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ORGANISATION DES NATIONS UNIES POUR L'EDUCATION, LA SCIENCE ET LA CULTURE

CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

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Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

<u>Point 7 de l'Ordre du jour provisoire</u>: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Aeolian Islands (Italy) (908) / Îles Eoliennes (Italie) (908)

21-28 March 2007 / 21-28 mars 2007

This mission report should be read in conjunction with Document: Ce rapport de mission doit être lu conjointement avec le document suivant:

□ WHC-07/31.COM/7A	WHC-07/31.COM/7A.Add
WHC-07/31.COM/7B	☑ WHC-07/31.COM/7B.Add

REPORT ON THE MISSION TO Aeolian Islands, Italy FROM 21 TO 28 March 2007

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EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

Executive Summary and Recommendations

In 2000, IUCN recommended the Aeolian Islands for inscription on the World Heritage List but noted a number of concerns regarding the integrity of the property. The Italian authorities responded to IUCN's concerns with assurances that:

- a coordinated management structure was in place since 1998, and that a municipal consortium called *Ecosviluppo Eolie* was in charge and had nominated and empowered a Superintendent for protection;
- resources had been committed to prepare a management plan and measures had been taken for protection, education/interpretation and staff training; and
- specific monitoring actions were in place.

The current mission could find no evidence that any of these actions have been effectively carried out, and it is also noted that the property still lacks a management plan.

Moreover, several environmental NGOs, in particular Legambiente Sicilia, called various threats on Lipari Island to the attention of the World Heritage Centre and IUCN. These included pumice mining activity adjacent to and within the property, plus the threat of large hotel developments and an airport.

The hotel proposals, from 2004, were rejected by the Regional Urban Committee in December 2006 as they did not adhere to the provisions of the Landscape Territorial Plan. The mission is not aware of any current proposals for large accommodation structures. Similarly, the proposal for an airport does not conform to the Landscape Territorial Plan, and seems to be limited by the topography of this island. We have been assured that this is not being considered, but there is no official document confirming this.

There is, however, a proposal for a significant expansion of the Port of Lipari which goes beyond the minimum expansion needed. The new port aims to accommodate large cruise ships, which could bring up to 2,000 visitors per ship. There are currently no regulatory measures in place to control port development and construction of coastal sea walls. While the port and ships do not directly affect the WH property, the indirect effects of increased visitation could be substantial.

The pumice mining activity remains seriously problematic. Although the Italpomice mine was closed in 2002, the large PUMEX mining operation remains a threat to the WH Site. Though under restraints to cease operations, an environmental police inspection on 1 March, 2007 revealed that extraction was still going on, under the guise of removing stored material. Removal of stockpiled material is currently permitted, and continues, with no deadline given for completion. At the time of the mission visit, 24 March, there was loading and hauling taking place, but there could be a little extraction going on. Authorities regionally and locally have assured the mission that mining has now stopped.

The new boundaries for the new Lipari Reserve, which is planned to be instituted in June 2007, exclude the mining areas. The previous boundaries, which are also those of the World Heritage site, included the pumice mines within Zone A (Reserve). Neither IUCN nor UNESCO had been informed about the boundary modifications prior to the mission, as requested by the Operational Guidelines for the Convention. The mission deems the redrawing of the boundaries as a positive step taken to ensure the protection of the areas beyond the pumice mines.

Main Recommendations

The Reactive Monitoring Mission has made a number of specific recommendations in its report. The key recommendations, if the Aeolian Islands are to continue on the list of World Heritage Sites, follow:

- 1. The new boundary map for the Lipari Reserve should be ratified in law by 1 September, 2007. A proposal explaining the new boundaries, and their implications for the conservation of the Site, needs to be submitted to the World Heritage Centre by 1 September, 2007.
- 2. A protected area management entity, whether it be an environmental NGO with reserve management experience or a new regional body, be designated by 1 September, 2007 and fully functioning at the latest by the end of 2007

- 3. That the institution of a Regional Park for all the Aeolian Islands be carefully considered and possibly adopted, with an appropriate management entity designated, by 1 September, 2007. Should the Regional Park be instituted, we recommend the State Party consider proposing to the WH Centre the extension of the property to include the new boundaries.
- 4. A Management Plan, including the identification of funding resources to implement it, be prepared by 1 September, 2007. Such a Plan must make use of the most updated scientific data available, and include provisions for the management entity, staffing, monitoring, and an education/awareness-raising program for the Site.
- 5. That mining extractive activity be stopped in areas within and adjacent to the WH Site, and no new mines be opened.
- 6. A deadline for removal of stockpiled pumice material be set immediately, based on present volume and feasible removal methods.
- 7. A programme of reemployment and/or retraining of the affected mining workers be initiated by 1 September, 2007.
- 8. A science-based project of vegetation restoration using native plants and a sound, creative plan for conversion of the mining infrastructure to serve educational and ecotourism needs be instituted by the end of 2007.
- 9. A thorough and comprehensive environmental impact assessment of the proposed enlargement of the Port of Lipari be undertaken, including analysis of the impact on the World Heritage Site of cruise ships that might use this enlarged facility.
- 10. We recommend the State Party explore the possibility of extending the property to include its biodiversity values, including important coastal and marine habitats, and possibly re-nominate it under criterion (ix).
- 11. We request that the World Heritage Committee recommend the Site for Danger Listing should mining activity not cease immediately, and a management plan and management structure not be fully operational by the end of 2007.

1 BACKGROUND TO THE MISSION

The Aeolian Islands were first nominated in 1999. Nomination was deferred on the basis that management issues had to be clarified.

At the 24th Session of the World Heritage Committee (Cairns, Australia, November-December 2000), the Aeolian Islands were inscribed as one of the most outstanding examples of volcanic island-building and destruction phenomena in the world under criterion N (viii). The Committee noted that the State Party had adequately responded to the issues and commended the State Party for further strengthening the nomination by simplifying the boundaries of the nominated area, and creating a clear surrounding buffer zone and a co-ordinated management structure.

Justification for Inscription:

Criterion (viii): The islands' volcanic landforms represent classic features in the continuing study of volcanology world-wide. With their scientific study from at least the 18th Century, the islands have provided two of the types of eruptions (Vulcanian and Strombolian) to vulcanology and geology textbooks and so have featured prominently in the education of all geoscientists for over 200 years. They continue to provide a rich field for volcanological studies of on-going geological processes in the development of landforms. [WHC-2000/CONF.204/21]

Decision 26 COM 21B.13:

The World Heritage Committee noted the positive outcome of the Court case grating legitimacy to the Landscape Territorial Plan, but expressed concern over delay in implementing management instruments for the Site. The Committee requested the State Party to submit further information on the pumice mining and urged it to prohibit the expansion of pumice extraction. It requested the State Party provide a report by 1 February 2003 for examination at its 27th Session.

Decision 27 COM 7B.18:

The World Heritage Committee noted the positive development of the adoption, legitimacy and implementation of the Landscape Territorial Plan and welcomed the State Party's intention to close the pumice quarries. However, it also expressed concern about requests for the opening of new, and extension of existing, pumice quarries within the World Heritage property. The Committee, therefore, requested the State Party to keep the World Heritage Centre and IUCN informed about the developments related to this issue and to provide a report to the World Heritage Centre by 1 February 2004.

Decision 28COM 15B.26:

The World Heritage Committee noted that the State Party had reported that no further pumice quarries had been opened and no extension to the four existing quarries within the World Heritage property had been granted. The Committee welcomed the positive proposal from the Pumex Society, and the initiative of the State Party of informing IUCN of this proposal, for the environmental recuperation of areas currently being exploited within the property and the rehabilitation of unused industrial buildings into hotels and tourist services, thus assisting in replacing jobs lost in the extractive industry. It urged the State Party to seek long-term solutions towards a closure of the existing quarries, to stop all mining activities in the World Heritage property and to keep the World Heritage Centre and IUCN informed about further developments.

Decision WHC-06/30.COM/7B.23:

The World Heritage Committee, noted with great concern that the mining activities continued to have major adverse impacts on the integrity of the property and that little progress had been made in relation to the requested stop on all mining activities in the World Heritage property. The Committee requested the State Party to invite a joint World Heritage Centre/IUCN mission to assess the state of conservation of the property, in particular the impacts of the mining activities, proposed hotel development and the implementation of the Landscape Territorial Plan. It also

requested the State Party to provide the World Heritage Centre with an updated report by 1 February 2007 on the state of conservation of the property.

Examination of the State of Conservation Report (Extract from WHC-06/30.COM/7B.Rev)

At its 30th Session (Vilnius, Lithuania, 8 to 16 July 2006), the World Heritage Committee, noted the main threats identified in previous reports:

- a) Lack of overall management plan;
- b) Excessive tourism development;
- c) Pumice-pit mining.

It noted that the State Party of Italy had submitted a report on the state of conservation of the property on 9 March 2006 indicating that it had requested the two relevant Sicilian authorities for official statements regarding the mining activities on Lipari Island. Both authorities (*l'Assessorat à l'Industrie et 'Assessorat aux Biens Culturels et Environnementaux et del'Instruction Publique de la Région Sicile*) confirmed that any further extension or expansion of the pumice-pit mining is illegal and against the Landscape Territorial Plan in place. The State Party also reported that the latter had requested the communes of the Aeolian Islands to speed up the preparation of a general management plan. The authority had also informed the communes that, in case of their continued inactivity, it would take over the responsibility to prepare the general management plan.

The Committee noted that in its Decision 28 COM 15B.26, it had urged the State Party to seek long-term solutions towards a closure of the existing pumice quarries and to stop all mining activities in the World Heritage property. IUCN had also received information on a proposal to develop an airport on Lipari Island, but no further information was made available. A joint UNESCO/IUCN mission was required to assess the state of conservation of the property, and in particular progress made in seeking the above mentioned long-term solutions with regard to mining activities in the property. The State Party had previously offered to invite such a mission to the World Heritage property as indicated in its 2004 report.

The State Party submitted a report, received by the World Heritage Centre on 30 January 2007, as requested in Decision 30 COM 7B.23. In it, the following was stated:

- The Sicilian regional authorities have exclusive responsibility over the management of the World Heritage site;
- The Councillorship for Cultural and Environmental Property and Public Education of Sicily (in this report known as the Regional Authority for Cultural Heritage) has been given the responsibility (by law) for writing the management plan. Funds (€125,000 for 2006) have been allocated.
- Mining, although prohibited by the Landscape Territorial Plan, has been temporarily allowed under exceptional circumstances due to occupational reasons. However, as of 31 December 2006, the only authorised activities were removal of stockpiled material under the supervision of the Lipari municipality.

- The Landscape Territorial Plan has been declared legally valid and fully effective (as of 23 April 2004), and is the guiding mechanism for protection of the Aeolian Islands.
- Proposed hotel development (construction of 15 new hotels) has been denied on the basis of incompatibility with the Landscape Territorial Plan.
- The alarms over the construction of an airport on Lipari Island are unfounded as this would be incompatible with the Landscape Territorial Plan, and with the geomorphologic characteristics of the area.

2 NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

Protected Area Legislation

Sicily has the strongest regional autonomy in Italy and has exclusive jurisdiction over territorial planning and protected areas. Sicily's 1981 protected area policy is unique in that it allows for protected areas to be managed by environmental conservation groups, provincial governments, and universities, in addition to the Regional Forestry Body. Funds for both types of protected areas are provided by the Regional Authority for Territory and Environment. Regional Parks boast stronger protection than Reserves. Marine reserves come under the jurisdiction of the national government and are instituted by the Ministry of the Environment.

The Landscape Territorial Plan for the Aeolian Islands is the main tool used to control development on the islands through its strict zoning requirements. At the time of nomination, it was the major instrument giving conservation status to the WH property. The Plan was legalized in 2001, but has been repeatedly undermined in its power to control mining activity on Lipari (refer to Annex 5.7). As of October 2004, the Plan is legally above all other laws, with only Reserves and Regional Parks superseding it. Urban Plans (which come under the jurisdiction of local municipalities) have to adhere to the strict provisions of the Landscape Territorial Plan, and need to be approved by both the Regional Authority for Cultural Heritage and the Regional Authority for Territory and the Environment. The Landscape Territorial Plan is due for revision on 30 April, 2007 and the impacts of this process are uncertain. There are calls for the revised Plan to ensure stronger protection measures for the Aeolian Island's natural resources, but there are also fears that the Plan's current provisions could be undermined.

Institutional Framework (refer to Annex 5.8)

<u>National level</u>: A major player and initiator of the original nomination is the Ministry of Cultural Heritage. Though the islands are a Natural World Heritage site, the Ministry continues to be involved because of the archaeological richness and cultural values that are associated. Since its new administration came to power in 2006, the Ministry of the Environment has also become increasingly involved and has played a key role in pushing the regional and local authorities to stop the pumice mining operations.

<u>Regional level</u>: Two regional bodies are actively involved in the management of the World Heritage site: the Regional Authority for Cultural Heritage¹, and the Regional Authority for Territory and Environment². Currently, the two are well-coordinated in ensuring the implementation of the Landscape Territorial Plan which, at the time of nomination, was the major instrument giving conservation status to the WH property. In the past, the two authorities have not always worked in a coordinated manner and political instability or changes could distance the two authorities once again.

<u>Provincial level</u>: Territorial development is directly supervised by the Superintendence for Cultural Heritage in Messina³, which reports to the Regional Authority for Cultural Heritage. The Superintendence approves any development proposals for the Aeolian Islands, in conformance with the Landscape Territorial Plan. The Provincial Authority for Messina⁴ is the designated management entity for the reserve on the island of Salina, *Montagne delle Felci e dei Porri*.

<u>Municipal level</u>: There are four municipal governments governing the Aeolian Islannds. The Municipality of Lipari governs the islands of Lipari, Vulcano, Filicudi, Alicudi, Stromboli and Panarea while the island of Salina has three municipalities: Santa Marina Salina, Malfa, and Leni.

Management Structure

To date there is no formalized management structure for the World Heritage site, in spite of the assuring Italian response in 1999 Addendum to the nomination (see Section 3.8 of this report).

Response to the recognition of values under international treaties and programmes

All of the Aeolian Islands are recognized as International Bird Areas (IBAs) and several areas within the World Heritage site are listed as priority areas within the EU Habitat Directive. Sicily is lagging behind in the implementation of international environmental agreements. The new Italian Minister of the Environment recently created a new department to address this, and during the mission the team was accompanied by one of its representatives, Dottore Ottavio di Bella. Additional concerns have been raised regarding the lack of international protection for several key species which are endemic to the Aeolian Islands and among the most threatened in the Mediterranean (e.g. Aeolian lizard *Podarcis raffonei*). Existing new data for the Aeolian Islands was not available when assessments were made for international environmental directives.

¹ Assessorato Regionale dei Beni Culturali e Ambientali e della Pubblica Istruzione

² Assessorato Regionale del Territorio e Ambiente

³ Soprintendenza ai Beni Culturali e Ambientali di Messina

⁴ Provincia di Messina

3 ASSESSMENT OF ISSUES AND STATE OF CONSERVATION OF THE SITE

3.1 Pumice Mining

The extraction of pumice is an ancient and well documented⁵ activity. Since the 1999 WH mission, the scale of mining has increased on the slopes of Monte Pilato (Lipari), which lie within the WH property (Annex 5.6, Photo 1). This activity has reached the point where it is an unacceptable threat to the WH Site. Responding to the concerns of UNESCO, several recent attempts to curtail the mining within the property have been taken (refer to Annex 5.7).

The mine near Acquacalda of the company Italpomice was closed in 2002 (Annex 5.6, Photos 2 and 3). However, the PUMEX mine continues in operation within the property. On 1 March, 2007 the National Environmental Police reported that extraction was still going on, substantiating the allegations from environmental NGOs that mining activity was being masked by the authorized removal and use of stockpiled material. The final order to PUMEX to cease all mining activities was issued on 6 March, 2007 by the regional authorities and on 8 March by the municipality of Lipari. No deadline has been set for completion of stored material removal (refer to Annex 5.7).

On the day of the visit by the mission (not a usual working day), trucks and loaders were in use, apparently working on stockpiled material (Annex 5.6, Photos 4 and 5). The mission is concerned that some extraction may still be going on (Annex 5.6, Photo 6), in the guise of removal. The only other mining activity seen was a relatively small aggregate mine south of Acquacalda in the Pre-reserve buffer zone B (Annex 5.6, Photo 7).

The mission recommends:

- That mining extractive activity be stopped in areas within and adjacent to the WH Site, and no new mines be opened. This would ensure the application of the position on protected areas and mining, as expressed by the World Commission on Protected Areas (WCPA), IUCN resolution 2.82 (Amman, 2000), and the International Council on Mining & Metals (ICMM) policy statement on mining and World Heritage (2003).
- That a physical barrier be placed to stop any further illegal pumice extraction and that a firm enforceable deadline be set for termination of the removal of existing stockpiles, based on volume of stored materials, and feasible removal methods.

3.2 Unemployment due to Mining Cessation

Currently, approximately 40 persons are in full- or part-time employment at Lipari's PUMEX mine, and they are concerned about the loss of employment due to closing of the mines. We have been informed that over the years, several mine workers have suffered health problems from working with the pumice. The mine workers' main concern is the lack of a clear and immediate employment alternative. Re-employment

⁵ "Storia del Pomice", Giuseppe La Greca (2002)

and re-training are being discussed, not only at the municipal level but with the regional authorities. A restoration project for the mining area could provide substantial short-term employment. The establishment of a well-managed Reserve could offer more stable employment. There are increasing ecotourism opportunities, which would require the creation and maintenance of trails, as well as trained reserve guides. Rehabilitating the area and creating a "geo-park" could help to "de-seasonalize" tourism, and provide long-term employment for the local communities.

The mission recommends:

• *that a comprehensive, well-conceived programme for re-employment and re-training be immediately implemented by the municipality of Lipari.*

3.3 Rehabilitation of the Pumice-Mined Areas

Old mining spoil banks and residual surfaces, though exhibiting much rill erosion, do gradually revegetate naturally, except on very steep slopes (Annex 5.6, Photo 8). Accelerated human restoration is planned. The Landscape Territorial Plan has strong provisions to ensure environmentally sound rehabilitation projects in all of Lipari's mining areas. Rehabilitation projects seem to fall under the jurisdiction of the Regional Authority for Industry⁶, which could be of concern if the Regional Authority for Territory and Environment and the Regional Authority for Cultural Heritage are not appropriately involved.

Proposals for rehabilitation of the spoil and removal or conversion of the mining infrastructure have been made. One for a Geo-Park has been made by La Greca in 2002⁷. Legambiente Sicilia has used the latter to propose an "Aeolian Islands Vulcanologic and Archaeological Natural Park"⁸, which includes an eco-museum, coastal rehabilitation, observation facilities for the proposed marine reserve, use of thermal energy for therapeutic uses, and focused on increasing local and visitor knowledge and awareness of the WH Site. There has been no mention of whether funds are available to implement this proposal.

Serious objections have been raised by stakeholders and environmental groups, in light of UNESCO's decision (28 COM 15B.26) welcoming PUMEX's rehabilitation plan for the closed pumice mines. Concerns have been raised over the environmental damage the implementation of the PUMEX plan would cause.

The mission recommends:

- For areas where activity has already ceased, re-vegetation should commence immediately but within the framework of an overall comprehensive restoration plan. Only native plant species should be used, unless a nurse crop of more easily established plants is deemed necessary by experienced mine-spoil restorationists.
- That the rehabilitation plan for the pumice mines be the result of a participatory process, with input from local stakeholders. Alternative plans should be solicited and

⁶ Assessorato per l'Industria

⁷ Il Parco Geo-Minerario della Pomice di Lípari, Giuseppe La Greca (2002)

⁸ Il Parco Naturale Vulcanologico e Archeologico delle Isole Eolie (2004)

taken into account before awarding or implementing the final, comprehensive rehabilitation project. The process should be led by the regional authorities, with monitoring support from the local municipality.

• That the ICCM⁹ guidelines on rehabilitation of mining areas be followed.

3.4 Boundaries of the Lipari Reserve

The Lipari property of the WH Site has always had a very convoluted boundary. The revised boundaries submitted at the request of WH Centre in the 2000 final nomination were an improvement, but included some of the PUMEX Porticello mining area in Zone A (See Annex 5.5a, Map 1). A new map has been produced by the Regional Authority for Territory and Environment, with input from experts and local stakeholders. The new boundaries clearly exclude both mining areas from the two WH Site Zones A and B (Annex 5.5b, Map 2). They also make better use of roads and topography, and are less convoluted, making for easier recognition of the area included in the WH Site. A new decree, giving this map formal status, will hopefully be issued in June 2007. However, the proposed changes have not been submitted to the WH Centre, as requested by the Convention's Operational Guidelines.

The mission recommends:

- Welcoming the proposed boundary revisions for 2007 as an improvement, we strongly urge the new reserve boundaries for the island of Lipari to be legally ratified by 1 July 2007;
- That once these new boundaries for the Reserve (Zone A) and Pre-Reserve (Zone B) are validated by decree, maps be more generally available;
- That the State Party submit a proposal to the World Heritage Centre for revision of the property boundaries in accordance with the Operational Guidelines.

3.5 Feral Grazing on Alicudi

An additional threat to the property has come to light. On the formerly little-disturbed north and east slopes of Alicudi, the native Mediterranean maquis is being destroyed by feral sheep and goats (population estimates of 800 sheep and around 90 goats on an area of only 2 to 3 km^2). This area is listed under the EU's Habitat Directive and is core zone A of the World Heritage site. The elimination of sheep and goats on Alicudi would be in keeping with the Convention on Biological Diversity and the European Habitat Directives, protecting important plant species of the maquis. Sport hunting for these species only could be considered.

The mission recommends:

• A strong feral animal control programme should be initiated, hopefully leading to the elimination of sheep and goats on Alicudi

⁹ International Council on Mining & Metals

3.6 Additional Protection Measures for the World Heritage site

Some concerns have been raised regarding management of Salina's *Montagne delle Felci e dei Porri* Reserve, which was set up by the Provincial Authority for Messina. The Regional Forestry Body which manages this has been criticized for ineffectively managing island native habitats. Felci has been planted with three non-native tree species, and the buildings present are incongruous with the natural environment. The Regional Authority for Territory and Environment plans to undertake a general study of protected area management in all the islands, in order to create an appropriate management structure. There is a budget already available for this.

Currently, the WH reserve boundaries on Vulcano exclude an area populated by an endemic species. There are also concerns about some of the smaller islands which, although under the strictest paper protection, are not appropriately monitored and neither is access to them controlled.

The mission recommends:

- That the reserve boundaries of Vulcano be revised to ensure all priority flora and fauna are protected.
- That consideration be given to turning the management of the Reserve Montagne delle Felci e dei Porri over to the proposed new World Heritage site management entity.

3.7 Public Awareness

In spite of assurances in the 1999 Addendum to the Evaluation that Italian authorities were committing resources to "educational/interpretive actions", there is a very serious lack of knowledge that a World Heritage site exists for the Aeolian Islands. There are no signs, maps or brochures indicating to locals or visitors that this is a World Heritage site. While the Vulcanology Museum and Archaelogical Museum are easily known and found, the biological values are unknown to the vast majority of locals and tourists. Consequently, there is much confusion as to what World Heritage designation means, and ignorance regarding the benefits of World Heritage status. The confusion is currently being aggravated by the misrepresentation of UNESCO by a political candidate for the May 2007 municipal elections in Lipari, Ms. Angela Mazziotta, who claims she is the President of the UNESCO Centre for the Aeolian Islands. Clearly, these are all obstacles for obtaining widespread support for the World Heritage site and for instigating a sense of local pride, and hence support.

The mission recommends:

That an environmental communication programme for all the islands of the World Heritage site be launched as soon as a management entity is designated. This should ensure more public visibility for both locals and visitors regarding the existence of a World Heritage site and the benefits it provides. At least minimal signage is needed on each of the islands targeted to those coming in by ship. It would be to the benefit of the four Municipalities to prepare popular brochures, based on sound updated

science such as the "Nature Guide to the Aeolian Islands"¹⁰, which could be available on ferries and at any future visitor centres, or for use in schools.

• That more interpretive opportunities, such as the guided nature walks and hikes offered by NESOS (Nature, Culture, Tourism Research), be developed as part of an ecotourism development programme.

3.8 Management Plan and Supervision

As of March 2007 no management plan for the World Heritage site, or structure for its implementation, exists. This is in spite of the affirmations in the Addendum to the 1999 Evaluation, which noted that:

- there had been "significant commitment of resources...towards preparing a separate Management Plan";
- that a "coordinated management structure has been in place since 1998 to oversee the management of the important heritage values" in the form of "a syndicate of the four local municipalities which administer the Aeolians known as *Ecosviluppo Eolie*...with the collaboration of an individual Superintendent nominated and empowered to oversee protection"; and
- that there were "specific actions...to monitor the on-going integrity of the nominated area".

To the best of the mission team's knowledge, none of these have been implemented. No "Superintendent" has ever been appointed. No "coordinated management structure" has been established. The only monitoring of the World Heritage site appears to be by environmental NGOs such as Legambiente, WWF and Italia Nostra. Although *Ecosviluppo Eolie* received €75,000 to draft a management plan, it clearly has not delivered on the original commitments. The plan, released in April 2006, was a "model" for a draft management plan¹¹. While this 174-page document contains much overview material its focus is mainly socio-economic, it provides only generalized suggestions for the management of the property, and it lacks any maps or timetable for action. In addition, it gives little attention to natural values and their conservation. The plan has been deemed inadequate by the Regional Authority for Cultural Heritage, which in July 2006 informed the Italian Ministry of Cultural Heritage about the its main limitations:

- 1) it does not take into account the roles of provincial and regional governments;
- 2) it does not address legal and administrative components;
- 3) it lacks specific technical information; and
- 4) it lacks reference to updated and relevant cultural heritage components.

The mission welcomes the commitment of the Regional Authority for Cultural Heritage to immediately start a Management Plan for the World Heritage site, in cooperation with the Regional Authority for Territory and Environment. €250,000 has been destined to the development of a final management plan through the Regional Authority for Cultural Heritage, coordinated by Dott. Antonino Scimemi. However, this commitment needs to be supported by urgent actions towards its implementation. A management entity for the Site has not yet been designated, although the Regional Authority for Territory and

¹⁰ Guida Naturalistica alle Isole Eolie. Pietro Lo Cascio and Enrico Navarra (2003)

¹¹ Modello per la Redazione del Piano di Gestione del Sito UNESCO Isole Eolie World Heritage List (2006)

Environment has proposed management of the property be taken on by an experienced NGO.

Further concerns relate to the use of scientific information. There seems to be an ad-hoc approach to the commissioning of scientific studies on the Aeolian Islands' natural resources. Funds for scientific studies are available but it is not clear whether these are channelled to priority research areas or compiled in any coordinated way. Scientific studies have been commissioned by the Office for the Minor Islands¹² and through the Nature Card¹³, a GIS-based research instrument funded by the Regional Protected Areas Law. Coastal and marine studies are carried out by the National Institute for Applied Marine Research¹⁴. There is a sound body of existing and updated scientific information, such as a comprehensive guide book on the Aeolian Islands' flora and flaura¹⁵, which to the mission team's knowledge has not been used by the authorities responsible for the WH Site. In fact, the naturalistic report on Lipari presented to the mission by the Regional Council for Environmental Protection¹⁶ uses significantly outdated references. This raises concerns over how effectively the regional authorities are using updated (and where possible, local) scientific knowledge. In addition, data gaps exist and new studies are needed.

The mission recommends:

- A Management Plan, including the identification of funding resources to implement it, be prepared by 1 September 2007.
- That the management plan include provisions for staffing, training, monitoring and public education.
- That the most updated scientific data and knowledge currently available for the Islands be used in the planning and management of the ; World Heritage site and that existing data gaps be addressed, such as population assessments for priority flora and fauna, assessment of rehabilitation needs for wetland areas, and studies on pioneer plant species in active volcanic areas.
- That the management plan establish strict limits on visitor capacity in order to ensure environmentally and socially sustainable tourism.
- A protected area management entity, whether it be an environmental NGO with reserve management experience or a new regional body, be designated by 1 September, 2007 and fully functioning at the latest by the end of 2007.

3.9 Hotel Development

In December 2006, the Regional Urban Committee¹⁷ rejected the proposal for eight large hotels (seven on Lipari and one on Vulcano) as they were not in line with the Landscape Territorial Plan. Therefore, the concerns reported in the press in October 2004 no longer seem to be realistic, provided the Landscape Territorial Plan is properly implemented.

¹² Ufficio per le Isole Minori with funds from the Dipartimento di Programmazione

¹³ Carta della Natura

¹⁴ Istituto Centrale Ricerca Applicata al Mare (ICRAM)

¹⁵ Guida Naturalistica alle Isole Eolie. Pietro Lo Cascio and Enrico Navarra (2003)

¹⁶ *R.N.O. Isola di Lipari - Relazione Naturalistica*, Consiglio Regionale per la Protezione del Patrimonio Naturale (CRPPN)

¹⁷ Commitato dell'Urbanistica (CRU)

The mission team was not made aware by the environmental NGOs or the authorities of any current large proposal for the islands, and there seemed to be agreement that there will only be controlled additions to existing hotels and the creation of new small inns or pensions (Annex 5.6, Photo 9). The Landscape Territorial Plan controls the location of hotel development. It also establishes generic size limitations, which could be reinforced by the new Urban Plan. The Mayor of Lipari is planning to launch the new Urban Plan (for the six islands controlled by the municipality of Lipari) before the next municipal elections in May 2007.

In terms of the tourism industry, an encouraging trend is emerging whereby most stakeholders are stressing the need to de-seasonalize visitation to the Islands. Diverting visitation away from peak periods and encouraging off-season tourism would provide long-term economic benefits to the local communities as well as help to conserve the natural values of the WH Site. In addition, there seems to be a significant shift in the type of investment in the tourism sector, which will focus on high quality hotels (4 and 5 star hotels) to attract a high-end tourism. An encouraging proposal presented by WWF Sicily aims to rehabilitate existing hotel facilities, such as B&Bs, abandoned buildings, and old manor houses.

Of some concern and consequence, however, are the "floating hotels" in the form of large cruise ships. A proposal for substantial expansion of the Port of Lipari could accommodate vessels of up to 2,000 passengers per ship. Even as day visitors, the addition of such numbers to existing seasonal peak visitation could mean greater stress from increased infrastructure development on the island, impacting adversely on the natural and cultural heritage values. The port development and cruise ship presence do not come under the restrictions of the Landscape Territorial Plan or any other regulatory framework.

The mission recommends:

- That the Urban Plan being developed by the Municipality of Lipari strengthen and complement the Landscape Territorial Plan with regard to size and shape for hotel additions or new accommodation structures, and guarantee their blending into the environment.
- That any cruise ships allowed to visit the islands be limited in size and number of passengers. This may have to be effected through special legislation.

3.10 Additional infrastructure developments

The development of an airport on Lipari does not seem to be an imminent threat, due to the provisions of the Landscape Territorial Plan and limitations of topography. There is concern, however, over the initial proposal for major re-construction and enlargement of the Port of Lipari (Annex 5.9) and its consequent impact. The plans include building sea walls, which could seriously alter the geomorphology and dynamics of the coasts. They also include a large commercial centre, which would fall outside the jurisdiction of the Landscape Territorial Plan. There are no existing regulatory frameworks to offer protection to port areas. There may be proposals for ports on the other islands of which the mission team may be unaware.

The mission recommends:

- That the State Party adopt specific legislation for coastal and marine protection in the Aeolian Islands, with specific emphasis on controlling port developments and associated infrastructure.
- That regional and municipal authorities ensure that tourist numbers, accommodation, and tourist activities are in line with the UNESCO Operational Guidelines.
- That a rigorous environmental impact analysis of the port proposal for Lipari be required, including its impact on the World Heritage site and its values.

3.11 Governance

The most difficult and intractable issue for the WH property is the complicated, often overlapping, seldom well-coordinated governance (See Annex 5.8). It involves national, regional, provincial and municipal authorities. Sicily is an autonomous region with many players, further adding to complexity. This situation makes the achievement of an "integrated management structure" for the WH property a difficult task. All parties, whether at the levels of government or of environmental NGOs, have a strong desire that WH status be continued. It is necessary to clarify who the main governmental players are in terms of the management and responsibility of the WH Site.

Legambiente Sicilia has presented a proposal¹⁸ (Annex 5.10) to create a regional park encompassing all the islands, including archaeological and cultural values, and extending beyond the WH Site boundaries. The creation of a Regional Park for the Aeolian Islands would require a regional law, which would not be too complicated to institute due to the existing institutional and regulatory frameworks (provided for under the 1981 Sicilian protected area law). The Regional Authority for Territory and Environment is also interested in creating a regional park with a corresponding independent management entity.

The mission recommends:

- That, given the communication and integration difficulties among and across government levels, the allocation of management authorities for Zones A and B of the World Heritage site be vested in an experienced NGO or by the creation of a semi-autonomous regional management agency. This would better avoid conflicts of interest. The mission team suggests that the designation of a supervisory management entity be required by 1 September 2007.
- That, given the rather frequent changes in political party governance, the policies and management structures put in place to protect and conserve the WH Site be instituted by the end of 2007, and include regulatory measures that ensure their long-term survival.
- That, in light of the upcoming proposal for a new Urban Plan by the municipality of Lipari, it include environmental provisions for the rehabilitation of the mines and for

¹⁸ Proposta di Disegno di Legge Regionale per lÍstituzione del Parco Naturale, Vulcanologico e Archeologico delle Isole Eolie. Legambiente Sicilia (2004)

general urban development compatible with, and strengthening, the Landscape Territorial Plan.

- That when the Landscape Territorial Plan is revised/renewed in 2008, it strengthen rather than weaken conservation measures for the World Heritage property.
- That Legambiente's draft decree for the institution of a Regional Park for all the Aeolian Islands be studied and possibly adopted by the end of 2007.

3.12 Additional Comments and Recommendations

- We urge the State Party to institute appropriate marine reserves to enhance the natural values of the World Heritage site, and assign a management entity for them as soon as possible integrated with the management of the terrestrial reserves. An effective communication campaign is encouraged to support its acceptance at the local level.
- We request that the State Party ensure the most updated scientific data and knowledge be used in the planning and management of the WH Site. Welcoming the proposed studies on the islands' natural resources, we recommend existing data gaps be addressed.
- We strongly urge the State Party to ensure that the management plan for the WH site adheres to other international environmental agreements and provisions, such as the European Union's Habitat Directive, Important Bird Areas (IBAs), etc. Action should be taken to ensure any priority species or habitats not yet listed within international directives, be included.
- In light of the updated data available for the flora and fauna of the islands, the proposed scientific studies, and possible institution of a marine reserve, we recommend the State Party explore the possibility of extending the property to include its biodiversity values, including important coastal and marine habitats, and possibly re-nominate it under criterion (ix).
- We request that the World Heritage Committee recommend the site for Danger Listing in case mining activity does not cease immediately, and a management plan and management structure not be fully operational by the end of 2007.

4 CONCLUSIONS AND RECOMMENDATIONS

The Aeolian Islands are still of outstanding universal value based on their vulcanological characteristics. The mission welcomes growing interest on the part of most stakeholders, and especially of the two competent regional authorities, in keeping World Heritage status. However, the islands still need to find the right equilibrium between economic development, which is mostly brought on through tourism, and the conservation of their natural and cultural heritage. The protection granted by expanded World Heritage status and a newly instituted regional park will be key in ensuring the right balance is achieved.

5 ANNEXES

- 5.1 TORs for the mission
- 5.2 Itinerary and Programme
- 5.3. Composition of Mission Team
- 5.4a List of contacts made
- 5.4b List of stakeholders
- 5.5a Map 1: Existing boundaries for the Lipari Reserves
- 5.5b Map 2: Proposed new boundaries for the Lipari Reserves
- 5.6 Photos (nine in number)
- 5.7 Chronology of Events
- 5.8 Institutional Framework for the Aeolian Islands
- 5.9 Port proposal image
- 5.10 Legambiente draft law for a comprehensive protected area

ANNEX 5.1

TERMS OF REFERENCE

For the joint UNESCO - IUCN mission to Isole Eolie (Aeolian Islands), Italy (March 2007)

- Carry out a joint IUCN UNESCO mission to assess the state of conservation of the Isole Eolie (Aeolian Islands) World Heritage property as requested by the World Heritage Committee at its 30th Session;
- 2. Review the impacts of mining activities, proposed hotel developments, and the implementation of the Landscape Territorial Plan;
- 3. Meet with all stakeholders involved, including local and national authorities and NGOs to review the aforementioned issues;
- 4. Review all reports available on the site, as requested by Decision 27COM 7B.18 and 30 COM 7B.23 (including the updated report of 1 February, 2007);
- Prepare a concise report by 3 April 2007 for review by the World Heritage Committee considering Operational Guidelines paragraphs 178-186 and 192-198, and submit the report to the World Heritage Centre in electronic form (not exceeding 10 pages; according to the enclosed format).

ANNEX 5.2

ITINERARY AND PROGRAMME

March 21	Assembly of the team from Gland, Paris and Burlington (USA) in Palermo
March 22	Meeting with environmental NGOs: Legambiente Sicilia, Italia Nostra Sicilia and WWF Sicilia at the headquarters of the Regional Authority for Cultural Heritage in Palermo.
	Meeting with the Regional Authority for Cultural Heritage in Palermo. Included the representative from the Ministry of the Environment.
March 23	Meeting in Palermo with the Regional Authority for Territory and Environment. Included representatives from the Regional Authority for Cultural Heritage, the Ministry of Cultural Heritage, the Office for the Minor Islands, and environmental technical bodies.
	Ground transportation to Milazzo and ferry to Lipari.
March 24	Coast Guard boat tour around the island, but trip aborted right after the pumice mines due to rough sea conditions.
	Helicopter flight over northeastern side of Lipari.
	Automibile visit to both mining sites: Italpomice (Acquacalda) and PUMEX (Porticello).
	Meeting with Mayor and Councillors of Lipari.
	Press and television interviews.
March 25	Long press interview (regional TV) at Lipari hotel
	Meeting with NGO biologist at NESOS (Lipari)
	Visit to Lipari museums with the Port Authority.
March 26	Working session.
	Travel by ferry to Milazzo and car to Palermo.
	Session with two biologists (from the 1999 evaluation mission)
March 27	Full day working session and final contacts with informants and regional authorities.
March 28	Return to Gland and Paris of mission team.

ANNEX 5.3

COMPOSITION OF MISSION TEAM

Prof. Lawrence Hamilton	Senior Advisor, World Commission on Protected Areas (WCPA), the World Conservation Union (IUCN)
Dr. Carlos García-Saez	Marine Heritage Specialist, World Heritage Marine Programme, UNESCO World Heritage Centre
Ms. Sarah Gindre	Junior Professional Associate, Programme on Protected Areas, the World Conservation Union (IUCN)

ANNEX 5.4a

LIST OF CONTACTS MADE

Prof. Francesco Alaimo	Head of Protected Areas, WWF Sicily
Ammiraglio Bernardo	Admiral, Coast Guard (Guardia Costiera Catania)
Dott. Mariano Bruno	Mayor of Lipari (and Alicudi, Filicudi, Vulcano, Panarea and Stromboli)
Dott. Enrico Carapezza	(Responsible for the Landscape Territorial Plan) Department of Planning, Regional Authority for Territory and Environment
Dott. Ottavio Di Bella	Observatory for International Affairs, Ministry of the Environment
Dott. Gelardi	Vice-head of the Councillor's Office, Regional Authority for Cultural Heritage
Prof. Nicola Giudice	Legambiente Sicily
Ing. Giuseppe Giunta	Office of the Minor Islands
Prof. Salvatore Granata	Legambiente Sicily
Dott. Riccardo Gullo	Director, Archaeological Museum of Lipari (Museo Archeologico "Bernabò Brea"). Ex-mayor of Santa Marina di Salina (during the 1999 mission).
Avv. Rossana Interlandi	Councillor, Regional Authority for Territory and Environment
Dott. Nicola Leanza	Councillor, Regional Authority for Cultural Heritage
Ing. Giuseppe La Greca	Author of proposal for a Geo Park (Island of Lipari)
Dott. Pietro Lo Cascio	Founder and Director, NGO NESOS (Nature, Culture, Tourism Research)
Prof. Piero Longo	President, Italia Nostra Palermo
Dott. Mauro Mannino	Councillor's Office, Regional Authority for Territory and Environment
Dott. Paolo Masella	
Dr.ssa Mazzarella	Department of Planning, Regional Authority for Territory and Environment
Dott. Roberto Palma	Councillor's Office, Regional Authority for Territory and Environment
Avv. Romeo Palma	Head of Department, Regional Authority for Cultural Heritage
Dr.ssa Maria Rosaria Palombi	Technical Director, Ministry of Cultural Heritage
Dott. Antonino Scimemi	Head of the Councillor's Office, Regional Authority for Cultural Heritage (ex- Councillor, Regional Authority for Territory and

	Environment)
Dr.ssa Daniela Segreto	(Official interpreter for the mission) Regional Environmental Protection Agency (ARPA)
Dr.ssa Laura Stassi	Department of Planning, Regional Authority for Territory and Environment
Prof. Giuseppe Sunseri	National Institute for Applied Marine Research (ICRAM)
Arch. Pietro Tolomeo	Technical Director, Regional Authority for Territory and Environment (ex-Director of the Mining Authority for Catania)
Ing. Tuccio	Office of the Minor Islands
Dott. Gianfranco Zanna	Head of Cultural Heritage, NGO Legambiente Sicily
Dott. ???	Superintendence for Cultural Heritage

ANNEX 5.4b

Main Stakeholders Related to the Natural World Heritage Site of the Aeolian Islands (Sicily, Italy)

STAKEHOLDER	COMPETENCE/ROLE
National Authorities	
Ministry of the Environment (<i>Ministero dell'Ambiente</i>)	The new administration came into power in June 2006, under Minister Pecoraro Scanio. He has created a new division to ensure the implementation of the multilateral environmental agreements (MEAs) Italy has subscribed to.
Ministry of Cultural Heritage (Ministero per i Beni e le Attività Culturali)	
UNESCO National Commission for Italy (Commissione Nazionale Italiana UNESCO)	
National Environmental Police Corps (Nucleo Operativo Ecologico del Comando dei Carabinieri)	A completely independent entity – used at the national level, under the Ministry of Defense, but can be used by any Ministry. Has regional and provincial counterparts to delegate to.
Regional Authorities	
Regional Authority for Cultural Heritage and Landscape (Assessorato Regionale dei Beni Culturali e Ambientali e della Pubblica Istruzione)	Sicily's equivalent of the Italy's national Ministry for Cultural Heritage. Dottore Scimemi, who helped launch the Landscape Territorial Plan, has returned as the new administration since July 2006.
Regional Authority for Territory and Environment (Assessorato Regionale del Territorio e Ambiente)	Sicily's equivalent of the Italy's national Ministry of the Environment. The new administration under l'Assessore Rossana Interlandi is there since July 2006 and consists of a group of several people who previously had worked in environmental NGOs.
Regional Authority for Family, Social Affairs and Local Autonomies (Assessorato Regionale della Famiglia, delle Politiche Sociali e delle Autonomie Locali)	Provided funding to the municipality of Lipari to draft a management plan for the WH Site (2004). Have been involved in the discussions regarding the unemployment concerns as a result of the permanent closure of the PUMEX mines.
Regional Authority for Tourism (Assessorato Regionale del Turismo)	Promote port development, and provide concessios for coastal developments. Short-sighted in their approach. In the past they created a plan without informing the other Authorities but approved by the Ministry for Tourism.

STAKEHOLDER	COMPETENCE/ROLE
Office for the Minor Islands (Ufficio per le Isole Minori)	Created in 1999 within the regional government framework. It depends on the President of Sicily, although funding comes from the Ministry for Finance, the Regional Programming Department (<i>Dipartimento di Programmazione</i>), and from EU funds. It plays a coordination role on all issues affecting Sicily's islands: 14 islands and 8 municipal governments. It is also charged with coordinating efforts across government levels i.e. between local and regional authorities, and works continuously with the Regional Authority for Tourism (<i>Assessorato del Turismo</i>). Will be part of the Committee created to develop a management plan for the WH site. It has provided funding for the new management plan through the APQ (Accordo Programma Quadro).
Regional Urban Committee (Commitato dell'Urbanistica, CRU)	Authority that approves anny municipal Urban Plan, as well as proposals for development.
Regional Tribunal (<i>Tribunale Amministrativo Regionale</i>)	The judiciary court for the region of Sicily.
Regional Programming Department (Dipartimento di Programmazione)	Funding agency that receives contributions from each of the Regional Authorities in Sicily and channels it to different uses e.g. the work of the Office for the Minor Islands
Provincial Authorities	
Provincial Authority for Messina (Provincia di Messina)	It currently is the designated management entity for the reserve on the island of Salina, <i>Montagne delle Felci e dei Porri</i> .
Superintendence for Cultural Heritage (Soprintendenza ai Beni Culturali e Ambientali di Messina)	Institution that implements territorial policy on both cultural and natural heritage in the Region of Sicily. It is the authority that approves any development proposals for the Aeolian Islands, in line with the Landscape Territorial Plan. They are overseen by the Regional Authority for Cultural Heritage.
Mining Authority for Catania (Distretto Minerario di Catania)	Is the authority that issues the mining authorizations on the Aeolian Islands.
Local Authorities	
Municipality of Lipari (Comune di Lipari)	The current administration came into power in 2004. Also the municipality for Alicudi, Filicudi, Vulcano, Panarea and Stromboli. It has a Local Council (<i>Consiglio Comunale</i>), which is supposed to represent the people of the six islands. The municipalities have jurisdiction over the Urban Plans, which must subscribe to the Landscape Territorial Plan.
Municipalities of Leni, Malfa and Santa Marina Salina (Comuni di Leni, Malfa e S. Marina Salina)	The three municipalities governing the island of Salina. The three mayors are part of the consortium <i>Ecosviluppo Eolie</i> .

ANNEX 5.6 SUPPORTING PHOTOS (Lipari)

Photo 1. Mining activity by PUMEX on slopes of Mount Pelato (Lipari) within the boundary of the World Heritage Site (Photo: Sarah Gindre)



Photo 2. Italpomice mine near Acuqcalda, now inactive (Photo: Larry Hamilton)



Photo 3. Italpomice mine closing sign, 2002 (Photo: Sarah Gindre)



Photo 4. Stockpile at PUMEX mine (Photo: Larry Hamilton)



Photo 5. Pumice being removed by truck on March 24, 2007, from mine face, presumably from material already extracted (Photo: Sarah Gindre)



Photo 7. Small aggregate mine in Zone B (Photo: Larry Hamilton)

Photo 6. There appears to still be extraction on March 24, 2007 (Photo: Sarah Gindre)



Photo 8. Rill erosion on old mining spoil but with some natural re-vegetation (Photo: Larry Hamilton)





Photo 9. One of the few "large" hotels in Lipari which seems appropriate scale (Photo: Larry Hamilton)



<u>Chronology of Events</u> Natural World Heritage Site- Aeolian Islands (Italy)

Shading:

Dates relevant to the management plan of the WH Site

Dates relevant to pumice mining operations

Date	Action Taken
1991	First institution of the Lipari Reserve
1997	The Landscape Territorial Plan (Piano Territoriale Paesistico) is formalized.
1998	Creation of the <i>Ecosviluppo Eolie</i> , a consortium of 4 municipalities on the Aeolian Islands: Lipari, Leni, Malfa e S. Marina Salina (the latter three all on the island of Salina).
1999	First nomination submitted by the Italian State Party for the Aeolian Islands as a mixed WH Site. UNESCO/IUCN/ICCOMOS Evaluation Mission visits the islands.
2000	UNESCO WH Committee approves the revised nomination and grants the Aeolian Islands natural WH status
23 February 2001	Approval and legal adoption of the Landscape Territorial Plan for the Aeolian Islands by the Regional Authority for Cultural Heritage, placing strict restrictions on all aspects of territorial development.
3 May 2001	New regional law (no. 6) permits mining activities in areas that have been traditionally mined, overriding the Landscape Territorial Plan.*
21 December 2001	Approval of the Territorial Agreement for the Aeolian Islands (<i>Patto Territoriale delle Eolie</i>) which aims to override the Landscape Territorial Plan with regard to mining activities and construction.*
??? 2002	The Landscape Territorial Plan for the Aeolian Islands is contested in Court by the municipalities of Leni and Lipari, as well as by a hotel association (<i>Federalberghi</i>) and a private company (<i>Meligunte srl</i>)*
26 November 2002	The Regional Court overturns the contestation of the Landscape Territorial Plan and confirms its legal validity.*
16 December 2002	Expiry of PUMEX authorization to mine on Lipari
18 December 2002	Expiry of Italpomice authorization to mine on Lipari and closure of the Italpomice mine at Acquacalda
??	Extensions to continue mining granted by the Mining Authority of Catania???
30 April 2003	PUMEX sends its rehabilitation proposal for the mining area to the Ministry of Cultural Heritage. It includes provisions to transfer extractive activities from the external crater area to the internal one.
25 June 2003	PUMEX sends its rehabilitation proposal to the Regional Authority for Cultural Heritage
2004	New administration of the municipality of Lipari comes into power

Date	Action Taken
9 May 2004	Legambiente Sicilia presents its proposal for an "Aeolian Islands Vulcanologic and Archaeological Natural Park" (Il Parco Naturale Vulcanologico e Archeologico delle Isole Eolie).
June ? 2004	Legambiente Sicilia presents a draft law for the institution of an "Aeolian Islands Vulcanologic and Archaeological Natural Park" (Il Parco Naturale Vulcanologico e Archeologico delle Isole Eolie).
21 July 2004	Financing of €75,000 provided for the creation of a management plan for the WH Site. Funds provided by the Regional Authority for Family, Social Affairs and Local Autonomies.
22 October 2004	The Regional Court approves the Territorial Agreement for the Aeolian Islands (<i>Patto Territoriale Isole Eolie</i>) under regional law no. 917 article 25. This grants legal backing to mining activities in areas traditionally destined to this use, notwithstanding the prohibition under the Landscape Territorial Plan.*
25 October 2004	Legambiente Sicily, contests regional law 917 claiming it goes against the Landscape Territorial Plan and the regional Constitution.*
29 October 2004	The State Commission for the Region of Sicily (<i>Commissario dello Stato per la Regione Sicilia</i>), overturns article 25 of regional law 917 on the basis that it is unconstitutional.*
28 December 2004	Transfer of funds (€75,000) to <i>Ecosviluppo Eolie</i> by the municipality of Lipari with funds channeled through the Regional Authority for Social and Family Affairs.
30 December 2004	Contract signed between the municipality of Lipari (Mayor Mariano Bruno) and <i>Ecosviluppo Eolie</i> (President Gianluca Galati) for the drafting of a model for the management plan (<i>Definizione di un Modello per la Realizzazione di un Piano di Gestione del Sito UNESCO Isole Eolie</i>)
??? 2005	Private consulting company, S.I.M s.r.I Ingegneria per l'Ambiente Ecosvilupo del Territorio, contracted by Ecosviluppo Eolie to draft the management plan.
31 March 2005	The Mining Authority of Catania rejected PUMEX's request for an extension to pumice mining, only to re-authorize the company 14 days later following concerns over the social situation linked to the unemployment of the mining workers.*
28 October 2005	The Regional Authority for Cultural Heritage calls on all the mayors of the Aeolian Islands to provide information on proposals/plans being developed for the management of the WH Site.
5 November 2005	<i>Ecosviluppo Eolie</i> shared its "model" for the management plan with Prof. Giunta, of the Office for the Minor Islands (according to the Mayor of Lipari)
30 November 2005	Deadline for the mayors of the Aeolian Islands to send proposals to the Regional Authority for Cultural Heritage regarding the management of the WH Site. No response received.
31 December 2005	Expiry of PUMEX authorization extension to mine on Lipari. Mayor of Lipari granted a further extension of 90 days, although authorizations can only be granted by the Mining Authority of Catania.*
2 March 2006	The Regional Authority for Cultural Heritage informs all the mayors of the Aeolian Islands that, in light of not having received information from them regarding any proposed management plans, it will take on the responsibility of drafting the plan. The formal communication noted that the local municipalities would be fully informed about and involved in the process.

Date	Action Taken
3 April 2006	Ecosviluppo Eolie shared the Modello per la Redazione del Piano di Gestione del Sito UNESCO Isole Eolie World Heritage List, a "model" for drafting the WH Site management plan, with the Regional Authority for Cultural Heritage (Assessorato Regionale dei Beni Culturali e Ambientali).
24 May 2006	The Regional Authority for Cultural Heritage invited all mayors of the Aeolian Islands to attend a meeting to discuss the model and WH site management plan.
6 June 2006	Meeting held between the Regional Authority for Cultural Heritage and the mayor of Leni, two Local Councilors from Lipari instead of the Mayor himself, as well as the provincial government (<i>Soprintendenza</i>). The Regional Authority shared the "model" for the management plan drafted by <i>Ecosviluppo Eolie</i> (received in April via e-mail) The mayor of Leni and the Provincial Authority had not been informed of the model. So the Region decided to take on the responsibility of developing the management plan.
3 July 2006	The Regional Authority for Cultural Heritage sent their observations on the "model" prepared by <i>Ecosviluppo Eolie</i> to the Ministry of the Foreign Affairs, the National UNESCO Commission, and the Ministry for Cultural Heritage.
31 October 2006	Minister for the Environment, Pecoraro Scanio, wrote to the Major of Lipari requesting that illegal mining operations be stopped.
30 November 2006	Report by the Environmental Police Corps (<i>Nucleo Operativo Ecologico Carabinieri di Catania</i>) to the Minister of the Environment informing him that PUMEX mining extraction activities still continued.
11 December 2006	Minister of the Environment, Pecoraro Scanio, wrote to the President of the Region of Sicily and to the Court of Catania requesting that extractive activities be immediately halted.
31 December 2006	Order by the Mining District of Catania to only permit the "use" of already mined materials by PUMEX on Lipari Island
December 2006	The Regional Urban Committee (<i>Commitato dell'Urbanistica, CRU</i>) rejects the proposals for the large hotel developments, based on their incompatibility with the Landscape Territorial Plan.
9 January 2007	The Lipari municipality met with the Regional Authorities, including those for the Environment and Cultural Heritage, to discuss the unemployment problem.
19 January 2007	The President of Sicily approved the provision of funds for re-employment of the ex-mine workers in the short-term rehabilitation of the mining area.
7 February 2007	During a technical meeting organized by the Regional Authority for Cultural Heritage, the Provincial Authority for Messina and the Mining Authority for Catania requested PUMEX to immediately stop all illegal mining activities.
21 February 2007	Formal order released by the Provincial Authority of Messina for PUMEX to suspend all mining activities at the Porticello caves.
22-23 February 2007	Reports by the Lipari police that there was no mining activity at Porticello, but that materials were being transported at Punta Castagna.
1 March 2007	Lipari police report demonstrating that mining activity was still going on at Porticello
6 March 2007	Order released by the regional authorities to the municipality of Lipari to stop all abusive mining activities.
8 March 2007	Order released by the Municipality of Lipari for PUMEX to immediately stop all abusive mining activities.

Date	Action Taken
2 April 2007	Expected date for official approval of the new boundaries for Lipari's reserve by the Regional Council for Environmental Protection (CRPPN)
30 April 2007	Expected revision of the Landscape Territorial Plan.
2 June 2007	Deadline for contestations from the Municipality of Lipari regarding the proposed Lipari Reserve boundary change.
?? June 2007	Expected date for the institution of the Lipari Reserve.
Autumn 2007	Expected date for the completion of a management plan for the WH Site (as suggested by the Foundation for UNESCO Sites in Sicily)

* Dossier "Isole Eolie: Patrimonio dell'Umanità o Territorio di Conquista per Pochi Speculatori?", Legambiente Sicilia (2 July 2006).

Institutional Framework Governing Cultural and Natural Heritage in the Aeolian Islands, Sicily (Italy)



ANNEX 5.9 PORT PROPOSAL IMAGES (Island of Lipari)

A. Entire port



B. Marina Lunga







C. Marina Corta



D. Sottomonastero







ISOLA DI LIPARI LEGENDA A = UNESCO SITE

B = BUFFER ZONE