

## **Report On the State of Conservation of the UNESCO World Heritage Property Volcanoes of Kamchatka (Russian Federation, No 765bis) in 2016**

### **1. Response of the Russian Federation with regard to Resolution No. 40 COM 7B.100 adopted by the World Heritage Committee**

The World Heritage site “Volcanoes of Kamchatka” comprises 6 parts – 2 specially protected areas (PAs) of federal significance (Kronotsky Federal Nature Biosphere Reserve and South Kamchatka Federal Sanctuary) and four clusters of “Volcanoes of Kamchatka” Nature Park of regional significance (Nalychevo, Bystrinsky, South Kamchatka and Kluchevskoy Nature Parks). As of November 1, 2017 the total area of the World Heritage site “Volcanoes of Kamchatka” is 3 959 952,90 hectares, including:

1) 1 484 916,90 ha covered by areas of specially protected areas of federal significance, including:

- a) Kronotsky Federal Nature Biosphere Reserve with area of 1 147 619,37 ha;
- b) South Kamchatka Federal Sanctuary with area of 337 297,53 ha;

2) 2 475 036 ha of areas of four clusters of “Volcanoes of Kamchatka” nature park of regional significance, including:

- a) Nalychevo Nature Park with area of 287 155 ha;
- b) Bystrinsky Nature Park with area of 1 325 000 ha;
- c) Kluchevskoy Nature Park with area of 375 981 ha;
- d) South Kamchatka Nature Park with area of 486 900 ha.

The organizations, which manage specially protected natural areas of federal and regional significance within the territory of the World Heritage site “Volcanoes of Kamchatka” - the Federal State Institution “Kronotsky Federal Nature Biosphere Reserve” (FSI “Kronotsky Reserve”) and the Regional Governmental Institution “Nature Park “Volcanoes of Kamchatka” (RGI “Nature Park “Volcanoes of Kamchatka”) – assure that their actual boundaries have not been changed during the reporting period. Insignificant discrepancy with numbers of the areas of PAs within the territory of the World Heritage site “Volcanoes of Kamchatka”, presented earlier, are not due to actual changes in the areas, but to more accurate mapping of the boundaries of PAs and refinement of the numbers of their areas with the help of geoinformation system. So, in 2017, such works were carried out for the area of South Kamchatka Federal Sanctuary, currently the land management works that will document the specified areas are at the final stage.

Since the World Heritage site comprises specially protected areas of federal significance (Kronotsky Federal Nature Biosphere Reserve and South Kamchatka Federal Sanctuary) and of regional significance (4 clusters of “Volcanoes of Kamchatka” Nature Park), a universal plan of managing the entire property has not been developed. However, the organizations, which manage its component protected areas, interact consistently. For these purposes regional non-government organization “Association of Specially Protected Areas of Kamchatka Region” also was established.

As of January 1, 2017 the staff number of the FSI “Kronotsky Reserve” was 145,5 employees, of the RGI “Nature Park “Volcanoes of Kamchatka” – 47 employees.

Large monitoring and research activities are continuing on the World Heritage site.

According to the Plan of scientific research work the FSI “Kronotsky Reserve” is carrying out the environmental condition monitoring (including monitoring of the quantity of key species of the fauna) on the territories of Kronotsky Federal Nature Biosphere Reserve and South Kamchatka Federal Sanctuary. Every year the calculations of sea mammals are maintained. Due to photo-identification the “Catalogue of Kamchatka Gray Whales” is enlarged. In order to establish the genetic characteristics and to define the population structure of gray whales’ grouping annual work on skin sample collection is carried out. Over the last five years the quantity of gray whales near coastal areas within the World Heritage site “Volcanoes of Kamchatka” has been increasing.

Ichthyologic researches are also conducted in Kronotsky Federal Nature Biosphere Reserve and South Kamchatka Federal Sanctuary. The sock-eye salmon population condition monitoring in the basin of the Kuril Lake (the world’s largest spawning place of this valuable salmon species) is being carried out.

On the territories of the four units of the “Volcanoes of Kamchatka” Nature Park of regional significance – components of the World Heritage site (Nalychevo, Bystrinsky, South Kamchatka and Kluchevskoy Nature Parks) – the following monitoring and research activities are implemented annually: meteorological observations, active volcanoes condition monitoring, key vascular plants species phenology monitoring, monitoring of ornithological complexes, special structure of populations and seasonal spreading of mammals, the condition of local salmon, amphibian, insect populations, including monitoring of the model population grouping condition of such animals as black-headed marmot (*Marmota camtschatica*) and bighorn sheep (*Ovis nivicola*) in Nalychevo nature park.

The collected data show that the quantity of the main background species of animals corresponds to the level of the natural capacity of the lands. The quantity of all the species with the exception of the wild northern reindeer (*Rangifer tarandus*) is stable and sustainable.

At the present time the study of reasons for the wild northern reindeer quantity reduction in Kronotsky reserve and its outskirts is continuing. According to the results of the aerial survey conducted in March 2017, the size of the largest recorded group was only 150 animals. There is a need for further detailed monitoring of the population, as well as planning and implementing targeted operational and preventive measures aimed at preserving the main core of the herd at the southern border of the reserve and adjacent to them hunting areas.

For strengthening protection of the World Heritage property, particularly from poaching, the material support for the activities of the rangers of the FSI “Kronotsky Reserve” as well as the RGI “Nature Park “Volcanoes of Kamchatka” has been substantially improved. Directly in the protected areas, a network of cordons and patches of year-round and seasonal patrols are expanded. As of November 1, 2017, four cordons operate in the territories of the regional protected areas (Nalychevo, South Kamchatka, Bystrinsky and Kluchevskoy Nature Parks), 6 cordons – in the Kronotsky Federal Nature Biosphere Reserve, 2 cordons – in the South Kamchatka Federal Sanctuary.

To strengthen protection of coastal and sea areas of the Kronotsky Federal Nature Biosphere Reserve and the South Kamchatka Federal Sanctuary, as well as to implement detailed research and monitoring activities in these ecosystems in 2016 the ship “Anisifor Krupenin” was purchased by the FSI “Kronotsky Reserve”. The conduct of patrol

measures carried out from “Anisifor Krupenin” increases the effectiveness of controlling the special regime of protection and strengthens the anti-poaching activities (mainly illegal commercial fishing) and helps to prevent illegal shipping operations by transport companies in the coastal areas of PAs.

In addition to the activities of the rangers of PAs, in both organizations managing the components of the property of the World Heritage Site “Volcanoes of Kamchatka”, special anti-poaching task groups have been created and are operating all year round. There are 2 such groups in the RGI “Nature Park “Volcanoes of Kamchatka” and 3 – in the FSI “Kronotsky Reserve”. These groups are targeted to implement anti-poaching and protection activities: during the spawning period (July-October) – in the most valuable spawning areas and the areas of concentration of brown bears, year-round – protection of coastal groups of snow sheep, wild reindeer populations, and others.

As a result of activities within the Program for the restoration and conservation of the coastal grouping of the snow sheep in Cape Nalycheva (Nalychevo Nature Park) a natural increase in the number of the groupings is observed every year.

To reduce threats from adjacent territories with the World Heritage Site Property, the FSI “Kronotsky Reserve” and the non-profit organization “Association of Fish Enterprises of the Ozernovsky region” concluded an agreement about united anti-poaching actions. According to the agreement the activities of the task forces in the field of monitoring the compliance with environmental legislation in for fisheries extends to spawning rivers and their basins in close proximity to the territory of the South Kamchatka Federal Sanctuary.

Much work is being done in the direction of creating economic alternatives to poaching in the settlements located in close proximity to the PAs – components of the World Heritage site “Volcanoes of Kamchatka”. Thus, in 2016–2017 years in the villages of the “Ozernovsky township”, located on the adjacent area to the South Kamchatka Federal Sanctuary, the FSI “Kronotsky Reserve” with the support of the grant of the President of the Russian Federation implemented a project “School of Tourism in the South of Kamchatka”. The project was aimed at activating the entrepreneurial activity of the local communities and education of beginning entrepreneurs in the sphere of tourism, at the growth of the professional competencies of guides from among the residents of settlements, at the increase of social and environmental responsibility of the tour operators and business in general. Currently, to increase the socio-economic benefits for the local population from tourism development in PAs, the FSI “Kronotsky Reserve” together with the residents of the settlements is working on the creation of an integrated network of tourist routes passing through facilities of both protected areas and settlements.

Tourism development on the World Heritage site property is carried out within the approved routes (on PAs of federal significance) and boundaries of determined functional zones (recreational zones and visitor service areas in the units of the park “Volcanoes of Kamchatka”).

In 2016–2017 there were functioning 12 tourist routes in Kronotsky Federal Nature Biosphere Reserve, 10 routes – in the South Kamchatka Federal Sanctuary and 33 routes in the units of “Volcanoes of Kamchatka” Nature Park, included into the World Heritage Site. The number of visitors for the entire property of the World Heritage site for this period was 69 592 persons, including:

- 1) 12 116 visitors of Kronotsky Federal Nature Biosphere Reserve;
- 2) 7 877 visitors of South Kamchatka Federal sanctuary;
- 3) 49 599 visitors of four units of the “Volcanoes of Kamchatka” Nature Park:
  - a) 31 841 visitors of Nalychevo Nature Park;
  - b) 5 469 visitors of Bystrinsky Nature Park;
  - c) 6 433 visitors of Kluchevskoy Nature Park;
  - d) 5 856 visitors of South Kamchatka Nature Park.

To reduce the tourism impacts on natural complexes and to support visitors management, monitoring research activities are carried out on the units of the World Heritage property: annual monitoring of the state of natural complexes along tourist routes (impacts on soil, vegetation cover, wildlife habituation, etc.), counting of visitors and their social surveys. To protect the most fragile and highly used ecosystems and objects infrastructure and wooden trails are built. So, annually the estimation of changes in natural complexes under the influence of anthropogenic burden is maintained, the dynamics and structure of tourist flows are analyzed, recommendations concerning their regulation are given. According to the results of research, tourism activities on the property the World Heritage site “Volcanoes of Kamchatka” do not threaten the wild condition of natural complexes and their individual components.

Educational activities play an enormous role in the prevention of poaching and the education of local communities, as well as in informing the public about the value of the UNESCO heritage site.

In 2016–2017 the FSI “Kronotsky Reserve” together with the RGI “Nature Park “Volcanoes of Kamchatka” and regional non-government organization “Association of Specially Protected Areas of Kamchatka Region” conducted the following educational events devoted to eco-literacy:

- training seminars “Preparation of guides for specially protected areas of Kamchatka Region”;
- ecological educational field festival in summer children’s holiday camps of Kamchatka region;
- research and educational field camps for schoolchildren and students;
- ecological educational automobile expedition “Kamchatka Protected”;
- thematic classes and public lectures in remote settlements and big towns of Kamchatka region;
- ecological quests, etc.

During 2016 – 2017 more than 100 thousand people became the participants of different environmental education activities conducted by organizations that manage the units of the World Heritage site “Volcanoes of Kamchatka”.

## **2. Information about other current issues related to the World Heritage property conservation**

The territories of Kronotsky Federal Nature Biosphere Reserve and South Kamchatka Federal Sanctuary face the following potential threats on the part of the neighboring areas:

- because of game stock reduction on the border sites cases of poaching within the protected area are likely to occur; that will require holding additional nature protection activities on the part of reserve territories security service;

- for the species which have vast habitats or migrate far beyond the boundaries of the Kronotsky Reserve and South Kamchatka Sanctuary (wild northern reindeer, brown bear, bighorn sheep) the protected areas are only a temporary zone of habitation and do not guarantee prosperity of the populations.

For the territory of the Kronotsky State Nature Reserve and its surroundings, the problem of reducing the number of wild reindeer remains unsolved. Currently, work is continuing on the organization of the protection zone of the Kronotsky Reserve and the development of measures for the restoration of the Kronotsko-Zhupanovsky population of wild reindeer.

Another promising threat for the territory of the Kronotsky Federal Nature Biosphere Reserve, in particular for the basin of the largest freshwater reservoir in Kamchatka – Kronotskoye Lake, is the resumption of plans for the construction of the Kronotskaya hydropower stations cascade, as well as the initiation by a number of organizations and individuals of works on the creation of a herd of sockeye salmon in the basin of Kronotskoye Lake and on the design of the fishing passage constructions along Kronotskaya river.

The territories of nature parks included in the World Heritage site are threatened mainly on the part of hunting and fishing sites which are located within the boundaries of the nature parks.

The potential threats on the part of the neighboring sites are the following

- neighboring with the territories of nature parks belonging to large agglomerations, good transport availability of the park territory in autumn, increase in the number of cross-country vehicles owned by local population;

- increasing recreational impacts on certain sites and objects of nature parks.

On the whole, the condition and preservation of the World Heritage site “Volcanoes of Kamchatka” is good and is not a matter of anxiety. No negative irreversible changes in natural landscapes and their components were found out.

**3. Significant changes within the World Heritage site property are not expected.**