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Emergence of Modern Humans: The Pleistocene Occupation Sites

Overarching Integrated Conservation Management Plan







The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa

Integrated Conservation Management Plan

Vision Statement

The Emergence of Modern Humans: The Pleistocene Sites of South Africa World Heritage Site will be a financially sustainable series of heritage sites that is managed effectively and protected through collaboration between key stakeholders, while enhancing the appreciation of the sites by all people through education and interpretation, and potentially contributing to local economic development through community-based heritage tourism.

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List of Acronyms

AIA	Archaeological Impact Assessment
BP	Years Before Present (1950)
DAC	National Department of Arts and Culture
DCAS	Western Cape Provincial Department of Cultural Affairs and Sport
DEA&DP	Western Cape Provincial Department of Environmental Affairs and Development Planning
DFFE	Department of Forestry, Fisheries and the Environment
DRS	Diepkloof Rock Shelter
DRS 1	Diepkloof Rock Shelter 1
EBEDAG	Elands Bay Environmental and Development Action Group
emhwhs	The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa World Heritage Site
HWC	Heritage Western Cape
ICMP	Integrated Conservation Management Plan
JMC	Joint Management Committee
LSA	Later Stone Age
MA	Management Authority
MEC	Member of the Executive Council
MELI	Monitoring Evaluation Learning and Intervention
METT	Management Effectiveness Tracking Tool
MSA	Middle Stone Age
NEMA	National Environmental Management Act
NEMPAA	National Environmental Management: Protected Areas Act
NHRA	National Heritage Resources Act
NHS	National Heritage Site
OUV	Outstanding Universal Value

- PFMA Public Finances Management Act
- PHRA Provincial Heritage Resources Authority
- PHS Provincial Heritage Site
- PPSC Pinnacle Point Site Complex
- SAHRA South African Heritage Resources Agency
- SANBI South African National Biodiversity Institute
- SDF Spatial Development Framework
- SMC Site Management Committee
- SMART Specific, Measurable, Attainable, Realistic, and Timely
- UNESCO United Nations Educational and Scientific Organisation
- WHC World Heritage Committee
- WHCA World Heritage Convention Act
- WHS World Heritage Site

1. Introduction

1.1 What is the ICMP?

Every World Heritage Site (WHS) requires an Integrated Conservation Management Plan (ICMP)¹ that is reviewed every five years. The current document is the overarching ICMP for The Emergence of Modern Humans: The Pleistocene occupation sites of South Africa World Heritage Site (EMHWHS).

The ICMP promotes the wise use of the heritage properties, effective protection of their Outstanding Universal Value (OUV) and adequate maintenance of their Authenticity and Integrity. It considers the broader context within which the EMHWHS exists and integrates the perspectives of relevant local stakeholders and regulatory authorities. Moreover, the ICMP is a *management tool* that contains policies, principles and actions for the sustainable use and conservation of the sites' tangible and intangible heritage.

The Plan takes a holistic approach that embraces internal linkages between layers of the cultural landscape and the broader context within which the EMHWHS sites exists. The development followed a logic in which the actions necessary to be taken are identified and prioritised (Figure 1).

The ICMP is driven by a broad Vision from which the Strategic Goals are derived. These are served by Action Categories containing Specific Actions.

This ICMP will be reviewed on an annual basis using the Management Effectiveness Tracking Tool (METT) and the Monitoring, Evaluation, Learning and Intervention (MELI) system, to ensure dynamic and adaptive management of the EMHWHS.

The purpose of this ICMP is not to deal with specific management issues of each site as each site to be included in the WHS will have its own specific management plan. Rather, this ICMP addresses overarching issues of governance, the establishment of an overall management authority (MA) and ancillary management processes for all the sites in this serial WHS. This document is hence intended to tie together the management strategies for the various sites.

¹ World Heritage Convention Operational Guidelines; World Heritage Convention Act (49 of 1999); National Heritage Resources Act (25 of 1999).

Integrated Conservation Management Plan: The Emergence of Modern Humans





1.2 How the Integrated Conservation Management Plan evolved

This document is the first Integrated Conservation Management Plan for the EMHWHS. The ICMP provides an overall approach for heritage, conservation, tourism and scientific aspects of the sites. It furthermore promotes the integration of the role of localised stakeholders and institutional stakeholders concerened with policy and governance.

1.3 Understanding where the ICMP fits within broader management strategies

After inscription it may take many years for a new World Heritage Site to function optimally. In the case of EMHWHS there has been a steady progression towards the protection and holistic management of the three sites in the nomination, with the nomination of the sites as a serial World Heritage Site being the eventual Goal.

As the lead document, the ICMP serves as a roadmap from the Current State to a Desired State. The individual Site Management Plans (SMPs) are intended to assist the various role players in the management of these sites to eventually arrive at a situation of improved capacity, better functioning management and stability.

1.4 How the ICMP was developed

This ICMP was developed through engagement with various stakeholders around the three sites in the Western Cape, as well as a review of the various requirements and

legal provisions for constituting Management Authorities. There was also engagement with existing Management Authorities regarding lessons learned in governing serial World Heritage Sites in South Africa.

Each site-specific Management Plan was developed along similar lines, but were geared to focus on issues specific to each site's context.

1.5 How to implement the ICMP?

The ICMP is an official document and enforceable under Section 47 of the National Heritage Resources Act (No 25 of 1999) (NHRA). The necessary human resources and mechanisms therefore must be in place for its effective implementation. The sections below describe the approach to the development of the current ICMP and elaborate on principles used to guide the process of drafting the ICMP. The following principles have guided the compilation of the ICMP and likewise should guide its implementation:

- Inclusive Stakeholder Engagement;
- Rights-Based Approach to Conservation;
- Avoidance of Disturbance;
- Professional Conservation Measures;
- Sensitive and Suitable Development; and
- Integration with Government Planning Frameworks.

The various actions described below are monitored through indicators and expected outcomes and are subject to periodic performance review and applications of the METT and MELI systems, to ensure dynamic and adaptive management of the EMHWHS.

2. The sites and their OUV

2.1 Introduction to the sites

2.1.1 Diepkloof Rock Shelter

Diepkloof Rock Shelter (DRS) is situated within a prominent rocky outcrop overlooking the Eastern End of the Verlorenvlei estuary. The cave is situated 200km North of Cape Town, midway between the towns of Redelinghuys and Elands Bay. Diepkloof Rock Shelter 1 (DRS 1) is the most important archaeological site for understanding the behaviour, diet and cultural development of modern humans on the west coast of South Africa, and indeed on the entire west coast of Africa.

Diepkloof Rock Shelter was first excavated in 1973 to examine Later Stone Age occupation horizons. These pilot excavations focused on the upper levels and sampled the Later Stone Age as well as the upper strata of the Middle Stone Age, but stopped there as the main research interest at the time was in the Holocene.

The tangible heritage of the modern human population that lived in the Diepkloof Rock Shelter and surrounding landscape is expressed in the stone and other artefacts made throughout the last 100,000 years. For example, the practice of engraving ostrich eggshells with geometric patterns during the Howiesons Poort technological stage is one of the earliest examples in the world of identifying ownership. The disappearance of this practice after the Howiesons Poort era may reflect a modification in the way late Middle Stone Age inhabitants interacted with one another (Texier *et al.*, 2013). The Later Stone Age deposits that overlie the Middle Stone Age, and the rock paintings in both DRS 1 and 2 give further evidence of changes in the tangible heritage. These record both hunter-gatherer lifestyles in the Holocene as well as the appearance of pastoralism which heralded a new economy and technology in the Western Cape about 2000 years ago. There are substantial assemblages of sheep bones in the deposit associated with artefacts, fireplaces and bedding made of plant material, but these have been only partly investigated.

Excavations showed that a thin veneer of Later Stone Age material, dating to the last 2,000 years, overlies a much deeper and much older set of Middle Stone Age (MSA) records. Subsequent renewed excavations carried out in collaboration with French colleagues from the University of Bordeaux (Steele & Klein, 2013) have shown that these MSA occupation deposits date from beyond 100,000 years ago to about 40,000 years ago. Most notable in this sequence are the ostrich eggshell fragments that provide

some of the earliest evidence of art, and as such the site is important in understanding development of thought processes that led to the art necessary to undertake this form of cultural activity (Parkington & Poggenpoel, 1987)².



Map 1: Diepkloof Rock Shelter Site Map.

2.1.2 Pinnacle Point Site Complex

The sites at Pinnacle Point are part of a series of wave-cut caves and rock shelters that stretch westwards from Cape St. Blaize at 'The Point' in Mossel Bay to the western boundary of the Provincial Heritage Site (PHS). The oldest formation date for these caves is 1.1 million years ago, and subsequent caves were formed by later high sea levels. Over the last 200,000 years, the coastline was mostly further from the sites than it is today. The sites were occupied episodically by Middle and Later Stone Age hunter-gatherers. At times of higher sea level, the contents of some of the lower caves were washed out while, when sea level was lower and beach sand was exposed, dunes filled the entrance to some of the caves limiting access for thousands of years. As a result, the history of each of the caves is different. At this stage there are two caves known to contain long sequences of human occupation (PP13B and PP5-6), and

² Adapted from Diepkloof Rock Shelter: Integrated Conservation Management Plan 2017 - 2022

together they provide the oldest and longest composite sequence of all coastal sites in South Africa.

In 1997, the archaeological sites at Pinnacle Point were first recorded as part of an Archaeological Impact Assessment (AIA) when plans for the golf course and casino development triggered an environmental impact assessment as required in terms of the Environment Conservation Act (1989)³.



Map 2: Pinnacle Point Site Complex Map.

³ Adapted from Pinnacle Point Site Complex: Integrated Conservation Management Plan 2017 - 2022

2.1.3 Sibhudu Cave

Sibhudu Cave is situated on Portion Sibhudu of Erf 16902 of Farm Sinembe, KwaDukuza Local Municipality, iLembe District Municipality, in KwaZulu-Natal. The cave is located 40 km north of Durban and about 10 km inland from the Indian Ocean, about 100 m above sea level.



Map 3: Sibhudu Cave Site Map.

Sibhudu Cave is a shelter 55 m long and about 18 m in breadth, sloping from north to south, with a deposit up to 3 m in depth. The site is positioned in a steep, forested cliff that overlooks the uThongathi River, in an area that is now a sugar cane plantation. The cave was formed by erosional downcutting of the river, which now lies 7–10 m below the site. The site looks through the coastal forest across the uThongathi River.

The site was first excavated by Aron Mazel of the KwaZulu-Natal Museum in 1983. At the time of the first excavation and was interested in the identification of an LSA site. He excavated one square metre in the shelter and then abandoned the site, because the entire Stone Age component of the site appeared to be MSA.

Lyn Wadley of the University of the Witwatersrand began excavations at the site in 1998, after which two excavation seasons per year were conducted until 2011 under her supervision for an excavation of a total of 21 m². In 2011, Nicholas Conard of the University of Tübingen, Germany, took over the directorship of the site excavation.

The site preserves a very detailed record of MSA occupation from before 77 000 (possibly 100 000) to 38 000 years ago. The site has exceptional organic preservation and has yielded evidence from the pre-Still Bay onwards.

2.2 Management of the sites as a serial WHS

2.3 Criteria for inscription

World Heritage sites are selected based on six cultural and four natural criteria. The cultural criteria to be considered are as follows:

i. represent a masterpiece of human creative genius;

ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning, or landscape design;

iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living, or which has disappeared;

iv. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

v. be an outstanding example of a traditional human settlement, land-use, or seause which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The World Heritage Committee considers that this criterion should preferably be used in conjunction with other criteria).

The 'Emergence of Modern Humans" (EMH) comprises a series of sites proposed for inscription on the basis that together they are an outstanding example illustrating modern human behaviour and culture. The sites are proposed for inscription under the following criteria:

Criterion (iii): Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

The latest literature (Rito et al., 2019; Scerri et al., 2018; Soares et al., 2016; Stringer, 2016; Gunz et al., 2009) in the field agrees that modern humans evolved in Africa and spread from there throughout the world around 70 000 years ago. The nominated sites provide unique and rich information on the cultural tradition of the Middle and Late Pleistocene, when anatomically modern humans became behaviourally modern.

The archaeological layers of the Emergence of Modern Humans sites in the proposed World Heritage Nomination provide exceptional evidence and insight into the behavioural and palaeoenvironmental remains of the MSA cultural tradition. These sites contain early evidence of symbolic thought and advanced technologies in the form of:

- extensive ochre processing
- engraved patterns on ochre
- estuarine shellfish beads used for body decoration
- decorated ostrich eggshell
- evidence of lithic technological advancement in the Howiesons Poort and Still Bay industries, and the use of pyrotechnology and development of microliths
- advanced projectiles such as spear throwers and bows and arrows
- compound adhesives
- sedge and grass bedding
- earliest use of medicinal plants
- collection of sea shells
- mastering the tides to exploit coastal resources.

From this evidence, we have gained insight into the origins of art, technological innovation, language, and belief systems, which developed during the MSA in South Africa. The archaeological evidence was produced, used, and ultimately deposited at these sites, and as such, the landscape, the caves and the finds are an ensemble representing an exceptional example of an early cultural tradition of modern humans and an extinct culture.

Criterion (iv): Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

These sites preserve exceptionally well-stratified archaeological sequences dating from 162 000 to 38 000 years ago. These sequences represent a range of evidence of a technological ensemble that exhibits important developments during the significant stage of human history when anatomically modern humans started developing modern human behaviour during the MSA in southern Africa.

This evidence is found in the technological assemblage, which records the first evidence of:

- the deliberate heat treatment of stone for toolmaking
- prepared-core stone blades and backed tools
- microlithic technology

- polished bone points that are similar to those used in later times for arrows
- advanced projectiles such as spear throwers and bows and arrows
- engraved bone tools, and
- some of the earliest recorded evidence of 'art' in the form of incised patterns on both ochre and ostrich eggshell

All the above technological evidence is indicative of complex cognition, and therefore collectively illustrate a significant stage in human history when anatomically modern humans started developing more complex cognitive abilities which characterised them as behaviourally modern.

More specifically, at Diepkloof Rock Shelter an engraved bone tool dated to 109 000 years ago and over 400 engraved ostrich eggshells, which were used as functional items (containers/water flasks) and dated also as early as 109 000 years ago illustrate the ability of our ancestors to think abstractly and to conceptualise patterns and forms. These patterns on ostrich eggshell were most likely used to indicate possession. In addition, the early appearance (74 000 to 100 000 years ago) of composite tools using bone points and microlithic tools provides evidence for abstract thinking, technological innovation, and the ability to plan and strategize.

At Pinnacle Point, PP13B contains the world's earliest evidence for systematic coastal exploitation (shellfish), the earliest radiometrically dated modified pigment (ground red ochre), and some of the earliest evidence for complex bladelet technology and heat treatment of silcrete. PP5-6, currently under excavation, has one of the thickest continuous stacks of MSA sediments in South Africa (> 15 metres), currently dated between 90 000 and 50 000 years ago, and documents the earliest evidence for microlithic technology and the furthest travelled evidence of the super-volcanic eruption of Mount Toba.

Sibhudu Cave holds some of the earliest evidence in the archaeological record for the use of bone tools and implements. These, along with compound adhesives, were used in bow-and-arrow technology, which displays the complex cognition of our ancestors to multi-task and think abstractly. The outstanding lithic assemblage of Sibhudu Cave, unique also amongst the sites represented in this nomination, meticulously illustrates the technological achievements of the MSA at the point of evolution of modern human behaviour. Evidence for the earliest exploitation of birds implies the use by our ancestors of new and innovative acquisition techniques, such as the use of blunt-tipped projectiles or bows and arrows, bolas, nets and snares. This is the first time we see this used by *Homo sapiens*.

Additionally, the presence of shell beads for personal ornament illustrates the development of symbolic behaviour.

For hundreds of thousands of years, caves and rock shelters were abodes for humans. These sites are superb examples of such early homes that were repeatedly occupied over the millennia and thus built up extraordinary, world-renowned and well-dated sedimentary records of ancient human life. The significant and consistent amount of evidence pre-dates other sites on the continent.

Criterion (v): Be an outstanding example of a traditional human settlement, land-use or sea-use which is representative of a culture, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

The majority of people on the planet today live near coastlines. Despite humans being terrestrial mammals, we have in many instances become dependent on the sea and its resources.

Pinnacle Point Site Complex provides some of the earliest and best-preserved evidence in the world for the consistent exploitation of coastal resources during the Middle and Late Pleistocene (Marean et al., 2007). Scientists suggest that an increased consumption of long-chain omega-3 fatty acids (specifically DHA), found in aquatic and coastal food resources, ensured the healthy development of our brains and the early expansion of anatomically modern humans' advanced cognitive abilities, which contributed to our ancestors' behavioural and technological progress during the MSA (Broadhurst et al., 2002; Kyriacou et al., 2016).

As current sea levels rise due to climate change, much of the ancient record of human coastal resource use has been obliterated or is in grave danger. Yet, Cave 13B at Pinnacle Point Site Complex, which contains exceptionally well-preserved evidence from the Middle to Late Pleistocene, is located 13m above sea level, as such, its archaeological record has survived the rising sea levels following its occupation up to 90 000 years ago. The remains of 11 different mollusc species are represented, and show that the cave inhabitants were harvesting shellfish and carrying some of it back to the cave, some as sea shells. The oldest deposits at 162 000 years ago are the earliest evidence in the world of the systematic collection of shellfish and the use of marine resources as a food source.

PPSC preserves a rich record of the palaeoclimate and palaeoenvironment in the form of speleothems, raised beaches, fossil dunes, a fossil hyena assemblage and palaeontological assemblages. All are spread continuously across the area and together provide a globally unparalleled record of human, climate, and environmental coevolution. There are many unexcavated caves and rock shelters at PPSC that will provide scientists a rich record of scientific knowledge of human evolution for generations to come.

The meticulous palaeoenvironmental reconstruction which was made possible at Sibhudu Cave by the outstanding organic preservation of the archaeological record allowed scientists to identify significant changes within the environment and the adaptation of humans to a changing environment. People living at Sibhudu had already identified 77 000 years ago that they could exploit plants and leaves for their insecticidal and larvicidal properties.

Additionally, all three sites are pivotal in the preservation of outstanding evidence for palaeoclimates and palaeoenvironments. This is specifically recorded in the form of speleothems (e.g., stalagmites and stalactites) at Pinnacle Point, in faunal, floral, and geological remains, including from the cores of the now submerged Palaeo-Agulhas Bank. At Sibhudu Cave the overall dry conditions at the site favoured the exceptional preservation of organic material.

Thanks to this outstanding body of evidence, scientists have been able to reconstruct in great detail the palaeoenvironment and the unique human interaction with and adaptation to it.

2.4 Outstanding Universal Value

South Africa can justifiably claim to be one of the countries with the most ancient of human histories in that it is closely associated with the emergence and development of our early hominin ancestors as far back as four million years ago. Many scientists think that the origin population for all modern humans derived from the southern tip of Africa and eventually spread across the globe. Genetic and fossil evidence suggests that humans became anatomically modern in Africa between 300,000 and 150,000 years ago. It is believed that from the early human population of southern Africa there emerged the ancestors of the San hunter-gatherer population that for tens of thousands of years occupied the country in small numbers and whose descendants continue to live on the south-western side of the African continent.

Scientific research on the origin of anatomically modern humans and the modernity of their behaviour is crucial to understanding the history of all modern people. The South African sites of Blombos Cave, Diepkloof Rock Shelter, Pinnacle Point Site Complex, Klasies River, Border Cave and Sibhudu Cave all provide evidence for aspects of these transitional periods to modern. Together, the South African sites present the richest record for the behaviour and culture of the earliest modern humans. This seems to be a function of three characteristics: 1) the sites themselves preserve dense records of

human behaviour, 2) there appears to be a confluence in this region of early evidence for advanced behaviour and culture, and 3) there has been a concerted effort by local and international scientists to study these sites with advanced scientific methods.

Current archaeological research suggests that the Middle Stone Age (MSA) is associated with both anatomically modern humans (H. sapiens) as well as archaic H. sapiens. The African prehistoric period known as MSA began approximately 300,000 years ago and lasted between 50 and 25,000 years ago. Substantial evidence for the origins of modern human behaviour has been identified in the southern coastal sites of South Africa (Lombard, 2012; Marean and Assefa, 2004). Cognitive advances were identifiable within the MSA period and the origin of our species is linked to the appearance of MSA technology (McBrearty and Brooks, 2000) and behavioural flexibility (Kandel *et al.*, 2016. Furthermore, it has been proposed that there are four main features that characterise modern human behaviour. These include 1) symbolic behaviour, 2) abstract thinking, 3) behavioural, economic and technological innovations, and 4) the ability to plan and strategize.

Three lines of evidence are considered when searching for evidence of symbolic behaviour in the MSA. These are direct evidence reflecting concrete examples of symbols; indirect evidence reflecting behaviours that would have been used to convey symbolic thought; and technological evidence reflecting the tools and skills that would have been used to produce art (Marean and Assefa, 2004). Direct evidence is difficult to find beyond 40,000 years ago, as it is essentially intangible, thus technological evidence is the most constructive of the three (Marean and Assefa, 2004).

Blombos Cave and Diepkloof Rock Shelter have some of the earliest evidence for these innovations in terms of human symbolic behaviour with patterns engraved on ochre and ostrich eggshell, beads made of estuarine shells and ostrich eggshell, ochre crayon lines on stone, and the processing of pigment. Klasies River, Blombos Cave, and the Pinnacle Point Site Complex provide some of the earliest evidence for the systematic use of marine resources. Border Cave and Klasies River have skeletal remains of early anatomically modern humans, and Sibhudu Cave and Border Cave has beads, well preserved botanical remains and evidence of innovative technology. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities.

Sibhudu Cave, Diepkloof Rock Shelter and Pinnacle Point Site Complex have been identified as properties worthy of inclusion on the World Heritage List as a serial nomination for sites with Outstanding Universal Value (OUV) with regard to their contribution towards a better understanding of the evolution of anatomically modern humans, their innovative technology/ culture, and their behaviour.

3. Policy and Legislative Framework

3.1 International Conventions and Policy

The governance of the Emergence of Modern Humans World Heritage Site is determined by international agreements, national, provincial and municipal statutes, legislation and ordinances. On the international front, South Africa is a signatory to the UNESCO Convention for the Protection of the World Cultural and Natural Heritage (1972) also referred to as the World Heritage Convention. Other important documents include the Action Plan for Implementation of World Heritage in Africa 2012 to 2017, updated in 2016.

Additionally, the management of the sites is informed by international best practices including various policies and charters such as:

• ICOMOS Charter for the Protection and Management of Archaeological Heritage (ICAHM, 1990);

ICOMOS International Cultural Tourism Charter (ICOMOS, 1999);

• ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (ICOMOS, 2008);

• UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003);

• United Nations Environment Programme (UNEP) sustainable tourism in protected areas guidelines (Eagles, Mccool, & Haynes, 2002);

• Convention on Biological Diversity (CBD) guidelines on biodiversity and tourism development (The Secreteriat of the Convention on Biological Diversity, 2004); and

• UNESCO Operational Guidelines for the Implementation of the World Heritage Convention (World Heritage Centre, 2017).

The broader international conventions are given efficacy through various National Policies and Laws.

3.2 National Policies and Laws

Important legislation includes the following:

Table 1: Relevant Legislation

#	Description	Applicability of the Legislation	
	Internat	tional Agreement	
1.	Convention Concerning the Protection of the World Cultural and Natural Heritage (1972) (UNESCO, 1972)	General recognition of globally unique cultural heritage as found at the various sites to be included in the EMHWHS.	
2.	Nara Document on Authenticity 1994	General discussion on the underpinning elements of authenticity when determining the value of a heritage site.	
3.	Nara + 20: On Heritage Practices, Cultural Values, And the Concept of Authenticity	An updated discussion on differing values and perspectives regarding heritage significance and the inclusion of Stakeholders in understanding heritage value.	
	H	eritage Law	
4.	National Heritage Resources Act (No. 25 of 1999)(S 27 – the applicable Provincial Heritage Resources Authority (PHRA) is responsible for the protection of Provincial Heritage Sites. Determines permitting and other conservation protocols.	
5.	South African World Heritage Convention Act (No. 49 of 1999)	Sets out state responsibilities in terms of reporting to UNESCO and strengthening the public's appreciation of heritage. Determines the form and responsibilities of a WHS Management Authority.	
	Law relating to p	oublicly funded Institutions	
6.	Public Finance Management Act (No. 1 of 1999) (Updated 1 April 2010)(Requires that all revenue, expenditure, assets and liabilities of recipients of state funds are managed in accordance with the standards set for Public Entities and similar institutions.	
	Environmental Law		
7.	National Environmental Management Act (No. 107 of 1998) (and all subsequent amendments)	Applicable to the protection of the natural environment and the effective environmental management of activities and operations on and around The Emergence of Modern Human sites.	
8.	NationalEnvironmentalManagement:ProtectedAreas Act (No. 57 of 2003)	Applicable to areas protected i.t.o NEMA and World Heritage Sites. Defines management and governance standards for WHS.	
9.	National Environmental Management Biodiversity Act No. 10 of 2004	Applicable to the protection of the natural environment, specifically the unique habitat and evolution of species within the WHS.	

10.	National Environmental Management Integrated Coastal Management Act No. 24 of 2008	Applicable particularly to the Pinnacle Point Site Complex, as both sites fall within significant natural coastal environments.
11.	National Veld and Forest Fire Act No. 101 of 1998	Applicable to the management of fires and prevention measures at all sites.
12.	Nature and Environmental Conservation Ordinance No. 19 Of 1974, as amended by the Western Cape Nature Conservation Laws Amendment Act 3 of 2000	Applicable to the protection of the natural environment in the Western Cape.
13.	National Water Act No. 36 of 1998	Applicable to the management of water resources at each site. Particularly relevant to the Pinnacle Point Site Complex.
	(Other Laws
14.	National Tourism Act No. 3 of 2014	Governs the Tourism industry in South Africa. It makes provision for the promotion of tourism as well as maintains and enhances the facilities and services available to tourists.

3.3 Regulations

Each law comes with its own set of regulations that are updated from time to time. Certain activities can trigger the application of certain acts, at which point the regulations come into play. For example, development in a rural area within 100m of the High-Water Mark is a listed activity under the 2017 NEMA regulations, subjecting the proposed development to a regulation process which may include an impact assessment.

4. Governance Framework

4.1 International Governance

UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage of outstanding value to humanity. The 1972 World Heritage Convention is managed by the World Heritage Committee (WHC) that meets once a year and consists of 21 representatives from State Parties who have signed the Convention. The World Heritage Committee invites State Parties to submit State of Conservation Reports of their World Heritage Sites. Article 29 sets out a process by which this reporting takes place.

As a State Party, the South African Government implements the World Heritage Convention through the Biodiversity and Conservation Branch of the National Department of Environmental Affairs. The second function of the Biodiversity and Conservation Branch is the:

"Establishment, development and safeguarding of the integrity of World Heritage Sites as well as implementation of world Heritage Convention in South Africa⁴"

Reporting to the WHC is therefore the responsibility of the National Department of Forestry, Fisheries and the Environment (DFFE).

4.2 National and Local Governance

The legislative framework provides the mandate for the actors involved in the governance of the EMHWHS as summarised in the table below.

Institution	Responsibility	
Department of Sport, Arts &	Coporal oversite of Cultural World Heritage Sites	
Culture (DAC)	General oversile of Conordi wond hemage siles.	
Parliamentary Portfolio		
Committee for Arts &	Shared oversight over EMHWHS.	
Culture		
	Environmental management on the Sites, including	
	marine and coastal management and providing	
	support as a whole in its role as a focal point for World	
Department of Forestry	Heritage Sites in South Africa, these include:	
Department of Forestry,	1. Biodiversity and Conservation - World Heritage	
Fisheries and the	functions;	
Environment (DFFE)	2. Accountability in terms of the World Heritage	
	Committee;	
	3. Environmental Programmes – Working for Water,	
	Working on Fire; and	

Table 2: Governance of EMHWHS

⁴ <u>https://www.environment.gov.za/branches/biodiversity_conservation</u> Accessed on 12 February 2018.

Institution	Responsibility	
	4. Legal Authorisations and Compliance	
	Inspectorate – Environmental Authorisations.	
Department of Water	Potential inputs by Working for Water	
Affairs		
South African National	Leads and coordinates research and monitors and	
Biodiversity Institute (SANBI)	reports on the state of biodiversity in South Africa.	
Heritage Western Cape	Heritage Authority for the provincial heritage sites in the	
(HWC)	Western Cape.	
Amafa and Research	Heritage Authority for the provincial heritage sites in	
Institute	KwaZulu-Natal.	
South African Heritage		
Resources Agency	Heritage Authority for the national heritage sites.	
(SAHRA)		
	Potential inputs by Provincial Department of	
Provincial Institutions	Environmental Affairs and Development Planning	
	(DEA&DP), CapeNature.	
District Municipalities	The three sites fall into the Garden Route and West	
District Municipalities	Coast District Municipalities.	
	University of Cape Town has hosted much of the	
	Research for the Diepkloof excavations under Prof.	
	Parkington.	
	Excavations at the Pinnacle Point Site Complex are	
Universities	undertaken by researchers associated with Arizona	
	State University.	
	Excavations at Sibhudu Cave are conducted by the	
	University of Tübingen in collaboration with the	
	University of Witwatersrand.	
	Iziko Museum holds the majority of the excavated	
	material from the two sites in the Western Cape.	
	The Bartolomeu Dias Museum Complex in Mossel Bay is	
	a potential partner in the interpretation aspects of the	
Museums	Pinnacle Point Site Complex, and holds some of the	
	material from Pinnacle Point on long term loan from	
	lziko.	
	The Elands Bay Museum has been set up in 2019 with	
	the purpose of becoming an interpretation centre for	

Institution	Responsibility
	the World Heritage Site and the component of
	Diepkloof Rock Shelter in particular.
	The KwaZulu-Natal Museum in Pietermaritzburg is a
	potential partner in the interpretation of Sibhudu Cave.

4.3 Cooperative Governance

Provincial authorities need to work with national and local governance authorities in achieving integrated governance of the three sites. Disintegration and isolation of stakeholders, as well as a top down management approach would be counterproductive. Lessons learnt from similar WHS management authorities within South Africa (Levin, 2008) show that consultative, co-operative governance can eliminate many potential disagreements and bad feelings between stakeholder before these occur, thus contributing to effective and efficient governance.

4.4 Proposed Institutional Framework of Management Authority

4.4.1 Legal requirement to establish a Management Authority

The establishment of Management Authorities for World Heritage Sites is a statutory requirement in terms of Sections 7, 8, and 9 of the World Heritage Convention Act (WHCA) (No. 49 of 1999). A Management Authority (MA) serves to provide an effective system for the management of World Heritage Sites in line with the Operational Guidelines for the Implementation of the World Heritage Convention (WHC), the World Heritage Convention Act (WHCA) and the National Heritage Resources Act (NHRA).

Two potential models for constituting a management authority exists, which are outlined in Section 8 and 9 of the WHCA. The WHCA prescribes that an existing authority connected to the World Heritage Site (WHS) could either be declared a Management Authority (section 8), or a new authority may be set up (section 9). A Management Authority set up in terms of Section 9 of the WHCA needs to draw heavily on government funding. When funding is not available, these types of authorities need to find ways of funding the implementation of their mandates, for instance through generating funds for the management of the site through commercial operations or through applying for funding from relevant institutions. Examples of commercial operations include the tourism operations of Robben Island WHS and the Maropeng Interpretation Centre for the Fossil Hominid Sites of South Africa.

Tourism operations and paid interpretation exhibits are unlikely to solely provide the required income to subsidise the conservation and operational budgets of any

Management Authority. In the case of the EMHWHS, the sites are too sensitive and have a low carrying capacity for visitors. While opportunities for tourism ventures exist, infrastructure development, minimal as it may need to be, will likely need to occur at some distance from the sites. Currently, tourists are visiting the sites at Pinnacle Point and tourism infrastructure to host few tourists per day are being developed at Diepkloof Rock Shelter. Interpretation centres in proximity of the sites do however offer the opportunity to attract more visitors and raise more funds for the sites.

In reality, it is unlikely that the Department of Forestry, Fisheries and the Environment (DFEE) as the state party for the World Heritage Convention in South Africa, will allow a section 9, standalone Management Authority to be created.

As stipulated under Section 14(4) of the WHCA, a Management Authority as a governing entity for a WHS, may be constituted from a broad range of stakeholders, including representatives of:

- National Government;
- Provincial government departments and cultural or nature conservation authorities;
- Directly affected adjacent communities;
- Heritage bodies;
- Organised business;
- Affected adjacent tribal authorities;
- Nature conservation bodies;
- Cultural organisations;
- Non-governmental organisations;
- Scientific or academic expert bodies;
- Local authorities;
- Private landowners; and
- International cultural or nature conservation bodies.

The Management Authority should inter alia perform the following functions:

- Implementing the ICMP;
- Communicating regularly with other stakeholders and authorities;
- Monitoring the State of Conservation of the Site;
- Managing and mitigating risks;
- Providing input and expressing opinions on proposals for work of any nature on the site;
- Raising and allocating funds for management of the site;

- Coordinating the responsibilities and work of its members and other stakeholders regarding the site;
- Investigating possibilities for coordinating with local community and other tourism initiatives;
- Aligning programmes to local municipality Integrated Development Plans;
- Developing and implementing policies; and
- Entering into heritage agreements with various Stakeholders.

Several measures can be taken to enhance the capacity of the proposed Management Authority in line with the Operational Guidelines, as may be required in the specific situation of the EMHWHS. These measures include:

- Ensuring that there is adequate scientific representation to steer research and conservation programmes;
- Ensuring that the broad spectrum of stakeholders is given a platform to participate in policy and decision making;
- Ensure that there is adequate financial resourcing and sound accounting in terms of the Public Finances Management Act (PFMA); and
- Implementation of the Strategic Objectives of outlined in the Integrated Conservation Management Plan (ICMP).

The WHCA requires a Management Authority to provide certain reports and to implement various governance systems that are set out in Table 3 below.

Table 3: Table indicating the various management systems and responsibilities of a
Management Authority as set out in WHCA (49 of 1999)

World Heritage Convention Act Text	Requirement
36. (1) (a) An Authority must submit to the Minister its	Annual Financial
annual financial plan for approval for the following	Plan
financial year not later than 30 days before the end of	
each financial year	
37. (1) (a)(i) An Authority must submit a five-year strategic	Strategic Plan
plan to the Minister for approval, not later than 30 days	
before the end of its first financial year.	
39. (1) An Authority must keep proper books and records of	Professional
account, subject to applicable law, for each financial year	accounting and
in accordance with generally accepted accounting	record keeping
practice, with regard to its income, expenditure and	
transactions during the financial year and the state of its	

World Heritage Convention Act Text	Requirement
assets and liabilities during, and as at the end of, the	
financial year.	
40. (2) The books and records of account and financial	Audit Report
statements of an Authority must be audited annually by	
the Auditor-General.	
42. An Authority must submit to the Minister, within six	Annual Report
months after the end of each financial year, an annual	
report	

While it is possible that the Minister of Forestry, Fisheries and the Environment may stipulate which, if any, of the above management systems are required to be implemented as set out in Section 32 of the WHCA, it is unlikely that a Management Authority would be able to benefit from public funding or be compliant with the PFMA without implementing most of these measures. In the case of a Section 8 Management Authority, many of these requirements will need to be fulfilled anyway.

It is important at this point to distinguish between a Management Authority (MA) and a Site Management Committee (SMC). A Management Authority is a decision-making body who will report to the Department of Environmental Affairs. A MA is a statutory body defined in terms of section 8 or 9 of the WHCA. An SMC is an advisory committee made up of people on the ground with first-hand knowledge about the day-to-day operations of the sites. This committee does not have decision-making power on its own, but can be contractually constituted as an arm of the MA.

With these management systems in mind, one should understand that there is a balance to be achieved between ensuring each site is managed by a close-working management team with enough on-the-ground knowledge to effectively manage a site, while not burdening each Site Management Committee with the administrative tasks that the above set of management measures represents. For effective management of the sites, the amount of bureaucracy needs to be kept to a minimum, for both reasons of time and costs.

The serial nature of the EMH WHS is also complex and needs to be considered when determining how a Management Authority will be constituted. The Management Authority needs to effectively bridge the various roles of management, stakeholder engagement and efficient governance. That is it needs to be able to operate at a local level, as well as at an overarching national level and be able to liaise effectively with DFFE and UNESCO.

Based on the above legal requirements and analysis, three scenarios for the proposed EMHWHS Management Authority have been identified. These are described in detail in Appendix 1, but only scenario 2 is presented here since it is the preferred model.

4.4.2 Management Scenarios

A number of Management Authorities Scenarios were explored⁵. Through a discussion of the various pros and cons of different models, the following model (scenario 2) was presented:

The management of the Western Cape sites is coordinated and hosted by the MEC of the Western Cape Cultural Affairs and Sport, whereas the management of the KwaZulu-Natal sites is coordinated and hosted by the MEC of the KwaZulu Natal Department of Sport, Arts and Culture. Site Management Committees (SMC), made up of local stakeholders are constituted as Advisory Committees, however the committees are supported through the Provincial Departments. In this way, the operational costs can be supported by the relevant Provincial Departments.

The two authorities will jointly serve as the Overall Management Authority of the Emergence of Modern Human nomination through the establishment of a Joint Management Committee (JMC). For each of the proposed sites, a Site Management Committee is recommended. A Site Management Committee will have an advisory role and will include representatives of the main stakeholders involved with the management of the site.

The proposed structure of the Management Authority is presented in Figure 2 below.



Figure 2. Proposed Structure of the proposed overall Management Authority for the Emergence of Modern Humans WHS. A Site Management Committee is proposed for each site included in the nomination.

⁵ Refer to Appendix: Discussion Document on Management Scenarios

Each of the Management Authority should perform the following functions in accordance with section 13 of the World Heritage Convention, including *inter alia*:

- Implement the ICMP;
- Communicate regularly with other stakeholders and authorities;
- Monitor the State of Conservation of the sites;
- Manage and mitigate risks;
- Provide input and express opinions on proposals for work of any nature on the sites;
- Raise and allocate funds for management of the sites;
- Coordinate the responsibilities and work of its members and other stakeholders regarding the sites;
- Investigate possibilities for coordinating with local community and other tourism initiatives;
- Align programmes to local municipality Integrated Development Plans;
- Develop and implement policies; and
- Enter into heritage agreements with various stakeholders.

4.4.3 The Joint Management Committee

The JMC will meet biannually and as and when necessary. The JMC will be established through an MoU in place setting out functions and responsibilities, thus ensuring that the appointed Management Authorities work together in harmony and support one another in their efforts to achieve the vision and objectives of the World Heritage Site. The JMC will be chaired by the Deputy Director-General: Biodiversity and Conservation of the Department of Forestry, Fisheries and the Environment, which is the focal point. The members of the JMC will also be the HODs of the Department of Cultural Affairs and Sport in the Western Cape Government and of the Department of Sport, Arts and Culture in KwaZulu-Natal, and/or their duly authorized delegates.

The JMC shall:

- ensure a management system or mechanisms for the co-ordinated management of the separate components and the development of a joint integrated vision and objective for the entire prospective World Heritage Site with detail provided in their individual Integrated Management Plans (IMP's) (as required in terms of World Heritage Convention Act, 1999 (Act No. 49 of 1999) (WHCA);
- harmonize and coordinate all relevant policies to facilitate a uniform approach to the management of the entire prospective World Heritage Site;

- serve as a platform whereby all parties work together and support one another in their efforts to achieve the vision and objectives of the World Heritage Site in terms of the World Heritage Convention, WHCA and the UNESCO Operational Guidelines;
- serve as a vehicle for the identification of common goals and liaising with heritage resource agencies authorities on a national, provincial and local government level and with the consent of the DFFE, international partners as well as donors;
- appoint technical teams with concise Terms of Reference and timeframes to deal with specific technical issues as and when required;
- implement the monitoring framework to ensure monitoring and evaluation of the management effectiveness of the prospective World Heritage Site;
- coordinate the identification of financial needs by the two provincial departments to ensure management of threats affecting the integrity of the prospective World Heritage Site in order to develop sustainable funding mechanisms for the World Heritage Site;
- ensure the development and implementation of a joint branding and marketing strategy for The Pleistocene Occupation Sites of South Africa that should be used in conjunction with the branding and marketing strategies adopted by the individual sites, and
- ensure the development of an appropriate fund-raising mechanism for the serial sites for purposes of community beneficiation, scientific research etc.

4.4.4 Site Specific Management Committees

The practicalities referred to above need to be considered in the development of the Management Authority. The sites are all under private ownership and are regulated by three different heritage authorities under two sets of legislation. Pinnacle Point and Diepkloof Rock Shelter are Provincial Heritage Sites, while Sibhudu Cave is declared a National Heritage Site. Integrated Conservation Management Plans (ICMPs) have been compiled in Final Draft form for each of the sites.

In managing each site, the World Heritage Convention Act (WHCA) (No. 49 of 1999) requires certain governance processes to be in place, such as strategic planning and financial auditing. The practical management of each site in its individual context requires that people who are actively engaged on the ground are closely involved in the management structures. As the EMHWHS will be a serial nomination, a one-size-fits-all approach to managing the sites would not make sense. Though local stakeholders need to be actively involved, it would be unreasonable and impractical to expect that a local, mostly volunteer, committee would be able to report independently to DFFE and UNESCO, as well as providing the materials stipulated for the governance processes such as financial reports or strategic plans.

The long-term security and good management of the sites will need to be addressed through creating structures at the most suitable level so that these can function optimally.

Diepkloof Stakeholders

Diepkloof Rock Shelter is situated midway between the town of Redelinghuys and Elands Bay. It is visible from the main road between the two towns and can attract visitors on weekends. The site is presently owned by Heine and Barbara Steyn who farm the property. The two rock shelters have been excavated over the years, primarily by a team lead by Prof. John Parkington, as well as members of a French team. The current round of excavations has been completed and the site will likely not be actively excavated in the foreseeable future.

The nearby town of Elands Bay has recently seen the establishment of a local Museum, the Elands Bay Museum, under the auspices of the Department of Cultural Affairs and Sport. The Elands Bay Museum, which is currently not yet open to the public, is expected to function as Interpretation Centre for Diepkloof Rock Shelter. The interpretation centre is located about 20km from the site. The establishment of a potential Interpretation Centre at Elands Bay presents opportunities to include DRS material and information while limiting access to the DRS site to maintain conservation standards.

The West Coast District Municipality has expressed an interest in the site and is actively pursuing the creation of a West Coast Palaeontology and Archaeology tourist route.

The management of the site entails the following, as presented in Table 4

What to manage	How to manage	Who within the SMC
The archaeology of the cave and OUV	Develop a cave monitoring	
	system, using SMART	Management Authority
	indicators, in line with	Munugement Authonly
	standard practice	
	Implement annual cave	Management Authority
	inspections	Management Authonly
	Create board walks at the	
	site	DCASHIVC
	Create a firebreak at the	
	bottom of the koppie to	Landownorg
	decrease the risk of fires	Landowners
	reaching the site	

Table 4. Site management committees responsibilities at Diepkloof Rock Shelter

What to manage	How to manage	Who within the SMC
	Train qualified guides on how to protect heritage	HWC, West coast tourism
		department,
		archaeologist
Access to the land	Install a gate at the entrance	
	of the Erf to undesired people	Landowners with HWC
	to enter	
	Install signage at the	Landowners with HWC
	entrance and at the site itself	
	Place a visitor book at the	
	gate to record the number of	Landowners with HWC
	visitors coming to the site	

It is proposed that a Site Management Committee be established for DRS that includes the landowner, Prof. John Parkington as a knowledgeable archaeologist who has a long term relationship with the site and a representative from EBEDAG as the core Site Management Committee. The inclusion of other interested representatives including the Cedarberg Municipality, The Baboon Point Reference Group and the West Coast District Municipality would be useful.

4.4.5 Pinnacle Point Stakeholders

The Pinnacle Point Site Complex is situated on private property. The site has good access control and formalised visitor management systems. The sites are additionally protected by a buffer zone, including the whole of the Pinnacle Point Estate.

A small tourism company, led by Dr Peter Nilssen, operates on the site. The tour operation takes visitors down to the caves in small numbers. The caves visited by the public are not actively being excavated. The ongoing research at the site is continuingly revealing scientific discoveries, and this is adding to the significance of the site. It is important that the scientific team is closely incorporated into the management of the sites.

The Pinnacle Point Estate is a carefully managed golf and housing estate. The buffer zone for the cave sites includes the rest of the estate. The Estate Manager, who oversees the operational management of the estate, has a key role as a central point around which a local management committee can be formed.

The scientific team led by Dr Curtis Marean, the small-scale tourism operations run by Dr Peter Nilssen, and the Estate Manager Mr Carl van der Linde have an existing working relationship.
Several stakeholders in the surrounding area have been identified, including the Bartolomeu Dias Museum Complex, the Mossel Bay Municipality, the Point of Discovery Centre, Heritage Mossel Bay and the Groot-Brak Museum.

The Bartolomeu Dias Museum Complex is the closest museum to the Pinnacle Point Site Complex. The Bartolomeu Dias Museum Complex and the Mossel Bay Municipality have a potentially significant role to play in the establishment of an Interpretation Centre at the Cape St Blaize Cave. The Non-Profit Company Point of Discovery Centre was set up within the Mossel Bay Municipality to drive the development of an interpretation centre for the site on the ground next to the Cape St Blaize Cave.

The Mossel Bay Municipality is integral in dealing with the various challenges of zoning and conservation in the region. While the Pinnacle Estate is largely established, with the proposed development laid out and it is recommended that the Mossel Bay Municipality takes measures to integrate the conservation and buffer zones on the estate into the local planning by-laws and Spatial Development Frameworks.

Heritage Mossel Bay is an I&AP in the establishment of the WHS. While they do not have direct managerial responsibilities, they serve as important community watchdog in the ongoing conservation efforts. The role of Heritage Mossel Bay as a conservation body is therefore important in maintaining the standard of conservation at Pinnacle Point Site Complex.

It is proposed that the Site Management Committee for the Pinnacle Point Site Complex consist of core stakeholders, such as the Estate Manager, the Leader of the scientific team and the tour operator, as well as a representative from the Bartolomeu Diaz Museum Complex, and Heritage Mossel Bay. A representative from the Municipality can also be included on an as needed basis.

What to manage	How to manage	Who within the SMC
The archaeology of the Site Complex and OUV	Develop a site monitoring system using SMART indicators, in line with standard practice for caves, shelters and middens	Management Authority
	Implement quarterly site inspections, particularly to monitor the identified risks	Management Authority

Table 5	Site management	committees	responsibilities	at Pinnacle	Point Site	Complex
IUDIE J.	sile munuyemeni	COULINIEES		ui i illiucie		Complex.

What to manage	How to manage	Who within the SMC
	Evaluation of existing	
	backfill method of	
	sandbags and assessment	Archaeologist, researchers
	of remedial action when	
	necessary	
	Assessment of	
	conservation status of	Archaeologist
	each of the PPSC sites	
	Confirm the boundaries of	Landowners with HWC
	the PPSC	
Access to the land	Install signage at the	
	entrance and at the site	Landowners with HWC
	itself	

4.4.6 Sibhudu Cave Stakeholders

Sibhudu Cave is on private property, owned by Mr Mhlongo. However, a subdivision and sale process is ongoing to transfer the ownership of the piece of land where the cave is located to the Sibudu Trust.

Sibhudu Cave has a strong and eager local community that is willing to be involved in the management of the Site. The Site Management Committee should engage regularly with the other external stakeholders around the Site regarding management of the Site. Representatives from the local municipalities will be needed.

Each stakeholder represented should be tasked with specific functions that pertain to its role in ensuring the conservation and sustainable management of Sibhudu Cave.

It is proposed that the Site Management Committee for Sibhudu Cave consist of representatives of the following stakeholders: the landowners; the Qwabe Traditional Council; the local custodian; the Sibudu Trust; Friends of Sibudu; Ward councillors; KwaDukuza Local Municipality; Ndwedwe Local Municipality; iLembe District Municipality; The archaeologists holding recent excavation permits for the Site; Relevant conservation bodies registered with KZN Amafa Research and Institute; and KZN Tourism Authority.

Table 6 Site	management	committees	responsibilities	at Sibbudu Cave	
	munugemeni	commees	responsionnes		•

What to manage			How to manage			Who within the SMC
The	archaeology	of	Develop	a site m	onitoring	Management Authority
Sibhudu Cave and OUV			system	using	SMART	Management Autionly

What to manage	How to manage	Who within the SMC
	indicators, in line with	
	standard practice for	
	caves, shelters and	
	middens	
	Implement quarterly site	
	inspections, particularly to	Management Authority
	monitor the identified risks	
	Evaluation of existing	
	backfill method of	
	sandbags and assessment	Archaeologist, researchers
	of remedial action when	
	necessary	

4.5 Constituting of the Site Management Committees

The Site Management Committees will be constituted through a nomination process, whereby, following the declaration of the WC and KZN MECs for DCAS and DSAC as the Management Authority for WC and KZN respectively, the Departments will advertise for nominations to the site management committees among the identified stakeholders. The call for nominations can be extended to a slightly broader audience than just the key stakeholders. There should be an effort made to include previously excluded stakeholders.

4.6 Draft Terms of Reference for the Site Management Committees

This document describes the roles and responsibilities of the Management Committee (SMC) for Diepkloof Rock Shelter, Pinnacle Point Site Complex and Sibhudu Cave. It is suggested that the position of chair and secretary are rotated on an annual basis. It is up to the SMC to elect their representatives for these functions.

The organisational structure for the Site Management Committee will look as follows:



Figure 3: Proposed Site Management Committee Structure Chair:

- 1. Chairs the meetings.
- 2. Function as the spokesperson for the WHS.
- 3. Liaise with chairs of other sites of the serial nomination on the management of the sites.
- 4. Participate in the implementation of the integrated conservation management plan.
- 5. Is aware of every stakeholder and all that goes on in the WHS.
- 6. Collaborate with the landowner, archaeologist and municipality to transmit information about the WHS to the broader public, including awareness raising.
- 7. Assist with sourcing funding for the maintenance of the site.

Secretary:

- 1. Takes minutes of the meetings and circulate to stakeholders.
- 2. Updates the stakeholder list.
- 3. Keeps record of relevant documentation related to the World Heritage Site.

Landowners

- Responsible for basic security of the site, such as creating fire breaks, repair and maintain fences around the property, removal of alien vegetation, trimming of grass.
- 2. Work closely with the local municipality and archaeologist regarding the access to the site and status of conservation.

Archaeologist

1. Undertake and report on the monitoring and evaluation of the site at regular intervals to assess the state of conservation.

- 2. Contribute to technical aspects a monitoring system for the site.
- 3. Develop and implement a baseline survey of the impact of activities around the site.
- 4. Liaise closely with the landowner and local municipality on the protection of the site.
- 5. Supervise the interventions undertaken as per the Integrated Conservation Management Plan.

Government representatives Municipality

- 1. Assist with providing financial and human resources support for the protection of the site.
- 2. Ensure the site is included in the municipal IDPs and SDFs as well as Disaster Management Plans.
- 3. Collaborate with the archaeologist and landowner to transmit information about the WHS to the broader public, including awareness raising.

Local Community representatives

- 1. Provide input to the actions of the Integrated Conservation Management Plan.
- 2. Raise concerns if any of the actions are adversely affecting the local community.

Local Organisations

- 1. Provide input to the actions of the Integrated Conservation Management Plan.
- 2. Provide support to the landowner, archaeologist and municipality when required.

5. Strategic Goals and Action Categories

5.1 Vision

The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa World Heritage Site will be a financially sustainable series of heritage sites that is managed effectively and protected through collaboration between key stakeholders, while enhancing the appreciation of the sites by all people through education and interpretation, and potentially contributing to local economic development through community-based heritage tourism.

5.2 Strategic Goals

Strategic Objective 1: To establish an effective Management Authority for the Emergence of Modern Humans Serial World Heritage Site.

Strategic Objective 2: To ensure effective performance management and adaptive management of the world heritage site.

6. Monitoring, Evaluation, Learning and Intervention

Without comprehensive monitoring it is challenging to know how the implementation of the ICMP is going. The Management Evaluation Tracking Tool, initially developed by the World Wide Fund for Nature, for use in Protected Areas has become the standard by which protected areas are monitored in South Africa. While this system is adequate, it relies heavily on the monitoring and evaluation part of the process. The proposed actions and intervention to address any reported issues is further developed in the Monitoring, Evaluation, Learning and Intervention (MELI) system. The two systems should not be seen as at odds with each other, but rather complimentary. The MELI Tool is a simple to use, yet comprehensive Monitoring tool and will complement the METT system, as well as the performance management within HWC.

The MELI Tool is the foundation of adaptive management that responds to changing circumstances and relies on learning and adaptive intervention by those who use it.

Monitoring is the action of determining where implementation of the ICMP stands. It is the ongoing, systematic collection of data to provide management and the main stakeholders with a good indication of the progress in terms of the ICMP and the use of allocated funds for these purposes.

Evaluation informs the manager and stakeholders of the degree of effectiveness in terms of outcomes and impacts of the activities. Indicators are identified, and baselines must ideally be established against which to measure progress. Evaluation must also assess unplanned outcomes and impacts for which established baseline values may not exist.

Learning refers to continuous learning from the insights gained from the results of the monitoring and evaluation. Good practices have already started to be identified and more can be generated as the progress of the ICMP unfolds.

Intervention is the evidence-based action on the Monitoring, Evaluation and Learning that must be taken to overcome obstacles or challenges faced during the implementation of the necessary actions.

The MELI is therefore a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected.

The reader is referred to Section 7: Action Plan. In practical terms, in monitoring the indicators are ticked off one by one. This answers the question of what was done. Evaluation is informed by Expected Outcomes – were the actions effective? Learning is achieved through discussion in a broad-based MELI Committee that analyses shortfalls, which leads to the interventions to achieve better results.

The sequence of events are as follows:

1. An internal quarterly meeting is held to evaluate the performance of the various SCAs

2. The MELI Committee takes the performance evaluation results and expands them into a bigger table which includes the rest of the MELI components –

3. The performance management and a MELI report will enrich feedback to the HWC Council I and will be an informed aid to decision-making. The MELI format can similarly be used to generate State of Conservation Reports. While an organisation can monitor its progress in terms of implementing actions in the ICMP, it is neither appropriate nor credible, and indeed very difficult for an organisation on its own to measure the effectiveness and impacts of its own actions. It is therefore highly recommended that certain key stakeholders who are affected by the efficacy of an organisation, including potential beneficiaries be involved in the MELI Committee.

Conversely, the MELI Committee can be internal while a broad-based Monitoring and Evaluation Committee should be established to periodically monitor progress of the ICMP on an annual basis. Participation and transparency are the foundations of buyin; when people are involved and understand why things happen as they do, they tend to be far less critical and instead EMHWHS will be creating a supportive and collaboration community of supporters.

7. Action Plan

The Action Plan for EMHWHS translates management responses into actual steps that need to be taken, The Vision and Mission Statement for EMHWHS have led to a set of Strategic Goals, under which various Action Categories and Actions that readily group under them, have been identified. The Actions are specific and build on existing work undertaken in recent years, including the site specific ICMPs.

7.1 Action Tables

The Action Plan Tables below provide Action Categories, Specific Actions, Expected Outcomes, Indicators, Responsibilities, and a proposed Timeframe for the Actions.

Table 7: Specific actions to implement the ICMP

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Responsibility	Timeframe
SO1: To establish an ef	fective Management Au	Modern Humans Serial World He	eritage Site.		
1. Update Management Plans	1.1. Update existing site ICMPs	1.1. Clear outline on how to manage the site	• Updated individual Site ICMPs	Management Authority	2022
	1.2. Update Over- Arching ICMP	1.2. Clear outline on how to manage the 6 sites	Updated ICMP	Management Authority	2022
2. Establish Management Authority	2.1. Establish Management Authority	2.1 A functioning Management Authority	Minutes and decisions of meetings	Management Authority	2022
	2.2. Establish Site Management Committees	2.2 Functioning Site Management Committees	 Advertisement for Site Management Committees Agendas and minutes of established Management Committees 	Site Management Committees	2022
	2.3. Employ Site Managers for each Site	2.3 Site managers employed	 Reports from site managers Performance reports of site managers 	Heritage Western Cape	2022

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Responsibility	Timeframe
	2.4 Establish Heritage Agreements with Local Municipalities	2.4 Clear agreement between Local Municipalities and WHS setting out responsibilities	Heritage Agreement		2022
SG2: To ensure effectiv	e performance manage	ment and adaptive manage	ment of the world heritage site		
3. Implement Management Systems	3.1. Implement METT	3.1 Effective tracking of all projects	Reporting to DFFE and UNESCO		Once submitted
	3.2. Implement MELI	3.2 An effective method of adaptive management for the various heritage sites	• Annual review of the implementation of the ICMP		2017-2022

8. Glossary

Archaeology: The study of human activity in the past, primarily through the recovery and analysis of the material culture and environmental data that they have left behind, which includes artefacts, architecture, and the archaeological record.

Conservation: All efforts to retain the cultural heritage and significance of a site. It includes maintenance and may include preservation, restoration, reconstruction and adaptation. It will usually be a combination of several of these strategies.

Cultural Landscape: A landscape designed, improved or at least affected by human activity, whether deliberately or not. Cultural landscapes typically refer to areas where tangible heritage is associated with intangible values associated with the landscape, including memories, legends, songs, traditions and stories, belief systems, all representing different layers in the landscape. Appreciation of the different layers and their interrelationships ultimately brings a deeper understanding and appreciation of the cultural landscape. The World Heritage Committee refers, inter alia, to 'associative cultural landscapes, which are particularly valued for their religious, artistic or cultural associations of the natural element'.

Cultural Landscape Map: A map of all the heritage resources of an area, including natural resources, tangible heritage and intangible heritage. Heritage resources can then be linked to other attribute data, timelines, etc. in a GIS system for easy access and updating.

Cultural Significance: Historic, scientific or social value of past, present or future generations.

Heritage: Heritage is our legacy from the past. It includes those places, objects, languages, memories or cultural activities that have aesthetic, historic, scientific or social significance or some other special memory and routine.

Integrated Conservation Management Plan: A management framework, consisting of a central Operational Management Plan and Specific Plans, all of which guides the conservation of a specific area, avoiding negative impacts on the resources of the area, and where avoidance is not possible, minimising the negative impacts through the implementation of mitigation measures.

Intangible Heritage: Heritage associated with a place that is not expressed physically. It includes non-physical aspects such as symbolic meaning, values, activities like dancing, storytelling and music-making, memory and routine, indigenous knowledge, local traditions, passed from one generation to the next, mostly through oral traditions.

Khoekhoen (formerly spelled Khoikhoi): An indigenous ethnic group, one of the 'First Peoples' of southern Africa, who practised a pastoral economy with domesticated sheep and cattle.

Khoe-San, or Khoisan: is a term used to refer collectively to the Khoekhoen and the San huntergatherers, although the two groups had different histories, economies and cultures.

Landscape: A collection of natural and cultural features that characterise a particular place.

Local Economic Development (LED): Local economic development aims to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation.

Mitigation: Any action to reduce the negative impact of intervention.

Outstanding Universal Value: Outstanding universal value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

Risk: A hazard measured against vulnerability. In other words, the degree to which loss is likely to occur, as a function of the nature of particular threats in relation to particular circumstances. More broadly speaking, risks include any factor that could render Pinnacle Point Site Complex unable to achieve its Strategic Objectives.

San: Also known as the 'Bushmen', this 'First Peoples' group of southern Africa were traditionally hunter-gatherers and formed part of the Khoe-San ethnic group.

Statement of Outstanding Universal Value: A concise statement of the outstanding heritage value of a World Heritage Site (WHS), the value which provides such as a site with universal value.

Tangible Heritage: The physical aspects of heritage such as the series of sites at Pinnacle Point Site Complex, the rock art, archaeological sites and resources, and the sense of place provided by the natural environment.

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Annexure A: Management Authorities Scenarios Discussion

1. Management Authorities in South Africa

At the time of writing, South Africa has ten proclaimed World Heritage Sites, with three in the process of nomination (Human Rights, Liberation Struggle: Nelson Mandela Legacy Sites, Early Farmsteads of the Cape of Good Hope and the Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa). The various management structures of each WHS are presented in Table 8.

In investigating where the EMHWHS Management Authority could be constituted, the World Heritage Site that most closely resembles the current nomination is that of the Fossil Hominid Sites of South Africa. This serial site is managed by three separate management authorities, positioned in provincial departments across the three provinces that hold the sites. A joint management committee meets annually to discuss overarching management issues. This structure has had challenges in co-ordination and with hands-on management of the sites, as some of the provincial offices where the Management Authorities sit are too far removed from the sites to be effective for day-to-day operations. For a Management authority to be effective in the Western Cape, there would need to be better on the ground capacityaAnd more effective vertical reporting and communication.

Other Management Authorities in South Africa are detailed in Table 1 below.

WHS site	Year of inscription	Name of MA	Section	Туре	Funding source	Comments
Fossil Hominid Sites of South Africa	1999 and 2005	Cradle of Humankind World Heritage Site MA	8	Trading entity	Gauteng Department of Economic Development Site revenues	Three separate management authorities for each site are located within DEDT in Gauteng, North West and Limpopo. A single joint management Committee co- ordinates between he three different authorities, but is semi-functional.
Robben Island	1999	Robben Island Museum	9	National Public entity (3(a)) Cultural Organization situated in DAC	Department of Cultural Affairs Revenues from the Island Grants Fundraising	The Robben Island Museum has a council that reports to DAC as a cultural institution. It can therefore raise its own funds, while also getting assistance from government through the DAC
iSimangaliso Wetland Park	1999	iSimangaliso Wetland Park and Authority	9	National Public entity - Established by Regulation 1193 of 24 November 2000, under the World Heritage Convention Act 49 of 1999. The iSimangaliso Wetland Park Authority is	Revenues	Management of the Park was transferred to iSimangaliso officially in 2002 when a management agreement was concluded with the former Park manager, Ezemvelo KZN Wildlife. They have set up several PPP arrangements with lodges and campsites in the park. Conservation and ecotourism activities are run by Ezemvelo

WHS site	Year of inscription	Name of MA	Section	Туре	Funding source	Comments
				a Schedule 3A National Public Entity		
Drakensberg- Maluti	2000 and 2013	Ezemvelo KwaZulu-Natal wildlife	8	Provincial public entity established under section 3(C) of the PFMA reporting to the KZN Department of Economic Development, Tourism and Environmental Affairs	Revenues Grants	Similar agreement as with Isimangaliso with Ezemvelo for day to day management
Mapungubwe Cultural Landscape	2003	SANParks	8	National Public entity	SANParks and fundraising by the agency	
Vredefort Crater	2005	Vredefort Dome WHS	9	National Public Entity		Established in April 2015
Richtersverld Cultural and Botanical Landscape	2007	MEC for Environmental Affairs	8	Provincial Government Department	Provincial Government	Established on the 9th of June 2017

WHS site	Year of inscription	Name of MA	Section	Туре	Funding source	Comments
Cape Floral Region Protected Areas	2004 and 2015	SANParks, CapeNature and the Eastern Cape Parks and Tourism Agency	8	National and Provincial public entities under Western Cape and Eastern Cape		
!Khomani Cultural Landscape	2017	SANParks	8	National Public entity	SANParks and fundraising by the agency	
Barberton Makhonjwa Mountains	2018	MTPA - Mpumalanga Tourism and Parks Board- BMM - The plan is to found a WHS MA within the MTPA with its own HR - keeping the MTPA name	8	Provincial Public Entity	The MTPA will be responsible for the collection of all revenue generated by the Songimvelo Nature Reserve. Funds for the visitor information centre and other tourist	Involvement of landowner representatives in all decision-making structures of the WHS Management Authority is a clearly stated condition of landowner participation and the commitment of their individual properties to inclusion within the BMM WHS.

WHS site	Year of	Name of MA	Section	Туре	Funding source	Comments
	Inscription					
		The MTPA will			activities will	
		be supported			come from	
		by a co-			Barberton	
		management			Tourism and	
		committee			Biodiversity	
		(CMC)			Corridor	
		comprised of 3				
		СРА				
		representatives				
		and 3 MTPA				
		representatives.				
		The MTPA and				
		the Communal				
		Property				
		Associations				
		(CPA) are to				
		enter into a Co-				
		management				
		Agreement				
		under section				
		42 of NEM:PAA				

2. Existing Context of sites leading to Management Scenarios

The EMHWHS does not have a specific pre-existing management structure, neither does it have an operating tourism venture to subsidise the conservation of the sites (tours do operate at Pinnacle Point, but at a small scale). A Management Authority cannot function as an entity without a funded mandate. Operating funds for the various sites could be augmented through Tourism, where appropriate, however even with a well-established and operating tourism offering in place, the majority of the funds for the operations of the sites would need to be funded through other means. Regarding tourism, it is unlikely that Diepkloof Rock Shelter and Sibhudu Cave will be able to sustain a tourism venture large enough to provide funds for conservation. Any tourism ventures related to Diepkloof Rock Shelter and Sibhudu Cave will need to exist at some distance to these sites. This could be adequately achieved through the establishment of an Interpretation Centre. Several plans are underway for an Interpretation Centre at the Cape St Blaize Cave, a few kilometres from the Pinnacle Point Site Complex, which may present opportunities for interpretation of all the EMHWHS sites.

The need to interpret the sites to a broad audience will likely increase with added tourist interest in the world heritage site. The resulting pressure on the sites to be easily accessible needs to be balanced with the rights of the owners, as well as the interests of conservation. Each of the three sites is positioned on private land and the rights of the landowners should be respected. The intention of setting up a Management Authority is not to limit the rights of the owner, but rather to create a formal framework for ensuring the conservation and preservation of the sites that promotes collective decision making.

In examining the precedents of other Management Authorities in South Africa certain elements can be deemed applicable to the EMHWHS situation. The nature of the Heritage Resources demands on the ground knowledgeable people to provide effective operational support for each site. The broader strategic governance and coordination can be situated away from the sites, but must have clear and easy reporting functions in place so that there is effective information sharing and cooperative governance. The majority of funding will need to come from the Government, therefore a management directorate with a clear mandate will need to be established.

These specifications are explored in relation to the below scenarios.

2.1 Scenario 1 – Each site has its own Management Authority declared in terms of Section 9 of the WHCA

In this scenario, each Site has a Management Authority constituted as an individual public entity with a board reporting directly to the Department of Forestry, Fisheries and the Environment (DFFE). In this case, each Management Authority would have to provide for its own management systems and governance processes. The responsibilities outlined in **Table 3** would have to be fulfilled by each site-specific Management Authority independently.



Figure 4: Scenario 1 - Independent Site Management Authorities

2.2 Scenario 2 – Site Management Authorities constituted as Committees within a Provincial Department in terms of Section 8 of the WHCA

In this scenario, the management of the sites are coordinated and hosted by the MECs of the Western Cape Cultural Affairs and Sport and the MEC of Sport, Art and Culture in KwaZulu-Natal. The Site Management Committees (SMC) are constituted as Advisory Committees, however the Committees are supported through the Provincial Departments. In this way, the operational costs can be supported by the relevant Provincial Department. The MECs would be declared a Management Authority in terms of Section 8 of the WHCA. This structure would allow the Management Authority to begin functioning and managing the sites effectively in a very short time frame.

The two authorities will jointly serve as the Overall Management Authority of the Emergence of Modern Human nomination through the establishment of a Joint Management Committee (JMC). For each of the proposed sites, a Site Management Committee is recommended. It is possible that the Advisory Committees (SMCs) could

also be funded as municipal advisory committees as laid out in the Municipal Systems Act (Act 32 of 2000) under section 17(4).

(4) A municipal council may establish one or more advisory committees consisting of persons who are not councillors to advise the council on any matter within the council's competence. When appointing the members of such a committee, gender representivity must be taken into account.

In each case, the primary responsibility of each site management committee would be the implementation of the management plan, as well as creating a forum where issues around the conservation of the site can be discussed.



Figure 5: Scenario 2 - Management Authority situated in the Western Cape Department of Cultural Affairs and Sport and KwaZulu-Natal Department of Sport, Arts and Culture.

2.3 Scenario 3 – Site Management Committees as sub-committees of parent Management Authority Section 9 of the WHCA

In this scenario, a single Management Authority is set up as a public entity and is constituted as a section 9 Management Authority in terms of the WHCA. The Management Authority will be responsible for the management of the serial WHS as a whole and would fulfil the majority of the responsibilities as outlined in chapter 6 of the WHCA (**Table 3**). This structure would allow effective integration and holistic management, while letting the operational issues of site management be controlled by Site Management Committees on the ground (See Figure 6). This is the ultimate scenario and structure one will work towards.

Each site has a constituted Site Management Committee (SMC) that performs on the ground, day-to-day functions. The committees are not responsible for co-ordinating or controlling the general management of the World Heritage Site as a whole, but rather are concerned with the individual issues of the particular site. Each committee is constituted from a set of key stakeholders, with additional revolving members from other Interested and Affected Parties (I&APs). In this Scenario, the SMCs are not situated within the Municipalities as advisory committees, but are rather subcommittees of the

overarching Management Authority. They will need to be funded through the public entity.

While this structure is intended to alleviate the administrative burden on the SMCs, some reporting to the Management Authority for each SMC is still required. The SMC's will be able to draw on the financial resources of the Management Authority and will have to report on the use of funding for projects.

The overarching constraint of this proposed structure is that the Management Authority, without government funding, would be an unfunded independent entity, with significant pressure to provide revenue from tourism or other measures. As such, it would need to cover its own costs with little to no assistance from government funding. In the case of the EMHWHS, it would be further constrained because the majority of the sites to be included in the WHS are not appropriate for tourism development, therefore making the subsidising of the operational budget challenging.



Figure 6: Scenario 3 - Sites Managed through Site Management Committees, with an overarching Management Authority

A Management Authority is required to produce certain documents and to be constituted in a certain way. The below table describes the various legal responsibilities of a Management Authority as fulfilled in the three scenarios.

Responsibility	Scenario 1	Scenario 2	Scenario 3
How will the MA be constituted?	Management Authorities as Public Entities i.t.o. Section (9) of WHCA	SMCs as Committees within MEC's Office i.t.o S(8) of WHCA	SMCs as sub-committees of MA set in department of Environmental Affairs. (i.t.o. Section (9) of WHCA)
The general role of the MA.	Management Authorities are constituted as separate public entities, reporting to DFFE independently	Site Management Committees constituted as Advisory Committees to the MEC.	Management Authority is made up of local stakeholders. Site management committees constituted as sub committees of Emergence of Modern Humans WHS Management Authority (a Public Entity)
General Reporting to DFFE	MAs report directly to DFFE independently	Each Provincial MEC reports to DFFE independently	SMCs feed information to Management Authority. The parent authority then liaises with DFFE i.r.t periodic reporting etc.
Strategic Plan	MAs to provide strategic plan	Each MEC provides a strategic plan encompassing the sites in their province, with input from local committees and SMCs	Management Authority develops strategic plan with input from local committees
Financial Plan	MAs to provide Financial Plan	Each MEC provides a Financial plan encompassing the sites in their province, with input from local committees	Management Authority develops Annual financial plan.

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ICIDIE 9. ()VERVIEW	ot scenarios		responsibilities
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	MAs to be audited and	EMHWHS is audited as	Management Authority
Auditing	provide auditing	a part of the MEC's	provides annual financial
	reports to DFFE	office.	auditing report
Annual Report	MAs to provide stand- alone Annual Report	EMHWHS is included in the Departmental annual report.	Management Authority provides annual report with input from each SMCs

Annexure B. Terms of Reference for the Site Management Committees

The purpose of this document is to ensure that the Management Authority and its various Site Management Committees:

- Possess the expertise and professional capacity necessary to make sound decisions with
- regard to the management of the various sites within the Serial World Heritage Site;
- Undergo a smooth transition at the time of the reconstitution of the Site Management Committees;
- Have an efficient system for replacement of members who resign during the term of office of the Site Management Committee; and
- Adhere to the operational practices and policies of the Management Authority.

Site Management Committees of the Management Authority:

The following are the Site Management Committees of the Management Authority:

- The Diepkloof Rock Shelter Site Management Committee
- The Pinnacle Point Site Complex Management Committee
- The Sibhudu Cave Site Management Committee

Membership and appointment of committees:

The Management Authority shall from time to time determine the number of members required for each of the Site Management Committees. All committee chairpersons shall report in writing or in person to the Management Authority and the Joint Management Committee as required.

Each Committee will consist of the following representatives

- Landowners
- Archaeologist
- Government representatives
- Municipality
- Local Community representatives
- Local Organisations

In addition to the above representatives a chairperson and a secretary will be elected from within the committee.

General Policy of Committee Meetings

- A committee shall be considered to have a quorum if half the members plus one are present at a meeting.
- Meetings must be minuted and decisions adopted with an approved set of minutes for distribution. Minutes must be compiled and distributed within 14 days of the meeting.
- All decisions shall be decided by consensus or a majority of votes cast.
- If a Committee member resigns, or is unable to continue serving on the committee, an appropriate replacement must be sought to ensure that the correct skills and knowledge remain on the committee.

The roles of the various committee members are outlined below.

Chair

- Chairs the meetings.
- Represents the Particular site on the Joint Management Committee
- Liaise with chairs of other sites of the serial nomination on the management of the sites.
- Participate in the implementation of the integrated conservation management plan.
- Is aware of every stakeholder and all that goes on in the WHS.
- Collaborate with the landowner, archaeologist and municipality to transmit information about the WHS to the broader public, including awareness raising.
- Assist with sourcing funding for the maintenance of the site.

Secretary

- Takes minutes of the meetings and circulate to stakeholders.
- Updates the stakeholder list.
- Keeps record of relevant documentation related to the World Heritage Site.

Landowners

- Responsible for basic security of the site, such as creating fire breaks, repair and maintain fences around the property, removal of alien vegetation, trimming of grass.
- Work closely with the local municipality and archaeologist regarding the access to the site and status of conservation.

Archaeologist

- Undertake and report on the monitoring and evaluation of the site at regular intervals to assess the state of conservation.
- Contribute to technical aspects a monitoring system for the site.
- Develop and implement a baseline survey of the impact of activities around the site.
- Liaise closely with the landowner and local municipality on the protection of the site.
- Supervise the interventions undertaken as per the Integrated Conservation Management Plan.

Government representatives Municipality

- Assist with providing financial and human resources support for the protection of the site.
- Ensure the site is included in the municipal IDPs and SDFs as well as Disaster Management Plans.
- Collaborate with the archaeologist and landowner to transmit information about the WHS to the broader public, including awareness raising.

Local Community representatives

- Provide input to the actions of the Integrated Conservation Management Plan.
- Raise concerns if any of the actions are adversely affecting the local community.

Local Organisations

- Provide input to the actions of the Integrated Conservation Management Plan.
- Provide support to the landowner, archaeologist and municipality when required.

Diepkloof Rock Shelter Integrated Conservation Management Plan 2017 - 2022







Diepkloof Rock Shelter

Integrated Conservation Management Plan

2017 - 2022

Revised January 2023

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1 Acronyms

APM	Archaeology, Palaeontology and Meteorites
BELCOM	Build Environment and Landscape Committee
CBD	Convention on Biological Diversity
CBTO	Cederberg Tourism Organisation
CDCP	Clanwilliam Dam Community Project
CSO	Civil Society Organisation
DEA&DP	Department of Environmental Affairs & Development Planning
DEDAT	Department of Economic Development & Tourism
DRS	Diepkloof Rock Shelter
EBEDAG	Elands Bay Environmental and Development Action Group
ECDO	Elands Bay Community Development Organisation
EIA	Environmental Impact Assessment
GPS	Geographical Positioning System
HEADS	Human Evolution: Adaptations, Dispersals and Social Development
HIA(s)	Heritage Impact Assessment(s)
HIMS	Heritage Information Management System
HWC	Heritage Western Cape
IBA	Important Bird and Biodiversity Areas
ICMP	Integrated Conservation Management Plan
IDP	Integrated Development Plan
Ка	Thousand Years Ago
LUPO	Land Use Planning Ordinance
LSA	Later Stone Age
MELI	Monitoring, Evaluation, Learning and Intervention
MSA	Middle Stone Age
NEM:PAA	National Environmental Management: Protected Areas Act
NGO	Non-Governmental Organisation
NHRA	National Heritage Resources Act
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OUV	Outstanding Universal Value
PAIA	Promotion of Access to Information Act
PAJA	Promotion of Administrative Justice Act
PHS	Provincial Heritage Site
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SDF	Spatial Development Framework
SLA	Service Level Agreement
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
UCT	University of Cape Town
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USP	Unique Selling Points
VC	Verlorenvlei Coalition
VEMF	Verlorenvlei Estuary Management Forum
WCAC	West Coast Aboriginal Council
WHCA	World Heritage Convention Act
WHS	World Heritage Site

Executive Summary

- This document is an Integrated Conservation Management Plan for the Diepkloof 0 Rock Shelter near Elands Bay in the Western Cape Province. This site features the earliest material evidence of the behavioural characteristics of Homo sapiens (henceforth modern humans). All living humans belong to a single species – Homo sapiens. Modern humans are unique among all living animals in having a complex culture that acts as our primary adaptation to the world and its challenges. That culture is made possible by several key features possessed by all modern humans, namely a complex cognition, a proclivity to cooperate at large scales with kin and non-kin, and a unique form of social learning. Scientists often refer to these three features collectively as "modern human behaviour" to set it apart from the behavioural repertoire of other animals. Scientific research on the origin of anatomically modern humans and the modernity of their behaviour is crucial to understanding the history of all modern humans. It has been proposed that there are four characteristics for modern human behaviour. These include i) symbolic behaviour, ii) abstract thinking, iii) behavioural, economic and technological innovations, and iv) the ability to plan and strategize.
- In South Africa, Blombos Cave, Diepkloof Rock Shelter (DRS) and Pinnacle Point 0 Site Complex (PPSC) in the Western Cape, together with Klasies River in the Eastern Cape, and Border Cave and Sibhudu Cave in KwaZulu-Natal provide excellent scientific evidence for the appearance of modern human behaviour dating back to about 170,000 years ago thereby contributing towards understanding the evolution of behaviourally modern humans. Together, the South African sites present the best-preserved record for the behaviour of the earliest modern humans. This is because: i) the sites themselves preserve dense records of human behaviour, ii) there appears to be a confluence in this region of early evidence for advanced behaviour and culture, and iii) there has been a concerted effort by local and international scientists to study these sites with advanced scientific methods. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities and cultures. Moreover, the sites fill a significant gap in sites already on the World Heritage and Tentative Lists as identified by the HEADS review and published by the World Heritage Centre.
- The six sites have been placed on South Africa's tentative list of World Heritage sites to eventually make up a serial nomination for sites with Outstanding Universal Value (OUV) based on their contribution towards a better understanding of the

evolution of modern human behaviour. Two sites located in the Western Cape, namely Diepkloof Rock Shelter and Pinnacle Point Site Complex, along with Sibhudu Cave, in KwaZulu-Natal, will be the first sites to be nominated for inscription on the World Heritage List, with the others following later.

- The nomination process for World Heritage Sites requires the development of a management plan for each site to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected and its Outstanding Universal Value maintained. The overall purpose of the current Integrated Conservation Management Plan (ICMP) is therefore twofold, namely: i) to provide guidance for the management and conservation of Diepkloof Rock Shelter; and ii) to support the nomination dossier as part of the submission to apply for World Heritage Status.
- Diepkloof Rock Shelter (DRS), which takes its name from the nearby Diepkloof stream, is situated about 180 km north of Cape Town and 17 km upstream from the mouth of the Verlorenvlei River between Elands Bay and Redelinghuys. More specifically, DRS is on Portion 3 of the Farm Groote Drift 5, Piketberg on a ridge about 120 m above sea level, overlooking the Verlorenvlei wetland. The highest point of the koppie is 151 m above current sea level. Two adjacent rock shelters make the Diepkloof site and are named Diepkloof 1 and Diepkloof 2. Diepkloof 1 is a large cave with extensive archaeological deposit, dates back to approximately 100,000 years, and covers a large part of the floor area of the cave. It is here that the most important discoveries at Diepkloof have been made. Diepkloof 2 is situated to the south-east of Diepkloof 1 and is recognised for its rock art with the archaeological deposits being less significant than those excavated in Diepkloof 1.
- The OUV of DRS lies in the assets that illustrate the behaviour, decorative items, technology, and food resources of anatomically modern humans during the MSA. These include: i) over 400 engraved ostrich eggshell fragments of functional items (containers) and dated to between 55 000 and 65 000 years ago, thereby illustrating the ability of our ancestors to think abstractly and to conceptualise patterns and forms; ii) early appearance (74 000 to 100 000 years ago) of stone tool industries provides evidence for abstract thinking, technological innovation and the ability to plan and strategize; iii) faunal evidence that suggests that the MSA hominins occupying Diepkloof based their hunting strategies around some resources that were available at the coast reflecting the earliest systematic exploitation of marine foods along with other South African sites covered by the proposed World Heritage nomination; iv) the exploitation of the fur of nocturnal felines, which are dangerous to hunt, for symbolic purposes, and iv) its long

sequence dating from within the past 1 000 years to beyond 100 000 years, thereby providing the opportunity of studying assemblage and behavioural changes through a crucial period of human evolutionary history.

- The area proposed as the World Heritage property (previously referred to as the 'core') is located above the 100 m contour line of this particular koppie (hill) as no significant archaeological resources are located below this line. The area of the farm below this contour line forms the Buffer Zone for the proposed World Heritage nomination and covers the rest of Portion 3 of Groote Drift 5. Following the guidelines in the Provincial Zoning Scheme Model By-law, consent for one additional house or other development may be permitted on Portion 3 of Farm Groote Drift 5. It is assumed that zoning would not change, as the current zoning in itself forms part of the protective measures applying in the Buffer Zone and is hence essential to conservation.
- Under the terms of Section 27 of the National Heritage Resources Act (NHRA), Diepkloof Rock Shelter was declared a Provincial Heritage Site on 23 September 2014. Once a site is inscribed on the World Heritage List and gazetted as such, the National Environmental Management: Protected Areas Act (NEM:PAA) automatically applies to both the property and its buffer zone. Heritage Western Cape, as the provincial heritage resources authority for the Western Cape Province, is responsible for the protection of Diepkloof Rock Shelter. The ICMP proposes institutional arrangements and mechanisms by which HWC can fulfil its mandate in terms of this site.
- The ICMP is prepared in line with the principles, guidelines and requirements set out by the United Nations Education, Scientific and Cultural Organization (UNESCO) and its advisory bodies for World Heritage, the International Council on Monuments and Sites (ICOMOS) and the International Union for the Conservation of Nature (IUCN), as well as relevant South African legislation. In addition, regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with development planning for the area in which it is located.
- The current state of conservation of Diepkloof Rock Shelter is fairly good, this being largely the result of the attributes of the site. The site is remote, relatively inaccessible and its physical orientation and characteristics provide further protection also. The caves are elevated well above the Verlorenvlei and entrances face away from the prevailing wind direction, thereby receiving a fair degree of natural protection. The areas that have been excavated are back filled with sandbags up to the level of the cave floor. New conservation measures are

proposed for the site and should be in place by the end of 2020. There are currently very few visitors and there has been very limited vandalism of rock art or other inappropriate interventions.

- In a desired state, Diepkloof Rock Shelter is well managed, protected and promoted. Stakeholders collaborate to safeguard the authenticity and integrity of DRS and ensure the site is integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Visitor numbers to the site are controlled through the required use of qualified guides to access the site. Awareness and appreciation of the value of the site is enhanced and the local and national community contributes to the long-term care of the site. A sustainable finance mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community. The ICMP examines and presents the actions that need to be taken to move from the current to desired state in the main text.
- The development of the ICMP has a logical foundation. Stakeholders support a management plan more readily if they understand the logic behind it. Thus far an array of stakeholders has contributed to its contents. The ICMP is driven by a broad Vision that provides a broad strategic direction for the ICMP, a future aspirational point or 'guiding light' for where one would like to see the site. From the Visions a set of Strategic Objectives are readily derived. The latter are served by Action Categories consisting of specific actions.
- The ICMP includes a Vision, outlines Strategic Objectives (SOs) to pursue the Vision, examines management issues, and outlines institutional arrangements and mechanisms by which HWC can fulfil its mandate in terms of this site. The Implementation Plan is aligned with the SOs¹. For each SO there are Action Categories, Specific Actions Expected Outcomes, and Performance Indicators. The tasks identified in the Action Plan emerged from the review of documents, information obtained during consultation with relevant stakeholders, with linkages to the Vision, Strategic Objectives and desired state of conservation. In addition, the Lead Parties, the Main Stakeholders involved particular actions, and a Timeline is presented. The SOs of the ICMP are the following:

¹ The purpose of the Action Plan is to guide effort and ensure that all work conducted can be measured to comply with the Specific, Measurable, Achievable, Relevant and Timebound (SMART) criteria required by the National Treasury of South Africa.

• <u>Strategic Objective 1:</u> To establish a management framework for Diepkloof Rock Shelter that will enhance conservation of the site.

This objective relates to putting in place a management framework for the site. The World Heritage Convention Act requires every World Heritage Site (WHS) to have a Management Authority. As Diepkloof Rock Shelter is part of a proposed serial World Heritage nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. In line with precedents at other serial World Heritage Sites in South Africa, it is recommended that a committee be formed to oversee management for Diepkloof Rock Shelter, and which functions as an organ of the Management Authority, The conceptual aspects of the organisational structure can be refined through time as different needs arise.

• <u>Strategic Objective 2:</u> To ensure conservation of archaeological deposit and related archaeological material on site.

This objective relates to putting in place infrastructure and resources to conserve the archaeological deposit and related material. For example, a fence should be put up to clearly demarcate the boundary of the Buffer Zone as well to keep undesirable animals and people out. In addition, signage should be erected at strategic points to guide behaviour on the site. Since there is a moderate risk of fires, a firebreak should be created around the bottom of the koppie to prevent fires moving up the koppie and into the Cave. Measures should be put in place to ensure conservation and preservation of the archaeological excavation itself. The site requires closure and maintenance to ensure that it is suitably ready to welcome a controlled number of tourists on site.

• <u>Strategic Objective 3:</u> To monitor and assess the economic, social and environmental impacts of activities at and around Diepkloof Rock Shelter.

This objective relates to developing a monitoring system to assess the current and future impacts on the site. To monitor these impacts, Diepkloof Committee in collaboration with the Management Authority, should develop a cave monitoring system. In addition, a survey should be undertaken at the start of the implementation of the ICMP to establish a baseline of economic, social and environmental impact of activities around DRS. To evaluate the impact of the ICMP implementation, the same survey should be undertaken at the end of the ICMP timeframe.

• <u>Strategic Objective 4:</u> To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management.

This objective is to develop a sustainable financing mechanism for the site to secure ongoing funding to manage and protect the site. The Management Authority with support from the landowner, partnerships with other (local) stakeholders, improved marketing as well as

through integration of the site into local and regional development plans and spatial planning frameworks, will be able to manage the site financially.

 <u>Strategic Objective 5:</u> To encourage collaboration between stakeholders to conserve Diepkloof Rock Shelter and promote the site as a heritage tourism attraction.

This objective is to encourage stakeholder collaboration to protect, manage and promote the site. One of the objectives for managing Diepkloof Rock Shelter sustainably is to 'communicate its significance and need for conservation to the local community and visitors' and generally to involve the community in decision-making processes. Whilst formal communications within Diepkloof Committee, as well as with key stakeholders, will take place during its meetings, more regular communication with local stakeholders and the scientific community should take place. In addition, the constitution and/or policies of the Diepkloof Committee should clearly outline how to manage conflicts either within the Management Authority or with or between other stakeholders regarding the management of Diepkloof Rock Shelter.

 <u>Strategic Objective 6:</u> To increase the awareness and appreciation of Diepkloof Rock Shelter by the local and global community through research, education and interpretation of the cultural heritage of the site.

This objective is to increase awareness of the value of the site through research and interpretation. Guidelines for research are directed by the terms of the National Heritage Resources Act No. 25 of 1999 as well as by international best practice. The planning of research will remain the responsibility of permit holders in consultation with Heritage Western Cape with input from the Management Authority. The principle guiding research planning will be to uphold and extend the OUV of the sites. Until such appointment, Heritage Western Cape shall be responsible for monitoring of research and for issuing permits in terms of Section 27 of the NHRA.

• <u>Strategic Objective 7</u>: To build capacity of local people in heritage tourism to ensure responsible tourism to Diepkloof Rock Shelter.

This objective relates to building the capacity of local people to contribute to effective protection of the site. Training would involve all aspects of World Heritage, basic training in archaeology, in ecology of the regional biomes, guiding and hospitality. A local museum supported by the Department of Cultural Affairs and Sport will be opening in 2020 in Elands Bay to act as an interpretation centre for Diepkloof Rock Shelter. It is expected that the site itself will be open to visitors by the end of 2020.

 <u>Strategic Objective 8:</u> To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation projects.

This objective relates to promoting community involvement and benefits through the protection and sustainable utilisation of the site. The Cederberg Municipality aims to create conditions conducive for genuine, bottom-up tourism transformation and specifically the inclusion of previously disadvantaged areas and individuals in the Cederberg Tourism industry². This can be achieved through the participation and inclusion of all sectors of the community with a stake in tourism. For example, local communities can be involved as guides, hosts, and caterers or to transport visitors.

In addition, a sound benefit sharing mechanism should be developed to ensure that the broader local community benefits from tourism development. For example, a levy as part of the tourism fee to the site can be deposited into a community fund.

Any ICMP is only as good as its implementation. For the ICMP we propose a simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool for the ICMP in a participative manner, once the Diepkloof Committee is in place. The MEL is a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected. Taking an adaptive approach, the ICMP is a living document that requires revision on a periodic basis to ensure the most effective measures are in place to protect the site.

² Cederberg Municipality. 2013. Integrated Tourism Development and Marketing Strategy for the Cederberg Municipal Area: 2013-2018.

1 Introduction

Diepkloof Rock Shelter and Pinnacle Point Site Complex in the Western Cape Province and Sibhudu Cave in Kwazulu-Natal have been placed on South Africa's Tentative List of World Heritage sites³ to become part of a serial nomination for sites with outstanding universal value with regard to their contribution towards a better understanding of the evolution of modern human behaviour in anatomically modern humans. The nomination process for the proposed status requires the development of Site Management Plans (SMPs), otherwise called Conservation Management Plans (CMPs) to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected and maintain its outstanding universal value. As such, this document serves as an Integrated Conservation Management Plan (ICMP) for Diepkloof Rock Shelter in the Cederberg Local Municipality.

1.1 Introduction to Heritage Sites

Heritage

In many societies, the importance of heritage is increasingly being recognised and provides an anchor in a time of accelerating change. Evidence of the past provides a sense of belonging and is an important component of national and individual identity. Understanding the past also assists with managing challenges faced by modern society.

The perception of heritage has broadened considerably over recent decades. Initially sites were considered to be monuments and were inviolable. They were standalone places to be conserved in isolation and without consideration of the context in which they existed. Current consensus is that heritage is broader, with its value lying in the context of a broader environment being affected by interaction with the community, which lives and works in or around it. This line of thinking has consequently widened the understanding of what constitutes heritage, who owns it and the way it is managed.

South Africa's broad framework for heritage

South Africa has a modern system for managing heritage resources, which are defined in the broad sense set out above and the concept of the 'National Estate'. It has a comprehensive and 'integrated system for the identification, assessment and management' of the 'National Estate' as per the National Heritage Resources Act (NHRA) No. 25 of 1999. This system allocates responsibility for aspects of heritage to national, provincial or local government and provides each sphere of government with mechanisms for protection and conservation. The key provisions of these responsibilities are set out in the NHRA, but

³ The Emergence of Modern Humans: The Pleistocene occupation sites of South Africa http://whc.unesco.org/en/tentativelists/6050/.

protection of heritage may also occur through Municipal Sector Plans, pertaining to the environment and/or heritage as set out in the Municipal Systems Act No. 32 of 2000 as well as through Spatial Development Frameworks and Zoning schemes as per the Western Cape's provincial Land Use Planning Act, No.3 of 2014. The South African Heritage Resources Agency (SAHRA) is responsible for National Heritage Sites. Heritage Western Cape (HWC) manages Provincial Heritage Sites. Other measures under the NHRA are either managed by the local municipality or HWC, depending upon the assessed competency of the municipality. In case of inscribed World Heritage Sites, the World Heritage Convention Act (WHCA) No. 49 of 1999 applies as well as the National Environmental Management Act No. 107 of 1999 and the National Environmental Management: Protected Areas Act (NEM:PAA) No. 31 of 2004, the latter of which is more generally used for environmental conservation.

1.1.1 Modern Human Origins Serial World Heritage Sites in South Africa

South Africa is one of the places where the roots of humankind are most evident, as some of the earliest hominids have been found here. *Homo sapiens*, the species common to all of humanity, emerged about 300,000 years ago. The earliest dated fossils have been found in North Africa, while southern Africa is part of the Middle Stone Age cultural diaspora associated with early *H. sapiens*.

Debates around the origin of these anatomically modern humans and the modernity of their behaviour are crucial to understanding the history of all modern people. Evidence from artefacts such as stone tools, indications of pigment use and hearths, has been interpreted as showing the occupants of the caves had made significant social, behavioural and technical innovations. Blombos Cave has some of the earliest evidence for symbolic behaviour. Klasies River, Blombos Cave, Pinnacle Point Site Complex and other sites provide some of the earliest evidence for the systematic use of marine resources in the Last Interglacial. Border Cave and Klasies River have remains of early anatomically modern humans. In addition, all sites have contributed outstanding evidence for palaeoenvironmental conditions via the rich Mid- to Late Pleistocene African mammalian fauna with a number of species now extinct, as well as extensive palaeoenvironmental data from well-dated stratigraphic horizons and extremely well preserved plant remains. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities. Diepkloof Rock Shelter, Pinnacle Point Site Complex and Sibhudu Cave have been identified as first properties worthy of inclusion on the World Heritage List as a serial nomination for sites with outstanding universal value with regard to their contribution towards a better understanding of the evolution of anatomically modern humans.

1.1.2 Provincial Heritage Sites in the Western Cape

In 2000, when the National Heritage Resources Act replaced the National Monuments Act, and SAHRA replaced the National Monuments Council, all national monuments in South Africa became Provincial Heritage Sites. This change in status involved about 2,500 sites in the Western Cape Province. Less than 1% of these sites commemorated the indigenous precolonial heritage of the province. Since the establishment of Heritage Western Cape in 2003, other provincial heritage sites have been added, including Diepkloof Rock Shelter, and Pinnacle Point Site Complex.

A place is declared a Provincial Heritage Site (PHS) after it is assessed as having heritage significance within the context of the province and in terms of criteria set out in the National Heritage Resources Act (NHRA) and its Regulations. A PHS is declared in terms of Section 27 of the Act and receives the same protection as a National Heritage Site. Provision of such status communicates clearly and definitively that the heritage authority considers a site to be an important heritage asset that warrants focused conservation attention. Moreover, such status immediately provides protection via strenuous permitting.

On 23 September 2014, Diepkloof Rock Shelter was declared a PHS. The three major motivations for this were as follows⁴:

"1) Diepkloof Rock Shelter is highly important in understanding the development of modern humans and cultural expression, as seen in the engraved ostrich eggshells. To ensure that this significant site is preserved for future research and no untoward impact occurs, a greater level of protection is required.

2) This site has been earmarked to form part of a World Heritage Site serial nomination of South African archaeological sites. DRS contributes to the narrative of the development of humans which other sites, such as Pinnacle Point Site Complex, Elands Bay Cave, Blombos Cave, Sibhudu, Border Cave and Klasies River Caves, are already a part of.

3) South Africa's rich record in the earliest stages of human evolution has received substantial public promotion, funding as well as tourism and education development. The country's record for the emergence of modern human behaviour is equally rich, but has not received similar support and attention. Through declaration of the DRS, it is anticipated that the importance of the archaeological record in South Africa for modern human behaviour along the West Coast will be communicated to South Africans [and humankind at large]."

⁴ Heritage Western Cape, Provincial Heritage Nomination Form: Diepkloof Rock Shelter.

1.1.3 World Heritage Sites

A World Heritage Site is a place that adds outstanding cultural and/or natural value to the common heritage of humanity. A list of these sites is maintained by UNESCO's World Heritage Centre and administered by its World Heritage Committee. For a site to be included on the World Heritage list, it needs to demonstrate Outstanding Universal Value (OUV) and meet at least one of the ten selection criteria⁵. Six of these criteria are cultural and four natural. The criteria applicable to DRS are outlined in Section 3.3.

Within the World Heritage System are several programmes aimed at conserving and promoting research of particular aspects of heritage. The Human Evolution: Adaptations, Dispersals and Social Development (HEADS) programme was established under the auspices of UNESCO for 'defining and establishing a solid strategy of cooperation and implementation to ensure the future recognition, conservation and study of these early vulnerable sites in relation to World Heritage⁶. The activities under HEADS represent a process of evolutionary accretion that took place over a vast period of time, offering vital insight to scientific, cultural, ethological and historical dimensions of human development, and the earliest evidence of human ritual, expression and practice. An aspect of the HEADS Programme is the proper management and conservation of human evolution related sites, which could include Diepkloof Rock Shelter, and Pinnacle Point Site Complex.

1.2 What is the Integrated Conservation Management Plan (ICMP)?

To enable the protection of important heritage sites, receiving official heritage status is in itself not sufficient. The nomination process for World Heritage Site status therefore requires the development of a management plan to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected to maintain its outstanding universal value. To be considered of outstanding universal value, a property needs to: i) meet one or more of ten criteria; ii) meet the condition of integrity; iii) if cultural, meet the condition of authenticity; and iv) have an adequate system of protection and management to safeguard its future. All these aspects will be considered in this Integrated Conservation Management Plan (ICMP).

Section 47 (3) of the National Heritage Resources Act also requires that Provincial Heritage Sites have 'conservation management plans'. This provision is consistent with the provisions for World Heritage Sites.

Traditionally, heritage conservation followed a preservationist approach in which a site was ring-fenced and access restricted. Among the negative consequences of restricting access

⁵ http://whc.unesco.org/en/criteria.

⁶ http://whc.unesco.org/en/heads/.

is the separation of people from their heritage and culture and fostering of resultant resentment. In addition, indirect spin-offs of local economic development that can be stimulated through the appropriate use of cultural assets will also be limited. An ICMP therefore takes into account the broader context within which a particular site is located and integrates the perspectives of relevant sectors into the management plan.

This ICMP is a management tool that presents an approach, principles and actions for the sustainable use and conservation of DRS and the sum of tangible and intangible heritage it contains. The plan is described as an ICMP, because all its content, including how the management plan, its structure and operations relate to one another, is treated in a holistic and integrated manner.

The ICMP aims to be concise, accessible and practical. Using straightforward language, it presents a policy reference framework and manual-like management plan. At operational level, the ICMP identifies and prioritises management responsibilities and imperatives needed for proper management of the site. Specifically, an ICMP should conform to the following four basic principles:

- Effectiveness the ICMP should ensure realization of the objective;
- Coherence the outlook, objectives, measures and tasks should be consistent;
- Functionality the ICMP should be workable; and
- Realism the ICMP should be achievable and implementable.

This ICMP is further based on a local resource management approach to heritage conservation that:

- Embraces the linkages of the site to the broader cultural landscape;
- Strengthens the sense of place of the site and broader cultural landscape;
- Sustainably utilises the site and the resources of the broader landscape;
- Strengthens the link between the historical and present cultural landscape;
- Seeks solutions in close cooperation with stakeholders; and
- Fosters local custodianship.

The vision for DRS drives the ICMP, and is also informed by input from stakeholders including those who are responsible for implementing the management framework. The vision is detailed in Section 5.1 of this ICMP.

1.3 Approach of the ICMP

Establishing the ICMP as an official document, enforceable under Section 47 of the NHRA, as well as putting the necessary human resources and mechanisms in place is important for effective management and local economic development. The sections below describe the approach to the development of the current ICMP and elaborate on principles used to guide the process of the drafting of this ICMP. The following principles have guided the compilation of the ICMP as described further below:

- Inclusive Stakeholder Engagement;
- Rights-Based Approach to Conservation;
- Avoidance of Disturbance;
- Professional Conservation Measures;
- Sensitive and Suitable Development; and
- Integration with Government Planning Frameworks.

1.3.1 Inclusive Stakeholder Engagement

Development of the ICMP included an inclusive and transparent stakeholder involvement process to provide all relevant stakeholders an opportunity to contribute their opinions on managing the site. The interests, needs and values of all relevant stakeholders had to be included as far as possible. A participatory approach cultivates buy-in and contributes to the long-term support of relevant stakeholders to the conservation of the site.

Stakeholders are afforded the opportunity to become involved in the management planning and implementation of the ICMP as far as possible, as well as to provide input on mechanisms for managing conflicts between different stakeholders. The objective of stakeholder engagement is to have all relevant stakeholders benefit from the protection and use of the site without damaging its integrity. As part of this process, existing development rights and plans as well as existing tourism activities in the area and the tourism potential of the site itself were reviewed and assessed.

The ICMP therefore provides a framework for interaction between relevant stakeholders. The various views of the stakeholders can be debated in an open and transparent manner and can be balanced through *inter alia* i) appropriate conflict resolution procedures; ii) relevant

legal instruments; and iii) the principles of co-operative governance in accordance with the Constitution of South Africa.

1.3.2 Rights-Based Approach to Conservation

The conservation approach is based on the concept of the 'National Estate', as set out in the National Heritage Resources Act (NHRA). This Act establishes the principle that the values embodied in heritage resources are the shared property of all South Africans. In a rightsbased approach are two stakeholder groups: i) the rights holders, whereby rights are defined as entitlements that belong to all human beings regardless of race, ethnicity, or socioeconomic class; and ii) the duty bearers, or the institutions who are obligated to ensure fulfilment of the rights of the rights holders. A rights-based approach aims at empowering the rights holders, strengthening the capacity of duty bearers - both have an active role in conservation - and increasing the capacity of both the rights holders and duty bearers. It is important to build upon existing capacities, ensure engagement and custodianship, and adjust to changing needs.

Rights extend to all South Africans, including the historically dispossessed, customary users of a site, and landowners and it is important they understand why our common heritage needs to be conserved for future generations. The ICMP neither weighs up one type of right against another, nor gives preference to a particular group. Laws and procedures exist to guide how different groups wish to exercise their rights, with the NHRA being a prominent tool in this regard. To ensure that the ICMP is a principled document, rights are emphasised as a prime consideration, as protected by Law and enshrined in the South African Constitution.

1.3.3 Avoidance of Disturbance

In terms of the potential utilisation or development of the site, the overarching principle of avoiding negative disturbance of heritage resources has been applied. The natural environment of the site is a sensitive, vulnerable and dynamic ecosystem, which forms an important component of the landscape and context of the site, which in many ways provides a natural protection of the cultural heritage. As such, the site requires special attention in Management and planning procedures need to be rigorous enough to protect these sensitive values. (See Section 7 for discussion of management system.)

1.3.4 Professional Conservation Measures

To set a leading example in heritage conservation requires professionally implemented conservation measures. These include *inter alia* consultation with an experienced professional archaeologist, local communities, conservation of the surrounding environment, maintaining original fabric that contributes to the heritage value of the site, removing and curbing graffiti, stabilising the archaeological deposit, and constructing paths, boardwalks

and/or signage to limit detrimental impacts where avoidance is not possible. Such measures, and others to be identified in further detailed planning, must be implemented by professional archaeologists in an adequate and scientific manner, in the planning phase as well as when undertaking the activities.

1.3.5 Sensitive and Suitable Development

Heritage management and any related development must be sensitive to the people of the area and their needs. In addition, it must equitably serve their physical, psychological, developmental, cultural and social interests and be socially, environmentally and economically sustainable.

1.3.6 Integration with Government Planning Frameworks

Relevant government authorities and planning officials have been engaged in the drafting of this ICMP. Accordingly, provision has been made for the management policies and spatial management guidelines contained in this ICMP to be integrated with required governmental spatial planning tools, as well as local social and economic development frameworks as included in the municipal Integrated Development Plan (IDP) and Spatial Development Framework (SDF).

1.4 The Purpose of the ICMP

The overall purpose of this ICMP is twofold, namely i) to provide guidance for the management and conservation of DRS; and ii) to contribute to the nomination dossier as part of the submission to apply for World Heritage Status.

The Logic of the ICMP

The development of the ICMP has a logical foundation. Stakeholders support a management plan more readily if they understand the logic behind it. Thus far an array of stakeholders has contributed to its contents. The ICMP is driven by a broad Vision that provides the broad directives from which the Strategic Objectives are derived. The latter are served by Action Categories consisting of specific actions (see Figure 1).





1.5 Preparation of the ICMP

1.5.1 What process was followed?

The process followed in developing this ICMP included i) review of available literature; ii) site visits; iii) stakeholder consultation; iv) development of the Draft ICMP; and v) completion of the Final Draft ICMP.

1.5.2 Literature Review

The development of the ICMP involved an extensive review of all available literature, including reports, peer-reviewed publications, background material, the nomination dossier itself, and relevant planning frameworks. Literature used for this ICMP is cited in the bibliography at the end of this document.

1.5.3 Consultations

To develop this ICMP, consultations with a broad range of stakeholders took place. The nature of these consultations included face-to-face conversations, emails, and telephone conversations. Stakeholders included landowners, researchers, representatives of the municipality, local organisations and conservation organisations. Stakeholders consulted are listed in Appendix A of this document.

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2 History and Site description of Diepkloof Rock Shelter 1

2.1 Brief History of Diepkloof Rock Shelter

Diepkloof Rock Shelter 1 (DRS 1) in the Elands Bay area is the most important archaeological site for understanding the behaviour, diet and cultural development of modern humans on the West Coast of South Africa, and possibly on the entire west coast of Africa. Excavations in the vicinity of Elands Bay and Verlorenvlei started in the late 1960s and 1970s by Professor John Parkington of the University of Cape Town. His main purpose was to record and analyse the spatial distribution of Stone Age sites both in shell middens on the coast and in rock shelters and open sites in the adjacent Sandveld and the Cederberg mountains to the east. The results, particularly from Elands Bay Cave that overlooks the coast west of Diepkloof, suggested that during the Holocene (the last 11 000 years) both marine and land-based food resources were used in a seasonal round that involved mainly coastal food in winter and land-based resources in summer.

Between the 1970s and 1990s, students involved in archaeological field schools assisted in several excavations in the area, complemented with open site surveys to record rock art and artefacts located across the Sandveld. The majority of these sites were manually plotted on topographic maps. Since 2 000, some of these maps have been updated and digitised using a Geographical Positioning System (GPS) and the data have been entered into the national South African Heritage Resources Information System (SAHRIS) database. This has assisted in placing Diepkloof Rock Shelter (DRS) within its broader environmental context.

As part of this broader landscape study, DRS was first excavated in 1973 to examine the period of Later Stone Age occupation. These pilot excavations focused on the upper levels and sampled the Later Stone Age as well as the upper strata of the Middle Stone Age, but stopped there as the main research interest at the time was in the Holocene. Since 1998, a South African - French partnership started to expand on these excavations, primarily to investigate the Middle Stone Age artefacts and associated materials, date them, and compare them with other sites of similar age in southern Africa. Palaeoenvironmental studies of changes in sea level, vegetation and fauna have further complemented this work. See below a list of permits issued for DRS, which provides a summary of the research history.

Permits issued By SAHRA since 2008:

Title: Export of sediments and stones from Diepkloof Applicant: Cedric Poggenpoel Application date: 4 November 2008. Permit date: 4 December 2008 to 1 January 2010 Status: Closed (Approved)

Case ID: 4498

Title: Temporary export of 100 pieces of ochre from sieving waste, 33-pieces of recorded ochre and in addition 9 pieces of ochre

Applicant: Laure Dayet

Application date: N/A

Permit date: 6 December 2011 to 1 January 2013

Status: Closed (Approved)

Cased ID: N/A

Permit ID:

Title: Temporary export of 12 Silcrete artefacts Application date: 29 July 2013 Applicant: Dr Guillaume Porraz Permit date: 27 August 2013 to 31 August 2014 Status: Closed (Approved) Cased ID: 3099

Title: U-series dating of ostrich eggshells from Diepkloof Rock Shelter Application date: 10 October 2017 Applicant: Chantal Tribolo and John Parkington Permit Date: 26 March 2018 to 31 March 2019 Status: Final Permit Report Pending Case ID: 11767

Permits issued by HWC since 2007: Application date: 27 November 2007 Applicant: C. Poggenpoel Proposal description: Extent excavation permit (No 2004-08-003) for excavations at Diepkloof Shelter, Farm Diepkloof, 32.23S, and 18,27EE, Piketberg Magisterial District

Valid: 30 October 2010

Permit No: 2004-08-003

Application date: 18 November 2008

Applicant: C. Poggenpoel and P.J. Texier

Proposal description: Extent excavation permit (No 2004-08-003) for excavations at Diepkloof Shelter, Farm Diepkloof, 32.23S, and 18,27EE, Piketberg Magisterial District

Permit No: 2004-08-003

2.2 Location

Diepkloof Rock Shelter (32° 23' 11.92" S, 18° 27' 9.49" E, Figure 2) is located about 150 km north of Cape Town and 17 km east of the present Atlantic coastline between Elands Bay and Redelinghuys (see Map 1). More specifically, DRS is on Portion 3 of the Farm Groote Drift 5, Piketberg on a ridge about 120 m above sea level, overlooking the Verlorenvlei.



Figure 2: Diepkloof Rock Shelter at the front with the smaller cave to the left.

2.2.1 Cultural and Natural Landscape Mapping

A Cultural and Natural Landscape Map refers to tangible human modifications of a natural environment and the intangible meanings associated with it, such as memories, traditions and stories. Cultural landscapes can contain several layers reflecting a range of activities over time, the historical phases and their effects on the landscape (O'Hare, 1997:47). Considering the several other protected cultural sites around Elands Bay and the natural heritage status of Verlorenvlei, a Cultural and Natural Landscape Map is included to place DRS in a broader context (see Map 1).



Map 1: Cultural and Natural Landscape of Elands Bay area.

2.3 Description of Key Features

There are two rock shelters close together at Diepkloof, namely Diepkloof 1 and Diepkloof 2. Both are situated on a butte7 (koppie) about ~120 m above sea level that overlooks the Verlorenvlei approximately 500 m to the east. From the rock shelters, the vlei can be seen to the east, and to the southeast is the village of Redelinghuys across Grootdrif and Witklip. The site derives its name from the Diepkloof stream that runs to the south east of the koppie into the Verlorenvlei. The area proposed as the World Heritage property (previously referred to as the 'core') is located above the 120 m contour line of this particular koppie as no significant archaeological resources are located below this line (see Map 2). The crown of the koppie is 151 m above current sea level.

Diepkloof 1 comprises a large "cathedral" cave that is 35 m wide, 20 m deep and 20 m high. A large boulder is located at the entrance of the cave with smaller boulders strewn across the cave floor. The fall of the large boulder marked the start of sediment accumulation within the rock shelter as it provided a protective barrier against wind and or water. The extensive archaeological deposits date back more than 100,000 years (Figure 3). Within the last 1 500 years, the rock shelter was used by Khoekhoe people as a kraal for sheep. The archaeological deposit covers a large part of the floor area of Diepkloof 1 and it is here that the most important Middle Stone Age discoveries have been made.



Figure 3: Excavation plan at Diepkloof Rock shelter

⁷ A butte is an isolated hill with steep, often vertical sides and a small, relatively flat top.

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Diepkloof 2 is situated to the south-east of Diepkloof 1. It is a smaller cave being 20 m wide, 15 m deep and 15 m high with the upper slope approximately 105 m above sea level. Small to medium sized boulders are located at the front of the cave with sandy deposit developed towards the back of the cave. Diepkloof 2 is recognised for its rock art (see 5) with the archaeological deposits being less significant than those excavated in Diepkloof 1, although it does preserve thus far largely uninvestigated MSA deposits (Parkington, pers. comm., 2018).



Figure 4: Diepkloof 1, showing the excavation area.



Figure 5: Rock art in Diepkloof 2.

The results of the analysis of materials from the excavations in DRS 1, in particular those undertaken after 1998, demonstrate that the technological, cultural and environmental changes that took place at DRS during the Middle Stone Age were similar but not identical to those observed at other sites on the south coast, including Klasies River, Blombos Cave and Pinnacle Point (Porraz *et al.*, 2013).

MSA at Diepkloof Rock Shelter

The Middle Stone Age sequence (Figure 6), that built up to a depth of 3.5 to 4 metres over about 60 000 years, encompasses changing traditions of stone tool-making. These are labelled by archaeologists after places where they were first described and each has a characteristic set of stone tool designs and tends to date within a particular time-span.

At Diepkloof Rock Shelter, the MSA sequence comprises five distinct technological phases (Porraz *et al.*, 2013) which encompass changing traditions of stone tool-making. The five technological phases from the base upwards are; (1) MSA type 'Mike', (2) Pre-Still Bay type 'Lynn', (3) SB, (4) Howiesons Poort and (5) Post Howiesons Poort.

MSA-Mike is located near the base of the excavated sequence. The lithic assemblage is characterised by blades and triangular flakes which were manufactured from locally procured raw materials. The locally sourced coarse-grained quartzite largely dominates the MSA-Mike technological phase. These stone tools are dominated by notches and denticulates.

The Pre-SB type Lynn lithic assemblage contains unifacial and bifacial points and is dominated by irregular flakes, but other typological pieces are not documented at Diepkloof. This lithic assemblage is also dominated by quartzite while the dominant non-local raw material represented at the site is silcrete. The most striking feature of this phase concerns the frequency and nature of the formal tools which comprise lateral and convergent scrapers. Double-patinas reflecting re-tooling were also frequently observed on silcrete and, occasionally, on quartz tools.

The SB phase is characterised by bifacial pieces manufactured from mainly fine grained quartzites but also present are other lesser numerous tools which include scrapers and denticulates. A lower percentage of tools were also made from non-local silcrete. It has been observed that there is a gradual decrease in the proportion of local rocks from the base to the top of the SB.

The HP phase accounts for the largest part of the archaeological sequence at Diepkloof and is subdivided into different phases (Early, Intermediate and Late) but only the upper phases resemble the so-called "classic" Howiesons Poort (Porraz et al., 2013). The HP pattern of raw material selection is preferentially oriented towards (non-local) fine grained rocks, particularly silcrete. Only the last sub-phase of the Late HP (type Eric) documents a discrete change with

a higher frequency of local quartz. In the Early phase of the HP there are two subphases. The first phase is dominated by exotic fine grained silcretes while the second phase uses local quartzites and quartz. Blades and bladelets were the main tools produced in both of these phases. Porraz et al. (2013) identify an Early HP phase that is stratigraphically and technologically distinct from the classic HP as reported at other sites. In two layers, referred to as "Frank" and "Darryl", with stone tools typical of the Howiesons Poort complex, more than 250 engraved ostrich eggshell fragments were found, and smaller numbers continued into the underlying layers, making a total of 408. This is many more than have been found at any other site so far (Porraz, 2013). The intermediate HP phase tools are composed predominantly of exotic silcrete. Typical of this phase is the high frequency of strangulated-notched pieces. The Late HP phase is characterised by the preferential selection of fine-grained varieties of silcrete and by the presence of typical HP core forms. Compared to preceding phases, the proportion of irregular blades relative to regular blades increases and is coupled with an increase in flake production. Another identifiable element is the production of backed flakes.

The post-HP phase is characterised by the use of silcrete, quartz and quartzite in the production of stone tools. Materials are sourced from both local rocks (quartzite and quartz) and non-local silcrete. Stone tools include flakes that are morphologically more variable than in preceding layers as well as scrapers.

OSL and TL chronology	L Lithostratigraphic y units		Technological phases		logical ses	Technological and symbolical proxies	Vegetational communities		Main Faunal species
(after Tribolo et al., this issue)	1	after Miller et al., this issue)	6	after Porraz et	al., this issue)	(after Charrié-Duhaut et al., Dayet et al. Texier et al., this issue)	(after Cartwright, this issue)		(after Steele and Klein, this issue)
		"Layer-cake"-like deposit,	N=3 SUs (ca. 15cm thick)	Post- HP (type Claude)	Non-local (50%) and local (50%) rocks, blades and flakes, 'unifacial points'/scrapers.		To be characterized		Hares, carnivores, hyraxes, equids, small, small-medium, large-medium and large bovids, shells.
52±5 ka	LU 4	high frequency of combustion features and combustion- derived components (ash-dumps, burnt bedding).	N=10 SUs (ca. 55cm thick)	Late Howiesons P.	Non-local (50%) and local (50%) rocks, blades and flakes backed pieces (segments and truncated).	g adhesive I OES containers			Hares, carnivores, small, small-medium, large-medium and large bovids, fur seals, shells.
65±8ka 83±8 ka 85±9 ka 77±8 ka	103	sharp contact Homogenous deposit with high amounts of diagenetic minerals. sharp contact	N=8 SUs (ca. 45cm thick)	Intermediate Howiesons P.	Non-local (60%) and local (40%) rocks, blades, strangulated- notched tools, backed pieces (few).	use of haftin engraves	Great species diversity, shrubland, fynbos and thicket species, wetland plants, perificance of Afro		Hares, dune molerats, carnivores, hyraxes, small bovids, fur seals.
89±8 ka			N=2 SUs (cz. 10cm thick)	MSA-Jack	Local (80%) and non-local (20%) rocks, flakes and blades, backed 'scrapers'/pieces, (end-)scrapers.		montane forest taxa.		Hares, carnivores, hyraxes, small, large-medium and large bovids, shells.
109±10 ka 105±10 ka			N=6 SUs (ca. 45cm thick)	Early Howiesons P.	Non-local (50%) and local (50%) rocks, blades, pièces esquillées, backed pieces (truncated), bifacial pieces (few).			trich eggshells.	Hares, carnivores, hyraxes, small, large-medium and large bovids.
109±10 ka	LU 2	Geogenic and anthro- pogenic components, intact hearths.	N=5 SUs (ca. 35cm thick)	Still Bay (type Larry)	Local (80%) and non-local (20%) rocks, bifacial reduction sequence, few (end-)scrapers.		Dominance of thicket taxa, Afromontane taxa, diverse proteoid fynbos, wetland plants.	Tortoises, os	Hares, carnivores, hyraxes, equids, small and large- medium bovids.
100±10 ka			N=1 SU (ca. 10cm thick)	Pre-SB type Lynn	Local (80%) and non-local (20%) rocks, flakes and blades, lateral and convergent scrapers.				Dune molerats, hyraxes, equids, small bovids.
			N=2 SUs (cot. 15cm thick)	MSA-Mike	Local rocks (95%), triangular flakes, flakes, blades, few formal tools (denticulates).		Predominance of Afro-		Hares, dune molerats, carnivores, hyraxes, small and large bovids.
107±11 ka		diffuse contact		aracterized	Local rocks,	+	montane forest taxa, riverine woodland species, mesic thicket and proteoid fynbos vegetation.		Dune molerats,
100±10 ka	IUI	High proportion of geogenic components and little anthropogenic material.		MSA to be ch	Flakes, few formal tools.	?			nyraxes, small and large-medium bovids



Evidence for modern human behaviour

Engraved ostrich eggshells

What makes DRS 1 a site of outstanding significance, is the clear and unambiguous evidence of engraved geometric patterns on ostrich eggshell (Figure 7). The practice demonstrates an unexpectedly early graphic tradition that is interpreted as evidence for modern behaviour through the use of artefacts. Over 400 fragments of engraved ostrich eggshell pieces were found and were dated to between 55 000 and 65 000 years ago (Texier *et al.*, 2010) and were later extended with further excavated samples and improved dating methods to between 52 000 and 100 000 years ago (Porraz, 2013). These engravings were made on functional items (containers), which were involved in daily activities of the cave occupants. Fragments of holes or apertures that were made in the ostrich eggshells are very similar to



those found on ostrich eggshell water containers used by present-day San people who indicate ownership by marking their water containers with engraved geometric patterns.

Figure 7: Engraved ostrich eggshell Early appearance of Stone Tool Industries

The appearance of more refined stone tool industries, and in particular the Still Bay and Howiesons Poort industries of the southern African Middle Stone Age in which fine-grained raw materials (Figure 8) were pressure-flaked and blades were backed for hafting, provides evidence for abstract thinking, technological innovation and the ability to plan and strategize (Lombard, 2012). Dates for the Still Bay Industry at Diepkloof suggest that the innovations characterised by bifacial pressure-flaking in this industry emerged possibly as early as 100 000 years ago, about 25,000 years earlier than at other sites; while backed blades associated with the Howiesons Poort Industry may also have emerged somewhat earlier than at other sites, i.e. prior to 74 000 years ago (Porraz *et al.*, 2013b).



Figure 8: Fine-grained silcrete core Subsistence

The environmental evidence excavated from DRS 1 in the form of both animal and plant remains, indicates that while Diepkloof has never been on the coast, while the overall environment around Diepkloof and distance from the ocean changed substantially between 40 000 and 100 000 years ago. It was a strategic, elevated place positioned at the interface of distinct ecological niches with access to a mosaic of vegetation communities (Porraz, 2013b). This places it in a different environmental niche from Pinnacle Point, which was more obviously affected by changes in sea level during times of colder temperatures world-wide between about 100 000 and 11 000 years ago. The faunal remains in the same layers as the decorated ostrich eggshell fragments include bones of animals such as Cape fur seal, hyrax and hare, and mussel shells. This provides evidence that the sea level was not far from its present position when the site was occupied. The absence of deposits that date to between

about 40 000 and 11 000 years ago indicates that the cave was not occupied when the sea level dropped during the Last Glacial Maximum and the coastline moved about 20-30 km westwards (Steele and Klein, 2013).

Exploitation of nocturnal felines

Recent studies of Diepkloof Rock Shelter⁸ showed that inhabitants at the rock shelter during the Still Bay and Howiesons Poort technocomplexes were hunting solitary and dangerous felines with nocturnal habits — such as caracals, African wild cats and leopards — for their fur. The pattern of cut marks on the bones of these felines is evidence of careful and intentional removal of the most complete furs possible, most likely in anticipation of their use. The skinning of these dangerous carnivores is to be interpreted within the context of symbolically loaded cultural traditions and practices (Val et al., 2020).

2.4 Boundaries

2.4.1 Provincial Heritage Site

As a result of the PHS status, the protected property falls under the provisions of Section 27 of the NHRA No. 25 of 1999, which in sub-section (18) prescribes that 'No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any (provincial) heritage site without a permit issued by the heritage resources authority responsible for the protection of such site'. Once DRS is inscribed as a WHS, the Protected Areas Act No. 31 of 2004 will also apply. Development is also restricted in terms of the Agriculture 1 Land Use Zoning. Being inaccessible to most livestock, the two caves, as the most sensitive part of the PHS, are unlikely to experience damage from that source.

2.4.2 Spatial Extent of the Buffer Zone

The area protected as a PHS lies above the 100 m contour line, which circles the koppie. In World Heritage terms this constitutes 'the property' or core of the site. The area below the 100 m contour line of Portion 3 of the Farm Groote Drift 5 is the proposed Buffer Zone for Diepkloof Rock Shelter. A small portion of the farm on the far southern end of the parcel of land is currently used for agriculture with the remainder retained as wilderness area. From satellite imagery over the past 14 years the agricultural land only appears to be planted irregularly

⁸ Val, A., Porraz, G., Texier, P.-J., Fisher, J.W., Parkington, J. 2020. Human exploitation of nocturnal felines at Diepkloof Rock Shelter provides further evidence for symbolic behaviours during the Middle Stone Age. *Scientific Reports* 10: a6424. https://doi.org/10.1038/s41598-020-63250-x

and has not been so for several years. Map 2 shows the proposed Property and Buffer Zone of DRS.



Map 2: Property and Buffer Zone of DRS, including servitude road.

2.4.3 Protected Area

A section within the Buffer Zone, indicated in blue in Map 3, was declared by HWC as protected area under Section 28 of the NHRA. This provides an extra level of official protection to part of the Buffer and allows for the development of tourism infrastructure within the Buffer to service the proposed World Heritage Site.



Map 3: Protected area under Section 28 of the NHRA for the Property of Diepkloof Rock Shelter.

2.4.4 Principles of Acceptable Land Use and Development

Diepkloof Rock Shelter is zoned Agriculture 1 (AGR1). The objective of this zone is to "promote and protect agriculture on large farms as an important economic, environmental and cultural resource. Limited provision is made for non-agricultural uses to provide rural communities in more remote areas with the opportunity to increase the economic potential of their properties, provided these uses do not present a significant negative impact on the primary agricultural resource⁹."

The following principles apply:

- Land use within areas zoned as Agriculture 1 should be limited to stock farming and grazing within the carrying capacity of the land parcel. For example, no feedlots or ploughed fields should be developed.
- Development on properties zoned as Agriculture 1 is limited to a single homestead with associated outbuildings, with departures required for any additional dwelling houses. This includes development of tourist accommodation.

Table 1 provides a set of development guidelines for the proposed Buffer Zone and other portions of Farm Groote Drift within the context of the Agriculture 1 zone.

⁹ Provincial zoning scheme model by-law, 2004.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
Area GREEN	Sensitivity High	Permissible land use/s (as per zoning) Permissible land uses within Agriculture 1 zoning: Primary uses are: agriculture, dwelling house. Consent uses are: additional dwelling unit, home occupation, guest-house, bed and breakfast establishment, tourist facilities, farm stall, farm shop, aqua-culture, intensive animal farming, intensive horticulture, plant nursery, riding school, 4x4 trail, commercial kennel and commercial antenna. Permissible land uses within Authority zoning: Primary use is: authority usage, utility usage, commercial antenna. Consent uses are: any use determined by Council, commercial antenna.	Guidelines Use zoning scheme as a guide to development and land use. Should a promoter propose new structures in areas of high sensitivity the onus will be on the promoter to conduct the necessary HIA(s), EIA(s), associated public participation processes, etc. to conclusively prove that the proposed development(s) will not impact negatively on the values of the site. Adherence to the National Heritage Resources Act requires a permit to change planning status and all other relevant laws of South Africa pertain. Natural landscape to remain undisturbed and managed in accordance the permissible infrastructure development (see Section 6.3) and visual intrusions to be mitigated. Limits on zoned consent uses: o Enterprise development must be
			congruent with the Vision of the

Table 1: Land Use and Development Guidelines within the Buffer Zone of the Property.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			CMP.
			 Development restrictions and guidelines to be determined by the Management Authority as per the permissible infrastructure development (see Section 6.3). Only a single additional dwelling associated with tourism development should be permitted provided it conforms to guidelines and is in close proximity to existing dwelling, which it should not exceed in terms of floor area. Property should not be subdivided. (NHRA requires a permit to do so).

2.5 Natural Environment

2.5.1 Climate and Geomorphology

Climate

Elands Bay currently has a Mediterranean climate receiving an annual rainfall of ~170 mm, of which the majority falls during winter. The average temperature in July is ~18°C during the day and ~7°C during the night; in February, these averages are ~28.7°C and ~15°C respectively.

Geomorphology

The quartzitic shelter of DRS is formed within the sandstone and conglomerate of the Piekenierskloof Formation that belongs to the Table Mountain Group. At the site itself, quartz and quartzite artefacts predominate in the earliest part of the archaeological sequence with some occurrences of silcrete. During the 70-74 ka unit, silcrete has replaced quartz with quartzite still quite dominant. From 65-70 ka quartz becomes dominant again with some presence of quartzite.

2.5.2 Flora

Diepkloof Rock Shelter falls within the Cape Floral Kingdom, one of the world's six Floral Kingdoms. The site also lies within the Sandveld that forms part of the Greater Cederberg Biodiversity Corridor. The Sandveld contains about 12 vegetation types of which nine are threatened by habitat loss. These vegetation types occur within three major biomes: Fynbos, Succulent Karoo and Afromontane Forest. The area around DRS is further known for its Rooibos tea and medicinal plants. In addition, the West Coast region nearby DRS is particularly renowned for its annual wild flowers in August and September. In the area of the Verlorenvlei wetland, rare plants have been recorded including Ferraria foliosa, F. densepunctulata, Cerycium venoum (possibly extinct) and Cullumia floccose¹⁰.

From excavations at DRS, the preservation of organic matter such as wood, grass, seeds and fruits is exceptional and the remains of pollen have allowed the identification of local plants. For example, its Howiesons Poort period between 52 000 and 65 000 years ago shows evidence for thicket vegetation such as *Diospyros*, *Cassine peragua* and *Hartogiella schinoides*. In addition, Afromontane trees have been found in the area, including *Ficus*, *Kiggelaria africana* and *Podocarpus elongatus*, which points to a riverine environment more diverse than now present in the area (Texier, *et al.*, 2010).

¹⁰ <u>http://www.birdlife.org/datazone/sitefactsheet.php?id=7157</u>.

2.5.3 Fauna

Verlorenvlei has been identified as an Important Bird Area (IBA), particularly for water birds such as the great crested grebe, South African shelduck and Caspian tern. To date, more than 200 bird species have been identified at Verlorenvlei. Mammals recorded in the area include the threatened Cape clawless otter, Anonyx capensis.¹¹

At DRS, remains of animals found in excavations include mammals, tortoises and intertidal marine shells (Steele & Klein, 2013). The majority of the bones found in the cave are from steenbok, grysbok and hares as well as animals from rocky environments including rock hyrax and klipspringer. In addition, evidence exists of grassland species such as zebras, wildebeest and hartebeest. Though there are ostrich eggshell remains, no ostrich bones have been found. The majority of tortoise bones are from angulate tortoises. These bones are relatively large compared with their Later Stone Age (LSA) counterparts, which suggests different intensities of predation between MSA and LSA populations. Over time, the coastline moved up and down the river and fragments from the shells of black mussels, granite limpets and Cape fur seals have been found (Texier, *et al.*, 2010).

2.6 Ownership

Portion 3 of the Farm Groote Drift 5, Piketberg, is owned by Verlorenvlei Vakansieplaas. The sole director for the company is Mr Hendrick Steyn, who lives on the property with his family.

¹¹ <u>http://www.birdlife.org/datazone/sitefactsheet.php?id=7157</u>.

3 Significance of the site

3.1 Significance of Diepkloof Rock Shelter

Diepkloof Rock Shelter (DRS) is in an outcrop of Table Mountain Series quartzite some 17 kilometres inland along the Verlorenvlei. The shelters are located high above the current vlei water level at the point where the open water closer to the coast gives way to reeds and a more riverine landscape. The Pleistocene and Holocene history of this river and the contents of the DRS deposits are intimately related, both reflecting in part the rising and falling of sea level during the Last Glacial-Interglacial cycle, in the last 120 000 years, with the coldest time (the Last Glacial Maximum) centering on 20 000 years ago.

The tangible heritage of the modern human population that lived in the Diepkloof Rock Shelters and surrounding landscape is expressed in the stone and other artefacts made throughout the last 100 000 years or more. The practice of engraving ostrich eggshells with geometric patterns during the Howiesons Poort technological stage is one of the earliest examples in the world of identifying ownership. The disappearance of this practice after the Howiesons Poort may reflect a modification in the way late Middle Stone Age inhabitants interacted with one another (Texier, *et al.*, 2013). The Later Stone Age deposits that overlie the Middle Stone Age, and the rock paintings in both DRS 1 and 2 give further evidence of changes in tangible heritage. They record both hunter-gatherer lifestyles in the Holocene as well as the appearance of pastoralism which heralded a new economy and technology in the Western Cape about 2 000 years ago. There are substantial assemblages of sheep bones in the deposit associated with artefacts, fireplaces and bedding made of plant material, but they have been only partly investigated.

Excavations showed that a thin veneer of Later Stone Age (LSA) material, dating to the last 2 000 years, overlies much deeper and much older set of Middle Stone Age (MSA) records that are all effectively beyond the range of radiocarbon dating. Subsequent renewed excavations carried out in collaboration with French colleagues from the University of Bordeaux (Steele, T.E. & Klein, R.G., 2013) have shown that these MSA occupation deposits date from beyond 100 000 years ago to about 40 000 years ago. Most notable in this sequence are the ostrich eggshell fragments that provide one of the earliest evidence found to date of 'art', and as such the site is important in understanding development of thought processes that led to the art necessary to undertake this form of cultural activity (Parkington and Poggenpoel, 1987). Figure 9 shows an outline and comparison with three other sites, Blombos, Klasies River and Sibhudu Cave that are also part of the serial nomination for becoming a WHS based on their contribution towards a better understanding on the evolution of anatomically modern humans.
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The Later Stone Age deposits that overlie the Middle Stone Age, and the rock paintings in both DRS 1 and 2 give further evidence of changes in tangible heritage. They record both huntergatherer lifestyles in the Holocene as well as the appearance of pastoralism which heralded a new economy and technology in the Western Cape about 2,000 years ago. There are substantial assemblages of sheep bones in the deposit associated with artefacts, fireplaces and bedding made of plant material, but they have been only partly investigated.

3.2 Justification for Inscription

This World Heritage Nomination focuses on the development of modern human behaviour in *Homo sapiens* in South Africa. This is an important subject of study to which UNESCO has directed effort within the ambit of HEADS (Human Evolution: Adaptations, Dispersals and Social Developments).

All living humans belong to a single species – Homo sapiens (henceforth modern humans). Modern humans are unique among all living animals in having a complex culture that acts as our primary adaptation to the world and its challenges. That culture is made possible by several key features possessed by all modern humans – a complex cognition, a proclivity to cooperate at large scales with kin and non-kin, and a unique form of social learning. Scientists often refer to these three features collectively as "modern humans are descended from primordial lineage that lived originally in Africa and eventually left the continent and spread throughout the planet. That origin lineage must have possessed this modern human behaviour and the capacity for complex culture. The four proposed sites for the Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa provide the best, richest, and earliest scientific evidence for the appearance of this modern human behaviour as expressed in the material culture found by scientific investigations at these sites.

Scientific research on the origin of anatomically modern humans and the timing and nature of what behavioural characteristics make us "modern" is centred on archaeological sites that have provided the best evidence for modern behaviour in this crucial time period. In South Africa, Blombos Cave, Diepkloof Rock Shelter and Pinnacle Point Site Complex in the Western Cape, together with Klasies River in the Eastern Cape, and Border Cave and Sibhudu Cave in KwaZulu-Natal have Outstanding Universal Value with regard to their contribution towards understanding the evolution of anatomically and behaviourally modern humans. The sites offer powerful testimony to the development of distinctly modern human behaviour in the Middle Stone Age (MSA) at the southern tip of Africa between 100 000 and 40 000 years ago. The three sites in the Western Cape and Sibhudu Cave in KwaZulu-Natal have been identified as sites worthy of inclusion on the World Heritage List as first candidates of the serial nomination.

Collectively, Diepkloof Rock Shelter, Pinnacle Point Site Complex and Sibhudu Cave have preserved long sequences of habitation remain with artefacts such as flaked stone and polished bone tools, early evidence for preparation of stone by heating to improve its flaking qualities for sophisticated tool-making, engraved patterns on ochre, the use of bone-and-arrow technology, a pattern of ochre crayon lines on stone, shell beads and decorated ostrich eggshell, evidence of consistent use of hearths, and the making of paint from pigments such as ochre. The findings have demonstrated significant social, behavioural and technical innovations of people occupying the caves during the MSA.

At an individual site level, Blombos Cave, DRS and PPSC have some of the earliest evidence for symbolic behaviour. Blombos Cave, PPSC and Klasies River provide some of the earliest evidence for the systematic use of marine resources before and during the Last Interglacial period. Border Cave and Klasies River contain the remains of early anatomically modern humans. In addition, Blombos Cave, DRS, PPSC, Border Cave, Klasies River, and Sibhudu Cave have contributed outstanding evidence for the palaeoclimatic and palaeoenvironmental conditions experienced by early modern humans via the rich Middle and Late Pleistocene African mammalian fauna remains conserved at these sites. The sedimentary record from these sites shows that these caves were all occupied repeatedly, over long periods of time that have been well dated. Additionally, Border Cave and Sibhudu Cave have exceptionally good preservation of botanical remains. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities and cultures. Taken together with the evidence from other long-sequence cave sites of similar age that will become part of a serial nomination from South Africa, the sites fill a significant gap in sites already on the World Heritage and Tentative Lists as identified by the HEADS review and published by the World Heritage Centre (Sanz, N., 2013).

3.2.1 Statement of Outstanding Value

The outstanding universal value (OUV) of DRS lies in the evidence, which illustrates the behaviour, decorative items, technology, and food resources of anatomically modern humans during the MSA on the south-western edge of the African continent. About 60 000 to 80 000 years ago, and possibly earlier, people who from time to time occupied the rock shelter were engraving abstract patterns onto ostrich eggshell water containers (Schapera, 1930; Wannenburgh, 1980). These are among the earliest abstract representations found to date in the world and illustrate the ability of our ancestors to think abstractly and to conceptualise patterns and forms that do not exist in nature. As such, it is evidence of a remarkable development in human thought processes that are significant to the understanding of the origins of behavioural modernity (Rigaud, *et al.*, 2006). There is also evidence of a variety of marine foods used in their diet, which along with other South African sites covered by the proposed World Heritage nomination, reflects the earliest systematic exploitation of marine foods thus far investigated anywhere in the world.

The deposit at DRS also includes stone tools, many hearth features and, probably, although not yet exposed, many levels with preserved vegetation used for bedding, together with other activity residues.

The site is significant for its long sequence dating from within the past 1 000 years to beyond 100 000 years. The MSA depositional units that are below the LSA deposits that date to the past 2 000 years include assemblages from the later MSA that are conventionally known as Howiesons Poort and Stillbay as well as assemblages from below, above and possibly stratigraphically between these, thereby providing the opportunity of studying assemblage and behavioural changes through a crucial period of human evolutionary history (Tribolo, *et al.*, 2009)

Combined with the evidence from other long sequence cave sites of similar age that will become part of a serial nomination from South Africa, DRS will fill a significant gap in sites already on the World Heritage List as identified by the HEADS review and published by the World Heritage Centre (Sanz, UNESCO).

3.2.2 Authenticity of the Site

Early evidence for abstract 'art' and anatomical and behavioural modernity

Since the 1980s, it has been known that the upper MSA layers at Diepkloof, and specifically those with Howiesons Poort stone tools, have large numbers of pieces of ostrich eggshell showing deliberate markings. In the earlier excavations, the stratigraphic derivation and age of these was unclear but currently these contexts are more definitively known. Some 400 or more small pieces, some of which refit to make larger eggshell fragments, have been systematically marked with a few 'geometric' engraved lines. These small pieces are undoubtedly parts of ostrich eggshell containers as those recovered have several intentional perforations, almost identical to the openings made by modern southern African hunter-gatherers in their water flasks.

Stratigraphy and dating

A crucial observation is that the stratigraphy of these MSA layers shows nothing in the way of large scale depositional mixing, meaning that the dated levels reflect a reliable and sequential record of human behaviour through several tens of thousands of years. One cannot speak of continuity as ancient visits were demonstrably brief and episodic. However, these brief visits are captured in chronological sequence and can therefore inform on environmental and behavioural changes through time. The site was dated through a set of luminescence methods that can give age estimates for sediment deposition or the heating of stone tools in the more distant past. These luminescence methods are now the tools of choice for dating Earlier Stone Age and MSA artefacts and the behaviours they reflect and show the ostrich eggshell fragments to be dated from 65 000 to 55 000 years ago (Texier, Porraz, *et al.* 2013; Tribolo 2013).

3.2.3 Integrity of the Site

The stratigraphic deposits at DRS are clear and finely resolved, although challenging to excavate. So far a small fraction, about 25% of the available floor space in this large overhang, has been excavated.

The unexcavated deposits that still contain further evidence at DRS are in good condition. Excavated areas have been back-filled temporarily, but plans are already in place for the permanent closure of the site in 2020. The site is relatively inaccessible and the deposit is well sheltered by the deep rock overhang, which faces away from prevailing winds. This has contributed to retention of integrity over a protracted period of time.

3.3 Criteria for Selection

World Heritage sites are selected on the basis of six cultural and four natural criteria. The cultural criteria to be considered are as follows:

- i. represent a masterpiece of human creative genius;
- ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, townplanning or landscape design;
- iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change; and
- vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance¹².

The 'Emergence of Early Modern Humans'' (EMH) comprises a series of sites proposed for inscription on the basis that together they form an outstanding example illustrating the emergence of modern human behaviour, diet and culture during the MSA. The sites are proposed for inscription under the following criteria:

¹² The World Heritage Committee considers that this criterion should preferably be used in conjunction with other criteria.

Criterion (iii) Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

Excavations in the 70s showed that a thin veneer of Later Stone Age (LSA) material, dating to the last 2 000 years, overlies a much deeper and much older set of Middle Stone Age (MSA) records. Subsequent renewed excavations in the 90s have shown that these MSA occupation deposits date from beyond 100 000 years ago to about 40 000 years ago (Porraz, *et al.*, 2013).

Criterion (iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

The tangible heritage of the modern human population that lived in the Diepkloof Rock Shelters and surrounding landscape is expressed in the stone and other artefacts made throughout the last 100 000 years or more. The practice of engraving ostrich eggshells with geometric patterns during the Howiesons Poort technological stage is one of the earliest examples in the world of identifying ownership at approximately 60 000 years ago. The disappearance of this practice after the Howiesons Poort may reflect a modification in the way late Middle Stone Age inhabitants interacted with one another (Texier, *et al.*, 2013).

Criterion (v): Be an outstanding example of a traditional human settlement, land-use or sea-use which is representative of a culture, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

Diepkloof Rock Shelter (DRS) is in an outcrop of Table Mountain Series quartzite some 17 kilometres inland along the Verlorenvlei. The shelters are high above the current vlei (wetland) water level at the point where the open water closer to the coast gives way to reeds and a more riverine landscape. The Pleistocene and Holocene history of this river and the contents of the DRS deposits are intimately related, both reflecting in part the rising and falling of sea level during the Last Glacial-Interglacial cycle, during the last 120 000 years, with the coldest time (the Last Glacial Maximum) centring on 20 000 years ago.

4 Situational Analysis and Local Economic Development

To be able to manage Diepkloof Rock Shelter in an appropriate and sustainable manner, a better understanding of the local and economic context is required.

4.1 Demographics and Administrative Context

Diepkloof is close to the coastal town of Elands Bay and the village of Redelinghuys that fall within the Cederberg Municipality, which is in turn within the West Coast District of the Western Cape Province of South Africa. Within the West Coast District, the Cederberg Municipality, with a population of 49,768 in the 2011 census, has the smallest number of people, representing only ~13% of the total population in the district. In 2011, Elands Bay had a population of 1525. Just over a third of the population of the Cederberg Municipality is younger than 19 years old. As a result, there is a great need for education facilities and future employment. In a study by the Department of Environmental Affairs and Development Planning (DEA&DP), Elands Bay was identified as an area with high social needs and low potential for its fishing settlements.

4.2 The Agricultural and Fisheries Sector

From 2000 to 2010, the agriculture and fishing sector in Cederberg Municipality shrank by 6 200 jobs. The decline is a result of the contraction of agriculture combined with limited manufacturing growth. However, with a contribution of ~30% to the gross domestic product, it is still by far the largest sector in the local municipality.

Agriculture

A number of farms exist in the area around DRS of which the majority produce potatoes. In addition to potatoes, onion and wheat cultivation also occurs as well as livestock grazing. Many of the local inhabitants of Elands Bay are employed as labourers on these farms. The 2016/2017 Action plan in the reviewed IDP shows the municipality's aim to develop and assist emerging farmers through lease agreements and fencing.

Fisheries

Fishing, including reliance on the sea and its resources, has been part of the culture of the people in the Elands Bay area for thousands of years, which is evidenced by extensive shell middens dating back at least 3 000 years¹³. Currently, the fishing industry forms the main economic base of Elands Bay, but shows a declining trend as a consequence of quota limitations on fishing by the local community. Income is mainly derived from the commercial crayfish industry, or artisanal line fishing practice. However, the crayfish factories tend to be

¹³ The MSA paleontological site contains some marine shell fragments dating to beyond 60,000 years ago, during the last glacial period. This shows evidence of the first recorded use of the site.

insufficiently managed and lack adequate municipal services. Land-based line fishing is also an option for local fishermen, although mostly as a component of the tourism industry linked to recreational and sport fishing.

The local fishing community forms an integral part of the living cultural landscape of Elands Bay. Despite this, the fishermen struggle to make a living and provide for their families¹⁴. The following factors severely restrict local fishermen at subsistence level: i) the current fishing license system inhibits the earning of sufficient livelihood; ii) limited access to knowledge of applicable laws and what they aim to achieve; and iii) limited language and literacy skills inhibit development beyond subsistence level. Furthermore, conflicts around the use of the slipway and land use rights to some of the old crayfish factory buildings, as well as limited support facilities exacerbate the daily struggle for survival experienced by the local fishing community.

4.3 The Tourism Sector

The Western Cape Province is a popular tourist destination that in 2014 received 1.8 million domestic and 1.4 million international visitors. According to WESGRO15, in the same year, ~15.3% of these visitors were engaged in cultural/heritage related activities and international visitors had a slightly higher rate of participation than the domestic market. Appendix B provides more detailed background on heritage tourism to the Western Cape and South Africa in general.

Heritage tourism

To date, no set definition of heritage tourism exists. Zepple and Hall (1992) define it "as an encounter with or an experience of being part of the history of a place through visiting historic sites, monuments, and landscapes. It focuses on learning and includes the experience of local traditions, social customs, religious practices and cultural celebrations". The Advisory Council on Historic Preservation defines¹⁶ heritage tourism as: "the business and practice of attracting and accommodating visitors to a place or area based especially on the unique and special aspects of that locale's history, landscape (including trail systems) and culture".

According to South Africa's National Heritage and Cultural Tourism Strategy 2012, heritage and cultural tourism products are still underrepresented in marketing South Africa as a tourism destination. This is mainly because of poor integration of heritage and cultural resources into

¹⁴ The local fishermen have a quota that allows them to only catch fish and crayfish to the approximate value of R 20,000 a year. This is insufficient to adequately support a family.

¹⁵ WESGRO is the Western Cape Destination Marketing, Investment and Trade Promotion Agency.

¹⁶ Definition in Section 7 of Executive Order 13287 of the Advisory Council on Historic Preservation that provides guidance to State and Federal agencies in the United States.

mainstream tourism as well as the value and impact of heritage tourism not being fully realised, particularly the economic potential of related products.

The Western Cape has about half of the protected heritage sites in South Africa¹⁷. These sites include monuments, museums, built environments, heritage precincts, cultural landscapes, places of worship, archaeological sites, fossil sites, caves, middens and rock art. Of these sites, two UNESCO World Heritage Sites attract the most tourists, namely the Cape Floral Region and Robben Island. Visitor numbers for cultural heritage attractions tend to be considerably lower than those for natural attractions in South Africa (see Appendix B). However, not all heritage sites are accessible to tourists, because these are: i) remotely located; ii) located on private land; iii) vulnerable; and/or iv) do not have adequate tourism infrastructure.

4.3.1 Existing Tourism Attractions

Elands Bay has a modest yet attractive tourism industry, including natural, cultural and historical heritage as well as water-based activities. Around Elands Bay, the following are the main cultural and natural attractions:

Verlorenvlei

Verlorenvlei is among the Western Cape's most important estuarine eco-systems and being 1 500 ha in extent it is one of the country's few coastal freshwater lakes as well as one of the largest natural wetlands along South Africa's west coast. As a result, the vlei is listed as a RAMSAR site, a wetland with international importance. Moreover, it has been identified as an Important Bird and Biodiversity Area¹⁸ (IBA), particularly for water birds such as the great crested grebe, South African shelduck and Caspian terns. During the rainy season, Verlorenvlei can host more than 200 bird species. As such, it is a major attraction for bird watchers.

South-North Route - West Coast Crayfish trail¹⁹

This six-day guided trail along the pristine coastline of the West Coast starts in Elands Bay forms part of the South-North tourism route, a community-based tourism initiative based on sustainable tourism principles. This part of the West Coast offers many bird species, great ocean views, unique coastal vegetation, seasonal wildflowers as well as dolphin and whale sighting.

Baboon Point

Baboon Point, also known as Cape Deseada, is located near the mouth of the Verlorenvlei estuary on the Atlantic coast. The Elands Bay Cave and the associated shell middens on the

¹⁷ South African Heritage Resources Information System (SAHRIS) register of declared sites, http://www.sahra.org.za/sahris/declaredsites.

¹⁸ <u>http://www.birdlife.org.za/conservation/important-bird-areas</u>.

¹⁹ <u>http://www.south-north.co.za/cray_rt_trail.htm</u>.

Point provide evidence similar to and associated with the DRS. Baboon Point is one of the few sites in Africa where rock paintings can be found in proximity to the coast. In April 2009, the site was declared as a PHS. In 2013, an ICMP was developed for Baboon Point in which it is proposed to establish the site as an independent responsible tourism destination while part of a broader network of culture and heritage sites. In addition, the ICMP states community benefits should be created through direct employment, cooperation with local businesses and facilitating inclusion in government and NGO skill development programmes.

Mussel Point

Mussel Point, just south of Elands Bay Cave on Baboon Point, is believed to be the largest of 13 mega-middens found along the West Coast of South Africa. The midden is furthermore the only open site with remains from the early pottery period (3 000 to 2 000 years ago) in the Elands Bay area. Mussel Point stands out among other megamiddens in that it offers the best chronological resolution for the later part of this period of the pre-colonial history of South Africa. The site was declared a PHS at the same time as Baboon Point. Mussel Point is currently not promoted as a tourism attraction.

Verlorenvlei Heritage Settlement

This settlement is privately owned and made up of traditional fishermen's houses situated on the southern shore of the vlei. It includes a few minor shell middens of similar age to the others found in the area. It was declared a Provincial Heritage Site in September 2014.

Elands Bay Museum

The Elands bay Museum was established in early 2020 by the MEC of Cultural Affairs and Sport of the Western Cape. The museum was set up as a local museum to function as interpretation centre for the World Heritage Site and more specifically for Diepkloof Rock Shelter. The Museum will host by the end of 2020 a temporary exhibition on the World Heritage Sites and the Cradle of Human Culture and the Virtual Reality experience from Diepkloof Rock Shelter. Guided tours from the interpretation centre to the site will also be organised. To allow this, young members of the Elands Bay and Redelinghuys communities will be trained to conduct visitor tours both at the interpretation centre and at the site.

Developing community heritage tourism in the Elands Bay area will provide a basis on which to build infrastructure and visitor facilities. Training will also be needed to develop the required capacity of the local community as tourism skills are critical for the further development of (heritage) tourism and to maximise community benefit of tourism (IKM, 2013). The business plan for the Cradle of Human Culture and the Feasibility Study for the West Coast Route of the Cradle of Human Culture have assessed the feasibility and identified methods for increasing tourism to cultural sites at Elands Bay, Diepkloof Rock Shelter and adjacent sites included on the Route.

4.3.2 Tourism Promotion and Management

The promotion of tourism is currently outsourced to the Cederberg Tourism Organisation (CBTO). This entity acts as an executive and coordination body to promote sustainable tourism development in the area through a strategic partnership with the local municipality. A Service Level Agreement (SLA) outlines the main responsibilities of the CBTO, which include 3 important areas, namely marketing, administration and development. As such, the CBTO would be the best entity to develop a Tourism Development and Marketing Plan for the Elands Bay area. The CBTO receives an annual grant from the municipality and membership fees from CBTO members.

While no cultural heritage sites have been properly developed in Elands Bay area so far, the CBTO utilises several marketing tools to promote the Cederberg Municipality as a heritage tourism destination. These tools include *inter alia*: the organisation's website²⁰, brochures, print media, social media, exhibitions, study tours and trade shows. Wesgro, the Cape Town and Western Cape Tourism, Trade and Investment Agency, is also actively involved with the marketing and promotion of the interpretation centre and of all tourism offering in the area.

In addition to the CBTO website, there are several others that market the West Coast region as a natural and cultural (including heritage) destination and route. The Elands Bay Cave is specifically marketed by the West Coast District tourism website²¹ as well as by the South-North Route website²², which focuses on tourism routes along the West Coast of South Africa that include heritage.

4.3.3 Visitor Management

The main purpose of visitor management is to enhance the experience of visitors, while ensuring that negative impacts of large numbers are mitigated and avoided. Please see Section 8.4.3 and the guidelines for Permissible Infrastructure Development in Section 6.3 for more detail. Currently, DRS is not open to the public as the site is on private property and its resources are non-renewable and vulnerable to damage by visitors. Currently, there is no clear demarcation or signage regarding where the site is located. The visitor therefore does not know where to go unless having clear directions from someone who knows where it is.

Funding is available for 2021 for the development of tourism facilities on site. It is planned that a parking lot with ablution facilities, interpretation signage and a pedestrian path to the shelter will be developed so that the site is ready to welcome visitors.

²⁰ <u>http://www.cederberg.com/listplaces.php?bt=4</u>

²¹ www.capewestcoast.org

²² <u>www.south-north.co.za</u>

It was noted that even if the site is currently not open to the public, the World Heritage Convention provides that inscription can still occur.

4.4 Stakeholders

4.4.1 Community

Elands Bay is a socially diverse community, made up of the following groups:

Local long-term residents of Elands Bay can be divided according to the census categories into into 30.6% Black African and 60.13% coloured (this category also includes those of KhoeKhoen and San descendant) living in Sea Breeze and the white community (8%) living along the beachfront. The West Coast Aboriginal Council (WCAC) represents the cultural and heritage interests of communities of KhoeKhoen and San descendant. Many of those living along the beachfront are property owners and organised into the Elands Bay Rates Payers Association. Both groups are largely made up of people with strong links to the agricultural sector. However, there is substantial variation in socio-economic status between the two groups, with those living in Sea Breeze having far lower socio-economic status than those along the beachfront.

Surrounding property and landowners: These include commercial farmers and residents on recent housing developments consisting of holiday homes in Elands Bay.

People from other parts of the country: in recent years, many people from outside the region have settled in both sections of the community. These include people who came in search of work, and retirees from Cape Town and Johannesburg.

4.4.2 Civil Society Organisations

The local community is represented by the following Civil Society Organisations (CSOs): The Elands Bay Local Museum, Coast Care, West Coast Aboriginal Council, Elands Bay Community Development Organisation (ECDO), Elands Bay Youth Group, Elands Bay Advice Office, Crayfish Hiking Trail, the Verlorenvlei Estuary Management Forum (VEMF), the South Africa Fishers Front (representing local small-scale fishers), Coastal Links (representing small-scale farming initiatives), Elands Bay Environmental and Development Action Group (EBEDAG), the Elands Bay Ratepayers Association (IKM, 2013) and the Friends of the Vlei/The Verlorenvlei Coalition.

Government Authorities

Heritage Western Cape (HWC) is the provincial public entity that resides in the Department of Cultural Affairs and Sport (DCAS) of the Western Cape Province and is responsible for managing most of the heritage resources within the Province. The South African Heritage Resources Agency (SAHRA) is a public entity, which like HWC, is established under the National Heritage Resources Act, and is responsible for the protection of South Africa's cultural heritage, particularly National Heritage Sites, underwater cultural heritage and moveable heritage. It also manages the national heritage register in the form of the SAHRIS.

The provincial Department of Environmental Affairs and Development Planning (DEA&DP) is responsible for terrestrial and coastal environmental management in the Western Cape Province as well as the implementation of the Protected Areas Act. The management of activities along the coast and estuaries is the joint responsibility of DEA&DP's Coastal Management Unit and the national Department of Environmental Affairs, Forestry and Fisheries (Oceans and Coast) (DEFF).

The provincial Department of Economic Development and Tourism (DEDEAT) and its public entity, Wesgro, are responsible for the marketing, promotion, tourism development and support in the area.

The Diepkloof Rock Shelter falls within the Cederberg Local Municipality and within the West Coast District Municipality. In addition to the approvals process implemented by HWC, the local municipality is required to approve building and associated plans in terms of the National Building Regulations and conform the provincial Land Use Planning Act. The local and district municipalities are responsible for the provision and maintenance of a range of services, amenities and infrastructure.

4.4.3 Businesses, Guest Houses and Tourism Operators

Elands Bay has a small business centre with a hotel and a range of small shops. These include the Elands Bay Cafe, the Elands Bay Bottle Store and the White Mussel Pot, There are a variety of spaza²³ and informal shops in the Sea Breeze neighbourhood.

Since much of the local fishing industry is at subsistence level, limited catch is for sale to visitors. The town also has a substantial number of guesthouses catering largely for tourists. No official local tourism office exists, but the Elands Bay Hotel currently serves as the go-to point for tourist information.

4.4.4 Academics, Researchers and Specialist Interest Group

In 1973, through the Department of Archaeology of the University of Cape Town, Prof. John Parkington initiated excavations at DRS. Since then many students have been trained in field techniques there. Researchers, mainly archaeologists involved with the Diepkloof PHS, have produced numerous published scientific research papers.

Elands Bay Cave and the DRS are also regularly visited by Prof. Parkington and other scientists. He has written extensively on the archaeological sites around the Verlorenvlei. Considering the

²³ These are micro-enterprises selling general products for daily consumption.

importance of Diepkloof Rock Shelter, the South African public at large could be considered a stakeholder. The site is also part of the planned National Khoe and San Heritage Route, and stakeholders within that process should be included.

4.5 Management Issues

To date, the DRS site has not been open to the public. There are currently no barriers to enter the site, but it does not appear to be visited on a frequent basis, as it is fairly remote. However, inscription of a WHS might increase interest by the public leading to pressure to visit. Steps therefore need to be taken to adequately manage access to the site and its resources through the creation of a management authority. This is dealt with in more detail under visitor management in Section 7.

4.6 Risk Assessment

4.6.1 Major threats to the values of the site

The following risks are identified for the Diepkloof Rock Shelter site:

Theft and non-renewable damage

Although the DRS site is located on a koppie on private land, no artificial barriers are limiting access to the site. Before the value of the site becomes publically well known, a risk that may arise from World Heritage inscription, adequate management measures will have to be implemented to protect the site from possibilities of theft and other irreversible damage.

Limited enforcement and monitoring

Cederberg Municipality is among the poorest in the Western Cape Province. Limited financial and human resources hence increase the risk that the site will not be adequately protected through law enforcement.

Fire

As a result of limited annual rainfall (~200 mm), the area around DRS is generally dry. Although the site is located above most vegetation, bushes still occur on the slopes close to the cave. Therefore, without adequate fire management and quick response from fire fighters, the risk exists of fire affecting the cave. In addition, the nearest fire station is in Clanwilliam, located 1.5 hours away from Elands Bay. This means fire fighters will likely not be in time to extinguish a fire when it occurs²⁴.

²⁴ Personal conversation with Mr. Jevonk, Disaster Management Officer, Cederberg Municipality on 6 September 2016.

4.6.2 Main factors contributing to threats (including climate change)

Unmonitored site access

A dirt road from the tarred road towards Piketberg crosses the Verlorenvlei and leads towards the farm. The farm has a gate, but it is easy to open, potentially allowing unmonitored access to the site and its heritage. Since the landowner's family lives on site, unmonitored access is limited.

Limited financial resources

Currently, no specific budget from government is allocated for the protection of DRS. Budget from the museum will be made available for environmental awareness programmes within the local community, including schools. This is expected to lower the risk of under-appreciation for the site.

Limited accessibility

The DRS is located ~120 m above current sea level. While currently the rocky and vegetated slopes limit easy access to attend to certain threats, particularly fire, the development of a path to the site will allow for easier access, including in time of fire.

Climate change

The already limited rainfall in the area is likely to be further reduced as a result of the effects of climate change. The area around DRS will become drier thereby increasing the risk of and frequency of fires. The climate in the area around the cave has varied from much wetter to much drier than at present, without affecting the deposits in the cave. For example, the site still retains good organic preservation, which shows the efficacy of the natural protections of the site. In addition, across the entrance to both caves are rocks accumulated over time that act as a natural retaining wall to protect the deposit.

4.6.3 Mitigating Specific Threats

Limited enforcement and monitoring

To address the limited resources available for law enforcement and monitoring at local level, more use could be made of the services and resources at Provincial and National Government level, for example, for day-to-day oversight and provision of public services. In addition, support can be sought from the private sector in nearby towns to assist during certain emergencies or assist in implementing measures to mitigate threats. Local environmental and heritage community based NGOs could also assist in this regard. Most importantly, the local community must be made aware of the significance of the site, the importance to preserve it, and as far as possible they should be involved in implementing protective measures.

5 Vision and Objectives

5.1 Vision

Diepkloof Rock Shelter will be a financially sustainable heritage site that is managed effectively and the integrity of the evidence for modern human development will be protected for future research through collaboration between key stakeholders, while enhancing the appreciation of Diepkloof Rock Shelter by all people through education and interpretation, and potentially contributing to local economic development through community-based heritage tourism.

5.2 Guiding Principles and Strategic Objectives

The following Strategic Objectives (SOs) support the vision:

SO1: To establish a management framework for Diepkloof Rock Shelter that will enhance conservation of the site.

SO2: To ensure conservation of archaeological deposits and related archaeological material on site.

SO3: To monitor and assess the economic, social and environmental impacts of activities at and around Diepkloof Rock Shelter.

SO4: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management.

SO5: To encourage collaboration between stakeholders to conserve Diepkloof Rock Shelter and promote the site as a heritage tourism attraction.

SO6: To increase the awareness and appreciation of Diepkloof Rock Shelter by the local and global community through research, education and interpretation of the cultural heritage of the site.

SO7: To build capacity of local people in heritage tourism to ensure responsible tourism to Diepkloof Rock Shelter.

SO8: To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation projects.

5.3 State of Conservation

5.3.1 Current State of Conservation of the Heritage Resources

DRS is protected as a Provincial Heritage Site under Section 27 of the NHRA. As such and regarding site conservation, HWC is able to prescribe conservation measures to be taken during

and after excavation. Regarding the deposit, \sim 10% of the volume and \sim 25% of the area of Diepkloof 1 has been excavated to date.

In terms of HWC policies and procedures, permits issued for excavation are issued conform to internationally accepted practice regarding:

- expertise required to excavate the site;
- technology applied to research;
- deposition and curation of material;
- publication of results; and
- portion of the deposit which may excavated.

The site is remote and relatively inaccessible. The caves are elevated well above the Verlorenvlei and entrances face away from the prevailing wind direction, thereby receiving a fair degree of natural protection. The areas that have been excavated were back-filled temporarily with sandbags, but plans are already in place for the permanent closure of the site in. There are very few visitors at this stage, mainly because the tourism potential of the site and of heritage tourism in Elands Bay is not yet fully utilised, but plans are already in place for its further development. There have been no reports of recent vandalism to the rock art or archaeological deposit although there are some graffiti from the 19th and early 20th centuries, which are now considered part of the heritage of the site.

5.3.2 Desired State of Conservation of the Heritage Resources

In a desired state, Diepkloof Rock Shelter is well managed, protected and promoted. Stakeholders collaborate to safeguard the authenticity and integrity of DRS and ensure the site is integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Visitor numbers to the site are controlled through the required use of qualified guides to access the site. Awareness and appreciation of the value of the site is enhanced and the local and national community contributes to the long-term care of the site. A sustainable finance mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community.

6 Policy, Legal, Statutory and other Frameworks

The management and development of the site will be implemented in an enabling environment creating by policies, laws, statutory and other frameworks. They are briefly described below.

6.1 National Legal Status and Protection

There are a number of laws that provide an enabling framework in terms of actions that can be taken to protect the property. Under Section 27 of the National Heritage Resources Act (NHRA), Diepkloof Rock Shelter was declared a PHS on 23 September 2014. In terms of this Act, archaeological and paleontological sites, unmarked burials, the landscape and natural features of cultural significance and structures within the site are formally protected as a Provincial Heritage Site of high significance. A permit is required from HWC to 'destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of the declared area'. As the provincial heritage resources authority for the province of the Western Cape, HWC is responsible for the protection of the site in terms of Section 27(16) of the Act. Within the provisions of the NHRA, the mechanisms for the resolution of conflict, protection of heritage resources, etc. are in place for heritage sites. Nevertheless, effective management of DRS is still limited. Key provisions of the Act, their relevance to this ICMP and the related challenges faced are summarised in Table 2 below. These provisions only apply to the property declared as a PHS and not to the Buffer Zone.

The World Heritage Act incorporates the World Heritage Convention into South African law and establishes a framework for the establishment and management of World Heritage Sites. Of particular relevance for a candidate World Heritage Site such as Diepkloof are the provisions for the establishment of management authorities for all World Heritage Sites in South Africa, including their administration and responsibility for their finances.

Once a site is inscribed on the World Heritage List and gazetted as such, and in terms of Section 13 thereof, the National Environmental Management: Protected Areas Act (NEM:PAA) automatically applies to both the property and its buffer zone.²⁵ This Act and its regulations provide a wide range of environmental and related protections, applicable to national parks and other protected natural areas. The NEM:PAA deals with some matters which are not as clearly established in the NHRA, in particular prescribing a prohibition of mining and prospecting.²⁶ In addition, the regulations of the Act provide a broad array of measures useful in the day-to-day protection and management of World Heritage Sites. These are particularly useful in managing access and development as well as environmental resources within the site.

²⁶ See: NEM:PAA Section 48

²⁵ See: NEM:PAA Section 13

Table 2: Key provisions of the National Heritage Resources Act (25 of 1999).

Section	Description	Relevance to ICMP	Challenges faced
27(16)	A provincial heritage resources authority is responsible for the protection of provincial heritage sites in accordance with the provisions of this Section 27.	Management responsibilities	 Potential diverse interests of stakeholders Disjointed protection efforts
27(18)	No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of the site without a permit issued by HWC.	Protection of the PHS	 Limited on-site presence Conflicting development rights Damage to rock art and heritage resources HWC has no monitoring capacity
27(19)	HWC may make regulations pertaining to the site with the consent of the	Site management	• Diverse interests of

Section	Description	Relevance to ICMP	Challenges faced
	relevant landowner/s for: (a) safeguarding heritage sites from destruction, damage, disfigurement, excavation or alteration; (b) regulating the conditions of use of any heritage site or the conditions for any development thereof; (c) regulating the admission of members of the public to the site, and the fees payable for such admission.		stakeholders
27(21)	HWC may, by agreement with the relevant landowner/s of the site: (a) conserve or improve the site; (b) construct fences, walls or gates around or on the site; (c) acquire or construct and maintain an access road to the site over any land, and construct upon such land fences, walls or gates; or (d) erect signs on or near the site.	Development of infrastructure	 Limited funding Uncontrolled access
27(23)	All reproduction rights in respect of the site, subject to any existing rights and the agreement of the relevant landowner/s, belong to the State and vest in HWC for the protection of such site or, by agreement, with the authority or public institution responsible for the management of such site. Subject to the above, no person other than the relevant landowner/s of the site may make such reproduction for profit without a permit from HWC, which may prescribe the fees payable in respect of such reproduction, the proceeds of which must be dedicated to the conservation of the site or of heritage resources in general.	Management of film production and publication of photographic images	 Sourcing qualified Environmental Officer to join productions
28(2)	HWC may, with the consent of the relevant landowner/s of an area, designate as a protected area: (a) such area of land surrounding a Provincial Heritage Site as is reasonably necessary to ensure the protection and reasonable enjoyment	Protection of the buffer area	Diverse interests of stakeholders

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Section	Description	Relevance to ICMP	Challenges faced
	of the site, or to protect the view of and from such site; or (b) such area of land surrounding any archaeological or paleontological site or meteorite as is reasonably necessary to ensure its protection.		 Conflicting development rights
28(3)	No person may damage, disfigure, alter, subdivide or in any other way develop any part of a protected area unless, at least 60 days prior to the initiation of such changes, he or she has consulted the heritage resources authority which designated such area in accordance with a procedure prescribed by that authority.		 Insufficient integration with local development and planning
28(5)	HWC may make regulations providing for specific protections for any protected area, which it has designated, including the prohibition or control of specified activities by any person in the designated area.		frameworks
28(6)	A local authority may, with the agreement of HWC, designate a protected area, and make provision in the town-planning scheme or in by-laws for the management of such an area.		
29(1)	SAHRA, or a provincial heritage resources authority, may, subject to subsection (4), by notice in the Gazette or the Provincial Gazette, as the case may be (a) provisionally protect for a maximum period of two years any (i) protected area; (ii) heritage resource, the conservation of which it considers to be threatened and which threat it believes can be alleviated by negotiation and consultation; or (iii) heritage resource, the protection of which SAHRA or the provincial heritage resources authority wishes to investigate in terms of this Act; and (b)	Provisional protection of the buffer area	 Insufficient integration with local planning frameworks

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Section	Description	Relevance to ICMP	Challenges faced
	withdraw any notice published under paragraph (a).		
30(5)	At the time of the compilation or revision of a town or regional planning scheme or a spatial development plan, or at any other time of its choosing, or at the initiative of a provincial heritage resources authority where in the opinion of a provincial heritage resources authority the need exists, a planning authority shall compile an inventory of the heritage resources which fall within its area of jurisdiction and submit such inventory to the relevant provincial heritage resources authority, which shall list in the heritage register those heritage resources which fulfil the assessment criteria under section 30(1).	Inventory of heritage resources	 Insufficient integration with local development and planning frameworks
31(1)	At the time of revision of a town or regional planning scheme, or the compilation or revision of a spatial plan, or at the initiative of HWC (where HWC is of the opinion that the need exists to protect a place of environmental or cultural interest as a heritage area), the planning authority must investigate the need for the designation of heritage areas to protect any place of environmental or cultural interest.	Establishment of a Heritage Area Overlay Zone	 Insufficient integration with local development and planning frameworks
31(3-4)	HWC must assist the planning authority to investigate the designation of the place as a heritage area. Where the planning authority is unable or unwilling, HWC may investigate the designation of the place as a heritage area and, with the approval of the MEC, designate such place to be a heritage area.	development and spatial planning	 Diverse interests of stakeholders Conflicting
31(5)	A local authority may designate any area or land to be a heritage area on the grounds of its environmental or cultural interest or the presence of heritage		development

Sachan	Description	Relevance to	Challengestassd
Section	Description	ICMP	Challenges facea
	resources, provided that prior to such designation it shall consult HWC and the		rights
	relevant landowner/s, as well as any other interested or affected parties.		
	A local authority must provide for the protection of a heritage area through the		
	provisions of its planning scheme or by-laws under the National Heritage		
	Resources Act (1999), provided that any such protective provisions shall be jointly		
	approved by HWC, the provincial planning authority and the local authority, and		
	provided further that: (a) special consent of the local authority shall be required		
	for any alteration or development affecting a heritage area; (b) in assessing an		
	application under paragraph (a) the local authority must consider the		
31(7)	significance of the area and how this could be affected by the proposed		
	alteration or development; and (c) in the event of any alteration or		
	development being undertaken in a heritage area without the consent of the		
	local authority, it shall have the power to require the owner to stop such work		
	instantly and restore the site to its previous condition within a specified period. If		
	the owner fails to comply with the requirements of the local authority, the local		
	authority shall have the right to carry out such restoration work itself and recover		
	the cost thereof from the owner.		
3527 (1)	Subject to the provisions of section 8, the protection of archaeological and	Guidance for	
	palaeontological sites and material and meteorites is the responsibility of a	archaeological	

²⁷ Since the site is a PHS Section 35 doesn't apply, but is used to guide applications for archaeological work under Section 27.

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Section	Description	Relevance to ICMP	Challenges faced
	provincial heritage resources authority: Provided that the protection of any	work	
	wreck in the territorial waters and the maritime cultural zone shall be the		
	responsibility of SAHRA.		
	Subject to the provisions of subsection (8)(a), all archaeological objects,		
	palaeontological material and meteorites are the property of the State. The		
	responsible heritage authority must, on behalf of the State, at its discretion ensure		
35 (2)	that such objects are lodged with a museum or other public institution that has a		
	collection policy acceptable to the heritage resources authority and may in so		
	doing establish such terms and conditions as it sees fit for the conservation of		
	such objects.		
	No person may, without a permit issued by the responsible heritage resources		
	authority—		
	(a) destroy, damage, excavate, alter, deface or otherwise disturb any		
	archaeological		
35 (4)	or palaeontological site or any meteorite;		
	(b) destroy, damage, excavate, remove from its original position, collect or own		
	any archaeological or palaeontological material or object or any meteorite;		
	(c) trade in, sell for private gain, export or attempt to export from the Republic		
	any category of archaeological or palaeontological material or object, or any		

Section	Description	Relevance to ICMP	Challenges faced
	meteorite; or (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.		
	When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may—		
35 (5)	(a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;		
	(b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;		
	(c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and		
	(d) recover the costs of such investigation from the owner or occupier of the		

Section	Description	Relevance to ICMP	Challenges faced
	land on which it is believed an archaeological or palaeontological site is located		
	or from the person proposing to undertake the development if no application for		
	a permit is received within two weeks of the order being served.		

6.2 International and National Guidelines

6.2.1 Alignment with international guidelines

In addition to the legislative requirements of protection and management, this ICMP is also informed by international best practices related to World Heritage Sites and is therefore subject to the following international charters and guidelines:

- ICOMOS Charter for the Protection and Management of Archaeological Heritage (1990);
- ICOMOS International Cultural Tourism Charter (1999);
- ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (2008);
- UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003);
- United Nations Environment Programme (UNEP) sustainable tourism in protected areas guidelines (2002);
- Convention on Biological Diversity (CBD) guidelines on biodiversity and tourism development (2004); and
- UNESCO Operational Guidelines for the Implementation of the World Heritage Convention (2019).

The ICMP specifically complies with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Operational Guidelines for the Implementation of the World Heritage Convention (2019). These aim to safeguard the authenticity and integrity of a site through *inter alia* appropriate management actions, as well as indicating clear site boundaries and a buffer zone. In addition, the principles of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage have been consulted to ensure that the site remains relevant to the living cultural landscape of Elands Bay and its people.

6.2.2 Integration with regional planning

Regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with the development planning of the region and include the following:

- West Coast District Integrated Development Plan (IDP) (2020 2025) Review 3;
- West Coast District Spatial Development Framework (SDF) (2020);
- Cederberg Local Municipality. Integrated Development Plan (IDP) (2017-2022);
- Cederberg Local Municipality. 2015. Public Participation Policy;

- Cederberg Local Municipality. 2013. Integrated Tourism Development and Marketing Strategy for the Cederberg Municipal Area: 2013–2018;
- Cederberg Local Municipality Spatial Development Framework (SDF) (2017-2022);
- Cederberg Local Municipality. Draft Disaster Management Plan (2019); and
- Cederberg Local Municipality. Draft Integrated Infrastructure Investment Plan (in preparation).

6.3 Permissible Infrastructure Development

6.3.1 Infrastructure and Servitude Holder

Much infrastructure exists near DRS. The tarred road from Elands Bay towards Piketberg falls under the jurisdiction of the Regional Roads Maintenance Office of the West Coast District Municipality. The unpaved road from the tarred road across Verlorenvlei towards the farm falls under the jurisdiction of the West Coast District Municipality. A power line (or electrical servitude) runs via the northeast of DRS towards the east of DRS, but is some distance away from the property and does not obstruct the view of or from either of the caves. Please refer to the route of the electrical servitude plotted in Figure 5 in Section 2.

Based on the Servitude "right of way" as per Deed of Transfer number 8151/1959 and created in Deed of Transfer T20752/1960, the owner of portion 6 of Groote Drift Farm 5 has a right of way of 7 metres across the north-eastern side of portion 2 (Muishoek) and 3 (Diepkloof) of Groote Drift Farm 5 as indicated per the line x-y on the survey diagram map (Deeds Registration Office, 1932). The effect of this provision is to allow the neighbours access to their farm.

The DRS PHS is included in neither the current (2012 – 2017) Cederberg Local Municipality IDP, nor the Elands Bay SDF. The implication of this is that in the short to medium term the site cannot be considered for any form of development, funding or promotion by the municipal government.

6.3.2 Permissible Infrastructure Development

Currently one house with one shed exists on the property. Based on the Provincial Zoning Scheme Model By-law of 2004, which the Cederberg Municipality applies, the following is permitted on the property zoned as Agriculture 1:

"Use of Property

14.1.1 The following use restrictions apply to property in this zone:

(a) Primary uses are: agriculture, dwelling house

(b) **Consent uses** are: additional dwelling unit, home occupation, guest-house, bed and breakfast establishment, tourist facilities, farm stall, farm shop, aqua-culture, intensive animal

farming, intensive horticulture, plant nursery, riding school, 4x4 trail, commercial kennel, commercial antenna.

Development Management Provisions

14.1.2 The following development management provisions apply:

(a) Floor Space

(i) Any additional dwelling unit shall not exceed a total floor space of 120 m².

(ii) Any farm shop or farm stall shall not exceed a floor space of 100 m².

(b) Building lines

(i) The street building line is 30,0 m.

(ii) The side building line is 30,0 m.

(iii) The rear building line is 30,0 m.

(iv) Attention is drawn to the general building line exemptions in section 17.1 of the Provincial Zoning Scheme Model By-law.

(c) Parking

(i) Parking and access shall be provided on the land unit in accordance with section 18.1 of the Provincial Zoning Scheme Model By-law, where applicable.

(d) Height

(i) Dwelling houses shall not exceed a height of two storeys, provided that, where the slope of the grade line is greater than 1 in 5, the owner may elect to regulate height in accordance with clause (ii) below;

(ii) Where the height is regulated in terms of this clause, no point on a building shall exceed a vertical distance above the grade line of 6 m in the case of a flat roofed building, or 8 m in the case of an inclined or pitched roof building, provided that if it is an inclined or pitched roof building, only the roof structure may exceed a height of 6 m;

(iii) Agricultural buildings other than the dwelling houses shall not exceed 10 m in height above the grade line to the ridge of the roof, provided that where Council is satisfied that a greater height is necessary for the function of the building, it may permit such greater height."

In terms of the guidelines, under the present zoning with consent, one additional house or other development as set out above may be permitted on Portion 3 of Farm Groote Drift 5. In case the landowner wishes to develop tourism accommodation, with consent this may be possible if relevant authorities are agreeable thereto. (The concept of 'consent' in South African planning law implies that there is no right to build, but that an application may be granted under certain circumstances.)

Rezoning to increase development potential would likely change the scenario with regard to risks, impacts, etc. on the site and Buffer Zone and would amongst other things necessitate reconsideration of major provisions of this ICMP. The ICMP is written on the assumption that zoning should not change, as Agriculture 1 zoning in itself forms part of the protective measures applying in the Buffer Zone and is hence essential to conservation. In terms of the NHRA a permit application has to be made to HWC in order to change the planning status (i.e. including zoning) of a PHS.

6.3.3 Development Guidelines

Based on the Land Use and Development Guidelines for Agriculture Zone 1 as set out in Section 2.4, the following guidelines are proposed for potential tourism development at DRS as well as in the Buffer Zone of DRS. Future development should only occur within the limitations set out.

Any new development should be within close proximity to existing buildings and within a zone to be designated at the time of negotiating with the heritage resources authority and depending on the nature of the development planned. The major consideration should be to restrict development to existing developed area at the northern end of the property and remain strictly within the dimensions prescribed in the guidelines.

General architectural guidelines include:

- Allowing the style of new structures to blend into the landscape.
- Using natural materials.
- Using natural colours that blend in with the natural landscape.
- Dwelling houses shall not exceed a height of two storeys.

Specific guidelines pertaining to DRS include:

- Goats should not be permitted to graze on this property due to their ability to access the caves.
- Access:
- Only a single access path should exist providing access up to the two caves.
- Anti-erosion measures must be taken along the single pathway.
- Steps and rails (when necessary), provided these are made from natural materials.
- Within the shelters:
- Wooden board walk to protect the archaeological deposit.

Specific guidelines pertaining to the Buffer Zone include:

- A single path up to the boundary of the PHS, including anti-erosion measures.
- Infrastructure should blend into the landscape by using appropriate materials and colours
- Infrastructure should not unnecessarily impact on views from the caves and the path up to them.
- Infrastructure should make use of green energy such as solar and wind to limit negative impacts from incoming large infrastructure.
- Ablution facilities for visitors should be located in the buffer.
- Waste management systems should be designed to have minimal impact on the environment.
- Due to their ability to access the caves, goats should not be permitted to graze on this property.

7 Management Structures

HWC is the statutory body responsible for the management of the PHS. As such it may make decisions about the management and use of the site in accordance with Section 42(1)(a) of the National Heritage Resources Act (1999). This section further allows HWC to establish a 'heritage agreement' with the landowner, a local community, the municipality or individual to conserve and improve, or present and interpret a defined heritage resource, in this case DRS.

7.1 Management Authority

The establishment of Management Authorities for World Heritage Sites is a statutory requirement in terms of Sections 7, 8, and 9 of the World Heritage Convention Act (WHCA) (No. 49 of 1999). A Management Authority (MA) serves to provide an effective system for the management of World Heritage Sites in line with the Operational Guidelines for the Implementation of the World Heritage Convention (WHC), the World Heritage Convention Act (WHCA) and the National Heritage Resources Act (NHRA).

DRS is part of a future serial World Heritage nomination and therefore prior to submission of the nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. Currently, DRS is largely unmanaged and although fairly remote, the site needs a management authority for effective implementation of this ICMP.

The management of the Western Cape sites is coordinated and hosted by the MEC of Cultural Affairs and Sport in the Western Cape and by the MEC of Sport, Arts and Culture in KwaZulu-Natal. The proposed structure of the Management Authority is presented in Figure 10.



Figure 10: Overarching Management Authority Framework

The two authorities will also jointly serve as the Overall Management Authority of the Emergence of Modern Humans nomination through the establishment of a Joint Management Committee (JMC).

The JMC will meet biannually and as and when necessary. The JMC will be established through an MoU in place setting out functions and responsibilities, thus ensuring that the appointed Management Authorities work together in harmony and support one another in their efforts to achieve the vision and objectives of the World Heritage Site. The JMC will be chaired by the Deputy Director-General: Biodiversity and Conservation of the Department of Forestry, Fisheries and the Environment, which is the focal point. The members of the JMC will also be the HODs of the Department of Cultural Affairs and Sport in the Western Cape Government and of the Department of Sport, Arts and Culture in KwaZulu-Natal, and/or their duly authorized delegates.

The JMC shall:

- ensure a management system or mechanisms for the co-ordinated management of the separate components and the development of a joint integrated vision and objective for the entire prospective World Heritage Site with detail provided in their individual Integrated Management Plans (IMP's) (as required in terms of World Heritage Convention Act, 1999 (Act No. 49 of 1999) (WHCA);
- harmonize and coordinate all relevant policies to facilitate a uniform approach to the management of the entire prospective World Heritage Site;
- serve as a platform whereby all parties work together and support one another in their efforts to achieve the vision and objectives of the World Heritage Site in terms of the World Heritage Convention, WHCA and the UNESCO Operational Guidelines;
- serve as a vehicle for the identification of common goals and liaising with heritage resource agencies authorities on a national, provincial and local government level and with the consent of the DFFE, international partners as well as donors;
- appoint technical teams with concise Terms of Reference and timeframes to deal with specific technical issues as and when required;
- implement the monitoring framework to ensure monitoring and evaluation of the management effectiveness of the prospective World Heritage Site;
- coordinate the identification of financial needs by the two provincial departments to ensure management of threats affecting the integrity of the prospective World Heritage Site in order to develop sustainable funding mechanisms for the World Heritage Site;
- ensure the development and implementation of a joint branding and marketing strategy for The Pleistocene Occupation Sites of South Africa that should be used in conjunction with the branding and marketing strategies adopted by the individual sites, and
- ensure the development of an appropriate fund-raising mechanism for the serial sites for purposes of community beneficiation, scientific research etc.

The three sites should each have a Site Management Committee composed by key stakeholders. The office of the MEC should have a sub-directorate created, with a dedicated staff member that will work with the various committees and liaise with DFFE and the relevant heritage authority.

Levin's (2008) Analysis of the Management structures of the Fossil Hominid Sites of South Africa WHS and the Isimangaliso WHS notes that a centralised power organisational structure within these Management Authorities isolates the stakeholders from participating in the governance of

the sites. The structure in Figure 11 is focussed on putting the power where the knowledge lies, while limiting the administrative burden on the Site Management Committees as much as possible.

Each Site Management Committee should engage regularly with the other external stakeholders around each site regarding the management of the sites. Including representatives from the local municipalities will be needed if the Site Management Committees are going to be constituted as advisory committees, however in addition to this, heritage agreements between the municipalities should be developed that define the roles of the municipalities, in terms of planning and land use. It would be presumptuous to expect a local planning authority to revise their entire SDF on the declaration of the sites. However, the requirements to address these planning issues should be included in a heritage agreement between the Management Authority and the local municipalities prior to the declaration of these sites as WHS. Heritage Agreements may also be used to address issues of access, conservation and other general issues that can be resolved through contractual means.

It is proposed that a Site Management Committee be established for DRS that includes the landowner, Prof. John Parkington as a knowledgeable archaeologist who has a long-term relationship with the site, a representative of the Department of Cultural Affairs and Sport and one of the Elands Bay Museum). Other interested representatives including the Cederberg Municipality, the Baboon Point Reference Group and the West Coast District Municipality will also be approached. The organisational structure for the Site Management Committee will look as follows (Figure 12):



Figure 11: Proposed structure for Diepkloof Rock Shelter Committee.

The Site Management Committee may be established as advisory body of the provincial Departments before the Management Authority is formally established.

7.2 Structure and Functions of the Committee

Stakeholders will appoint representatives for the proposed Diepkloof Rock Shelter Committee.

Each stakeholder represented should be tasked with specific functions that pertain to its role in ensuring the conservation and sustainable management of DRS.

The Diepkloof Rock Shelter Committee should consist of representatives of the following stakeholders:

- The landowner;
- The Elands Bay Museum;
- The Department of Cultural Affairs and Sport;
- The Cradle of Human Culture;
- The Cederberg Local Municipality;
- The West Coast District Municipality;
- HWC;
- The archaeologists holding recent excavation permits for the site;
- Relevant conservation bodies registered with HWC; and
- The Cederberg Tourism Bureau.

Delegations made to the committee should deal with the following:

- Implementing the tasks outlined in Section 8 of this ICMP.
- Communicating regularly with other stakeholders and authorities.
- Monitoring the site.
- Managing and mitigating risks.
- Providing input and expressing opinions on proposals for work of any nature on the site.
- Raising and allocating funds for management of the site.
- Coordinating the responsibilities and work of its members and other stakeholders regarding the site.
- Investigating possibilities for coordinating with community and other tourism initiatives in Elands Bay as well as the local and district municipalities.
- Developing and implementing policies.

- Assisting in the development of accessibility and tourism on the site.
- Entering into a heritage agreement with HWC.

7.3 Institutional Development, Monitoring and Assessment

The process above describing the evolving institutional arrangements is proposed in light of practicality, financial austerity, interest of parties in the site, as well as inclusive and transparent management of the DRS. This ICMP is based on a conservative financial approach given the financial austerity, nationally and internationally, as well as the challenges involved in developing tourism businesses under adverse economic conditions and on the West Coast in general. Accordingly:

- A 'start small' strategy is key for allowing successful establishment of a management authority.
- Care should be taken to ensure that activities do not outstrip the financial foundation of DRS through stringent internal financial control.
- Development around DRS, its management structures and processes should be externally evaluated on a regular basis.
8 Implementation of the Strategic Objectives

The Implementation Plan details the proposed execution of the ICMP for Diepkloof Rock Shelter (DRS) following the Strategic Objectives and in the context of the management framework in Section 6.

8.1 SO1: To establish a management framework for Diepkloof Rock Shelter that will enhance conservation of the site

This objective relates to putting in place a management framework for the site. The World Heritage Convention Act requires every World Heritage Site (WHS) to have a Management Authority. As Diepkloof Rock Shelter is part of a proposed serial World Heritage nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. In line with precedents at other serial World Heritage Sites in South Africa, it is recommended that a committee be formed to oversee management for Diepkloof Rock Shelter, which can in the future be represented at the Management Authority for all three sites. The Diepkloof Committee should function as an organ of the appointed Management Authority, once the Management Authority is established. Until then, the committee should function under the Department of Cultural Affairs and Sport.

8.2 SO2: To ensure conservation of archaeological deposit and related archaeological material on site

This objective relates to putting in place infrastructure and resources to conserve the archaeological deposit and related material.

Infrastructure

Signage should be erected at strategic points to guide behaviour on the site. For example: the requirement to be accompanied by a qualified guide, no fires and no smoking. In addition, signage to indicate the route from the bottom of the koppie will keep visitors on the designated path. At the entrance to the caves, a boardwalk should be constructed to allow the visitors to see the caves without damaging the archaeological deposit and to keep them a distance away from the rock art on the cave's walls. Since there is a moderate risk of fires, a firebreak should be created around the base of the koppie to prevent fires moving up the koppie and into the Cave.

Interpretation panels informing the visitors of the outstanding universal value of the site should be location in the parking and reception area of the site, at the base of the hill. Ablution facilities will also be located on the protected area declared at the bottom of the hill.

Human Resources

It is acknowledged that infrastructure alone is insufficient to ensure conservation of DRS. As part of the guide training stipulated under Strategic Objective 6, a specific focus must be on how to conserve and protect heritage. This will provide guides with the knowledge to inform visitors concerning measures required to avoid damage to the site. Training of guides is expected to be implemented in collaboration with the Elands Bay Museum and the Western Cape Department of Economic Development and Tourism. **

Stabilisation of excavations

A grant was received by the U.S. Ambassadors Fund for Cultural Preservation for the stabilisation, conservation and closure of the excavation. The sandbags within the excavation will be removed to allow for straitening of the profiles which have been damaged at the top of the excavation by the elements. After the profiles have been straightened and secured, sandbags will be repositioned within the excavation leaving a few centimeters between the sand bags and the profile, which will be then filled in with sterile sand. A window may be left in the excavation to allow for guided tours to experience the excavation itself. This window will be regularly monitored by the Diepkloof Rock Shelter Site Management Committee to ensure its preservation.

8.3 SO3: To monitor and assess the economic, social and environmental impacts of activities at and around Diepkloof Rock Shelter

HWC shall be responsible for the monitoring of research. To monitor the impact of visitation to the site, the Diepkloof Committee in collaboration with HWC Management, should develop a cave monitoring system. In addition, a survey should be undertaken at the start of the implementation of the ICMP to establish a baseline of economic, social and environmental impact of activities around DRS. To evaluate the impact of the ICMP implementation, the same survey should be undertaken at the end of the ICMP timeframe.

8.3.1 Risk Management

Theft and vandalism

To manage the risk of theft and vandalism at DRS, the following actions should be taken:

- i) managing access to the site by installing a gate and fencing; and
- ii) putting up signage to warn people that the land is private property.

Fire

To manage the risk of fire, a firebreak should be created around the bottom of the koppie. This will prevent fires that may originate elsewhere on the property or in its vicinity from reaching the caves. In addition, the fire department in Clanwilliam should have the knowledge and skills needed to deal with fire issues on a heritage site of this nature. Since there is no fire station in

Elands Bay, a risk exists for fires damaging heritage sites and other property in the area, appropriate fire equipment should be made available and easy accessible on site.

Natural disasters as a result of climate change

Natural disasters such as heavy rains have occurred throughout history. DRS has been subject to around 85 000 years of climate change with the archaeological deposit still retaining a high level of integrity with high levels of preservation of organic material. Precautions against rains will only be necessary if wind patterns change to northerly direction and the deposit is threatened by inundation. This is considered an unlikely and very remote threat.

Tourism

DRS is one of the anchor sites of the archaeological and palaeontological heritage tourism route within the Western Cape branded as the Cradle of Human Culture. The project is a joint effort between the Department of Cultural Affairs and Sport, Wesgro and the Department of Economic Development and Tourism (DEDAT).

An interpretation centre for Diepkloof Rock Shelter is in the process of being opened in Elands Bay under the auspices of the newly established Elands Bay Museum in Elands Bay.

Already registered guides and new tour guides will be trained for the guiding of the museum and of ther West Coast heritage, focusing specifically on Diepkloof Rock Shelter. It is expected that the visitors at the Elands Bay Museum will be offer the opportunity to visit Diepkloof Rock Shelter.

This project is expected to create a limited number of jobs within the region and contribute to the development of the economy advertising Elands Bay as one of the destinations within the West Coast.

Marketing will be mainly driven by Wesgro, the agency for the marketing and promotion of Cape Town and the Western Cape.

8.4 SO 4: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management

Financial support is key to ensure adequate protection and monitoring of DRS. It is necessary to clarify that HWC and DCAS currently have limited funding to manage this site. However, with partnerships with other (local) stakeholders, improved marketing as well as through integration of the site into local and regional development plans and spatial planning frameworks, a range of funding opportunities are possible. Funding have already been made available to HWC and DCAS for the conservation of the site and the establishment of tourism infrastructure on site.

8.4.1 Management Expenses

The following expenses are applicable but not limited to the conservation and management of DRS:

- Restoration and maintenance of rock art and the cave.
- Site interpretation and marketing.
- Repair and construction of infrastructure (e.g. signage, boardwalks, lavatories, etc.).
- Procurement of fixed assets.
- On-going operational costs including maintenance.
- On-site implementation/management remuneration.
- Research, training and social investment.

8.4.2 Financial Management Guidelines

The Site Management Committees will be constituted through a nomination process, whereby, following the declaration of the MEC for DCAS as the Management Authority, DCAS will advertise for nominations to the site management committees among the identified stakeholders. As such, the financial management of the site management committee will be regulated by the provisions of the Public Finance Management. Broadly this means that all monies earned or raised by the Committee must be deposited into an account of DCAS and requests for expenditure made to DCAS in terms of its procedures. Until such a time when the Management Authority is established, the finances of the Committee will be managed under the SCM system of DCAS.

8.4.3 Funding

Based on the limited financial resources of HWC and DCAS and the global recession, a conservative approach to financial management should be taken. Despite the global recession, tourism has remained strong. The development of DRS as a tourism attraction therefore has the potential to contribute funding towards the management of the site. This is provided that the financial requirements to manage the site are relatively modest. Joint marketing and fund raising within the Cradle of Human Culture and with other heritage sites in the area, such as Baboon Point, is therefore promoted to interpret and protect the entire residual cultural landscape. In addition, possible small-scale accommodation in the Buffer Zone` of the property could be developed and contribution made towards the conservation of DRS.

The Diepkloof Committee and Management Authority should actively engage with potential donors to source funding. Potential donors include Non-Governmental Organisations (NGOs),

the National Lottery Distribution Trust Fund, as well as the private sector and individuals. In addition, the Diepkloof Committee should ensure its presence in municipal planning forums (for example the annual IDP consultation process, exercises to consult on revision of the SDF, etc.) to take advantage of potential development grants and/or initiatives, which could provide funding for heritage related projects.

8.5 SO 5: To encourage collaboration between stakeholders to conserve Diepkloof Rock Shelter and promote the site as a heritage tourism attraction

8.5.1 Communications, Consultation and Sharing of Information

Effective communication within the management structure, as well as information sharing and inclusion of stakeholders in information sharing and decision-making, is a prerequisite for successful management of the site. Although formal communications within the Diepkloof Committee, as well as with key stakeholders, will generally take place during its meetings, more regular communication with local stakeholders should take place. This can include communications through media such as newsletters, notices, local papers, radio and informal meetings. In addition, on-going communication with the scientific community is important regarding: i) protection of the heritage resources; ii) accessing such resources for further research; and iii) keeping site interpretation up to date to retain and build public interest.

In line with the ICOMOS International Cultural Tourism Charter of 1999, one of the objectives for managing DRS sustainably is to 'communicate its significance and need for conservation to the local community and visitors' and generally to involve the community in decision-making processes. In this regard care must be taken to comply with the following:

- Promotion of Access to Information Act (PAIA);
- Promotion of Administrative Justice Act (PAJA); and
- Relevant HWC policies.

This will be achieved through the outreaching work conducted by the Elands Bay Museum functioning as Interpretation Centre for DRS.

8.5.2 Tourism Promotion

In 2013, the Tourism Development and Marketing Strategy for the Cederberg Municipal Area was developed and is currently being implemented. The Marketing Strategy highlights the possibility to develop viable niche tourism sectors, particularly birding, mountain biking routes, cultural and heritage routes and agro-tourism.

Marketing

Within the Marketing Strategy, the following objectives were identified: i) increasing the number of visitors to the region; ii) managing seasonality to minimise impact thereof on the local industry; and iii) develop and implement a cutting-edge digital marketing strategy based on a cost-effective and efficient electronic marketing portal and website. The plan exists to develop a comprehensive information portal where users can access current and accurate regional tourism and related information. As part of the process to attract visitors, it is important to keep websites up to date and to respond rapidly and meaningfully to requests for information.

To increase competitiveness with other areas within the municipality, Elands Bay would need to improve the marketing of its Unique Selling Points (USPs). For the Elands Bay area, these USPs include the cultural heritage sites of Baboon Point, Mussel Point and Diepkloof Rock Shelter as well as the natural heritage site of Verlorenvlei, which is also part of the residual paleolandscape. Packages could be developed in collaboration with tour operators in Cape Town and Elands Bay to combine cultural and natural assets. Moreover, the archaeological assets of Diepkloof as well as other caves around Elands Bay could be integrated into the South-North route to Namibia.

The marketing for DRS will be included within the overall marketing strategy of the Cradle of Human Culture with specific attention to the content of the Artist's Journey, which is the route covering the West Coast and Cederberg areas. The West Coast District Municipality Tourism Office is also part of the steering committee of the Cradle of Human Culture and will assist with the marketing of the identified USPs and experiences within the Route.

8.5.3 Tourism Infrastructure Development²⁸

The possibility exists for small-scale tourism to DRS:

- The development of a small facility (up to 6 people) in the Buffer Zone that is run by the owner or his agent and providing access to the rock shelter.
- A small number of day visitors to DRS once the infrastructure is in place for the safety of the site and of the tourist experience (maximum 12 people per tour with a maximum of three tours per day).

This small group of potential visitors should be carefully managed. Visitor management covers different aspects of visitor interactions: i) identifying how visitors get to the site; ii) managing access and visitor numbers to the site; and iii) identifying specific actions that should be implemented by the Diepkloof Committee.

²⁸ DRS has tourism potential, particularly when the site obtains World Heritage status. However, South African heritage law does not guarantee access to heritage sites as constitutional provisions guarantee land rights, including access to private property.

Proposed tourism to DRS should follow Responsible Tourism Guidelines as outlined by UNESCO²⁹. This will include small scale (up to 6 people per time) and restricted access. Access to the site will be restricted and only allowed when accompanied by a qualified guide and over a single path. For tourism development to DRS, collaboration can also be sought with the neighbouring farm, for example to expand on the catering facilities offered. Additionally, for each tourist, a tourism levy can be charged which will be shared between the guide, the landowner and the Diepkloof Committee. In the latter case, funds should be used for maintenance of the site.

8.5.4 Film Production

Film production in unique landscapes is increasingly common. Filming often serves as an awareness and information communication-sharing tool and for the promotion and recognition of important places. However, sensitive sites such as the DRS need to be managed appropriately.

Permission for filming can be granted to film crews at the discretion of HWC. This should be based on considerations that address impacts on the site, for example the size of the film crew, a written permission signed by the appropriate representative of HWC, along with conditions that address do's and don'ts in terms of treatment of the site. Additionally, it is recommended that an archaeologist be present to monitor filming and related activities at DRS. The fees for film production can be agreed upon by HWC, the Diepkloof Committee and landowner, and should be similar to those charged by SANParks or CapeNature. Furthermore, photographs and films made during production should be made available to the Diepkloof Committee for use in marketing efforts and related purposes.

The application should provide full details regarding the nature of the proposed filming activities. It should specify whether the films are educational, for an advertisement, documentary or commercial use. All film applications should also include the following elements: objectives, filming and related activities, implementation schedules, follow-up studies and budget. The Diepkloof Committee, after consulting with relevant stakeholders, will assess the application.

Notwithstanding the above, filming is also subject to approval of a permit application to HWC in terms of Section 27(23)(a) of the NHRA and associated SAHRA and HWC standards and policies. The express permission of the owner must also be sought. HWC policies provide for rapid issuing of permits whenever necessary.

The Diepkloof Committee should conduct a Film Audit on an annual basis or as deemed necessary. The purpose of the Audit is to get an overview of the film projects that had taken place over the preceding period, including:

²⁹ <u>http://whc.unesco.org/uploads/activities/documents/activity-113-2.pdf</u>.

- Number of projects;
- Types of films;
- Incomes generated and benefits;
- General experience with production crews; and
- Determine whether feedback from producers has taken place and whether the relevant documents are properly kept in a manner that is accessible to relevant stakeholders.

Film companies must make available two high-resolution copies of the film on DVD for use in awareness raising and/or marketing of the site.

8.6 SO6: To increase awareness and appreciation of Diepkloof Rock Shelter by the local and global community through research, education and interpretation of the cultural heritage of the site

8.6.1 Research Guidelines

Guidelines for research are directed by the terms of the National Heritage Resources Act No. 25 of 1999 as well as by international best practice.

- Copies of applications for funding for research must be submitted to HWC for peer review to
 ensure that the proposed research will be permitted. Similarly, research that affects artefacts
 recovered from the site must be approved by HWC and import of such artefacts for
 research in other countries requires a permit from SAHRA. If the site is inscribed on the World
 Heritage List, such applications must be submitted to and discussed by the Management
 Authority.
- Research proposals must focus on the development and extension of the OUV of the site, and may, after consultation with HWC, extend these values should additional significant findings be made.
- Research proposals must ensure that the OUV of the site are not compromised.
- Research that will involve the removal of in-situ deposits must include provision for stabilisation of all surfaces before, during and after removal.
- Information prepared for the general public, such as signboards, pamphlets, websites, films, videos and books, must uphold the outstanding universal values of Diepkloof Rock Shelter.

To complement the desired state of conservation and the terms and conditions of HWC archaeological excavation permits:

- Research should aim to further verify the OUV of DRS and answer well-motivated research questions, removing only that part of the deposit that is necessary to the research concerned;
- All applications for research must be peer reviewed;
- Not more than 50% of the original deposits may be removed without good reasons;
- New excavation permits may only be issued after receipt of a full report on the results of previous permits and copies of published papers;
- All applications for research funding must include a budget for conservation of the deposits and the site; and
- Every effort must be made to include South Africans in research an excavation teams.

8.6.2 Research Permits

- All permits for excavation and collection of artefacts are issued on application to HWC.
- HWC may reserve the right to refuse a permit after consultation with relevant stakeholders.
- All applications will be peer reviewed.
- The Diepkloof Committee must be consulted on all permit applications and informed of the results of all applications affecting the site.
- All permit applications must include a suitably qualified South African archaeologist as the permit holder or co-permit holder.
- The application form must be signed by the director of an institution, approved by HWC that agrees to house and curate the collections from DRS in perpetuity.
- Permit extensions will only be allowed after receipt of a detailed report on the previous permit activities.
- HWC may withdraw a permit if the permit holder does not ensure protection of the OUV, integrity and authenticity of the site.
- Not more than 50% of the original deposit at a site may be removed under permit from HWC.
- Applications for the export of archaeological material from DRS must be submitted to HWC and SAHRA.

Planning of research shall be the responsibility of permit holders in consultation with HWC and the Diepkloof Rock Shelter Committee. The principle guiding research planning will be to uphold and extend the OUV of the site.

8.6.3 Site interpretation

In November 2019 the MEC for Cultural Affairs and Sport in the Western Cape gazetted the newly established Elands Bay Museum. This museum will function as Interpretation Centre for Diepkloof Rock Shelter and will also focus on the rich archaeological heritage of the West Coast.

It is expected that, once infrastructure on site have been established, guided tours will depart from the Interpretation Centre towards the site and visitors will be provided the opportunity to have a guided tour of the site. No visitors will be allowed on site without a guide.

Interpretation panels explaining the outstanding universal value of the site will also be located at the parking area and reception area for the site, which is planned to be developed in the protected area at the bottom of the hill.

8.7 SO 7: To build capacity of local people in heritage tourism to ensure responsible tourism to Diepkloof Rock Shelter

The Cederberg Municipality recognises that the Provincial Heritage Sites are an important but vulnerable economic asset that have potential to contribute to job creation. Currently, many citizens in the province are unaware of the importance of the features that make the Cederberg Municipality special, how to access economic opportunities in tourism, and how and where to gain the necessary skills to qualify for such economic opportunities. To address this gap, it is proposed in the 2016/2017 IDP action plan to convert the "Ou Verlorenvlei Building" into a Skills Development Centre. Trained heritage guides together with innovative and effective site interpretation could assist in attracting visitors to deliver a higher quality service as well as in obtaining potential donor funding for heritage management related projects and initiatives.

8.8 SO 8: To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation project

Several plans exist within the Cederberg Municipality to increase the participation of local communities to address the need for local economic development. The two most relevant for the Elands Bay area are related to the fisheries and tourism industry.

8.8.1 Community Development and Beneficiation

As mentioned in the 2013 Marketing Strategy, the Cederberg Municipality aims to "create conditions conducive for genuine, bottom-up tourism transformation and specifically the inclusion of previously disadvantaged areas and individuals in the Cederberg Tourism industry." This can be achieved through the participation and inclusion of all sectors of the community

with a stake in tourism. For example, local communities can be involved as guides, hosts, and caterers or to transport visitors.

In addition to personal benefits obtained from the provision of services, a sound benefit sharing mechanism should be developed to ensure that the broader local community benefits from tourism development. For example, a levy as part of the tourism fee to the site can be deposited into a community fund. This fund can then be used for emergencies or for developing or maintaining community assets, such as a school, clinic, playground, etc. Structures for managing this fund can be discussed and developed in collaboration with the Diepkloof Committee and the local community.

9 Action Plan

Implementing the ICMP involves the detailing and implementation of Actions, which are in support of the Vision and Mission Statement. The Vision for the ICMP has led to a set of Strategic Objectives, under which various Action Categories have been identified. These Action Categories, Specific Actions, Expected Outcomes, Performance Indicators, Stakeholders, Lead Parties and Timeframes are listed for each Strategic Objective in Table 3 below. The Action Plan lists all actions that need to be completed over the next 5 years.

The purpose of the Action Plan is to guide effort and ensure that all work conducted as detailed in Table 3, can be measured to comply with the SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) criteria required by the National Treasury of South Africa.

It is proposed that the actions from the Action Plan, be planned in more detail using a log-frame format that outlines clear steps, deliverables, indicators and timelines, with tasks assigned to and accepted by the responsible parties. Every quarter progress can be assessed which provides an opportunity to discuss obstacles and find a way of overcoming them.

Table 3: Actions to Implement the Integrated Conservation Management Plan.

Strategic Objective	Strategic Objective 1: To establish a management framework for Diepkloof Rock Shelter.					
Action Category	Specific Action	Expected Outcomes	Performance	Stakeholders	Lead Parties	Timeframe
			Indicators			
1. Strengthen	1.1 Establish a	1.1 DRS is managed	1.1 Organogram	HWC,	HWC	2020-2022
management	committee with key	effectively through	and mandate of	Landowner,	Manageme	
of DRS	stakeholders to	the establishment of	the committee	Cederberg	nt	
	manage Diepkloof	sound frameworks		Municipality,		
	Rock Shelter			archaeologists,		
	10 Establish a Unitara		1.2 A signed	CBTO,		
			Heritage	Committees of		
	Agreement		Agreement	Diepkloof,		
				Sibhudu Cave		
				and Pinnacle		
	HWC		1.3 Minutes of the	Point		
	1.3 Convene meetings		meetings			
	of the committee		1.4 Approved			
	1.4 Develop financial		financial			
	guidelines for DRS		guidelines			
	1.5 Establish the		1.5 Management			
	Management		Authority with			
	Authority in		names of			

	collaboration with the Committees of Sibhudu Cave and Pinnacle Point ³⁰		representatives			
2. Integrate DRS into existing development plans	 2.1 Include DRS in the next municipal IDPs and SDFs 2.2 Make provision for DRS to be included in the most recent municipal Disaster Management Plan 	2.1 The management of DRS is included in all local, district and provincial development plans and frameworks	 2.1 DRS integrated in next municipal IDP and SDF 2.2 Disaster plan for DRS included in the municipal Disaster Management Plan 	Cederberg Municipality, Diepkloof Committee	Diepkloof Committee	2020-2022

³⁰ At the time of writing this ICMP, the sites were not inscribed yet as WHS, but this was envisioned for the immediate future.

Strategic Objective	Strategic Objective 2: To ensure conservation of archaeological deposit and related archaeological material on site.					
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
1. Development of infrastructure	 1.1 Install signage at the entrance 1.2 Put up a fence near the entrance of the land to prevent animals and undesired people to enter 	1.1 The site is secured through implementation of appropriate infrastructure	 1.1 Signage boards installed at the entrance and at the site 1.2 A fence constructed around the Erf 	HWC, Landowner, Cederberg Municipality, archaeologists , CBTO, Committees of Diepkloof, Sibhudu Cave and Pinnacle Point	HWC Managemen t	2020-2022
	 1.3 Create a firebreak at the bottom of the koppie to decrease the risk of fires reaching the site 1.4 Establish boardwalks at the site 		 1.3 A firebreak created 1.4 Boardwalks established at 			

					the site			
2.	Human	0	Ensure training	2.1 Human Resources	2.1 Guides have	HWC,	Diepkloof	2020-2021
	Resource		of avalified	involved have the	certificate of	Landowner.	Committee	
	development			Capacity to protect the	qualification	Archaeologist		
	development		bow to		quaineanon			
			10 IO					
			protect			Committee,		
			heritage		2.2 Monitoring	dedat, dcas		
					reports on the			
					effectiveness of			
		0	Implement		current methods			
			new					
			conservation					
			measures on					
			site					
			2116					

Strategic Objectiv	strategic Objective 3: To monitor and assess the economic, social and environmental impacts of activities at and around Diepkloof Rock					
Shelter.						
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Partners	Main Stakeholder s	Timeframe
1. Monitoring	 1.1 Regular reports from the Diepkloof Committee to the HWC Council 1.2 Develop a cave monitoring system, including SMART indicators, in line with standard practice 	1.1 Social, economic and environmental changes that can have an effect on the conservation and management of the site are noticed timely and addressed adequately	 1.1 Quarterly and Annual progress reports 1.2 Cave monitoring system developed 	HWC Management with Managemem ent Authority and Diepkloof Committee	Diepkloof Committee	2020 –2022
	 1.3 Implement annual cave inspections 1.4 Develop and implement a survey to establish a baseline of 		 1.3 Brief report of site visits 1.4 Survey developed and results from respondents 			

	economic, social and		received			
	environmental impact					
	of activities around					
	DRS					
1	1.5 Develop a database		1.5 Database developed			
	for recording the		·			
	results of the survey					
	developed or build on					
	HWC Heritage					
	Information					
	Management System					
	с ,					
2. Enforcement 2	2.1 Develop site	2.1 Damage to the site	2.1 Site	HWC	Diepkloof	2020 –
	management	avoided through	management	Management	Committee	2022
	guidelines/policy for	effective	guidelines/policy	with Diepkloof		
	DRS	enforcement of	implemented	Committee		
		policies and				
		guidelines by the				
2	2.2 Implement the	Diepkloof	2.2 Protected Areas			
	Protected Areas Act	Committee	Act			
	regulations with		implemented			
	regard to visitors					
	-					

Strategic Objectiv	Strategic Objective 4: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that support						
management of t	he site.						
Action Category	Specific Action	Expected Outcomes	Performance	Main	Lead Parties	Timeframe	
Action category			Indicators	Stakeholders		linerance	
1. Secure	1.1 Develop and prioritise	1.1 Human and	1.1 A list of site	Diepkloof	Diepkloof	2020 – 2022	
funding for	a list of site needs,	financial resources	needs	Committee,	Committee		
DRS	including infrastructure	are allocated	developed	Management			
	as well as human	effectively and		Authority			
	resources	efficiently to					
		achieve financial					
		sustainability					
	1.2 Identify local, national						
	and potential		1.2 Approved				
	international funding		tunaing				
	sources and make						
	applications						
	1.3 Identify opportunities						
	for joint fund raising						
	and sharing of						
	resources		1.3 List of				
			opportunities to				
	1.4 Develop a sustainable		share resources				

financing strategy			
	1.4 Sustainable		
	financing		
	strategy		
	developed		

Strategic Objective 5: To encourage collaboration between stakeholders to conserve Diepkloof Rock Shelter and promote the site as a heritage tourism attraction. Performance Main Action Category **Specific Action Expected Outcome** Lead Parties Timeframe Indicators **Stakeholders** 1. Tourism 1.1 Develop 1.1 local 1.1 A local tourism Wesgro, Diepkloof 2020-2022 a local and tourism development International tourism development DEDAT. West Committee developmen and and marketing plan at the Interprtation and marketing Coast District marketing Municipality Centre in Elands plan developed Bay Tourism Office. Best 0 CBTO, 1.2 Develop partnerships 1.2 Responsible practices small-Diepkloof with tourism scale tourism to DRS identified Committee. stakeholders through effective and HWC marketing implement Management, ed Committees of Slbhudu Cave 1.3 Collaborate with the and Pinnacle Landscape Living 1.2 Joint marketing, Point, Project in Clanwilliam including Clanwilliam for best practices promotion Living material, a web-1.4 Collaborate with the Landscape based platform Project other two committees and awareness at Sibhudu Cave and raising, for Pinnacle Point (and

	possible additional		Modern Human			
	sites in other provinces)		Origins sites			
	to create joint		implemented			
	marketing for Modern		through the			
	Human Origins sites		Cradle of Human			
			Culture			
	1.5 Promote tourism to DRS					
	nationally and		1.3 DRS mentioned			
	internationally through		in national and			
	existing tourism		international			
	structures and		promotion			
	organising fund raising		material and on			
	events		websites			
2. Heritage	o Install tourism	2.1 High quality tourism	o Signage	West Coast	Diepkloof	2017-2020
tourism	road signage to	products and	for	Distrist Tourism	Committee	
products	the site	services	direction	Office,		
and services		appreciated by all	and rules	Department of		
		visitors	and	Transport and		
			regulations	Public Works,		
			in place	CBTO,		
				Diepkloof		
				Committee,		
				HWC		
				management		
				management		

Strategic Objective 6: To increase awareness and appreciation of Diepkloof Rock Shelter by the local and global community through							
research, educati	on and interpretation of the c	ultural heritage of the site.					
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe	
1. Raise		o Increased	o DRS	Diepkloof	Diepkloof	2020 - 2022	
awareness	awareness	awareness	included	Committee,	Committee		
	raising material	and social	in	CBTO			
		connectedn	promotion				
		ess to DRS	material				
		among the	for cultural				
		community	heritage in				
		to promote	the				
		long-term	municipalit				
		protection of	У				
		the site					
0 Decembr				Disable of	Diamble of	0000 0000	
2. Research	2.1 Strengthen ties with the	2.1 High quality	2.1 MOU with the	Diepkioof	Diepkioof	2020 – 2022	
	Department of	research	Archaeological	Committee,	Committee		
	Archaeology at the	undertaken to	Department of	Department of			
	University of Cape	promote the value	UCT	Archaeology			
	Town (UCT)	of the site		at UCT			
	2.2 Department of		2.2 Students				

Archaeology to assist with conservation, interpretation and promotion of the site	contribute research on through thesis	to DRS their
2.3 Develop a scientific bibliography of all research undertaken at Diepkloof	2.3 A scie bibliography developed	ntific

Strategic Objective 7: To build capacity of local people in heritage tourism to ensure responsible tourism to Diepkloof Rock Shelter.						
Action Category	Strategic Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe
1.1 Training of	1.1 Collaborate with	1.1 Capacity of local	1.1At least 4 guides	Department of	Diepkloof	2020 – 2022
cultural guides	DEDAT	communities is built	registered with the	Economic	Committee	
with focus on		to deliver a high-	Tourist Guide	Development		
West Coast		quality tourism	Registration Office at	and Tourism;		
heritage ³¹	1.2 Provide on-the-ground	experience while	the Western Cape	Diepkloof		
	training for cultural	ensuring protection	Department of	Committee,		
	guides, providing	of the site	Economic			
	equal opportunities		Development and			
			Tourism			

³¹ This training should be developed and provided using an accredited training provider as per Tourism Act 3, 2014.

Strategic Objective 8: To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation projects.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe
1. Community benefits	 1.1 Promote involvement of marginalised people in the development of heritage tourism products 1.2 Collaborate with local businesses to provide heritage tourism services 1.3 Promote employment 	1.1 Local community members receive employment benefits as a result tourism development to DRS	 1.1 Community- based heritage products developed 1.2 MoUs with local service providers 1.3 Employment of 	Cederberg Municipality, Diepkloof Committee, Local businesses; Elands Bay Museum	Diepkloof Committee	2020-2022
	of locally marginalised people by existing tourism businesses		nocally marginalised community members			

10 Monitoring and Evaluation

A simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool should be established for the ICMP. Such a MELI approach is described as follows:

Monitoring is the action of determining where implementation of the Action Plan stands. It is the ongoing, systematic collection of data to provide management and the main stakeholders with a good indication of the progress in terms of the Implementation Plan on the use of allocated funds for these purposes.

Evaluation informs the manager and stakeholders of the degree of effectiveness in terms of outcomes and impacts of the activities. Once indicators are identified, baselines must ideally be established against which to measure progress. Evaluation must also assess unplanned outcomes and impacts for which established baseline values may not exist.

Learning refers to continuous learning from, and the insights gained from the results of the monitoring and evaluation. Best practices have been identified and more can be added as Diepkloof Rock Shelter progresses.

Intervention is the evidence-based action on the Monitoring, Evaluation and Learning that must be taken to overcome obstacles or challenges faced during the implementation of the ICMP. The MELI is therefore a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected.

The performance indicators in the Action Plan act as the monitoring and evaluation of the ICMP. Learning and insights are derived from measurements of progress against the tasks and deliverables. While an organisation can monitor its progress in terms of the tasks set out in the Action Plan, it is neither appropriate nor credible, and indeed very difficult for the landowner/site manager on its own to measure the effectiveness and impacts of actions. It is therefore highly recommended that the Diepkloof Committee, including potential beneficiaries, be involved at some point in the MELI. This could be achieved through establishing management forums and working groups.

11 Glossary

Archaeology: The study of human activity in the past, primarily through the recovery and analysis of the material culture and environmental data that they have left behind, which includes artefacts, architecture, and the archaeological record.

Cultural Landscape: A landscape designed, improved or at least affected by human activity, whether deliberately or not. Cultural landscapes typically refer to areas where tangible heritage is associated with intangible values associated with the landscape, including memories, legends, songs, traditions and stories, belief systems, all representing different layers in the landscape. Appreciation of the different layers and their interrelationships ultimately brings a deeper understanding and appreciation of the cultural landscape. The World Heritage Committee refers, *inter alia*, to 'associative cultural landscapes, which are particularly valued for their religious, artistic or cultural associations of the natural element'.

Cultural Landscape Map: A map of all the heritage resources of an area, including natural resources, tangible heritage and intangible heritage. Heritage resources can then be linked to other attribute data, timelines, etc. in a GIS system for easy access and updating.

Cultural Significance: Historic, scientific or social value of past, present or future generations.

Desired state of conservation: This describes how the site would function and look like when all strategic objectives are achieved.

Episodic: This means made up of separate loosely connected episodes. These are events that are happening from time to time, not continuous.

Heritage: Heritage is our legacy from the past. It includes those places, objects, languages, memories or cultural activities that have aesthetic, historic, scientific or social significance or some other special memory and routine.

Integrated Conservation Management Plan: A management framework, consisting of a central Operational Management Plan and Specific Plans, all of which guides the conservation of a specific area, avoiding negative impacts on the resources of the area, and where avoidance is not possible, minimising the negative impacts through the implementation of mitigation measures.

Intangible Heritage: Heritage associated with a place that is not expressed physically. It includes non-physical aspects such as symbolic meaning, values, activities like dancing, storytelling and music making, memory and routine, indigenous knowledge, local traditions, passed from one generation to the next, mostly through oral traditions.

KhoeKhoen: An indigenous ethnic group, one of the 'First Peoples' of southern Africa, who practised a pastoral economy with domesticated sheep and cattle.

Khoe-San, or Khoisan: a term used to refer collectively to the KhoeKhoen (formerly spelled Khoikhoi) and the San hunter-gatherers, although the two groups had different histories, economies and cultures.

Landscape: A collection of natural and cultural features that characterise a particular place.

Local Economic Development (LED): Local economic development aims to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation.

Luminescence: Emission of light by a substance not resulting from heat.

Mitigation: Any action to reduce the negative impact of intervention.

NEM:PAA: The National Environmental Management: Protected Areas Act, No 57 of 2003 is complimentary to the National Environmental Management Act (NEMA), No 107 of 1998. The aim of NEM:PAA is to provide for the protection and conservation of ecologically viable areas that are representative of South Africa's biological diversity. As described in Article 13 of NEMPAA, chapter 1 and 2 of NEM:PAA apply to World Heritage Sites in South Africa.

Outstanding Universal Value: Outstanding universal value means cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

Property: This is a term used by UNESCO to indicate the core zone of the proposed World Heritage Site.

Radiocarbon dating: A method for determining the age of an object that contains organic material by using the properties of radiocarbon 14 C, which is a radioactive isotope of carbon.

Risk: A hazard measured against vulnerability. In other words, the degree to which loss is likely to occur, as a function of the nature of particular threats in relation to particular circumstances. More broadly speaking, risks include any factor that could render DRS unable to achieve its Strategic Objectives.

San: Also known as the 'Bushmen', this 'First Peoples' group of southern Africa were traditionally hunter-gatherers and formed part of the Khoe-San ethnic group.

Statement of Outstanding Universal Value: A concise statement of the outstanding heritage value of a World Heritage Site (WHS), the value, which provides such as a site with universal value.

Stratigraphy: A branch of geology which studies rock layer (strata) and layering (stratification).

Tangible Heritage: The physical aspects of heritage such as the Diepkloof Rock Shelter, the rock art, archaeological sites and resources, and the sense of place provided by the natural environment of Verlorenvlei.

Thermoluminescence: The re-emission of absorbed energy when a substance is heated.

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13 Appendix A: Final Draft Stakeholder List

Full Name	Organisation	Postal Address	Contact Details
Primary Stakeholders		1	
Barbara and Heindrik	Landowners	PO Box 4725	Email: <u>bsteyn3@gmail.com</u>
Steyn (Verlorevlei		Tygervalley	Tel: 083 500 7189
Vakansieplas)		Cape Town	
		7536	
Janette Deacon			Email: janette@conjunction.co.za
(Archaeologist)			
John Parkington	University of Cape Town		Email: john.parkington@uct.ac.za
(Archaeologist)			
Guillaume Porraz	Laboratoire		Email: <u>guillaume.porraz@cnrs.fr</u>
(Archaeologist)	Méditerranéen de		
	Préhistoire Europe Afrique,		
	Marseilles		101: +33 6 60 29 62 / 1
Secondary Stakeholders		1	1

Full Name	Organisation	Postal Address	Contact Details
Henry Slimmert	Cederberg Municipality	Cederberg Municipality	Tel: 027 482 8000
(Municipal Manaaer)		2A Voortrekker Street,	
		Private bag X2,	
		Clanwilliam 8135	
Mr Boetie Booysen	Cederberg Municipality	Cederberg Municipality	Tel: +27 27 482 8600
(Town Planner)		2A Voortrekker Street,	Cell: +27 82 886 6088
		Private bag X2,	
		Clanwilliam 8135	Email: ajbooysen@cederbergraad.co.za
Mr. Logobim Pollot	Naiabhaur	Elands Bay	Tol: +27.71.417.1542
			161. +27 7 1 417 1362
(Neighbour)			Mobile: +27 83 925 8187
Mr B van de Merwe	Verlorenvlei Coalition	PO Box 75	Tel: +27 22 942 1782
(Chairman)		Redelinghuys	Cell: +27 83 460 4066
		8105	Email: kerry@devs.co.za
Ms Felicity Strange	Friends of Verlorenvlei	Verlorenvlei, Elands Bay	Tel: +27 22 972 1432
			Email: vleiratdesign@gmail.com
Mr Mike Winfield	EBEDAG	c/o 17 Bergvliet Road	Tel: +27 83 229 6007
(Chair)		Bergvliet, Cape Town	Email: MWinfield@martin-east.co.za
		7945	

Full Name	Organisation	Postal Address	Contact Details
Mrs Jo MacRobert	EBEDAG	17 Bergvliet Road	Tel: +27 21 713 1497
(Attorney)		Bergvliet, Cape Town	Fax: +27 86 678 2525
		7945	Cell: +27 83 269 2562
			Email: law@jomacrobert.com
Joos Engelbrecht	Cederberg Tourism Office	Lamberts Bay	Tel: +27 27 432 1000
	(CBTO) /Lamberts Bay		Email: info@clanwilliam.info
	office		
Mr Guy Preston	SANBI	Kirstenbosch,	Tel: +27 21 441 2700
(Working for Wetlands)		Cape Town	Email: gpreston@environment.gov.za
Ms Charika Barends	West Coast Aboriginal	St Helena	Tel: +27 82 753 5962
(Chair)	Council		Email: wcacouncil@gmail.com
Mr Peter Owies	Crayfish Hiking Trail	Elands Bay	Cell: +27 74 358 4333
(Local Organisation)			Email: peter.owies@gmail.com
Mr Barry Smith	Elands Bay Youth	Elands Bay	Cell: +27 74 912 4431
(Local Organisation)	Organisation		
Mr Johnny Kotze	Elands Bay Ratepayers	Elands Bay	Cell: +27 82 656 8055
(Chairperson)			Email: johnnyk@telkomsa.net
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Full Name	Organisation	Postal Address	Contact Details
Mr Charles Malherbe	West Coast District	PO Box 242,	Tel: +27 22 433 8400
(Environmental	Municipality	Morreesburg, 7310	Email: cimalherbe@wcdm.co.za
Officer)			
Andries Titus	Cederberg Municipality	Cederberg Municipality	Tel: +27 27 482 2583
(Acting Director)	Community and	2A Voortrekker Street,	Fax: +27 27 482 1933
(,	Development Services	Private bag X2,	
		Clanwilliam 8135	Cell: +27 76 984 2679
			Email: andriest@cederbergraad.co.za
Bradley Zass, Rural	Cederberg Municipality	Cederberg Municipality	Email: bradleyz@cederbergmun.gov.za
Development Officer	Tourism and Local	2A Voortrekker Street,	Tel: (+27) 27 482 8000
	Economic Development	Private bag X2,	
	Community Commission	Clanwilliam 8135	Cell: (+27) 76 063 6160
	Community Services		
Terri Nero	Elands Bay Community	Elands Bay	Tel: +27 22 972 1415
(Local Organisation)	Development		
	Organisation		

14 Appendix B: Heritage Tourism in the Western Cape

SITUATIONAL ANALYSIS OF HERITAGE TOURISM IN THE WESTERN CAPE WITH A VIEW OF DEVELOPING MODERN HUMAN ORIGINS SITES AS TOURISM ATTRACTIONS

1. Introduction

Planning for and managing visitor flows is an important part of integrated management planning for a heritage site. If developed as sustainable tourism attractions, heritage sites have the potential to contribute to local economies and communities. However, protecting and maintaining the heritage values of the site should always be the primary concern. This report assesses tourism opportunities for Modern Human Origins sites in the Western Cape, by defining heritage tourism in the given context, evaluating the market for heritage tourism, and suggesting approaches to the sustainable management of tourism at heritage sites.

2. Defining heritage tourism

A first step towards describing the demand for heritage tourism in the Western Cape is to obtain an understanding of key terms and draw definitional boundaries.

The following definition of "heritage tourism" is put forward as a working definition for this study:

Heritage tourism is defined as visitation by visitors to one or more of the following heritage resources that provide a historical experience during their visit to the Western Cape:

- Heritage sites, places and cultural landscapes including: declared World Heritage Sites, Grade1 (national), Grade 2 (provincial) sites and Grade 3 (local) heritage sites and heritage areas, as defined in the National Heritage Resources Act (NHRA), and included in the South African Heritage Resources Agency (SAHRA) data-base and local registers. This definition may include monuments, memorials, buildings and assemblages of building, streetscapes, cultural landscapes, archaeological sites, routes, and other sites of cultural significance.
- Places of interpretation and presentation that describe or show a culturally important event or era in history. These include: national, provincial, province-supported and local museums as well as private, institutional and community museums, interpretation centres, visitor attractions and sites with interpretive signage.

3. Guidelines for developing and managing a heritage tourism attraction

Several policy and strategy documents provide guidelines for the sustainable development of heritage sites as tourism attractions. It is generally accepted that the management of tourism at World Heritage Sites should be in accordance with the International Council on Monuments and Sites (ICOMOS) Charters, as outlined below. A guidance document, Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers (2002) and subsequent documents focus strongly on the issues of visitor management, carrying capacity and sustainability in relation to tourism.

3.1. The UNESCO World Heritage and Sustainable Tourism Programme

The World Heritage and Sustainable Tourism Programme encourages sustainable tourism to World Heritage sites. The overall mission of the Tourism Programme is to aid the World Heritage Committee and site managers to develop tourism as a positive force to retain World Heritage Site values and to help mitigate site threats. The programme focuses on seven activities (that can also be applied to non-World Heritage Sites), namely:

- Building site management capacity to deal with tourism;
- Training local community members in environment and culture preservation as well as tourism related activities to receive tourism benefits;
- Assist communities around the sites to market their products and use the World Heritage Sites as a lever for local economic and social development;
- Raising public awareness of the site's outstanding universal values, or significance of the site, and building pride and intercultural dialogue with local communities and visitors through conservation education;
- Using tourism generated funds to supplement site conservation and protection costs;
- Spreading lessons learned to other sites and protected areas and;
- Raising awareness of the objectives of the World Heritage Convention, other UNESCO conventions, activities and policies: for local and national public tourism authorities, tourism industry officials and tourists.

These activities align broadly with other international conventions and charters dealing with sustainable and/ or responsible tourism.

3.2. ICOMOS International Cultural Tourism Charter, 1999

The ICOMOS International Cultural Tourism Charter: Managing Tourism at Places of Heritage Significance, 1999, provides an umbrella statement of principles to guide the dynamic relationships between tourism and places or collections of heritage significance. In addition to recognising the need to safeguard the diversity and universal importance of cultural heritage, both tangible and intangible, the charter promotes two major concepts:

- making the significance of the site, or place, accessible to visitors and host communities in a well managed manner; and
- promoting cooperation between the conservation community and the tourism industry, especially given the fragility of the heritage resource.

The Charter sets our six principles to guide cultural heritage tourism:

- Encourage public awareness;
- Manage the dynamic relationship;
- Ensure a worthwhile visitor experience;
- Involve host and indigenous communities;
- Provide benefit for the local community; and
- Responsible promotion programmes.

The Charter notes that tourism can be a positive force for natural and cultural conservation but gives a note of warning that poorly managed tourism and tourism-related development can threaten the integrity and natural and cultural characteristics of the site.

3.3. International Council on Monuments and Sites (ICOMOS) Charter for the Interpretation and Presentation of Cultural Heritage Sites, 2007

The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, 2007 addresses appropriate goals for heritage interpretation. For example, the principles that should underpin the technical means and methods appropriate to the cultural and heritage contexts as well as the general ethical and professional considerations that should help shape interpretation and presentation of heritage sites. In summary, these principles and considerations include:

- Access and understanding;
- Information sources;

- Context and setting;
- Authenticity;
- Sustainability;
- o Inclusiveness; and
- Research, Training, and Evaluation.

4. Heritage tourism attractions in the Western Cape

4.1. The supply of heritage attractions in the Western Cape

The Western Cape has a wide range of heritage sites that include monuments, museums, built environments, heritage precincts, cultural landscapes, places of worship, archaeological sites, fossil sites, caves, middens and rock art sites. However, not all of these heritage sites are accessible to tourists for a variety of reasons, because these are: i) remotely located; ii) located on private land; iii) vulnerable; and/or iv) do not have adequate tourism infrastructure. Regardless, a substantial number of heritage sites attract tourists, of which within the Western Cape's two UNESCO World Heritage Sites attract the most tourists, namely the Cape Floral Region and Robben Island.

4.2. Demand for heritage attractions in the Western Cape

Robben Island is the only heritage tourism attraction in the Western Cape for which reliable records of visitor numbers are available. Furthermore, many sites do not incur entry fees, for example the caves at De Kelders, or track visitor numbers. Given the limited information available, it is difficult to provide further insight into the demand for heritage tourism attractions in the Western Cape.

From heritage sites in other parts of South Africa, such as Maropeng and Sterkfontein, information on visitor numbers is available. Most likely as these paleo-anthropological sites have human origins interpretive centres are part of the Cradle of Humankind UNESCO World Heritage Site and are among Gauteng's iconic tourist attractions.

Figure 1 represents the sum of data available regarding visitation to the human origins interpretive centre and archaeological sites in Maropeng, Sterkfontein and Robben Island.





Figure 12: Number of visitors to heritage sites in South Africa

Source: South African Tourism Annual Reports, 2012 and 2015; Gauteng Tourism Authority (visitor numbers for Maropeng and Sterkfontein not available post 2011)

Both Robben Island and Maropeng are popular tourist attractions and represent the upper reaches of what a heritage tourism attraction can achieve in terms of visitor numbers. However, Figure 2 shows that visitor numbers for cultural heritage attractions, such as Robben Island and the Apartheid Museum, tend to be considerably lower than those of natural attractions.

ATTRACTION OR LANDMARKS VISITED BY TOURISTS IN SA								
Rank	Top 20 Attractions or Landmarks	2013	2014	2015				
1	Cape Town Central City	817 000	774 000	883 000				
2	V& A Waterfront	828 000	918 000	840 000				
3	Table Mountain Cableway	664 000	761 000	722 000				
4	Cape Point	724 000	718 000	664 000				
5	The Winelands	609 000	662 000	559 000				
6	Robben Island	325 000	291 000	317 000				
7	The Garden Route	258 000	325 000	284 000				
8	Kruger Park via Skukuza, Numbi, Malelane, Crocodile Bride	201 000	246 000	242 000				
9	Apartheid Museum	179 000	227 000	208 000				

Figure 2: Number of visitors to human origin sites in South Africa Source: SA Tourism, 2016

5. The market for heritage tourism

5.1. Introduction

Developing an accurate profile and measuring the market for 'heritage tourism' is extremely difficult. Few destinations report on "heritage tourism" as defined in this study, and visitation to historical attractions is often reported under "cultural tourism". Furthermore, information on tourists to South Africa is mostly sourced from SA Tourism's annual reports and profiles of key target markets. These annual reports only mention key indicators reported like number of tourists, purpose of visit, number of bed nights stayed and expenditures. As such, the reports only allow for a superficial understanding of tourists and provide little insight into tourist's motivations, travel patterns and behaviours – including attractions visited other than the top 20 attractions visited nationally.

The following section describes the demand for heritage attractions in South Africa and the Western Cape. In the absence of data on the characteristics of heritage tourism markets in South Africa, the section also presents a summary of market profiles developed in Canada, Australia and the USA.

5.2. The market for heritage tourism in South Africa

Although it is probable that all types of tourists, e.g. leisure, business and religious tourists, visit heritage attractions in South Africa, it is a reasonable assumption that these attractions are most likely to be visited by leisure tourists who are visiting tourism attractions while on holiday. Other leisure tourists, shoppers and those visiting friends and family are less likely to visit heritage tourism attractions. In 2015, 16.5% of all international visitors to South Africa were holidaymakers, 11.2% shoppers and 37.4% visited friends and relatives³².

South African Tourism reports that in 2015 visiting natural attractions, beaches and business were among the other popular activities undertaken by foreign tourists. Visiting natural attractions was a more popular activity than visiting cultural, historical and heritage attractions, with 17.3% and 11.0% of all international tourists participating in each activity respectively. Overall there is a declining trend for visiting both natural and cultural attractions, as can be seen in Figure 3 below. This is a long-term trend, as previous South African Tourism annual reports indicate that participation in cultural, historical and heritage based activities stood at 23% in 2006 and 17% in 2008. After a peak in 2014, a drop in visitor numbers was observed in 2015 as a result of regulations by Home Affairs requesting families to have birth certificates with them while travelling to South Africa as well as external unforeseen factors such as Ebola.

³² 2015 statistics for tourism performance in South Africa were sourced from: South African Tourism. 2016. Tourism Performance Highlights 2015





The main source markets for holidaymakers in 2015 were the Americas, Asia, Australasia and Europe. These source markets have different activity patterns. The 2015 SA Tourism annual report³³ reveals that 44% of tourists from the Americas and ~35%% from Europe visited cultural and historical attractions. The annual report also reveals that 3% of all visitors to South Africa were from other African countries, mainly Namibia, Kenya, Angola, Malawi, Nigeria and Tanzania. The comparative figures for 'visiting natural attractions' and 'wildlife' are: Americas – 57.5% and 48.3%, Europe - 56% and 42.1%, and Africa - 11% and 5%.

5.3. The market for heritage tourism in the Western Cape

Estimating the size of the heritage tourism market in the Western Cape is difficult given the limited information available. However, insight can be gained from the profile of the national heritage tourism market.

In 2015, Europe ranked as the Western Cape's strongest contributor to tourist arrivals, maintaining a solid share of arrivals of 60% across 2014 and 2015 but declined by 6.4% in absolute terms year-on-year from 2014. Africa and the Middle East ranked as the second largest

³³ South African Tourism. 2016. Tourism Performance Highlights 2015

contributor with 20.6 %; the African land market accounted for majority of these arrivals (Figure 4).



Figure 4: Tourist arrivals to the Western Cape: 2014/2015 Source: SA Tourism, 2016

Figure 5 provides the top five international markets to the Western Cape by country. The top three markets - United Kingdom, Germany and the USA - are also SA Tourism's international target market segments. Profiles for each of these target markets suggests that tourists from these countries are most likely to visit cultural attractions. Table 1 summarises the travel behaviour and desires of these target market segments that support the argument that they will be the most likely market for cultural tourism in the Western Cape.



TOP INTERNATIONAL MARKETS TO THE WESTERN



Table 1: The interest in culture among South African Tourism international target market segments

SA Tourism market segment	Geographic scope	Participation in exploring culture while in South Africa	Travel desires
Next Stop	USA	0007	Highly interested in travelling for
South Africa		00 /0	education and culture; also show

Source: SA Tourism. Marketing South Africa in the UK, USA and Germany. 2006 and 2010

			interest in heritage and shopping
			If travelling to South Africa they are
	UK		In Indvening to south Africa, they are
		75%	interested in seeing natural beauty,
		/ 0/0	meeting locals, viewing wildlife and
			culture
	Germany	72%	Mostly interested in natural beauty,
		7270	wildlife and culture
Wanderlusters	USA		If travelling to South Africa,
			interested in safari, natural beauty,
		86%	and culture : not as interested in
			shapping and tourist attractions
			such as museums.
	UK		If travelling to South Africa,
		82%	interested in wildlife, beach, and
			culture
	Germany		Looking for nature, culture and
		69%	variety of things to do in a holiday
			destination
Senior	Germany		Culture and great landscape are
Explorers		78%	important factors when deciding on
			a destination

In terms of the Western Cape's relative position amongst the provinces, its profile in the international tourism market is stronger than in the domestic tourism market. For example, in 2015, the Western Cape ranked sixth as the destination of choice amongst domestic tourists, while the province was the third most popular province amongst international tourists, behind Gauteng and Limpopo.

During 2015, there were 1.8 million domestic trips to the Western Cape, a share of 7% of a total of 24.5 million domestic trips. This is a slight increase from the 1.6 million domestic trips in 2014, but still less than the 2.4 million in 2013. Half of domestic tourists to the Western Cape visit the province to visit friends and relatives, whereas a third are holidaymakers. The province attracts the highest portion of domestic tourists travelling for holiday purposes.

Domestic tourists generally engage in unpaid activities, such as social activities associated with VFR travel. Generally, a very small minority of domestic tourists visit cultural, heritage or historical attractions when travelling in South Africa.





The trend reports published by the tourism marketing organisation of the Western Cape, WESGRO, reveals that visitors to the Western Cape are more inclined to participate in culture/heritage activities than visitors to South Africa. For example, in 2014, ~15.3% of all visitors were engaging in culture/heritage activities. International visitors had a slightly higher rate of participation than the domestic market. The 2015 Western Cape provincial report is not yet available and hence the rate of change in interest in culture/heritage activities between 2014 and 2015 is not known. However, regional reports for the Winelands and Cape Town confirm the relatively higher participation rate in culture/heritage activities by both international and domestic visitors.





In a gap analysis study conducted in 2012, 11 tourism experts were asked to identify and prioritise the development of new tourism products for the Western Cape. Nature, contemporary culture and cuisine-based products ranked the highest and historical culture ranked sixth out of 16 tourism products. However, the development of historical cultural tourism product received strong support, having scored 45 out of a maximum of 55 points³⁴.

5.4. Heritage tourism market profiles

In the absence of information about heritage tourism in South Africa, other information sources need to be consulted, interpreted and applied to the South African and Western Cape context where possible. The following sections provide an overview of cultural heritage tourism markets in Canada, the United States and Australia – destinations that report on the activities that define heritage tourists, namely:

- Visiting heritage sites, places and cultural landscapes; and
- Visiting places of interpretation and presentation.

The overview hones in on the characteristics of participants in cultural heritage tourism, with the aim to distil a profile/s of this market segment. Deriving an accurate estimate of the size of the global market is, however, more complex. The presentation of figures and statistics in this section attempts to provide a sense of the relative scale of this market.

³⁴ Van der Merwe JH, Van Niekerk A. Application of geospatial technology for gap analysis in tourism planning for the Western Cape. S Afr J Sci. 2013;109(3/4), Art. #1226, 10 pages. http://dx.doi.org/10.1590/sajs.2013/1226

5.4.1. Canada: Domestic cultural and heritage market segments

Canada has undertaken extensive research into the activities and motivations of both the Canadian domestic market and its major foreign source market, the United States (US). Visiting Historical sites, Museums and Art Galleries (HMA) is one of the activity groupings generated from variables within the Travel Activities and Motivation Survey (TAMS).

The following sections provide more in depth descriptions of the domestic and US Historical sites, Museums and Art Galleries (HMA) enthusiasts³⁵.

Canada's Historical sites, Museums and Art Galleries enthusiasts

Of the 24.7 million Canadian adults in 2006, about 10.7 million (43.4%) visited a historical site, museum or art gallery on a trip during 2004 and 2005. Other than shopping and dining, visiting historical sites, museums and art galleries was the most common activity undertaken by Canadian Pleasure Travelers while on trips in the past two years. Of those who visited historical sites, museums and galleries, 29.2% reported that this activity was the main reason for taking at least one trip.

The majority in this travel segment are married (67.9%), older than 35 (67.4%) and live in adultsonly households (73%). However, they are slightly more likely to have a university degree (37.3%) and their household incomes (\$76,691) are slightly above average. They seek intellectually stimulating holidays that provide novelty and opportunities to learn. Strolling around a city to observe buildings and architecture, was the most popular activity (30.6%), followed by visits to well-known sites & buildings (22.5%), other sites & monuments (18.5%), viewing natural wonders (18.1%) and visiting general history museums (17.4%), art galleries (14.5%), historical replicas (7.9%), military museums (7.1%) and paleontological or archaeological sites (5.4%).

This activity segment is an average user of the internet to plan and book travel. However, they are above-average consumers of travel media and can also be effectively targeted through science and nature media, history and biography television programs and magazines and news and current events media.

³⁵ Canadian Tourism Commission. Canada's Heritage Tourism Enthusiasts



Top activities undertaken in the Western Cape in 2019 Table 2: Overnight domestic tourists visiting historical sites: 2007-2010³⁶

	2007	2008	2009	2010
Visitor numbers	4,818,912	5,103,318	5,277,696	5,479,216
Percentage change		6%	3%	4%

5.4.2. United States: Cultural and heritage tourism market segments

The United States is South Africa's second most important overseas market, and a key market for the Western Cape and Cape Town. The following sections provide more in depth descriptions of the Historical Sites, Museums and Art Galleries activity segment.

At 91 million, adult American that visited Historical sites, Museums and Art Galleries (HMA) represent 41.4% of the 176 million Americans who took trips over a two-year period (or 53.5% of the 170 million Americans who took leisure trips). Other than shopping and dining, visiting historical sites, museums and art galleries was the most common activity undertaken by US Pleasure Travellers while on trips in 2004 and 2005.

Visiting HMA is a fairly strong motivator, with 32.8% (29,941,969) reporting that this activity was the main reason for taking at least one trip in the previous two years. They are more likely than the average US pleasure traveller to seek vacation experiences that offer opportunities to learn (e.g., see or do something new and different, enrich perspective on life, gain knowledge of history and other cultures or places, stimulate your mind).

Within the general category of visiting HMA, 'strolling around a city to observe buildings and architecture' (25.6%) was the most popular activity, followed by 'visits to historical sites or buildings' (23.1% well-known sites and buildings, 19.2% less well-known sites and buildings), 'visits to well-known natural wonders' (16.3%), 'visits to museums' (15.0% general history, 7.9% military), 'visits to art galleries' (11.1%), and 'visits to historical replicas of cities or towns' (7.2%.) They are somewhat older than the average U.S. Pleasure Traveller (46.4 versus 45.4), most live in adult-only households and almost two thirds are likely to be in the market for performance based tourism experiences that take into account the interests and needs of teenagers or children. They are more likely than the typical US traveller to have university level qualifications (65.3%). Their household income (\$80,734) is above average. They tend to live in mid-sized and larger cities.

Most travellers in this segment use the Internet to plan their trips (77.5%), and 57.1% booked at least part of a trip online in the past two years. They are more likely than the average U.S. Pleasure Traveller to obtain travel information from official travel guides and brochures and they are avid consumers of travel-related media (especially magazines) and news and current events media (e.g., talk & news radio, newspaper websites, network news websites). These are prime media channels by which to reach this segment.

5.4.3. Cultural heritage travellers in the US

The US National Travel and Tourism Office reports on cultural heritage tourism in their Cultural Heritage Traveler report, the most recent report released in 2014. The number of cultural heritage tourists to the US has grown year-on-year between 2010 and 2014, although this growth has not been consistent (Table 3). More than half of all tourists visiting the US are cultural heritage tourists.

	2010	2011	2012	2013	2014
Overseas visitors* (000)	15369	16590	16815	18294	19619
% change	14	8	1	9	7
Share of overseas visitors	58.3	59.5	56.5	57.1	57.0
Point change in share	1.5	1.2	-3.0	0.6	-0.1
Overseas visitors					

Table 3: Number of overseas cultural heritage tourists to the US: 2010 – 2014. Source: US National Travel and Tourism Office * Excludes Mexico and Canada

³⁶ The Federal-Provincial-Territorial Ministers' Table on Culture and Heritage (FPT). 2012. Cultural & Heritage Tourism: A Handbook for Community Champions. Canada

Four of South Africa's main international source markets, the United Kingdom, Germany, China, France and Australia, are also among US' top five cultural heritage source markets (Table 4).

	Market share (%)	Volume (000)	Market share (%)	Volume (000)
Visitor origin	2013	2013	2014	2014
United Kingdom	13.9	2,543	14.0	2,747
Germany	7.7	1,409	7.5	1,471
Brazil	7.8	1,427	7.4	1,452
China	5.7	1,043	6.8	1,334
France	6.6	1,207	6.3	1,236
Australia	5.5	1,006	5.9	1,158
Japan	7.0	1,281	5.9	1,158
Korea, South	4.0	732	4.2	824

Table 4: Source countries of cultural heritage travellers to the US: 2013/2014.

Most cultural heritage tourists visiting the US in 2014 were leisure tourists (89%) on holiday (77%). Visiting historical locations was the fifth most popular activity that 46% of all cultural heritage tourists engaged in during 2014.

5.4.4. Cultural heritage tourism in Australia

The Cultural and Heritage Tourism in Australia 2006 snapshot³⁷ reported on the performance of cultural and heritage tourism in Australia for that year. Between 1999 and 2006 there was a 4% increase in the number of international cultural heritage tourists. International cultural tourists were very likely to engage in more than one type of cultural activity while travelling, however visiting a history or heritage building (61%) sites was the most popular activity while in Australia.

Of the 2.6 million international cultural and heritage visitors, 17% were from the UK, 16% from other European countries and 14% from New Zealand. Importantly, the UK and several European markets are also South Africa's main overseas source markets. Of these two markets, 18% of UK and 22% of other European cultural heritage tourists arrived in Australia on travel packages. There was a fairly even spread among the age groups of international cultural and heritage visitors during 2006.

During the eight-year period over which the research was conducted, the number of domestic cultural tourists in Australia grew slightly to 9.8 million visitors. Visiting historical/heritage buildings, sites or monuments was the second most popular activity type among domestic cultural and

³⁷ Tourism Australia. 2007. Cultural and Heritage Tourism in Australia 2006.

heritage visitors (31%), second only to visiting museums and art galleries. Cultural and heritage tourism activities were most popular with domestic visitors aged 45 years and over.

International cultural and heritage visitors spent on average more than three times the amount spent by domestic overnight visitors.

The latest research from Tourism Research Australia indicates that the strong annual growth in the number of international tourists visiting monuments and heritage buildings, with a 25% increase in 2015 for the year ending December 2015³⁸ and an 18% increase for the year ending March 2016.³⁹

³⁸ Tourism Research Australia. 2016. International Visitor to Australia – Year Ending December 2015.

³⁹ Tourism Research Australia. 2016. International Visitor to Australia – Year Ending March 2016.

The Integrated Conservation Management Plan for Diepkloof Rock Shelter was compiled by EcoAfrica Environmental Consultants under the direction of Heritage Western Cape



Pinnacle Point Site Complex Integrated Conservation Management Plan 2017 - 2022







Pinnacle Point Site Complex

Integrated Conservation Management Plan

2017 - 2022

Revised January 2023

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1 Acronyms

AIA	Archaeological Impact Assessment
ACMP	Archaeological Conservation Management Plan
APM	Archaeology, Palaeontology and Meteorites Permit Committee
ARC	Agriculture Research Council
CBD	Convention on Biological Diversity
CEMP	Construction Environmental Management Plan
СМР	Conservation Management Plan
DEA&DP	Department of Environmental Affairs & Development Planning
DFFE	Department of Forestry, Fisheries and the Environment
ECO	Environmental Control Officer
ELM	Environmental Liaison Committee
EMP	Environmental Management Plan
НАО	Heritage Area Overlay
HEADS	Human Evolution: Adaptations, Dispersals and Social Developments
HWC	Heritage Western Cape
ICMP	Integrated Conservation Management Plan
ICOMOS	International Council on Monuments and Sites
IDP	Integrated Development Plan
IUCN	International Union for Conservation of Nature
Ка	Thousand Years Ago
LSA	Late Stone Age
LUPO	Land Use Planning Ordinance
MA	Management Authority
MIS	Marine Isotope Stage
MSA	Middle Stone Age
NEMA	National Environmental Management Act

NEM:PAA	National Environmental Management Protected Areas Act
NHRA	National Heritage Resources Act
NSF	National Science Foundation
OEMP	Operational Environmental Management Plan
OSL	Optically Stimulated Luminescence
OUV	Outstanding Universal Value
PHS	Provincial Heritage Site
PP	Pinnacle Point
PPSC	Pinnacle Point Site Complex
RSA	Republic of South Africa
SA	South Africa
SACP South Palaeoanthro	African Coast Paleoclimate, Palaeoenvironment, Palaeoecology, pology Project
SAHRA	South African Heritage Resources Agency

-	
SDF	Spatial Development Framework
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WH	World Heritage
WHCA	World Heritage Convention Act No. 49 of 1999
WHS	World Heritage Site

vii

2 Executive Summary

- 1. This document is an Integrated Conservation Management Plan for the Pinnacle Point Site Complex near Mossel Bay in the Western Cape Province. This site features the earliest material evidence of the behavioural characteristics of *Homo sapiens* (henceforth modern humans), the species to which all living humans belong. Modern humans are unique among all living animals in having a complex culture that acts as our primary adaptation to the world and its challenges. That culture is made possible by several key features possessed by all modern humans, namely a complex cognition, a proclivity to cooperate at large scales with kin and non-kin, and a unique form of social learning. Scientists often refer to these three features collectively as "modern human behaviour" to set it apart from the behavioural repertoire of other animals. Scientific research on the origin of anatomically modern humans. It has been proposed that there are four characteristics for modern human behaviour. These include i) symbolic behaviour, ii) abstract thinking, iii) behavioural, economic and technological innovations, and iv) the ability to plan and strategize.
- 2. In South Africa, Blombos Cave, Diepkloof Rock Shelter (DRS) and Pinnacle Point Site Complex (PPSC) in the Western Cape, together with Klasies River in the Eastern Cape, and Border Cave and Sibhudu Cave in KwaZulu-Natal provide excellent scientific evidence for the appearance of modern human behaviour dating back over 100 000 years ago thereby contributing towards understanding the evolution of behaviourally modern humans. Together, the South African sites present the best-preserved record for the behaviour of the earliest modern humans. This is because: i) the sites themselves preserve dense records of human behaviour and culture, and iii) there has been a concerted effort by local and international scientists to study these sites with advanced scientific methods. These sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities and cultures. Moreover, the sites fill a significant gap in sites already on the World Heritage Centre.
- 3. The six sites have been placed on South Africa's tentative list of World Heritage sites to eventually make up a serial nomination for sites with Outstanding Universal Value (OUV) based on their contribution towards a better understanding of the evolution of modern human behaviour. Two sites located in the Western Cape, namely Diepkloof Rock Shelter and Pinnacle Point Site Complex, and Sibhudu Cave, located in KwaZulu-Natal, will be the first sites to be nominated for inscription on the World Heritage List, with the others following later.
- 4. The nomination process for World Heritage Sites requires the development of a conservation management plan for each site to show which actions will be taken to ensure that the

proposed World Heritage Site will be adequately protected and its Outstanding Universal Value maintained. The overall purpose of the current Integrated Conservation Management Plan (ICMP) is therefore twofold, namely: i) to provide guidance for the management and conservation of Pinnacle Point Site Complex; and ii) to support the nomination dossier as part of the submission to apply for World Heritage Status.

- 5. Pinnacle Point is a rocky headland, and like most rocky headlands in South Africa it is home to an assortment of caves, rock shelters, and other geological formations of interest. The Pinnacle Point Site Complex is situated on the Pinnacle Point Estate, Erf 15391 (a portion of Erf 2001) and Erf 15390, Boplaas, Mossel Bay. The site borders the provincial boundary at the coastline in the south, and lies along the eastern edge of Erf 15391 (a portion of Erf 2001), Boplaas, Mossel Bay. On the western edge it includes a section of erf 15390 and borders with the rest of the erf. The Pinnacle Point Site Complex includes 58 archaeological, paleontological, and geological sites of which a majority has not been scientifically studied through excavation or sampling. The sites are formed within the Table Mountain Sandstone (TMS) quartzites that are overlain throughout the area by calcretes, shallow leached soils and sand dunes (Bar-Matthews *et al.*, 2010). As a result, the Site Complex comprises numerous wave-cut caves and rock shelters that stretch westwards from Cape St. Blaize at 'The Point' in Mossel Bay to the western boundary of the Provincial Heritage Site.
- 6. The OUV of the Pinnacle Point Site Complex (PPSC) lies in the fact that it preserves in a short stretch of coastline Africa's densest concentration of well-preserved archaeological sites and a unique sequence of human occupation from 167,000 years ago to pre-colonial human occupation embedded in a rich record for climate and environmental change. The site contains evidence of: i) among the oldest dated occurrence of the systematic dietary use of shellfish. The regular use of shellfish shows that people at Pinnacle Point had grasped the lunar and tidal relationship and learned to schedule their visits to the coast accordingly. It documents an advance in cognition at an early phase in human evolution; ii) rich and well- preserved record for the continual and focused use of pigments. PP13B has currently the oldest modified ochre from this region dated to ~170,000 years ago; iii) excellent fossil bone preservation in the older layers, unlike many other caves along the Cape coast; iv) early stone tool technology by miniaturizing stone artefacts, PP5-6 provides the excellent evidence for this advanced technology at ~70,000 years ago; and v) early heat treatment technology of stone for the production of stone artefacts at ~170,000 years ago and for making silcrete bladelets.
- 7. The area protected as a WHS is the location indicated in Map 3, with geographical coordinates to the nearest second. In World Heritage terms this constitutes 'the property' or core of the site. The Buffer Zone is the entire remaining extent of the Pinnacle Point Estate and the part of Erf 15390 which is not included in the core. Map 3 shows the proposed Property and Buffer Zone of the PPSC.

- 8. Under the terms of Section 27 of the National Heritage Resources Act (NHRA), Pinnacle Point Site Complex was declared a Provincial Heritage Site on 14 December 2012. Once a site is inscribed on the World Heritage List and gazetted as such, the Protected Areas Act (NEM:PAA) automatically applies to both the property and its buffer zone. Heritage Western Cape, as the provincial heritage resources authority for the Western Cape Province, is responsible for the protection of Pinnacle Point Site Complex. The ICMP proposes institutional arrangements and mechanisms by which HWC can fulfil its mandate in terms of this site.
- 9. The ICMP is prepared in line with the principles, guidelines and requirements set out by the United Nations Education, Scientific and Cultural Organization (UNESCO) and its advisory bodies for World Heritage, ICOMOS and IUCN, as well as relevant South African legislation. In addition, regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with development planning for the area in which it is located.
- 10. The current state of conservation of PPSC is fairly good. The excavated sites at PP9, PP13A, PP13B, PP13c and PP5-6 are stabilised with sandbags, which protects the sites from erosion, heavy rainfall and potential damage from people. Furthermore, access to Pinnacle Point Site Complex is relatively well managed due to it being situated mostly within the boundaries of the Pinnacle Point Estate. In addition, formal visits to the sites are controlled by professional guides.
- 11. In a desired state, the Pinnacle Point Site Complex is well managed, protected and promoted. Stakeholders collaborate to safeguard the authenticity and integrity of Pinnacle Point Site Complex and ensure the site is integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Visitor numbers to the site are controlled through the required use of qualified guides to access the site. Awareness and appreciation of the value of the site is enhanced and the local and national community contributes to the long-term care of the site. A sustainable finance mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community. The ICMP examines and presents the actions that need to be taken to move from the current to desired state in the main text.
- 12. The development of the ICMP has a logical foundation. Stakeholders support a management plan more readily if they understand the logic behind it. Thus far an array of stakeholders have contributed to its contents. The ICMP is driven by a broad Vision that provides a broad strategic direction for the ICMP, a future aspirational point or 'guiding light' for where one would like to see the site. From the Visions a set of Strategic Objectives are readily derived. The latter are served by Action Categories consisting of specific actions.
- 13. The ICMP includes a Vision, outlines Strategic Objectives (SOs) to pursue the Vision, examines management issues, and outlines institutional arrangements and mechanisms by which HWC can fulfil its mandate in terms of this site. The Implementation Plan is aligned with the SOs. For each SO there are Action Categories, Specific Actions Expected Outcomes, and

Performance Indicators. The tasks identified in the Action Plan emerged from the review of documents, information obtained during consultation with relevant stakeholders, with linkages to the Vision, Strategic Objectives and desired state of conservation. In addition, the Lead Parties, the Main Stakeholders involved particular actions, and a Timeline is presented. The SOs of the ICMP are the following:

- 14. <u>Strategic Objective 1:</u> To establish a management framework for Pinnacle Point Site Complex.
 - This objective relates to putting in place a management framework for the site. The World Heritage Convention Act requires every World Heritage Site (WHS) to have a Management Authority. As Pinnacle Point Site Complex is part of a proposed serial World Heritage nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. In line with precedents at other serial World Heritage Sites in South Africa, it is recommended that a committee be formed to oversee management for Pinnacle Point Site Complex, which can in the future be represented at the Management Authority for all three sites. The Pinnacle Point Committee should function as an organ of the Management Authority as their frameworks can support the Committee as well as provide capacities that will otherwise have to be created, for example a financial management system and a system for conflict resolution.
- 15. <u>Strategic Objective 2:</u> To ensure conservation of archaeological deposit and related archaeological material on site.
 - This objective relates to putting in place infrastructure and resources to conserve the archaeological deposit and related material. Construction and maintenance of infrastructure, including for example boardwalks and improved signage are required. The Heritage Buffer Zone put in place by the Mossel Bay Municipality, along with the relevant zoning and development parameters limits the infrastructure development as a means to support conservation of the site. It is further recommended that a site monitoring system is developed for regular monitoring. In addition, regular monitoring of the existing sandbagged areas is necessary to ensure that it remains effective.
- 16. <u>Strategic Objective 3:</u> To monitor and assess the economic, social and environmental impacts of activities at and around Pinnacle Point Site Complex.
 - This objective relates to developing a monitoring system to assess the current and future impacts on the site. To monitor these impacts, Pinnacle Point Committee in collaboration with HWC Management, should develop a site monitoring system. In addition, a survey should be undertaken at the start of the implementation of the ICMP to establish a baseline of economic, social and environmental impact of activities around Pinnacle Point Site Complex. To evaluate the impact of the ICMP implementation, the same survey should be undertaken at the end of the ICMP timeframe.
- 17. <u>Strategic Objective 4:</u> To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management.

- This objective is to develop a sustainable financing mechanism for the site to secure ongoing funding to manage and protect the site. Heritage Western Cape currently does not have the required funding to manage Pinnacle Point Site Complex. However, with support from the landowner, partnerships with other (local) stakeholders, improved marketing as well as through integration of the site into local and regional development plans and spatial planning frameworks, a range of funding opportunities are possible. The Pinnacle Point Committee and future Management Authority should actively engage with potential donors to source funding. In addition, the Pinnacle Point Committee should ensure its presence in municipal planning forums (for example the annual IDP consultation process, exercises to consult on revision of the SDF, etc.) to take advantage of potential development grants and/or initiatives, which could provide funding for heritage related projects.
- 18. <u>Strategic Objective 5:</u> To encourage collaboration between stakeholders to conserve Pinnacle Point Site Complex and promote the site as a heritage tourism attraction.
 - This objective is to encourage stakeholder collaboration to protect, manage and promote the site. One of the objectives for managing Pinnacle Point Site Complex sustainably is to 'communicate its significance and need for conservation to the local community and visitors' and generally to involve the community in decision-making processes. Whilst formal communications within Pinnacle Point Committee, as well as with key stakeholders, will take place during its meetings, more regular communication with local stakeholders and the scientific community should take place. In addition, the constitution and/or policies of the Pinnacle Point Committee should clearly outline how to manage conflicts either within the Management Authority or with or between other stakeholders regarding the management of Pinnacle Point Site Complex.
- 19. <u>Strategic Objective 6:</u> To increase the awareness and appreciation of Pinnacle Point Site Complex by the local and global community through research, education and interpretation of the cultural heritage of the site.
 - This objective is to increase awareness of the value of the site through research and interpretation. Guidelines for research are directed by the terms of the National Heritage Resources Act No. 25 of 1999 as well as by international best practice. Unless a management authority is appointed, planning of research will be the responsibility of permit holders in consultation with Heritage Western Cape. The principle guiding research planning will be to uphold and extend the OUV of the sites. Until such appointment, Heritage Western Cape shall be responsible for monitoring of research.
- 20. <u>Strategic Objective 7:</u> To build capacity of local people in heritage tourism to ensure responsible tourism to Pinnacle Point Site Complex.
 - This objective relates to building the capacity of local people to contribute to effective protection of the site. Training would involve all aspects of World Heritage, basic training in archaeology, in ecology of the regional biomes, guiding and hospitality. The Mossel

Bay Municipality recognises that Provincial Heritage Sites within the cultural landscape are important but vulnerable economic assets that have potential to contribute to job creation. As such, the Mossel Bay Municipality makes provision within its 2012 Local Economic Development and Tourism Strategy Implementation Plan for empowerment and skills development for the local community across several intervention sectors, including heritage and tourism.

- 21. <u>Strategic Objective 8:</u> To encourage the generation of community benefits through on-thejob training, integration of local entrepreneurship and job creation projects.
 - This objective relates to promoting community involvement and benefits through the protection of, and the sustainable utilisation of the site. As mentioned in the 2012 Mossel Bay Local Economic Development and Tourism Strategy and Implementation Plan, there are a number of planned interventions for the benefit of the local community. In particular, social development and possible local economic opportunities associated with tourism and heritage. At the Pinnacle Point Site Complex there exists potential on a limited scale for the local community to become involved as guards for monitoring of the site, and potentially to transport visitors to it. Presently, Point of Human Origins Pty Ltd is a formal tourism initiative already in place, which employs a local community member as a guide. At Cape St. Blaize Cave, the planning of the Interpretation Centre is underway. This will provide further opportunities for the local community to become involved in heritage tourism, associated with both Pinnacle Point Site Complex and Cape St. Blaize Cave.
- 22. Any ICMP is only as good as its implementation. How do we know the plan is being implemented? How do we know specific actions have the desired effect? If such things are not monitored, we will not know where we stand. For the ICMP we propose a simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool for the ICMP in a participative manner, once the Pinnacle Point Committee is in place. The MELI is a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected. Taking an adaptive approach, the ICMP is a living document that requires revision on a periodic basis to ensure the most effective measures are in place to protect the site.

Pinnacle Point Site Complex Integrated Conservation Management Plan 2017-2022

3 Introduction

The Pinnacle Point Site Complex, Diepkloof Rock Shelter and Sibhudu Cave have been placed on South Africa's tentative list of World Heritage sites¹ to become part of a serial nomination for sites with outstanding universal value with regard to their contribution towards a better understanding of the evolution of modern human behaviour of anatomically modern humans. The nomination process for the proposed status requires the development of a management plan to show what actions will be taken to ensure that the proposed World Heritage Site will be adequately protected and its outstanding universal value maintained.

Pinnacle Point Site Complex (PPSC) consists of a series of sites of archaeological, palaeontological, and geological significance situated mostly in the Pinnacle Point Estate, within the Mossel Bay Municipality.

In 2014, two years after the PPSC was declared a Provincial Heritage Site (PHS) an Archaeological Conservation Management Plan (ACMP) was approved by Heritage Western Cape to safeguard the site from inappropriate development and to support the Home Owners' Association in terms of its responsibilities for heritage conservation.

The ACMP was approved on condition that a detailed Integrated Conservation Management Plan (ICMP) would be compiled at a later stage. The existing ACMP was not compiled with the view to PPSC being nominated for inscription as a World Heritage Site (WHS).

This ICMP takes into account the existing ACMP and uses it as a basis to build on, with a view of developing a detailed ICMP and for the purpose of PPSC being nominated as a WHS.

3.1 Introduction to Heritage Sites

Heritage

In many societies, the importance of heritage is increasingly being recognised and provides an anchor in a time of accelerating change. Evidence of the past provides a sense of belonging and is an important component of national and individual identity. Understanding the past also assists with managing challenges faced by modern society.

The perception of heritage has broadened considerably over recent decades. Initially sites were considered to be monuments and were inviolable. They were standalone places to be conserved in isolation and without consideration of the context in which they existed. Current

¹ The Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa <u>http://whc.unesco.org/en/tentativelists/6050/</u>.

consensus is that heritage is broader, with its value lying in the context of a broader environment being affected by interaction with the community, which lives and works in or around it. This line of thinking has consequently widened the understanding of what constitutes heritage, who owns it and the way it is managed.

South Africa's broad framework for heritage

South Africa has a modern system for managing heritage resources, which are defined in the broad sense set out above and the concept of the 'National Estate'. It has a comprehensive and 'integrated system for the identification, assessment and management' of the 'National Estate' as per the National Heritage Resources Act (NHRA) No. 25 of 1999. This system allocates responsibility for aspects of heritage to national, provincial or local government and provides each sphere of government with mechanisms for protection and conservation. The key provisions of these responsibilities are set out in the NHRA, but protection of heritage may also occur through Municipal Sector Plans, pertaining to the environment and/or heritage as set out in the Municipal Systems Act No. 32 of 2000 as well as through Spatial Development Frameworks and Zoning schemes as per the Western Cape's provincial Land Use Planning Act, No. 3 of 2014. The South African Heritage Resources Agency (SAHRA) is responsible for national heritage sites. In the Western Cape Province, Heritage Western Cape (HWC) manages provincial heritage sites. Other measures under the NHRA are either managed by the local municipality or HWC, depending upon the assessed competency of the municipality. In case of inscribed World Heritage Sites, the World Heritage Convention Act (WHCA) No. 49 of 1999 applies as well as the National Environmental Management Act No. 107 of 1999 and the Protected Areas Act (NEM:PAA) No. 31 of 2004, which is more generally used for environmental conservation.

3.1.1 Modern Human Origins Serial World Heritage Sites in South Africa

South Africa is one of the places where the roots of humankind are most evident, as some of the earliest modern human fossils and some of the earliest evidence for complex behaviour have been found here. *Homo sapiens*, the species common to all of humanity, emerged about 300,000 years ago.

Debates around the origin of these anatomically modern humans and the modernity of their behaviour are crucial to understanding the history of all modern people. The South African sites of Blombos Cave, Border Cave, Diepkloof Rock Shelter, Klasies River Caves, Pinnacle Point Site Complex and Sibhudu Cave have contributed outstanding evidence for palaeoenvironmental conditions via the rich Middle to Late Pleistocene African mammalian fauna dating to the last 200,000 years, with a number of species now extinct, as well as extensive palaeoenvironmental data from well-dated stratigraphic horizons. Evidence in artefacts such as stone tools, in indications of pigment use and hearths, has been interpreted as showing the occupants of the caves made significant social, behavioural and technical innovations. Blombos Cave has some of the earliest evidence for symbolic behaviour. Klasies River, Blombos Cave, Pinnacle Point Site Complex and other sites provide some of the earliest evidence for the systematic use of marine resources in the last Interglacial. Border Cave and Klasies River Caves have remains of early anatomically modern humans; Sibhudu Cave has some of the earliest evidence of the use of bow-and-arrow, hafting and use of medicinal plants. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities. In the Western Cape, Sibhudu Cave, Diepkloof Rock Shelter and Pinnacle Point Site Complex have been identified as properties worthy of inclusion on the World Heritage List as a serial nomination for sites with outstanding universal value with regard to their contribution towards a better understanding of the evolution of modern humans.

3.1.2 Provincial Heritage Sites in the Western Cape

In 2000, when the National Heritage Resources Act replaced the National Monuments Act, and SAHRA replaced the National Monuments Council, all national monuments in South Africa became Provincial Heritage Sites. This change in status involved about 2,500 sites in the Western Cape Province. Less than 1% of these sites commemorated the indigenous precolonial heritage of the province. Since the establishment of Heritage Western Cape in 2003, more sites have been added, including Diepkloof Rock Shelter and Pinnacle Point Site Complex.

A place is declared a Provincial Heritage Site (PHS) after it is assessed as having heritage significance within the context of the province and in terms of criteria set out in the National Heritage Resources Act (NHRA) and its Regulations. A PHS is declared in terms of Section 27 of the Act and receives the same protection as a National Heritage Site. Provision of such status communicates clearly and definitively that the heritage authority considers a site to be an important heritage asset that warrants focused conservation attention. Moreover, such status immediately provides protection via strenuous permitting.

On 14 December 2012, Pinnacle Point Site Complex (PPSC) was declared a PHS (Western Cape Government Provincial Gazette 7075). The main components for the motivation were as follows²:

• "South Africa's rich record in the earliest stages of human evolution has received substantial public promotion, funding, and tourism and education development. South Africa's record for the origins of modern humans is equally rich, but has not received

² Heritage Western Cape, Provincial Nomination Form: Pinnacle Point Site Complex.

similar support and attention. Declaration of the PPSC will communicate to South Africans the importance of the record in South Africa for modern human origins along the southern coast.

- "Many of the sites represented at Pinnacle Point are common site-types along the coastcaves, rock shelters, and shell middens. The last few years have seen an explosion of development along this coastline. Declaration of the Pinnacle Point sites will illustrate to the public and business community the nature and significance of these types of sites, and their value to national heritage. This is the first step in conservation, and will also contribute to education of the public both nationally and locally, and raise the potential of using these resources for tourism.
- "The Pinnacle Point sites are currently at the base of a major golf course and residential development. Damage to the sites by activities associated with this development has been in some cases extensive, including effluent water seepage into the caves and rock shelters, erosion of sites from the result of changed runoff conditions above the cliffs, and mechanical destruction resulting from building activities. At this stage the golf course is mostly completed, including major buildings and land grading, some residents are moving in, and others are building on their Erven. The result is that access to the sites is now easy and safe, and as a result human traffic to the sites is increasing. The Archaeological Conservation Management Plan (ACMP) has not been fully implemented and has not yet been funded, nor is there funding in the Conservation Trust for the archaeology at this time. It is unclear if the Pinnacle Point Home Owners' Association is fiscally committed to the preservation of the sites, though we have had many visits to the sites by members of the Home Owners' Association and noted an enthusiastic interest in the archaeology from them. We believe that members of the Home Owners' Association are ready to play an active and positive role in the heritage management, but they need a clear signal as to the significance of the sites and the commitment of government to enforce their protection.
- "Provincial Heritage Site status will communicate clearly and definitively that the heritage community and agencies consider these sites to be major and important heritage assets that warrant serious and focused conservation attention from all parties. The local Mossel Bay community, which has otherwise been uninformed of the significance of the sites, will immediately have definitive evidence that the sites are an asset and warrant their attention and concern. Provincial Heritage Site status provides the full protection to the sites as described in the National Heritage Resources Act (1999). We are entering a crucial phase in the negotiations over the future status of the sites, the funding for their conservation, and the specifics of the responsibilities for this funding and conservation."
3.1.3 World Heritage Sites

A World Heritage Site is a place that has outstanding cultural or natural value to the common heritage of humanity. The list of these sites is maintained by UNESCO's World Heritage Centre and administered by its World Heritage Committee. For a site to be included on the World Heritage list, it needs to demonstrate outstanding universal value and meet at least one of the ten selection criteria³. Six of these criteria are cultural and four natural. The criteria applicable to PPSC are outlined in Section 3.3.

Within the World Heritage System are several programmes aimed at conserving and promoting research of particular aspects of heritage. The Human Evolution: Adaptations, Dispersals and Social Development (HEADS) programme was established for 'defining and establishing a solid strategy of cooperation and implementation to ensure the future recognition, conservation and study of these early vulnerable sites in relation to World Heritage⁴'. The activities under HEADS represent a process of evolutionary accretion that took place over a vast period of time, offering vital insight to scientific, cultural, ethological and historical dimensions of human development, and the earliest evidence of human ritual, expression and practice. An aspect of the HEADS Programme is the proper management and conservation of human evolution related sites.

The archaeological sites at Pinnacle Point fall within the scope of HEADS. It was established in 2008 using an interdisciplinary approach for assessment of properties on the World Heritage and Tentative lists, make recommendations to fill the gaps, and strengthen the processes for identification, study, management and evaluation of sites related to human origins (Conard 2012; Sanz 2012). Blombos Cave, Diepkloof Rock Shelter, Klasies River and Sibhudu Cave have been identified by name, and Pinnacle Point is one of the coastal caves worthy of inclusion on the World Heritage List as a serial nomination. These sites are internationally recognised for their outstanding universal value with regard to fossil traces of human biological, cognitive and cultural evolution (Conard 2012:25; Dennell 2012:82; Sanz 2012:239).

The Pinnacle Point Site Cluster offers i) deposits with good evidence for the reconstruction of palaeoenvironments during the last 100,000 years; ii) evidence of technological innovation; and iii) coastal adaptations (Sanz 2012: 237, 239).

3.2 What is the Integrated Conservation Management Plan (ICMP)?

To enable the protection of important heritage sites, receiving official heritage status is in itself not sufficient. The nomination process for World Heritage Site status therefore requires

³ http://whc.unesco.org/en/criteria

⁴ http://whc.unesco.org/en/heads/

the development of a management plan to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected and maintain its outstanding universal value. To be considered of outstanding universal value, a property needs to: i) meet one or more of ten criteria; ii) meet the condition of integrity; iii) if cultural, meet the condition of authenticity; and iv) have an adequate system of protection and management to safeguard its future. All these aspects will be considered in this Integrated Conservation Management Plan (ICMP).

Section 47 (3) of the National Heritage Resources Act also requires that Provincial Heritage Sites have 'conservation management plans'. This provision is consistent with the provisions for World Heritage Sites.

Traditionally, heritage conservation followed a preservationist approach in which a site was ring-fenced and access restricted. Among the negative consequences of restricting access is the separation of people from their heritage and culture and fostering of resultant resentment. In addition, indirect spin-offs of local economic development that can be stimulated through the appropriate use of cultural assets will also be limited. An ICMP therefore takes into account the broader context within which a particular site is located and integrates the perspectives of relevant sectors into the management plan and prioritise site protection measures.

This ICMP is a management tool that presents an approach, principles and actions for the sustainable use and conservation of PPSC and the sum of tangible and intangible heritage it contains. The plan is described as an ICMP, because all its content, including how the management plan, its structure and operations relate to one another, is treated in a holistic and integrated manner.

The ICMP aims to be concise, accessible and practical. Using straightforward language, it presents a policy reference framework and manual-like management plan. At operational level, the ICMP identifies and prioritises management responsibilities and imperatives needed for proper management of the site. Specifically, an ICMP should conform to the following four basic principles:

- Effectiveness the ICMP should ensure realization of the objective;
- Coherence the outlook, objectives, measures and tasks should be consistent;
- Functionality the ICMP should be workable; and
- Realism the ICMP should be achievable and implementable.

This ICMP is further based on a local resource management approach to heritage conservation that:

- Embraces the linkages of the site to the broader cultural landscape;
- Strengthens the sense of place of the site and broader cultural landscape;

- Sustainably utilises the site and the resources of the broader landscape;
- Strengthens the link between the historical and present cultural landscape;
- Seeks solutions in close cooperation with stakeholders; and
- Fosters local custodianship.

The vision for PPSC drives the ICMP, which is also informed by input from stakeholders including those who are responsible for implementing the management framework. The vision is detailed in Section 5.1 of this ICMP.

3.3 Approach of the ICMP

Establishing the ICMP as an official document, enforceable under Section 47 of the NHRA, as well as putting the necessary human resources and mechanisms in place is important for effective management and local economic development. The sections below describe the approach to the development of the current ICMP and elaborate on principles used to guide the process of the drafting of this ICMP. The following principles have guided the compilation of the ICMP as described further below:

- Inclusive Stakeholder Engagement;
- Rights-Based Approach to Conservation;
- Avoidance of Disturbance;
- Professional Conservation Measures;
- Sensitive and Suitable Development; and
- Integration with Government Planning Frameworks.

3.3.1 Inclusive Stakeholder Engagement

Development of the ICMP included an inclusive and transparent stakeholder involvement process to provide all relevant stakeholders an opportunity to contribute their opinions on managing the site. The interests, needs and values of all relevant stakeholders had to be included as far as possible. A participatory approach cultivates buy-in and contributes to the long-term support of relevant stakeholders to the conservation of the site.

Stakeholders are afforded the opportunity to become involved in the management planning and implementation of the ICMP as far as possible, as well as to provide input on mechanisms for managing conflicts between different stakeholders. The objective of stakeholder engagement is to have all relevant stakeholders benefit from the protection and use of the site without damaging its integrity. As part of this process, existing development rights and plans as well as existing tourism activities in the area and the tourism potential of the site itself were reviewed and assessed.

The ICMP therefore provides a framework for interaction between relevant stakeholders. The various views of the stakeholders can be debated in an open and transparent manner and

can be balanced through *inter alia* i) appropriate conflict resolution procedures; ii) relevant legal instruments; and iii) the principles of co-operative governance in accordance with the Constitution of South Africa.

3.3.2 Rights-Based Approach to Conservation

The conservation approach is based on the concept of the 'National Estate', as set out in the National Heritage Resources Act (NHRA). This Act establishes the principle that the values embodied in heritage resources are the shared property of all South Africans. In a rightsbased approach are two stakeholder groups: i) the rights holders, whereby rights are defined as entitlements that belong to all human beings regardless of race, ethnicity, or socioeconomic class; and ii) the duty bearers, or the institutions who are obligated to ensure fulfilment of the rights of the rights holders. A rights-based approach aims at empowering the rights holders, strengthening the capacity of duty bearers - both have an active role in conservation - and increasing the capacity of both the rights holders and duty bearers. It is important to build upon existing capacities, ensure engagement and custodianship, and adjust to changing needs.

Rights extend to all South Africans, including the historically dispossessed, customary users of a site, and landowners and they need to understand why our common heritage needs to be conserved for future generations. The ICMP neither weighs up one type of right against another, nor gives preference to a particular group. Laws and procedures exist to guide how different groups wish to exercise their rights, with the NHRA being a prominent tool in this regard. To ensure that the ICMP is a principled document, rights are emphasised as a prime consideration, as protected by Law and enshrined in the South African Constitution.

3.3.3 Avoidance of Disturbance

In terms of the potential utilisation or development of the site, the overarching principle of avoiding negative disturbance of heritage resources has been applied. The natural environment of the site is a sensitive, vulnerable and dynamic ecosystem, which forms an important component of the landscape and context of the site, which in many ways provides a natural protection of the cultural heritage. As such, the site requires special attention in Management and planning procedures need to be rigorous enough to protect these sensitive values.

3.3.4 Professional Conservation Measures

To set a leading example in heritage conservation requires professionally implemented conservation measures. These include *inter alia* consultation with local communities, conservation of the surrounding environment, removing and curbing graffiti, stabilising the archaeological deposit, and constructing paths, boardwalks and/or signage to limit

detrimental impacts where avoidance is not possible. Such measures, and others to be identified in further detailed planning, must be implemented in an adequate and scientific manner, in the planning phase as well as when undertaking the activities.

3.3.5 Sensitive and Suitable Development

Heritage management and any related development must be sensitive to the people of the area and their needs. In addition, it must equitably serve their physical, psychological, developmental, cultural and social interests and be socially, environmentally and economically sustainable.

3.3.6 Integration with Government Planning Frameworks

Relevant government authorities and planning officials have been engaged in the drafting of this ICMP. Accordingly, provision has been made for the management policies and spatial management guidelines contained in this ICMP to be integrated with required governmental spatial planning tools, as well as local social and economic development frameworks as included in the municipal Integrated Development Plan (IDP) and Spatial Development Framework (SDF).

3.4 The Purpose of the ICMP

The overall purpose of this ICMP is i) to provide guidance for the management and conservation of PPSC; and ii) to contribute to the nomination dossier as part of the submission to apply for World Heritage Status.

3.4.1 The Logic of the ICMP

The development of the ICMP has a logical foundation. Stakeholders support a management plan more readily if they understand the logic behind it, and were part of developing the plan. Thus far an array of stakeholders has contributed to its contents. The ICMP is driven by a broad Vision that provide the broad directives from which the Strategic Objectives are derived. The latter are served by Action Categories consisting of specific actions (see Figure 1).



Figure 1: Logic of the ICMP

3.5 Preparation of the ICMP

3.5.1 What Process was Followed?

The process followed in developing this ICMP included i) review of available literature; ii) site visits; iii) stakeholder consultation; iv) development of the Draft ICMP; v) completion of the Final Draft ICMP; and vi) completion of the Final Draft ICMP.

3.5.2 Literature Review

The development of the ICMP involved an extensive review of all available literature, including reports, peer-reviewed publications, background material, the nomination dossier itself, and relevant planning frameworks. Literature used for this ICMP is cited in the bibliography at the end of this document.

3.5.3 Consultations

To develop this ICMP, consultations with a broad range of stakeholders took place. The nature of these consultations included face-to-face conversations, emails, and telephone conversations. Stakeholders included landowners, researchers, representatives of the municipality, local organisations and conservation organisations. Stakeholders consulted are listed in Appendix A of this document.

4 History and Site description of the Pinnacle Point Site Complex

4.1 Brief History of Pinnacle Point

The sites at Pinnacle Point are part of a series of wave-cut caves and rock shelters that stretch westwards from Cape St. Blaize at 'The Point' in Mossel Bay to the western boundary of the Provincial Heritage Site. The oldest formation date for these caves/rock shelters is 1.1 million years ago, and subsequent caves/rock shelters were formed by later high sea levels. Pinnacle Point Site Complex (PPSC) preserves a rich record for palaeoclimate and palaeoenvironment in the form of speleothems, raised beaches, fossil dunes, and palaeontological assemblages. All are spread continuously across the area and together provide a globally unparalleled record of human, climate, and environmental co-evolution. Furthermore, PPSC preserves a unique sequence of human occupation from 167,000 to precolonial human occupation embedded in a rich record for climate and environmental change.

The majority of the cave and rock shelter sites at the PPSC are more than 10 m above sea level, which preserved deposits dating to prior than 167,000 years ago when sea levels were higher than today. For this reason, one of the PPSC sites (PP13B) preserves the only sediments dated back to 167,000 years ago on the coast. PP13B was inhabited between 167,000 and 90,000 years ago and then a sand dune at the entrance made it inaccessible between about 90,000 and 40,000 years ago. A second PPSC site, PP5-6, then shows a record dated from 90,000 to 50,000 years ago.

Two glacial cycles occurring over the last 200,000 years would have resulted in the global sea level dropping by as much as 130m. This meant that at those times the Pinnacle Point sites would have been further away from the present-day coastline position. Marean's (2010) paleoscape model shows us that the coastline was at times as far away as 90 km during glacial maxima, and through MIS 6 to MIS 2, with the exception of the MIS 5e high sea level, there was continually a flat featureless plain to the south of the current neo-coastline that was typically several kilometres wide (Compton, 2011).

The elevation of some of the sites meant that at times of high sea level the contents were washed out, while caves situated at high elevations were not affected by wave action during higher past sea levels (MIS 5e). A drop-in sea level resulted in the exposure of beach sands causing the development of dunes that often filled the entrance to some of the caves, limiting access to the caves during glacial periods. These factors resulted in each of the sites having a different archaeological history.

The cave and rock shelter sites were occupied episodically by Middle and Later Stone Age hunter-gatherers. Occupation of site PP13B appears to have occurred at periods of higher sea level and increased aeolian activity (Jacobs, 2010). At this stage there are four known to

contain long sequences of human occupation (PP5-6, PP9, PP13A, and PP13B), and together they provide the oldest and longest composite sequence of all coastal sites in South Africa. A sand dune at the entrance of PP13B, made it inaccessible between 90,000 and 40,000 years ago (Jacobs, 2010). PP13B has been interpreted as being essentially a coastal site at periods of high sea level. It was more terrestrial during periods of low sea level. In terms of human occupation, it was less hospitable, as it was probably some distance from fresh water sources and lacked a reliable food source that the ocean would have provided (Marean et al., 2007; Jacobs, 2010; Marean, 2010).

Marean *et al.*, (2007) show that by 164,000 years ago (the glacial period when the coastline was approximately 5 to 10 km south of its present position), Pinnacle Point humans expanded their diet to systematically include marine resources, perhaps as a response to these harsh environmental conditions. The earliest previous evidence for systematic human use of marine resources and coastal habitats was dated to 125,000 years ago (Walter *et al.*, 2000; Erlandson, 2001).

The southern coast may have followed a somewhat different rainfall regime than the interior as indicated by the results from an analysis of a Pinnacle Point speleothem (Faith, 2013). The speleothem record from Crevice Cave at Pinnacle Point provided a proxy record of the changing influence of winter and summer rainfall systems originating from the west and east, respectively (Bar-Matthews et al., 2010). It indicates that during the cooler periods, as the sea level dropped, Pinnacle Point and the surrounding south coast received more summer rain. Marean (2010) suggests that the Cape flora grasses and evergreen hard leafed shrubs may have followed the coastline out onto the Agulhas Bank and was concentrated at the coast.

Although not within the boundary of the PPSC Provincial Heritage Site, the history of the nearby Cape St. Blaize cave is of historical interest (Map 1). In 1801, Sir John Barrow reported the shell midden within the cave. Unfamiliar with sites of this kind, he claimed that the shells had been dropped there by sea birds. In 1810, his assumption was challenged by Henry Lichtenstein who pointed out that none of the shells were fresh and that "the cave was formerly a common resort of the Hottentots [Khoekhoen], who lived predominantly on the shellfish." Controversy lingered until 1888 when Sir George Leith demonstrated conclusively through excavation that the midden had been accumulated by people of the Middle and Later Stone Age. This was one of the first excavations of a cave in Africa. In the 1930s further excavations took place by A.J.H. Goodwin and B.D. Malan who gave the name 'Mossel Bay Industry' to the Middle Stone Age (MSA) artefacts found there. The relative inaccessibility of the Pinnacle Point caves probably prevented evidence from them being added to the debate, although Dreyer and others reported both Earlier and Middle Stone Age sites between Cape St. Blaize and Pinnacle Point, but without providing details of their location.

There is some evidence that some of the younger shell middens in the PPSC were removed at some time, possibly for the creation of lime.

Research History

In 1997, plans for a golf course and casino development for the area above the cliffs near Mossel Bay were submitted. The proposal triggered an environmental impact assessment as required in terms of the Environment Conservation Act (1989). The archaeological sites at Pinnacle Point were first recorded as part of an Archaeological Impact Assessment (AIA) by Jonathan Kaplan with assistance from Dr Peter Nilssen (Kaplan, 1997). Their survey covered an area of approximately 2 km from west to east, and 1 km from the coast inland. They recorded and named a total of 28 archaeological sites (Marean et al., 2004; Parkington, 2006). Caves and rock shelters accounted for 15 of these sites. Furthermore, 21 of the 28 sites were associated with the MSA (Marean et al., 2004). Sites that were related to the same formation (similar history), were given a number and a letter, for example 13A and 13B adjoin each other. The research potential of Pinnacle Point was established in March 1999, when Dr Nilssen and Prof Curtis Marean surveyed the area. Four of the cave sites at Pinnacle Point were selected for test excavations, namely PP9, PP13A, PP13B, and PP13C. Scatters of MSA stone tools are abundant in most of the caves and rock shelters in this area, although only a few are in situ. The four caves mentioned above were chosen based on their proximity to one another and the exceptionally high potential of PP13B.

The four caves that they selected for excavation are near the base of a nearly vertical cliff face 40 to 60 m from base to top. Hiking down and up the cliff was hazardous. Therefore, they commissioned the construction of a 176-step wooden staircase from the top of the cliffs to bottom. Water pipes (municipal water) were also installed from above the cliff down to the excavations so that the excavated materials could be wet-sieved with fresh water. In July of 2000, test excavations were conducted, funded by the National Science Foundation (USA) and National Research Foundation (RSA). After the test excavations, there were several weeks of logistical work that included curation and study at the Iziko South African Museum. Excavations were conducted at the sites PP9, PP13A, and PP13B, but not at PP13C due to time constraints (Marean *et al.*, 2004).

Between 2001 and 2002, Prof Marean and Dr Nilssen continued with surveying and mapping the surrounding area. In 2003, Prof Marean received a second larger (\$240 k) NSF grant for focused excavations at PP13B. During the 2003 field season several specialists joined them for sampling and training in collecting samples. Two sites (13A and 13B) yielded rich MSA horizons with outstanding preservation of lithic assemblages and fossil bone and shell (Marean *et al.*, 2004).

In 2005, a third, and much larger (US\$2.5 m) NSF grant was received to fund multi-proxy studies of the archaeological, palaeoclimatic, and palaeoenvironmental records. At this

time Prof Marean developed a project called the "South African Coast Paleoclimate, Palaeoenvironment, Palaeoecology, Palaeoanthropology Project (=SACP4)" to recognize the broad multi-disciplinary research being conducted. Since 2005, excavations continued at PP13B, shifted to PP9B and PP9C, and recently focused on the very long section at PP5-6 and MSA open-air sites at the adjoining half-moon bay of Vleesbaai.

In 2010, Prof Marean wrote a paper for the general public on the scientific research being conducted at Pinnacle Point and it was featured as the cover article for Scientific American magazine. Archaeological tours are offered by Point of Human Origins (directed by Dr Nilssen). In 2011, NSF awarded Prof Marean another grant totalling US\$1 m to continue and expand the research programme. In 2012, research at Pinnacle Point was featured on the cover of Nature, arguably the world's most prestigious scientific magazine. In March of 2018, the team announced in Nature the discovery of the microscopic shards of volcanic ash (cryptotephra) from the Indonesian super volcano Toba that erupted 74,000 years ago. It has been argued that this massive eruption caused a long volcanic winter that nearly drove humans extinct. The Pinnacle Point team showed that people on the south coast thrived through this event (Smith *et al.*, 2018).

Below is a list of permits issued for PPSC, which provides a summary of the research history.

Issued by SAHRA:

• Application approval date: 9 May 2016

Applicant: Prof. Curtis W. Marean

Proposal description: Temporary Export Permit for C14 dating of shell from PP5-6

Period for excavation: 9 May 2016 to 31 March 2017

Case ID: 9321

• Application approval date: 24 November 2015

Applicant: Prof. Curtis W. Marean

Proposal description: Permanent Export Permit for ancient DNA analysis of fossil ungulate remains from Pinnacle Point

Period for excavation: 24 November 2015 to 30 November 2016

Case ID: 7714

- Application approval date: 3 October 2014
- Applicant: Ms Emma Loftus

Proposal description: Temporary Export Permit for stable isotope sampling of shells

Period for excavation: 2 October 2014 to 31 October 2015

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Case ID: 5967

• Application approval date: 27 May 2014

Applicant: Dr. Cindy Nelson-Viljoen and Prof. Curtis w. Marean

Proposal description: Temporary Export Permit of shells from the Pinnacle Point Shell Midden Complex

Period for excavation: 27 May 2014 to 30 June 2015

Case ID: 5504

- Application approval date: 1 January 2013
- Applicant: Prof. Curtis W. Marean

Proposal description: Permanent Export Permit of sediment samples from Pinnacle Point

Period for excavation: 21 December 2011 to 1 January 2013

Permit ID: 1657

• Application approval date: 2 May 2012

Applicant: Prof. Curtis W. Marean

Proposal description: Temporary and Permanent Export Permit of a maximum of 347 microfaunal teeth from LA-GC-IRMS

Period for excavation: 2 May 2012 to 1 June 2013

Permit ID: 1703

• Application approval date: 27 September 2012

Applicant: Prof. Curtis W. Marean

Proposal description: Permanent Export Permit of shellfish from PP5/6, Western Cape

Period for excavation: 26 September 2012

Case ID: 552

• Application approval date: 21 December 2011

Applicant: Prof. Curtis W. Marean

Proposal description: Permanent Export Permit of sediment samples and rock samples taken from Pinnacle Point

Period for excavation: 21 December 2011 to 1 January 2013

Permit ID: 1658

• Application approval date: 21 December 2011

Applicant: Prof. Curtis W. Marean

Proposal description: Permanent Export Permit of sediment samples taken from excavations from Pinnacle Point

Period for excavation: 21 December 2011 to 1 January 2013

Permit ID: 1656

• Application approval date: 27 March 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of 20 samples of small flowstones from Pinnacle Point Caves 13B

Period for excavation: 27 March 2006 to 1 April 2007

Permit ID: 588

• Application approval date: 27 March 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of soil samples from archaeological and geological context from Pinnacle Point 13B

Period for excavation: 27 March 2006 to 1 April 2007

Permit ID: 589

• Application approval date: 27 March 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of sediment samples from geological contexts from Pinnacle Point 13B

Period for excavation: 27 March 2006 to 1 April 2007

Permit ID: 590

• Application approval date: 2 March 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of 150 samples collected from Pinnacle Point Caves

Period for excavation: 2 March 2006 to 1 April 2007

Permit ID: 597

• Application approval date: 6 November 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of approximately 300 samples of sediments (soil) and rock from Pinnacle Point Caves

Period for excavation: 6 November 2006 to 1 December 2007

Permit ID: 778

• Application approval date: 16 February 2006

Applicant: Dr. Peter Nilssen

Proposal description: Permit for excavation, collection and removal of archaeological remains from its original position

Period for excavation: 16 February 2004 to 1 March 2006

Permit ID: 2004-02-002

HWC Reference: C13/3/6/2/1/1/1/1/C17

• Application approval date: 22 June 2005

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of 10 samples of small flowstones from Pinnacle Point 13B, Mossel Bay

Period for excavation: 22 June 2005 to 1 July 2006

Permit ID: 421

• Application approval date: 21 June 2005

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export permit of stone artifacts from Pinnacle Point 13B, Mossel Bay

Period for excavation: 21 June 2005 to 1 July 2006

Permit ID: 425

• Application approval date: 25 November 2005

Applicant: Dr. Peter Nilssen

Proposal description: Permanent Export Permit of sediment from Pinnacle Point 13B

Period for excavation: 25 November 2005 to 1 December 2006

Permit ID: 533

Issued by HWC:

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• Application date: 8 February 2011

Applicant: Prof Curtis Marean in association with Dr Thalassa Matthews

Proposal description: excavate, collect, alter and remove archaeological and palaeontological material from its original position from PP5-6 on Erf 15387, a portion of Erf2001 at Pinnacle Point, Mossel Bay

Period for excavation: 8 February 2011 to 31 January 2014

Permit Number: 2011-02-001

HWCReference:HM/EDEN/MOSSELBAY/ERF15387/PORTIONOFERF2001BOPLAAS/PINNACLE POINT SITE 5-6/RESEARCH EXCAVATION

• Application date: 21 October 2010

Applicant: Prof Curtis Marean in association with Mr Nicholas Wiltshire

Proposal description: excavation of 2x2 m sample down long section, the back and into the deposit at PP5-6

Period for excavation: 25 October 2010 to 24 October 2013

Permit Number: 2010-10-001

HWC Reference: HM/EDEN/MOSSEL BAY/ERF 15387/PORTION OF ERF 2001 BOPLAAS/PINNACLE POINT SITE 5-6/RESEARCH EXCAVATION

• Application date: 12 March 2009

Applicant: Dr P. J. Nilssen & Dr Curtis W. Marean

Proposal description: Excavation, removal from its original position, and collection at Erf 15387 (Portion of Erf 2001), Boplaas, Pinnacle Point, Mossel Bay, Western Cape Province

Period for excavation: 1 May 2009 to 30 April 2012

Permit Number: 2009-03-004

HWCReference:HM/EDEN/MOSSELBAY/ERF15387/PORTIONOFERF2001BOPLAAS/PINNACLE POINT SITE 5-6/RESEARCH EXCAVATION

Application date: 4 December 2008

Applicant: Dr Curtis W. Marean

Proposal description: excavation of 2x2 m sample down long section, the back and into the deposit at PP5-6

Period for excavation: 1 May 2009 to 30 April 2012

Permit Number: 2006-04-003 (re-application)

HWCReference:HM/EDEN/MOSSELBAY/ERF15387/PORTIONOFERF2001BOPLAAS/PINNACLE POINT SITE 5-6/RESEARCH EXCAVATION

• Application date: 14 November 2008 Applicant: Mr L. Kinnear

Proposal description: destruction of archaeological and palaeontological material on Erf 15387, a portion of Erf 2001 at Pinnacle Point, Mossel Bay, Western Cape

Period for excavation: 1 August 2005 to 1 August 2008

Permit Number: 2008-11-001 (re-application, approved)

HWC Reference: Hm/Pinnacle Point/Farm Boplaas

• Application date: 20 March 2007

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Applicant: Dr P.J. Nilssen
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Proposal description: short term protective and preventative measures against erosion and chemical impact of water on archaeological deposits in caves 5 and 13A from water seepage at Erf 15387 (Portion of Erf 2001), Boplaas, Pinnacle Point, Mossel Bay, Western Cape Province

Period valid until: 2 April 2008

Permit Number: 2007-03-002

HWC Reference: C13/3/6/1/1/1/1/C17

• Application date: 14 November 2006 Applicant: Dr Peter Nilssen

Proposal description: Excavation, removal from its original position, and collection on at PP 5 and 6 on Erf 15387, a portion of Erf2001 at Pinnacle Point, Mossel Bay, Western Cape

Permit valid until: 1 May 2009

Permit Number: 2006-04-003

HWC Reference: C13/3/6/2/1/1/1/1/CI7

• Application date: 18 July 2005

Applicant: Dr P.J. Nilssen

Proposal description: to excavate further into the LC-MSA at site 13B and collect samples

Period for excavation: 1 August 2005 to 1 August 2008 (re-application, approved)

Permit Number: 2005-08-001

HWC Reference: C13/3/6/2/1/1/1/1/C17

• Application date: 6 September 2004

Applicant: Dr P.J. Nilssen

Proposal description: collection, damage, destruction and removal of two speleothems from crevice cave for the purpose of analysis and dating

Period for excavation:

Permit Number: 2004-09-001

HWC Reference: C13/3/6/2/1/1/1/1/CI7

4.2 Location

The Pinnacle Point Site Complex (34° 12' 27" S, 22° 05' 22" E) is situated on the Pinnacle Point Estate, Erf 15391 (a portion of Erf 2001), Boplaas, Mossel Bay. The southern border of the site is the provincial boundary at the coastline⁵ (See Figure 2).

The golf estate has an approved limited density and a requirement for a certain amount of area dedicated to indigenous flora. This will ensure that the site remains protected from inappropriate development. (See Figure 2).



Figure 2: Cave below the golf course and housing at the Estate

⁵ Western Cape Government. 2012. Provincial Gazette 7075. Friday, 12 December 2012. Pp. 2672-2682.

4.2.1 Cultural Landscape Mapping

In addition to the Pinnacle Point Site Complex, several other cultural sites exist in the area. A Cultural Landscape Map refers to tangible human modifications of a natural environment and the intangible meanings associated with it, such as memories, traditions and stories. Cultural landscapes can contain several layers reflecting a range of activities over time, the historical phases and their effects on the landscape (O'Hare, 1997:47). Considering the several other protected cultural sites around Mossel Bay, a Cultural Landscape Map is included to place PPSC in a broader context (See Map 1).



Map 1: Mossel Bay Cultural Landscape Map

4.3 Description of Key Features

Pinnacle Point is a rocky headland, and like most rocky headlands in South Africa it is home to an assortment of caves, rock shelters, and other geological formations of interest. The Pinnacle Point Site Complex is situated on the Pinnacle Point Estate, Erf 15391 (a portion of Erf 2001), and on a section of erf 15390 owned by the municipality, Boplaas, Mossel Bay. The site borders the provincial boundary at the coastline in the south, and of the continuation of Erf 15390, Boplaas, Mossel Bay.

The Pinnacle Point Site Complex includes 58 archaeological, palaeontological, and geological sites. Most have not been scientifically studied through excavation or sampling. These comprise numerous wave-cut caves and rock shelters that stretch westwards from Cape St. Blaize at 'The Point' in Mossel Bay to the western boundary of the Provincial Heritage Site (Map 3a). Four archaeological sites have been excavated that are relevant to this application – PP5-6, PP9, PP13A, and PP13B. One site, PP30, is a fossil hyena den that preserves an outstanding record of the ancient fauna from 150,000 years ago. The sites from the PPSC are well dated by a diversity of geochronological techniques. The oldest caves/rock shelters were formed 1.1 million years ago (Pickering *et al.*, 2013). The sites are formed within the TMS quartzites that are overlain throughout the area by calcretes, shallow leached soils and sand dunes (Bar-Matthews *et al.*, 2010). For this reason, we recognise that the core consists of the PPSC that spans the coastal area below the Cape St Blaize Trail comprising all Middle Stone Age sites of significance.



Map 2: Overview of Pinnacle Point Sites within the Provincial Heritage Site (Heritage Western Cape, Provincial Nomination Form: Pinnacle Point Site Complex).

4.4 Boundaries

4.4.1 Provincial Heritage Site

The PHS is situated along the southern and western edge of Erf 15391 (a portion of Erf 2001), Boplaas, Mossel Bay. As a result of the PHS status, the protected property falls under the provisions of Section 27 of the NHRA No. 25 of 1999, which in section 27(18) prescribes that 'No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any (provincial) heritage site without a permit issued by the heritage resources authority responsible for the protection of such site'.

A part of the PHS is considered for the Property of the World Heritage Site.

4.4.2 The Buffer Zone

In terms of provisions of the Western Cape's Land Use Planning Act of 2014, a 'Heritage Buffer Zone' has been created by the Mossel Bay Municipality, following an approval by the Municipal Council in September 2015, as a response to the proposed World Heritage nomination. It involves the creation of a special zone that applies across conventional land use zones and encompasses the entire extent of the Pinnacle Point Estate, i.e.: Erf 15387 (a portion of Erf 2001), Boplaas, Mossel Bay and the numerous residential "and other" erven that fall within its boundaries (See Table 1 for a list of these erven). Whilst recognising existing land uses and development rights it requires that all changes to land use and any new development applications must be processed by Heritage Western Cape. This should ensure that such proposals do not have a negative impact on heritage resources.

The Heritage Buffer Zone has become an Overlay Zone when the Mossel Bay Municipality's new Town Planning Scheme By-Law was implemented in 2017.

4.4.3 Protected Areas Act

When PPSC obtains WHS status, the Protected Areas Act will also automatically apply. The area protected as a PHS includes the area below the Cape St Blaize Trail and a portion of the most westerly area as indicated in Map 3, with geographical coordinates to the nearest second. In World Heritage terms this constitutes 'the property' or core of the site. The Buffer Zone is the entire remaining extent of the Pinnacle Point Estate and the Municipal property of Erf 15390. Map 3 shows the proposed Property and Buffer Zone of PPSC.



Map 3: Property area and buffer zone proposed for Pinnacle Point.

4.4.4 Principles of Acceptable Land Use and Development

Map 5 shows the zoning of the Pinnacle Point Estate in colours (Mossel Bay Municipality, 2016b). These colours are further explained in Table 1.

The Pinnacle Point Site Complex falls mainly within Open Space 2 (Private Open Space) zoning. According to the Western Cape Provincial Zoning Scheme Model By-Law, 2004, the objective of this zone is 'to provide for active and passive recreational areas on private land, in order to promote recreation and enhance the aesthetic appearance of an area's.

In accordance with the Mossel Bay Municipality's new Town Planning Scheme By-Law, land use within areas zoned Open Space Zone 2 is primarily for private open space use, for sport, play, rest or recreation, or as a park or nature reserve.

Within Erf 15387 are numerous of residential erven zoned Single Residential 1, General Residential 2 and General Residential 4. These zonings broadly speaking provide for domestic accommodation for single, clustered and flats/apartment housing respectively and constitute the major areas of ongoing development within the Golf Estate. (See Table 1 for details of development permissible under these zonings). At the present time approximately 76% of these erven are already developed7.

In addition to the above, there are several erven zoned Business 1 allowing for the development of a variety of types of business, such as the Homeowners Association Non-Profit Company Office, Golf Course, Clubhouse Restaurant, Pro-Shop, Wellness Centre and Conference Centre, and a few erven zoned Transport 1 which cover the private roads on the resort. In each instance permissible development parameters are set out in Table 1.

Table 1 outlines the guidelines and development parameters for the zones relevant to the proposed Property and Buffer Zone. Section 8 provides further guidelines and development parameters in respect of Open Space Zone 2 on which the proposed Property is situated.

⁶ Provincial Zoning Scheme Model By-Law, 2004.

⁷ C. Van der Linde, pers, com. 2016. General Manager, Pinnacle Point Beach and Golf Resort.



Map 4: Pinnacle Point Site Complex showing the Main Cave Complex and Heritage Buffer Zone (Mossel Bay Municipality, 2016b)



Map 5: Zones within the Pinnacle Point Estate (Mossel Bay Municipality, 2016b).

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
YELLOW	High	A: Single Residential Zone 1 (yellow)	Development parameters:
		Erven: 19315-19326; 17945-17955; 17957-17967; 17969-17982; 17798; 19190-19192; 17987-17992; 17994-17995; 17912-17928; 17929-17944; 17564- 17630: 17632-17647: 19205-19206; 17996-18011;	(a) Height(i) The height of a dwelling house may not exceed 6 metres to the wall plate in all cases, and 8,5 metres to the ridge of the roof
		18013-18051; 17651-17661; 17662-17700; 17702- 17708; 17801-17813; 17815-17840; 17889-17891; 17893-17901; 17906-17908; 19196-19200; 17847- 17872; 17876-17887	in the case of a pitched roof. (ii) The general provisions regarding earth banks and retaining structures in this By-law apply.
		"dwelling house" Land use description: "dwelling house" means a	(b) Coverage and building lines(i) Building lines are at least the distance indicated in the table entitled "Coverage and building lines" from the relevant erf
		building containing only one dwelling unit,	boundary:
		together with such outbuildings as are ordinarily used with a dwelling house, including:	Coverage and building lines
		(a) a storeroom and garaging;	Erf sizeCoverageBuildinglinesinmetres
		(b) a second dwelling unit or additional dwelling,	

Table 1: Draft Land Use and Development Guidelines within the Property and Buffer Zone^{8,9}.

⁸ Mossel Bay Municipality, 2016b. New Town Planning Scheme By-Law. Scheme Parameters/uses/conditions.

⁹ At time of writing, these Land Use Guidelines were still subject to a public participation process and may change slightly in the final version.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines					
		with a floor area which does not exceed 60 m ² ;			Street	Side	Rear	
		(c) a braai room;	Less than or	80%	1 m	1 m	1.5	
		(d) renewable energy structures for household purposes;	equal to 250 m ²				m	
		(e) home occupation;	Greater than 250 m², but	65%	3 m	1.5 m	1.5 m	
		(f) letting to lodgers;	not exceeding					
		(g) a bed and breakfast establishment; and	500 m²					
		(h) home child care.	Greater than	50%	4 m	2 m	2 m	
			not exceeding					
			1,000 m ²					
			Greater than 1,000 m ²	500 m ² or 40%, whichever is greater	5 m	3 m	3 m	
			(ii) The general b (c) Single Resider	uilding line enc	roachme	ents in t	nis By-law app	oly.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			In the case of a "dwelling house" in Single Residential Zone III,
			the development parameters pertaining to coverage, height
			and building lines of "shelter" apply.
			(d) Window and door placement
			Any portion of a building that contains an external window or
			door facing onto a common boundary must—
			(i) be set back at least 1,5 metres from the boundary; and
			(ii) the portion of building to be set back from the boundary
			must include the door or window, together with the additional
			length of wall that is required to make up a total minimum
			length of 3 metres.
			(e) Garages, carports and outbuildings
			(i) A garage, carport and outbuildings are permitted within the
			common boundary building line provided that the garage and
			carport do not—
			(aa) extend higher than 3,5 metres to the top of the roof;
			(bb) contain more than a double garage façade; and
			(cc) exceed a width of 6,5 metres.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			(ii) For land units of 650 m^2 and less, a garage or carport is
			permitted up to 1,5 metres from the street boundary provided
			the garage or carport—
			(aa) is not higher than 3,5 metres to the top of the roof;
			(bb) does not contain more than a double garage façade; and
			(cc) does not exceed a width of 6,5 metres.
			(iii) For land units exceeding 650 m ² , a garage or carport may
			not be closer than 5 metres from the street boundary,
			notwithstanding the street building line.
			(iv) Despite subitems (ii) and (iii), a garage or carport may be
			erected within the street boundary building line if, in the opinion
			of the Municipality, compliance with the street boundary
			building line is not practical due to steep slopes of the ground
			between the road and the property concerned. The
			Municipality must determine the street boundary building line in
			such a case.
			(f) Parking and access
			(i) Parking and access must be provided on the land unit in
			accordance with this By-law.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			(ii) Where a dwelling unit is occupied by unrelated persons as
			defined in paragraph (b) of the definition of "family" in section
			1, provision must be made for parking in accordance with the
			parking requirements for a boarding house.
			(g) Garaging
			Garaging for up to four vehicles is permitted.
ORANGE	Moderate	B: General Residential Zone 2 (Orange)	Development parameters:
		Erven: 18075-18167; 19271	(a) Design principles
		"group housing"	All buildings and structures must be planned, designed and built
		land use description: "aroun bousing" and "aroun	as a harmonious architectural entity and special attention must
		housing scheme" means a group of separate or	be given to aesthetics, architectural coordination, urban design
		linked dwelling units where—	and landscaping.
		(a) every dwelling unit has a ground floor;	(b) Density
		(b) the units may be cadastrally subdivided;	The maximum gross density on a group housing site is 35 dwelling
		(a) the units are planned designed and built as a	units per hectare.
		harmonious architectural entity in an ordered way	(c) Height
		and	(i) The height of dwelling units may not exceed 6 metres to the

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
		(a) the second sec	
		(d) the units are integrated with communal private	wall plate in all cases, and 8,5 metres to the ridge of the root in
		open spaces, private roads and parking.	the case of a pitched roof.
			(ii) The general provisions regarding earth banks and retaining
			structures in this By-law apply.
			(d) Open space
			Within a group housing site, outdoor space of at least 50 m^2 per
			dwelling unit must be provided and the outdoor space may
			include private or communal open space or any functional
			outdoor space that is inaccessible to motor vehicles, but
			excludes roads, service yards and parking areas.
			(e) Building lines along the perimeter of a group housing site
			The following building lines apply along the perimeter of a group
			housing site:
			(i) a street boundary building line of 5 metres applies where the
			group housing site abuts an external public street;
			(ii) side and rear boundary building lines are 3 metres along the
			perimeter of the group housing site; and
			(iii) the general building line encroachments in this By-law apply.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			(f) Building lines within a group housing site
			The following building lines apply within a group housing site:
			(i) street boundary building lines on internal roads are 0 metres;
			provided that any garage door facing the road must be set
			back at least 5 metres from the kerb of such internal road; and
			(ii) side and rear boundary building lines within the group
			housing site are 0 metres, unless the Municipality requires a
			building line for fire-fighting purposes, in which case the
			common boundary building lines must be determined by the
			Municipality.
			(g) Parking and access
			(i) Parking and access must be provided in accordance with the
			requirements of this By-law.
			(ii) Parking may be provided in the form of communal parking.
			(a) Site development plan
			A site development plan of the proposed group housing
			scheme must be submitted to the Municipality for its approval,
			and, if approved, the development of the group housing site
			must be in accordance with the approved site development

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			plan.
			(b) Service yard
			Service yard(s) must be provided on the land unit in
			accordance with this By-law.
			(c) Refuse room
			A refuse room must be provided on the land unit in accordance
			with this By-law.
LIGHT BLUE	Moderate	C: General Residential Zone 4 (Light Blue)	Development parameters:
		Erven: 17563	(a) Coverage
		((f) - 1 - 1)	The maximum coverage is 60%.
		lidis	(b) Floor factor
		Land use description: "flats" means a building	The floor factor may not exceed 1.
		containing three or more dwelling units of which at	
		least one does not have a ground floor, together	(c) Height
		with such outbuildings, open space and private	(i) The highest point of a building may not exceed 15 metres to
		roads as are ordinarily associated with flats.	the top of the root.
			(ii) The general provisions regarding earth banks and retaining
			structures in this By-law apply.
			(d) Building lines
			(i) The street building line is at least 5 metres.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			(ii) Side and rear building lines are at least 4,5 metres.
			(iii) The general building line encroachments in this By-law apply.
			(e) Parking and access
			Parking and access must be provided in accordance with this
			By-law.
			(f) Screening
			The Municipality may require screening in accordance with this
			By-law.
			(g) Site development plan
			The Municipality may require a site development plan to be
			submitted for its approval.
			(h) Institution, place of instruction and place of
			assembly
			The development parameters that apply to "institution", "place
			of instruction" and "place of assembly" apply to this use;
			provided that where the institution, place of instruction or place
			of assembly is situated within a building which is also used for
			flats or a boarding house, then the coverage, height and
			building line requirements for the flats or boarding house apply.
			(i) Open space

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			(i) Every block of flats must have access on the land unit to an
			outdoor living area, including private or communal open space,
			but excludes roads, service yards and parking areas.
			(ii) An outdoor living area of at least 10% of the net erf area must
			be provided and the outdoor living area(s) must be of
			reasonable proportions and location to allow for leisure or
			recreational use by residents, and may include open courtyards
			within the complex.
			(j) Service yard
			A service yard must be provided on the land unit in accordance
			with this By-law.
			(k) Refuse room
			A refuse room must be provided on the land unit in accordance
			with this By-law.
			(1) Flats as a consent use in a group housing scheme
			The following conditions apply to flats as a <u>consent</u> use right in
			this zone:
			(i) the flats must form an integrated part of a group housing site
			and must comply with the development parameters for "aroup
			housing";

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			 (ii) the total floor space of flats may not exceed 40% of the total floor space of all buildings on the group housing site; and (iii) the open space requirement for dwelling units in a group housing site applies.
DARK BLUE	Moderate	D: Business Zone 1 (Dark Blue) Erven: 19312-19314 "business premises" Land use description: "business premises" means a property from which business is conducted and— (a) includes a shop, big box retail, supermarket, restaurant, sale of alcoholic beverages, two electronic or mechanical playing devices, plant nursery, office, funeral parlour, financial institution and building for similar uses, place of assembly, institution, hotel, hospital, conference facility, rooftop base telecommunication station, and multiple parking garage; (b) includes also the following land uses above	Development parameters: The following development parameters apply: (a) Coverage The maximum coverage for all buildings on a land unit is 100%. (b) Street centre line setback The Municipality may require a street centre line setback, in which case all buildings or structures on a land unit must be set back at least 8 metres from the centre line of the abutting public street or streets. (c) Floor factor The maximum floor factor on the land unit is 3, but may be departed from if item (h) of these development parameters is complied with.

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
		ground floor:	(d) Height
		(i) flats;	(i) The highest point of a building may not exceed 15 metres to
		(ii) caretaker's quarters;	the top of the roof.
		(iii) backpackers' lodge;	(ii) The general provisions regarding earth banks and retaining
		(iv) youth hostel;	structures in this by-law apply.
		(v) boarding houses; and	(e) Building line
		(c) does not include a place of entertainment,	(i) The street building line is 0 metres.
		motor repair garage, industry, noxious trade, risk	Municipality may lay down common building lines in the interest
		adult shop.	of public health and safety or in order to enforce any other law or right.
			(iii) Minor architectural and sunscreen features may project
			beyond the street boundary building line, provided that such
			features do not project more than 250 millimetres beyond the
			(f) Hotel floor space concession
			Where it is proposed to erect a hotel of at least 30 bedrooms in
			terms of this use right, the development parameters applicable
			to "hotel" apply.
Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
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			(g) Canopy or balcony projection
			The Municipality may require, and may approve, a canopy or
			balcony projection over the street boundary in accordance
			with the following conditions:
			(i) the canopy or balcony may not project closer than
			500 millimetres to a vertical plane through the kerb line or
			proposed kerb line;
			(ii) no portion of a canopy or balcony projection may be less
			than 2,8 metres above the pavement;
			(iii) the Municipality may lay down more restrictive requirements
			relating to the dimensions, design and materials of the canopy
			(iv) the owner must enter into an encroachment agreement
			a balcony projection.
			(b) Bublic podestrian factural along street boundary
			(ה) רטאוג אפעפגוומה וסטויאמץ מוסחק גוופפו סטטוממוץ
			If the owner provides on the land unit a public pedestrian
			3 metres wide next to a building situated alongside the street

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			boundary, with a canopy and pavement that ties in with the
			street pavement, then, in recognition of the urban design
			contribution to the street environment, the maximum floor space
			of the building may be increased by twice the area of the
			public pedestrian footway.
			(i) Street corners
			The Municipality may require the owner of a building to be
			situated at a public street corner, and where the Municipality
			considers the street corner to be significant, to incorporate in the
			building architectural features that focus visual interest on the
			corner and emphasise the importance of pedestrian movement
			around the corner. The architectural features may include
			building cut-offs, walkthrough covered arcades, plazas or other
			elements.
			(j) Parking and access
			(i) Parking and access must be provided on a land unit in
			accordance with this By-law, except in a case where the
			Municipality has approved alternative parking supply under
			section 43(1).
			(ii) Except with the approval of the Municipality, no parking bays

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
			at ground floor level on a land unit, either outside or within a
			building, may be located closer than 10 metres to a street
			boundary in order to enhance amenity at street level.
			(k) Loading
			Loading bays must be provided on the land unit in accordance
			with this By-law.
			(I) Screening
			The Municipality may require screening in accordance with this
			By-law.
			(m) Refuse room
			A refuse room must be provided on the land unit in accordance
			with this By-law.
	Hiah	F: Open Space Zone 2 (Dark Green)	Development parameters:
GREEN	riigiri		
OREER		Erven: 18169-18171; 19308-19311; 17956; 17968;	The following development parameters apply:
		17983; 17993; 17631; 18012; 17701; 17814; 17892;	(a) the Municipality must require a site development plan to be
		15391	submitted for its approval; and
		"private open space"	(b) the site development plan as approved by the Municipality

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
		Land use description: "private open space"—	constitutes the development parameters for a primary use and,
		(a) means land not designated as public open	if applicable, a consent use.
		space and that is used primarily as a private site for	
		sport, play, rest or recreation, or as a park or nature	
		conservation area:	
		 (a) includes ancillary buildings, infrastructure, and public land that is or will be leased on a long term basis; and (b) does not include shops restaurants and 	
		avmpasiums	
		gymnasions.	
LIGHT	Low	F: Transport Zone 3 (Light Brown)	Development parameters:
BROWN		Erven: 18172; 19327; 18053-18054; 17709-17712; 17909-17910; 17874-17875	As determined by the Municipality.
		"private road"	
		Land use description: "private road"	
		(a) means privately owned land designated as a	
		private road that provides vehicle access to a	
		separate cadastral property or properties;	

Area	Sensitivity	Permissible land use/s (as per zoning)	Guidelines
		(b) includes utility services and ancillary access	
		control infrastructure, including a gatehouse,	
		guardhouse, refuse room and utility room; and	
		(c) does not include a driveway on a property, or	
		a servitude right of way over a property as	
		these do not constitute private roads for the	
		purpose of this zoning scheme.	
GREY	Low	G: Special (Grey)	Development parameters:
		Erven: 19493	As determined by the Municipality.
		"Sectional Title Garages for Golf Carts"	

4.5 Natural Environment

4.5.1 Climate and Geomorphology

Climate

Mossel Bay has a mild climate all year round, with a narrow range of annual temperatures and rainfall throughout all seasons. The area receives an annual average rainfall of 330 mm, with temperatures between 18°C to 26°C in summer and 8°C to 19°C in winter.

Geomorphology

The coastal cliffs at Pinnacle Point are highly folded and faulted exposures of the Skurweberg Formation of the Paleozoic Table Mountain Sandstone Group (TMS), comprising coarse-grained, light-gray quartzitic sandstone, with beds of varying thickness and consolidation, often covered with lichens. The dip varies strongly along the coast, ranging from 10 to 75 degrees (South African Geological Series 3422AA 1993). Shear zones with boudinage features cut through the TMS, fault breccias of varying thickness fill these zones, and the caves and rock shelters are found in these eroded fault breccias. Unlithified dunes, aeolianites, calcarenites, and calcretes cap the TMS throughout the area, and are mostly referable to the shallow marine Quaternary Klein Brak, and aeolian deposits of the Waenhuiskrans and Strandveld (Marean, 2012).

A large number of coastal caves and rock shelters (>20) occur in the nearly vertical coastal cliffs in the thicker shear zones where substantial fault breccias had formed, and the caves typically coincide with less steeply dipping beds (10-40 degrees). The primary mechanisms for cave development include the formation of the shear zones, followed by movement along these shear zones and erosion at the contact, cementation of the breccia, mechanical erosion by high sea levels, and in some cases collapse. The caves cluster at three heights; +3-7 masl (m above sea level), +12-15 masl, and +18-20 masl. Since the coast has been tectonically stable through the Quaternary, these likely represent separate high sea levels, and we are currently seeking to ascertain these times of cave formation (Marean, 2012).

While TMS is acidic and acidizes groundwater flowing through it, the water entering the caves has been buffered by the calcium carbonate-rich formations capping the TMS, as at Klasies River. Abundant calcite formations are present in the caves and rock shelters, particularly along joints and bedding planes. Small (1-10 cm) to large (> 1 m) stalactites and stalagmites are present in many of the caves, and flowstone formations are present in all the caves, often intercalated with archaeological deposits, and almost always occurring behind aeolianite

remnants. Various phases of speleothem formation can be identified that mark periods of cave entrance enlargement and reduction. (Marean, 2012)¹⁰

4.5.2 Flora

The Mossel Bay Municipality lies within two biodiversity hotspots, namely the Cape Floral region and Succulent Karoo. Within the Cape Floral region, the Fynbos biome is the most important and exhibits high levels of biodiversity and species endemism. Around Pinnacle Point, three types of natural vegetation exist, namely coastal fynbos and thicket mosaic, limestone fynbos and proteoid fynbos. The extent of Fynbos has however been greatly reduced as a result of alien plant encroachment and cultivation (Nilssen, et al., 2009; Maree and Vromans, 2010).

It is also important to note that the Pinnacle Point Site Complex falls within a Critical Biodiversity Area (CBA) – Terrestrial Area, as per mapping undertaken by the C.A.P.E. Fine Scale Biodiversity Mapping Project for Mossel Bay Municipality (Maree and Vromans, 2010).

4.5.3 Fauna

No specific fauna studies have been undertaken around Pinnacle Point. However, species known to be present in the area include grysbok, bushbuck, yellow mongoose, Cape francolin and Cape dune mole rat. To date, no Red Data species occur or are breeding at Pinnacle Point (Nilssen, Marean and Yates, 2009).

4.6 Ownership

The Pinnacle Point Site Complex is situated within the Pinnacle Point Estate, Boplaas, Mossel Bay. Remainder of Erf 15391 is owned by the Pinnacle Point Homeowners Association. The contactable owner at the Pinnacle Point Estate is Mr Carl van der Linde (General Manager). Please see Appendix A for more details.

Residential erven within the Remainder of Erf 15391 are privately owned with the owners being represented by the Pinnacle Point Homeowners Association Non-Profit Company.

¹⁰ Marean, C. W. 2012. Pinnacle Point Site Complex: Information required for each site to be included in the serial nomination. Modern Human Origins: WHS Nomination.

5 Significance of the site

5.1 Significance of Pinnacle Point

Pinnacle Point Site Complex (PPSC) preserves a rich record for palaeoclimate and palaeoenvironment in the form of speleothems, raised beaches, fossil dunes, and palaeontological assemblages. All are spread continuously across the area and together provide a globally unparalleled record of human, climate, and environmental co-evolution. Furthermore, PPSC preserves a unique sequence of human occupation from 170,000 to precolonial human occupation embedded in a rich record for climate and environmental change.

The cave and rock shelter sites were occupied episodically by Middle and Later Stone Age hunter-gatherers. Occupation of site PP13B appears to have occurred at periods of higher sea level and increased aeolian activity (Jacobs, 2010). At this stage there are three known to contain long sequences of human occupation (PP9, PP5-6, and PP13B), and together they provide the oldest and longest composite sequence of all coastal sites in South Africa. A sand dune at the entrance of PP13B, made it inaccessible between 90,000 and 40,000 years ago. A sand dune sealed the cave and prevented further occupation until about 39,000 years ago, when it stopped forming (Jacobs, 2010). PP13B has been interpreted as being essentially a coastal site at periods of high sea level. It was more terrestrial during periods of low sea level. In terms of human occupation, it was less hospitable, as it was probably some distance from fresh water sources and lacked a reliable food source that the ocean would have provided (Marean *et al.*, 2007; Jacobs, 2010; Marean, 2010).

Marean *et al.*, (2007) show that by 167,000 years ago (glacial period when the coastline was approximately 5 to 10km south of its present position), Pinnacle Point humans expanded their diet to systematically include marine resources, perhaps as a response to these harsh environmental conditions. The earliest previous evidence for human use of marine resources and coastal habitats was dated to 125,000 years ago (Walter *et al.*, 2000; Erlandson, 2001).

The process of treating by heat testifies to two uniquely modern human cognitive abilities. 'First, people recognized that they could substantially alter a raw material to make it useful—in this case, engineering the properties of stone by heating it, thereby turning a poor-quality rock into high-quality raw material. Second, they could invent and execute a long chain of processes. The making of silcrete blades requires a complex series of carefully designed steps: building a sand pit to insulate the silcrete, bringing the heat slowly up to 350 degrees Celsius, holding the temperature steady and then dropping it down slowly' (Marean 2010: 59). These cognitive abilities were therefore present at the southern tip of Africa much earlier than has been assumed before.

5.2 Justification for Inscription

The archaeological sites at PPSC fall within the scope of human origin sites and identified by HEADS, the World Heritage thematic programme on Human Evolution: Adaptations, Dispersals and Social Developments, as worthy of serial World Heritage listing.

The PPSC contains: i) deposits with good evidence for the reconstruction of palaeoenvironments during the last 200,000 years; ii) evidence of human technological skill and innovation; and iii) evidence of coastal adaptations.

PPSC preserves a rich record for palaeoclimate and palaeoenvironment in the form of speleothems, raised beaches, fossil dunes, and palaeontological assemblages. All are spread continuously across the area and together provide a globally unparalleled record of human, climate, and environmental co-evolution. Moreover, PPSC preserves a unique sequence of human occupation from 167,000 during the MSA to the period before colonial occupation embedded in a rich record of climate and environmental change and warrants inclusion in a World Heritage Site.

First Evidence of a Marine Diet

Pinnacle Point Site Complex preserves the oldest dated occurrence of the dietary use of shellfish (Marean et al 2007). To efficiently and systematically embed shellfish into a foraging system, people must understand and track the relationship between lunar phases and the tides. The regular use of shellfish shows that people at Pinnacle Point had grasped this relationship and learned to schedule their visits to the coast to intercept the low spring tide. It documents an advance in cognition at an early phase in human evolution.



Figure 3: Turbo sarmaticus shell from Pinnacle Point

Early Utilization of Pigments

The South African archaeological sequence has the world's oldest and richest record for the continual and focused use of pigments, such as the production of pigment powders, and engraving ochre. PP13B has the oldest modified ochre from this region dated to ~160,000 years ago. A total of 57 pieces of red ochre pigment were found at Cave 13B, mostly in LC-MSA Lower. Ten pieces had definite signs of having been ground to make a powder, probably for body painting. While ochre is known from other older sites, occurrence of ground surfaces is at least 40,000 years older than comparable samples from other sites in Africa (Marean *et al.*, 2007). While not engraved, this sample of ochre shows that people were consciously choosing red ochre over other colours, and intensively grinding it (Watts, 2010).



Figure 4: Modified Ochre

Early Pyrotechnology

Pyrotechnology, the controlled use of fire, stands at the very core of the human adaptation. The first use of fire may date back to a million years or more but seems restricted to the production of light and heat. The next major step is when humans used fire and heat to manipulate raw materials. Pinnacle Point preserves the world's oldest evidence for the heat treatment of stone

for the production of stone artefacts at ~160,000 years ago (Brown *et al.*, 2009). The stone artefacts from LC-MSA Lower at cave 13B are of particular interest because they include an unusually high percentage of bladelets that have previously been found only in more recent deposits in southern Africa (Marean *et al.*, 2007). Their size suggests that they were probably hafted, thus representing composite tools and evidence for advanced cognitive abilities. More significantly, technology for their manufacture included heat treatment of the silcrete from which they were made.



Figure 5: Heat treated microliths

Heat treatment technology involves the controlled alteration of the physical properties of stone by heating, and in South Africa this technology was applied to a rock type called silcrete. During excavation at site PP5-6 in 2008, a large piece of silcrete with the same lustre as the silcrete used to make the bladelets was found embedded in ash. Experiments by Dr Brown showed that heating raw silcrete changed its properties and made it much easier to flake (Brown *et al.*, 2009). Thermoluminescence analysis determined that the silcrete tools from Pinnacle Point were intentionally heated. Results of further analyses showed that intentional heat treatment was a dominant technology at Pinnacle Point by 72,000 years ago at PP5-6, and that people employed it intermittently as far back as 164,000 years ago in cave PP13B. The process of treating by heat testifies to two uniquely modern human cognitive abilities. 'First, people recognized that they could substantially alter a raw material to make it useful—in this case, engineering the properties of stone by heating it, thereby turning a poor-quality rock into high-quality raw material. Second, they could invent and execute a long chain of processes. The making of silcrete blades requires a complex series of carefully designed steps: building a sand pit to insulate the silcrete, bringing the heat slowly up to 350 degrees Celsius, holding the temperature steady and then dropping it down slowly' (Marean 2010: 59). This is a very early manipulation of the physical properties of a naturally occurring material by heat, and this is the basis of many technologies crucial to human civilization (Marean, 2010).



Figure 6: Microliths

Heat treatment technology required a complex causal understanding of the relationship between fire and the alteration of the physical properties of materials and thus signals a complex cognition.

Early Advanced Stone Technology

A major advance in stone technology was when humans begin miniaturising stone artefacts (Error! Reference source not found.) so that they could be mounted to wood and bone darts as p

rojectile points. PP5-6 provides some of the earliest evidence for this advanced microlithic technology at ~70 000 years ago (Brown et al., 2012), which is about 50 000 years earlier than its dispersal in Europe and Asia.

5.2.1 Statement of Outstanding Universal Value

The OUV of the Pinnacle Point Site Complex (PPSC) lies in the fact that it preserves in a short stretch of coastline Africa's densest concentration of well-preserved archaeological sites and a unique sequence of human occupation from 160,000 years ago to pre-colonial human occupation embedded in a rich record for climate and environmental change. The site contains evidence of: i) among the oldest dated occurrence of the systematic dietary use of shellfish. The regular use of shellfish shows that people at Pinnacle Point had grasped the lunar and tidal relationship and learned to schedule their visits to the coast accordingly. It documents an advance in cognition at an early phase in human evolution; ii) rich and well- preserved record for the continual and focused use of pigments. PP13B has currently the oldest modified ochre from this region dated to ~160,000 years ago; iii) excellent fossil bone preservation in the older layers, unlike many other caves along the Cape coast; iv) early stone tool technology at ~70,000 years ago; and v) early heat treatment technology of stone for the production of stone artifacts at ~170,000 years ago and for making silcrete bladelets.

5.2.2 Authenticity of the Site

The well-stratified deposits in the excavated caves attest to the authenticity of their contents. This is backed up by the numerous radiometric dates that correlate with palaeoclimatic and palaeoenvironmental data to authenticate the outstanding universal value in the ancient shellfish remains, the early evidence for grinding of ochre, heat treatment to improve the flaking qualities of silcrete and consequent ability to make bladelets.

No human remains have been found at Pinnacle Point apart from 7 teeth. They have not yet been dated, but are all likely to be younger than 100,000 years ago (Marean et al., 2004). The human remains from Klasies River nevertheless attest to the presence of anatomically modern humans in the area by at least 115,000 years ago.

5.2.3 Integrity of the Site

The majority of the cave sites situated 10 m or more above sea level are undisturbed, but the integrity of those at lower levels has been compromised by higher sea levels in the past that washed some of the deposit out, thereby destroying the stratigraphic relationship of stone artefacts. Changes have also taken place as a result of wind action that sealed off some of the caves when the sea level was lower. A sand dune at the entrance to PP13B, for example, made

it mostly inaccessible between about 90,000 and 40,000 years ago. It was only used again after the sea level rose to its present level within the last 10,000 years.

The building of the golf course and houses also compromised the integrity of a few LSA open shell middens and other smaller artefact scatters, but although they were of general interest, they were not of outstanding universal value. These problems have since been resolved and the ongoing monitoring programme should avoid recurrence. Additionally, these sites are not included in the core area of the WHS since they do not contribute to the narrative of the WHS nomination being their occupation period in the Holocene.

Another issue arose with the seepage of irrigation water from the golf course into the caves around PP13B. Chemicals in the water stained the rocks and deposits green. Action was taken to reduce the flow by, amongst other things, moving one of the greens on the golf course. Buckets have been placed under the drips to collect the water. A record is kept of the quantity of water that accumulates to ascertain its source and relationship to the irrigation cycle on the golf course surface above and samples are analysed for chemical content.

5.3 Criteria for Selection

The following criteria were used for a World Heritage nomination for Pinnacle Point Site Complex.

Criterion (iii): Bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation, which is living or which has disappeared.

It is a scientific consensus that modern humans evolved in Africa and spread from there throughout the world. These sites provide unique and rich information on the development of the behaviour and culture of Middle and Late Pleistocene modern humans. The archaeological layers of the EMH sites provide evidence and insight into the behavioural and palaeoenvironmental remains of the MSA. These sites contain early evidence of symbolic thought in the form of extensive ochre processing, engraved patterns on ochre from PPSC, beads from Sibhudu Cave and PPSC, beads and decorated ostrich eggshell from DRS, as well as technological advancements evidenced by lithic technologies such as the Howiesons Poort and Still Bay industries present at PPSC, Sibhudu Cave and DRS. From this evidence, we have gained insight into the origins of art, technological innovation, language, and belief systems. The archaeological evidence was produced, used and ultimately deposited in these caves and as such, the landscape, the caves and the finds are an ensemble representing an exceptional example of an early cultural tradition and extinct culture.

Criterion (iv): Be an outstanding example of a type of building, architectural or technological ensemble or landscape, which illustrates a significant stage in human history.

The EMH sites preserve well stratified and well dated sequences (170,000 to 50,000 years ago) that represent a range of evidence of a technological ensemble that exhibits important developments in the interchange of human values in settlement, in the occurrence of small hearths, putatively related to early nuclear family life, in technology through the heat treatment of stone for tool-making, prepared-core stone blades and backed tools, polished bone points that are similar to those used in later times for arrows, bone tools, early evidence of 'art' in the form of incised patterns on ochre crayon lines on stone, an ochre processing kit, ostrich eggshell decorated with incised patterns, all of which have been cited as indicative of modern cognition and therefore collectively illustrate a significant stage in human history.

For hundreds of thousands of years, caves and rock shelters were the preferred abode for humans and these sites are superb examples of such early homes that were repeatedly occupied over the millennia and thus built up extraordinary, world-renowned and well-dated sedimentary records of ancient human life at some of the origin points of our lineage.

Criterion (v): Be an outstanding example of a traditional human settlement, land-use or sea-use which is representative of a culture, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

The majority of people on the planet today live near coastlines. Despite the fact that humans are terrestrial mammals, we have in many instances become dependent on the sea and its resources. These sites provide some of the earliest and best-preserved evidence in the world for the consistent exploitation of coastal resources during the Middle and Late Pleistocene. Scientists suggest that an increased consumption of long-chain omega-3 fatty acids (specifically DHA), found in aquatic and coastal food resources, ensured the healthy development of our brains and the early expansion of anatomically modern humans' advanced cognitive abilities, which contributed to our ancestors' behavioural and technological progress during the MSA (Marean, 2010a; Kyriacou et al., 2016).

As current sea levels rise due to climate change, much of the ancient record of human coastal resource use has been obliterated or is in grave danger. Yet, Pinnacle Point Site Complex, which contain exceptionally well-preserved evidence from the Middle to Late Pleistocene, have survived because of their position above the maximum sea level reached after the MSA occupation.

These sites are pivotal in the preservation of outstanding evidence for palaeoclimates and palaeoenvironments in the form of speleothems (e.g. stalagmites and stalactites), and faunal, floral, and geological remains, including from the now submerged Palaeo-Agulhas Bank. Thanks to this outstanding body of evidence, scientists have been able to reconstruct the palaeoenvironment, and the unique human interaction with and adaptation to it, in great detail.

6 Situational Analysis and Local Economic Development

To be able to manage Pinnacle Point Site Complex (PPSC) in an appropriate and sustainable manner, a better understanding of the local and economic context is required.

6.1 Demographics and Administrative Context

The PPSC is situated along the southern coast of South Africa in Mossel Bay Local Municipality within the Garden Route District Municipality. In 2018 the population of Mossel Bay consisted of estimated 95,255 people. The unemployment rate in 2019 was 15.3%. The main industry is the finance, insurance, real estate and business services with 28.3%, followed by wholesale and retail trade, catering and accommodation with 17.5% and Manufacturing with 14.7%¹¹.

6.2 The Agricultural and Fishing Sector

Agriculture

Economic activities in Mossel Bay include agriculture, fishing, tourism, alongside the light industry and petrochemicals.

The agriculture sector includes aloes, cattle, citrus, dairy, ostriches, sheep, timber, bees, vegetables and wine. Reduced rainfall, drought and extended dry periods have associated impacts on agriculture. Increasing temperatures resulted in an increased incidence of pests (e.g. fruit flies), conversely causing a reduction or disabling of insects vital to agriculture¹².

The Mossel Bay Municipality identified a need to create awareness of worm farms and food production for the environmental and economic benefits of own food production. A number of rural poverty nodes have been identified within Mossel Bay Municipality by the Department of Rural Development and Land Reform (DRDLR) for strategic investment in economic and social infrastructure. A total amount of R 6.3 million is funded by the DRDLR for the development and implementation of an integrated chicken farming/poultry value chain that aims to benefit the identified rural communities and has potential growth for the rural economy. The Agriculture Research Council (ARC) is the implementation body for the poultry value chain concept, which will consist of five business units and includes the feed mill, the egg layer/producers, the hatchery, the abattoir and sales outlet and the broiler for rearing. The Mossel Bay Municipality has also requested assistance from the Department of Agriculture for the roll-out of the project¹³.

¹¹ Western Cape Government. Socio-economic profile Mossel Bay Municipality. 2020.

¹² <u>http://www.mosselbay.gov.za/about_us</u>

¹³ Mossel Bay Municipality. 2016. Integrated Development Plan 2016/2017 (Final Review).

Fishing

Mossel Bay harbour is one of the smallest commercial harbours in South Africa. The Port is managed by the Transnet National Port Authority and caters for the small fishing fleet. Subsistence fishing is also practiced by some of the local community.

6.3 The Tourism Sector

The Western Cape Province is a popular tourist destination that in 2017 received 1.388 million domestic and 1.727 million international visitors. According to WESGRO14, in 2019, ~19.5% of visitors were engaged in cultural/heritage related activities whereby international visitors had a slightly higher rate of participation than the domestic market. Appendix B provides more detailed background on heritage tourism to the Western Cape and South Africa in general.

Heritage Tourism

To date, no set definition of heritage tourism exists. Zepple and Hall (1992) define it "as an encounter with or an experience of being part of the history of a place through visiting historic sites, monuments, and landscapes. It focuses on learning and includes the experience of local traditions, social customs, religious practices and cultural celebrations". The Advisory Council on Historic Preservation defines 15 heritage tourism as: "the business and practice of attracting and accommodating visitors to a place or area based especially on the unique and special aspects of that locale's history, landscape (including trail systems) and culture".

According to South Africa's National Heritage and Cultural Tourism Strategy 2012, heritage and cultural tourism products are still underrepresented in marketing South Africa as a tourism destination. This is mainly because of poor integration of heritage and cultural resources into mainstream tourism as well as the value and impact of heritage tourism not being fully realised, particularly the economic potential of related products.

The Western Cape has about half of the protected heritage sites in South Africa¹⁶. These sites include monuments, museums, built environments, heritage precincts, cultural landscapes, places of worship, archaeological sites, fossil sites, caves, middens and rock art. Of these sites, two UNESCO World Heritage Sites attract the most tourists, namely the Cape Floral Region and Robben Island. Visitor numbers for cultural heritage attractions tend to be considerably lower

¹⁴ WESGRO is the Western Cape Destination Marketing, Investment and Trade Promotion Agency.

¹⁵ Definition in Section 7 of Executive Order 13287 of the Advisory Council on Historic Preservation that provides guidance to State and Federal agencies in the United States.

¹⁶ South African Heritage Resources Information System (SAHRIS) register of declared sites, <u>http://www.sahra.org.za/sahris/declaredsites</u>.

than those for natural attractions in South Africa (see Appendix B). However, not all heritage sites are accessible to tourists, because these are: i) remotely located; ii) located on private land; iii) vulnerable; and/or iv) do not have adequate tourism infrastructure.

6.3.1 Existing Tourism Attractions

Mossel Bay is most known as the starting point of the scenic Garden Route along the south eastern coast of South Africa, a popular tourism route that goes to Storms River and includes the towns of Knysna, Oudtshoorn, George, Plettenberg Bay, and Nature's Valley. In 1488, the first European explorer to round the Cape, Bartholomeu Dias, arrived at Mossel Bay where he encountered the indigenous Khoekhoen herders, the Gouriqua, who inhabited the area¹⁷. In 1601, the Dutch seafarer, Paulus van Caerden named the town after the abundance of mussels found on the rocks in the bay.

As a result of its rich history, the Mossel Bay area has many cultural and heritage sites. Map 1 shows PPSC amongst other Provincial Heritage Sites (PHSs) within the Mossel Bay Cultural Landscape. Many of these PHSs as well as other cultural and heritage sites are major tourist attractions. PPSC has strong links with the following sites and initiatives:

Pinnacle Point Guided Tours

A private company, offers guided tours of PPSC and a film and introduction to the complex at the Pinnacle Point Golf Club with a qualified guide or professional archaeologist¹⁸. This experience is currently rated as the number 1 outdoor activity in Mossel Bay according to TripAdvisor.¹⁹

The Bartholomeu Dias Museum Complex

The museum is the largest in Mossel Bay and was designed to celebrate the arrival of Bartholomeu Dias and his crew on 3 February 1488. Currently, the Museum Complex also provides a broader view on the history of Mossel Bay from an environmental, archaeological, and cultural perspective, and it is understood that new exhibitions that more fully deal with local history are planned for the future.

Cape St. Blaize Cave

¹⁷ <u>http://www.mosselbay.gov.za/about_us/tourism</u>

¹⁸ Point of Human Origins. http://www.humanorigin.co.za/

¹⁹ Outdoor Activities in Mossel Bay, TripAdvisor. https://www.tripadvisor.co.za/Attractions-g317080-Activities-c61-Mossel_Bay_Western_Cape.html

Cape St. Blaize Cave is near the westernmost point of the geographical feature Mossel Bay and is situated directly below the Cape St. Blaize Lighthouse. First investigated in 1888, the site is one of South Africa's oldest excavated archaeological sites. Deposits from the Cave date from a similar period to Pinnacle Point Site Complex and reflect similar archaeological records. The cave is 10 m high, 12 m deep and 22 m wide providing a prominent lookout point over the ocean. It is regularly visited by tourists and a boardwalk with signboards containing information about the history of the cave and its deposits are installed.

St. Blaize Trail

The St. Blaize Trail is a popular 13.5 km hiking trail that follows the 30 m contour along the cliffs westwards starting below the Cape St. Blaize Lighthouse, at St Blaize Cave and ending at Dana Bay. It is clearly marked with the sign of the Oystercatcher, as it forms part of the greater Oystercatcher trail starting at the Gourits River mouth. The St Blaize trail offers dramatic sea views and excellent whale and dolphin watching.

Other attractions around Mossel Bay include the Mossel Bay Historic Walk, Cape St. Blaize Lighthouse of 1864 and the Santos Beach Pavilion. It is feasible for heritage tourism to expand in the Mossel Bay area as the town has adequate and well-developed infrastructure including a wide range of accommodation facilities, award winning restaurants, a casino, sports facilities and two golf courses, one of which is the Pinnacle Point Estate.

6.3.2 Tourism Promotion and Management

The tourism sector in Mossel Bay, by contributing ~22% of jobs in the town forms a substantial part of the local economy. The major seasons for domestic tourists are the months of December and April²⁰. The Mossel Bay Tourism²¹ Bureau is the municipality's partner in marketing the destination. According to the Garden Route and Klein Karoo Tourism Strategy 2019-2023, in 2015 38.28% of the visitors were international, with the top 3 countries being Germany, United Kingdom and the Netherlands²². In Mossel Bay, the Bartholomeu Dias Museum is one of the most popular attractions with 90,000 visitors for 2019/20²³.

The same tourism strategy highlights that currently the full potential of heritage sites is not realised. Heritage tourism should be better packaged and marketed, including the stories of

²⁰ J, Roux. Director Planning & Integrated Services, Mossel Bay Municipality. 12 December 2016. Letter: Comments on the Draft Pinnacle Point Site Complex Integrated Conservation Management Plan (ICMP).

²¹ www.visitmosselbay.co.za.

²² Garden Route and Klein Karoo Diversity. Garden Route & Klein Karoo Tourism Strategy 2019-2023.

²³ Data provided by the Dias Museum.

local/indigenous people. In the Mossel Bay Local Economic Development and Tourism Strategy and Implementation Plan (2017), culture and heritage tourism is recognised as a focus point within the tourism sector. Within this plan, Cape St. Blaize Cave and the Pinnacle Point caves are mentioned as sites to be upgraded. Other tourism focus points in the plan include:

- Paying urgent attention to protecting our heritage through leveraging assets such as the Dias Museum Complex;
- Prioritise the declaration of the Pinnacle Point Caves as World Heritage Site
- Developing resources around indigenous heritage and the heritage of previously disadvantaged communities e.g. the Gouriqua House, highlighting the history of precolonial indigenous communities;
- Developing new public tourism products and work to attract new commercial tourism activities and adventures by providing potential investors with the economic and marketing intelligence they require to make informed decisions;
- Improving quality of service and levels of friendliness;
- Negotiating with SA Tourism and Western Cape Tourism authorities to convince them to improve their marketing in the region;
- Developing co-operative programs between NGO's, NPO's and CBO's; and
- Upgrading and marketing of Point Discovery Centre

The Mossel Bay Fourth-Generation Integrated Development Plan 2017/2022 uses a Participatory Appraisal of Competitive Advantage (PACA) to develop and grow the local economy, including the tourism sector. This approach emphasises local action and stakeholders and role player mobilisation initially towards small, easily implemented LED activities.

6.3.3 Visitor Management

The main purpose of visitor management is to enhance the experience of visitors, while ensuring that negative impacts of large numbers are mitigated and avoided. Currently, PPSC received 2555 visitors in 2018/2019 and 3101 in 2019/2020 under supervision of a qualified guide.

6.4 Stakeholders

6.4.1 Community

The Mossel Bay community includes all who live and work within and around the municipal area. As noted in Section 3.1.2, indigenous San and Khoekhoen descendants form part of the general population in the vicinity and in the past two decades have shown interest in participating in tourism-related activities in Mossel Bay. Some of the local community members have become involved in heritage based tourism over recent years. Annual free visits to the site are organised for Khoe and San populations in the area who wish to participate in the tour.

6.4.2 Civil Society Organisations

There are several Civil Society Organisations (CSOs) related to PPSC. These include the following:

Pinnacle Point Home Owners' Association Non-Profit Company - this is the home owners' association for the residential units with the Pinnacle Point Estate.

Wildlife and Environment Society of South Africa (WESSA).

6.4.3 Government Authorities

Heritage Western Cape (HWC) is the provincial public entity that resides in the Department of Cultural Affairs and Sport of the Western Cape Province and is responsible for managing most of the heritage resources within the Province. The South African Heritage Resources Agency (SAHRA) is a public entity, which like HWC, is established under the National Heritage Resources Act, and is responsible for the protection of South Africa's cultural heritage, particularly National Heritage Sites, underwater cultural heritage and moveable heritage. It also manages the national heritage register in the form of the South African Heritage Resources Information System (SAHRIS). The latter project aims to provide all heritage bodies, custodians of heritage resources, provincial heritage resources authorities and local planning authorities with a heritage management tool.

The provincial Department of Environmental Affairs and Development Planning (DEA&DP) is responsible for terrestrial and coastal environmental management in the Western Cape Province as well as the implementation of the Protected Areas Act. The management of activities along the coast and estuaries is the joint responsibility of DEA&DP's Coastal Management Unit and the national Department of Environmental Affairs (Oceans and Coast).

The Pinnacle Point Site Complex falls within the Mossel Bay Local Municipality, within the Garden Route District Municipality. In addition to the approvals process implemented by HWC, the local municipality is required to approve building and associated plans in terms of the National Building Regulations and conform with the provincial Land Use Planning Act. The local and district municipalities are responsible for the provision and maintenance of a range of services, amenities and infrastructure.

The municipality is also the owner of a section of the Provincial Heritage Site on Remainder of Erf 15390, which is included in the buffer area of the prospective World Heritage site property.

6.4.4 Businesses, Guest Houses and Tourism Operators

The clubhouse of the Estate serves as a recreation facility for the golfers and home owners at the Estate and provides a restaurant. It is also the departure point for tours of the caves. Presently, Point of Human Origins Pty Ltd operates in the immediate vicinity of the site and provides professional tour guides to visitors. In nearby Mossel Bay, several small businesses exist, including several self-catering and bed & breakfast options, restaurants and a petrol station.

6.4.5 Academics, Researchers and Special Interest Groups

Archaeologists actively involved at Pinnacle Point Site Complex include the following:

- Prof Curtis Marean from the Institute of Human Origins, School of Human Evolution and Social Change, Arizona State University and the Centre for Coastal Palaeoscience, Nelson Mandela Metropolitan University, Port Elizabeth, and sole director of Mossel Bay Archaeology Project Cultural Resources Management (MAPCRM) Pty (Ltd), (current permit holder)
- Dr Thalassa Matthews, Iziko Museums Cape Town (current permit holder)
- Dr Peter Nilssen from the Point of Human Origins Pty Ltd
- African Centre for Coastal Palaeoscience at the Nelson Mandela University

Special interest groups include the following:

- Point of Human Origins Pty Ltd
- Oystercatcher Trail²⁴
- Our Heritage (Non-Profit Organisation)²⁵/Great Brak River Museum
- Heritage Mossel Bay
- Point Discovery Centre (currently planning the interpretation centre)

6.5 Management Issues

Although currently the PPSC sites are well managed and protected, inscription as a World Heritage Site will require formalised management measures to ensure protection of the sites at the PPSC. To date, the Home Owners' Association is supportive of the protection of PPSC and no issues are foreseen from that point.

To increase security the following measures are proposed:

 Establishing Memoranda of Understanding (MoUs) between the Pinnacle Point Estate with Dr Peter Nilssen (Point of Human Origins – the company offering tours on the site), and separately with Prof Curtis Marean (MAPCRM PTY – the company undertaking research on the site). Such MoUs will outline the roles and responsibilities of each party regarding the management and conservation of the PPSC and its infrastructure, relative on the one hand

²⁴ www.oystercatchertrail.co.za

²⁵ <u>www.ourheritage.org.za</u>

to tourism and the other to research. These matters could alternatively be provided for in the proposed Heritage Agreement to be negotiated between all relevant stakeholders on the site.

- The establishment of a long-term Heritage Agreement under s. 42 of the National Heritage Resources Act between Heritage Western Cape and several stakeholders is proposed to reach a common understanding between all stakeholders with regard to the conservation of the site, including who contributes to funding for management and conservation in and around the site and how. This Heritage Agreement should consider all streams of funding associated with Pinnacle Point Site Complex to optimise funding for the site. Examples include:
 - o Previously, ~20% of tourist fees earned by Point of Human Origins Pty Ltd were given to the Pinnacle Point Estate for conservation purposes. The monies, however, were used to undertake monitoring of the water quality. To use a levy from tourist fees more effectively for heritage conservation, it is proposed to use such a levy for maintaining the sites as well as for monitoring the effects of tourism on them. The levy might not be sufficient to cover all maintenance and management costs of PPSC, therefore additional funding from other sources is recommended.
 - Employing permanent guards to supervise the site. Having such a presence on site will
 assist with protecting it and preventing potential damage. This could be achieved by
 monitoring movement of people in and around the site, and preventing trespassing by
 those who enter via the coastal right of way.

6.6 Tourism Infrastructure

The Pinnacle Point Site Complex has fairly substantial tourism infrastructure. Much of this is associated with the Golf Course, the large clubhouse of which has restaurant and bar facilities and is the starting point for tours down to the caves. A space is set aside within the clubhouse for orientation of visitors.

There are extensive pathways and boardwalks connecting the clubhouse to the cave sites, with two wooden stairways leading down the cliffs to the shoreline.

6.7 Risk Assessment

6.7.1 Major Threats to the Values of the Site

The following risks are identified for the Pinnacle Point Site Complex (PPSC):

Erosion

Given the proximity to the coastline, one of the major threats is erosion. It is evident, particularly at site PP5-6, a rock shelter that is more exposed than the cave sites. While a cave creates a microhabitat for organisms a rock shelter is an overhang. The sea is closer to the caves than it has been at times in the past and this too poses a potential risk. Heavy rains result in streams that flow through parts of the site and potentially destroy archaeological evidence. Erosion also poses a risk at PP13B, though to a limited extent as the site is a cave with some enclosure.

Some sites are at risk from erosion from water running off the cliff, which has been increased in power since the installation of the golf course. PP5-6 is currently subject to intense erosion during strong rains since a stream forms at the top of the site (to the north) and runs through the site. This water needs to be diverted with a strong permanent installation. The archaeological research team has brought this to the attention of the Home Owners' Association.

Theft and Non-renewable Damage

Since the development of the Pinnacle Point Estate, security has improved as the Homeowners Association manages people's access to the Resort. Entering through the Pinnacle Point Estate requires identification. At PPSC, researchers have at times in the past left their equipment on site without incident²⁶.

Access to the site is also possible via the right of way along the coast. This access is rocky and difficult and is generally only used by fishermen. This creates a small risk that needs to be taken into account.

Tourism

The current number of visitors to the archaeological sites at Pinnacle Point are about 3,000 per year. Increased marketing of PPSC to the Beach and Golf component, could increase these numbers. As a result, pressure on the areas around the sites that are currently exposed could increase with various impacts. In addition, if not well controlled, visitors could wander off designated routes to other places within the PPSC thereby potentially damaging valuable archaeological assets.

Fire

While fire is identified as a potential risk, it is not regarded as a major risk. The PPSC is generally rocky with limited fuel for fires. Access to 13B cave is currently by means of guided tours and the risk of human-induced fires appears to be less of a risk in this instance. However, public access to coast and the use of the coast by fishermen may pose a human-induced fire risk.

²⁶ C. Marean, pers com. 2016. Archaeologist, Institute of Human Origins, School of Human Evolution and Social Change, Arizona State University.

Infrastructure

The boardwalks leading down to the caves and along the shoreline are very exposed and subject to regular damage from storms. Wood is also a building material that in such exposed conditions has a limited lifespan and requires constant maintenance.

6.7.2 Main factors contributing to the threats (including climate change)

Limited financial resources

Currently, no specific budget from government is allocated for the protection of Pinnacle Point Site Complex (PPSC). However, mitigation measures and monitoring of the PPSC to safeguard its heritage assets needs funding. The limited resources obtained from the tourist fees are not sufficient.



Figure 7: St. Blaize Trail traverses Pinnacle Point Site Complex

Public access to the coast

The access to the Estate from the road is controlled by tight security, with visitors having to register when they access the Estate. The public access to the coast via the right of way as per the Integrated Coastal Management Act, as well as access via the St. Blaize Trail is required to be open to the public, however, hikers are requested to report to security when they enter through the Cape St Blaize Trail in Oyster Bay and on the other side of the Estate. The free access may pose a risk to the sites, however,

Fishermen are requested to register with security at the entrance of the Estate. From the clubhouse they are then driven to the coastline.

Similarly, hikers who use the Cape St Blaize Trail are requested to sign with security at both the most easterly and westerly (Oyster Bay) points of the Estate. While damage due to public access may be identified as a risk, the highly security controlled set up within the Estate, the presence of daily guided tours at the site and general awareness programme on the significance of the sites, are considered sufficient enough measures for the mitigation of this risk.

Fire

Fire has the potential to destroy the boardwalks that provide access to the PPSC and whilst it would not affect the major archaeological sites could pose a risk to the many lesser sites that are located in the fynbos above the cliff face. Given the rocky terrain of the Pinnacle Point Site Complex, fire is less of a risk along the shoreline. The St Blaize Trail is patronised by recreational hikers who may in most instance be expected to have an interest in environmental conservation and hence pose a small risk. Nevertheless, this is a matter that needs to be taken into consideration.

Climate change

Frequency of intense rainfall as a result of the effects of climate change may increase the risk of water erosion, particularly at site PP5-6. Sea-level rise also a result of the effects of climate change also pose a further risk in terms of the particularly the exposed overhang of site PP5-6 and the proximity to the coastline which is receding.

It is expected that increased sea level will not be higher than during the Eemian, as such, most archaeological sites and cave sites below the expected increase in sea level will be affected by the increase. No significant sites will be affected by this. However, proper 3D recording of all caves has been conducted and as such most information will not be lost. Mitigating Specific Threats

Erosion

Currently, approximately 10,000 sand bags and a sailcloth have been placed at PP5-6 to limit the rate of erosion and to protect the heritage assets as a short-term solution.



Figure 8: Sailcloth at PP5-6 limiting rate of erosion

Limited enforcement and monitoring

While access to the Pinnacle Point Estate is fairly well secured to control public access, public access via the coast poses a risk to security and possible human-induced fire.

Currently, the Pinnacle Point Estate undertakes water quality monitoring on a monthly basis at the cave previously affected by water ingress from the golf course prior to modification of its layout to reduce impacts. Monitoring is necessary as a result of rain and irrigation water flowing from the golf course. In addition, this monitoring includes visits to the caves on a regular basis.

According to the Audit Report of the Operational Environmental Management Plan (2015), the Pinnacle Point Home Owners' Association and the Environmental Conservation Officer are taking steps towards environmental management of the Estate to mitigate threats associated with archaeology, fire management and fynbos management. The Audit Report follows an Environmental Record of Decision by the Department of Environmental Affairs & Development Planning in terms of the development of Pinnacle Point Estate (See Section 6.2 for details on the Environmental Record of Decision).

Tourism

Presently, tours to Pinnacle Point Site Complex take place under the supervision of Dr Peter Nilssen or Mr Christopher Jantjies who have an arrangement with Pinnacle Point Estate. The number of visitors to PPSC is increasing with approximately 2400 visitors being received in 2017/2018, 2555 in 2018/2019 and 3101 in 2019/2020

Fire

The Pinnacle Point Estate has an Integrated Fire Management Plan valid until 2028, and is a member of the Southern Cape Fire Protection Agency²⁷.

²⁷ Du Preez, 2015. Pinnacle Point Beach and Golf Resort Operational Environmental Management Plan Audit Report.

7 Vision and Objectives

7.1 Vision

The Pinnacle Point Site Complex will be a financially sustainable heritage site that is managed effectively and protected through collaboration between key stakeholders, while enhancing the appreciation of the site by all people through education and interpretation, and potentially contributing to local economic development through community-based heritage tourism.

7.2 Guiding Principles and Objectives

The following Strategic Objectives (SOs) support the vision:

SO 1: To establish a management framework for Pinnacle Point Site Complex.

SO 2: To ensure conservation of archaeological deposit and related archaeological material on site.

SO 3: To monitor and assess the economic, social and environmental impacts of activities at and around Pinnacle Point Site Complex.

SO 4: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management.

SO 5: To encourage collaboration between stakeholders to conserve Pinnacle Point Site Complex and promote the site as a heritage tourism attraction.

SO 6: To increase the awareness and appreciation of Pinnacle Point Site Complex by the local and global community through research, education and interpretation of the cultural heritage of the site.

SO 7: To build capacity of local people in heritage tourism to ensure responsible tourism to Pinnacle Point Site Complex.

SO 8: To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation projects.

7.3 State of Conservation

7.3.1 Current State of Conservation of the Heritage Resources

Pinnacle Point Site Complex is formally protected as a Provincial Heritage Site in terms of Section 27 of the NHRA. As such and regarding site conservation, HWC is able to prescribe conservation measures to be taken during and after excavation. In terms of HWC policies and procedures, permits issued for excavation conform to internationally accepted practice regarding:

- expertise required to excavate the site;
- technology applied to research;
- deposition and curation of material;
- publication of results; and
- portion of the deposit which may excavated.

The excavated sites at PP9, PP13A, PP13B, PP13c and PP5-6 are stabilised with sandbags that protect the sites from erosion, heavy rainfall and potential damage by people. Annexure 5 provides an overview of the sites with a basic description, current conservation status and accessibility status at Pinnacle Point Site Complex.

The Archaeological Conservation Management Plan (ACMP) approved by Heritage Western Cape in 2014, reflects the state of conservation of each of the sites. Assessments of each of the PPSC sites are presented on pages 37-58 within the ACMP²⁸, and an assessment of the sites included also in the actual World Heritage Sites will be presented also in Appendix C.

It is unlikely that the conservation status of each of the sites will chang significantly as conditions on the sites remain more or less consistent and in some cases have improved, such as with site PP5-6 where the water flow issue has been temporarily mitigated. However, it is recommended that an assessment or evaluation of each of the sites should take place every five years. An evaluation of the site was conducted in October 2020 and the results are presented in Annexure 5.

7.3.2 Desired State of Conservation of the Heritage Resources

In a desired state, Pinnacle Point Site Complex is well managed, protected and promoted. Stakeholders collaborate to safeguard the authenticity and integrity of PPSC and ensure that the site remains integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Visitor numbers to the site are controlled through the required use of qualified guides to access the site. Awareness and appreciation of the value of the site is enhanced and the local and national community contributes to the long-term care thereof. A sustainable financing mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community.

²⁸ Nilssen, P., Marean, C. and Yates, R. 2009. Archaeological Conservation Management Plan (ACMP). Centre for Heritage and Archaeological Resource Management cc (CHARM). Great Brak River, Mossel Bay, South Africa.

8 Policy, Legal, Statutory and other Frameworks

The management and development of the site will be implemented in an enabling environment created by policies, laws, statutory and other frameworks. These are briefly described below.

8.1 Legal Status and Protections

There are a number of laws that provide an enabling framework in terms of actions that can be taken to protect the property:

Under the terms of Section 27 of the National Heritage Resources Act (NHRA), Pinnacle Point Site Complex was declared a PHS on 14 December 2012. In terms of the Act, archaeological and paleontological sites, unmarked burials, the landscape and natural features of cultural significance and structures within the site are formally protected as a Provincial Heritage Site of high significance. A permit is required from HWC to 'destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of the declared area'. As the provincial heritage resources authority for the province of the Western Cape, HWC is responsible for the protection of the site in terms of Section 27(16) of the Act. Within the provisions of the NHRA, the mechanisms for the resolution of conflict, protection of heritage resources, etc. are in place for heritage sites. Nevertheless, effective management of PPSC is still limited. Key provisions of the Act, their relevance to this ICMP and the related challenges faced are summarised in Table 2 below. These provisions only apply to the property declared as a PHS and not to the Buffer Zone.

In terms of provisions of the Western Cape's Land Use Planning Act of 2014, a 'Heritage Buffer Zone' has been created by the Mossel Bay Municipality. This special zone encompasses the entire extent of the Pinnacle Point Estate, ie: Erf 15391 (a portion of Erf 2001), Boplaas, Mossel Bay and all of the residential and other erven that fall within its boundaries (See Table 1 for a list of the other erven). Whilst recognising existing land uses and development rights it requires that all changes to land use and any new development applications must be processed by Heritage Western Cape which should ensure that such proposals do not have a negative impact on heritage resources.

The Heritage Buffer Zone is an Overlay Zone when the Mossel Bay Municipality's new Town Planning Scheme By-Law is implemented with effect from March 2017.

The World Heritage Act incorporates the World Heritage Convention into South African law and establishes a framework for the establishment and management of World Heritage Sites. Of particular relevance for a candidate World Heritage Site such as Pinnacle Point Site Complex are the provisions for the establishment of management authorities for all World Heritage Sites in South Africa, including their administration and responsibility for their finances.

Once a site is inscribed on the World Heritage List and gazetted as such, the Protected Areas Act (NEM:PAA) automatically applies to both the property and its buffer zone.²⁹ This Act and its regulations provide a wide range of environmental and related protections, applicable to national parks and other protected natural areas. The NEM:PAA deals with some matters which are not as clearly established in the NHRA, in particular prescribing a prohibition of mining and prospecting.³⁰ In addition, the regulations of the Act provide a broad array of measures useful in the day-to-day protection and management of World Heritage Sites. These are particularly useful in managing access and development as well as environmental resources within the site.

²⁹ See: NEM:PAA Section 13

³⁰ See: NEM:PAA Section 48

Section	Description	Relevance to ICMP	Challenges faced
07(1)			
27(16)	A provincial heritage resources authority is responsible for the protection of	Management	 Potential diverse
	provincial heritage sites in accordance with the provisions of this Section 27.	responsibilities	interests of
			stakeholders
			• Disjointed
			protection efforts
27(18)	No person may destroy, damage, deface, excavate, alter, remove from its	Protection of the	• Limited on-site
	original position, subdivide or change the planning status of the site without a	PHS	presence
	permit issued by HWC.		Conflicting
			development
			rights
			• Damage to
			heritage
			resources
			•
27(19)	HWC may make regulations pertaining to the site with the consent of the relevant	Site management	• Diverse interests
	landowner/s for: (a) safeguarding heritage sites from destruction, damage,		of stakeholders
	disfigurement, excavation or alteration; (b) regulating the conditions of use of		
	any heritage site or the conditions for any development thereof; (c) regulating		
	the admission of members of the public to the site, and the fees payable for such		
	admission.		
27(21)	HWC may, by agreement with the relevant landowner/s of the site: (a) conserve	Development of	Limited funding
	or improve the site; (b) construct fences, walls or gates around or on the site; (c)		Uncontrolled

Table 2: Key provisions of the National Heritage Resources Act (25 of 1999)

Section	Description	Relevance to ICMP	Challenges faced
	acquire or construct and maintain an access road to the site over any land, and	infrastructure	access
	construct upon such land fences, walls or gates; or (d) erect signs on or near the		
	site.		
27(23)	All reproduction rights in respect of the site, subject to any existing rights and the	Management of	Sourcing
	agreement of the relevant landowner/s, belong to the State and vest in HWC for	film production	qualified
	the protection of such site or, by agreement, with the authority or public	and publication of	Environmental
	institution responsible for the management of such site. Subject to the above, no	photographic	Officer to join
	person other than the relevant landowner/s of the site may make such	images	productions
	reproduction for profit without a permit from HWC, which may prescribe the fees		
	payable in respect of such reproduction, the proceeds of which must be		
	dedicated to the conservation of the site or of heritage resources in general.		
28(2)	HWC may, with the consent of the relevant landowner/s of an area, designate as	Protection of the	• Diverse interests
	a protected area: (a) such area of land surrounding a Provincial Heritage Site as	buffer area	of stakeholders
	is reasonably necessary to ensure the protection and reasonable enjoyment of		Conflicting
	the site, or to protect the view of and from such site; or (b) such area of land		development
	surrounding any archaeological or paleontological site or meteorite as is		rights
	reasonably necessary to ensure its protection.		 Insufficient
28(3)	No person may damage, disfigure, alter, subdivide or in any other way develop		integration with
20(3)	any part of a protected area unless at least 40 days prior to the initiation of such		local
	changes be or she has consulted the beritage resources authority which		development
	designated such area in accordance with a procedure prescribed by that		and planning
	authority		frameworks

Section	Description	Relevance to ICMP	Challenges faced
28(5)	HWC may make regulations providing for specific protections for any protected area, which it has designated, including the prohibition or control of specified		
	activities by any person in the designated area.		
28(6)	A local authority may, with the agreement of HWC, designate a protected area,		
	and make provision in the town-planning scheme or in by-laws for the		
	management of such an area.		
29(1)	SAHRA, or a provincial heritage resources authority, may, subject to subsection	Provisional	Insufficient
	(4), by notice in the Gazette or the Provincial Gazette, as the case may be (a)	protection of the	integration with
	provisionally protect for a maximum period of two years any (i) protected area;	buffer area	local planning
	(ii) heritage resource, the conservation of which it considers to be threatened		frameworks
	and which threat it believes can be alleviated by negotiation and consultation;		
	or (iii) heritage resource, the protection of which SAHRA or the provincial heritage		
	resources authority wishes to investigate in terms of this Act; and (b) withdraw any		
	notice published under paragraph (a).		
30(5)	At the time of the compilation or revision of a town or regional planning scheme	Inventory of	Insufficient
	or a spatial development plan, or at any other time of its choosing, or at the	heritage resources	integration with
	initiative of a provincial heritage resources authority where in the opinion of a		local
	provincial heritage resources authority the need exists, a planning authority shall		development
	compile an inventory of the heritage resources which fall within its area of		and planning
	jurisdiction and submit such inventory to the relevant provincial heritage		frameworks
	resources authority, which shall list in the heritage register those heritage		
	resources which tuitil the assessment criteria under section 30(1).		

Section	Description	Relevance to ICMP	Challenges faced
31(1) 31(3-4)	At the time of revision of a town or regional planning scheme, or the compilation or revision of a spatial plan, or at the initiative of HWC (where HWC is of the opinion that the need exists to protect a place of environmental or cultural interest as a heritage area), the planning authority must investigate the need for the designation of heritage areas to protect any place of environmental or cultural interest. HWC must assist the planning authority to investigate the designation of the place as a heritage area. Where the planning authority is unable or unwilling, HWC may investigate the designation of the place as a heritage area and with	Establishment of a Heritage Area Overlay Zone Integration with development and spatial planning	 Insufficient integration with local development and planning frameworks Diverse interests of stakeholders Conflicting
31(5)	 A local authority may designate any area or land to be a heritage area. A local authority may designate any area or land to be a heritage area on the grounds of its environmental or cultural interest or the presence of heritage resources, provided that prior to such designation it shall consult HWC and the relevant landowner/s, as well as any other interested or affected parties. 		development rights
31(7)	A local authority must provide for the protection of a heritage area through the provisions of its planning scheme or by-laws under the National Heritage Resources Act (1999), provided that any such protective provisions shall be jointly approved by HWC, the provincial planning authority and the local authority, and provided further that: (a) special consent of the local authority shall be required for any alteration or development affecting a heritage area; (b) in assessing an application under paragraph (a) the local authority must consider the significance of the area and how this could be affected by the proposed		
Section	Description	Relevance to ICMP	Challenges faced
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	alteration or development; and (c) in the event of any alteration or development		
	being undertaken in a heritage area without the consent of the local authority, it		
	shall have the power to require the owner to stop such work instantly and restore		
	the site to its previous condition within a specified period. If the owner fails to		
	comply with the requirements of the local authority, the local authority shall have		
	the right to carry out such restoration work itself and recover the cost thereof		
	from the owner.		
35 ³¹ (1)	Subject to the provisions of section 8, the protection of archaeological and	Guidance for	
	palaeontological sites and material and meteorites is the responsibility of a	archaeological	
	provincial heritage resources authority: Provided that the protection of any wreck	work	
	in the territorial waters and the maritime cultural zone shall be the responsibility of		
	SAHRA.		
35 (2)	Subject to the provisions of subsection (8)(a), all archaeological objects,		
	palaeontological material and meteorites are the property of the State. The		
	responsible heritage authority must, on behalf of the State, at its discretion ensure		
	that such objects are lodged with a museum or other public institution that has a		
	collection policy acceptable to the heritage resources authority and may in so		
	doing establish such terms and conditions as it sees fit for the conservation of		
	such objects.		

³¹ Since the site is a PHS Section 35 does not apply, but is used to guide applications for archaeological work under Section 27.

Section	Description	Relevance to ICMP	Challenges faced
35 (4)	No person may, without a permit issued by the responsible heritage resources		
	authority—		
	(a) destroy, damage, excavate, alter, deface or otherwise disturb any		
	archaeological		
	or palaeontological site or any meteorite;		
	(b) destroy, damage, excavate, remove from its original position, collect or own		
	any archaeological or palaeontological material or object or any meteorite;		
	(c) trade in, sell for private gain, export or attempt to export from the Republic		
	any category of archaeological or palaeontological material or object, or any		
	meteorite; or		
	(d) bring onto or use at an archaeological or palaeontological site any		
	excavation equipment or any equipment which assist in the detection or		
	recovery of metals or archaeological and palaeontological material or objects,		
	or use such equipment for the recovery of meteorites.		
35 (5)	When the responsible heritage resources authority has reasonable cause to		
	believe that any activity or development which will destroy, damage or alter any		
	archaeological or palaeontological site is under way, and where no application		
	for a permit has been submitted and no heritage resources management		
	procedure in terms of section 38 has been followed, it may—		

Section	Description	Relevance to ICMP	Challenges faced
	(a) serve on the owner or occupier of the site or on the person undertaking such		
	development an order for the development to cease immediately for such		
	period as is specified in the order;		
	(b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is		
	necessary;		
	(c) if mitigation is deemed by the heritage resources authority to be necessary,		
	assist the person on whom the order has been served under paragraph (a) to		
	apply for a permit as required in subsection (4); and		
	(d) recover the costs of such investigation from the owner or occupier of the land		
	on which it is believed an archaeological or palaeontological site is located or		
	from the person proposing to undertake the development if no application for a		
	permit is received within two weeks of the order being served.		

8.2 Environmental Record of Decision

At the time of approval of the development of the Pinnacle Point Estate, an impact assessment was conducted in terms of the National Environment Management Act. The Environmental Record of Decision (ROD) gave the developer rights to proceed with the development of a residential golf resort development at Pinnacle Point, Mossel Bay. The Environmental ROD was issued by the provincial Department of Environmental Affairs and Development Planning (DEA&DP), on 29 October 2003.

This Authorisation was granted in terms of Section 22 of the Environment Conservation Act No. 73 of 1989. The conditions of authorisation, relevant to this ICMP include the following:

- "An integrated waste management approach must be used that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a landfill licensed in terms of section 20 of the Environment Conservation Act 1989 (Act No. 73 of 1989)."
- "The mitigation/rehabilitation measures and recommendations as detailed in the Environmental Impact Report dated July 2003 compiled by Mr C.M. Gaigher of CODEV, must be adopted and implemented."
- "The applicant must appoint a suitably experienced and qualified Environmental Control Officer (ECO) before commencement of any land clearing or construction activities to ensure that the mitigation/rehabilitation measures and recommendations referred to in the Record of Decision are implemented and to ensure compliance with the provisions of the construction phase EMP. The ECO must report to the Environmental Liaison Committee (ELC), and where appropriate to this Directorate, on a regular basis."
- "The applicant must compile and submit an acceptable construction phase Environmental Management Plan ("CEMP"), for the installation of the services, roads, residential units and the golf course to this Directorate." This included amongst others, to "provide guidance on the treatment of any archaeological or other heritage resources uncovered during construction".
- "The applicant must compile and submit an acceptable operational phase Environmental Management Plan ("OEMP") for the entire property. This must be approved by this Directorate, before any of the units may be occupied." As a minimum, the OEMP must address "burning of fynbos; the complete removal and eradication of all alien/invasive vegetation and management of greens to prevent the spread of kikuyu grass; management of conservation areas; storm water management; fauna management (as appropriate); water conservation and demand management; waste minimization; energy efficiency; and any other aspects identified by the specialists and ELC." In addition, "the Home Owners' Association and/or operator of the facility must implement and ensure with this OEMP".

- "The applicant must submit an Environmental Audit Report, ("audit report") to this Directorate six months after construction of the golf course and infrastructure have been implemented."
- "The applicant must appoint a specialist archaeologist to oversee all excavation and earthmoving activities. The specialist archaeologist must report to the ELC and where appropriate to Heritage Western Cape on a regular basis."
- "The applicant must develop and implement and Archaeological Conservation Management Plan (ACMP) for the entire development area. This must be approved by Heritage Western Cape or the South African Heritage Resources Agency (SAHRA) before any of the units may be occupied."
- "The recommendations made by SAHRA in their review comment dated 14 June 2002 on the Archaeological Impact Assessment (Phase 1: Archaeological Study: Proposed Pinnacle Point Development A), must be implemented."
- "The applicant must ensure that the individual property owners are legally bound to comply with the requirements of the OEMP, particularly as they relate to the management of the conservation areas, either in the deed of sale or constitution of the Home Owners' Associations."
- "The applicant must establish a Trust with adequate funding from the applicants to oversee the conservation areas through the lifespan of the development. An amendment to the existing Constitution of the Pinnacle Point Casino Community Trust and commitment by the various applicants to contribute to this Trust may fulfil this requirement."³²

The key factors affecting the decision, relevant to this ICMP included amongst others the following:

In recent years, golf has been identified as one of the recreational activities that could attract many tourists in the country. It is therefore not surprising that the South Cape Municipalities coupled the beauty of the Southern Cape with golf, to declare the intent of making the Southern Cape the golf Mecca of South Africa. The Pinnacle Point golf estate development is clearly in line with the National Government Growth and Development Strategy GEAR, and the Western Cape Government Development Strategy called "iKapa Eihlumayo" (the growing Cape) that compels all departments to contribute effectively in the economic growth of the province. The golf estate is therefore also in line with the intent of Southern Cape Municipalities of developing a golf mecca, because golf tourists generate a lot of income for the area. This type of tourism has the potential of giving rise to secondary industries that could contribute towards job creation, additional to the jobs generated during the construction phase of the development."

³² Department of Environmental Affairs & Development Planning. 2003. Record of Decision: The Proposed Residential Golf Resort Development at Pinnacle Point, Mossel Bay.

- "The socio-economic investigation identified various significant benefits associated with the proposed activity. The requirement for an appropriate Construction Management Plan (CEMP) and Archaeological Conservation Management Plan (ACMP) will adequately respond to the heritage resources on site."
- "The environmental legislation, the principles of sustainable development and the preservation of this important pocket of land will not be best served by refusing the proposed Beach and Golf Club development. The levies and other funds from the Homeowner's Association(s) will provide sufficient funds to conserve the sensitive vegetation and archaeological artefacts found on site."³³

These conditions remain in place, are binding on the current owners of the site and are subject to environmental audit. An Audit Report was approved by the DEA&DP in August 2014, and remains a working document that was updated in August 2015³⁴.

8.3 Policy

The Pinnacle Point Estate is bound by the Pinnacle Point Development Plan which provides further guidelines for development at Pinnacle Point. Please refer to Appendix D for more details.

8.4 International and National Guidelines

8.4.1 Alignment with international guidelines

In addition to the legislative requirements for protection and management, this ICMP is also informed by international best practices related to World Heritage Sites and is therefore subject to the following international charters and guidelines:

- ICOMOS Charter for the Protection and Management of Archaeological Heritage (1990);
- ICOMOS International Cultural Tourism Charter (1999);
- ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (2008);
- UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003);
- United Nations Environment Programme (UNEP) sustainable tourism in protected areas guidelines (2002);
- Convention on Biological Diversity (CBD) guidelines on biodiversity and tourism development (2004); and

³³ Department of Environmental Affairs & Development Planning. 2003. Record of Decision: The Proposed Residential Golf Resort Development at Pinnacle Point, Mossel Bay.

³⁴ Du Preez, D. 2015. Pinnacle Point Beach and Golf Estate: Operational Environmental Management Plan Audit Report.

• UNESCO Operational Guidelines for the Implementation of the World Heritage Convention (2015).

The ICMP specifically complies with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Operational Guidelines for the Implementation of the World Heritage Convention (2019). These aim to safeguard the authenticity and integrity of a site through *inter alia* appropriate management actions, as well as indicating clear site boundaries and a buffer zone. In addition, the principles of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage have been consulted to ensure that the site remains relevant to the cultural landscape of Mossel Bay and its people.

8.4.2 Integration with regional planning

Regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with the development planning of the region, include the following:

- Mossel Bay Municipality Fourth Generation Integrated Development Plan 2017-2022
- Mossel Bay Municipality. 2016. Integrated Development Plan 2016/2017 (Final Review).
- Mossel Bay Municipality Local Economic Development and Tourism Strategy and Implementation Plan 2017 2022
- Mossel Bay Municipality. 2012. Condensed Draft Mossel Bay Spatial Development Framework.
- Mossel Bay Municipality. 2012. Mossel Bay Point Precinct Development Plan.
- Mossel Bay Municipality. 2016. New Town Planning Scheme parameters/uses/conditions (to be implemented from March 2017).
- Garden Route & Klein Karoo Tourism Strategy 2019-2023.
- Maree, K.S. and Vromans, D.C. 2010. The Biodiversity Sector Plan for the Hessequa and Mossel Bay Municipalities: Supporting land-use planning and decision-making in Critical Biodiversity and Ecological Support Areas. Produced by CapeNature as part of the C.A.P.E. Fine-Scale Biodiversity Planning Project. Kirstenbosch.

8.5 Permissible Infrastructure Development

8.5.1 Infrastructure and Servitude Holder

While the Pinnacle Point Estate has mixed land uses, the heritage assets of PPSC is recognised by the Mossel Bay Municipality, and already included in the Heritage Buffer Zone, along with relevant zoning and development parameters.

The Mossel Bay Point is considered as an integral part of heritage of Mossel Bay and wider tourism offerings (Mossel Bay Municipality, 2012). The Mossel Bay Point Precinct Development Plan was developed in view of protecting the significance of heritage assets related to Cape St. Blaize Cave and Pinnacle Point, and future developments that may be associated with PPSC obtaining World Heritage status (Mossel Bay Municipality, 2012). An application to the National Lottery Board for a grant of R51 million was turned down and other sources of funding is being investigated (Mossel Bay Municipality, 2016/7).

At the Pinnacle Point Estate approximately 180 houses are still in the planning.

As per the Title Deed and Surveyor General's Diagram there is no Servitude within the Property or Buffer Zone³⁵. However, the St. Blaize Trail traverses the Pinnacle Point Site Complex and is a registered servitude footpath in the name of the Mossel Bay Municipality³⁶. This servitude is in effect a 'right of way' as the trail is part of the national trail system. In addition, the St. Blaize Trail creates an opportunity for the public to access the coastal zone. Public access to the coast is also in effect a 'right of way', because the National Environmental Management: Integrated Coastal Management Act (no 24 of 2008) gives South African citizens right of access to the coastal along the coast. Although the 'right of way' is meant to provide the public access to the coastal area below the high-water mark, the risk exists that people wander away from the area below the high water mark and 'explore' private property.

8.5.2 Permissible Infrastructure Development

About 170 houses are expected to be built within the Estate. The Mossel Bay Municipality's new Town Planning Scheme By-Law establishes several different land use zones within the Buffer Zone. Where these apply is shown in Map 4 and the permissible development parameters for infrastructure for each zoning type is set out in Table 1.

With respect to the Pinnacle Point Site Complex, the following is permitted on the Property zoned Open Space 2 (Private Open Space):

Land use description: "private open space"-

- (a) means land not designated as public open space and that is used primarily as a private site for sport, play rest or recreation, or as a park or nature conservation area.
 - (a) includes ancillary buildings, infrastructure, and public land that is or will be leased on a long-term basis; and
 - (b) does not include shops, restaurants and gymnasiums.

Development parameters:

The following development parameters apply:

(b) the Municipality must require a site development plan to be submitted for its approval; and

³⁵ Deeds Registration Office. 2002. Title Deed T63141/2002.

³⁶ C. Van der Linde, pers, com. 2016. General Manager, Pinnacle Point Beach and Golf Resort.

(c) the site development plan as approved by the Municipality constitutes the development parameters for a primary use and, if applicable, a consent use."

As mentioned in Section 2.4, all new development applications within the Heritage Buffer Zone which includes the entire Pinnacle Point Estate needs to be processed by Heritage Western Cape, as of March 2017.

A Visual Impact Assessment conducted in 2020 made suggestions to be complied with by new constructions to ensure minimal impact of the new houses on the integrity of the proposed core.

8.5.3 Development Guidelines

Based on the Land Use and Development Guidelines for (Open Space Zone 2) as set out in Section 2.4 the following guidelines are proposed for the potential of development within the PHS. Future development should only occur within the limitations set out.

No new permanent structures not related to access and interpretation of the PHS should be permitted within the PHS.

- Access:
 - The St Blaize Trail traversing parts of the PHS.
 - Two existing access pathways/boardwalks provide access down to the shoreline and to some of the archaeological sites.
 - Temporary access paths, boardwalks as well as power and water provision may be provided to areas where archaeological excavation is active, provided that these are fully reversible/removable at the conclusion of such work. Paths should be disguised or blocked off during the off season for excavations.
 - New permanent paths and boardwalks may be created or excavation access retained should there be new sites that HWC considers to open up for tourism. This is provided that as far as possible the current access boardwalks down the cliff faces are used rather than constructing new primary access ways.
 - Anti-erosion measures must be taken along both permanent and temporary pathways and all boardwalks should be retained/constructed in accordance with the present minimalist design and with the minimum required irreversible securing to the ground or rock.
 - Creation of new paths and boardwalk as well as alteration of existing routes must be guided by archaeological and environmental sensitivity as determined by experts in those fields and is subject to the issuing of a permit by HWC. Any digging required as part of such work should only be undertaken under the supervision of an archaeologist approved by HWC.

- Interpretation:
 - Interpretive panels may be erected provided that they are simple, do not intrude into view sheds and are mounted on supporting structures made up of natural materials (wood or natural local stone).
 - Content of interpretive panels should be compiled by an archaeologist or other professional qualified to interpret the aspects of the site that are being explained and texts should be subject to approval by HWC.
 - Placement and replacement of interpretive panels must be guided by archaeological and environmental sensitivity as determined by experts in those fields and is subject to the issuing of a permit by HWC. Any digging required as part of such work should only be undertaken under the supervision of an archaeologist approved by HWC.

Guidelines pertaining to the Buffer Zone:

- Development within the Buffer Zone is subject to the development guidelines for the Pinnacle Point Estate. These have been formally included in as Appendix D and are to be considered an integral part of the ICMP and hence enforceable under the NHRA.
- Guidelines included in the Visual Impact Assessment conducted on behalf of Heritage Western Cape on the proposed further development of the estate should also be followed to ensure minimum visual impact on the Pinnacle Point core.

9 Management Structures

HWC is the public entity responsible for the management of the PHS. As such it may make decisions about the management and use of the site in accordance with Section 42(1)(a) of the National Heritage Resources Act (1999). This section further allows HWC to establish a 'heritage agreement' with the landowner, a local community, the municipality or individual to conserve and improve, or present and interpret a defined heritage resource, in this case PPSC.

9.1 Management Authority

The establishment of Management Authorities for World Heritage Sites is a statutory requirement in terms of Sections 7, 8, and 9 of the World Heritage Convention Act (WHCA) (No. 49 of 1999). A Management Authority (MA) serves to provide an effective system for the management of World Heritage Sites in line with the Operational Guidelines for the Implementation of the World Heritage Convention (WHC), the World Heritage Convention Act (WHCA) and the National Heritage Resources Act (NHRA).

DRS is part of a future serial World Heritage nomination and therefore prior to submission of the nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. Currently, DRS is largely unmanaged and although fairly remote, the site needs a management authority for effective implementation of this ICMP.

The management of the Western Cape sites is coordinated and hosted by the MEC of Cultural Affairs and Sport in the Western Cape and by the MEC of Sport, Arts and Culture in KwaZulu-Natal. The proposed structure of the Management Authority is presented in Figure 9.





The two authorities will also jointly serve as the Overall Management Authority of the Emergence of Modern Humans nomination through the establishment of a Joint Management Committee (JMC). The JMC will meet biannually and as and when necessary. The JMC will be established through an MoU in place setting out functions and responsibilities, thus ensuring that the appointed Management Authorities work together in harmony and support one another in their efforts to achieve the vision and objectives of the World Heritage Site. The JMC will be chaired by the Deputy Director-General: Biodiversity and Conservation of the Department of Forestry, Fisheries and the Environment, which is the focal point. The members of the JMC will also be the HODs of the Department of Cultural Affairs and Sport in the Western Cape Government and of the Department of Sport, Arts and Culture in KwaZulu-Natal, and/or their duly authorized delegates.

The JMC shall:

- ensure a management system or mechanisms for the co-ordinated management of the separate components and the development of a joint integrated vision and objective for the entire prospective World Heritage Site with detail provided in their individual Integrated Management Plans (IMP's) (as required in terms of World Heritage Convention Act, 1999 (Act No. 49 of 1999) (WHCA);
- harmonize and coordinate all relevant policies to facilitate a uniform approach to the management of the entire prospective World Heritage Site;
- serve as a platform whereby all parties work together and support one another in their efforts to achieve the vision and objectives of the World Heritage Site in terms of the World Heritage Convention, WHCA and the UNESCO Operational Guidelines;
- serve as a vehicle for the identification of common goals and liaising with heritage resource agencies authorities on a national, provincial and local government level and with the consent of the DFFE, international partners as well as donors;
- appoint technical teams with concise Terms of Reference and timeframes to deal with specific technical issues as and when required;
- implement the monitoring framework to ensure monitoring and evaluation of the management effectiveness of the prospective World Heritage Site;
- coordinate the identification of financial needs by the two provincial departments to ensure management of threats affecting the integrity of the prospective World Heritage Site in order to develop sustainable funding mechanisms for the World Heritage Site;
- ensure the development and implementation of a joint branding and marketing strategy for The Pleistocene Occupation Sites of South Africa that should be used in conjunction with the branding and marketing strategies adopted by the individual sites, and
- ensure the development of an appropriate fund-raising mechanism for the serial sites for purposes of community beneficiation, scientific research etc.

The three sites should each have a Site Management Committee composed by key stakeholders. The office of the MEC should have a sub-directorate created, with a dedicated staff member that will work with the various committees and liaise with DFFE and the relevant heritage authority.

Levin's (2008) Analysis of the Management structures of the Fossil Hominid Sites of South Africa WHS and the Isimangaliso WHS notes that a centralised power organisational structure within these Management Authorities isolates the stakeholders from participating in the governance of the sites. The structure in Figure 11 is focussed on putting the power where the knowledge lies, while limiting the administrative burden on the Site Management Committees as much as possible.

Each Site Management Committee should engage regularly with the other external stakeholders around each site regarding the management of the sites. Including representatives from the local municipalities will be needed if the Site Management Committees are going to be constituted as advisory committees, however in addition to this, heritage agreements between the municipalities should be developed that define the roles of the municipalities, in terms of planning and land use. It would be presumptuous to expect a local planning authority to revise their entire SDF on the declaration of the sites. However, the requirements to address these planning issues should be included in a heritage agreement between the Management Authority and the local municipalities prior to the declaration of these sites as WHS. Heritage Agreements may also be used to address issues of access, conservation and other general issues that can be resolved through contractual means.

The MEC of Cultural Affairs and Sport should be declared the overall Management Authority for the three sites in the Western Cape. The three sites should each have a SMC made up from key stakeholders. The office of the MEC should have a sub-directorate created, with a dedicated staff that will work with the various committees and liaise with DEFF and the relevant heritage authority.

Levin's (2008) Analysis of the Management structures of the Fossil Hominid Sites of South Africa WHS and the Isimangaliso WHS notes that a centralised power organisational structure within these Management Authorities isolates the stakeholders from participating in the governance of the sites. The structure in Figure 10 is focussed on putting the power where the knowledge lies, while limiting the administrative burden on the Site Management Committees as much as possible. While collective decision making will be facilitated by the Management Authority, the primary agents for implementing any conservation measures will be the landowners and the relevant archaeologist for each site.

Each Site Management Committee should engage regularly with the other external stakeholders around each site regarding the management of the sites. Including representatives from the local municipalities will be needed if the Site Management Committees are going to be constituted as advisory committees, however in addition to this, heritage agreements between the municipalities should be developed that define the roles of the municipalities, in terms of planning and land use. It would be presumptuous to expect a local planning authority to revise their entire SDF on the declaration of the sites. However, the requirements to address these planning issues should be included in a heritage agreement between the Management Authority and the local municipalities prior to the declaration of these sites. Heritage

Agreements may also be used to address issues of access, conservation and other general issues that can be resolved through contractual means.

It is proposed that the Site Management Committee for the Pinnacle Point Site Complex consist of core stakeholders, such as the Estate Manager, Mossel Bay Municipality, the Point Discovery Centre, the Principal Investigator of the scientific team and the tour operator, as well as a representative from the Bartolomeu Diaz Museum Complex, and Heritage Mossel Bay. The organisational structure for the Site Management Committee will look as follows.



Figure 10: Decision-making process for Pinnacle Point Committee

9.2 Structure and Functions of the Committee

Stakeholders will appoint representatives to the proposed Pinnacle Point Committee. The Committee will be as an ad-hoc committee of DCAS s. The functions of the Committee and level of decision-making power as well as ability to operate independently will depend upon the powers delegated in terms of Section 26 of the NHRA and will require negotiation with the landowner in particular.

Each stakeholder represented should be tasked with specific functions that pertain to its role in ensuring the conservation and sustainable management of PPSC.

The Pinnacle Point Committee should consist of representatives of the following stakeholders:

- Department of Cultural Affairs and Sport;
- The Pinnacle Point Home Owners' Association NPC;
- The Mossel bay Local Municipality;
- The Garden Route District Municipality;
- HWC;
- The archaeologist/s holding the most recent permits for the site;
- A representative of the tourism operators on the site;
- Relevant conservation bodies registered with HWC;
- The Mossel Bay Tourism Bureau; and
- The Point Discovery Centre.

Delegations made to the Committee should deal with the following:

- Implementing the tasks outlined in Section 8 of this ICMP.
- Communicating regularly with other stakeholders and authorities.
- Monitoring the site.
- Managing and mitigating risks.
- Providing input and expressing opinions on proposals for work of any nature on the site.
- Assist with raising and allocating additional funds for management of the site.
- Coordinating the responsibilities and work of its members and other stakeholders regarding the site.
- Investigating possibilities for coordinating with community and other tourism initiatives in Mossel Bay as well as the local and district municipalities.
- Developing and implementing policies.
- Assisting in the development of accessibility and tourism on the site.
- Entering into a heritage agreement with HWC.

9.2.1 Institutional Development, Monitoring and Assessment

The process above describing the evolving institutional arrangements is proposed in light of practicality, financial austerity, interest of parties in the site, as well as inclusive and transparent management of the PPSC. This ICMP is based on a conservative financial approach given the financial austerity, nationally and internationally, as well as the challenges involved in developing tourism businesses Mossel Bay in general. Accordingly:

- A 'start small' strategy is key for allowing successful establishment of a management authority.
- Care should be taken to ensure that activities do not outstrip the financial foundation of PPSC through stringent internal financial control.
- Development around PPSC, its management structures and processes should be externally evaluated on a regular basis.

10 Implementation of the Strategic Objectives

The Implementation Plan details the proposed execution of the ICMP for Pinnacle Point Site Complex (PPSC) following the Strategic Objectives and in the context of the management framework in Section 7.

10.1 SO1: To establish a management framework for Pinnacle Point Site Complex

This objective relates to putting in place a management framework for the site. The World Heritage Convention Act requires every World Heritage Site (WHS) to have a Management Authority. As Pinnacle Point Site Complex is part of a proposed serial World Heritage nomination, a 'Management Authority' for the serial World Heritage Site will have to be established. In line with precedents at other serial World Heritage Sites in South Africa, it is recommended that a committee be formed to oversee management for Pinnacle Point Site Complex, which can in the future be represented at the Management Authority for all three sites. The conceptual aspects of the organisational structure can be refined through time as different needs arise.

10.2 SO2: To ensure conservation of archaeological deposit and related archaeological material on site

This objective will ensure that infrastructure and resources are put in place to conserve the archaeological deposit and related material.

Infrastructure

The Pinnacle Point Site Complex has fairly substantial tourism infrastructure. Much of this is associated with the Golf Course, the large clubhouse of which has restaurant and bar facilities and is the starting point for tours down to the caves.

There are extensive pathways and boardwalks connecting the clubhouse to the cave sites, with two wooden stairways leading down the cliffs to the shoreline. The boardwalks leading down to the caves and along the shoreline are very exposed and subject to regular damage from storms. Wood is also a building material that in such exposed conditions has a limited lifespan and requires constant maintenance. Construction and maintenance of infrastructure are therefore required.

While the Pinnacle Point Estate has mixed land uses, the heritage assets of Pinnacle Point Site Complex are recognised by the Mossel Bay Municipality, and already included in the Heritage Buffer Zone, along with relevant zoning and development parameters, these further limits the infrastructure development as a means to support conservation of the site.

Signage could be improved, ensuring that the public are more aware of the sensitivity of the sites and appropriate behaviour when in their vicinity.

Human Resources

It is acknowledged that infrastructure alone is insufficient to ensure conservation of the Pinnacle Point Site Complex. It is recommended that a site monitoring system is developed and that regular monitoring of the site takes place.

Stabilisation of excavations

Regular monitoring of the existing sandbagged areas is necessary to ensure that it remains effective. This is particularly necessary to consider decay and wear and tear of the bags that are exposed at surface level and consideration should be given to treating the surface areas differently.

For future excavations, careful consideration should be given to the most appropriate method to be used to protect and stabilise excavated areas and to ensure adequate protection of the archaeological deposit.

Protection of archaeological deposits

Consideration should be given to extending existing boardwalks into cave sites where this would protect the deposits from visitors, both those on official tours and fishermen and others who use them for shelter.

Monitoring of water ingress into caves affected by irrigation on the golf course above should continue with a more formalised programme for testing of water quality than the informal arrangement that presently exists.

Where rainwater penetrates into caves in a manner that threatens stability and existence of the deposit appropriate steps should be taken to channel water away from sites. This problem should be assessed on a case by case basis and measures taken that are suitable to each site and its circumstances.

10.3 SO3: To monitor and assess the economic, social and environmental impacts of activities at and around Pinnacle Point Site Complex

HWC shall be responsible for monitoring of research. To monitor the impact of visitation to the site, Pinnacle Point Committee in collaboration with the Management Authority, should develop a site monitoring system. In addition, a survey should be undertaken at the start of the implementation of the ICMP to establish a baseline of the economic, social and environmental status of activities around PPSC. To evaluate the impact of the ICMP implementation, the same survey should be undertaken at the end of the ICMP timeframe.

As per Section 5.3.1 of this ICMP, it is recommended that an assessment or evaluation of each of the sites should take place every five years, the next evaluation within the life span of this ICMP. Moreover, such evaluation can be undertaken as a first step to implement the ICMP and is also a requirement for the nomination dossier.

10.3.1 Risk Management

Erosion

While sand bags and a sailcloth have been placed at PP5-6 to limit the rate of erosion and to protect the heritage assets as a short-term measure, a permanent structure may be required to better manage the flow of rain water. To prevent PP5-6 from deterioration it may be necessary to divert the flow of the stream as a result of heavy rains and to install a suitably designed cover. An alternative recommendation would be to replant Fynbos as a means to prevent surface run-off negatively affecting the caves.

Limited enforcement and monitoring

There is a need to reduce any possible risk of human-induced fire as well as to monitor public access to the coast via the St. Blaize Trail which traverses the site. Most importantly, the local community and particularly the Home Owners' Association must be made aware of the significance of the site, the importance to preserve it, and as far as possible they should be involved in implementing protective measures. Furthermore, it is recommended that one or more guards potentially from the local community are employed to monitor coastal access to the caves, particularly access via the St. Blaize Trail.

Monitoring of the sites is required thereby using a checklist to record the status of each site on a bi-monthly basis.

Tourism

To mitigate the risk of damage caused by increased visitor numbers, guidelines for sustainable tourism at heritage sites should be followed³⁷. In addition, one can make it obligatory to book a tour in advance indicating the maximum capacity of people per day or apply extra selection at the boom gate when entering the Pinnacle Point Estate using daily visitor limitations.

Since most of the visitor tours are currently booked in advance, it is expected that the number of visitors per day is kept to 12 people per tour maximum with a maximum of three tours conducted on site per day.

Fire

Adequate fire management and quick response from fighters will be required to reduce any fires damaging the sites and their deposits.

³⁷ <u>http://whc.unesco.org/sustainabletourismtoolkit/how-use-guide</u>.

10.4 SO4: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management

Financial support is key to ensure adequate protection and monitoring of PPSC. It is necessary to clarify that the Department currently does not have the required funding to manage this site. However, with support from the landowner, partnerships with other (local) stakeholders, improved marketing as well as through integration of the site into local and regional development plans and spatial planning frameworks, a range of funding opportunities are possible.

A very promising potential source of funding is the Interpretation Centre that it is intended to establish in Mossel Bay's 'Point Precinct' next to Cape St. Blaize Cave. It is being developed with financial contributions from the Mossel Bay Municipality³⁸. The centre will serve as a gateway to the future World Heritage Site and will explain the research conducted at Pinnacle Point and other sites to be included in the nomination, using the Cape St. Blaize Cave as a site that is less vulnerable and able to accommodate far larger numbers of visitors than the caves at Pinnacle Point. The Mossel Bay Municipality is driving this project and has already commenced seeking funding through various sources. It also has in principle approval for the redevelopment of the Point area in the form of HWC approval of the proposed upgrade of the Mossel Bay Point³⁹.

The Municipality recognises that the Interpretation Centre presents great potential for heritage and tourism opportunities. The Bartholomeu Dias Museum Complex in Mossel Bay receives ~100,000 visitors per annum⁴⁰. With the planned Interpretation Centre, it is assumed that most if not all of the visitors to the Museum will also visit the Interpretation Centre. Its potential to attract even more visitors can increase if the Pinnacle Point Site Complex obtains World Heritage Site status. The existence and success of the Interpretation Centre can be considerably enhanced by the presence of a well-managed and conserved World Heritage Site close by. It is therefore logical that some of the income of the centre be contributed to the conservation of PPSC. The Pinnacle Point Committee should hence explore funding opportunities together with the management structure of the Interpretation Centre once such a structure or provisional structure is established. To this end, it has been suggested in 7.2 that as soon as there is a body representing the initiative to establish the Interpretation Centre it be represented on the Pinnacle Point Committee. For example, 5% of the entrance fees for the Interpretation Centre can be contributed to maintenance and monitoring requirements at the Pinnacle Point Site Complex and based on the approximately 83,000 visitors received by the Bartholomeu Dias

³⁸ J, Roux. Director Planning & Integrated Services, Mossel Bay Municipality. 12 December 2016. Letter: Comments on the Draft Pinnacle Point Site Complex Integrated Conservation Management Plan (ICMP).

³⁹ Heritage Western Cape. 2013. Final Comment: HIA: Proposed upgrade of the Mossel Bay Point on Erf 3419, Erf 3794 and Portion of Erven 3626 & 15131. Case Number: 120309JL08.

⁴⁰ Data from Dias Museum.

Museum. The following provides an example of the possible income for the Pinnacle Point Site Complex from entrance fees at the Interpretation Centre⁴¹:

Entrance	Fee	Estimate visitors /per annum	Income by Interpretation Centre	Percentage Contribution	Income to Pinnacle Point Site Complex
Children	R 20	50,000	R 1,000,000	5%	R 50,000
Adult	R 40	30,000	R 1,200,000	5%	R 60,000

Table 3: Possible Income for Pinnacle Point Site Complex

Similarly, the tourism operation at the PPSC itself should contribute substantially to the upkeep of the site and already does so.

Previously about 20% of income received from Point of Human Origins Tours went to the Home Owners' Association and was used to cover costs of monitoring water flow and quality in the caves. However, with the establishment of the Pinnacle Point Committee, managing such income should become its responsibility and as such channelled into conservation management issues in line with the provisions of this ICMP.

Such income from tourism will assist Pinnacle Point Site Complex with management expenses for conservation management measures in line with this ICMP.

10.4.1 Management Expenses

The following expenses are applicable but not limited to the conservation and management of PPSC:

- Maintenance and monitoring of the caves and other archaeological deposits;
- Site interpretation and marketing;
- Construction and maintenance of infrastructure (e.g. signage, boardwalks, ablution facilities, etc.);
- Procurement of fixed assets;
- Other operational costs;
- On-site implementation/management remuneration; and
- Research, training and social investment.

10.4.2 Funding

Based on the limited financial resources of the Department, a conservative approach to financial management should be taken. The development of PPSC as a tourism attraction and

⁴¹ All figures presented is an estimate only and based on modest application.

the development of the Interpretation Centre at Cape St. Blaize Cave therefore have the potential to contribute funding towards the management of the PHS. This is provided that the financial requirements to manage the site are relatively modest. For example, for each tourist, a tourism levy can be charged which will be shared between the guide, the landowner and the Pinnacle Point Committee. In the latter case, funds should be used for monitoring and maintenance of the Pinnacle Point Site Complex.

To increase funding, the Pinnacle Point Committee and future Management Authority should actively engage with potential donors to source funding. Potential donors include Non-Governmental Organisations (NGOs), the National Lottery Distribution Trust Fund, as well as the private sector and individuals. In addition, the Pinnacle Point Committee should ensure its presence in municipal planning forums (for example the annual IDP consultation process, exercises to consult on revision of the SDF, etc.) to take advantage of potential development grants and/or initiatives, which could provide funding for heritage related projects.

10.5 SO5: To encourage collaboration between stakeholders to conserve Pinnacle Point Site Complex and promote the site as a heritage tourism attraction

10.5.1 Communications, Consultation and Sharing of Information

Effective communication within the management structure, as well as information sharing and inclusion of stakeholders in information sharing and decision-making, is a prerequisite for successful management of the site. Although formal communications within the Pinnacle Point Committee, as well as with key stakeholders, will generally take place during its meetings, more regular communication with local stakeholders should take place. This can include communications through media such as newsletters, notices, local papers, radio and informal meetings. In addition, on-going communication with the scientific community is important regarding: i) protection of the heritage resources; ii) accessing such resources for further research; and iii) keeping site interpretation up to date to retain and build public interest.

In line with the ICOMOS International Cultural Tourism Charter of 1999, one of the objectives for managing PPSC sustainably is to 'communicate its significance and need for conservation to the local community and visitors' and generally to involve the community in decision-making processes. In this regard, care must be taken to comply with the following:

- Promotion of Access to Information Act (PAIA);
- Promotion of Administrative Justice Act (PAJA); and
- Relevant HWC and DCAS policies.

10.5.2 Tourism Promotion

In 2012 and 2017, the Mossel Bay Local Economic Development and Tourism Strategy and Implementation Plan was developed and is currently being implemented. The Local Economic Development and Tourism Strategy and Implementation Plan highlights the possibility to develop heritage and tourism sectors.

Tourism to the Pinnacle Point Site Complex started in 2013 and has grown since. A focus of the message conveyed to visitors concerns who we are as humans, our behaviour and the effects it has on our surroundings. This initiative has been managed by, Dr Nilssen of Point of Human Origins Pty Ltd. Point of Human Origins Pty Ltd also employs Mr Christopher Jantjies, a local guide whom Dr Nilssen has trained, and who accompanies most visitors taking specialist tours.

This operation has put the Pinnacle Pont sites firmly on the tourism map and Dr Nilssen is to be commended for his initiative. However, in the interests of openness and transparency it is necessary that in the future the contracts to manage tourism operations at PPSC be via a competitive contract to operate for a limited timeframe before the contract is again competed for. The contract should be awarded by the Pinnacle Point Committee and the landowner should have a right to veto the decision should it have legitimate reasons to oppose the awarding of the contract.

Pinnacle Point, along with Cape St Blaize's Cave, is one of the sites included along the Cradle of Human Culture. This is a project in collaboration with the Department of Cultural Affairs and Sport, the Western Cape Department of Economic Development and Tourism and Wesgro, the Cape Town and Western Cape Tourism and Investment Agency and the Cradle of Humankind in Gauteng. The Cradle of Human Culture is the brand name for an archaeological and palaeontological heritage tourism route within the province which, anchoring on the three proposed World Heritage Sites, aims to provide visitors with an experience which educates them about the overall environment in which modern human behaviour emerged; and in the process to contribute to socio-economic empowerment and beneficiation within local communities through fostering partnerships with stakeholders.

10.5.3 Tourism Infrastructure Development

The Pinnacle Point Estate has excellent existing tourism facilities, including ablutions for visitors, a wellness centre, a restaurant and accommodation that mainly caters for the golfers and existing visitors to the sites.

Part of the income from the tourism operation goes to the land owner in order to offset the costs of provision of tourism infrastructure used by visitors to PPSC and to house future exhibitions, etc. The landowner thus benefits from the positive exposure that visitors bring through the Point of Human Origins tourism initiative. Experience shows that in such instances it is better to work in partnership than on a landlord tenant basis. As such, it is suggested that the Golf Estate receives a proportion of the income from the tourism operation rather than a fixed rental. In this way, its positive support for development of the tourism operation is assured. Alternatively, the additional income received from visitors to the caves, for example from meals purchased at the restaurant, may contribute to offset costs for tourism infrastructure and therefore it may not be necessary for the landowner to receive income. However, this is a matter of discussion and decision by the Pinnacle Point Committee.

Tourism to PPSC should follow Responsible Tourism Guidelines as outlined by UNESCO⁴². Currently, through arrangement with the landowner's security, visitors to the caves are already controlled, as are numbers. Apart from fishermen and occasional unaccompanied visitors (which require better control via site guards), pedestrian traffic is controlled and delineated by the Point of Human Origins qualified guide. Small-scale tourism to PPSC can continue on this basis but needs to be managed more tightly as visitor numbers increase. The site capacity should be capped at a level that is in line with international standards for sensitive archaeological sites. Visitor management covers different aspects of visitor interactions: i) identifying how visitors get to the site; ii) managing access and visitor numbers to the site; and iii) identifying specific actions that should be implemented by the Pinnacle Point Committee. Presently, visitor numbers at PPSC are controlled, carefully managed and always accompanied by a qualified guide. A maximum number of 12 visitor per group with one guide has been identified as carrying capacity of the site, with a maximum of three tours per day conducted.

The Mossel Bay Municipality has plans to develop the Point Precinct in the town and create a Multi-Purpose Interpretation Centre also referred to as the Point Discovery Centre. The Interpretation Centre should be the place to which the majority of the visitors interested in PPSC go as the adjacent St. Blaize Cave is an authentic site at which the same period of human development can be explained. For PPSC, collaboration with the future Interpretation Centre on future tourism development is essential to ensure that tourists to both sites are assured of a quality experience.

10.5.4 Film Production

Film production in unique landscapes is increasingly common. Filming often serves as an awareness and information communication-sharing tool and for the promotion and recognition of important places. However, sensitive sites such as the PPSC need to be managed appropriately.

Permission for filming can be granted to film crews at the discretion of HWC. This should be based on considerations that address impacts on the site, for example the size of the film crew, a written permission signed by the appropriate representative of HWC, along with conditions that address dos and don'ts in terms of treatment of the site. Additionally, it is recommended that an archaeologist be present to monitor filming and related activities at PPSC. The fees for film production can be agreed upon by the Pinnacle Point Committee and landowner, and

⁴² <u>http://whc.unesco.org/uploads/activities/documents/activity-113-2.pdf</u>.

should be similar to those charged by SANParks or CapeNature. Furthermore, photographs and films made during production should be made available to the Pinnacle Point Committee for use in marketing efforts and related purposes.

The application should provide full details regarding the nature of the proposed filming activities. It should specify whether the films are educational, for an advertisement, documentary or commercial use. All film applications should also include the following elements: objectives, filming and related activities, implementation schedules, follow-up studies and budget. The Pinnacle Point Committee, after consulting with relevant stakeholders, will assess the application.

Notwithstanding the above, filming is also subject to approval of a permit application to HWC in terms of Section 27(23)(a) of the NHRA and associated SAHRA and HWC standards and policies. The express permission of the owner must also be sought. HWC policies provide for rapid issuing of permits whenever necessary.

The Pinnacle Point Committee should conduct a Film Audit on an annual basis or as deemed necessary. The purpose of the Audit is to get an overview of the film projects that had taken place over the preceding period, including:

- Number of projects;
- Types of films;
- Incomes generated and benefits;
- General experience with production crews; and
- Determine whether feedback from producers has taken place and whether the relevant documents are properly kept in a manner that is accessible to relevant stakeholders.

Film companies should make available a high-resolution copy of the film on DVD for use in awareness raising and/or marketing of the site.

10.6 SO6: To increase awareness and appreciation of Pinnacle Point Site Complex by the local and global community through research, education and interpretation of the cultural heritage of the site

10.6.1 Research Guidelines

Guidelines for research are directed by the terms of the National Heritage Resources Act No. 25 of 1999 as well as by international best practice.

 Copies of applications for funding for research should be submitted to HWC for peer review to ensure that the proposed research will be permitted. Similarly, research that affects artefacts recovered from the site must be approved by WCHWC and HWC and import of such artefacts for research in other countries requires a permit from SAHRA. If the site is inscribed on the World Heritage List, such applications must be submitted to and discussed by the Management Authority.

- Research proposals must focus on the development and extension of the OUV of the site, and may, after consultation with HWC, extend these values should additional significant findings be made.
- Research proposals must ensure that the OUV of the site are not compromised.
- Research that will involve the removal of in-situ deposits must include provision for stabilisation of all surfaces before, during and after removal.
- Information prepared for the general public, such as signboards, pamphlets, websites, films, videos and books, must uphold the outstanding universal values of Pinnacle Point Site Complex.

To complement the desired state of conservation and the terms and conditions of HWC archaeological excavation permits:

- Research should aim to further verify the OUV of PPSC and answer well-motivated research questions, removing only that part of the deposit that is necessary to the research concerned;
- All applications for research must be peer reviewed;
- Not more than 50% of the original deposits may be removed without good reasons;
- New excavation permits may only be issued after receipt of a full report on the results of previous permits and copies of published papers;
- All applications for research funding must include a budget for conservation of the deposits and the site; and
- Every effort must be made to include South Africans in research and excavation teams.

10.6.2 Research Permits

- All permits for excavation and collection of artefacts are issued on application to HWC.
- HWC may reserve the right to refuse a permit after consultation with relevant stakeholders.
- All applications will be peer reviewed.
- The Pinnacle Point Committee must be consulted on all permit applications and informed of the results of all applications affecting the site.
- All permit applications must include a suitably qualified South African archaeologist as the permit holder or co-permit holder.
- The application form must be signed by the director of an institution, approved by HWC and a suitable repository that agrees to house and curate the collections from PPSC in perpetuity.
- Permit extensions will only be allowed after receipt of a detailed report on the previous permit activities.
- HWC may withdraw a permit if the permit holder does not ensure protection of the OUV, integrity and authenticity of the site.

- Not more than 50% of the original deposit at a site may be removed under permit from HWC.
- Applications for the export of archaeological material from PPSC must be submitted to HWC and SAHRA.

Planning of research shall be the responsibility of permit holders in consultation with HWC and the Pinnacle Point Committee. The principle guiding research planning will be to uphold and extend the OUV of the site.

10.6.3 Site interpretation

As mentioned, the possibility exists to explain the PPSC story and other sites in the proposed serial World Heritage nomination in the planned Interpretation Centre in Mossel Bay, and the adjacent Cape St. Blaize Cave. Both interpretation programmes are dependent upon the research at PPSC for source information and are ideal places to promote ongoing research and 'new discoveries'.

10.7 SO7: To build capacity of local people in heritage tourism to ensure responsible tourism to Pinnacle Point Site Complex

The Mossel Bay Municipality recognises that Provincial Heritage Sites within the cultural landscape are important but vulnerable economic assets that have potential to contribute to job creation. Currently, many citizens in the province are unaware of the importance of the features that are unique to Mossel Bay Municipality, how to access economic opportunities in tourism, and how and where to gain the necessary skills to qualify for such economic opportunities. To address this gap, the Mossel Bay Municipality makes provision within its 2012 Local Economic Development and Tourism Strategy Implementation Plan for empowerment and skills development for the local community across several intervention sectors, including heritage and tourism.

In light of the above, a training manual and on the job-training could be provided to local community members interested in heritage and tourism at Pinnacle Point Site Complex with the intention to equip them with the knowledge necessary for work at the future Interpretation Centre and generally for the promotion of understanding of the archaeological assets of the town in general tourism initiatives. Training of guides is planned by the Department of Economic Development and Tourism to ensure that these guides are trained and registered according to the Tourism Act no 3of 2014 that requires that the guides are suitably qualified and have completed an accredited tourist guides training course.

10.8 SO8: To encourage the generation of community benefits through on-the-job training, integration of local entrepreneurship and job creation project

A number of plans exist within the Mossel Bay Municipality to increase the participation of local communities to address the need for local economic development.

10.8.1 Community Development and Beneficiation

As mentioned in the 2017 Mossel Bay Local Economic Development and Tourism Strategy and Implementation Plan, there are a number of planned interventions for the benefit of the local community. In particular, social development and possible local economic opportunities associated with tourism and heritage.

At the Pinnacle Point Site Complex there exists potential on a limited scale for the local community to become involved as guards for monitoring of the site, and potentially to transport visitors to it. Presently, a tour guide from the community is taking visitors to the Pinnacle Point Site Complex.

At Cape St. Blaize Cave, the planning of the Interpretation Centre is underway. This will provide further opportunities for the local community to become involved in heritage tourism, associated with both Pinnacle Point Site Complex and Cape St. Blaize Cave.

11 Action Plan

Implementing the ICMP involves the detailing and implementation of Actions, which are in support of the Vision and Mission Statement. The Vision for the ICMP has led to a set of Strategic Objectives, under which various Action Categories have been identified. These Action Categories, Specific Actions, Expected Outcomes, Performance Indicators, Stakeholders, Lead Parties and Timeframes are listed for each Strategic Objective in Table 3 below. The Action Plan lists all actions that need to be completed over the next 5 years.

The purpose of the Action Plan is to guide effort and ensure that all work conducted as detailed in Table 3, can be measured to comply with the SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) criteria required by the National Treasury of South Africa.

It is proposed that the actions from the Action Plan, be planned in more detail using a log-frame format that outlines clear steps, deliverables, indicators and timelines, with tasks assigned to and accepted by the responsible parties. Every quarter progress can be assessed which provides an opportunity to discuss obstacles and find a way of overcoming them.

Strategic Objective 1	: To establish a managemer	nt framework for Pinna	cle Point Site Complex.			
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timefram e
Strengthen	1.1 Establish a committee	1.1 PPSC is	1.1 Organogram	HWC, Landowner,	HWC	2017-
management of	with key stakeholders	managed	and mandate	Mossel Bay	Manageme	2022
PPSC	to manage Pinnacle	effectively	of the	Municipality,	nt	
	Point Site Complex 1.2 Confirm the boundaries of the PPSC 1.3 Establish a Heritage Agreement, MoUs for tourism and research, including benefit sharing between the	through the establishment of sound frameworks	 A map and list of GPS points to confirm the boundaries of the PPSC 1.2 A signed Heritage Agreement 	archaeologists, Committees of Diepkloof, Sibhudu and Pinnacle Point		
	Pinnacle Point Committee, HWC,					

Table 4: Actions to Implement the Integrated Conservation Management Plan.

the landowner and		1.3 Minutes of the			
other relevant		meetings			
stakeholders		 Approved 			
1.4 Convene meetings of		financial			
the committee		guidelines			
Develop financial					
guidelines for PPSC		1.4 Management			
		Authority with			
		names of			
1.5 Establish the		representatives			
Management					
Authority in					
collaboration with the					
Committees of					
Sibhudu Cave and					
Pinnacle Point ⁴³					
1. Integrate PPSC 2.1 Include PPSC in the	2.1 The	2.1 PPSC integrated	Mossel Bay	Pinnacle	2017-
into existing next municipal IDPs	management	in next	Municipality,	Point	2022
development and SDFs	of PPSC is	municipal IDP	Pinnacle Point	Committee	
plans	included in all	and SDF	Committee		
	local, district				
	and provincial				

⁴³ At the time of writing this ICMP, the sites were not inscribed yet as WHS.

			dev	velopment							
	2.2 Make provisio PPSC to be inc in the most municipal D Management P	n for cluded recent Visaster Ian	pla frai	ins ar	nd	2.2 Disasta PPSC in the Disasta Mana Plan	er plan fo include municip er gement	or d al			
Strategic Objectiv	e 2: To ensure conserva	tion of c	archaeo	logical dep	posit	and relate	ed archa	eolo	gical material on s	site.	
Action Category	Specific Action	Expec	ted Out	comes		Performo Indicato	ance rs		Stakeholders	Lead Parties	Timeframe
Infrastructure	Construction and	The sit	e is sec	cured throu	ugh	1.1 App	ropriate	and	HWC,	HWC	2017-2022
development to	maintenance of	appro	priate	infrastruct	ture	well	maintai	ned	Landowner,	Manageme	
reduce the risk	appropriate	develo	opment	C	and	infra	structure		Archaeologists	nt	
of damage to	infrastructure when	mainte	enance								
the site	necessary										
2. Human	• Evaluation of	2.1 Hu	man	Resour	ces	2.1	Monito	ring	HWC,	Pinnacle	2017-2022
Resource	existing	inv	olved	have	the	reports	on	the	Landowner,	Point	
developmen	backfill	са	pacity t	to protect	the	effective	eness	of	Archaeologists,	Committee	
t	method of	OL	JV of the	e site.		current r	nethods		Pinnacle Point		
	sandbags								Committee		
	and										
	assessment										

	of remedial					
	action when					
	necessary					
Strategic Objectiv	e 3: To monitor and ass	ess the economic, social and e	environmental impacts	of activities at an	d around Pinna	acle Point Site
Complex.						
				ſ	l .	
Action			Performance		Main	
Category	Specific Action	Expected Outcomes	Indicators	Partners	Stakeholder	Timeframe
Calogoly					S	
1. Monitoring	1.1 Regular reports	1.1 Social, economic and	1.1 Quarterly and	HWC	Pinnacle	2017-2022
	from the Pinnacle	environmental changes	Annual progress	Management	Point	
	Point Committee	that can have an effect	reports	with Pinnacle	Committee	
	to the UWC	an the conservation and		Doint	Committee	
				FOINI		
	Council	management of the site		Committee,		
		are noticed timely and		Archaeologists		
		addressed adequately				
			1.2 Site monitoring			
	1.2 Develop a site	1.2 Undated conservation	system			
	monitoring	status of each of the	developed			
	system using					
	SMART indicators,	PPSC sifes				
	in line with					
	standard					
	practice for					
	caves, shelters		1.3 Brief report of site			

and middens	visits		
1.3 Implement	•		
quarterly site	1.4 Survey		
inspections,	developed and		
particular to	results from		
monitor the	respondents		
identified risks	received		
1.4 Develop and			
implement a			
survey to			
establish a			
baseline of	1.5 Database		
economic, social	developed		
and			
environmental			
impact of			
activities around			
PPSC			
1.5 Develop a			
database for			
recording the			
results of the			
survey			
developed or			
build on HWC			

	Heritage					
	Information					
	Management					
	System					
	1.6 Assessment of					
	conservation					
	status of each of					
	the PPSC sites					
2. Enforcement	2.1 Develop site	2.1 Damage to the site	2.1 Site	HWC	Pinnacle	2017 – 2022
	management	avoided through	management	Management	Point	
	guidelines/policy	effective enforcement	guidelines/policy	with Pinnacle	Committee	
	for PPSC	of policies and	implemented	Point		
		guidelines by the		Committee		
	2.2 Implement the	Pinnacle Point				
	Protected Areas	Committee				
	Act regulations		2.2 Protected Areas			
	with regard to		Act			
	visitors		implemented			
Strategic Objectiv	/e 4: To achieve financi	al sustainability usina a divers	e range of sources in a	an integrated, ef	fective manne	r that support
management of t	he site.					
Action	Specific Action		Performance	Main	Lead Parties	Timeframe
Category			Indicators	Stakeholders		

1. Secure	1.1 Develop and	1.1 Human and financial	1.1 A list of site	Pinnacle	Pinnacle	2017 - 2022
funding for	prioritise a list of	resources are allocated	needs	Point, HWC	Point	
PPSC	site needs,	effectively and	developed	Management	Committee	
	including	efficiently to achieve		,		
	infrastructure as	financial sustainability		Management		
	well as human			Authority		
	resources			Xomonry		
			1.2 Approved			
	1.2 Identify local,		funding			
	national and					
	potential					
	international					
	funding sources					
	and make		1.3 List of			
	applications		opportunities to			
	1.3 Identify		share resources			
	opportunities for					
	joint fund raising					
	and sharing of					
	resources,					
	including with the		1 1 Sustainable			
	planned					
	Interpretation		indicing			

	Centre		strategy										
	1.4 Develop a		developed										
	sustainable												
	financing strategy												
Strategic Objectiv	ve 5: To encourage collat	ooration between stakehol	ders to conserve Pinnacl	e Point Site Complex	and promote	the site as a							
heritage tourism a	ittraction.												
Action			Performance	Main									
Category	Specific Action	Expected Outcome	Indicators	Stakeholders	Lead Parties	Timeframe							
1. Tourism	1.1 Develop a local	1.1 Responsible small-	1.1 A local tourism	Pinnacle Point	Pinnacle	2017-2022							
developmen	tourism	scale tourism to	development and	Committee, HWC	Point								
t and	development and	PPSC through	marketing plan	Management,	Committee								
marketing	marketing plan	effective marketing	developed	Mossel Bay									
	1.2 Develop		1.2 MoUs with key	Municipality,									
	partnerships with		tourism	Committees of									
	tourism		stakeholders,	Sibhudu Cave									
	stakeholders		including the	and Diepkloof									
			Interpretation										
	1.3 Collaborate with		Centre										
	the Interpretation												
	Centre		1.3 Best practices										
			identified and										
			implemented										
	1.4 Collaborate with		1.4 Joint marketing,										
	the other												
		committe	ees at				includi	ng					
--------	------------	--------------	-------------	---------------	--------	---------	-------------	--------------	----------	-----------	-------	-----------	-----------
		Sibhudu	and				promo	tion					
		Diepkloc	of to				materi	al, d	a web-				
		create	joint				based	Ķ	olatform				
		marketin	g for				and	aw	vareness				
		Modern	Human				raising,	for	Modern				
		Origins s	ites within				Humar	۱	Origins				
		the C	radle of				sites de	evelo	pped				
		Human	Culture										
		project.											
		1.5 Promote	tourism to										
		PPSC	nationally										
		and inte	rnationally										
		through	existing										
		tourism	structures				1.5 PPSC	me 	ntioned				
		and	organising				in na	tion	al and				
		fund rais	ing events				interno	ition(al				
							promo	tion					
							materi	ai c	ana on				
	:+			0.1.11;5:15.5				əs		Diananala	Deint	Disesse	0017 0000
2. Her	riana	2.1 Underfai		2.1 High C		tourism	2.1 Feasibi	IITY :	STUDY	Pinnacie	Point	Pinnacie	2017-2020
100			/ sludy on	produc		ana	swot	ll Na aib		Comminee,	HVVC	Committee	
pro		poieniia		Service	eieted	ام ما	30010	andr	ysis	manageme	er 11	Comminee	
and	a services		and	uppre	cluted	by all							
		activities		VISITORS			2.2 Signag	е	for				

	2.2 Install tourism road		direction and rules			
	signage to the site		and regulations in			
			place			
Stratogic Objectiv	(a. 4: Ta incrassa gwaran	oss and appropriation of Pinna	cla Paint Sita Camplax	by the local and		unity through
sindlegic Objectiv	ion and interpretation of th	ess and appreciation of the site	cie roini sile complex	by me local and	giobal comme	niny ninoogn
research, eaucan	on and merpretation of it	le conordi nemage of me sile.				
Action	Spacific Action	Expected Outcomes	Performance	Main	Load Parties	Timoframo
Category	Specific Action	expected Outcomes	Indicators	Stakeholders	Lead Fames	Innenune
	1 Dortoor with the		1.1 loint was of the	Dianarala Daiat	Diaparala	0017 0000
I. KUISE					Pinnacie	2017 – 2022
awareness	Interpretation	ana sociai	Interpretation	Committee,	Point	
	Centre	connectedness to PPSC		Mossel Bay	Committee	
		among the community		Municipality		
		to promote long-term				
		protection of the site	1.2 PPSC included in			
	1.2 Develop		promotion			
	awareness raising		material for			
	material		cultural heritage			
			in the			
			municipality			
2. Research	2.1 Strengthen ties	2.1 High quality research	2.1 MoU with	Pinnacle Point	Pinnacle	2017 – 2022
	with the	undertaken to promote	archaeologists	Committee,	Point	
	archaeoloaists	the value of the site	and research	Archaeoloaists	Committee	
	and research		institutions			
	institutions		2.2 Students			
			2.2 310000113			

	2.2 Research		contribute to			
	institutions to assist		research on			
	with conservation,		PPSC through			
	interpretation and		their thesis			
	promotion of the					
	site					
Strategic Objectiv	ye 7: To build capacity of	local people in heritage touris	m to ensure responsible	tourism to Pinnac	le Point Site Co	
Sindlegic Objectiv		local people in hemage lobisi				
Action	Stratagic Action	Expected Outcomes	Performance	Main	Load Partics	Timoframo
Category			Indicators	Stakeholders	Lodd Fames	linename
1. Co-develop	1.1 Collaborate with	1.1 Capacity building of	1.1 Training modules	Pinnacle Point	Pinnacle	2017 – 2019
heritage	Mossel Bay	local communities to	developed	Committee,	Point	
quide	, Municipality to	deliver a hiah-auality	,	HWC	Committee	
trainina	develop trainina	tourism experience at		manaaement		
programme	modules for	the Interpretation		0		
44	heritage guides	Centre and at PPSC				
	1.2 Provide on-the-					
	around trainina		1.2 At least 4 guides			
	for heritage		registered with			
	auides providina		the lourist Guide			
	equal		Registration			

⁴⁴ This training should be developed and provided using an accredited training provider as per Tourism Act 3, 2014.

	opportunities for		Office at the			
	both men and		Western Cape			
	women		Department of			
			Economic			
			Development			
			and Tourism			
Strategic Objectiv	ve 8: To encourage the g	generation of community bene	fits through on-the-job	training, integration	on of local en	repreneurship
and job creation	projects.					
Action			Porformanco	Main		
ACIION	Specific Action	Expected Outcomes	renomance		Lead Parties	Timeframe
Category			Indicators	Stakenolaers		
1. Community	1.1 Promote	1.1 Local community	1.1 Community-	Mossel Bay	Pinnacle	2017-2022
benefits	involvement of	members receive	based heritage	Municipality,	Point	
	marginalised	employment benefits as	products	Pinnacle Point	Committee	
	people in the	a result tourism	developed	Committee,		
	development of	development to PPSC		Local		
	heritage tourism	the Interpretation		businesses		
	products	Centre				
	1.2 Collaborate with					
	local businesses to		1.2 Molls with local			
	provide heritage		1.2 MOUS WITH IOCU			
	tourism services					
	1.3 Promote					
	employment of					
	locally		1.3 Employment of			
	,					

marginalised		locally		
people by e	visting	marginalised		
tourism busin	esses	community		
		members		

12 Monitoring and Evaluation

A simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool should be established for the ICMP. Such a MELI approach is described as follows:

Monitoring is the action of determining where implementation of the Action Plan stands. It is the ongoing, systematic collection of data to provide management and the main stakeholders with a good indication of the progress in terms of the Implementation Plan on the use of allocated funds for these purposes.

Evaluation informs the manager and stakeholders of the degree of effectiveness in terms of outcomes and impacts of the activities. Once indicators are identified, baselines must ideally be established against which to measure progress. Evaluation must also assess unplanned outcomes and impacts for which established baseline values may not exist.

Learning refers to continuous learning from, and the insights gained from the results of the monitoring and evaluation. Best practices have been identified and more can be added as Pinnacle Point Site Complex progresses.

Intervention is the evidence-based action on the Monitoring, Evaluation and Learning that must be taken to overcome obstacles or challenges faced during the implementation of the ICMP. The MELI is therefore a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected.

The performance indicators in the Action Plan act as the monitoring and evaluation of the ICMP. Learning and insights are derived from measurements of progress against the tasks and deliverables. While an organisation can monitor its progress in terms of the tasks set out in the Action Plan, it is neither appropriate nor credible, and indeed very difficult for the land owner/site manager on its own to measure the effectiveness and impacts of actions. It is therefore highly recommended that the Pinnacle Point Committee, including potential beneficiaries, be involved at some point in the MELI. This could be achieved through establishing management forums and working groups.

13 Glossary

Archaeology: The study of human activity in the past, primarily through the recovery and analysis of the material culture and environmental data that they have left behind, which includes artefacts, architecture, and the archaeological record.

Conservation: All efforts to retain the cultural heritage and significance of a site. It includes maintenance and may include preservation, restoration, reconstruction and adaptation. It will usually be a combination of several of these strategies.

Cultural Landscape: A landscape designed, improved or at least affected by human activity, whether deliberately or not. Cultural landscapes typically refer to areas where tangible heritage is associated with intangible values associated with the landscape, including memories, legends, songs, traditions and stories, belief systems, all representing different layers in the landscape. Appreciation of the different layers and their interrelationships ultimately brings a deeper understanding and appreciation of the cultural landscape. The World Heritage Committee refers, inter alia, to 'associative cultural landscapes, which are particularly valued for their religious, artistic or cultural associations of the natural element'.

Cultural Landscape Map: A map of all the heritage resources of an area, including natural resources, tangible heritage and intangible heritage. Heritage resources can then be linked to other attribute data, timelines, etc. in a GIS system for easy access and updating.

Cultural Significance: Historic, scientific or social value of past, present or future generations.

Heritage: Heritage is our legacy from the past. It includes those places, objects, languages, memories or cultural activities that have aesthetic, historic, scientific or social significance or some other special memory and routine.

Integrated Conservation Management Plan: A management framework, consisting of a central Operational Management Plan and Specific Plans, all of which guides the conservation of a specific area, avoiding negative impacts on the resources of the area, and where avoidance is not possible, minimising the negative impacts through the implementation of mitigation measures.

Intangible Heritage: Heritage associated with a place that is not expressed physically. It includes non-physical aspects such as symbolic meaning, values, activities like dancing, storytelling and music-making, memory and routine, indigenous knowledge, local traditions, passed from one generation to the next, mostly through oral traditions.

Khoekhoen: An indigenous ethnic group, one of the 'First Peoples' of southern Africa, who practised a pastoral economy with domesticated sheep and cattle.

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Khoe-San, or Khoisan: is a term used to refer collectively to the Khoekhoen (formerly spelled Khoikhoi) and the San hunter-gatherers, although the two groups had different histories, economies and cultures.

Landscape: A collection of natural and cultural features that characterise a particular place.

Local Economic Development (LED): Local economic development aims to build up the economic capacity of a local area to improve its economic future and the quality of life for all. It is a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation.

Mitigation: Any action to reduce the negative impact of intervention.

Outstanding Universal Value: Outstanding universal value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

Risk: A hazard measured against vulnerability. In other words, the degree to which loss is likely to occur, as a function of the nature of particular threats in relation to particular circumstances. More broadly speaking, risks include any factor that could render Pinnacle Point Site Complex unable to achieve its Strategic Objectives.

San: Also known as the 'Bushmen', this 'First Peoples' group of southern Africa were traditionally hunter-gatherers and formed part of the Khoe-San ethnic group.

Statement of Outstanding Universal Value: A concise statement of the outstanding heritage value of a World Heritage Site (WHS), the value which provides such as a site with universal value.

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15 Appendix A: Final Draft Stakeholder List

Full Name and role	Organisation	Postal Address	Contact Details
Primary Stakeholders	I		I
Mr Carl van der Linden	Pinnacle Point Estate	1 Pinnacle Point Drive	Tel: +27 44 606 5300
(General Manager)		Mossel Bay	Fax: +27 44 693 3200
			Cell: +27 73 036 7965
			Email: carlvdl@pinnaclepointestate.co.za
Prof. Curtis W. Marean	Institute of Human Origins,	PO Box Arizona State	Tel: +480 965 7796 / +480 965 2718
(Archaeologist)	School of Human Evolution and Social Change	University, Tempe, AS 85287-2402 USA	Cell: +27 76 890 6153
			Email: Curtis.marean@asu.edu
Dr Peter Nilssen	Archaeologist and	PO Box 2635	Tel: +27 44 691 0051
(Archaeologist)	Specialist Heritage Practitioner &	Mossel Bay 6500	Mobile: +27 82 783 5896
	Point of Human Origins Pty Ltd		Email: peter@carm.co.za

Full Name and role	Organisation	Postal Address	Contact Details
Primary Stakeholders		L	
Dr Jan de Vynck (Director)	African Centre for Palaeo Coastal Science		Director African Centre for Coastal Palaeoscience Nelson Mandela University 082 684 4461
Ms Colette M. Scheermeyer (Deputy Director: Heritage Resource Management Services)	Heritage Western Cape (HWC)	3rdFloor,ProteaAssurance BuildingGreenmarket SquareCape Town8000	Tel: +27 21 483 9682 Mobile: +27 73 377 4707 Email: Colette.Scheermeyer@westerncape.gov.za
Dr Mariagrazia Galimberti (Project Champion)	Department of Cultural Affairs and Sport (DCAS)	3 rd Floor, Protea Assurance Building Greenmarket Square Cape Town 8000	Tel: +27 021 483 7069 Email: Mariagrazia.galimberti@westerncape.gov.za
Secondary Stakeholders			

Full Name and role	Organisation	Postal Address	Contact Details
Primary Stakeholders	L		
Mr Mbulelo Mrubata	Bartolomeu Dias Museum	1 Market St	Email: Mbulelo.mrubata@westerncape.gov.za
(Manager)		Mossel Bay	
		6500	
Adv Thys Giliomee	Mossel Bay Municipality:	101 Marsh Street	Tel: +27 44 606 5003
(Municipal Manager)	Municipal Manager	Mossel Bay	Email: admin@mosselbay.gov.za
		6500	
Mr George Van Der	Mossel Bay Municipality:	101 Marsh Street	Tel: +27 44 606 5003
Westhuizen	Planning and Strategic	Mossel Bay	Email: admin@mosselbay.gov.za
(Planning and	Services	6500	
Strategic Services)		0000	
Mr Jaco Roux	Mossel Bay Municipality	Mossel Bay Municipality	Tel: +27 44 606 5071
(Spatial Planner)	Directorate: Planning and	Private Bag X29	Fax: +27 44 690 5786
	Integrated Services	Mossel Bay	Email: jroux@mosselbay.gov.za
		6500	

Full Name and role	Organisation	Postal Address	Contact Details
Primary Stakeholders		I	
Mr Rene de Kock	Our Heritage (Non-Profit	P O Box 20	Tel: +27 44 620 5124
(Chair)	Organisation) / Great Brak	Great Brak River 6525	Mobile: +27 83 448 1966
	River Museum		
			Email: chair.heritage@ourheritage.org.za
Ms Carina Wiggill	Chairperson Mosselbay	Heritage Mossel Bay	Tel: +27 44 691 2347
	Heritage Society	PO Box 774	Mobile: +27 82 687 9744
		Mossel Bay	Email: heritage.mosselbay@gmail.com
		6500	
Dr Nick Walker	Archaeologist and Dias		Email: nickwalker1947@yahoo.co.uk
	Museum Committee		
	member		
Ms Linda	Historian	George Museum	Email: Linda.labuschagne@westerncape.gov.za
Labuschagne			
Mr. Parny Jacoba	Chief of Khao	Croat Brak grag	Mabile: 092 419 2522
		GIOUI BIOK GIEG	MUDILE, U62 419 3323
			Email: barryjacobs9@gmail.com

Full Name and role Organisation		Postal Address	Contact Details
Primary Stakeholders		1	<u> </u>
Mr Edgar Yochanna	The Sabaim	KwaNonqaba	Tel: 044 693 2533
Phillips			Email: thesabaim@gmail.com
Mr Fred Orban	Point of Discovery Centre	Mossel Bay	Mobile: +27 82 550 4788
(Environmentalist)			Email: fred.orban@yahoo.com
Ms Aneli Gerber	Chief Operating Officer	Mossel bay Tourism Office	Email: manager@visitmosselbay.co.za
Mr James Malgas		Art up Close	Email: jamesmalgas@gmail.com
Mr Phillip Hine	Manager: Archaeology,	South African Heritage	Tel: +27 21 462 4502
	Palaeontology and Meteorites Unit	Resource Agency (SAHRA)	Mobile: +27 83 793 3852
		111 Harrington Street	Email: phine@sahra.org.za
		Cape Town	

16 Appendix B: Heritage Tourism in the Western Cape

SITUATIONAL ANALYSIS OF HERITAGE TOURISM IN THE WESTERN CAPE WITH A VIEW OF DEVELOPING MODERN HUMAN ORIGINS SITES AS TOURISM ATTRACTIONS

1. Introduction

Planning for and managing visitor flows is an important part of integrated management planning for a heritage site. If developed as sustainable tourism attractions, heritage sites have the potential to contribute to local economies and communities. However, protecting and maintaining the heritage values of the site should always be the primary concern. This report assesses tourism opportunities for Modern Human Origins sites in the Western Cape, by defining heritage tourism in the given context, evaluating the market for heritage tourism, and suggesting approaches to the sustainable management of tourism at heritage sites.

2. Defining heritage tourism

A first step towards describing the demand for heritage tourism in the Western Cape is to obtain an understanding of key terms and draw definitional boundaries.

The following definition of "heritage tourism" is put forward as a working definition for this study:

Heritage tourism is defined as visitation by visitors to one or more of the following heritage resources that provide a historical experience during their visit to the Western Cape:

- Heritage sites, places and cultural landscapes including: declared World Heritage Sites, Grade1 (national), Grade 2 (provincial) sites and Grade 3 (local) heritage sites and heritage areas, as defined in the National Heritage Resources Act (NHRA), and included in the South African Heritage Resources Agency (SAHRA) data-base and local registers. This definition may include monuments, memorials, buildings and assemblages of building, streetscapes, cultural landscapes, archaeological sites, routes, and other sites of cultural significance.
- Places of interpretation and presentation that describe or show a culturally important event or era in history. These include: national, provincial, province-supported and local museums as well as private, institutional and community museums, interpretation centres, visitor attractions and sites with interpretive signage.

3. Guidelines for developing and managing a heritage tourism attraction

Several policy and strategy documents provide guidelines for the sustainable development of heritage sites as tourism attractions. It is generally accepted that the management of tourism at World Heritage Sites should be in accordance with the International Council on Monuments and Sites (ICOMOS) Charters, as outlined below. A guidance document, Managing Tourism at World Heritage Sites: A Practical Manual for World Heritage Site Managers (2002) and subsequent

documents focus strongly on the issues of visitor management, carrying capacity and sustainability in relation to tourism.

3.1. The UNESCO World Heritage and Sustainable Tourism Programme

The World Heritage and Sustainable Tourism Programme encourages sustainable tourism to World Heritage sites. The overall mission of the Tourism Programme is to aid the World Heritage Committee and site managers to develop tourism as a positive force to retain World Heritage Site values and to help mitigate site threats. The programme focuses on seven activities (that can also be applied to non-World Heritage Sites), namely:

- Building site **management capacity** to deal with tourism;
- **Training local community members** in environment and culture preservation as well as tourism related activities to receive tourism benefits;
- Assist communities around the sites to market their products and use the World Heritage Sites as a lever for local economic and social development;
- Raising public awareness of the site's outstanding universal values, or significance of the site, and **building pride and intercultural dialogue with local communities** and visitors through conservation education;
- Using tourism generated funds to supplement site conservation and protection costs;
- Spreading lessons learned to other sites and protected areas and;
- Raising **awareness of the objectives of the World Heritage Convention**, other UNESCO conventions, activities and policies: for local and national public tourism authorities, tourism industry officials and tourists.

These activities align broadly with other international conventions and charters dealing with sustainable and/ or responsible tourism.

3.2. ICOMOS International Cultural Tourism Charter, 1999

The ICOMOS International Cultural Tourism Charter: Managing Tourism at Places of Heritage Significance, 1999, provides an umbrella statement of principles to guide the dynamic relationships between tourism and places or collections of heritage significance. In addition to recognising the need to safeguard the diversity and universal importance of cultural heritage, both tangible and intangible, the charter promotes two major concepts:

- making the significance of the site, or place, accessible to visitors and host communities in a well managed manner; and
- promoting cooperation between the conservation community and the tourism industry, especially given the fragility of the heritage resource.

The Charter sets our six principles to guide cultural heritage tourism:

• Encourage public awareness;

- Manage the dynamic relationship;
- Ensure a worthwhile visitor experience;
- Involve host and indigenous communities;
- Provide benefit for the local community; and
- Responsible promotion programmes.

The Charter notes that tourism can be a positive force for natural and cultural conservation but gives a note of warning that poorly managed tourism and tourism-related development can threaten the integrity and natural and cultural characteristics of the site.

3.3. International Council on Monuments and Sites (ICOMOS) Charter for the Interpretation and Presentation of Cultural Heritage Sites, 2007

The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, 2007 addresses appropriate goals for heritage interpretation. For example, the principles that should underpin the technical means and methods appropriate to the cultural and heritage contexts as well as the general ethical and professional considerations that should help shape interpretation and presentation of heritage sites. In summary, these principles and considerations include:

- Access and understanding;
- Information sources;
- Context and setting;
- Authenticity;
- Sustainability;
- Inclusiveness; and
- Research, Training, and Evaluation.

4. Heritage tourism attractions in the Western Cape

4.1. The supply of heritage attractions in the Western Cape

The Western Cape has a wide range of heritage sites that include monuments, museums, built environments, heritage precincts, cultural landscapes, places of worship, archaeological sites, fossil sites, caves, middens and rock art sites. However, not all of these heritage sites are accessible to tourists for a variety of reasons, because these are: i) remotely located; ii) located on private land; iii) vulnerable; and/or iv) do not have adequate tourism infrastructure. Regardless, a substantial number of heritage sites attract tourists, of which within the Western Cape's two UNESCO World Heritage Sites attract the most tourists, namely the Cape Floral Region and Robben Island.

4.2. Demand for heritage attractions in the Western Cape

Robben Island is the only heritage tourism attraction in the Western Cape for which reliable records of visitor numbers are available. Furthermore, many sites do not incur entry fees, for example the caves at De Kelders, or track visitor numbers. Given the limited information available, it is difficult to provide further insight into the demand for heritage tourism attractions in the Western Cape.

From heritage sites in other parts of South Africa, such as Maropeng and Sterkfontein, information on visitor numbers is available. Most likely as these paleo-anthropological sites have human origins interpretive centres are part of the Cradle of Humankind UNESCO World Heritage Site and are among Gauteng's iconic tourist attractions.

Figure 1 represents the sum of data available regarding visitation to the human origins interpretive centre and archaeological sites in Maropeng, Sterkfontein and Robben Island.



Figure 1: Number of visitors to human origin sites in South Africa

Source: South African Tourism Annual Reports, 2012 and 2015; Gauteng Tourism Authority (visitor numbers for Maropeng and Sterkfontein not available post 2011)

Both Robben Island and Maropeng are popular tourist attractions and represent the upper reaches of what a heritage tourism attraction can achieve in terms of visitor numbers. However, Figure 2 shows that visitor numbers for cultural heritage attractions, such as Robben Island and the Apartheid Museum, tend to be considerably lower than those of natural attractions.

ATTRACTION OR LANDMARKS VISITED BY TOURISTS IN SA								
Rank	Top 20 Attractions or Landmarks	2013	2014	2015				
1	Cape Town Central City	817 000	774 000	883 000				
2	V& A Waterfront	828 000	918 000	840 000				
3	Table Mountain Cableway	664 000	761 000	722 000				
4	Cape Point	724 000	718 000	664 000				
5	The Winelands	609 000	662 000	559 000				
6	Robben Island	325 000	291 000	317 000				
7	The Garden Route	258 000	325 000	284 000				
8	Kruger Park via Skukuza, Numbi, Malelane, Crocodile Bride	201 000	246 000	242 000				
9	Apartheid Museum	179 000	227 000	208 000				

Figure 2: Number of visitors to human origin sites in South Africa Source: SA Tourism, 2016

5. The market for heritage tourism

5.1. Introduction

Developing an accurate profile and measuring the market for 'heritage tourism' is extremely difficult. Few destinations report on "heritage tourism" as defined in this study, and visitation to historical attractions is often reported under "cultural tourism". Furthermore, information on tourists to South Africa is mostly sourced from SA Tourism's annual reports and profiles of key target markets. These annual reports only mention key indicators reported like number of tourists, purpose of visit, number of bed nights stayed and expenditures. As such, the reports only allow for a superficial understanding of tourists and provide little insight into tourist's motivations, travel patterns and behaviours – including attractions visited other than the top 20 attractions visited nationally.

The following section describes the demand for heritage attractions in South Africa and the Western Cape. In the absence of data on the characteristics of heritage tourism markets in South Africa, the section also presents a summary of market profiles developed in Canada, Australia and the USA.

5.2. The market for heritage tourism in South Africa

Although it is probable that all types of tourists, e.g. leisure, business and religious tourists, visit heritage attractions in South Africa, it is a reasonable assumption that these attractions are most likely to be visited by leisure tourists who are visiting tourism attractions while on holiday. Other leisure tourists, shoppers and those visiting friends and family are less likely to visit heritage tourism attractions. In 2015, 16.5% of all international visitors to South Africa were holidaymakers, 11.2% shoppers and 37.4% visited friends and relatives⁴⁵.

South African Tourism reports that in 2015 visiting natural attractions, beaches and business were among the other popular activities undertaken by foreign tourists. Visiting natural attractions was a more popular activity than visiting cultural, historical and heritage attractions, with 17.3% and 11.0% of all international tourists participating in each activity respectively. Overall there is a declining trend for visiting both natural and cultural attractions, as can be seen in Figure 3 below. This is a long-term trend, as previous South African Tourism annual reports indicate that participation in cultural, historical and heritage based activities stood at 23% in 2006 and 17% in 2008. After a peak in 2014, a drop in visitor numbers was observed in 2015 as a result of regulations by Home Affairs requesting families to have birth certificates with them while travelling to South Africa as well as external unforeseen factors such as Ebola.



Figure 3: Activities undertaken by international tourists to South Africa 2013 – 2015 Source: SA Tourism, 2016

The main source markets for holidaymakers in 2015 were the Americas, Asia, Australasia and Europe. These source markets have different activity patterns. The 2015 SA Tourism annual report⁴⁶ reveals that 44% of tourists from the Americas and ~35%% from Europe visited cultural

⁴⁵ 2015 statistics for tourism performance in South Africa were sourced from: South African Tourism. 2016. Tourism Performance Highlights 2015.

⁴⁶ South African Tourism. 2016. Tourism Performance Highlights 2015.

and historical attractions. The annual report also reveals that 3% of all visitors to South Africa were from other African countries, mainly Namibia, Kenya, Angola, Malawi, Nigeria and Tanzania. The comparative figures for 'visiting natural attractions' and 'wildlife' are: Americas – 57.5% and 48.3%, Europe - 56% and 42.1%, and Africa - 11% and 5%.

5.3. The market for heritage tourism in the Western Cape

Estimating the size of the heritage tourism market in the Western Cape is difficult given the limited information available. However, insight can be gained from the profile of the national heritage tourism market.

In 2015, Europe ranked as the Western Cape's strongest contributor to tourist arrivals, maintaining a solid share of arrivals of 60% across 2014 and 2015 but declined by 6.4% in absolute terms year-on-year from 2014. Africa and the Middle East ranked as the second largest contributor with 20.6 %; the African land market accounted for majority of these arrivals (Figure 4).





Figure 5 provides the top five international markets to the Western Cape by country. The top three markets – United Kingdom, Germany and the USA - are also SA Tourism's international target market segments. Profiles for each of these target markets suggests that tourists from these countries are most likely to visit cultural attractions. Table 1 summarises the travel behaviour and desires of these target segments that market support the argument that they will be the most likely





market for cultural tourism in the Western

Cape.

Table 1: The interest in culture among South African Tourism international target market segments Source: SA Tourism. Marketing South Africa in the UK, USA and Germany. 2006 and 2010

SA Tourism market segment	Geographic scope	Participation in exploring culture while in South Africa	Travel desires
Next Stop South Africa	USA	88%	Highly interested in travelling for education and culture; also show interest in heritage and shopping
	UK	75%	If travelling to South Africa, they are interested in seeing natural beauty, meeting locals, viewing wildlife and culture
	Germany	72%	Mostly interested in natural beauty, wildlife and culture
Wanderlusters	USA	86%	If travelling to South Africa, interested in safari, natural beauty, and culture ; not as interested in shopping and tourist attractions such as museums.
	UK	82%	If travelling to South Africa, interested in wildlife, beach, and culture
	Germany	69%	Looking for nature, culture and variety of things to do in a holiday destination
Senior Explorers	Germany	78%	Culture and great landscape are important factors when deciding on a destination

In terms of the Western Cape's relative position amongst the provinces, its profile in the international tourism market is stronger than in the domestic tourism market. For example, in 2015, the Western Cape ranked sixth as the destination of choice amongst domestic tourists, while the province was the third most popular province amongst international tourists, behind Gauteng and Limpopo.

During 2015, there were 1.8 million domestic trips to the Western Cape, a share of 7% of a total of 24.5 million domestic trips. This is a slight increase from the 1.6 million domestic trips in 2014, but still less than the 2.4 million in 2013. Half of domestic tourists to the Western Cape visit the province to visit friends and relatives, whereas a third are holidaymakers. The province attracts the highest portion of domestic tourists travelling for holiday purposes.

Domestic tourists generally engage in unpaid activities, such as social activities associated with VFR travel. Generally, a very small minority of domestic tourists visit cultural, heritage or historical attractions when travelling in South Africa.



Figure 6: Activities of domestic tourists in South Africa Source: SA Tourism, 2016

The trend reports published by the tourism marketing organisation of the Western Cape, WESGRO, reveals that visitors to the Western Cape are more inclined to participate in culture/heritage activities than visitors to South Africa. For example, in 2014, ~15.3% of all visitors were engaging in culture/heritage activities. International visitors had a slightly higher rate of

participation than the domestic market. The 2015 Western Cape provincial report is not yet available and hence the rate of change in interest in culture/heritage activities between 2014 and 2015 is not known. However, regional reports for the Winelands and Cape Town confirm the relatively higher participation rate in culture/heritage activities by both international and domestic visitors.



Figure 7: Activities of tourists to the Western Cape (Source: WESGRO, 2015)

In a gap analysis study conducted in 2012, 11 tourism experts were asked to identify and prioritise the development of new tourism products for the Western Cape. Nature, contemporary culture and cuisine-based products ranked the highest and historical culture ranked sixth out of 16 tourism products. However, the development of historical cultural tourism product received strong support, having scored 45 out of a maximum of 55 points⁴⁷.

5.4. Heritage tourism market profiles

In the absence of information about heritage tourism in South Africa, other information sources need to be consulted, interpreted and applied to the South African and Western Cape context where possible. The following sections provide an overview of cultural heritage tourism markets in Canada, the United States and Australia – destinations that report on the activities that define heritage tourists, namely:

• Visiting heritage sites, places and cultural landscapes; and

⁴⁷ Van der Merwe JH, Van Niekerk A. Application of geospatial technology for gap analysis in tourism planning for the Western Cape. S Afr J Sci. 2013;109(3/4), Art. #1226, 10 pages. http://dx.doi.org/10.1590/sajs.2013/1226

• Visiting places of interpretation and presentation.

The overview hones in on the characteristics of participants in cultural heritage tourism, with the aim to distil a profile/s of this market segment. Deriving an accurate estimate of the size of the global market is, however, more complex. The presentation of figures and statistics in this section attempts to provide a sense of the relative scale of this market.

5.4.1. Canada: Domestic cultural and heritage market segments

Canada has undertaken extensive research into the activities and motivations of both the Canadian domestic market and its major foreign source market, the United States (US). Visiting Historical sites, Museums and Art Galleries (HMA) is one of the activity groupings generated from variables within the Travel Activities and Motivation Survey (TAMS).

The following sections provide more in depth descriptions of the domestic and US Historical sites, Museums and Art Galleries (HMA) enthusiasts⁴⁸.

Canada's Historical sites, Museums and Art Galleries enthusiasts

Of the 24.7 million Canadian adults in 2006, about 10.7 million (43.4%) visited a historical site, museum or art gallery on a trip during 2004 and 2005. Other than shopping and dining, visiting historical sites, museums and art galleries was the most common activity undertaken by Canadian Pleasure Travelers while on trips in the past two years. Of those who visited historical sites, museums and galleries, 29.2% reported that this activity was the main reason for taking at least one trip.

The majority in this travel segment are married (67.9%), older than 35 (67.4%) and live in adultsonly households (73%). However, they are slightly more likely to have a university degree (37.3%) and their household incomes (\$76,691) are slightly above average. They seek intellectually stimulating holidays that provide novelty and opportunities to learn. Strolling around a city to observe buildings and architecture, was the most popular activity (30.6%), followed by visits to well-known sites & buildings (22.5%), other sites & monuments (18.5%), viewing natural wonders (18.1%) and visiting general history museums (17.4%), art galleries (14.5%), historical replicas (7.9%), military museums (7.1%) and paleontological or archaeological sites (5.4%).

This activity segment is an average user of the internet to plan and book travel. However, they are above-average consumers of travel media and can also be effectively targeted through science and nature media, history and biography television programs and magazines and news and current events media.

⁴⁸ Canadian Tourism Commission. Canada's Heritage Tourism Enthusiasts

More recent statistics indicate that cultural heritage tourism, particularly visiting historical sites, continues to grow (Table 2)49.

	2007	2008	2009	2010
Visitor numbers	4,818,912	5,103,318	5,277,696	5,479,216
Percentage change		6%	3%	4%

Table 2: Overnight domestic tourists visiting historical sites: 2007-2010

5.4.2. United States: Cultural and heritage tourism market segments

The United States is South Africa's second most important overseas market, and a key market for the Western Cape and Cape Town. The following sections provide more in depth descriptions of the Historical Sites, Museums and Art Galleries activity segment.

At 91 million, adult American that visited Historical sites, Museums and Art Galleries (HMA) represent 41.4% of the 176 million Americans who took trips over a two-year period (or 53.5% of the 170 million Americans who took leisure trips). Other than shopping and dining, visiting historical sites, museums and art galleries was the most common activity undertaken by US Pleasure Travellers while on trips in 2004 and 2005.

Visiting HMA is a fairly strong motivator, with 32.8% (29,941,969) reporting that this activity was the main reason for taking at least one trip in the previous two years. They are more likely than the average US pleasure traveller to seek vacation experiences that offer opportunities to learn (e.g., see or do something new and different, enrich perspective on life, gain knowledge of history and other cultures or places, stimulate your mind).

Within the general category of visiting HMA, 'strolling around a city to observe buildings and architecture' (25.6%) was the most popular activity, followed by 'visits to historical sites or buildings' (23.1% well-known sites and buildings, 19.2% less well-known sites and buildings), 'visits to well-known natural wonders' (16.3%), 'visits to museums' (15.0% general history, 7.9% military), 'visits to art galleries' (11.1%), and 'visits to historical replicas of cities or towns' (7.2%.) They are somewhat older than the average U.S. Pleasure Traveller (46.4 versus 45.4), most live in adult-only households and almost two thirds are likely to be in the market for performance based tourism experiences that take into account the interests and needs of teenagers or children. They are more likely than the typical US traveller to have university level qualifications (65.3%). Their household income (\$80,734) is above average. They tend to live in mid-sized and larger cities.

⁴⁹ The Federal-Provincial-Territorial Ministers' Table on Culture and Heritage (FPT). 2012. Cultural & Heritage Tourism: A Handbook for Community Champions. Canada

Most travellers in this segment use the Internet to plan their trips (77.5%), and 57.1% booked at least part of a trip online in the past two years. They are more likely than the average U.S. Pleasure Traveller to obtain travel information from official travel guides and brochures and they are avid consumers of travel-related media (especially magazines) and news and current events media (e.g., talk & news radio, newspaper websites, network news websites). These are prime media channels by which to reach this segment.

5.4.3. Cultural heritage travellers in the US

The US National Travel and Tourism Office reports on cultural heritage tourism in their Cultural Heritage Traveler report, the most recent report released in 2014. The number of cultural heritage tourists to the US has grown year-on-year between 2010 and 2014, although this growth has not been consistent (Table 3). More than half of all tourists visiting the US are cultural heritage tourists.

	2010	2011	2012	2013	2014
Overseas visitors* (000)	15369	16590	16815	18294	19619
% change	14	8	1	9	7
Share of overseas visitors	58.3	59.5	56.5	57.1	57.0
Point change in share	1.5	1.2	-3.0	0.6	-0.1
Overseas visitors					

Table 3: Number of overseas cultural heritage tourists to the US: 2010 – 2014 Source: US National Travel and Tourism Office * Excludes Mexico and Canada

Four of South Africa's main international source markets, the United Kingdom, Germany, China, France and Australia, are also among US' top five cultural heritage source markets (Table 4).

Table 4: Source countries of cultural heritage travellers to the US: 2013/2014.

	Market share (%)	Volume (000)	Market share (%)	Volume (000)
Visitor origin	2013	2013	2014	2014
United Kingdom	13.9	2,543	14.0	2,747
Germany	7.7	1,409	7.5	1,471
Brazil	7.8	1,427	7.4	1,452
China	5.7	1,043	6.8	1,334
France	6.6	1,207	6.3	1,236

	Market share (%)	Volume (000)	Market share (%)	Volume (000)
Visitor origin	2013	2013	2014	2014
Australia	5.5	1,006	5.9	1,158
Japan	7.0	1,281	5.9	1,158
Korea, South	4.0	732	4.2	824

Most cultural heritage tourists visiting the US in 2014 were leisure tourists (89%) on holiday (77%). Visiting historical locations was the fifth most popular activity that 46% of all cultural heritage tourists engaged in during 2014.

5.4.4. Cultural heritage tourism in Australia

The Cultural and Heritage Tourism in Australia 2006 snapshot⁵⁰ reports on the performance of cultural and heritage tourism in Australia for that year. Between 1999 and 2006 there was a 4% increase in the number of international cultural heritage tourists. International cultural tourists were very likely to engage in more than one type of cultural activity while travelling, however visiting a history or heritage building (61%) sites was the most popular activity while in Australia.

Of the 2.6 million international cultural and heritage visitors, 17% were from the UK, 16% from other European countries and 14% from New Zealand. Importantly, the UK and several European markets are also South Africa's main overseas source markets. Of these two markets, 18% of UK and 22% of other European cultural heritage tourists arrived in Australia on travel packages. There was a fairly even spread among the age groups of international cultural and heritage visitors during 2006.

During the eight-year period over which the research was conducted, the number of domestic cultural tourists in Australia grew slightly to 9.8 million visitors. Visiting historical/heritage buildings, sites or monuments was the second most popular activity type among domestic cultural and heritage visitors (31%), second only to visiting museums and art galleries. Cultural and heritage tourism activities were most popular with domestic visitors aged 45 years and over.

International cultural and heritage visitors spent on average more than three times the amount spent by domestic overnight visitors.

The latest research from Tourism Research Australia indicates that the strong annual growth in the number of international tourists visiting monuments and heritage buildings, with a 25%

⁵⁰ Tourism Australia. 2007. Cultural and Heritage Tourism in Australia 2006.

increase in 2015 for the year ending December 2015⁵¹ and an 18% increase for the year ending March 2016.⁵²

⁵¹ Tourism Research Australia. 2016. International Visitor to Australia – Year Ending December 2015.

⁵² Tourism Research Australia. 2016. International Visitor to Australia – Year Ending March 2016.

17 Appendix C: List of sites at Pinnacle Point Site Complex

The below Table 1 provides an overview of the sites with a basic description and accessibility status at Pinnacle Point Site Complex, as provided in the Archaeological Conservation Management Plan 2009 and revised after a site visit in 2020.

Site Number	Basic Description & Status of Access
PP01	Large coastal caves with MSA deposits & geological features. Off limits.
PP02	Small cave with very few artefacts
PP03	Open air shell middens of LSA origin with stone artefacts and flakes.
PP04a and b	Open air shell middens of LSA origin with stone artefacts. Off limits.
PP05	Large coastal cave with LSA & MSA deposits and geological features. Off limits. Partial Access with mitigation.
PP06	Large coastal cave with LSA & MSA deposits and geological features. Off limits. Partial Access with mitigation.
PP07	Small rock shelter with fragmented marine shell (also see Section 2.3.1.are PP07 lower). Off limits.
PP08	Large coastal cave with few MSA artefacts outside cave. Partial Access.
PP09	Large coastal caves with MSA deposits & geological features. Off limits.
PP11	Small coastal caves with MSA deposits and geological features. Off limits.
PP10	Small coastal caves with MSA deposits and geological features. Off limits.
PP12	Small coastal caves with MSA deposits and geological features. Off limits.
PP13A, 13B, 13C, 13D, 13E, 13F & 13G	Suite of large and small coastal caves with MSA deposits and geological features.
PP14	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance

Table 1: Overview of the sites with a basic description and accessibility status at Pinnacle Point Site Complex⁵³

⁵³ Nilssen, P., Marean, C. and Yates, R. 2009. Archaeological Conservation Management Plan (ACMP). Centre for Heritage and Archaeological Resource Management cc (CHARM). Great Brak River, Mossel Bay, South Africa.

Site Number	Basic Description & Status of Access
PP15	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance
PP16	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance
PP17	Open air, extensive and mostly low density scatters of MSA artefacts under the Cape St B;aize Trail. Low significance
PP18 and 18a	Open air shell midden of LSA origin. Off Limits. Fenced off as per HWC requirements.
PP19	Open air, stratified shell midden of LSA origin. Off limits. Fenced off as per HWC requirements.
PP20	Open air shell midden of LSA origin. Fully excavated and mitgated for development.
PP21	Large coastal cave with few MSA artefacts at mouth and geological features. Partial Access.
PP22	Open air, extensive and mostly low density scatters of MSA artefacts. Located outside the boundaries of the proposed WHS Propoerty. Site of low significance.
PP23	Open air quarry site of MSA origin. Partial Access.
PP24	Open air, extensive and mostly low density scatters of MSA artefacts. Mostly already destroyed by construction activities and the establishment of a pipleine. Low significance - Outside the proposed WHS boundariees
PP25	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance
PP26	Open air, extensive and mostly low density scatters of MSA artefacts with a few artefacts of ESA origin. The site is outside the proposed WHS Property in a very disturbed area. Low significance.
PP27	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance
PP28	Open air, extensive and mostly low density scatters of MSA artefacts (a few artefacts of ESA origin were noted at PP 26) Note: most already destroyed by construction activities. Low significance
PP29	
PP30	Subterranean deposit of probable Pleistocene age with mostly carnivore accumulated bones. Sealed.
PP31	Open air, stratified shell midden of pottery period origin. Off Limits.
PP32	The site was fenced off as required by Heritage Western Cape. It is located close to a recently built house. Two distinct layers of occupation.
PP33	Pottery shards

Site Number	Basic Description & Status of Access
PP35	Pottery shard
PP36	
PP37	Open air, extensive and mostly low density scatters of MSA artefacts under the Cape St B;aize Trail. Low significance. It might be the same as PP17 cut by the trail.
PP38	
PP49	
PP40	LSA shell midden in the adjacent property. Outside the proposed boundaries of the proposed WHS Property.
PP41	LSA shell midden exposed in the Cape St Blaize Trail. Mostly shells and stone artefacts.
PP42	LSA shell midden
PP43	Small exposed shell and artefact scatter of low density.
Geological sites	
PP-g01 - Crevasse Cave	Coastal cave with geological features. Off Limits
PP-g02 - Tunnel Cave	Coastal cave with geological features. Off Limits.
PP-g03	
PP-g04	Raised beach under gally
PP-g06	Mostly shells, possibly a midden on unclear origins
Staircase Cave	Relic coastal cave with geological features. Partial Access.
18 Appendix D: Architectural Guidelines for the Pinnacle Point Estate

The Integrated Conservation Management Plan for Pinnacle Point Site Complex was compiled by EcoAfrica Environmental Consultants under the direction of Heritage Western Cape



	Author:	PPARC	Effective Date:	01/07/2009
				1 July 2015
				1 June 2016
PINNACLE POINT beach and golf resort				1 June 2017
	Approver:	PPHOA Board	Revision No:	06
	Doc. No:	Draft 001		

ARCHITECTURAL CODE – REVISED – JUNE 2015 REVISED _ MAY 2016 REVISED _ JUNE 2017

	Author:	PPARC	Effective Date:	01/07/2015
	Approver:	PPHOA Board	Revision No:	05
PINNACLE POINT beach and golf resort	Doc. No:	Draft 001		

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	Author:	PPARC	Effective Date:	01/07/2015
	Approver:	PPHOA Board	Revision No:	05
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1. General Provisions

1.1 These guidelines are for free standing plots only.

1.2 Sketch plans as well as 3D's shall be submitted to the Pinnacle Point Home Owners who will then circulate these plans to the Pinnacle Point Architectural review committee for comment prior to submission of formal plans to the Pinnacle Point Architectural Review Committee (PPARC) for first meeting.

- 1.3 Site analysis shall be conducted by the Architect and take cognisance of the following before designing:
 - Red Data Species (position, amount, types, etc.)
 - Position of Services (fire hydrant, etc)
 - Ground/soil conditions
 - Slope of site and orientation
 - Practical position and layout of house
 - The gradient of a driveway to be 1:8 (12%) maximum gradient, if there are any discrepancies, these will be approved on merit.
- 1.4 The architect / competent representative (someone who understands technical discussions) should present the plans on the first meeting
- 1.5 Design Architects should be registered with the South African Council for the Architectural Profession (SACAP). Registration number should be on the plans.
- 1.6 Plans for all buildings; alterations and additions shall be submitted to the Pinnacle Point Architectural Review Committee (PPARC) for approval, insofar as design and position are concerned. Variances shall be based on the basis of architectural merit and not on hardship.
- 1.7 A scrutiny fee of R10 000 excluding VAT for new plans and R5 000 excluding Vat for alterations to an existing dwelling, is payable on or before the day of the PPARC meeting. No plans will be reviewed without payment of this fee.
- 1.8 All plans must first be approved by PPARC before being submitted to Mossel Bay Municipal Council.
- 1.9 Alterations should be approved by all neighbours concerned before plans are submitted to PPARC for final approval.
- 1.10 Decisions taken by PPARC shall be binding and final. An explanation of non-compliance will be issued.
- 1.11 PPARC members are indemnified of any decisions taken.
- 1.12 In addition to the provisions of the Pinnacle Point Urban Code and this Architectural Code, all construction is subject to the provisions of the Mossel Bay Council, National Home Builders Registration Council and the National Building Regulations/SANS10400. Compliance to these regulations stays the responsibility of the Professional submitting the above plans. All details, review and inspection procedures described in these regulations and the design approval process are intended to assure compliance.
- 1.13 All contractors shall be approved by the Pinnacle Point Home Owners Association (PPHOA). The main contractor and all his subcontractors shall be licensed as required by the relevant Departments (see 1.14 above). The general contractor shall warrant all materials and workmanship to be excellent quality. A competent Registered person must be appointed for the site administration. All contractors shall carry insurance as follows:
 - Department of Labour registration
 - NHBRC registered
 - MBA (Master Builders Association).
 - Workmen's compensation as required by law.
 - Public Liability: agreed sum for each accident occurrence

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- There should be a mandatory agreement between the Owner and Principal Contractor as well as a Principal Contractor's Legal appointment document.
- Health & Safety Plan
- Letter of Good Standing
- JBCC to be conducted for Construction The main contractor shall furnish to the owner evidence of the above insurances and shall secure the same from all subcontractors.
- 1.14 Environmental management as per the PPHOA Environmental Management Plan must be adhered to at all times during Construction.
- 1.15 These Guidelines should be read in conjunction with the Landscaping Guidelines, the ROD, House Rules and Memorandum of Incorporation.
- 1.16 Any deviations unspecified in the guidelines must be submitted to PPARC for approval.
- 1.17 The approval of plans by ARC does not constitute approval of Landscaping and/or Storm water plans.
- 1.18 Only single-phase electricity is available and this should be taken into consideration when designing a home.

2. General Construction Requirements

- 2.1 There shall be no more than one dwelling unit per erf with a total FAR of 0.5 and a coverage not exceeding 40%.
- 2.2 An area schedule similar to the following should be shown on all drawings:

AREA SCHEDULE: SITE AREA :m² $....m^2 = min. 40\%$ COVERAGE : FLOOR AREA RATIO :0.5 UNDISTURBED AREA :m² = min. 25% Normal Residential and Fynbos and 40% on footprint plots : $m^2 = min. 15\%$ REHABILITATED AREA ALL FLOOR AREAS (SEPARATE)m² TOTAL FLOOR AREA :m²

2.3 Floor Area Ratio (FAR)

- 2.3.1 The Floor Area Ratio (FAR) is the ratio of the total floor area of a building on a certain location, to the size of the land of the location, or the limit imposed on such a ratio. The floor area ratio is thus the total building area divided by the site area.
- 2.3.2 Total Building Area is the total covered area on all floors of all buildings on certain plot and is thus the sum of all floors of all storeys, including basements. Floor area to be measured from

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the outside of external walls. Covered parking space may be subtracted from the total FAR to a limit of $72m^2$ or parking space for 4 vehicles.

- 2.3.3 The following should be taken into consideration when calculating FAR:
 - Staircase well is counted as two storey building.
 - Garages and covered parking to a limit of 72 square meters may be subtracted from FAR.
 - Roof overhangs exceeding 900mm is counted as coverage.
 - Basement or inhabitant areas are counted as part of FAR.

3. Landscape – please refer to approved Landscape Guidelines

- 3.1 A full landscape plan should be submitted by a PPHOA accredited Landscaper with the approved list of plants before handover. A revised landscape plan may be submitted at a later stage.
- 3.2 All landscape plans must have a minimum of 10% of the plants replanted as food species for the Fauna on the site. A list is available from PPHOA.
- 3.3 Existing foliage shall be protected by 1800 high minimum 80% green shade cloth and Bonnox fence, screening it off from construction activities. The construction fence to be a minimum of 1.5m away from paved or single storey areas and 2.5m away from double storey areas. No plans will be considered for scrutiny if the construction fence and undisturbed areas are not indicated.
- 3.4 The construction fence must be indicated on the site layout plan with submission.

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See sketches



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EXAMPLE: SITE AREA - 1 000m²





UNDISTURBED AREA (NO GO) - 250m² = MIN 25%



REHABILITATED AREA (LANDSCAPED) - 150m² = MIN 15%



HARD SURFACE (DRIVEWAY, DECKS, APRONS)- 100m2 = MAX 10%



SOFT SURFACE (LAWN) - 100m² = MAX 10%

MAX 20%

Figure2: Site Legend

- 3.5 25% undisturbed area shall not be less than 3m wide at any point.
- 3.6 Search and Rescue plants are to be replanted on site.
- 3.7 A 2.5m hoarding building line area is allowed.
- 3.9 No construction shall take place within a minimum of 1.5m from the cadastral boundary.
- 3.8 Courtyard (atrium) should be sealed at all sides and be roofed.

4. Storm water - please refer to approved Landscape Guidelines

- 4.1 Pre-and post-storm water controls should be reflected on the plan that is submitted.
- 4.2 Storm water runoff pre-construction should equal storm water runoff post-construction.
- 4.3 Should the cal Crete layer be disturbed in construction, a suitable impervious layer (waterproof membrane) is to be placed back to prevent water seeping below the cal Crete layer.
- 4.4 All storm water to be designed by a registered Civil Engineer and all work to be carried out under his supervision. A final certificate is to be handed over to PPHOA.

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5. Irrigation – refer to Landscape guidelines

6. Footings & Structure

6.1 Basements

- Basements are not recommended, if allowed it should be uninhabitable and accommodating a maximum of 4 cars including golf cart.
- Positions and size of basements should be approved by PPARC with a maximum depth of 3.5m including footings and footing excavations not to exceed 3,5m.
- Midpoint of basement to be at 2m below natural ground level to qualify as basement area as per Local Authority Definition.
- All basements must be naturally ventilated.

See sketch overleaf.



Figure 3: Basement

6.2 Plinth Walls

Plinth walls and columns are restricted to a maximum height of 1.5m above natural ground level.

6.3 Plan Layout

No 45 degree angled walls will be allowed.

See Sketch overleaf.

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Timber Footings and Structure

- Timber structures where applicable shall be clear treated hardwoods.
- A structural engineer must certify foundations and structure.

6.5 Height Restriction

Restrictive heights shall be measured from the mean existing contour lines of the site. The height line approved for Pinnacle Point by Mossel Bay Council is 8.5metres above this line at any point on the site. Height lines to be indicated on all elevations and sections.

See sketch overleaf.



Figure5: Height Restriction

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7. Roof Structure

- 7.1 Roof Pitch as per the Pinnacle Point traditional guidelines– **Refer Point 23 of guidelines for modern design.**
 - All pitched roofs shall be a minimum of 20 degrees and a maximum of 30 degrees.
 - Roof pitch above porches and ancillary structure shall be a minimum of 20 degrees.
 - Main roofs must be symmetrical about their peaks.
 - Lean-to (linked-to) roofs will be permitted only when abutting vertical parapet walls on three sides. The roof pitch of the lean-to should be half of the pitch of the main roof.

See sketch overleaf.



Figure6: Lean-to roof

7.2 Verandahs or Covered stoeps are allowed subject to the above.

7.3 Flat Roofs – Refer 23 of the Guidelines

- Flat roofs not within the modern design option should not be more than 10% of the total roof area on plan.
- Flat roofs may be used as linking elements between pitch roofs.
- Eyebrows protruding more than 900mm will be perceived as flat roofs.
- Facias, if any, must completely cover rafter tails.
- Pergolas are allowed if framed with floating concrete beam and proportions to suit Design of House. Approval to PPHOA discretion.

7.4 Overhangs

- Roof overhangs should be a minimum of 450mm.
- Roof overhang is measured horizontally from outside of wall to inside of facias board.

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7.5 Skylights

- The uppermost projection of the skylight must not protrude higher than the parapet wall surrounding the flat roof area.
- Pitch should be kept to a minimum.
- Skylights must preferably not be visible from the perimeter of the site.
- No roof lights or dormer windows allowed

7.6 Solar Panels

- The use of solar panels for generating electricity and solar heated hot water systems are encouraged. Energy efficiency per SANS10400.
- Remote tank and panel system to be used thus combined tank and panels on roof area not allowed.
- Panels to be installed at the same angle as the roof.
- Solar panels to be indicated on roof plan for approval by PPARC and must be planned into the overall design. Visibility should be kept to a minimum.

7.7 Chimneys

- The highest point of the chimney should be not more than 1m above the ridgeline of the roof.
- Any exposed stainless steel flues must not exceed 1.2m in length.

7.8 Drying Yards and Refuse Areas

- Drying yards and refuse areas to be enclosed and height to be 2.1m maximum.
- Any length of yard wall may not exceed 25% of the corresponding boundary length.
- The entire surface of both sides of the yard walls must be finished to match the dwelling.
- Floor finish should match that of driveway.
- Gates to be timber or aluminium in vertical or horizontal panels and may not be higher or lower than the wall.

8. Exterior Finishes

- 8.1 All timber exposed to the weather shall be SABS approved and finishing according to PP Architectural Guidelines.
- 8.2 Fibre cement ship-lap boarding may be used for timber framed houses or as a cladding on brick houses.
- 8.3 All exposed brick walls shall be smooth plastered with a paint finish.
- 8.4 Face brick will not be allowed.
- 8.5 Stone cladding shall be natural stone only no stone tiling allowed.
- 8.6 Paint Finishes
 - All exterior colours shall be approved by the PPARC.
 - Trim around openings shall be of a contrasting colour.
 - When repainting, the original color scheme shall be repeated or a new color scheme must be submitted for approval.
 - Textured Paint Finishes shall be considered for approval.
- 8.7 Plaster

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- Spanish and similar plasters are not allowed.
- A sample of Rough Scraper Coat Plaster shall be approved by PPARC prior to commencement.
- Bagged wall finish is not allowed.

9. Windows & Doors

- 9.1 Sliding, casement, or double hung windows are allowed. Individual windows and porch openings, when rectangular shall be square or in the proportion 1:1.6 wherever possible.
- 9.2 Materials may be the following:
 - Timber
 - Anodized or powder coated aluminum (final colours, sections and shape shall be approved by PPARC).
 - UPVC Fan-light windows, circular windows, stained glass or other windows must be submitted for approval to the PPARC.
- 9.3 In areas where obscured glass is required, only frosted or sandblasted glass colour will be allowed. Position application and colour to be approved at PPARC discretion.
- 9.4 Glass standards to conform to SANS10400. Glass used must be fully non-reflective and no mirror glass will be allowed.
- 9.5 Privacy screens or shutters may be used. Non-functional decorative shutters will not be allowed. The material and colour should complement that of the Main House. Timber cladding not recommended due to ongoing maintenance issues.

10. External Stairs and Railings

- 10.1 Vertical retaining walls higher than 1m to have balustrades, and should be stepped with planters.
- 10.2 Glass balustrade allowed for approval by PPHOA.

11. Fasteners

11.1 All bolts, nails, staples, hinges, etc exposed to the weather shall be hot-dipped galvanized steel, stainless steel or brass.

11.2 Contractor shall provide adequate tie-down system consisting of anchor bolts, strapping and clips required for the particular connections within the structure.

11.3 Bolts and nails shall be counter-suncked or secret fixed to all facias, barge boards etc.

12. Roof Cladding

12.1 Rain water gutters and downpipes **MUST** be provided to all roofs, with a controlled run off at ground level. If downpipes are not used an approved apron surround must be provided.

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- 12.4 Steel Sheet Roof colour or any other roofing material should be in the grey range between dove grey and charcoal.
- 12.5 Concealed down pipes are encouraged.
- 12.6 The following roof types and colours are allowed: Shingle tiles slate grey and slate yellow rustic colours
 - Corrugated profile aluminium roof sheets.
 - Modern Flat Profile Cement Roof Tiles Charcoal or Grey in Colour
- 12.7 The following roof types will not be allowed:
 - Fibre Cement Roofs
 - IBR Sheeting (Specifications must be indicated)
 - Klip-Lock

13. Sewer Lines

- 13.1 All sewerage, water, electrical, telephone, and television service drops shall be underground.
- 13.3 All external plumbing and pipe work on the façade must be enclosed in a duct or concealed in walls.
- 13.5 All sewer pipes and plumbing should be concealed in vertical ducts flush with the external walls. All electrical conduits, wiring, piping, etc. should be concealed.
- 13.6 A sewer inspection chamber to be provided (as per Municipality request) between municipal sewer connection and domestic sewer line, approximately 1.5m from boundaries

14. Exterior Lights

- 14.1 Exterior light fixtures shall use light bulbs of 60 watts or less with energy saving lamps preferred.
- 14.2 Lights shall be placed so that they do not shine directly at neighbours.
- 14.3 All exteriors fixtures shall be approved by the PPARC prior to installation.
- 15.4 All entries from streets or footpaths shall have at least one bollard light placed at the intersection of the path to the street or cartpath so that light is cast on both the street or cart path and the entry.

15. Air Conditioning

- 15.1 Air-conditioning compressors shall be screened or fenced so that they are not visible and so that the sound transmission to neighboring properties is minimized and within the relevant standards.
- 15.2 All air-conditioning condensers should be installed at ground level not higher than 1.2m above finished floor level..
- 15.3 Window mounted units will not be allowed.
- 15.4 Positions to be indicated on plans at approval stage.

16. Aerials

- 16.1 All satellite dishes and TV aerials to be fitted below main building eaves line.
- 16.2 Aerials, roof fixtures, satellite dishes and solar panels must match the colour of the wall or roof if visible. No device may project above the ridge line of roof.
- 16.3 Position of satellite dishes should be shown on plan at approval stage and a final position to be indicated to PPHOA prior installation.
- 16.4 Generators should be housed underground and noise to be contained.

17. Driveway surfaces

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- 17.1 Every plot excluding footprint plots must have off-street parking for at least two cars in addition to garages. Driveways must be a maximum of 6m wide at road reserve.
- 17.2 Driveways in excess of 12m may not be wider than 3m.
- 17.3 Driveways shall be constructed of either approved brick pavers or cobbles.
- 17.4 No tarred or cement surfaces allowed.
- 17.5Grass blocks refer to Landscaping guidelines

18. Plot display signage

- 18.2 All houses must display plot numbers using 75mm to 100mm stainless steel numbers in a blockletter style. Numbers shall be placed on entry door post or header so as to be visible from the street or cart path.
- 18.3 The signage for plot numbers should be incorporated into approval drawings and conform to guidelines.
- 18.4 No signage on houses except Plot number shall be allowed.

20. Fences

- 20.1 Fences will be allowed on approval by PPARC.
- 20.2 Any fence must be constructed in timber or fibre cement to an approved design.
- 20.3 Swimming pool fencing will be as per PPARC approval.
- 20.4 If a retaining wall exceeds 1 meter in height a balustrade as per the NBR design to be submitted for approval.

21. SWIMMING POOL SAFETY

21.1 All swimming pools must comply with the National building regulations. Rails around the swimming pool to match that of the house.

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22. MINIMUM SIZE:

- 22.1 Minimum size of any dwelling unit 250m² covered.
- 22.2 Measured to the inside of external walls. The above area can include Enclosed Covered Garages and Covered Patios.
- 22.3 The area to exclude pergolas, adjustable louvre or similar systems.
- 22.5 These areas should be clearly defined in the area schedule with reference to the plans.
- 22.6 The 250m² should be apparent above Natural Ground Level and not hidden in Basement Levels or other.

23. IMPLEMENTATION OF MODERN ARCHITECTURE IN CONTEXT: (OPTION 2)

- These considerations have been included to accommodate an option for a modern design on the Estate.
- By submitting a modern design the Home Owner agrees to the stringent procedure and conditions as set out below.
- PPARC, to its sole discretion, has the authority to reject or advise a design.
- **Context and Design** would be one of the main evaluation points as to ensure continuity and safeguard current developments.
- It is advised that the Registered Professional meet with PPARC prior to Design Development.

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The Home Owner, by employing these guidelines agrees to completely adhere to the guidance of PPARC as to ensure continuity in the Estate. The submission risk lies with the Home Owner.

23.1 CONTEXT:

A Design within a cluster of traditional designs would require harsher scrutiny than that in an undeveloped cluster.

No submissions will be considered without the following documentation:

Cluster Identification:

- A Photo record of the applicable cluster and the position of the erf within this context.
- The record should be easy identifiable inclusive of a location plan explaining the position of the erf.

Neighbor Identification:

- A Photo record of adjacent properties and a clear description if built up or not.
- A site topography report with reference to Sections.
- A 3D rendering indicating the proposed building in Context to its neighboring properties.
- A Report motivating roofs, i.e. Site Slope Analysis, North Light, etc. All records to be in colour.

23.2 PROCEDURE:

- The submission fee for above available from PPHOA.
- An extra scrutiny architect will be engaged.
- Main Scrutiny Objective: Context
- Secondly, Design.
- Basic sketch plans shall be submitted to the Pinnacle Point Home Owners for an orientation meeting before submission of formal plans to the PPARC.
- Should the proposal be found viable the architect can proceed with normal procedures.
- If there are recommendations, an explanation of non-compliance will be issued.
- Decisions taken by PPARC shall be binding and final.
- PPARC members are indemnified of any decisions taken.

23.3 DESIGN PRINCIPLES:

- A cluster of flat roofed blocks not allowed.
- The focus should be the prominent form of the house.
- Forms should be kept simple and minimalistic.
- Straight consistent and continuous horizontal lines promoted.
- Simple roof forms (that are broken up and joined by flat concrete roof structures).
- Mono Pitch roofs must be a treated steel or timber based structure to enhance structural components.
- Floating mono-pitched roofs must be pitched between 5-7 deg.
- Mono Pitch roof must slope with contours and not contradict.
- Steel elements and glass must be present in the core design.
- Overhangs on pitch/wall must be a min of 450mm (subject to evaluation of HOA)

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• Dual Pitched roofs in Modern Design Envelope must pitch between 20 and 30 deg.



• Maximum span of the roof section to be 6m (overhangs excluded).

The flat roof area in the core design not to exceed 60%

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- •
- No single area of flat roof more than 20% is recommended (subject to evaluation of the HOA)
- All open concrete roofing in Modern Design shall be covered with stone dressing to approval. Guarantees as per the Architect.
- Soft exterior lighting is recommended to enhance structural elements.

MAINTENANCE: Must be a major consideration in the design of Option 2 and 3 of these guidelines.

OPTION 3 INCREASED CONCRETE ROOFS:

All the guidelines as per Option 2 applies.

- A 100% concrete roof will undergo harsh scrutiny and should be considered when this option is applied. The final discretion and viability of the design will be determined by the Design Review Panel.
- A broken skyline will be a main consideration with special reference to the location of the dwelling.
- Strong vertical lines are recommended.
- A cluster of blocks is not recommended.
- The focus must be on the prominent form of the structure. Add-on modern elements may not be used where homes are in essence not contemporary structures.
- Structures must have deep recessed glazed areas and/or walls creating depth on the facades.
- Material/finishes complementing the form of the structure must be selected.
- Home must be simple yet sophisticated, elegant and timeless buildings.

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- All concrete flat roofs must be dressed in stone aggregate, plated roof gardens or sections of synthetic grass. The Home Owner is responsible for the upkeep and guarantees of flat roof areas.
- All flat roof dressing material detail must be indicated on the plans.

Avoid Combination of Traditional and Contemporary Guidelines

<u>**NB**</u>: This code is the latest version of the document originally written in November 2002 which may be revised from time to time as conditions warrant.

PPARC - Revised October 2008 PPARC – Revised July 2009 PPARC – Revised June 2015 PPARC – Revised June 2017

Sibhudu Cave

Integrated Conservation Management Plan

2021-2026

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Acronyms

ACHP	Advisory Council on Historic Preservation
ASAPA	Association of Southern African Professional Archaeologists
CBD	Convention on Biological Diversity
DSRAC	Department of Sport, Recreation, Arts and Culture
GDP	Gross Domestic Product
HEADS	Human Evolution: Adaptations, Dispersals and Social Development
ICMP	Integrated Conservation Management Plan
ICOMOS	International Council on Monuments and Sites
IDP	Integrated Development Plan
IUCN	International Union for the Conservation of Nature
JMC	Joint Management Committee
KDM	KwaDukuza Municipality
KZN DSAC	KwaZulu-Natal Department of Sport, Arts and Culture
KZN	KwaZulu-Natal
LSA	Later Stone Age
МА	Management Authority
MEC	Management Executive Council
MEL	Monitoring, Evaluation, Learning
MELI	Monitoring, Evaluation, Learning and Intervention
MSA	Middle Stone Age
NEM: PAA	National Environmental Management: Protected Areas Act
NEMA	National Environmental Management Act
NGO	Non-Governmental Organisation
NHRA	National Heritage Resources Act

NHS	National Heritage Site
OSL	Optically Stimulated Luminescence
OUV	Outstanding Universal Value
PAIA	Promotion of Access to Information Act
PAJA	Promotion of Administrative Justice Act
PHS	Provincial Heritage Site
SAFDA	South African Farmers Development Association
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SAWHCC	South African World Heritage Convention Committee
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SMC	Site Management Committee
SO	Strategic Objectives
SPLUMA	Spatial Planning and Land Use Management
TKZN	Tourism KwaZulu-Natal
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WC	Western Cape
Wesgro	Western Cape Tourism, Trade, and Investment Promotion Agency
WHCA	World Heritage Convention Act
WHS	World Heritage Site

Executive Summary

- 1. This document is an Integrated Conservation Management Plan for the Sibhudu Cave in KwaZulu-Natal Province. This site features some of the earliest material evidence of the behavioural characteristics of *Homo sapiens*. All living humans belong to a single species *Homo sapiens*. Modern humans are unique among all living animals in having a complex behaviour that acts as our primary adaptation to the world and its challenges. Our behaviour is represented by several key features possessed by all modern humans, namely complex cognition, a proclivity to cooperate at large scales with kin and non-kin, and a unique form of social learning. Scientists often refer to these three features collectively as "modern human behaviour" to set it apart from the behavioural repertoire of other animals. Scientific research on the origin of anatomically modern humans and the modernity of their behaviour is crucial to understanding the evolution and history of all living modern humans. It has been proposed that there are four characteristics of modern human behaviour. These include i) symbolic behaviour, ii) abstract thinking, iii) behavioural, economic, and technological innovations, and iv) the ability to cooperatively plan and strategize.
- 2. In South Africa, Sibhudu Cave and Border Cave in KwaZulu-Natal Province, Blombos Cave, Diepkloof Rock Shelter, Pinnacle Point site Complex in the Western Cape Province, and Klasies River Rock Shelter in the Eastern Cape Province provide excellent scientific evidence for the appearance of modern human behaviour dating back at least 100 000 years ago, thereby contributing towards understanding the evolution of behaviourally modern humans. Together, the South African sites present the best-preserved record for the behaviour of the earliest modern humans worldwide due to the fact that: i) the sites have well-preserved and dense records of human behaviour, ii) there appears to be a confluence in this region of early evidence for advanced behaviour and culture, and iii) there has been a concerted effort by local and international scientists to study these sites with advanced scientific methods. As a group, these sites are vital to our understanding of the origin of behaviourally modern humans, the environmental transitions they survived, and their modern cognitive abilities and cultures. Moreover, the sites fill a significant gap in sites already on the World Heritage and Tentative List as identified by the Human Evolution: Adaptations, Dispersals and Social Development review and published by the World Heritage Centre.
- 3. The six sites have been placed on South Africa's tentative list of World Heritage Sites to eventually make up a serial nomination for sites with Outstanding Universal Value based

on their contribution towards a better understanding of the evolution of modern human behaviour. Sibhudu Cave in KwaZulu-Natal together with two other sites located in the Western Cape, namely Diepkloof Rock Shelter and Pinnacle Point Site Complex will be the first sites to be nominated for inscription on the World Heritage List, with the other three following later (Blombos Cave, Border Cave and Klasies River Rock Shelter).

- 4. The nomination process for World Heritage Sites requires the development of a management plan for each site to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected, and its Outstanding Universal Value maintained. The overall purpose of the current Integrated Conservation Management Plan (ICMP) is therefore twofold, namely: i) to provide guidance for the management and conservation of Sibhudu Cave; and ii) to support the nomination dossier as part of the submission to apply for World Heritage Status.
- 5. The key tangible heritage assets are located in the cave and have been well preserved through time, as the cave is difficult to reach. An indigenous forest grows on the steep slopes surrounding the cave which affords it additional protection while contributing to the "sense of place" and additional attraction of the site at the same time. The forested cliff that contains the cave overlooks the uThongathi River which flows through an area that is now largely used for sugar cane cultivation in a rural tribal area. The shelter was formed by erosional downcutting of the uThongathi River, which now lies 7-10 m below the shelter. Sibhudu Cave is situated at 29°31′26″ S, 31°05′10″ E on Portion 10 Sibhudu of the Farm Sinembe no 16902-fu, KwaDukuza Local Municipality, in the KwaZulu-Natal Province. The portion covers 4.3049 hectares in extent. It is located 40 km north of Durban and about 15 km inland from the Indian Ocean and about 100 m above sea level.



Thick forest and road above the cave, and view of the uThongathi Valley from the cave

- 6. The OUV of Sibhudu Cave lies in its comprehensive Middle Stone Age record and occupational history well dated through Optically Stimulated Luminescence (OSL) samples to between 77 000 and 38 000 years ago. This period is seldom represented in such detail in other South African sites, and it is therefore a model for the Middle Stone Age sequence of this time period. This was a significant stage marked by a florescence of material culture that is a proxy for the development of complex human cognition. Studies at Sibhudu Cave have made a significant contribution towards understanding human evolutionary history through the archaeological evidence of Middle Stone Age occupation which dates between 77 000 and 38 000 years ago (possibly as early as 100 000 years ago, based on dated material including an organic bed from Prof. Conard's recent excavations). Archaeological evidence in the shelter has revealed evidence of some of the earliest examples of modern human technology. It is one of only three sites in Africa with evidence of shell beads older than 70 000 years.
- 7. Additionally, Sibhudu Cave has a rare collection of bone tools dating between at least 77 000 and 62 000 year ago. It has the world's oldest bone arrowheads that imply that the use of the bow and arrow originated in Africa and were in use more than 30 000 years before they were used elsewhere. According to geoarchaeologists, the Sibhudu Cave sediments are remarkable and amongst the best in the world for identifying behavioural moments in time. Sibhudu Cave has one of the world's oldest evidence of bedding made from sedges, grass, and leaves. Due to its significance, Sibhudu Cave received international recognition as one of the most important sites of its kind and has been nominated as a World Heritage Site as part of the 'Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa' serial nomination.
- 8. Under the terms of Section 27 of the National Heritage Resources Act (NHRA), Sibhudu Cave was declared a National Heritage Site on 18 December 2020. Once a site is inscribed on the World Heritage List and gazetted as such, the National Environmental Management: Protected Areas Act (NEM: PAA) automatically applies to both the property and its Buffer Zone. Also, a Management Authority is being appointed that will be responsible for the protection and management of Sibhudu Cave. The ICMP proposes institutional arrangements and mechanisms by which the appointed Management Authority can fulfil its mandate in terms of managing and protecting the site.
- 9. The ICMP is prepared in line with the principles, guidelines and requirements set out by the United Nations Education, Scientific and Cultural Organization (UNESCO) and its advisory bodies for World Heritage, the International Council on Monuments and Sites (ICOMOS) and the International Union for the Conservation of Nature (IUCN), as well as relevant South

African legislation. In addition, regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with development planning for the area in which it is located.

- 10. The site is currently under excavation by a team led by Professor Nicholas Conard from the University of Tübingen (Germany). The site is therefore still open for research and closed temporarily at the end of each excavation season. However, limited visitation under the supervision of well-trained local guides is currently under consideration. To make the site safe for excavation, tensioning poles are erected when the site is opened. These poles help to secure wooden boards against the eastern and northern faces of the excavated squares. The site is filled with sandbags to protect the ground and the excavation pits from erosion. Because of its natural setting, the cave is generally protected from natural threats such as rain and sunlight. Mr. Dasa (resident custodian) is the local caretaker of the site when excavations are not taking place.
- 11. The **current state** of Sibhudu Cave is good in terms of its conservation. The cave deposits are sheltered from direct sunlight, wind, and rain. Presently the cave is not open to the public unless prior appointment is made with the heritage authorities. Visitors are accompanied to the site by heritage officials or by the resident custodian.
- 12. In a **desired state**, Sibhudu Cave is well-managed, adequately protected, its heritage promoted, and its general surroundings and sense of place maintained. Stakeholders collaborate to safeguard the authenticity and integrity of the cave and ensure that it is integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Access to the site is controlled, with the help of trained guides. Interpretation of the site is encouraged and at the same time awareness and appreciation of the value of the site is enhanced for both the local and national community. This will, therefore, contribute to the long-term care of the site. A sustainable finance mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community.
- 13. Following UNESCO guidelines, the site has a Core Zone and a Buffer Zone. The Core Zone contains the key assets and attributes that make up the site's Outstanding Universal Value. Around the Core Zone there is a Buffer Zone that has the purpose of eliminating or buffering impacts on the Core Zone. Development in it is strictly regulated and limited to what is necessary for management or accessing the Core Zone. A Buffer Zone is a mandatory requirement for World Heritage inscription. In addition to the Buffer Zone there will be

Buffering mechanisms designed to protect the Core Zone and these are in development with an emerging Policy for Buffering Mechanisms for South African World Heritage Sites. Further land use zones exist around the Sibhudu Cave with different sensitivity rankings. Sugarcane plantations occupy the Agricultural Zone which has become an integral part of the broader cultural landscape around Sibhudu Cave. This mode of land use is not expected to change in the medium to long term. There is also an area earmarked for development (see map below and Table 4).

14. The ICMP is driven by a Vision that provides a broad strategic direction for the ICMP, a future aspirational point or 'guiding light' for where one would like to see the site. The Vision was informed by the views of a range of stakeholders as well as by international, regional, and national policies, laws and mandates relating to the conservation of South Africa's heritage and environmental resources. Most importantly, the specific Values of the site (its attributes of worth which includes archaeological, historical, tourism and research values) had a strong influence on the Vision. The Values are important because they also determine what potential the site has – after all they are the qualities that make the site significant and attracts its visitors. The Vision is as follows:

Vision

Sibhudu Cave World Heritage Site strives to be well-managed and self-sustaining, its values appreciated by all people, locally, nationally, and internationally; and enhanced and promoted through research, education, awareness, and interpretation while contributing to local economic development.

15. From the Vision, Strategic Objectives (SOs) were developed. The SOs cover key issues such as the management and institutional arrangements for the site, infrastructure development, visitor management, community beneficiation, research, and sustainable tourism. The SO are listed below.



Sibhudu Cave Land Use Map

Strategic Objectives

SO1: To establish a management framework for Sibhudu Cave that will ensure the conservation of the site's archaeological deposits and related archaeological material while preserving its Outstanding Universal Value.

SO2: To encourage collaboration between stakeholders to conserve Sibhudu Cave and promote the site as a heritage tourism attraction.

SO3: To increase the awareness and appreciation of Sibhudu Cave by the local and global community through research, education, and interpretation of the cultural heritage of the site.

SO4: To build capacity of local people in heritage tourism to ensure responsible tourism to Sibhudu Cave.

SO5: To encourage the generation of community benefits through on-the-job training and encourage integration of local entrepreneurship and job creation projects.

SO6: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support Site management.

SO7: To constantly assess the economic, social, and environmental impacts and opportunities at Sibhudu Cave and the surrounding areas.

SO8: To put in place Monitoring, Evaluation, Learning and Intervention (MELI) system that will be ongoing in supporting adaptive management.

- 16. Actions are derived from the Strategic Objectives. The Actions are concrete steps that can be taken to achieve the Strategic Objectives and are grouped under various Action Categories.
- 17. This ICMP provides a holistic and detailed management framework. It also describes management structures and indications of who may be assigned to the actions to be performed. The ICMP presents a comprehensive suite of actions that should be implemented in managing the cave. Priorities in the short and long-term are indicated accordingly.
- 18. Finally, a system of Monitoring, Evaluation, Learning, and Intervention (MELI) is proposed as a tool which provides for adaptive management. The MELI, not only establishes whether an action was implemented, and whether this can be verified by an agreed upon indicator, but also examines whether the desired outcome was achieved. It encourages collective learning and decision-making on appropriate interventions to keep implementation effective, goal-oriented and on track.
1 Introduction

Sibhudu Cave and Border Cave in KwaZulu-Natal, Diepkloof Rock Shelter, and Pinnacle Point Site Complex in the Western Cape Province, and Klasies River Rock Shelter in the Eastern Cape Province have been placed on South Africa's Tentative List of World Heritage Sites to become part of a serial nomination for Sites with Outstanding Universal Value regarding their contribution towards a better understanding of the evolution of anatomically modern humans. The nomination process for the proposed 'Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa' World Heritage Site status requires the development of an overall management plan and an Integrated Management Plan (IMP¹) for each site to show which actions will be taken to ensure that the proposed World Heritage Site will be adequately protected to maintain its Outstanding Universal Value. As such, this document serves as an Integrated Management Plan for Sibhudu Cave in the KwaDukuza Municipality proposed as part of the World Heritage Site. This document will also function as a Conservation Management Plan for the National Heritage Site.

1.1 Introduction to the Heritage Site

1.1.1 Importance of Heritage

International laws and standards of the best practice around heritage management have underlined the growing importance of managing heritage resources in a time of unprecedented development and accelerating change. Evidence of the past provides a sense of belonging and is an important component of national and individual identity. Understanding the past also assists with managing challenges faced by modern society.

1.1.2 South Africa's Broad Framework for Heritage

South Africa's heritage management system provides for cataloguing and managing an inventory of heritage resources that form part of the National Estate. It has a comprehensive and 'integrated system for the identification, assessment and management' of the 'National Estate' as per the National Heritage Resources Act (NHRA) No. 25 of 1999. This system allocates

¹ Referred to in the UNESCO Guidelines (Operational Guidelines for the Implementation of the World Heritage Convention, 2019) as the Integrated Management Plan. This management plan puts additional emphasis on the 'conservation' aspect of management and hence is named the Integrated Conservation Management Plan (ICMP).

responsibility for aspects of heritage management to national, provincial, or local government authorities and provides each sphere of government with mechanisms for management, protection, and conservation. The key provisions of these responsibilities are set out in the NHRA, but protection of heritage may also occur through the Land Use planning system as set out in the Municipal Systems Act No. 32 of 2000 as well as through Spatial Development Frameworks and Zoning schemes such as the Kwazulu-Natal Planning and Development Act, 2008 (Act No. 06 of 2008).

The South African Heritage Resources Agency (SAHRA) is responsible for national heritage sites. In the KwaZulu-Natal Province, the KwaZulu-Natal Amafa and Research Institute manages provincial heritage sites. Other measures under the NHRA are either managed by the local municipality or KZN Amafa and Research Institute, depending upon the assessed competency of the municipality. In the case of inscribed World Heritage Sites, the World Heritage Convention Act (WHCA) No. 49 of 1999 applies as well as the National Environmental Management Act No. 107 of 1999 and the National Environmental Management: Protected Areas Act (NEM: PAA) No. 31 of 2004, which is more generally used for environmental conservation.

1.1.3 Modern Human Origins World Heritage Sites in South Africa

South Africa can justifiably claim to be one of the countries with the most intact and ancient evidence of the emergence and development of our early hominin ancestors dating as far back as four million years ago. The origins for all modern humans emanated from southern Africa and eventually spread across the globe. Genetic and fossil evidence suggests that origins of anatomically modern beings lie in Africa between 300 000 and 150 000 years ago.

Scientific research on the origin of anatomically modern humans and the modernity of their behaviour is crucial to understanding the evolution and history of all modern people. The South African sites of Sibhudu Cave and Border Cave (KwaZulu-Natal), Diepkloof Rock Shelter and Pinnacle Point Site Complex (Western Cape), and Klasies River Rock Shelter (Eastern Cape) that constitute the serial World Heritage Site nomination together present some of the richest records of evidence for the evolution of the behaviour and culture of the earliest modern humans.

1.1.4 National Heritage Sites

A place can be declared a National Heritage Site i.e., Grade I, after it is assessed as having sufficient heritage significance in terms of criteria set out in the National Heritage Resources Act (NHRA) and its Regulations. It is declared in terms of Section 27 of the NHRA. Provision of such status communicates clearly and definitively that SAHRA considers a site to have qualities

so exceptional that they are of special national significance. Moreover, such status immediately provides protection via strenuous permitting processes.

On 18 December 2020, Sibhudu Cave was declared a National Heritage Site on the basis of the following qualities:

- Exceptional material evidence of anatomical modernity; and
- Exceptional material evidence of behavioural modernity, including bone tools, modified ochre, use of bow-and-arrow and shell beads.

1.2 World Heritage Sites

A World Heritage Site is a place of particular significance of outstanding cultural or natural value to the common heritage of humanity. The list of these sites is maintained by UNESCO's World Heritage Centre and administered by its World Heritage Committee. For a site to be included on the World Heritage list, it needs to demonstrate Outstanding Universal Value (OUV) and meet at least one of the ten selection criteria. Six of these criteria are cultural and four are natural. The criteria applicable to Sibhudu Cave are outlined in Section 3.

Within the World Heritage system are several programmes aimed at conserving and promoting research on certain aspects of heritage. The Human Evolution: Adaptations, Dispersals and Social Developments (HEADS) programme was established under the auspices of UNESCO for 'defining and establishing a solid strategy of cooperation and implementation to ensure the future recognition, conservation and study of these early vulnerable sites in relation to World Heritage.' The activities under HEADS represent a process of evolutionary accretion that took place over a long period of time, offering vital insight to scientific, cultural, ethological and historical dimensions of human development, and the earliest evidence of human ritual, expression and practice. The HEADS Programme emphasizes the proper management and conservation of human evolution related sites, such as Sibhudu Cave, Diepkloof Rock Shelter and Pinnacle Point Site Complex.

1.3 What is the Integrated Conservation Management Plan?

Recognition of a site as a World Heritage Site does not automatically afford a heritage site any measure of conservation protection. The nomination process for World Heritage Site status therefore requires the development of a management plan to outline which actions will be taken, and by whom, to ensure that the proposed World Heritage Site will be adequately protected to conserve its outstanding universal value. To be considered to have outstanding universal value, a property needs to: i) meet one or more of ten criteria set by UNESCO; ii) meet

the condition of integrity; iii) if cultural, meet the condition of authenticity; and iv) have an adequate system of protection and management to safeguard its future. All these aspects are considered in this Integrated Conservation Management Plan (ICMP).

Section 47 (3) of the National Heritage Resources Act also requires that National Heritage Sites have a 'conservation management plan'. This provision is consistent with the Operational Guidelines for World Heritage Sites. This is the Conservation Management Plan that will govern the management of Sibhudu Cave and which will be reviewed after five years following the inscription on the World Heritage List.

An ICMP considers the broader context within which a particular site is located and integrates the perspectives of relevant sectors into the management plan.

This Integrated Conservation Management Plan is a management tool that presents an approach, principles and actions for the sustainable use and conservation of Sibhudu Cave and the sum of tangible and intangible heritage resources it contains. The plan is described as an ICMP, because all its content, including how the management plan, its structure and operations relate to one another, is treated in a holistic and integrated manner.

The ICMP aims to be concise, accessible, relatively short, easy to consume and practical. Using straightforward language, it presents a policy reference framework and manual-like management plan at the same time. At operational level, the ICMP identifies, and prioritizes management responsibilities and imperatives needed for proper management of the site. Specifically, the ICMP should conform to the following four basic principles:

- Effectiveness the ICMP should ensure realisation of the objective;
- Coherence the outlook, objectives, measures, and tasks should be consistent;
- Functionality the ICMP should be workable;
- Realism the ICMP should be achievable and implementable.

This ICMP is further based on a local resource management approach to heritage conservation that:

- Embraces the linkages of the site to the broader cultural landscape;
- Strengthens the site and the broader cultural landscape's sense of place;
- Sustainably utilises the site and the resources of the broader landscape;
- Strengthens the link between the historical and present cultural landscape;
- Seeks solutions in close cooperation with stakeholders; and
- Fosters local custodianship.

The vision for Sibhudu Cave drives the ICMP, which is also informed by input from stakeholders, including those who are responsible for implementing the management framework. The vision is detailed in Section 5 of this ICMP.

1.4 Approach to the Integrated Conservation Management Plan

Establishing the Integrated Conservation Management Plan as an official document, enforceable under Section 47 of the NHRA, as well as putting the necessary human resources and mechanisms in place is important for effective management of the site and for local economic development. The sections below describe the approach to the development of the current ICMP and elaborate on principles used to guide the process of drafting this ICMP. The following principles guided the compilation of the ICMP, as described further below:

- Inclusive Stakeholder Engagement;
- Rights-Based Approach to Conservation;
- Avoidance of Disturbance;
- Professional Conservation Measures;
- Sensitive and Suitable Development;
- Limited Public Access; and
- Integration with Government Planning Frameworks.

Inclusive Stakeholder Engagement

Development of the ICMP included an inclusive and transparent stakeholder involvement process to provide all relevant stakeholders an opportunity to contribute their opinions on managing the site. The needs, interests and values of all relevant stakeholders were included. A participatory approach cultivates buy-in and contributes to the long-term support of relevant stakeholders to the conservation of the site.

Stakeholders are afforded the opportunity to become involved in the management planning and implementation of the ICMP as far as possible, as well as to provide input on mechanisms for managing conflicts between different stakeholders. The objective of stakeholder engagement is to have all relevant stakeholders benefit from the protection and use of the site without damaging its integrity. As part of this process, existing development rights and plans as well as existing tourism activities in the area and the tourism potential of the site itself were reviewed and assessed.

The ICMP therefore provides a framework for interaction between relevant stakeholders. The various views of the stakeholders can be debated in an open and transparent manner and can be balanced through *inter alia* i) appropriate conflict resolution procedures; ii) relevant

legal instruments; and iii) the principles of co-operative governance in accordance with the Constitution of South Africa.

Rights-Based Approach to Conservation

The conservation approach is based on the concept of the 'National Estate', as set out in the National Heritage Resources Act (NHRA). This Act establishes the principle that the values embodied in heritage resources are the shared property of all South Africans. In a rights-based approach are two stakeholder groups: i) the rights holders, whereby rights are defined as entitlements that belong to all human beings regardless of race, ethnicity, or socio-economic class; and ii) the duty bearers, or the institutions who are obligated to fulfil the rights of the rights holders. A rights-based approach aims at empowering the rights holders, strengthening the capacity of duty bearers as both have an active role in conservation and increasing the capacity of both the rights holders and duty bearers. Examples to increase capacity are to build upon existing capacities, ensure engagement and custodianship, and adjust to changing needs.

Rights extend to all South Africans, including the historically dispossessed, customary users of a site, and landowners, and it is important that these groups understand why our common heritage needs to be conserved for future generations. The ICMP neither weighs up one type of right against another, nor gives preference to a particular group. Laws and procedures exist to guide how different groups wish to exercise their rights, with the NHRA being a prominent tool in this regard. To ensure that the ICMP is a principled document, rights are emphasised as a prime consideration, as protected by Law and enshrined in the South African Constitution.

Avoidance of Disturbance

In terms of the potential utilisation or development of the site, the overarching principle of avoiding negative impact to heritage resources has been applied. The natural environment of the site is a sensitive, vulnerable, and dynamic ecosystem, which forms an important component of the landscape and context of the site, which in many ways provides natural protection for the heritage significance of the site. As such, the site requires special attention in management and planning procedures.

Professional Conservation Measures

Effective heritage conservation requires professionally implemented conservation measures. These include inter alia consultation with local communities, conservation of the surrounding environment, maintaining original fabric that contributes to the heritage value of the site, removing and curbing graffiti, stabilising the archaeological deposit, and constructing paths, boardwalks and/or signage to limit detrimental impacts where avoidance is not possible. Such measures, and others to be identified in further detailed planning, must be implemented in the planning phase as well as when undertaking the activities.

Sensitive and Suitable Development

Heritage management and any development of the site must take the people of the area and their needs into account. In addition, it must equitably balance the conservation needs of the site with the physical, psychological, developmental, cultural and social interests of affected communities, and be socially, environmentally and economically sustainable.

Limited Public Access

Although one of the objectives of a declaration is to increase the understanding of the Outstanding Universal Value of a site to the general public, measures have to be taken to manage access to Sibhudu Cave to mitigate the risk of the site being damaged (e.g., by looting or illicit excavation). However, there is need to ensure that limiting public access does not undermine the Vision of the site.

Integration with Government Planning Frameworks

Consultation with relevant government authorities and planning officials has taken place in the process of drafting of this ICMP. Accordingly, provision has been made for the management policies and spatial management guidelines contained in this ICMP to be integrated with required governmental spatial planning tools, as well as local social and economic development frameworks as included in the municipal Integrated Development Plan (IDP) and Spatial Development Framework (SDF).

1.5 The Purpose of the Integrated Conservation Management Plan

The overall purpose of this ICMP is namely to provide guidance and recommend systems for the management and conservation of Sibhudu Cave;

The Logic of the ICMP

The ICMP is driven by a broad Vision that provides the directives from which the Strategic Objectives are derived. The Strategic Objectives are served by Action Categories consisting of specific actions (see Figure 1).





1.6 Preparation of the ICMP

1.6.1 What Process was followed?

The process followed in developing this ICMP included i) review of available literature; ii) site visit; iii) stakeholder consultation; iv) development of the Draft ICMP; and v) completion of the Final Draft ICMP.

Literature Review

The development of the ICMP involved an extensive review of all available literature, including reports, peer-reviewed publications, background material, the nomination dossier itself, and relevant planning frameworks. Literature used for this ICMP is cited in the bibliography at the end of this document.

Consultations

To develop this ICMP, consultations with a broad range of stakeholders took place. The nature of these consultations included face-to-face conversations, emails, and telephone conversations. Stakeholders included landowners, researchers and representatives of the municipality, local organisations, and government departments. Stakeholders consulted are listed in Appendix A of this document.

2 History and Site description of Sibhudu Cave

2.1 Brief History of Sibhudu Cave

Sibhudu Cave was first excavated in 1983 by Aron Mazel of the Natal Museum, (now the KwaZulu-Natal Museum) in Pietermaritzburg. The excavation was not extensive and has not been published and the notes, stratigraphic drawings, photographs, and the excavated material are housed and managed at the KwaZulu-Natal Museum. Mazel noted that the uppermost layers contained both Middle Stone Age (MSA) stone artefacts and Late Iron Age pottery, while the layers below (approximately 30 cm contained only MSA material. Further excavations have taken place between 1998 and 2011 led by Prof. Lyn Wadley and her team from the University of the Witwatersrand, South Africa, during which a number of breakthrough findings were made, and several publications made. In 2011, Wadley handed over the direction of the excavation to Prof. Nicholas Conard of the University of Tübingen, Germany. Since 2011, the team from Tübingen University has excavated the site on an annual basis. As of March 2021, Prof. Conard had completed ten excavation seasons. Figure 2 below is a view of Sibhudu Cave from a drone showing the interior of the cave and the archaeological excavations stabilised by sandbags.



Figure 2: View of Sibhudu Cave

All excavated material from Sibhudu Cave is kept for permanent storage at the KwaZulu-Natal Museum in Pietermaritzburg, in close collaboration with the chief archaeological curator Dr. Gavin Whitelaw. During excavations, newly recovered materials are temporarily stored at a private 'dig house' in Ballito where the researchers and students process and analyse the finds. At the end of each field season, all material is taken and secured in permanent storage at the KwaZulu-Natal Museum.

2.2 Location

Sibhudu Cave is situated at 29°31′26″ S, 31°05′10″ E on Portion 10 Sibhudu of the Farm Sinembe no 16902-fu (see Map 1 and Table 1 below) in KwaDukuza Local Municipality, in the iLembe District Municipality, in KwaZulu-Natal Province, South Africa. It is located 40 km north of Durban, about 15 km inland from the Indian Ocean and 6 km northwest of Tongaat. It is approximately 100 m above sea level. The portion covers 4.3049 ha hectares in extent. The cave is located in a steep, forested cliff that overlooks the uThongathi River in an area that is now a sugar cane plantation. The shelter was formed by erosional downcutting of the uThongathi River, which now lies 7-10 m below the shelter. The demarcation of the site shown in Table 1 below:

Site	Farm Number	Town	Municipality		Province	Title
Name			Local	District		Deeds
			Municipality	Municipality		
Sibhudu	Portion 10 of	Tongaat	KwaDukuza	iLembe	KwaZulu-	T3284 -
Cave	the Farm				Natal	1998
	Sinembe no					
	16902					

Table 1: Demarcation of the cave



Map 1: Sibhudu Cave National Heritage Site and the proposed Buffer Zone



Map 2: Sibhudu Cave National Heritage Site, Land Parcels, and the proposed Buffer Zone

2.3 Cultural and Natural Landscape Mapping

From the cave, the visitor is treated to an engaging view of the landscape. The eNdwedwe village on the south side of the river is a modern rural village flanked by sugarcane fields as well as a natural forest. The lighter green shade of the sugarcane fields contrasts sharply with the darker green of the long-evolved natural forest. The shades represent different eras in the landscape, one consisting of man-made modern agriculture while the other is a natural forest ecosystem, perhaps not so different from the one that existed at the time that modern humans first appeared in the area. Surrounded by this natural forest and embedded in the cliff, eroded through millions of years by the river, is the cave.

This rich and evolving living cultural landscape therefore contains components that stretch from present-day structures and activities all the way back for millions of years into geological and ecological history. At the heart of the landscape is the cave, its contents gradually unlocking aspects of the evolution of modern humans. Cultural landscape mapping is a process whereby the cultural attributes and assets of a landscape are mapped with the intention of understanding the different points and layers in the landscape that makes up and brings meaning to the overall heritages contained in the landscape. Intangible heritage is often anchored in the landscape in specific points.

2.4 Description of Key Features

Sibhudu Cave cuts into a sandstone cliff within the geological formation of the Natal Group. This was likely caused by erosion from a riverbed during a marine regression. The bedrock and sediments of the shelter slope steeply from north to south. The cave is a large, dry rock shelter, approximately 55 m long and 18 m wide on a cliff overlooking the uThongathi River. The well-preserved sediments slope towards the river and they are more than three metres deep in places. The sediments represent a huge mound of occupation debris. The mouth of the cave overlooks beautiful coastal forest across the scenic uThongathi River with its riverine vegetation. The indigenous plant life located here is highly varied. A rare tree, *Celtis mildbraedii*, grows on the edge of the shelter.

Although the MSA is broadly considered to cover the period from 300 000 years ago to 30 000 years ago, the sites considered in the serial nomination for WHS status cover the period from 227 000 years ago to 38 000 years ago. Sibhudu Cave has exceptional organic preservation from this time and has yielded the following:

- i. bone tools assemblage at 77 000 years ago, many bone tools were more recently recovered spanning layers from >77 000 until 58 000 years ago;
- ii. one of the earliest arrowheads at 65 000 years ago;
- iii. some of the earliest evidence for sedge and plant bedding at 77 000 years ago;

- iv. earliest evidence of human exploitation of birds at 77 000 years ago;
- v. shell beads at 70 000 years ago;
- vi. early evidence for the use of a variety of compound adhesive recipes;
- vii. sophisticated pressure-flaked bifacial points and blade technology during and before the Still Bay period at >77 000 until 70 000 years ago and the pre-Still Bay prior to 77 000 years ago (Rots *et al.* 2017); and
- viii. exceptional organic preservation of seeds.

The environmental conditions at Sibhudu Cave have led to excellent preservation of easily recognizable laminar stratigraphic layers. Articulated phytoliths are found as well as centimetre thick layers of undisturbed, carbonized bedding across several metres of sediments.

Human Remains

Two deciduous human teeth were found in MSA layers excavated by Prof. Lyn Wadley and her team. One was from BS 5 (~77 000 years ago) and the other from PGS (~65 000 years ago) (Riga et al. 2018). Two other juvenile teeth were recovered from pre-77 000 years ago and Howieson's Poort (ca. 64000 years ago) occupations by the Conard team (Will et al. 2019). All the teeth were identified as belonging to anatomically modern humans.

Lithics

Excavations at Sibhudu Cave have provided evidence of MSA technocomplexes and informal lithic industries namely:

- 1. Pre-Still Bay (before ~77 000 years ago) (pre-Still Bay bifacial points; non-bifacial bearing layers);
- 2. Still Bay (~72-70 000 years ago) (bifacial points)
- 3. Howiesons Poort (~65-62000 years ago) (quartz bifacial points and segment with ochre hafting line);
- 4. Post-Howiesons Poort (now called Sibhudan) or Sibhudu technocomplex (~58 000 years ago) (Sibhudan unifacial points);
- 5. Late MSA (~48 000 years ago) (unifacial points); and
- 6. Final MSA (~38 000 years ago) (hollow based points and bifacial points).

Locally available dolerite, quartzite and quartz were knapped throughout the sequence, although in varying proportions. Hornfels may have had its origin about 20 km or more from the site and rare pieces of cryptocrystalline quartz and cherts were probably found as small pebbles in local conglomerates.



Figure 3: Compilation of Points from Sibhudu

The early pre-Still Bay assemblage is characterised by blade production from unidirectional cores that have a lateral crest opposite a flat surface. This form resulted from direct

hammerstone percussion on naturally or initially crested cores with a triangular, but asymmetrical cross section (Schmid et al. 2019).

The pre-Still Bay sequence shows some typological changes through time with few retouched pieces and a hiatus in point production.

The Howiesons Poort (~65-58 000 years ago) is characterised by small blades and backed tools that include segments and other geometric forms. Small quartz segments may have been hafted transversely as arrow tips used with bows (hunting weaponry) was composite. Quartz bifacial points and their manufacturing debitage form a distinctive feature of the late Howiesons Poort.

The Sibhudan technocomplex is recognised as a local tradition and has four phases ('Upper/Classic,' 'Upper Middle,' 'Lower Middle' and 'Lower' Sibhudan), based on technotypological variability through time.

Quartz and quartzite predominate in the earliest phase, the Lower Sibhudan. Also, according to Will and Conard (2018), tiny quartz bifacial points, notched tools and denticulates also occur in the Lower Sibhudan. Overall, the Sibhudan period is particularly characterized by various well-defined types of finely retouched unifacial points that occur often in the middle part of the Sibhudan sequence and dominate in number at its top. Extensive use of non-local hornfels is another defining and special characteristic of this technocomplex.

Bifacial and unifacial points are prominent in the younger MSA horizon at Sibhudu, also called the late or final MSA. In the final MSA, which occurs only in the northern part of the excavation grid, bifacial points are slightly better represented than unifacial ones, and rare hollow-based points have also been found. Hollow-based points also occur at Umhlatuzana (Kaplan 1990), approximately 90 km from Sibhudu, as well as at Umbeli Belli (Bader et al. 2018), hence the tool type may be a regional variant of the final MSA.

Worked shell, bone and ochre

Worked shell, bone and ochre have also been recovered at Sibhudu Cave. Afrolittorina africana and Mancinella capensis perforated and unperforated shells were found. According to Wadley (2012), the shells dated to 71 000 years ago have restricted spatial distribution close to a hearth suggesting that this might have been the manufacturing area. Some of the shells were stained red with ochre and others were blackened from burning.

Sibhudu's bone tools occur commonly in the Howiesons Poort, pre-Still Bay, and post-Howiesons Poort technocomplexes, and they include, bone shards, awls, spatulas, wedges, scrapers, and a possible needle. A bone compressor, probably used for pressure flaking, was recovered in the pre-Still Bay layers. A notched rib fragment was also found. Bone points that might be arrowheads occur in the Howiesons Poort at Sibhudu (Backwell et al. 2008, 2018; d'Errico et al. 2012). A bone point from a layer dated to 62 000 years ago, revealed heat and impact damage when subjected to high resolution CT scanning (Backwell et al. 2018).

Ochre was frequently used throughout the entire MSA sequence at Sibhudu. Over 9 000 pieces of ochre have been retrieved from the site and have been studied by Hodgskiss (2012). Ochre powder is said to have been employed in the manufacture of compound adhesives used to join stone tips to handles or shafts during the pre-Still Bay, the Still Bay, and the Howiesons Poort industries. Ochre powder was used as an aggregate in hafting adhesives, as well as for grinding (Hodgskiss 2013).

Fauna

The pre-Still Bay and Still Bay fauna at Sibhudu is dominated by taxa that prefer to inhabit closed forested habitats (Clark 2019). These data are consistent with data from birds (Val 2015), and the results of isotopic measurements on tooth enamel (Robinson and Wadley 2018). Fauna such as the blue duiker, *Philantomba monticola*, many small carnivores, such as mongooses and dangerous bushpig, are present from 77 000 years ago and continued to dominate the Still Bay and Howiesons Poort layers at Sibhudu Cave (Clark and Plug 2008; Clark 2017). The blue duiker accounts for more than 41% of the faunal assemblage.

Doves and pigeons are the most common bird remains recovered in the Still Bay, Howiesons Poort and earlier layers with taphonomic evidence suggesting they were eaten by humans (Val et al. 2016).

Seeds, charcoal, and bedding

Burned seeds recovered from Sibhudu Cave include those from Asparagus spp., Diospyros spp. (jackalberry), Ziziphus mucronata (buffalo-thorn), Harpephyllum caffrum (wild plum), Phoenix reclinata (wild date palm), and possibly wild olive (Olea sp.) (Wadley 2004; Sievers 2006). Hundreds of burned sedge nutlets (Cladium mariscus) were found in the laminar arrangements of burned sedge and grass bedding in the 58 000 years ago occupations.

Woody taxa identified from charcoal in hearths are from evergreen forest, savanna, or cliff scrub habitats indicating a mosaic of vegetation communities (Wadley 2019). *Afrocarpus/Podocarpus* (Yellowwood) trees are the most common evergreen forest species represented, especially in the pre-62 000 years ago sequence. More open, drier conditions seem to have prevailed in occupations more recent than 62 000 years ago, when *Acacia* spp. and other deciduous woody plants were most prominent (Allott 2006). This is the only evidence given for palaeoenvironmental change at Sibhudu Cave.

Micromorphological analysis of the stratigraphy has identified several burning episodes, where hearths are built up on top of each other, some of them most likely the result of burning of monocotyledonous bedding for maintenance.

2.5 Middle Stone Age Phases at Sibhudu Cave

Sibhudu Cave was occupied during the Middle Stone Age from 77 000 to 38 000 years ago. The MSA phases are defined according to the technological assemblages found in the pre-Still Bay, Still Bay, Howiesons Poort and post-Howiesons Poort sediments found here. No Later Stone Age (LSA) occupation is present on site although the shelter was occupied again during the Iron Age at 1 000 AD.

At Sibhudu Cave, the MSA sequence consists of separate technological phases, the A-D layers, the pre-Still Bay, the Still Bay, the Howiesons Poort, the post Howiesons Poort the late Middle Stone Age and the final Middle Stone Age.

The pre-Still Bay layers (A-D) excavated by Prof. Conard have not been dated yet (but are likely between 100 000 – 80 000 years old), and they are the layers where excavations focused on in the last years. These layers are characterised by serrated points shaped by pressure flaking and laminar reduction and were used as projectiles. The serrated pieces and the laminar reduction system represent a key set of innovation at Sibhudu Cave and no clear equivalent has been found yet outside of KwaZulu-Natal (Rots *et al.* 2017; Schmid *et al.* 2019). More recent excavations since 2019 have uncovered even earlier layers that have different stone tools, predominantly characterized by unretouched large Levallois flakes and much lower find densities. Bedrock at Sibhudu has not been reached by March 2021, requiring additional excavations in the future.

The pre-Still Bay layers are the lowermost layers excavated by Wadley (77 000 to 72 500 years ago). These layers are characterised by lithic assemblages with flakes as well as blades and few formal tools, excluding bifacial pieces and possibly two bone notched pieces.

During the Still Bay layers, from 70 500 to 65 000 years ago, most of the lithic industry was produced through bifacial shaping. No bone tools were identified during this phase.

The Howiesons Poort layer (65 000 to 58 000 years ago) is characterised by a small blade and backed tool tradition emerged dominated by segments of a variety of sizes, including small quartz segments possibly used as arrowheads. These layers also record the first evidence in the archaeological record of the development of bone arrowheads (Wadley 2010). Studies on the preferred material during the HP show that dolerite, hornfels, quartz, quartzite and sandstone were used throughout the Howiesons Poort.

During the post-Howiesons Poort (58 000 - 47 000 years ago), or the Sibhudan technocomplex, the backed lithic technology described above disappeared. At this time, quartz was more dominant in the sequence than dolerite or hornfels. This lower phase is characterised by the importance of flake production from discoidal and Levallois knapping methods, unstandardized retouched pieces, and the higher than usual frequency of grindstones (de la Peña and Wadley, 2017). At this time, it seems that unifacial points were extensively used and produced particularly in the middle and upper part of this phase, associated with an increased use of non-local hornfels.

During the late MSA (from 48 000 years ago), Sibhudu Cave inhabitants were still making bifacial points, although most of the lithics identified were unifacial, broader, thicker and longer than in the other technocomplexes (Mohapi, 2012). There is also evidence that at this time, they were hunting large plains game, especially zebra.

During the final MSA, the most recent layers occupied during the MSA, (38 000 years ago), bifacial points are once again more prominent than unifacial lithics. Compared to earlier phases, bifacials are shorter but wider and thicker. They also include the hollow-base shape lithics, which are uncommon and has been recovered in other late MSA layers such as at Umhlathuzana Rock Shelter (Mohapi 2012).

2.6 Date of Site and Dating Techniques Applied

Most of the dating of the deposits at Sibhudu Cave was conducted in 2008 using the Optically Stimulated Luminescence (OSL) dating and was later refined using Single-grain OSL in 2017. Sibhudu Cave has a complex but clear stratigraphy with deposits that are particularly suitable for Optically Stimulated Luminescence (OSL) dating because of the brightness and size of the quartz grains (Jacobs 2004).

However, as in most archaeological sites, there has been both anthropogenic and natural disturbance to some parts of the site and three types have been recognised at Sibhudu: deliberate digging of pits, burrowing by animals, and rockfalls. The juxtaposition of Iron Age and MSA layers has caused some localised damage to stratigraphy because Iron Age pits were, in places, dug into the MSA layers (d'Errico et al., 2012).

Table 2 below summarises the stratigraphy and the dating of the Sibhudu Cave deposits.

Technological phase	Layer	Sample name	Date (ka)	Method	Reference	
Iron Age occupation	BSS		960 ± 25	Radiocarbon	Wadley, 2001	
Final MSA	Co; BU; LBMOD*	SIB22; 11; 10	38 6 ± 1.9	OSL	Jacobs et al., 2008a; b	
Late MSA	MOD; OMOD; OMOD-BL; RSp; RD*	SIB7; 13; 14; 12; 8	48.0 ± 1.4	OSL	Jacobs et al., 2008a	
Post-Howiesons Poort		SIB-9	50.2 ± 2.5	OSL	Jacobs and Roberts, 2017	
(Sibudan)	Ch2; Y1; B/G mix; BSp; SS and P*	SIB1; 2; 3; 4; 6; 9	58 5 ± 1.4	OSL	Jacobs et al., 2008a and b	
		SIB-15	61.7 ± 1.5			
Howiesons Poort		SIB-17	63.8 ± 2.5	OSL	Jacobs and Roberts, 2017	
		SIB-19	64.7 ± 1.9			
Still Bay	RGS	SIB-20	70.5 ± 2	OSL	Jacobs and Roberts, 2017	
	LBG	SIB-21	72.5 ± 2.5	OSL	Jacobs and Roberts, 2017	
Pre-Still Bay	LBG 2	SIB-24	73.2 ± 2.7	OSL	Jacobs and Roberts, 2017	
	BS1	SIB-23	77.2 ± 2.6	OSL	Jacobs and Roberts, 2017	
	A-D		undated	OSL	In preparation	

Table 2: The stratigraphy and dating of Sibhudu Cave

2.7 Evidence for Modern Human Behaviour

The organic preservation at the site has allowed for the recovery of a variety of rare organic cultural remains. Because of this exceptional organic preservation, archaeologists consider the Sibhudu Cave sediments remarkable and amongst the best in the world for identifying behavioural moments in time.

Shell beads as personal ornamentation

Sibhudu Cave is one of the earliest sites to show evidence of the use of personal ornamentation in southern Africa and Africa overall. The use of personal ornamentation in the form of shell beads implies that MSA people living at these sites expressed group or individual identity, which is considered an expression of symbolic behaviour.

In the Still Bay layers (70.5 000 years ago ± 2.0 000 years ago) at Sibhudu Cave, clusters of shells often associated with ochre and around specific hearths within the shelter were uncovered. Of these shells, 17 are Afrolittorina Africana and three, possibly four, are Mancinella capensis. Six A. africana and one specimen of M. capensis were intentionally drilled and used as beads (Vanhaeren et al., 2019 and d'Errico et al. 2008).



Figure 4: Afrolittorina africana Shells from the Lowermost Howiesons Poort and Still Bay layers at Sibhudu Cave

Studies through microscopic analysis, survey and fragmentation analysis of modern assemblages shows that the shells were not collected for subsistence (Vanhaeren et al., 2019)

and that the perforations on the archaeological shells are of human origin (d'Errico et al. 2008), most likely created with bone, lithic or hard wood (Vanhaeren et al., 2019).

Another two Nassarius krassianus shells were identified and dated to 46.6 ± 2.3000 years ago. One of the two specimens was perforated. None of these shells display obvious signs of use wear.

Bow and-arrow technology

Sibhudu Cave has the world's oldest projectile points, dated as early as 77 000 years ago. Bowand-arrow technology or flexible spear-throwers are thought to signal higher-level of cognitive functions and are considered a mark of complex modern human behaviour (Blackwell et al. 2018). The microlith-tipped projectile weapons increased the hunting success rate and could have reduced the extent of injuries caused by close hunting encounters.

Compound adhesive used in hafting

A central technology in the development of the use of the bow and arrow is hafting. This was necessary to ensure that the point is adequately connected to the wood or bone shaft. Hafting demonstrates the complex cognition and ability of our ancestors to multi-task and think abstractly.

Residue studies on MSA stone and bone from Sibhudu Cave were conducted to understand the composition and production of the compound adhesives used in hafting. These studies have shown that haft materials and hafting configurations of the lithic points changed over time. Adhesive components included resins, plant tissues, fibres, phytoliths and ochre. Plant twine was most likely the preferred binding material for hafting the points. Amongst the resins, one of the most commonly used was the resin of the conifer *Podocarpus falcatus* (commonly known as Outeniqua Yellowood).

Formal bone tools (including bone needles)

The production of formal bone tools during the Middle Stone Age is one of the main indicators of the development of modern human behaviour (d'Errico et al. 2012). Formal bone tools are implements fully modified with techniques specific to bone material such as grinding, scraping and cutting (d'Errico et al., 2012). The rare collection of bone tools from Sibhudu Cave includes several typologies that are not known elsewhere in the world and appear to be part of a local tradition which is also absent at contemporary or more recent southern African sites (Backwell et al 2008), including Blombos Cave. This highlights the material cultural differences and the evolutionary trends related to the various MSA technocomplexes at different time periods, sites and regions. Sibhudu, overall, retains a collection of bone tools which is more varied in conception, morphology, variety, and task of material for which they were used more than at

many other MSA sites. Excavations by Prof. Conrad have added significantly to the number and repertoire of bone tools from most layers between 77 000 – 58 000 years ago.

The formal bone-tool manufacturing tradition was identified at Sibhudu Cave with 23 pieces recovered from the pre-Still Bay, Howiesons Poort, post-Howiesons Poort and final MSA layers. No formal bone tools production has been identified in the Still Bay layers. In the pre-Still Bay layers only one possible notched piece was excavated (d'Errico et al. 2012b). In the Howiesons Poort layers at Sibhudu Cave, archaeologists have recovered 15 bone tools, including pins, smoothers, scaled pieces, wedges, pressure flakers and awls.

In the post-Howiesons Poort layers, five tools, inclusive of notched pieces, smoothers, *pieces* esquillées, wedges and pressure flakers were uncovered. Only one bone pin was found in the final MSA layer (d'Errico et al., 2012).



Figure 5: Refitted Bone Points from Sibhudu Cave

Use of medicinal plants and manufacture of plant bedding

Sibhudu Cave is one of the MSA sites where the application of plant bedding was first identified. These were identified starting from the pre-Still Bay layers and are present for the extent of the whole occupation. Archaeologists recovered phytoliths, burnt sedge seeds, burnt culms and burnt river clay with plant impressions, as well as burnt layer of plants, which have allowed a better understanding of both the behavioural and the environmental context of occupation. The materials used for the bedding include sedges and other monocotyledonous which were then covered with aromatic leaves from *Cryptocarya woodii*. When crushed, the *Cryptocarya woodii* leaves are aromatic and contain traces of α -pyrones, cryptofolione, and goniothalamin chemicals that have insecticidal and larvicidal properties (Wadley et al., 2011).

There is also evidence that bedding started being burnt, presumably for site maintenance approximately 73 000 years ago. By 58 000 years ago, bedding construction, burning, and other forms of site use and maintenance intensified (Wadley et al 2011). Archaeologists have recorded an increased rate in anthropogenic sedimentation with longer occupation periods, also suggesting that settlement strategies changed (Wadley et al 2011).



Figure 6: Riverine Clay Fragments from Sibhudu Sediments with Monocotyledonous Plant Impressions

Widespread use of ochre

The use of ochre during the Middle Stone Age is common. Large quantities of material with red and yellow pigment in the form of unworked fragments, ground pieces, and patches of ground powder were found in all MSA layers at Sibhudu Cave (Hodgskiss, 2010).

More than 9 000 pieces of ochre have been recorded from the excavation at Sibhudu Cave by Prof. Wadley, which several thousand pieces added by the Conard excavations. About 12% of this assemblage displays signs of anthropogenic use, in the form of grinding, rubbing, engraving, and powdering (Hodgskiss, 2013). Most of this assemblage is composed of brightred pieces, such as those found at Pinnacle Point 13 B and Blombos Cave. Pieces with mica inclusions, producing a bright red glistening powder were intensively utilised, indicating that these visual qualities were sought after for the powder (Hodgskiss, 2013). Most of the activities were aimed at the production of powdered ochre. The presence of engraved pieces of ochre is generally considered a hallmark of symbolically mediated behaviour and is evidence for the development of modern human behaviour (Mackay and Welz, 2008; Henshilwood et al., 2009; d'Errico et al., 2012).

Grinding and rubbing of ochre were the most frequent uses identified in the ochre assemblage from the pre-Still Bay period to the final MSA (Hodgskiss, 2013). Ground ochre was mixed with resinous material for the development of compound adhesive for hafting, indicating its functional use. There is increased evidence from the Howiesons Poort layers to the late MSA layers of direct transfer of ochre powder onto a soft material by rubbing, showing evidence of behavioural innovation (Hodgskiss, 2013). Also, ochre residues and polish from wear on a few 58 000 old Sibhudu scrapers imply the use on hides.

In the post-Howiesons Poort layers, archaeologists uncovered cemented hearths which have been interpreted as pigment working surfaces or receptacles for ochre powder (Wadley, 2010b; d'Errico 2012).

The analysis of the pieces which display evidence of scoring and engraving suggests the incisions and their shape were deliberate and it is likely that some significance was associated with them starting in the pre-Still Bay layers. It is however less clear than in other assemblages, such as at Blombos Cave, whether these 'engravings' held a message understood by others (Hodgskiss, 2013).

Serrated bifacial pieces by pressure flaking

The production of bifacial points is a characteristic of the Still Bay layers of many Middle Stone Age sites but at Sibhudu Cave they occur in many more of the different technocomplexes. The raw materials used for the development of bifacial points at Sibhudu include dolerite, quartz and quartzite. Studies on the bifacial points recovered at Sibhudu Cave show that

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different technologies were used at different periods of the occupation, confirming the idea that bifacial points are part of different MSA technocomplexes. The pre-SB occupation at Sibhudu, dated to 77 000 years ago, is the only site, besides Umhlathuzana Shelter where serrated bifacial points were manufactured. These serrated bifacial points were manufactured by pressure with bone compressors and are restricted to few contexts within the MSA making them a strong techno-cultural marker (Rots et al. 2017).



Figure 7: Serrated Point from Pre-SB layer at Sibhudu Cave

Subsistence and bird exploitation

Sibhudu Cave presents the capturing and consumption of fast, small game such as blue duiker and birds as well. The capture of these animals requires innovative techniques such as the use of blunt-tipped projectiles, bow and arrows, bolas, nets, and snares. Studies have shown that the use of snares or traps extend back to as early as 77 000 years ago (Clark, 2019).

At Sibhudu Cave modern *humans* are known to have exploited birds for the first time in the archaeological record, 77 000 years ago. Evidence is in the form of butchery marks, peeling, perforations associated with disarticulation of the forewing, and tooth marks have been found. Taxa exploited at Sibhudu are mostly pigeons and doves, but Galliformes, raptors, and waders are also included (Val et al. 2016).

Human Skeletal remains

Minimal human skeletal remains have been recovered at Sibhudu Cave and were described by Plug (2004). There are two human remains (a lateral malleolus of a fibula and the distal phalanx of an adult hand) from the final MSA sediments (49 000 years ago) and a toe phalanx and a fragment of a putative human sternum dated to 58 000 years ago (Plug, 2004). However, it is unclear whether they belong to the MSA or are an intrusion from the later Iron Age layers.

Human remains more certainly attributed to the MSA were found in the form of five deciduous teeth identified in different stratigraphic layers. These teeth are significant as they add to the pool of data from the MSA human fossil record from 15 sites in South Africa, thereby enhancing the understanding of anatomical features and individual variability within it (Riga et al., 2018). The size of teeth confirmed comparable sizes with other MSA and Upper Palaeolithic specimens (Will et al., 2019 and Riga et al., 2018) and more specifically with a population of *Homo sapiens* that is closer to the earliest member of the species and not closer to recent humans, which are normally smaller than the Sibhudu specimens (Will et al, 2019).

2.8 Boundaries

2.8.1 National Heritage Site

Sibhudu Cave was declared a National Heritage site in December 2020. The site falls under the provisions of Section 27 of the NHRA No. 25 of 1999, which in sub-section (18) prescribes that 'No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site'. Once Sibhudu Cave is inscribed as a WHS, the Protected Areas Act No. 31 of 2004 will also apply. Map 3 illustrates Sibhudu National Heritage site with Core Boundary Points; the points are further detailed in Table 3.



Map 3: Sibhudu Cave National Heritage Site with Property Boundary Points

Table 3 below presents boundary coordinates of Sibhudu Cave, the National Heritage Site and the landowner for each part of the buffer.

Table 3: Proposed Sibhudu National Heritage Boundary Coordinates

Point	Latitude	Longitude	Position	Land Portion
1	29°31'24.85''S	31° 5'15.82''E	NE Corner	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) & KDC Consulting (Portion 1 of Farm 17825)
2	29°31'20.52''S	31° 5'10.95"E	North, road	Road boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) & Yethu Family Trust (Portion 17 of Farm 16902)
3	29°31'17.85"S	31° 5'6.98''E	North, road	Road boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) & Yethu Family Trust (Portion 17 of Farm 16902)
4	29°31'15.72''S	31° 5'5.45"E	NW corner	Road boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) & Yethu Family Trust (Portion 17 of Farm 16902)
5	29°31'22.48''S	31° 5'3.48''E	SW Corner	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
6	29°31'21.86"S	31° 5'4.75''E	SW uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
7	29°31'21.35''S	31° 5'6.55"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
8	29°31'21.16"S	31° 5'7.55"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
9	29°31'21.29''S	31° 5'8.44''E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)

Point	Latitude	Longitude	Position	Land Portion
10	29°31'21.83"S	31° 5'9.37"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667). It must be noted, the access path, river crossing, into the cave is located closest to this point.
11	29°31'22.41"S	31° 5'10.01"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
12	29°31'23.19"S	31° 5'10.48"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
13	29°31'24.14''S	31° 5'10.81"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
14	29°31'25.22''S	31° 5'10.86"E	South uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
15	29°31'26.67"S	31° 5'10.65"E	SE uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land, Umvoti 4667)
16	29°31'28.78''S	31° 5'9.74"E	SE uThongathi River	Boundary of Sibhudu Cave (Mr. Mhlongo's Land, portion 10 of Farm 16902) along the uThongathi River (which also boarders Tribal Land to the south, Umvoti 4667, and KDC Consulting to the east, Portion 1 of Farm 17825)

2.9 Spatial Extent of the Property

The World Heritage nomination process requires that the site be protected by a Buffer Zone that surrounds the Core Zone. In considering a Buffer Zone around the site it is noted that the Property falls under the portion of land owned by Mr. Mhlongo, which is Portion 10 of the Farm "Sinembe" no 16902-fu.

Mr. Mhlongo's land is due to be subdivided as follows:

- Portion Sibhudu' of the Farm 16902, measuring 4.3049 ha where the cave is situated, will be acquired by the Sibudu Trust. The proposed boundary of the National Heritage site aligns with those of Portion Sibhudu (Map 3). Currently the Portion Sibhudu exists only in principle because Sibudu Trust² is still in the process of acquiring the land, hence the name 'Portion Sibhudu'. The title deeds still record Mr. Mhlongo as current owner.
- 2. Remainder of Portion 10 of the Farm 16902 measuring 114.4029 ha is owned by Mr. and Mrs. Mhlongo (Title Deeds T3284 1988). (However, Mrs. Mhlongo is deceased, but her name still appears on the title deeds).

2.10 Spatial Extent of the Buffer Zone

The forest around the cave already forms a natural physical Buffer Zone for protecting the cave. It is thickly wooded and steep, and as such the forest is still intact and has not been impacted by agricultural expansion. The proposed Buffer Zone is a portion of the forest itself as it surrounds and encloses the cave, and it is 14.965 ha in extent. The forest borders are easily discernible as they follow the perimeter of the forest and are additionally separated on the north-western to eastern sides by farm roads. It is always helpful to have easily discernible borders for a Buffer Zone, such as a road or a natural feature that stands out, to avoid confusion, see Map 4 (Overview) and Map 5 (Close-up View).

A large portion of the Buffer Zone on the western side is located in Mr. Mhlongo's land, Remainder of Portion 10 of Farm 16902. The Buffer Zone extends to the north side of Sibhudu Cave but remains within the limits of the forest between forest and farm road on the property owned by Yethu Family Trust (Portion 17 of Farm 16902, which is leased to Hulett Tongaat). On the northeast and southeast side of the cave, the Buffer Zone is also defined by the forest on property belonging to KDC Consulting and Development (Portion 1 of Farm 17825). On this

² Please note that the name of the site is Sibhudu Cave, Sibhudu with an "h" after consultation on the correct spelling while the Trust was previously registered as Sibudu Trust, without the "h".

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part, the Buffer Zone is small as it runs along the edge of the forest tree line and dirt road. In addition, with the steep slope of the cave, no further expansion could take place into this smaller section of the Buffer Zone. Besides, the Buffer Zone is bordered by land zones for agriculture which already exists and will not expand or change. On the south side of the cave, the Buffer Zone has been extended by 20m south of the uThongathi River. The object is to (1) protect the river and its banks from the extraction of sand for building; (2) protect the sense of place which is enhanced by the river as it is part of the viewscape; and (3) overall, provide a Buffering Mechanism for the cave on the southern boundary of the property.

The zone under KDC Consulting and Development (the Wewe Driefontein mixed development zone) is separated from the cultural property by a 500 m buffer of agricultural land, and as such the impacts from the proposed residential development on the property will be mitigated (see Map 4 and Map 5).

The rest of Area 3, the purple zone (see Map 4 and Map 5), where people have already built their homes is not included in the Buffer Zone. It will be difficult to include the rural homesteads in the Buffer Zone as this might cause conflicts. Limits of acceptable development will be suggested so that the landscape is not degraded. A buffer of only 20 m along the south bank of the uThongathi River has been proposed, which lies in Tribal Land.

Lastly, the forest surrounding the cave, will be retained since the steep valley side is not suitable for agriculture. The owners are in full support of the World Heritage Nomination, and hence conflicts over the Buffer Zone are not likely to occur. However, a formal undertaking to respect the Buffer Zone should be obtained, and the Buffer Zone should be formalised in municipal planning documents such as the Spatial Development Framework.



Map 4: Overview of Proposed Buffer Zone for the Sibhudu World Heritage



Map 5: Close-up View of the Proposed World Heritage Site and Buffer Zone

2.10.1 Specific Guidelines for the Buffer Zone

Specific guidelines pertaining to the Buffer Zone include:

Infrastructure should be minimal and only for purposes of access (such as a suspension bridge) and management or ecotourism (such as walking trails). All such developments should blend into the landscape by following the following guidelines:

- i. Using appropriate materials and colours.
- ii. Infrastructure should not impact on views from the cave and the path leading up to it.
- iii. Waste management systems should be designed to have minimal impact on the environment.

For further details, see Table 4: Land Use and Development Guidelines for the Property.

2.10.2 Zoning

As mentioned earlier, the cave is situated on Mr. Mhlongo's Land, which will be sub-divided in terms of which a portion will be acquired by Sibudu Trust in the future. This portion in which Sibhudu Cave is situated will be zoned as a protected conservation area. At the present time, however, the farm within which the property is situated is subject to the provisions of the Conservation of Agricultural Resources Act (Act 43 of 1983). The adjacent farms are also zoned for agriculture; Yethu Family Trust (portion 17 of Farm 16902) and KDC Consulting and Development (portion 1 of Farm 17825), see Map 4 and Map 5. The land south of uThongathi River, opposite the cave, is Ndwedwe communal land designated as Tribal Land (also known as Farm 4667 – Umvoti Location), and it is zoned for residential purposes. Settlement densities are generally low with a single house per plot in keeping with the traditional way of developing rural settlements (see Map 5).

Based on the intended preservation of the site, the most appropriate zone would be "Conservation Area". A Conservation Area is defined as "An area of notable environmental, scientific, architectural or historical interest or importance and whose character or appearance is desirable or necessary to preserve because they are discrete examples of a specific habitat, style or are irreplaceable" (see Land Use Scheme Extract of KwaDukuza Municipality). A rezoning application has been submitted to the Municipality. Re-zoning would serve to formalise the conservation of a highly significant heritage resource and pave way for future development of facilities for tourism and heritage education³. Once the ownership of

³ Motivational report for the proposed subdivision and rezoning application of the Sibhudu Caves in terms of the Spatial Planning and Land Use Management Act (Act 16 of 2013) read with the KZN PDA (Act 27 of 2008) and in terms of the KwaDukuza Municipality Spatial

the property has been transferred to the Sibudu Trust, its zoning must be changed on official planning documents from Agricultural to Conservation Area.

Planning and Land Use Management by-law no. 1630 gazetted 4 March 2016. Available at <u>https://sahra.org.za/Sites/default/files/additionaldocs/SPLUMA%20APPLICATION_SIBHU</u> <u>DU.pdf</u>. Accessed on 25 January 2021.
Zone	Area	<u>Farm(s)</u>	<u>Sensitivity</u>	<u>Permissible</u>	<u>Guidelines</u>
				Land Use/s	
Proposed	The Property	Portion Sibhudu	Very High	Presence of	1. Research excavation can take place only
Conservation		Cave,		extremely sensitive	with the authorisation from SAHRA, and strict
Zone		Mr. Mhlongo's		and irreplaceable	adherence to research and archaeological
		Portion 10 of		archaeological	ethics
		Farm 16902		heritage	2. Limited public access
				This area contains	3. Access only allowed when accompanied by
				the valuable	a trained guide
				archaeological	4. Only permissible developments include the
				deposits	following:
					Access tracks
					 Interpretation boards
					5. These developments must adhere to the
					strictest guidance from natural and cultural
					heritage professionals and stakeholders
					A 'leave no trace' approach to any visitor
					activities must be adhered to
	Proposed Buffer	Mr. Mhlongo's	High	Presence of	1. A 'leave no trace' approach to any visitor
	Zone	Portion 10 of		extremely sensitive	activities must be adhered to
		Farm 16902		natural and cultural	

Table 4: Demarcation of Zones and Land Use and Development Guidelines

Zone	Area	<u>Farm(s)</u>	<u>Sensitivity</u>	<u>Permissible</u>		Guidelines
				<u>Land Use/s</u>		
		Tribal Land,		environments,	2.	No permanent or semi-permanent structures
		(Farm 4667 -		outstanding view,		involving concrete may be erected unless
		Umvoti		and sense of place		absolutely, necessary to access the site
		Location)		This area's function	3.	Any developments must adhere to the strict
		KDC Consulting		is to not only		guidance from natural and cultural heritage
		and		protect the		professionals and stakeholders
		Development		heritage resource	4.	Extraction of sand for building from the river
		(Portion 1 of		but to ensure that		and the riverbanks must be prohibited
		Farm 17825)		the character of		
		Yethu Family		the area is		
		Trust (Portion 17		maintained and		
		of Farm 16902)		left intact		
Development	Proposed	Tribal Land,	Medium	Rural homestays	1.	Lower development costs and be stringent
and	Heritage site	(Farm 4667 -		Dwelling by the		enough to protect the heritage
Residential	services and	Umvoti		local communities	2.	This includes public services, which should be
Zone	residential	Location)		Accommodation		established within this area, such as water
				facility: Could be a		and sewerage pipes and electricity cables
				bed and breakfast		
				establishment		

<u>Zone</u>	<u>Area</u>	<u>Farm(s)</u>	<u>Sensitivity</u>	<u>Permissible</u>		Guidelines
				<u>Land Use/s</u>		
	Tribal Land,	Tribal Land,	Very low	Residential:	1.	Low-cost development and be stringent
	Ndwedwe Local	(Farm 4667 -		Dwelling by the		enough to protect the heritage
	Municipality	Umvoti		local communities	2.	This includes public services, which should be
		Location)				established within this area, such as water
						and sewerage pipes and electricity cables
	Proposed	KDC Consulting	Extremely low	Shopping (retail)	1.	Development of a complex with commercial
	development	and		and service centre		retailers, and offices
	area by KDC	Development		Low-cost housing	2.	Two fuel filling stations
	Consulting and	(Portion 1 of			3.	Low-cost housing
	Development	Farm 17825)			4.	Light industries such as food and beverages
						production
					5.	Zoning of the agricultural land should not be
						allowed to change, and the Buffer Zone
						should naturally be well respected
					6.	Development area to adhere to additional
						development buffer line of 0.5 km, ensuring
						no development happens west of this line
						which could infringe on the site

Zone	<u>Area</u>	<u>Farm(s)</u>	<u>Sensitivity</u>	<u>Permissible</u>	<u>Guidelines</u>
				<u>Land Use/s</u>	
Agricultural	Agriculture	Mr. Mhlongo's	Low	Agriculture is	1. Agricultural activities are permitted. Mostly
Zone		remaining		permissible as the	sugar cane as it is the main crop being
		Portion 10 of		farms fall under the	cultivated thus far.
		Farm 16902		Agricultural Zone	
		Yethu Family			
		Trust (portion 17			
		of Farm 16902)			

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2.11 Natural Environment

2.11.1 Climate

The KZN Province, within which Sibhudu Cave is located is one of the warmest regions in South Africa. It has an average daily temperature of 25° C. The climate is mostly moderate, but there are a few sultry months with high humidity and high temperatures. Summer rainfall averages 750 mm, and the mean winter rainfall is 250 mm per annum.

2.11.2 Geomorphology

Sibhudu Cave is located in the sandstones of the Natal Group which consists of a thick sequence of sediments, deposited onto a stable platform formed from the erosion of the granitic rocks of the Natal Metamorphic Province. The sandstone at the cave is purple-red, medium-grained and it comprises grains of well-sorted, sub-rounded quartz, feldspar, and some hornblende (Pickering 2006). Some clay is also present between the grains, especially on the exposed surfaces of the cliff, a product of the *in-situ* weathering of the feldspars present here. In this part of KwaZulu-Natal, these arkosic sandstones reach maximum thicknesses of 300 to 400 m. The thicker sandstone layers are more resistant to erosion and form prominent cliffs such as the one in which Sibhudu Cave formed (see Uken 1999).

The internal morphology of the cave is typical of sandy, braided river environments. Individual sets of planar cross-beds show pronounced changes in dip, resulting from discharge fluctuations, and they are often capped by fine-grained siltstone, which is generally eroded away resulting in the stepped morphology of the sandstone cliff at Sibhudu. The south-westerly side of the shelter is exposed to more weathering than the more sheltered eastern section of the shelter. The south-western cliff face has a smooth, shiny, black to silvery coloured stain. This surface feature is most likely a polish formed from the hands and feet of animals that still inhabit the shelter. These include rock hyraxes and vervet monkeys.

The cave was cut into a cliff face during a period of downcutting by the uThongathi River, which today flows at the base of the cliff (Pickering 2006). The sandstone cliffs adjacent to Sibhudu are cut by a number of intrusive dolerite dykes. One such dyke is exposed in the cliff face below the shelter approximately about 15 m upstream from the vertical entrance to the shelter (Pickering 2006). The dyke crosscuts the surrounding sandstone at an angle of ~40°, corresponding to the orientation of the major regional joint set. The contact between the dyke and sandstone is sharp, with only a few dolerite stringers extending 2–3 cm into the sandstone, and minimal alteration of the surrounding sandstone.

2.11.3 Flora

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Sibhudu Cave is located in a remnant forest in which evergreen, deciduous and semideciduous species occur. Mucina and Rutherford (2006) classify this vegetation type as 'KwaZulu-Natal Coastal Belt', within the larger 'Indian Ocean Coastal Belt' bioregion. This is the southern-most limit of humid, tropical to subtropical coastal forests. On the east- and northfacing hillsides near the uThongathi River there is a mosaic vegetation that includes savanna and a tropical vegetation type equally represented by woody plants and grasses. Most woody savanna species are deciduous and usually shed all their leaves in a single season. Tree species include *Albizia* sp, *Erythrina* sp. and *Acacia* sp.

A large specimen of the rare *Celtis mildbraedii* grows on the northern edge of the shelter. Only a few of these trees survive in the wild in South Africa and this particular one was visited by Thomas Packenham, the famous tree author.

To some extent, the present mosaic of vegetation communities has survived and may also have existed when the site was occupied in the Middle Stone Age (MSA) (Wadley 2013). Vegetation has been cleared over the years to pave way for sugar cane farming and other subsistence farming activities. The cliff face is densely populated with indigenous forest vegetation indicative of the KZN Coastal Belt vegetation type.

Additionally, alien invasive plant species found in the area include Melia azedarach (Syringa), Eucalyptus sp (Blue gum), Solanum mauritianum (Bugweed) and Lantana camara (Lantana).

2.11.4 Fauna

The hydrology of Sibhudu Cave provides a habitat for various animals including avifauna, reptiles and amphibians. There are two major rivers and associated streams, drainage lines and wetland areas that fall within the area where Sibhudu Cave is situated.⁴ Species found in the study area and its surroundings include *Gnomeskelus spectabilis* (Pill millipede), *Edouardia conulus*, (Conical Bark Snail), *Eremidium erectus*, the KZN-endemic erect-cercus wingless grasshopper and the endangered *Gulella separata*.

2.12 Accessibility

The site is located west of the R614 road which runs between Tongaat (east) and the R33 road (west) to Pietermaritzburg. The road is tarred and in a fairly good state of maintenance. The

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⁴ Enviroedge Environmental Solutions 2016. Background Information Document for Consultation Draft as a component of the SPLUMA (Act 16 of 2013) for the Proposed Rezoning from Agriculture to Conservation Area for the Sibhudu Cave WHS.

final approach to the site from the custodian's homestead, which ends on the south bank of the uThongathi River, is a natural earth road. It does not have side drainage ditches, hence the early signs of gully erosion. Figure 8 and Figure 9 below shows sections of the road leading to the site.



Figure 8: Section of road from the custodian's homestead to the river



Figure 9: Section of the road leading to the site

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The site is accessed by crossing the uThongathi River. At the present time, a natural arrangement of stepping stones is used as there is no prepared pedestrian pathway across the river (See Figure 10). At times the river is in flood during the rainy season and impassable, which makes this access point seasonal until a footbridge is built. This is a more feasible option in the short to medium term. There used to be a shallow crossing point a short distance upstream, but a deep pool has developed there as a result of sand mining in the river and along its banks.



Figure 10: Crossing Point on the River

Opening an alternative pass on the northern side of the uThongathi River may not be feasible in the short to medium term as there is a cliff and the riverbank is steep. Besides, the viewshed and sense of place will be affected.

The site is about 20 km northwest (30 minutes' drive by car) from King Shaka International Airport from where rental cars or taxis can be hired for a short trip to the site.

2.13 Signage

The site currently does not have directional or interpretive signage. Directional signage will be required at significant points once the site is officially open to the public. Arrows pointing to the site from Mr. Dasa's homestead are required. Interpretative signage at the cave will be required to provide baseline orientation of the site to visitors. The interpretation panels will present information about the cultural context of the site, chronology, stratigraphy, history of excavations, and findings from the excavations. Regulation signage will present conservation

rules. However, signage should be sparse and well-designed and there should be a greater reliance on other mechanisms such as pamphlets that can be obtained in the Interpretation Centre and can function as memos and marketing material when taken away by the visitor. A Tourism Development Plan is required which can include signage.

3 Significance of the Site

3.1 Significance of Sibhudu Cave

3.1.1 Tangible Heritage

The tangible heritage of the modern human population that lived in the Sibhudu Cave and surrounding landscape is expressed in the artefacts found in the cave sediments made throughout the last 77 000 years.

Sibhudu Cave has a preserved long sequence of habitation with artefacts such as flaked stone and polished bone tools, early evidence for sophisticated toolmaking, engraved patterns on ochre, plant bedding, shell beads and, evidence of consistent use of hearths, and the making of paint and adhesives from pigments such as ochre. The findings have demonstrated significant social, behavioural, and technical innovations of people occupying the cave during the MSA.

3.1.2 Intangible Heritage

Local communities settled in the area in 1953, hence the lack of direct connections between extant communities and the site. The area in general has a strong historical and living heritage associated with King Shaka, the 19th century founder of the Zulu Kingdom. For example, the names KwaDukuza and uThongathi both have associational links with the reign of Shaka. The name "uThongathi" is a reference to Shaka and his people arriving in the area at the time when it was not settled, and there were no people living there. When people settled and the landscape changed dramatically, Shaka named the area uThongathi which means "the place is what it is because of us". Tongaat is the English rendering of uThongathi and is the name of the nearby small agricultural town which was home to the oldest Indian community in South Africa. They were the first consignment of indentured Indian labourers from India in 1860 and worked in the sugar-cane plantations. Furthermore, in recent years, a local football team adopted the name, uThongathi.

The name "KwaDukuza" also dates back to the time of Shaka when people came to the hugely forested area, and they could not find a way out of the forest. The name "KwaDukuza" refers to the nightmare of getting lost and confused, which has become the name of the local Municipality – KwaDukuza Local Municipality.

3.1.3 Sense of Place

Sibhudu Cave has a powerful 'sense of place'. In short, "sense of place is the lens through which people experience and make meaning of their experiences in and with place" (Adams,

2013). As one approaches Sibhudu from the south, the cave and surroundings tucked in the uThongathi valley, present themselves as an amphitheatre holding some important treasures (see Figure 11 below).



Figure 11: View of uThongathi River from the top of the cliff

Visitors experience a powerful feeling of the place that is gradually amplified as they approach the steep cliff ascent. Even from a vantage point across the river, the cave itself remains hidden behind the giant *Celtis mildbraedii* tree until one is on the riverbank and slightly downstream from where the road ends. This natural area has remained relatively undisturbed, and the visitor can stand on the riverbank and marvel at the cliff face sculpted by the river through aeons.

This is a good place to start telling the story of Sibhudu, but only up to a point (more will follow at the bottom of the near-vertical short climb, and of course the 'landing place' at the end of the access trail where one enters the cave). From here, the large sugar cane fields above the cliff, and the sprawling rural development area behind the cave are hidden from view. The undisturbed vista of forest, river and the cave face are a focal point to experience the site as it was thousands of years ago.

3.2 Justification for Inscription

This World Heritage Nomination focuses on the evolution of modern human behaviour in *Homo* sapiens in Southern Africa. This is an important subject of study to which UNESCO has directed effort within the ambit of HEADS (Human Evolution: Adaptations, Dispersals and Social Developments).

All living humans belong to a single species – *Homo sapiens*. Modern humans are unique among all living animals in having a complex culture that acts as our primary adaptation to the world and its challenges. That culture is made possible by several key features possessed by all modern humans – a complex cognition, a proclivity to cooperate at large scales with kin and non-kin, and a unique form of social learning. Scientists often refer to these three features collectively as "modern human behaviour" to set it apart from the behavioural repertoire of other animals. All modern humans are descended from an original lineage that lived in Africa and eventually left the continent and spread throughout the planet. It is hypothesised that the original lineage must have possessed this modern human behaviour and the capacity for complex culture. Sibhudu Cave, together with the other sites in this serial nomination provide the best, richest, and earliest scientific evidence for the appearance of modern human behaviour as expressed in the material culture found by scientific investigations at these sites.

Scientific research on the origin of anatomically modern humans and the timing and nature of what behavioural characteristics make us "modern" is centred on archaeological sites that have provided the best evidence for modern behaviour in this crucial time period. In South Africa, Blombos Cave, Diepkloof Rock Shelter and Pinnacle Point Site Complex in the Western Cape, together with Klasies River Rock Shelter in the Eastern Cape, and Border Cave and Sibhudu Cave in KwaZulu-Natal have Outstanding Universal Value with regard to their contribution towards understanding the evolution of anatomically and behaviourally modern humans. The sites offer powerful testimony to the development of distinctly modern human behaviour in the Middle Stone Age (MSA) at the southern tip of Africa between 167 000 and 38 000 years ago. The three sites in the Western Cape and Sibhudu Cave in KwaZulu-Natal have been identified as sites worthy of inclusion on the World Heritage List as first candidates of the serial nomination.

Collectively, Diepkloof Rock Shelter, Pinnacle Point Site Complex and Sibhudu Cave have preserved long sequences of habitation with artefacts such as flaked stone and polished bone tools, early evidence for preparation of stone by heating to improve its flaking qualities for sophisticated tool-making, engraved patterns on ochre, the use of bow-and-arrow technology, shell beads and decorated ostrich eggshell, evidence of consistent use of hearths, and the making of paint from pigments such as ochre. The findings have demonstrated significant social, behavioural and technical innovations of people occupying the caves during the MSA.

At an individual site level, Sibhudu Cave, Blombos Cave, Diepkloof Rock Shelter, Pinnacle Point, Border Cave, and Klasies River Rock Shelter have contributed outstanding evidence for palaeoclimatic and palaeoenvironmental conditions during the MSA between 100 000 and 38 000 years ago. The sedimentary record from these sites shows that these caves were all occupied repeatedly over long periods of time that have been well dated. As a group, these sites are vital to our understanding of the origin of anatomically modern humans, the transitions they survived, and their modern cognitive abilities and cultures. Taken together with the evidence from other long-sequence cave sites of similar age that will become part of a serial nomination from South Africa, the sites fill a significant gap in sites already on the World Heritage and Tentative Lists as identified by the HEADS review and published by the World Heritage Centre (Sanz, N., 2013).

3.2.1 Statement of Outstanding Universal Value

The significance of Sibhudu Cave lies in its comprehensive Middle Stone Age record well dated by Optically Stimulated Luminescence (OSL) to between 100 000 and 38 000 years ago. This period is seldom represented in such detail in other South African sites, and it is therefore a model for the Middle Stone Age sequence during a significant stage marked by a fluorescence of material culture that is a proxy for the development of complex human cognition.

Sibhudu Cave contributes to human evolutionary history through its archaeological evidence of Middle Stone Age occupation which dates between 77 000 and 38 000 years ago. Archaeological evidence in the shelter has revealed evidence of some of the earliest examples of modern human technology. It is one of only three sites in Africa with evidence of shell beads older than 70 000 years. Sibhudu Cave has a rare and particularly rich collection of bone tools dating between 77 000 and 62 000 years ago. It has the world's oldest bone arrowheads that imply that the bow and arrow technology originated in Africa and was in use more than 30 000 years before it was used elsewhere. Weaponry (arrows and maybe spears) was composite at the time because there is also clear evidence for the use of barbs, as well as evidence for the use of several recipes for compound adhesives.

According to geoarchaeologists, the Sibhudu Cave sediments are remarkable and amongst the best in the world for identifying behavioural moments in time. Among other finds, Sibhudu Cave has one of the ancient evidence of bedding made from sedges, grass, and leaves. Due to its significance, Sibhudu Cave has received international recognition as one of the most important sites of its kind and has been nominated as a World Heritage site as part of the

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'Emergence of Modern Humans: The Pleistocene Occupation Sites of South Africa' serial nomination.

3.2.2 Authenticity of the Site

Sibhudu Cave has been excavated since 1998 using up-to-date archaeological techniques and approaches. As such, a team of international and interdisciplinary researchers has been working on the site for the last twenty years.

Given its position, Sibhudu Cave has been completely unaffected by sea-level changes (de la Peña and Wadley 2017). The sedimentary deposits have not shown any significant reworking or mixing. The stratigraphy is complex, but clear and well-preserved (d'Errico et al. 2012). Geoarchaeological investigations demonstrate that the site's stratigraphic layers have integrity and that there is minimal vertical mixing between the anthropogenically-formed layers (Goldberg et al., 2009; Wadley et al., 2011).

d'Errico (2012) notes that the Iron Age occupation has caused some localised disturbance in some of the MSA layers where pits were dug into the deposit. However, this damage is highly localised and the areas that have been affected by the pits are well-controlled and documented and they do not impact on the overall authenticity of the overall site.

3.2.3 Integrity of the Site

Sibhudu Cave contains a long sequence of human occupation over tens of thousands of years with evidence dating to the period of the emergence of modern humans.

Archaeological excavations have been conducted at the site following international standards and best-practice methodology and as such, they have not been detrimental to the site. Findings from the site are well documented, and there is a great deal of scientific literature interpreting the material culture uncovered from the site counting more than hundred scientific publications to date. Existing and ongoing research continue to demonstrate the reliability and quality of information.

Sibhudu Cave is located approximately 15 km inland from the Indian Ocean, 100 m above sea level and 7-8 m above the uThongathi River. Sibhudu Cave is in a semi-rural environment and it has been surrounded by sugar cane plantations for the last 150 years. This setting has not impacted on the archaeological deposit itself.

The site is not fenced, and the river on the southern side of the site acts as a natural barrier. The Dasa family, living approximately 200 m from the site, has been looking after the site ensuring that no unwanted visits are received. The Wewe Driefontein mixed zone development, marked on the map as KDC Consulting and Development (see Map 3) is a proposed mixed zone development which is going to include a shopping centre, 4 000 low-cost houses and schools covering a total of 620 ha. The proposed development is about 0.5 km from Sibhudu Cave. After agreement with the provincial heritage authority, the KZN Amafa and Research Institute, the Sibudu Trust and the Friends of Sibudu, the development has been approved. However, the planned development has been amended to ensure that a Buffer Zone is maintained between Sibhudu Cave and the development.

3.3 Criteria for Selection

World Heritage Sites are selected on the basis of six cultural and four natural criteria. The cultural criteria are as follows:

- i. represent a masterpiece of human creative genius;
- ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change; and
- vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance⁵.

The 'Emergence of Early Modern Humans' (EMH) proposed World Heritage Site comprises a series of sites proposed for inscription on the basis that together they form an outstanding example illustrating the emergence of modern human behaviour, diet and culture during the MSA. Sibhudu Cave, together with other sites is proposed for inscription under the following criteria:

Criterion (iii): Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living, or which has disappeared.

⁵ The World Heritage Committee considers that this criterion should preferably be used in conjunction with other criteria.

Sibhudu Cave preserves a very detailed record of Middle Stone Age occupation from ca. 77 000 to 38 000 years ago. The research conducted on site is pivotal for the understanding of the development of behaviour of modern humans in sub-Saharan Africa. As such, it bears an exceptional testimony to a cultural tradition and a critical stage in human evolution that has disappeared.

Criterion (iv): Be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.

Sibhudu Cave holds some of the oldest evidence in the archaeological record for the usage of bone tools and implements. These, along with compound adhesive, were used in bow and arrow technology which display the complex cognition of our ancestors at the time to multitask and think abstractly. The outstanding lithic assemblage of Sibhudu Cave, unique also amongst the sites represented in the nomination, meticulously illustrate the technological achievements of the Middle Stone Age.

Evidence for the earliest exploitation of birds implies the use of new and innovative acquisition techniques, such as the use of blunt-tipped projectile or bow and arrow technologies, as well as the use of bolas, nets, and snares.

The presence of shell beads for personal ornament illustrates the development of symbolic and social behaviour.

Criterion (v): Be an outstanding example of a traditional human settlement, land-use or seause which is representative of a culture, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change.

People lived at Sibhudu Cave around 77 000 years ago exploiting plants and leaves for their insecticidal and larvicidal properties. This was not previously found in the archaeological record.

4 Situational Analysis and Local Economic Development

To be able to manage Sibhudu Cave in an appropriate and sustainable manner, a better understanding of the local and economic context is required.

4.1 Demographics and Administrative Context

The total population of KwaDukuza municipality is around 276 719. Females constitute 51% while males constitute 49% of the total population.⁶ Statistics show that the population has been increasing, correlating with urban growth in the municipality. According to the 2011 Census, the population grew by 37.8 %, from 167 805 in 2001 to 231 187 in 2011. This has been attributed to the migration of people from the surrounding poorly developed rural municipalities where there are few economic opportunities. KwaDukuza has the lowest figures of unemployment when compared to the other municipalities in the iLembe District namely Mandeni, Maphumulo, and Ndwedwe local municipalities.

Regarding education, 54% of the KwaDukuza population have some form of education and can be regarded as fairly literate.⁷ Overall, education levels have been improving in the district. For example, 9,8% of people had no schooling in 2011 and the figure reduced to 6.8% in 2016. 28.4% of the people had a matric pass in 2011 while the figure rose to 36.4% by 2016⁸. However, those with higher education dropped slightly from 8.6% in 2011 to 8.5% in 2016.

4.2 The Agricultural Sector

Agriculture forms a large part of the KZN Province's economy. The agricultural sector in KZN is growing at around 12% per annum. In 2018, the KZN agricultural sector contributed about 4.4% to the provincial economy, producing approximately 30% of South Africa's agricultural output.⁹ The sector is key in providing food security for the Province and South Africa as well as making a significant contribution towards creating formal and informal employment.

⁶ KwaDukuza Municipality. 2019. Integrated Development Plan. Available at: <u>http://www.kwadukuza.gov.za/IDPdoc/KDM%20Final%20IDP-2019-2020%20.pdf</u>. Accessed on 8 February 2021.

⁷ Ibid

⁸ Ibid

⁹ Unlocking KZN's Agricultural Economic Potential. Available at: <u>https://durbanchamber.co.za/2019/09/11/unlocking-kzns-agricultural-economic</u> <u>potential/#:~:text=In%202018%2C%20the%20KZN%20agricultural,of%20South%20Africa's%20ag</u> <u>ricultural%20output</u>. Accessed on 1 February 2021.

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In KwaDukuza, where Sibhudu Cave is located, sugarcane remains one of the major crops of the agricultural economy. The sector has been declining over the last few years due to various reasons including the change of land use from agriculture to property development, the 2016/2017 droughts and international competition.¹⁰ Sugarcane farmers have been instrumental in changing the governance of the sugar industry through the establishment of the South African Farmers Development Association (SAFDA). SAFDA aims to act as a springboard towards the revival of sugar cane production in particular and agriculture in general, through development partnerships with various government entities¹¹. KwaDukuza Municipality has been involved in the development of Agri hubs under the direction of the Department of Rural Development and Land Affairs. The municipality provides initiatives to support producers on smallholdings by providing them with implements and related agricultural needs.¹²

4.3 The Tourism Sector

Tourism is one of the key economic sectors in KZN Province but has been in a state of decline for some time. The sector is supported by the numerous hotels and restaurants across the Province. In 2010 there were 956 550 tourists visiting KZN, which decreased to 908,277 in 2011, and further decreased to 891,822 tourists in 2012, 847 146 in 2013, 768 228 in 2014 and 743 615 in 2015.¹³ Statistics indicate that the number of foreign tourists from Africa decreased slightly, from 393 017 in 2010 to 371 218 in 2015.

Nevertheless, tourism remains one of the mainstays of the local economy. A large number of domestic tourists visits the area.¹⁴ Developing new and appealing destinations in the Province is a critical function of KZN's Tourism Development Department (TKZN).

4.3.1 Heritage Tourism

Zepple and Hall (1992) define heritage tourism "as an encounter with or an experience of being part of the history of a place through visiting historic sites, monuments, and landscapes.

¹⁰ KwaDukuza Municipality. 2019. Integrated Development Plan. Available at: <u>http://www.kwadukuza.gov.za/IDPdoc/KDM%20Final%20IDP-2019-2020%20.pdf</u>. Accessed on 8 February 2021.

¹¹ Ibid

¹² Ibid

¹³ KZN Tourism Authority: Annual Report 2018/2019. Available at:

http://www.zulu.org.za/files/images/files/TKZN%20Ann%20Rpt%20201819%20web.pdf. Accessed on 1 February 2021.

¹⁴ KwaDukuza Municipality. 2019. Integrated Development Plan. Available at: <u>http://www.kwadukuza.gov.za/IDPdoc/KDM%20Final%20IDP-2019-2020%20.pdf</u>. Accessed on 8 February 2021.

It focuses on learning and includes the experience of local traditions, social customs, religious practices and cultural celebrations". The Advisory Council on Historic Preservation (ACHP) for the United States of America defines heritage tourism as: "the business and practice of attracting and accommodating visitors to a place or area based especially on the unique and special aspects of that locale's history, landscape (including trail systems) and culture".

According to South Africa's National Heritage and Cultural Tourism Strategy 2012, certain heritage and cultural tourism products are still underrepresented in marketing South Africa as a tourism destination. This is mainly because of poor integration of certain heritage and cultural resources into mainstream tourism as well as the value and impact of heritage tourism not being fully realised, particularly the economic potential of related products.

Many of South Africa's prime heritage sites are located within the KZN Province. These sites include monuments, museums, significant structures, heritage precincts, cultural and natural landscapes, places of worship, archaeological sites, palaeontological sites, fossil sites, caves, middens and rock art. Two sites are UNESCO World Heritage Sites namely the iSimangaliso Wetlands Park and Maloti-Drakensberg Mountains. However, not all heritage sites are accessible to tourists, because either they are: i) remotely located; ii) located on private land; iii) vulnerable; and/or iv) do not have adequate tourism infrastructure.

4.3.2 Existing Tourism Attractions

Tourism in KwaDukuza is a significant sector contributing immensely to the local economy. Popular tourism places include Luthuli Museum, Zimbali Coastal Precinct, Ballito holiday town, Flag Animal Farm, a sanctuary for rescued animals, King Shaka's Grave, Tranquillity Bird Hide, Mafuta's Heritage Park, Prince's Grant and many other attractions. The following are the main tourism pulling factors:

- i. The warm and beautiful beaches;
- ii. Proximity to Durban;
- iii. International standard of the coastal resorts;
- Proximity to King Shaka International Airport many people travel and stay in places in the south of KDM because of its proximity to the airport;
- v. Event tourism is strong in KDM, making visitors stay longer;
- vi. Important Culture and Heritage assets such as the Luthuli Museum and King Shaka's Grave;
- vii. There are at least 14 wedding venues in the municipality; and
- viii. The animal Farm in Salt Rock.

Furthermore, the coastline is rich in nature, heritage, and culture.¹⁵ KwaDukuza is the historical place associated with King Shaka's capital and regarded as the cradle of the Zulu Kingdom. KwaDukuza Tourism has been working on doing brand transformation from the Dolphin Coast to KwaDukuza. KwaDukuza is known for its tagline 'Heartbeat of the North Coast'.¹⁶

By inclusion of Sibhudu Cave in the World Heritage Serial Nomination the Cradle of Human Culture trail will connect the Western Province and KwaZulu Natal Province.

A key feature of heritage tourism within KwaDukuza Municipality is the association with King Shaka who was assassinated on 24 September 1828. The day was commemorated annually as 'Shaka Day' by the Zulu people, until after 1994 when it was declared 'Heritage Day' and is celebrated by the whole country as a public holiday.

The King Shaka Cultural Heritage Tourism Trail is being developed in KwaDukuza in honour of the heritage that King Shaka left behind. This project is also known as the "Gateway to the Zulu Kingdom" of KwaZulu-Natal.¹⁷

KwaDukuza was the ancestral home of Chief Albert John Mvumbi Luthuli, the first African to win the Nobel Peace Prize, Chief Albert John Mvumbi Luthuli¹⁸. Chief Albert Luthuli's House is a popular tourism asset that boosts heritage tourism for the area. His grave and the church in which Chief Albert Luthuli's body laid in state¹⁹ are also key assets. On 4th of November 2007, President Thabo Mbeki joined thousands of people from KZN and KwaDukuza in celebrating the life of Chief Albert Luthuli on the 40th Anniversary of his death²⁰.

The town of KwaDukuza is built on the original site of King Shaka's Royal settlement called Dukuza. KwaDukuza Museum is situated opposite King Shaka Memorial and is dedicated to the sugar industry and the history of the early white settlers.

There is a geological terrace from the Eemian (300 000 years ago) with evidence of the last interglacial high stand. The terrace has marine shells embedded in it. This geological terrace can be added to the package of offerings in the area.

 ¹⁵ KwaDukuza Municipality Local Economic Development Plan – Review, 2019.
 ¹⁶ Ibid

¹⁷ KwaDukuza Housing Plan 2007-2012. 2012

https://www.kzndhs.gov.za/Uploads/documents/Services/Integrated Planning/Kwadukuza% 20Municipal%20Housing%20Sector%20Plan/KwaDukuza%20Housing%20Plan%202007-2012-Five%20Year%20Plan.pdf. Accessed on 17 February 2021.

¹⁸ KZN Tourism Business Portfolio. Available at: <u>http://kzntopbusiness.co.za/Site/kwadukuza</u>. Accessed on 19 February 2021.

¹⁹ Ibid

²⁰ Ibid

4.3.3 Tourism Promotion and Management

KwaDukuza Municipality has a functional tourism office, the Sangweni Tourism Centre. (see website <u>https://www.zulu.org.za/places-to-go/north-coast/sangweni-tourism-centre-P49756</u>.) The tourism office focuses on tourism marketing, business referrals and bookings and handling of complaints. The tourism officers participate in various tourism destination shows around the country in partnership with Enterprise iLembe and Tourism KwaZulu-Natal.

The Municipality has been making strides to market its tourism products and services. Amongst them include attending shows such as attends include Tourism Indaba, World Travel Market – Africa. The Municipality has developed and maintains a tourism website <u>www.tourismkwadukuza.co.za</u>, and utilizes the social media with the Hashtag: # Discover KwaDukuza.

Several projects have been identified by the Municipality and the private sector to further tourism development in the area. The Municipality has developed and adopted the KwaDukuza Beach Nodes Development Plan, with the aim to revamp public infrastructure in all the beaches. There are a number of initiatives which will impact tourism. These are:

- Redevelopment of KwaDukuza Museum;
- Integration of King Shaka Memorial Interpretative Centre;
- Expansion of Chief Albert Luthuli Museum project to include various significant sites that link to the late stalwart;
- Conceptualisation and integrating property owners along Mama Nokukhanya Street, Luthuli Street and Chief Albert Luthuli Museum;
- Development of new modern Beach at Nonoti Area; and
- Tourism and Hospitality Industry Skills Development Plan.

4.3.4 Visitor Management

Currently Sibhudu Cave is not receiving visitors except for researchers who come annually to conduct archaeological excavations. The site's custodian, Mr. Dasa, looks after the site from his homestead. For now, tourism should target the academic and research community and not more than one thousand people should visit the site per year.

It is recommended that visitors are not allowed in the cave unless they are accompanied by a trained tour guide. From the 'landing point', i.e. the point before they step on the cave deposits, visitors should be guided by the footpath that is clearly demarcated, which leads to the excavations (Figure 12). School party visits must be allowed so that children can learn about the cave. As part of learning for school party visits, school children can be split into three groups, one at the river, one in the shelter and one in-between where they can make small presentations and carry out activities relating to the site. For example, at the river one can point out the sedges used for bedding and the pebbles and rocks that could be exploited for

stone tool making. They must be well organised so that they are as non-invasive as possible, and any walkways or similar structures should be as little of an infringement on the site as possible. Above all, tour guides should be able to monitor the activities of the visitors inside the cave.



Figure 12: Footpath leading to the Excavation Pit

The following guidelines are proposed for potential tourism development at Sibhudu Cave as well as in the Buffer Zone. Future development should only occur within the recommendations set out. The major consideration should be to restrict developments on or near the site in order to maintain the cave's natural characteristics and the natural setting within which it is located, and above all to maintain the character of the landscape. Infrastructure development should remain strictly within the limits of what is prescribed in the guidelines.

General architectural guidelines include:

- i. New structures should be limited to what is absolutely necessary, and that should include ablution facilities, Interpretation Centre, signage boards, and a footbridge.
- ii. Any new structures should blend into the landscape so as not to disturb viewscapes.
- iii. Natural materials such as wood should be used as much as possible, bearing in mind that they are a potential fire hazard. Plywood should be avoided. Metal might be preferable outside the cave, as the forest surrounding the cave maybe susceptible to fire.

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- iv. Natural colours that blend in with the natural landscape should be used.

Specific guidelines pertaining to Sibhudu Cave include:

- i. No visitors should be allowed to the site unaccompanied by a registered and appropriately trained tour guide.
- ii. Only trained guides can take visitors to the site.

Access to the cave:

 Access to the cave is from the south of the uThongathi River via a road passing by Mr. Dasa's homestead. The road should be left in a fairly wild state yet fully functional. The 'wildness' of the site must be maintained as far as possible, resisting the temptation to 'tame the land'.

There are proposals for improving the crossing on the uThongathi River:

a) <u>Suspension bridge</u>: A sturdy suspension bridge that is high above the water can be considered, see Figure 13. Several ecotourism destinations have made use of suspension bridges. The flood level should be studied, and an engineer engaged. An environmental impact assessment should include plans to minimise impact associated with bringing in materials and no vegetation can be removed unnecessarily, and certainly no trees can be removed. Attractive suspension bridges that blend into the environment are an attraction in their own right. The suspension bridge can be narrow, allowing for one person at a time, one-way traffic, which makes it cheaper and easier to remove in a flood situation. The ideal point to place the bridge is indicated on Map 3 and Map 4 as the crossing point. The crossing point is also shown in Figure 14 below. The path leads on to a path that goes to the near-vertical cliff that must be ascended to reach the cave, see Figure 15 below.



Figure 13: Examples of Suspension Bridges at other Ecotourism Destinations



Figure 14: Crossing Point where the Suspension Bridge can be placed



Figure 15: Vertical cliff that must be ascended to reach the cave

b) <u>Wooden boardwalk</u>: A boardwalk can be constructed across the stream but is more likely to experience flood damage. The boardwalk could however be constructed in four parts so that it can be dismantled when there is a flood warning. Floods maybe hard to predict, however, a hanging footbridge that starts on the lower ledge of the cliff where one starts to climb, would likely be a better option.

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- c) <u>Flat hard substrate on the riverbed</u>: In the short-term, a path of flat rocks can be laid on the riverbed immediately above the small rapid see Figure 14 above, to make the crossing easier.
 - ii. The path to the mouth of the cave:

After the river has been crossed, one passes through a beautiful shady and pristine area. The urge to alter or 'improve' on nature with unnecessary infrastructure should be resisted. One reaches the near-vertical rock face that has to be ascended to get into the cave. The rock is solid and there are secure footholds. At most, a single railing can be fixed to the rock to make it even easier. However, minimal intervention is recommended as the wildness adds to the sense of adventure and exploration that the visitor will experience in coming to the cave.

Access within the cave:

- i. The walkway inside the cave should be clearly demarcated.
- ii. The walkway should not lead visitors directly to the excavation trenches. Visitors should stand at least one meter away from the trenches.
- iii. The walkway should have a 'landing area' as soon as one reaches the cave entrance at its southern end where people can re-organise themselves and receive a briefing from the guide.
- iv. The walkway should have a few designated sites where tourists can comfortably sit on rocks while listening to a lecture. Their positioning should be determined by the head of the excavations.
- v. The walkway can extend to the natural 'platform' (created by a rock fall event) at the far northern end of the cave that overlooks the entire cave from where one can observe the excavation as well as some of the landscape. This is an ideal spot to have a short parting lecture on the ascent of modern humans and touch on aspects such as sustainable living.
- vi. Walking on the ledges along the main wall is prohibited for safety reasons.

4.4 Stakeholders

4.4.1 Community and Local Organisations

1. **Qwabe Traditional Council:** The Traditional Council represents the local community. Its mandate is to ensure that the local community is involved in the management of the site and that they benefit both socially and economically from the site.

- 2. **Sibudu Trust:** This Trust is a non-profit organisation that was established to work with the Management Authority to ensure that the site is adequately protected and conserved as well as to ensure that the community benefits from development activities associated with the site.
- 3. Friends of Sibudu: Friends of Sibudu is a non-profit organisation with interests in the development of the Sibhudu Cave and its surroundings. Friends of Sibudu believe that the site's preservation and declaration as a World Heritage Site hold massive potential to developing the area as a tourism attraction. They would like to see the local community benefiting from the site through employment opportunities that will ultimately improve the lives of the local community.
- 4. Local Business Council: The Local Business Council consists of various enterprises within the area. The Council represents the needs and aspirations of these businesses and would like to ensure that when the implementation of the ICMP kicks off, they are given priority.
- 5. **Local Custodian:** Mr. Dasa is an appointed local custodian. He watches over the site from his homestead and presently accompanies visitors to the site.

4.4.2 Government Authorities

KZN Amafa and Research Institute is a provincial public entity under the KZN Department of Arts and Culture responsible for managing most of the heritage resources within the Province. The South African Heritage Resources Agency (SAHRA) is an entity and statutory body responsible for the protection and management of South Africa's cultural heritage, particularly National Heritage sites, underwater cultural heritage, and moveable heritage resources. It also manages the national heritage register in the form of the South African Heritage Resources Information System (SAHRIS).

4.4.3 KZN Amafa and Research Institute

KZN Amafa and Research Institute was set up to promote awareness of the significance and value of cultural heritage resources while ensuring that cultural heritage management is integrated into economic, social and environmental activities in the KZN Province. Its mandate is to:

a. ensure that the full cultural diversity of cultural heritage resources in KwaZulu-Natal is conserved and managed;

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- b. promote the sustainable and equitable use of cultural heritage resources in the Province, while implementing the controls necessary to ensure sustainability and equity;
- c. facilitate public access to cultural heritage resources and provide appropriate auxiliary services, including opportunities for education and research;
- d. support tourism in KwaZulu-Natal by providing appropriate visitor facilities and experiences; and
- e. employ suitably qualified personnel to ensure that cultural heritage management is conducted effectively.²¹

KZN Tourism Authority: The authority is responsible for ensuring the ongoing development, promotion and marketing of tourism into and within KwaZulu-Natal.

4.4.4 The Private Sector

- 1. **Sangweni Tourism Centre:** This is the local Municipality's tourism office. The Tourism Centre focuses on tourism marketing, business referrals and bookings and handling of complaints. The tourism officers participate in various tourism destination shows around the country in partnership with Enterprise iLembe and Tourism KwaZulu-Natal.
- 2. **Enterprise iLembe:** Enterprise iLembe is the Economic Development Agency of the iLembe District Municipality under which KwaDukuza Local Municipality falls. Its mandate is to drive economic development and promote trade and investment within the area.
- 3. **KDC Developments (Pty) Ltd:** It is a real estate and investment company. They have plans which are already at an advanced stage to develop the Wewe Driefontein mixed zone development project which is going to include a shopping centre, 4 000 low-cost houses and schools.
- 4. **Tongaat Hulett:** Tongaat Hulett is an agriculture and agri-processing business with a foothold in sugarcane production and produces complementary feedstocks from sugarcane and maize. It shares a border with Sibhudu Cave on its southern side.

²¹ KZN Amafa and Research Institute Act, 2018. (Act no 05 0f 2018). Available at: <u>https://www.heritagekzn.co.za/wp-content/uploads/2019/11/The-KwaZulu-Natal-Amafa-and-Research-Institute-Act-English-only.pdf</u>. Accessed on 16 March 2021.

- 5. Ithala Development Finance Corporation Limited: Its mandate is to drive economic development and empowerment. Among other roles, they mobilise financial resources and provide financial services, as well as monitor the implementation of development projects and programmes. It also promotes, encourages, and facilitates private sector investment and participation in community development projects and programmes.
- 6. **The Local Business Council**: The Local Business Council is an association of local and emerging businesses in the Ndwedwe Local Municipality. Its aim is to lobby for the participation of local businesses in local economic development.

4.4.5 Academics, Researchers and Specialist Interest Groups

Research at Sibhudu Cave was first conducted by Aron Mazel of the KwaZulu-Natal Museum, and later by Prof. Lyn Wadley of the University of the Witwatersrand (South Africa), and Prof. Nicholas Conard of Tübingen University (Germany). Prof. Lyn Wadley has conducted excavations at Sibhudu Cave over a period of ten years and is still doing scientific work on the material she recovered. Her research has contributed significantly to the understanding of ancient human technology and the thought patterns that generated it through excavations, analysis of material culture, interpretation, and publications.

Prof. Nicholas Conard is following in these footsteps and is fully committed to continue the excavations and scientific research in the years to come, as well as support the ICMP.

The Association of Southern African Professional Archaeologists (ASAPA) has an interest in the ongoing management and conservation of Sibhudu Cave. ASAPA has previously commented on proposed development applications and continues to have an interest in activities here.

4.5 Management Issues

A local resident, Mr John Dasa, is the appointed custodian of Sibhudu Cave. He watches over the site from his homestead approximately 200 m south of the cave. By this appointment, he is remunerated by the Amafa and Research Institute. The World Heritage nomination process requires that a Management Authority is established as the executive authority for the serial nomination. Since the cave has been declared a National Site (Grade 1), SAHRA is the heritage authority responsible for the permitting and management of the site in terms of section 27 of the NHRA. An ideal arrangement is for Amafa to be appointed the Management Authority.

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4.5.1 Risk Assessment

There are no major natural threats to the site. The site is well preserved in its natural setting as no direct sunlight nor rain enter the cave. Water erosion does not take place within the cave as it is sheltered by an overhanging cliff. The cave is dry but without grass or other vegetation, which rules out the threat of fires. However, fires do present a threat to the Buffer Zone containing the indigenous forest.

At the present time, there are no human threats to the site as visits are strictly controlled. However, when the site becomes a World Heritage Site, visitor numbers are expected to increase, hence the need to develop a visitor management strategy. The cave is out of reach of domestic animals, and there are no large wild animals that are known to shelter in the cave.

The excavation trenches are covered with sandbags to stabilise and protect the archaeological deposits. The local custodian watches over the site from his homestead and ensures that, no one goes to the site without permission or unaccompanied.

i) Development pressures

The site is located in a rural area. Plans are in place for a mixed zone development located approximately 0.5 km from the site. The development will include a shopping centre, 4 000 low - cost houses and schools covering a total of 620 ha. A buffer has been imposed between the cave and the development zone to ensure that the developments do not affect the site negatively. It was confirmed by a stakeholder consultation process prior to the commissioning of the ICMP.

Agriculture is not a threat as the forested area around the cave is not arable given the steep gradient, which in turn provides protection to the site.

Infrastructure development: No major infrastructure development is proposed at the site. Plans are at an initial stage for the possible development of an Interpretation Centre and an ablution facility located near the local custodian's homestead approximately 200 m from the site. These are necessary facilities and will not significantly impact the landscape.

Sand mining: Local people extract sand from the river and the riverbanks for building. As a result, the local natural environment has been impacted by erosion and loss of vegetation. A deep channel was created in this section of river close to the cave. This was the original crossing point to the cave and is now impassable. Community Based Natural Resource Management (CBNRM) is proposed to ensure that the local community continue to use this natural resource in a more sustainable way, without impacting negatively on the environment. CBNRM can also extent to traditional uses of the forest.

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Land and River Pollution: Poor management of plastic litter was noticed at the Custodian's homestead and neighbouring households. Plastic waste was also observed on the banks of the uThongathi River, most likely transported by the river from sources upstream. The river water is also possibly polluted as it has a greenish tinge which could be caused by agrochemicals. Although this does not have a direct effect on the cave itself, the natural environment around the cave is affected.

Climate change: Subtropical climatic conditions are partly influenced by conditions at the coast which is only 10 km away. It is generally mild all year round, however, summers are characterised by high humidity and high temperatures. The area receives summer rainfall averaging 750 mm, with most rain occurring from October to January. Winter rainfall averages about 250 mm per annum. These conditions do not seem to affect the site as the interior of the cave is always dry. The cliff overhang and the thick surrounding forest give natural protection to the site. Climate change is known to induce erratic weather patterns. At the present time, the short- and long-term impacts of climate change have not been evaluated.

5 Vision, Objectives and Policies

5.1 Vision

Sibhudu Cave World Heritage Site strives to be well-managed and self-sustaining, its values appreciated by all people, locally, nationally, and internationally; and enhanced and promoted through research, education, awareness, and interpretation while contributing to local economic development.

5.2 Strategic Objectives

The following Strategic Objectives (SOs) support the Vision:

SO1: To establish a management framework for Sibhudu Cave that will ensure the conservation of the site's archaeological deposits and related archaeological material while preserving its Outstanding Universal Value.

SO2: To encourage collaboration between stakeholders to conserve Sibhudu Cave and promote the site as a heritage tourism attraction.

SO3: To increase the awareness and appreciation of Sibhudu Cave by the local and global community through research, education, and interpretation of the cultural heritage of the site.

SO4: To build capacity of local people in heritage tourism to ensure responsible tourism to Sibhudu Cave.

SO5: To encourage the generation of community benefits through on-the-job training and encourage integration of local entrepreneurship and job creation projects.

SO6: To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support site management.

SO7: To constantly assess the economic, social, and environmental impacts and opportunities at Sibhudu Cave and the surrounding areas.

SO8: To put in place Monitoring, Evaluation, Learning and Intervention (MELI) system that will be ongoing in supporting adaptive management.

5.3 State of Conservation

5.3.1 Current State of Conservation of the Heritage Resources

The cave deposits are sensitive and the immediate environment fragile if subjected to large numbers of visitors. The site is currently under excavation by a team led by Prof. Conard from

the University of Tübingen (Germany). The site is therefore still open for research but is closed at the end of each excavation season. Given the current depth of excavations at approximately 2.7 m, it is important for the site to be kept safe both for the preservation of the deposit itself and for the excavators. To make the site safe for excavation, tensioning poles

have been erected, (see Figure 16 below). These poles help to secure wooden boards against



Figure 16: Tensioning Poles to Protect the Excavation Pits

The excavation trench is buffered with sandbags at the end of each excavation season, see Figure 17 below. For the last 10 years, this arrangement after yearly closing of the excavations has proven effective.



Figure 17: The Cave Floor with Sandbags to protect the Excavation Trench and the Archaeological Deposits

The site is relatively inaccessible. The cave is located below a steep cliff and surrounded by a dense forest, thereby receiving a fair degree of natural protection. There are no visits by the general public to the site except for researchers, but plans exist to develop the site for tourism as part of the Cradle of Human Culture expansion.

The KZN Amafa and Research Institute employs a local custodian, Mr. Dasa, to watch the site from his homestead across the uThongathi River.

5.3.2 Desired State of Conservation of the Heritage Resources

In a desired state, Sibhudu Cave is well-managed, adequately protected and promoted. Stakeholders collaborate to safeguard the authenticity and integrity of the cave and ensure that it is integrated into local development plans as well as into the broader cultural landscape. Responsible heritage tourism is implemented and guided by a local tourism and marketing plan. Visitor numbers are controlled through the required use of trained guides to access the site. Interpretation of the site is promoted and at the same time awareness and appreciation of the value of the site is enhanced for both the local and national community hence contributing to the long-term care of the site. A sustainable finance mechanism is implemented to secure long-term funding for the protection of the site and economic benefits are shared with the local community.

6 Policy, Legal, Statutory, and other Frameworks

6.1 National Legal Status and Protection

There are a number of laws that provide an enabling framework in terms of actions that can be taken to protect the property. The site is protected under the National Heritage Resources Act (NHRA), Act no. 25 of 1999. The NHRA promotes good management of the National Estate, enables, and encourages communities to nurture and conserve their legacy so that it may be bequeathed to future generations.

The KwaZulu-Natal Amafa and Research Institute was established in terms of Section 8 of NHRA as the provincial heritage resources authority for the KZN Province. The KZN had passed its own enabling act, the KwaZulu-Natal Heritage Act, no. 10 of 1997, which was supplanted by the KwaZulu-Natal Heritage Act no 4 of 2008. The latter has been amended to become the KwaZulu-Natal Amafa and Research Institute Act no 5 of 2018. The authority's mandate is to identify, conserve, protect, manage and administer heritage resources. It is also mandated to conduct both basic and applied research to generate relevant knowledge and contribute solutions to heritage issues in the Province.

Within the provisions of the NHRA, the mechanisms for the protection of heritage resources and resolution of conflicts are in place for heritage sites. Key provisions of the Act, their relevance to this ICMP and the related challenges faced are summarised in Table 5 below.

All Protected areas in the country are protected under the National Environmental Management: Protected Areas Act (Act 57 of 2003). Protected Areas includes World Heritage Sites, National Park, and Nature Reserves etc. NEM: PAA was established to provide for cooperative governance with regard to declaration and management of protected areas; Effect a national system of protected areas as part of a strategy to manage biodiversity; promote a representative network of protected areas, which are effectively managed; promote sustainable use of protected areas for the benefit of all (bring about coexistence with other land uses); and promote the participation of local communities.

The South African World Heritage Convention Act, no. 49 of 1999 incorporates the World Heritage Convention into South African law and establishes a framework for the establishment and management of World Heritage Sites. Of relevance for a candidate World Heritage Site such as Sibhudu Cave are the provisions for the establishment of management authorities for all World Heritage Sites in South Africa, including their administration and responsibility for their finances.

Once a site is inscribed on the World Heritage List and gazetted as such, and in terms of Section 13 thereof, the National Environmental Management: Protected Areas Act (NEM: PAA) no 57 of 2003 automatically applies to both the property and its Buffer Zone. This Act and its regulations provide a wide range of environmental and related protections, applicable to national parks and other protected natural areas. The NEM: PAA deals with some matters which are not as clearly established in the NHRA, in particular prescribing a prohibition of mining and prospecting. In addition, the regulations of the Act provide a broad array of measures useful in the day-to-day protection and management of World Heritage Sites. These are particularly useful in managing access and development as well as environmental resources within the site.

Section 42 of the NHRA allows for a provincial or local authority, conservation body or community for the execution of a heritage agreement to provide for the conservation, improvement, or presentation of a clearly defined heritage resource, provided that the consent of the owner of the property is given. SAHRA has obtained support from the landowner for the declaration of Sibhudu Cave as both a National Heritage site and for the WHS.

Table 5: Analysis of the NHRA

National Heritage Resources Act (NHRA)								
Section	Description	Relevance to ICMP	Key issues					
13 (1)	 (SAHRA is the statutory organisation established under the National Heritage Resources Act 25 of 1999, as the national administrative body responsible for the protection of South Africa's cultural heritage). The general functions of SAHRA are to— a) establish national principles, standards and policy for the identification, recording and management of the national estate in terms of which heritage resources authorities and other relevant bodies must function with respect to South African heritage resources; b) co-ordinate the management of the national estate by all agencies of the State and other bodies and monitor their activities to ensure that they comply with national principles, standards and policy for heritage resources and keep permanent records of such work; d) advise, assist and provide professional expertise to any authority responsible for the management of the national estate at provincial or local level, and assist any other body concerned with heritage resources management; e) promote and encourage public understanding and enjoyment of the pational estate and public interest and involvement in the 	Sibhudu Cave is a National Heritage Site Management issues Issuing of research permits	The site currently does not have an officially designated Management Authority. The appointment of a Management Authority is still ongoing.					
	National Heritage Resources Act (NHRA)							
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Section	Description	Relevance to ICMP	Key issues					
	 identification, assessment, recording and management of heritage resources; and f) promote education and training in fields related to the management of the national estate. 							
27(16)	At the present time Amafa, the provincial heritage resources authority is responsible for the protection of provincial heritage sites in accordance with the provisions of Section 27.	Management responsibilities	 Absence of an officially designated Management Authority 					
27(18)	No person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority responsible for the protection of such site.	Protection of the site	 Controlling environmental and development pressures 					
27(19)	The responsible heritage resources authority may make regulations pertaining to heritage sites under its control, or to any other heritage site with the consent of the owner of that site— (a) safeguarding heritage sites from destruction, damage, disfigurement, excavation or alteration; (b) regulating the conditions of use of any heritage site or the conditions for any development thereof; (c) regulating the admission of members of the public to a heritage site, and the fees payable for such admission.	Site management Guidance for archaeological work	 Local custodian guarding the site Monitoring 					

	National Heritage Resources Act (NHRA)					
Section	Description	Relevance to ICMP	Key issues			
27(21)	The responsible heritage resources authority may, by agreement with the owner of a heritage site (a) conserve or improve any heritage site; (b) construct fences, walls or gates around or on a heritage site; (c) acquire or construct and maintain an access road to a heritage site over any land, and construct upon such land fences, walls or gates; or (d) erect signs on or near a heritage site.	Infrastructure Development at the site	 Accessing the cave is a challenge because of the river and the steep ascent Absence of directional signage to the site 			
27(23)	All reproduction rights either in two or three dimensions in respect of a heritage site, subject to any existing rights and the agreement of the owner of such site, belong to the State and vest in the heritage resources authority responsible for the protection of such site or, by agreement, with the authority or public institution responsible for the management of such site. (b) Subject to the provisions of paragraph (a), no person other than the owner of the site may make such reproduction for profit without a permit issued by SAHRA or a provincial heritage resources authority, as the case may be, which may prescribe the fees payable in respect of such reproduction and must deposit such fees in a trust fund dedicated to the conservation of such site or of heritage resources in general.	Management of film production	• Filming to provide educational material and to promote the site			

	National Heritage Resources Act (NHRA)					
Section	Description	Relevance to ICMP	Key issues			
28(2)	A heritage resources authority may, with the consent of the owner of an area, by notice in the Provincial Gazette designate as a protected area— (a) such area of land surrounding a declared heritage site as is reasonably necessary to ensure the protection and reasonable enjoyment of such site, or to protect the view of and from such site; or (b) such area of land surrounding any archaeological or palaeontological site or meteorite as is reasonably	Additional protection mechanism for the Buffer Zone Legal protection				
28(3)	necessary to ensure its protection. No person may damage, disfigure, alter, subdivide or in any other way develop any part of a protected area unless, at least 60 days prior to the initiation of such changes, he or she has consulted the heritage resources authority which designated such area in accordance with a procedure prescribed by that authority.		The site is not incorporated in local municipal development and planning framoworks			
28(5)	A heritage resources authority may make regulations providing for specific protections for any protected area which it has designated, including the prohibition or control of specified activities by any person in the designated area.		ITUTTIEWOIKS			
28(6)	A local authority may, with the agreement of the heritage resources authority which designated a protected area, make provision in its town planning scheme or in by-laws for the management of such area.					
30(5)	At the time of the compilation or revision of a town or regional planning scheme or a spatial development plan, or at any other time of its choosing, or at the initiative of a provincial heritage resources authority where in the opinion	Inventory of heritage resources	Insufficient integration with local			

National Heritage Resources Act (NHRA)					
Section	Description	Relevance to ICMP	Key issues		
	of a provincial heritage resources authority the need exists, a planning		development		
	authority shall compile an inventory of the heritage resources which fall within		and planning		
	its area of jurisdiction and submit such inventory to the relevant provincial		frameworks		
	heritage resources authority, which shall list in the heritage register those				
	heritage resources which fulfil the assessment criteria under Section 30(1).				
	A planning authority must at the time of revision of a town or regional planning				
	scheme, or the compilation or revision of a spatial plan, or at the initiative of				
31(1)	the provincial heritage resources authority where in the opinion of the				
51(1)	provincial heritage resources authority the need exists, investigate the need for				
	the designation of heritage areas to protect any place of environmental or	Establishment of a			
	cultural interest.		 Insufficient 		
	The management authority must assist the planning authority to investigate the	- Heritage Area	integration with		
	designation of the place as a heritage area. Where the planning authority is	Overlay Zone	local		
31(3-4)	unable or unwilling, the heritage authority may investigate the designation of	Integration with	development		
	the place as a heritage area and, with the approval of the MEC, designate		and planning		
	such place to be a heritage area.	spatial planning	frameworks		
31(5)	A local authority may designate any area or land to be a heritage area on the	spana planning			
	grounds of its environmental or cultural interest or the presence of heritage				
	resources, provided that prior to such designation it shall consult the				
	management authority and the relevant landowner/s, as well as any other				
	interested or affected parties.				

	National Heritage Resources Act (NHRA)						
Section	Description	Relevance to ICMP	Key issues				
31(7)	A local authority must provide for the protection of a heritage area through the provisions of its planning scheme or by-laws under this Act, provided that any such protective provisions shall be jointly approved by the provincial heritage resources authority, the provincial planning authority and the local authority, and provided further that— (a) the special consent of the local authority shall be required for any alteration or development affecting a heritage area; (b) in assessing an application under paragraph (a) the local authority must consider the significance of the area and how this could be affected by the proposed alteration or development; and (c) in the event of any alteration or development being undertaken in a heritage area without the consent of the local authority, its hall have the power to require the owner to stop such work instantly and restore the site to its previous condition within a specified period. If the owner fails to comply with the requirements of the local authority, the local authority shall have the right to carry out such restoration work itself and recover the cost thereof from the owner.						
42 (1)	SAHRA, or a provincial heritage resources authority may negotiate and agree with a provincial authority, local authority, conservation body, person, or community for the execution of a heritage agreement to provide for the conservation, improvement, or presentation of a clearly defined heritage resource: Provided that the consent of the owner of such resource is given.	Appointment of a Management Authority	 The site currently does not have a Management Authority 				

6.2 International and National Guidelines

6.2.1 Alignment with International Guidelines

In addition to the legislative requirements of protection and management of Sibhudu Cave, this ICMP is informed by international best practices related to World Heritage Sites and is therefore subject to the following international charters and guidelines:

- i. ICOMOS Charter for the Protection and Management of Archaeological Heritage (1990);
- ii. ICOMOS International Cultural Tourism Charter (1999);
- iii. The Burra Charter: The Australian ICOMOS Charter for Places of Cultural Significance;
- iv. ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites (2008);
- v. UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003);
- vi. United Nations Environment Programme (UNEP) sustainable tourism in protected areas guidelines (2002);
- vii. Convention on Biological Diversity (CBD) guidelines on biodiversity and tourism development (2004); and
- viii. UNESCO Operational Guidelines for the Implementation of the World Heritage Convention (2019).

The ICMP complies with the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) Operational Guidelines for the Implementation of the World Heritage Convention (2019). These guidelines aim to safeguard the authenticity and integrity of a site through inter alia appropriate management actions, as well as indicating clear site boundaries and a Buffer Zone. In addition, the principles of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage have been consulted to ensure that the site remains relevant to the living cultural landscape and its people.

6.3 Integration with Regional Planning

Regional and local planning guidelines and frameworks were assessed to ensure that the ICMP is integrated with the development planning of the region. Provincial and local plans and legislation assessed include the following:

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6.3.1 KwaZulu-Natal Planning and Development Act, 2008 (Act No. 06 of 2008)

The Act provides for planning regarding development, land use, landownership, and land subdivisions and zoning among other issues. It seeks to promote a uniform planning and development system that treats all citizens of the Province equitably; provide a fair and equitable standard of planning and development to everyone in the Province while accommodating diversity such as urban and rural needs; and incorporate and build on good practices and approaches to planning and development which have evolved outside of the formal planning and development systems.

Most importantly, the Act stipulates the need for developers to consider the potential impact of any development proposal on the environment, socio-economic conditions, and cultural heritage as well as the protection or preservation of cultural and natural resources, including agricultural resources, unique areas or features and biodiversity.

6.3.2 Permissible Infrastructure

It is recommended that the only infrastructure permitted for development at the site is:

- 1. Interpretation Centre and ablution facilities;
- 2. Interpretation Boards;
- 3. Low-cost footbridge across the uThongathi River; and
- 4. Low mounted interpretive panel at the last stop and view point in the cave.

7 Management Structures

7.1 Overview

Over the last two decades, there has been an increasing emphasis on putting in place more rigorous management systems for World Heritage Sites. There has also been an increase in the emphasis on including, and even putting local communities centrally in WHS management, the Johannesburg Declaration of 2002 being only one example. There is also growing emphasis not only on strengthening Buffer Zones but putting in place effective Buffering Mechanisms to strengthen heritage protection. Figure 18 and Table 6 below provide an overview of the system of management for World Heritage Sites in South Africa. Table 6 outlines the responsibility of each institutions within the matrix of heritage management. Figure 18 that follows shows the accountability chain between the relevant management institutions.



Figure 18. Responsibility matrix of the different institutions

Table 6: Summary of stakeholder institutions, responsibilities, and source of legal mandates

No	Institution / Department	Legislation	Responsibilities
1	Department of Forestry,	The World Heritage Convention	Overall responsibility for WHS in South Africa
	Fisheries and the	Act (No 49 / 1999)	Represents the State Party in World Heritage Matters
	Environment (DFFE)	The National Environmental	Submission of Nomination Dossiers to UNESCO
		Management Act (No	Periodic reporting to UNESCO
		107/1998)	High level policy formulation
			High level monitoring
			Funding of World Heritage Sites
2	Department of Sport, Arts	The National Heritage Resources	Develop, preserve, protect and promote arts, culture and heritage
	and Culture (DSAC)	Act (No 25 / 1999)	• Key stakeholder in WHS management from the perspective of
			cooperative governance
			Co-management of cultural and mixed sites on the World Heritage List
3	South African Heritage	The World Heritage Convention	National statutory body for management of heritage resources
	Resources Agency	Act (No 49 / 1999)	Responsible for the management of Grade 1 sites – National Heritage
	(SAHRA)	The National Environmental	Sites
		Management Act (No	Assessment and monitoring the competency of heritage authorities
		107/1998)	
		• The National Heritage Resources	
		Act (No 25 / 1999)	
4	South African World	The National Heritage Resources	Ministerial advisory committee on World Heritage Matters
	Heritage Convention	Act (No 25 / 1999	A forum of experts on World Heritage matters
	Committee (SAWHCC)		Monitoring and evaluation body

No	Institution / Department	Legislation	Responsibilities
5	KwaZulu-Natal	The National Heritage Resources	• Promoting arts and culture and mainstreaming its role in social
	Department of Sport, Arts	Act (No 25 / 1999)	development
	and Culture (KZN DSAC)	The KwaZulu-Natal Amafa and	Policy formulation and implementation
		Research Institute Act (No 5	Funding of heritage programmes
		/2018	
6	Amafa and Research	The National Heritage Resources	Promote the sustainable use of the province's cultural resources
	Institute	Act (No 25 / 1999)	Encourage and facilitate public access to heritage resources
		• The KwaZulu-Natal Amafa and	Promote heritage education and research
		Research Institute Act (No 5/	Capacity building for heritage management (staffing and training)
		2018)	
7	Site Management	The National Heritage Resources	Brings on board local stakeholders to provide input and in some cases
	Committee	Act (No 25 / 1999)	represent their constituencies
		• The KwaZulu-Natal Amafa and	• Interfaces government institutions with the site, local people, and
		Research Institute Act (No 5 of	institutions
		2018)	
		• Spatial Planning and Land Use	
		Management Act (No 16/2013)	

The system of management of World Heritage Sites may be summarized as follows:

The **Department of Forestry**, **Fisheries and the Environment (DFFE)** is the Government Ministry responsible for the management of World Heritage Sites in South Africa. It is the country focal point and the interface between South Africa as a State Party to the World Heritage Convention and the UNESCO World Heritage Centre in matters concerning World Heritage Sites such as tentative listing, nominations, and periodic reporting.

DFFE is responsible for the implementation of World Heritage Convention and its domestic application under the World Heritage Convention Act (No 49/1999). Therein are statutory provisions for the establishment of Management Authorities for World Heritage Sites. Considering the number of World Heritage Site in South Africa, the different tiers of Government and various Management Authorities, it became necessary to establish a coordinating committee for World Heritage.

Through Government Gazette No. 39347, DFFE announced the establishment of the **South African World Heritage Convention Committee (SAWHCC)** as a forum of experts on world heritage management which includes site managers of the 10 World Heritage Sites, practitioners from other key stakeholder institutions such as the Department of Sport, Arts and Culture (DSAC), South African Heritage Resources Agency (SAHRA) and National Heritage Council (NHC). The principal function of SAWHCC is to provide professional advice to the Minister. SAWHCC meets quarterly for status quo briefings on nominations, South Africa's World Heritage Tentative list, conservation issues and any other matters of concern.

At inter-ministerial level, DFFE works closely with the **Department of Sport**, **Arts and Culture (DSAC)** particularly concerning the management of cultural and mixed sites with both natural and cultural elements. As a government department, its mission is to develop, preserve, protect and promote arts, culture and heritage. DSAC has a particularly prominent role to play in the case of cultural and mixed sites. It is a key stakeholder from the perspective of cooperative governance. The South African Heritage Resources Agency (SAHRA) is accountable to DSAC.

The **South African Heritage Resources Agency (SAHRA)** is the national statutory body for the management of heritage resources in South Africa. It is responsible for the management of Grade 1 sites, also called National Heritage Sites (NHS). It is a minimum standard before a site is inscribed on the World Heritage List that it must be afforded maximum legal protection as a Grade 1 Site in terms of Section 7 of the National Heritage Resources Act. Furthermore, SAHRA in terms of Section 8(6) of the NHRA is mandated to assess the competence of heritage authorities to perform heritage management tasks before such a responsibility is delegated. In general, SAHRA plays an important statutory oversight role in heritage management matters. It makes decisions regarding management and use of the site in accordance with Section 42(1)(a) of the National Heritage Resources Act (1999). This section further allows SAHRA to

establish a 'heritage agreement' with the landowner, a local community, the municipality or individual to conserve and improve, or present and interpret a defined heritage resource, in this case Sibhudu Cave.

7.2 Establishment of a Management Authority

In terms of Sections 7, 8, and 9 of the South African World Heritage Convention Act (WHCA) (No. 49 of 1999), a Management Authority (MA) serves to provide an effective system for the management of World Heritage Sites in line with the Operational Guidelines for the Implementation of the World Heritage Convention (WHC), the South African World Heritage Convention Act (WHCA) and the National Heritage Resources Act (NHRA).

A **Joint Management Committee (JMC)** will be required for the effective implementation of the ICMPs for the sites in this serial nomination including Sibhudu Cave. At the provincial level, the management system will be coordinated and hosted by the Member of the Executive Council (MEC) of the KZN Department of Arts and Culture.

For the submission of the initial nomination, the MEC of the KwaZulu-Natal for Arts and will be a member of the Joint Management Committee taking stewardship of the sites in KwaZulu-Natal whilst the MEC of the Western Cape for Cultural Affairs and Sport should be responsible for the sites in the Western Cape. The two Management Authorities representatives, along with a representative of the National Department of Forestry, Fisheries and the Environment, will form the Joint Management Committee, which will meet biannually and when necessary. This would be in line with the current structure of other proposed and inscribed serial sites in South Africa.





Figure 19: Proposed Structure of the Management Authority for the Emergence of Modern Humans WHS

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In the case of Sibhudu Cave, the **KZN Department of Sport**, **Arts and Culture** which resides in the KZN Provincial Government has the responsibility of promoting arts and culture and mainstreaming its role in social development. Most heritage projects are funded by the provincial government which must play a key monitoring and oversight role to ensure financial compliance and service delivery. The office of the MEC should have a sub-directorate created, with a dedicated staff member that will work with the various committees and liaise with the Joint Management Committee, DFFE and other heritage authorities.

7.3 Establishment of a Management Authority

Amafa and Research Institute is the provincial Heritage Resources Authority (PHRA). It is concerned about development anchored on the heritage resources in KZN Province. As such, its responsibilities encompass conservation, management, interpretation, and sustainable utilisation of the heritage resources. Amafa's role is to identify and promote projects that can leverage on heritage to bring about socioeconomic development to benefit communities and all the people of the Province.

Amafa is suitably positioned to become the Management Authority for Sibhudu Cave given its officially stated mandate to "promote the use of the province's cultural resources in a manner that is equitable and sustainable; encourage and facilitate public access to heritage resources, including encouragement of research, education and living heritage practices; support the tourism industry of the province by providing appropriate facilities and experiences to visitors of the sites; and employ suitably qualified personnel to ensure that the management of heritage resources, and the auxiliary services thereto, is undertaken in a manner that will promote the values of the organisation."

At the present time, SAHRA is in the process of assessing Amafa's competency and readiness to run the affairs of the site. The ideal arrangement would be that Amafa together with the Department of Cultural Affairs and Sport in the Western Cape and the Department of Sport, Recreation, Arts and Culture in the Eastern Cape would establish the Management Authority at both a serial and site level to which they would second staff, or oversee staff appointed for particular management purposes. In this way, whether Amafa passes the test of competency or fails, it will continue to administer the cave under existing arrangements.

7.4 District and Local Government Level

District and Local Municipalities are responsible for regulating Buffering Mechanisms for protected areas which included all the World Heritage Sites. In the case of Sibhudu Cave, KwaDukuza Local Municipality, Ndwedwe Local Municipality, and the iLembe District Municipality will be involved. Municipalities prepare and implement Spatial Development Frameworks for the integrated management of current and desirable land uses within a municipality for the sustainable utilisation of land resources. Spatial Development frameworks are enabled by the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA) whose object is to provide a framework for spatial planning and land use management.

Heritage agreements between the municipalities should be developed that define the roles of the municipalities in terms of planning and land use. It would be presumptuous to expect a local planning authority to revise their entire SDF on the declaration of the sites. However, the requirements to address these planning issues should be included in a heritage agreement between the Management Authority and the local municipalities prior to the declaration of these sites as WHS. Heritage Agreements may also be used to address issues of access, conservation and other general issues that can be resolved through contractual means.

7.5 Site Management Committee

7.5.1 Structure and Functions of the Site Management Committee

In order to incorporate the needs, aspirations and mandates of important local level stakeholders that may have a bearing on the management of the site, it is proposed that a **Site Management Committee (SMC)** be developed. The SMC not only brings together key stakeholders together but will ensure that they remain on board and can contribute to the management of the site at a local level. The SMC in particular is a valuable resource to the Management Authority in that it provides valuable linkages to key stakeholders that can affect and are affected by the site. The SMC, therefore, is an interface between government institutions and the local people and institutions. For the proposed structure of the Site Management Committee, see

Figure 20 below.

NB: It is important to note that the SMC for each of the sites in the nomination will differ according to realities on the ground for each of them, as well as their needs. As a result of these differences, the sites cannot have a size fits all management structure. For instance, Sibhudu Cave has a strong and eager local community that is willing to be involved in the management of the site whilst Diepkloof Rock Shelter and Pinnacle Point site Complex are in a private land and no local community exists nearby.

According to Levin's (2008), analysis of the Management structures of the Fossil Hominid sites of South Africa WHS and the iSimangaliso WHS, a centralised power organisational structure within these Management Authorities isolates the stakeholders from participating in the governance of the sites. The structure in

Figure 20 is focussed on putting the power where the knowledge lies.

The Site Management Committee should engage regularly with the other external stakeholders around the site regarding management of the site. Representatives from the local municipalities will be needed.



Figure 20: Proposed Structure for Site Management Committee

The key stakeholders will appoint representatives for the proposed Site Management Committee.

Each stakeholder represented should be tasked with specific functions that pertain to its role in ensuring the conservation and sustainable management of Sibhudu Cave.

The Site Management Committee should consist of representatives of the following stakeholders:

- 1. The landowners;
- 2. Qwabe Traditional Council;
- 3. The local custodian;
- 4. Sibudu Trust;
- 5. Friends of Sibudu;
- 6. Ward councillors;
- 7. KwaDukuza Local Municipality;
- 8. Ndwedwe Local Municipality;
- 9. iLembe District Municipality;

- 10. The archaeologists holding recent excavation permits for the site;
- 11. Relevant conservation bodies registered with KZN Amafa Research and Institute; and
- 12. KZN Tourism Authority.

7.5.2 Delegations made to the committee should deal with the following issues:

- 1. Implementing specific tasks outlined in Section 8 of this ICMP;
- 2. Communicating regularly with other stakeholders and authorities;
- 3. Managing and mitigating risks;
- 4. Providing input and expressing opinions on proposals for work of any nature on the site;
- 5. Coordinating the responsibilities and work of its members and other stakeholders regarding the site;
- 6. Investigating possibilities for coordinating with community and other tourism initiatives in around Sibhudu, as well as the local and district municipalities;
- 7. Assisting in the development of accessibility and tourism on the site; and
- 8. Entering into a heritage agreement with the Management Authority.

7.6 Institutional Development, Monitoring and Assessment

Concerning institutional development and capacity building, an incremental approach is proposed. This ICMP is based on a conservative financial approach²² given the financial austerity, nationally and internationally, as well as the challenges involved in developing tourism businesses under adverse economic conditions. Accordingly:

(i) A 'start small' strategy is key for allowing successful establishment of a management authority, (ii) Finances should be utilised wisely so as not to outstrip the budget channelled towards the management of the cave and (iii) Development around Sibhudu Cave, its management structures and processes should be externally evaluated on a regular basis.

²² A conservative financial approach is whereby an organisation relies on the long-term funds to acquire permanent assets and a part of temporary assets. This approach has less risk of a shortage of immediate funds as it uses long term funds.

8 Implementation of the Strategic Objectives

The Implementation Plan details the proposed execution of the ICMP for Sibhudu Cave following the Strategic Objectives and in the context of the management framework in Section 7.

8.1 Strategic Objective 1

To establish a management framework for Sibhudu Cave that will ensure the conservation of the site's archaeological deposits and related archaeological material while preserving its Outstanding Universal Value.

This objective relates to putting in place a management framework for the site. The World Heritage Convention Act requires every World Heritage Site (WHS) to have a Management Authority. As Sibhudu Cave is part of a proposed serial World Heritage nomination, a 'Management Authority' for the serial World Heritage Site will have to be established, a process which is in progress. In line with precedents at other serial World Heritage Sites in South Africa, it is recommended that a committee be formed to oversee management for Sibhudu Cave in the interim, consisting of a representative of the Qwabe Traditional Council, the Sibudu Trust and Amafa. The basic management needs are shown in Table 7 below.

	Needs	Action
1	Security of the site	Amafa appointed a
		custodian, Mr. Dasa
2	Development and curation of the Interpretation	Amafa
	Centre. Appointment of a trained guide who will train	
	other guides from the local community, and ensure	
	interpretation of the site	
3	Administration and legal issues	Sibudu Trust, Amafa
4	Financial administration and fundraising	Amafa, Sibudu Trust
5	Appointment of Site Management Authority	SAHRA, Amafa, KZN DSAC

Table 7: Sibhudu Cave Management Needs

8.1.1 Infrastructure

Both directional and interpretive signage is required. A directional sign must be erected at the turnoff from the main road before approaching the Custodian's homestead. Interpretative information will include the history of the site, elaborate on Outstanding Universal Value of the site, and give a brief description of findings of research work. Another panel will provide

conservation information and regulations, the dos and don'ts at the site. The visitor pathway within the cave needs to be clearly demarcated so that visitors will not stray into sensitive areas.

A low-cost footbridge across the river is required. All infrastructure deemed necessary should, however, blend in with nature, and should not have any negative visual impact or affect the archaeological deposits.

An interpretation centre and ablution facility are required. These can be established at Mr. Dasa's homestead. A viewpoint from the homestead towards the cave also needs to be developed.

8.1.2 Human Resources

It is acknowledged that infrastructure alone is insufficient to ensure conservation of Sibhudu Cave. It is recommended that a site monitoring system is developed, and that regular monitoring of the site takes place. As part of the guide training, a specific focus must be on how to conserve and protect the heritage. This will provide guides with the knowledge to inform visitors concerning measures required to avoid damage to the site.

8.1.3 Stabilisation of Excavations

Regular monitoring of the existing sandbagged areas is necessary to ensure that they remain effective in protecting the archaeological deposits. It is particularly necessary to consider decay, wear and tear of the bags that protect the excavation area, and the need to replace them if necessary.

For future excavations, careful consideration should always be given to the most appropriate method to protect and stabilise excavated areas and to ensure adequate protection of the archaeological deposit.

8.1.4 Protection of Archaeological Deposits

Since the cave is not severely affected by the sun and weather elements, the archaeological deposits are in a good state of conservation. However, concern should be on monitoring the state of sandbags so that they continue to protect the excavation and the archaeological deposits effectively.

To encourage collaboration between stakeholders to conserve Sibhudu Cave and promote the site as a heritage tourism attraction.

8.2.1 Communications, Consultation and Sharing of Information

Effective communication within the management structure, as well as information sharing and inclusion of stakeholders in information sharing and decision-making, is a prerequisite for successful management of the site. Although formal communications within the site Management Committee, as well as with key stakeholders will generally take place during its meetings, more regular communication with local stakeholders should take place. This can include communications through media such as newsletters, notices, local papers, radio and informal meetings. In addition, on-going communication with the research community is important regarding: i) protection of the heritage resources; ii) accessing such resources for further research; and iii) keeping site interpretation up to date to retain and build public interest.

In line with the ICOMOS International Cultural Tourism Charter of 1999, one of the objectives for managing Sibhudu Cave sustainably is to 'communicate its significance and need for conservation to the local community and visitors' and generally to involve the community in decision-making processes. In this regard, care must be taken to comply with the following:

- Promotion of Access to Information Act (PAIA);
- Promotion of Administrative Justice Act (PAJA); and
- Relevant SAHRA, Amafa and KZN DSAC policies.

8.2.2 Tourism Promotion

The development of a Local Economic Development (LED) Plan for the KwaDukuza local Municipality is underway. The LED Plan highlights the possibility to develop heritage tourism.

Although no tourism is currently taking place, if well developed and promoted, the site holds enormous potential for rural and cultural heritage tourism. An opportunity presented by the Cradle of Human Culture tourism route can be a great booster to tourism. The Cradle of Human Culture is the brand name for an archaeological and palaeontological heritage tourism route within the WC Province and is set to be extended to KZN Province. It will eventually incorporate all the six proposed World Heritage Sites, under the umbrella name 'Emergence of Modern Humans: The: The Pleistocene Occupation Sites of South Africa'. It aims to provide visitors with an experience which educates them about the overall environment in which modern human behaviour emerged; and in the process to contribute to socioeconomic empowerment and beneficiation within local communities through fostering partnerships with stakeholders.

Also, with adequate tourism infrastructure such as an interpretation centre, ablution facilities, a well-developed path, and interpretative and directional signage, tourism can be boosted. Marketing will also be key to ensure that the site is known, not only locally but also nationally and internationally.

8.2.3 Tourism Infrastructure Development

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Presently there is no tourism infrastructure at the site. However, an interpretation centre, ablution facilities, footbridge across the uThongathi River are required as part of developing the cave into a recognised tourism Site. Additionally, a low-cost accommodation facility can be developed by refurbishing the Sukusami buildings located north of the cave, see Figure 21 below, which can be investigated.

The community prioritizes educational school visits, hence the need for accommodation facilities close to the site. Accommodation will also contribute to revenue generation for the site. It is necessary to engage the Department of Agriculture for the refurbishment of the buildings into low-cost tourism accommodation.



Figure 21: Sukusami Buildings proposed for development as an accommodation facility

8.2.4 Film Production

Film production in special landscapes is increasingly common. Filming often serves as an awareness and information communication-sharing tool and for the promotion and recognition of important places. However, filming sensitive sites such as the Sibhudu Cave needs to be managed appropriately.

Permission for filming can be granted to film crews at the discretion of SAHRA in terms of section 27(23) of the NHRA. This should be based on considerations that address impacts on the site, for example the size of the film crew, a written permission signed by the appropriate representative of SAHRA, along with conditions that address dos and don'ts in terms of treatment of the site. Additionally, it is recommended that an archaeologist be present to monitor filming and related activities at Sibhudu Cave. Furthermore, photographs and films made during production should be made available to the Site Management Committee for use in marketing efforts and related purposes.

Film companies should make available a high-resolution copy of the film in electronic form for use in awareness raising and/or marketing of the site.

8.3 Strategic Objective 3

To increase the awareness and appreciation of Sibhudu Cave by the local and global community through research, education, and interpretation of the cultural heritage of the site.

8.3.1 Research Guidelines

Guidelines for research align with provisions of the National Heritage Resources Act No. 25 of 1999 and international best practice.

- Copies of applications for funding for research should be submitted to SAHRA for peer review to ensure that the proposed research will be permitted. Similarly, research that affects artefacts recovered from the site must be approved by SAHRA and the export of such artefacts for research in other countries requires a permit from SAHRA. If the site is inscribed on the World Heritage List, such applications must also be submitted to and discussed by the Management Authority.
- Research proposals must focus on the development and extension of the OUV of the site, and may, after consultation with SAHRA, extend these values should additional significant findings be made.
- Research proposals must ensure that the OUV of the site are not compromised.
- Research that will involve the removal of in-situ deposits must include provision for stabilisation of all surfaces before, during and after removal.

• Information prepared for the public, such as signboards, pamphlets, websites, films, videos, and books, must uphold the Outstanding Universal Values of Sibhudu Cave.

To complement the desired state of conservation and the terms and conditions of SAHRA archaeological excavation permits:

- Research should aim to further verify the OUV of Sibhudu Cave and answer wellmotivated research questions, removing only that part of the deposit that is necessary to the research concerned;
- All applications for research must be peer reviewed;
- Not more than 33% of the original deposits may be removed without good reasons;
- New excavation permits may only be issued after receipt of a full report on the results of previous permits and copies of published papers;
- All applications for research funding must include a budget for conservation of the deposits and the site; and
- Every effort must be made to include South Africans in research and excavation teams.

8.3.2 Research Permits

- All permits for excavation and collection of artefacts are issued on application to SAHRA.
- SAHRA may reserve the right to refuse a permit after consultation with relevant stakeholders.
- All applications will be peer reviewed.
- The Management Authority must be consulted on all permit applications and informed of the results of all applications affecting the site.
- All permit applications must include a suitably qualified South African archaeologist as the permit holder or co-permit holder.
- The application form must be signed by the director of an institution, approved by SAHRA and a suitable repository that agrees to house and curate the collections from Sibhudu in perpetuity.
- Permit extensions will only be allowed after receipt of a detailed report on the previous permit activities.
- SAHRA may withdraw a permit if the permit holder does not ensure protection of the OUV, integrity and authenticity of the site.
- Not more than 33% of the original deposit at a site may be removed under permit from SAHRA.
- Applications for the export of archaeological material from Sibhudu Cave must be submitted to SAHRA.

• Planning of research shall be the responsibility of permit holders in consultation with SAHRA and the Site Management Committee. The principle guiding research planning will be to uphold and extend the OUV of the site.

8.3.3 Site Interpretation

The primary goal of Site interpretation would be to enhance visitor experience by helping visitors understand the significance of the heritage associated with the cave. At the core of interpretation lies the development of the narrative. After all, interpretation is about meaning, which is conveyed through the story (the narrative) which is told in a manner that speaks and appeals to a wide range of audiences.

The Interpretation Centre exhibition will be strongly focused on the narrative which ought to have a credible and alluring balance of voices and disciplines in presenting the story of modern human evolution as told by the serial nomination and the discoveries in the cave in particular, including the history of the excavations and the interpretation of the material culture. The cave provides another little but important window in a series of windows (the other caves in the serial nomination) that provides us with further insight into the evolutionary ascent of modern humans, which makes a compelling story that can be fleshed out in the Interpretation Centre.

The displays and presentations in the Interpretation Centre should convey the complete picture so that a visit to the Interpretation Centre will be worthwhile even on a rainy day, or when one may not be able to cross the river into the cave itself. In doing so, the Interpretation Centre will act as a standalone heritage resource. It can, for instance, have a model of the cave inside it, laid out in scale, with photographs of key discoveries. It must be noted here that it is proposed that a suspension bridge be built to ensure year-round access to the site (see section 4.3.4) but even so, the Interpretation Centre is the first stop.

How the story is told will have a great deal of influence on how successful the cave is as a World Heritage Site.

The short journey down to the river's edge, the crossing of the river, and the vegetated riverine forest at the bottom of the cliff where the ascend to the cave starts, all adds to the experience and every care must be taken to keep the environment as natural as possible.

Starting at the Interpretation Centre where visitors receive an overview of the World Heritage Site and are oriented for their journey to the cave, the story unfolds along various points:

• At the river's edge there is a brief explanation of how the cave was formed through erosion followed by a safety briefing.

- The crossing and small patch of riverine forest evoke a feeling of exploration which is punctuated by a safety briefing on how to ascend the cliff. This short passage of river, riverine forest and ascending the cliff provides a wonderful opportunity to transcend into a different world.
- Landing point: This is located just as one enters the cave. It is where the vertical ascend to the site ends. The landing point will be where visitors first gather with their guide(s) and are briefed on the visitor rules (for example, one should stand one meter away from the excavations to prevent the collapse of the excavation walls). The layout of the cave can be explained here as well with a board that explains the layout of the cave. Signage until this point ought to be very sparse to maintain the natural environment and sense of place; besides, as all visits should be accompanied by a guide. A pamphlet that visitors can take with them is preferable to unsightly signboards.

See Figure 22 and Figure 23 for the view of the cave as one approaches from the landing point.

Explanations about the cave can be given by a trained tour guide at least from one of the following interpretation points. These points are illustrated in Figure 24, Figure 25, Figure 26, Figure 27 below.



Figure 22: Landing point as one reaches the end of the vertical ascend to the cave



Figure 23: View of the cave as one approaches from the landing point

- 1. Interpretation Point 1: Along the access path where visitors can briefly stop to receive explanations from the guide(s). See Figures 22 to Figure 25;
- 2. Interpretation Point 2: Near the edge of the excavation. This point makes it easier for one to investigate the excavation, especially, when people are digging and there is something to see. This point must be at least one meter from the edge of the excavation, so the walls do not collapse. See Figures 24 and 25;
- Interpretation Point 3: People can sit on the rocks north and northwest of the dig, which can work as a lecture area. See Figure 24 and Figure 25. Figure 26 gives a clear picture of the point; and
- **4.** Interpretation Point 4: At the crack of the cliff (within the cave along the rock shelter wall). See Figure 24 and Figure 25. Figure 27 gives a clear view of this point.



Figure 24: Floor Plan of Sibhudu Cave (further developed from the baseline plan provided by Prof. Nicholas Conard)



Figure 25: Interpretation Points within the cave where explanations about the cave can be given



Figure 26: Lecture Area (Interpretation Point 3)



Figure 27: Crack of the cliff, within the cave (Interpretation Point No 4)

Finally, it must be noted that the access path on Figure 24 (Floor Plan) in reality, is not a straight line, and it can be changed by the Site Manager as and when is deemed fit, in consultation with the archaeologists excavating the cave.

8.4 Strategic Objective 4

To build capacity of local people in heritage tourism to ensure responsible tourism to Sibhudu Cave.

Sibhudu Cave has the potential to contribute to job creation, though it is a vulnerable heritage asset.

A training manual and on-the-job-training can be developed for involving local community members who are interested in heritage and tourism at Sibhudu Cave. The intention would be to equip interested community members with the knowledge necessary for work at the future Interpretation Centre and generally for the promotion of understanding of the archaeological asset they have in their area. The training of guides is encouraged to ensure that these guides are competent and registered according to the Tourism Act No 3 of 2014. The legislation requires that the guides are suitably qualified and have completed an accredited tourist guides training course.

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8.5 Strategic Objective 5

To encourage the generation of community benefits through on-the-job training and encourage integration of local entrepreneurship and job creation projects.

8.5.1 Community Development and Beneficiation

There are a number of planned interventions for the benefit of the local community. In particular, social development and the development of local economic opportunities associated with tourism and heritage are needed.

At Sibhudu Cave, potential exists for rural homestays whereby the local people provide accommodation and traditional cuisine to tourists visiting the site. There exists potential on a limited scale for the local community to become involved as guides and guards for monitoring of the site, and potentially to provide transport to visitors. Presently, a local custodian, Mr. Dasa is employed by Amafa to look after the site.

The planning of the Interpretation Centre is underway. This will provide opportunities for the local community to become involved in heritage tourism, associated with Sibhudu Cave.

A Community-Based Natural Resource Management (CBNRM) is proposed to enhance the sustainable utilisation of natural resources such as soil, water, and vegetation by the local communities. A CBNRM is a people-centred approach based on best practices that relate to the collective sustainable use and management of natural resources (water, soil, vegetation, fauna) in rural areas by groups of people with distinct identities or falling within a geographical demarcation. It is a mechanism to address both environmental and social-economic goals and to balance the exploitation and conservation of valued ecosystem components.

8.6 Strategic Objective 6

To achieve financial sustainability using a diverse range of sources in an integrated, effective manner that will support Site management.

Financial support is key to ensure adequate protection and monitoring of Sibhudu Cave. With support from the landowners, partnerships with other (local) stakeholders, improved marketing as well as through integration of the site into local and regional development plans and spatial planning frameworks, a range of funding opportunities are possible.

The proposed Interpretation Centre is a promising potential source of revenue through entrance fees. The centre will serve as a gateway to the future World Heritage Site and will exhibit material culture recovered from the cave, and present research conducted at the site as well as other sites to be included in the WHS nomination. The Municipality will have a key role to play in the establishment for the Interpretation Centre. The success of the Interpretation Centre can be considerably enhanced by the presence of a well-managed and conserved World Heritage Site close by. It is therefore logical that some of the income from the centre be earmarked for the conservation of Sibhudu Cave. The site Management Committee should explore funding opportunities together with the management of the Interpretation Centre, once such a structure or provisional structure is established.

A certain percentage of the entrance fees for the Interpretation Centre can be channelled towards maintenance and monitoring requirements of the cave. Similarly, other tourism operators who will benefit from the site should contribute substantially to the upkeep of the site. Such income from tourism will help on management expenses for conservation measures in line with this ICMP.

Management Expenses

The following expenses are applicable but not limited to the conservation and management of Sibhudu Cave:

- i. Maintenance and monitoring of the cave and the archaeological deposits;
- ii. Site interpretation and marketing;
- iii. Construction and maintenance of infrastructure (e.g., interpretation centre, signage, boardwalks, ablution facilities, etc.);
- iv. Procurement of fixed assets;
- v. Other operational costs;
- vi. On-site implementation/management remuneration; and
- vii. Research, training, and social investment.

Funding

A conservative approach to financial management should be taken. The development of Sibhudu Cave as a tourism attraction and the development of the Interpretation Centre has the potential to contribute funding towards the management of the Sibhudu Cave. This is provided that the financial requirements to manage the site are relatively modest. For example, for each tourist, a tourism levy can be charged which will be shared between the guide, the landowner and the Management Authority. In the latter case, funds should be used for monitoring and maintenance of the Sibhudu Cave.

To increase funding, the Management Authority should actively engage with potential donors to source funding. Potential donors include Non-Governmental Organisations (NGOs), as well as the private sector and individuals.

To constantly assess the economic, social, and environmental impacts and opportunities at Sibhudu Cave and the surrounding areas.

To monitor the impact of visitation to the site, the Management Authority should develop a visitor management plan.

A socio-economic study was commissioned by Amafa and is currently underway. The study will unpack the opportunities available for the people living in the area. It will provide a baseline of the economic, social, and environmental status of activities that currently take place around Sibhudu Cave. To evaluate the impact of the ICMP implementation, the same survey should be undertaken at the end of the ICMP timeframe.

It is recommended that an assessment and evaluation of the site should take place every five years. Moreover, such evaluation can be undertaken as a first step to implement the ICMP and is also a requirement for the nomination dossier.

8.7.1 Risk Management

Erosion

The risk of erosion in the cave is very low as the cliff overhang shields the cave deposits from rain and wind.

Alluvial Sand Mining and Pollution

The extraction of sand from the river and its banks causes environmental degradation (see Figure 28 below). The abandoned pits have a negative visual impact on the natural context of the cave and are an environmental eyesore. The river water has a greenish tinge, a colour likely resulting from the presence of agrochemicals, most likely fertilisers from the sugarcane farming. A water cleaning project will be required. This is vital as the river forms part of the setting that gives character to the cave.



Figure 28: Sand Mining Pits on the south bank of the uThongathi River

Tourism

Sibhudu Cave can potentially become one of the anchor sites in the Province. It will soon form part of the heritage tourism route branded as the Cradle of Human Culture. The project initiated by the Western Cape Department of Cultural Affairs and Sport and Wesgro includes Diepkloof Rock Shelter, Blombos Cave and Pinnacle Point and will eventually also include Border Cave in KZN.

An interpretation centre for Sibhudu Cave has been proposed. Tour guides will be trained so that they can take visitors around the site.

Marketing will make the cave known within and outside South Africa. In the short term, the site will target the research and academic community as a priority.

8.8 Strategic Objective 8

To put in place Monitoring, Evaluation, Learning and Intervention (MELI) system that will be ongoing in supporting adaptive management.

8.8.1 Adaptive Management

Adaptive management responds to changing circumstances including building on what has been achieved as a management plan progresses through time. Lack of informative and effective monitoring, evaluation, learning and intervention tools, which should stimulate proper reflection by management is the most common underlying cause of failure of adaptive management. This ultimately leads to an organisation failing to reach the desired outcomes (Vision).

A simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool should be established for the ICMP. The MELI helps to track and assess the impact, results, and/or progress of the recommended management interventions. The development of the MELI allows for adaptive management, in which interventions are continually adjusted based on lessons learnt from monitoring and evaluation.

8.8.2 Monitoring, Evaluation, Learning and Intervention

The MELI tool is described below:

- **Monitoring** tells us whether a Specific Action has been completed. It also informs us on the overall progress of the Action Plan. It provides management and stakeholders with an indication of the progress in terms of Action Categories and Specific Actions as well as the use of allocated funds for these purposes.
- **Evaluation** tells us whether a Specific Action was effective in terms of its Expected Outcomes. Indicators may show that a Specific Action was completed yet it may have failed in achieving its Expected Outcome. That is where learning comes in.
- Learning refers to insights gained from discussion on the effectiveness of a Specific Action. If an action was taken but failed in what it was meant to achieve, it is important to understand why it failed.
- Intervention to correct the failure of a Specific Action now becomes necessary. Intervention hence is the evidence-based action on the Monitoring, Evaluation, and Learning phases that must be taken to overcome obstacles or challenges faced during implementation.

9 Action Plan

Implementing the Integrated Conservation Management Plan involves the detailing and implementation of Actions, which are in support of the Vision and Mission Statement. The Vision for the ICMP has led to a set of Strategic Objectives, under which various Action Categories have been identified. These Action Categories, Specific Actions, Expected Outcomes, Performance Indicators, Stakeholders, Lead Parties and Timeframes are listed for each Strategic Objective in Table 8 below. The Action Plan lists Actions that need to be completed over the next 5 years.

The purpose of the Action Plan is to guide effort and ensure that all work conducted as detailed in Table 8 can be measured to comply with the SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) criteria required by the National Treasury of South Africa.

It is proposed that the actions from the Action Plan, be described in more detail using a logframe format that outlines clear steps, deliverables, indicators, and timelines, with tasks assigned to and accepted by the responsible parties. Progress can be assessed quarterly to provide an opportunity to discuss obstacles and find a way of overcoming them.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe	
Strategic Objective 1: To establish a management framework for Sibhudu Cave that will ensure the conservation of the site's archaeological deposits and related archaeological material while preserving its Outstanding Universal Value.							
Strengthen management of Sibhudu Cave	1. Review and refine the institutional framework and organisational structure	 A more effective and efficient organisation Structure of organisation and functions are established 	 Refined organisational organogram 	Amafa, Sibudu Trust; SAHRA; KZN Department of Arts and Culture, HWC	Management Authority	2021-2022	
	2. Define Management Functions and Structure	 Roles and responsibilities of management are aligned with functions 	A detailed organogram with clearly defined roles and responsibilities	Amafa, Sibudu Trust; SAHRA; KZN Department of Arts and Culture, HWC	SAHRA	2021-2022	
	3. Establish a Site Management Committee with key stakeholders to manage Sibhudu Cave	Sibhudu Cave is managed effectively through the establishment of sound frameworks	 Site Management Committee Organogram and mandate of the committee 	Amafa, Landowner, KwaDukuza Municipality, archaeologists, and Sibudu Trust; SAHRA; KZN Department of Arts and Culture	Management Authority	2021-2022	

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	4. Convene meetings of the committee	 Decisions for the site are made collaboratively There is transparency in the management of the cave 	Minutes of the meetings	Amafa, Landowner, KwaDukuza Municipality, archaeologists, and Sibudu Trust; SAHRA; KZN Department of Arts and Culture	Management Authority	2021-2025 and ongoing
	5. Establish the Management Authority	The site has a Management Authority with clearly defined responsibilities	 Management Authority with names of representatives 	Amafa, Landowner, KwaDukuza Municipality, archaeologists, and Sibudu Trust; SAHRA; KZN Department of Arts and Culture	SAHRA	2021-2022
Qwabe Traditional Council and the Broader Local Community	6. Establish a protocol for operations	 Qwabe Traditional Council functions collaboratively with the site management The community is represented well in the management of the site 	 Report on Rules of Conduct Minutes of meetings between the Council and Site management 	Amafa, Landowners, KwaDukuza Municipality, Ndwedwe Local Municipality, Sibudu Trust; SAHRA; KZN Department of	Management Authority	2021-2023
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
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	7. Develop a participative	Grievances/confli cts are resolved	Grievance/confli ct Management	Arts and Culture, Qwabe Traditional Council, and the Broader Local Community Amafa, Landowners,	Management Authority	2021-2023
	Grievance/Conflic t Management Strategy	applicably • The relationship between the site Management and the Community and stakeholders is cordial	Strategy	KwaDukuza Municipality, Ndwedwe Local Municipality, Sibudu Trust; SAHRA; KZN Department of Arts and Culture, Qwabe Traditional Council, and the Broader Local Community		
Integrate Sibhudu Cave into existing development plans	8. Include Sibhudu Cave in the next municipal IDPs and SDFs	Management of the cave is included in all local, district and provincial development	Sibhudu Cave is integrated in next municipal IDP and SDF	KwaDukuza Municipality, Ndwedwe Local Municipality, iLembe Municipality, Site	KwaDukuza Local Municipality and the iLembe District Municipality	2022-2026

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		plans and frameworks		Management Committee		
Risk preparedness	9. Develop and implement a Risk Management Plan	 Measures are in place in case of a disaster Emergency protocols are established and followed Risks are known and managed Risk Management Plan for Sibhudu Cave is included in the municipal Disaster Management Plan 	 Risk Management Plan 	KwaDukuza Municipality, iLembe Municipality, Site Management Committee	Management Authority	2022-2026
Land Use	10. Refine the land use Map once the property is successfully placed within the Conservation Zone	Updated land use map indicating the sensitive areas	Land use map	KwaDukuza Municipality, Ndwedwe Local Municipality, iLembe Municipality, Site Management Committee	Management Authority	2022-2026
	land use guidelines	 All numan activities, impacts and developments in 	Land use guidelines	KWADUKUZA Municipality, iLembe Municipality, Site	Management Authority	2022-2026

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		and around the		Management		
		site are regulated		Committee		
Development of infrastructure	12. Install directional and interpretive signage	The site is secured through implementation or appropriate infrastructure	• Signage boards installed at the entrance and at the site	Amafa, Landowner, Ndwedwe Local Municipality, KwaDukuza	Management Authority ²³	2021-2023
				Municipality SAHRA		
	13. Develop a footbridge	The cave is easily accessible	A footbridge	Amafa, Landowner, KwaDukuza Municipality, Ndwedwe Local Municipality, Sibhudu Trust, Qwabe Traditional Council and the broader locale community	Management Authority	2021-2023
Human Resource development	14. Develop and implement a Human Resources Strategy	Human Resources involved have the capacity to	Human Resources Strategy	Amafa, SAHRA, KZN DSAC, Archaeologists, Site	Management Authority	2022-2023

²³ SAHRA is in the process of assessing the competence of Amafa with the intention of appointing them as the Management Authority.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		protect the OUV of the site		Management Committee		
	15. Invest in training of staff such as guides on how to protect heritage ²⁴	 Human resource capacity is known and improved (knowledgeable, experienced, and skilled individuals) Further training programmes are designed and provided to current staff for upskilling 	 Guides have certificate of qualification Skilled staff 	Amafa, SAHRA, KZN DSAC, Archaeologists, Site Management Committee	Management Authority	2022-2026
	16. Develop and implement an Annual Individual Performance Plan	Individual is measured on their directed tasks and is accountable for their actions	 Annual Individual Performance Plan 	Amafa, SAHRA, KZN DSAC, Archaeologists, Site Management Committee	Management Authority	2022-2026

²⁴ This can be done with the help of the Department of Economic Development Tourism and Environmental Affairs (EDTEA) and the KZN Tourism Authority.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
Broader Community participation Strategic Objective	 17. Create an evolving database of registered stakeholders, mechanisms, and opportunities for stakeholder involvement 2: To encourage collabor 	 Stakeholders are identified Mechanisms and opportunities for stakeholder involvement are identified Productive engagement of stakeholders in planning, project development and implementation Informed and aware community 	 A registered stakeholder database Stakeholder Engagement Reports 	Amafa, Landowners, Qwabe Traditional Council, Site Management Committee	Site Management Committee	2021-2026
	[Performance	Main		
Action Category	Specific Action	Expected Outcome	Indicators	Stakeholders	Lead Parties	Timeframe
Tourism development and marketing	18. Develop local tourism and marketing plan	 Local and International tourists visit the site The site is well marketed and known regionally, nationally, and internationally 	• Tourism and Marketing Plan	iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, Friends of Sibudu, KZN Tourism	Management Authority	2021-2023

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	19. Allocate a budget for marketing	• There is an adequate budget for marketing the site	• Marketing budget	Authority, Amafa Management, Western Cape Tourism, Trade, and Investment Promotion Agency (Wesgro) ²⁵ Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape Tourism, Trade, and Investment Promotion Agency	Management Authority	2021-2023
				(Wesgro)		

²⁵ Wesgro is the official tourism, trade and investment promotion agency for Cape Town and the Western Cape and is a possible partner in the extension of the Cradle of Human Culture to KZN.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	20. Reach out to target audiences through social media, and printed media	 The number of visitors visiting the site increases Tourists come from all over the world 	Visitor statistics showing an increase	iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape Tourism, Trade and Investment Promotion Agency (Wesgro)	Management Authority	2021-2026 and ongoing
	21. Prepare marketing material for the tourism products and services	 Marketing material such as pamphlets, brochures are printed and distributed, i.e. at tourism related events, in schools, etc Information about the site reaches various audiences 	 Number of printed materials (brochures, pamphlets, and the like) and digital marketing statistics Increase in number of visitors 	iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape	Management Authority	2021-2023

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	22. Develop a website and create linkages to other	 Increased publicity and overall marketing 	 A functional Website 	Tourism, Trade and Investment Promotion Agency (Wesgro) ²⁶ iLembe District Municipality Tourism Office.	Management Authority	2021-2023
	relevant tourism websites	 Relevant and related websites have information about the site 		Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape Tourism, Trade and Investment Promotion Agency (Wesgro)		

²⁶ Wesgro is the official tourism, trade and investment promotion agency for Cape Town and the Western Cape and is a possible partner in the extension of the Cradle of Human Culture to KZN.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	23. Cultivate strong ties with established tourism market players to gain access to a larger tourism clientele and marketing network	 Visitors can access basic information on facilities, activities, contact details, and the like via websites 	 Number of partnership agreements with other players in the industry 	iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape Tourism, Trade and Investment Promotion Agency (Wesgro)	Management Authority	2021-2023
	24. Develop partnerships with tourism stakeholders and private companies such as the Tongaat Hulett and KDC Consulting	 Responsible to Sibhudu through effective marketing Sibhudu is included in the design and branding (e.g., name of the buildings/complex es, landmarks etc within it) 	 Best practices identified and implemented Buildings/comple xes bear Sibhudu name and/or any of its associated elements 	iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa, Western Cape Tourism, Trade and	Management Authority	2021-2023

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	25. Promote tourism to Sibhudu Cave nationally and internationally through existing tourism structures and organising fund-raising events	Relevant and related websites have information about the site	Websites feature Sibhudu Cave	Investment Promotion Agency (Wesgro) ²⁷ iLembe District Municipality Tourism Office, Site Management Committee, Sibhudu Trust, KZN Tourism Authority, Amafa Management, Western Cape Tourism, Trade and Investment Promotion Agency	Management Authority	2021-2023
Tourism Accommodation	26. Engage the owners (KDC Consulting and	 Accommodation for visitors, especially school 	Visitor facilities	Management Authority, Site Management	Management Authority	2022-203

²⁷ Wesgro is the official tourism, trade and investment promotion agency for Cape Town and the Western Cape and is a possible partner in the extension of the Cradle of Human Culture to KZN.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe		
	Development) of Sukusami buildings for the development of a low-cost accommodation facility	children in proximity to the cave Income generation		Committee, Department of Agriculture				
Strategic Objective 3: To increase the awareness and appreciation of Sibhudu Cave by the local and global community through research, education, and interpretation of the cultural heritage of the site.								
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe		
Learning and Heritage	27. Identify target groups for learning and education	 Groups in need of education and training are identified 	Targeted groups listed	Site Management Committee, Sibhudu Trust, Amafa KZN Department of Education,	Management Authority	2022-2023		
EQUCATION	28. Identify learning, education, and training needs for each target group	 Learning, education, and training needs for each target group are identified 	 Number of education and training needs listed for each target group 	Site Management Committee, Sibhudu Trust, Amafa Management,	Management Authority	2022-2023		

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
				KZN Department of Education		
	29. Develop and implement a Heritage Education and Training Plan for each target group which includes timeframes, roles, and responsibilities as well as budgets	 Education and training needs and channels (i.e. quiz competitions, educational tours etc.) are identified for each target group Personalised education and training programmes for each target group is developed 	Heritage Education and Training Plan	Site Management Committee, Sibhudu Trust, Amafa Management, KZN Department of Education	Management Authority	2022-2026
Raise awareness	30. Determine together with the Qwabe Traditional Council what the communities' needs and concerns are	Community needs and concerns are known and addressed	 Number of reports raising and addressing community issues/needs and how they were addressed 	Site Management Committee Sibhudu Trust, Amafa Management, Qwabe Traditional Council, Broader Local Community	Site Management Committee	2021-2026

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	31. Determine what mechanisms can be used to reach out to communities	 Best communication mechanisms are identified Improved community awareness 	Number of mechanisms to reach out to communities	Site Management Committee, Sibhudu Trust, Amafa Management, Qwabe Traditional Council, Broader Local Community	Management Authority	2021-2026
	32. Implement the awareness mechanisms, which can include outreach programmes	 Communities are aware and sensitive towards the conservation and tourism needs of the site Visitors to the site are sensitive towards local customs and socio-cultural needs 	 A Community Awareness Programme Number of Community Awareness Programmes conducted 	Site Management Committee, Sibhudu Trust, Amafa Management, Qwabe Traditional Council, Broader Local Community	Management Authority	2021-2026
	33. Develop awareness raising material	 Increased awareness and social connectedness to Sibhudu Cave among the 	Sibhudu Cave included in promotion material for cultural heritage	Amafa, KwaDukuza Local Municipality, Ndwedwe Local Municipality,	Management Authority	2021-2022

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		community to promote long- term protection of the site	by the municipality	iLembe District Municipality, KZN Department of Education, Site Management Committee		
	34. Develop partnerships with the KZN Department of Education	 Literature about the caves is taught in schools School children are aware of the importance of the cave and the history associated with human development 	The history of the cave is part of the school's literature	Amafa, KwaDukuza Local Municipality, iLembe District Municipality, KZN Department of Education, Site Management Committee	Management Authority	2021-2025
Interpretation	35. Develop an Interpretation Centre	The site has a functional Interpretation Centre	Interpretation Centre	Amafa, KwaDukuza Local Municipality, Ndwedwe Local Municipality, iLembe District Municipality, KZN DSAC, Site Management Committee	Management Authority	2021-2025

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	36. Develop programmes and activities for interpretation and presentation (including audio- visual tools)	 Information is interpreted and presented to visitors and the local communities 	Interpretation and presentation programmes	Amafa, KwaDukuza Local Municipality, Ndwedwe Local Municipality, iLembe District Municipality, KZN DSAC, Site Management Committee	Management Authority	2021-2023
	37. Provide feedback mechanisms	 Feedback from visitors is received and where necessary, improvements are made 	Comment book	Amafa, KwaDukuza Local Municipality, iLembe District Municipality, KZN DSAC, Site Management Committee	Management Authority	2021-2026
Research Programme	38. Design a programme to meet the site's research needs in a participative manner (to include archaeological	 Targeted research is incorporated in a needs-based and systematic research programme 	 Research Programme developed 	Amafa, KwaDukuza Local Municipality, iLembe District Municipality, KZN DSAC, Site Management Committee	Management Authority	2021-2025

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	and historical research)					
	39. Develop and implement research proposals based on the directions identified in the Research Programme	 Research is being done to meet the site's needs 	 Report on the number of Research Proposals approved or declined and why 	Amafa, KwaDukuza Local Municipality, iLembe District Municipality, KZN DSAC, Site Management Committee	Management Authority	2021-2025
	40. Seek funding and partnerships with research institutions, i.e. Universities	 Partnerships and relationship are developed and maintained High quality research undertaken to promote the value of the site 	 Number of Partnerships Students contribute to research on Sibhudu Cave through their thesis 	Site Management Committee, Departments of Archaeology relevant institutions	Management Authority	2021-2025
	41. Develop a bibliography of all research undertaken at Sibhudu Cave	 Interpretation of the site is enhanced 	A bibliography developed	Site Management Committee, Departments of Archaeology relevant institutions	Management Authority	2021-2025

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
Strategic Objective	4: To build capacity of I	ocal people in heritage to	ourism to ensure respon	sible tourism to Sibh	udu Cave.	
Action Category	Strategic Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe
Training of cultural guides ²⁸	42. Collaborate with the KZN Department of Economic Development, Tourism and Environmental Affairs	Capacity of local communities is built to deliver a high-quality tourism experience while ensuring protection of the site	At least 4 guides registered	KZN Department of Economic Development, Tourism and Environmental Affairs, Site Management Committee	Management Authority	2022-2023
Skills Inventory	43. Develop local community skills inventory	 Available skills are known whilst gaps are identified Local communities actively participate in 	Skills inventory	KZN Department of Economic Development, Tourism and Environmental Affairs, Qwabe Traditional	Management Authority	2022-2023

²⁸ This training should be developed and provided using an accredited training provider as per Tourism Act 3, 2014.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe			
		activities related to the site		Council, Site Management Committee					
Strategic Objective 5: To encourage the generation of community benefits through on-the-job training and encourage integration of local entrepreneurship and job creation projects.									
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe			
Community benefits ²⁹	44. Promote involvement of marginalised people in the development of heritage tourism products	 Local community members receive employment benefits as a result tourism development to Sibhudu Cave The socio- economic status of the local community continues to rise 	 Community- based heritage products developed Employment of locally marginalised community members 	KwaDukuza Municipality, Ndwedwe Local Municipality, Site Management Committee, Local businesses, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional Council,	Site Management Committee	2022-2026			

²⁹ This section be worked on in conjunction with the outcomes of the Socio-economic study of the area that is ongoing.

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
				Broader local community		
	45. Collaborate with local and NGO's and businesses to provide heritage tourism services	The local community actively participate in community development projects	MoUs with local service providers	KwaDukuza Municipality, Ndwedwe Local Municipality, Site Management Committee, Local businesses, iLembe Municipality	Management Authority	2022-2023
	46. Promote employment of locally marginalised people by existing tourism businesses	The socio- economic status of the local community improves	Number of local people employed at the site	KwaDukuza Municipality, Ndwedwe Local Municipality, Site Management Committee, Local Business Council, iLembe Municipality	Site Management Committee	2022-2023
Community- Based Tourism	47. Develop and Implement a Community-Based Tourism Strategy	Effective management and conservation of heritage resources through community-based	 Community- Based Tourism Manual 	KwaDukuza Municipality, Site Management Committee, Local businesses, iLembe	Site Management Committee	2022-2023

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		tourism related projects		Municipality, Ndwedwe Municipality		
	48. Establish partnerships with NGOs and the Private Sector in developing and implementing the Community Based Tourism	 Partnerships with various entities are established 	Number of MoUs Partners	KwaDukuza Municipality, Site Management Committee, Local businesses, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional Council, Broader local community	Site Management Committee	2022-2026
	49. Ensure that all projects are compatible with the conservation needs of the site	All Community Based Tourism projects are analysed for compatibility with conservation needs – both cultural and natural heritage	 Number of Reports on evaluation of Community Based Tourism Projects 	KwaDukuza Municipality, Site Management Committee, Local businesses, iLembe Municipality, Ndwedwe Municipality, Qwabe	Management Authority	2022-2026

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
	50. Investigate pilot	The local	Number of pilot	Traditional Council, Broader local community KwaDukuza	Site	2022-2026
	projects such as homestays and art and craft production	community actively participate in community development projects • The socio- economic status of the local community improves	 Projects Homestays 	Municipality, Site Management Committee, Local businesses, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional Council, Broader local community	Management Committee	
Community- Based Natural Resources Management (CBNRM)	51. Develop and Implement a Community-Based Natural Resource Management Strategy	Effective management and conservation of resources	Community- based Natural Resource Management (CBNRM) Manual	KwaDukuza Municipality, Site Management Committee, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional	Management authority	2022, review annually

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
				Council, Broader local community		
	52. Establish partnerships with NGOs and the Private Sector in developing and implementing the CBNRM	Partnerships with various entities are established	• Singed MOUs	KwaDukuza Municipality, Site Management Committee, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional Council, Broader local community	Management authority	2022-2023
Business partnerships	53. Develop a cooperation system between business entities with the purpose of strengthening business activities	Local community members are partners in businesses and/or own their own business entities	 Number of business partnerships at the local level 	KwaDukuza Municipality, Site Management Committee, Local Business Council, iLembe Municipality, Ndwedwe Municipality, Qwabe Traditional Council, Broader local	Management Authority	2022-2026

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
Strategic Objective	6: To achieve financial s	ustainability using a diver	se range of sources in c	community, Local Business Council In integrated, effec	tive manner that wi	II support
Site management.						
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe
Secure funding for Sibhudu Cave	54. Develop and prioritise a list of site needs, including infrastructure, conservation, and human resource needs	Human and financial resources are allocated effectively and efficiently to achieve financial sustainability	 A list of site needs developed 	Site Management Committee, Management Authority	Management Authority e	2021 - 2023
	55. Identify local, national, and potential international funding sources and make applications	 Opportunities for joint fund raising and sharing of resources are established 	 Approved funding 	Amafa, Site Management Committee, Management Authority, KZN DSAC, Sibhudu Trust	Management Authority	2021 - 2023
	56. Develop a sustainable financing strategy	Funds are used sustainably for the intended purposes	 Sustainable financing strategy developed 	Amafa, Site Management Committee, Management Authority, KZN	Management Authority	2021 - 2023

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
				DSAC, Sibhudu Trust		
Strategic Objective surrounding areas.	7: To constantly assess t	he economic, social, and	environmental impacts	and opportunities	at Sibhudu Cave a	nd the
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Partners	Main Stakeholders	Timeframe
Assessment of impacts	57. Regular reports from the site Management Committee to the Management Authority	Social, economic, and environmental changes that can influence the conservation and management of the site are noticed timely and addressed adequately	Quarterly and Annual progress reports	Amafa Management with Management Authority and Site Management Committee	Site Management Committee	2021 –2023
	58. Develop a cave monitoring system, including SMART indicators, in line with standard practice	Cave monitoring system developed	Cave monitoring system	Amafa Management with Management Authority and Site Management Committee	Management Authority	2021 –2023

Action Category	Specific Action	Ex	pected Outcomes	Pe Inc	rformance dicators	Stakeholders	Lead Parties	Timeframe
	59. Implement annual	٠	Annual inspections	٠	Brief reports of	Management	Site	2021 and
	cave inspections		are conducted		site visits	Authority,	Management	ongoing
				٠	Survey reports	Amafa, KZN	Committee	
						DSAC, Sibudu		
						Trust, Qwabe		
						Traditional		
						Council		
	60. Uploading	٠	Information about	٠	Database	Management	Management	2021 and
	conservation data		the site is stored			Authority,	Authority	ongoing
	on SAHRIS ³⁰		and is easily			Amafa, KZN		
			accessible			DSAC, Sibudu		
						Trust, Qwabe		
						Traditional		
						Council		
Visitor	61. Develop a Visitor	٠	Controlled access	٠	Visitor	Management	Management	2022-2023
Management	Management Plan		to the site to		Management	Authority,	Authority	
			enhance		Plan	Amafa, KZN		
			conservation of			DSAC, Sibudu		
			the			Trust, Friend of		
			archaeological			Sibudu, Site		
			deposits and the			Management		
			cave in general			Committee,		

³⁰ SAHRIS is SAHRA's online heritage resource database and heritage management tool. This is in accordance with the Section 39 of the National Heritage Resources Act, 25 of 1999 which stipulates that "For the purposes of the consolidation and co-ordination of information on heritage resources, SAHRA must compile and maintain an inventory of the national estate, which must be in the form of a data base of information on heritage resources which it considers to be worthy of conservation..."

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe		
				Qwabe Traditional Council				
Enforcement	62. Develop site management guidelines/policy for Sibhudu Cave	Damage to the site avoided through effective enforcement of policies and guidelines by the Site Management Committee	 Site management guidelines/policy implemented 	Amafa, Site Management Committee, Management Authority	Management Authority	2021 – 2026		
Strategic Objective adaptive manager	Strategic Objective 8: To put in place Monitoring, Evaluation, Learning and Intervention (MELI) system that will be ongoing in supporting adaptive management.							
Action Category	Specific Action	Expected Outcomes	Performance Indicators	Main Stakeholders	Lead Parties	Timeframe		
Monitoring, Evaluation, Learning and Intervention	63. Implement the MELI system	 Progress on the implementation of the ICMP is determined Lessons are generated Best practices are identified and implemented Collective ownership, accountability 	 Monitoring and Evaluation Reports List of lessons learnt List of Best Practices 	Management Authority, Amafa, KZN DSAC	Management Authority	2021 and ongoing		

Action Category	Specific Action	Expected Outcomes	Performance Indicators	Stakeholders	Lead Parties	Timeframe
		and transparency are enhanced				

10 Monitoring and Evaluation

A simple but comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool should be established for the ICMP. The MELI approach is described as follows:

Monitoring is the action of determining where implementation of the Action Plan stands. It is the ongoing, systematic collection of data to provide management and the main stakeholders with a good indication of the progress in terms of the Implementation Plan as well as on the use of allocated funds for the given actions.

Evaluation informs the manager and stakeholders of the degree of effectiveness in terms of outcomes and impacts of the activities. Once indicators are identified, baselines must ideally be established against which to measure progress. Evaluation must also assess unplanned outcomes and impacts for which established baseline values may not exist.

Learning refers to continuous learning from, and the insights gained from the results of the monitoring and evaluation. Best practices are identified and can be added as the site progresses.

Intervention is the evidence-based action on the Monitoring, Evaluation and Learning that must be taken to overcome obstacles or challenges faced during the implementation of the ICMP. The MELI is therefore a system of adaptive management, where collective ownership is encouraged, transparency is promoted, and a greater degree of cooperation and support from all stakeholders can be expected.

The performance indicators and expected outcomes in the Action Plan are the monitoring and evaluation tools of the ICMP. Learning occurs at regular intervals (quarterly meetings are proposed) when the Management Authority together with certain key stakeholders (the government departments and agencies, the landowners and representatives of the Qwabe Traditional Council meet to discuss progress in the implementation of the plan, in particular whether expected outcomes are achieved. Based on the collective learning, interventions are then proposed, making this an exercise in *adaptive management*. An organisation cannot monitor itself adequately hence a MELI committee consisting of the above organisations take on the monitoring role. The committee may want to establish management forums and working groups that further increase participation in management, following the Johannesburg Declaration 2002.

11 Glossary

Archaeology: The study of human activities in the past, primarily through the recovery and analysis of the material culture and environmental data observable for the archaeological record. This may include artefacts and architecture.

Cultural Landscape: A landscape designed, improved, or at least affected by human activity, whether deliberately or not. Cultural landscapes typically refer to areas where tangible heritage is associated with intangible values associated with the landscape, including memories, legends, songs, traditions and stories, belief systems, all representing different layers in the landscape. Appreciation of the different layers and their interrelationships ultimately brings a deeper understanding and appreciation of the cultural landscape. The World Heritage Committee refers, *inter alia*, to 'associative cultural landscapes, which are particularly valued for their religious, artistic or cultural associations of the natural element'.

Cultural Significance: Historic, scientific, or social value of past, present or future generations.

Desired state of conservation: This describes how the site would function and look like when all strategic objectives are achieved.

Heritage: Heritage is the legacy from the past. It includes those places, objects, languages, memories or cultural activities that have aesthetic, historic, scientific or social significance or some other special memory and routine.

Integrated Conservation Management Plan: A management framework, consisting of a central Operational Management Plan and Specific Plans, all of which guides the conservation of a specific area, avoiding negative impacts on the resources of the area, and where avoidance is not possible, minimising the negative impacts through the implementation of mitigation measures.

Intangible Heritage: Heritage associated with a place that is not expressed physically. It includes non-physical aspects such as symbolic meaning, values, activities like dancing, storytelling and music making, memory and routine, indigenous knowledge, local traditions, passed from one generation to the next, mostly through oral traditions.

Khoe-San, or Khoisan: a term used to refer collectively to the KhoeKhoen (formerly spelled Khoikhoi) herders and the San hunter-gatherers, although the two groups had different histories, economies and cultures.

Landscape: A collection of natural and cultural features that characterise a particular place.

Local Economic Development (LED): Local economic development aims to build up the economic capacity of a local area to improve its economic future and the quality of life for

all. It is a process by which public, business and non-governmental sector partners work collectively to create better conditions for economic growth and employment generation.

Luminescence: Emission of light by a substance not resulting from heat.

Mitigation: Any action to reduce the negative impact of any intervention.

NEM: PAA: The National Environmental Management: Protected Areas Act, No 57 of 2003 is complimentary to the National Environmental Management Act (NEMA), No 107 of 1998. The aim of NEM:PAA is to provide for the protection and conservation of ecologically viable areas that are representative of South Africa's biological diversity. As described in Article 13 of NEMPAA, chapter 1 and 2 of NEM: PAA apply to World Heritage Sites in South Africa.

Outstanding Universal Value: Outstanding Universal Value means cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity.

Property: This is a term used by UNESCO to indicate the Core Zone of the proposed World Heritage Site.

Risk: A hazard measured against vulnerability. In other words, the degree to which loss is likely to occur, as a function of the nature of threats in relation to particular circumstances. More broadly speaking, risks include any factor that could render the site unable to achieve its Strategic Objectives.

San: Also known as the 'Bushmen', this 'First Peoples' group of southern Africa were traditionally hunter-gatherers and formed part of the Khoe-San ethnic group.

Statement of Outstanding Universal Value: A concise statement of the outstanding heritage value of a World Heritage Site (WHS), the value, which provides such as a site with universal significance.

Stratigraphy: A branch of geology which studies rock layer (strata) and layering (stratification).

Tangible Heritage: The physical aspects of heritage such as material culture, historical structures and buildings, monuments, and other material heritage such as rock art and the physical setting of heritage which includes the natural environment.

12 Bibliography

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13 Appendix: Stakeholder List

No	Key Stakeholder Role/Responsibility		Institution	Contact	
	Identified				
1.	Mariagrazia Galimberti	Project Champion	WC Department of Cultural	mariagrazia.galimberti@westerncape.gov.za	
			Affairs and Sport		
2.	Colette Scheermeyer	Deputy Director/ Acting CEO	Heritage Western Cape	colette.scheermeyer@westerncape.gov.za	
				ceoheritage@westerncape.gov.za	
3.	Mxolisi Dlamuka	Chief Executive Officer	Amafa and Research Institute	ceo@amafapmb.co.za	
				033 394 6543	
4.	Ntombimpela Zondi	Museum and Services	KZN DSAC	zondine@kzndac.gov.za	
	(Bona)			+27 83 234 3010	
5.	Nkosazana Machete	Manager: Heritage Protection	South African Heritage	nmachete@sabra.org.za	
		Manager. Hemage Holeenon	Resources Agency		
6.		Manager: Archaeology,	South African Heritage		
	Phillip Hine	Palaeontology and	Resources Agency	phine@sahra.org.za	
		Meteorites	Resources Agency		
7.	Heidi Weldon	Heritage Officer: Grading &	South African Heritage	Hweldon@sahra.org.za	
		Declarations	Resources Agency		
8.	Derick Nicholson	Chairperson & Secretary	Friends of Sibudu	derekgill@telkomsa.net	
				031208 1025 / 083659 3445	
9.	Siya Mkhize	Sibudu Trust	Sibudu Trust	smkhize@wylie.co.za	
				082 562 3674	

No	Key Stakeholder	Role/Responsibility	Institution	Contact	
	Identified				
10.	N. Nkomzwayo	CEO	Enterprise llembe	info@enterpriseilembe.gov.za	
11.	Pat Conway	Operations	KDC Projects & Developments	pat@spdev.co.za	
	Ful Conway	Director/Landowner	(Pty) Ltd	0321199 / 032946 2927 / 0824441654	
12.	Don McCullouch	Concerned party	Don McCullouch	don@dfin.co.za	
	Don Meedilooen			082- 962 0223	
13.	Induna Mfeka	Senior Induna	Owabo Poyal House	khuzwayodumisaniderrick@gmail.com	
	Induna Khuzwayo	Sibhudu Area		083-772 7199	
14.	Lawrence Msimanga	Academic Research	University of Tuchingon	lawrence.msimanga@uni-tuebingen.de	
	(Muzi)	Consultant		+49 163 6380314	
15.	Bornadino Callivor	Associate Director	Grant Thorton Durban	bernadine.galliver@za.gt.com	
				0315765 568 / 083522 4279	
16.	Gavin Whitelaw	Chairperson	K7N Archaeological Society	gwhitelaw@nmsa.org.za	
			Kzi (Alendeological society	0333410515 / 076270 8174	
17.		CEO	iLembe Chamber of	ceo@ilembechamber.co.za	
			Commerce	0873546343	
18.	Thumeka Ntloko	Director: Protected Areas	Department of Environmental	totloko@environment.gov.zg	
		Multilateral Programmes	Affairs – Protected Area Unit		
19.	Bongani Dlamini	Chairperson	Yethu Family Trust	bongani.dlamini@mw.com	
bongan blannin	bongan blamm			082661 399	
20.		Honorary Professor of	University of Witwatersrand:	lyn.wadley@wits.ac.za	
	Lyn Wadley	Archaeology		wadleyl@geoarch.wits.ac.za	
				<u>014-755 3506</u>	
No	Key Stakeholder	Role/Responsibility	Institution	Contact	
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	Identified				
			Archaeology and		
			Environmental Studies		
21.	Nicholas Conard	Permit Holder	University of Tübingen and Sibudu Trust	nicholas.conard@uni-tuebingen.de	
22.	Guy Nicolson	EIA Environmental Consultant	Guy Nicolson Consultation	<u>guyn@saol.com</u> 0317642515 / <u>0827729941</u>	
23.	Dobra Poborta	Doputy Hoad	Environmental Planning and	deborah.roberts@durban.gov.za	
	Dedra koderts	рерију неаа	Climate Protection	0313117527 / <u>0824519769</u>	
24.	Cllr S. Mdabe	Executive Mayor	iLembe District Municipality		
25.	Nonhlanhla Gamede	Municipal Manager	iLembe District Municipality	nonhlanhla.gamede@ilembe.gov.za 032 437 9300	
26.	Cllr D. Govender	Acting Executive Mayor / Deputy Mayor	KwaDukuza Local Municipality	lalitan@kwadukuza.gov.za	
27.	Nonhlanhla Khumalo	Local Economic Development and Tourism Manager	KwaDukuza Local Municipality	nonhlanhlak@kwadukuza.gov.za	
28.	Musawenkosi Hadebe	Municipal Manager	Ndwedwe Local Municipality	<u>mm@ndwedwe.gov.za</u> +27 (0)32 532 5000	
29.	E. Zondi	Area Manager Land Reform and Community Dynamics	Tongaat Hulett	emmanuel.zondi@tongaat.com	
30.	Sphelele Ngubane	Sangweni Tourism Centre	Sangweni Tourism Centre	<u>sphelelen@ilembe.gov.za</u>	

No	Key Stakeholder	Role/Responsibility	Institution	Contact
	Identified			
				(032) 946 1256
				(032) 437 5021 /5183
31.	Alfred Mhlongo	Owner	Landowner of the land within	charitysbongile42@gmail.com
			which the cave is located	082 507 0880
32.	Bheki Tembe	Ithala Development Finance	Ithala Development Finance	bhekitembe@ithala.co.za
		Corporation Limited	Corporation Limited	0720306129
33.	Roy Sharma	Tenant	Tenant	sharmaroy@mweb.co.za
34.	Pinky Radebe	Secretariat	KwaZulu-Natal Tourism	031 366 7500
			Authority	info@zulu.org.za
35.	John Dasa	Guardian	Dasa Family	078 693 6151