State of Conservation Report of Shiretoko

(Japan) (N1193)

in Response to the World Heritage Committee Decision 44 COM 7B.186

GOVERNMENT OF JAPAN

November 2022

1. Executive summary of the report

In response to the issues raised in World Heritage Committee Decision 44 COM 7B.186, with the collaboration of the Ministry of the Environment, Forestry Agency, Agency for Cultural Affairs, Hokkaido Prefectural Government, and other related organizations, and based on scientific reviews at the Shiretoko Natural World Heritage Site Scientific Committee, the Government of Japan reports as follows:

- Regarding paragraph 3 of the Decision, the predicted impacts of climate change on the attributes of the OUV of Shiretoko are being reinvestigated and adaptation options are being studied. The government of Japan aims to establish an adaptive management strategy for the property by the end of 2024.
- Regarding paragraph 4 of the Decision, the origin of Steller sea lions (*Eumetopias jubatus*) that migrate to the Nemuro Strait is becoming better understood. Accordingly, the Basic Management Policy for the populations of Steller sea lions, including those in the Nemuro Strait, is scheduled to be revised in 2024. Under the revised policy, the numbers of individuals in the migratory population of Steller sea lions will be estimated based on breeding and migration status, and the catch quota in the Nemuro Strait will be set based on scientific evidence.
- Regarding paragraph 5 of the Decision, non-lethal measures will be continued until the Basic Management Policy is revised, and efforts will be made to reduce the damage to the fishery industry by keeping the current catch quota set within a range where there is no risk of extinction of the Asian population of Steller sea lions.
- Regarding paragraph 6 of the Decision, a comprehensive evaluation was conducted in 2022 based on the data obtained over the past 10 years by the monitoring specified in the Long-Term Monitoring Plan for the Shiretoko Natural World Heritage Site developed in 2012. As a result, it was concluded that Shiretoko maintains its value as a natural World Heritage site. In addition, the contents of the plan are being reviewed, with the aim of completing the revision by March 2023. As well as enhancing the monitoring of climate change-driven impacts, the revised plan will serve as a mechanism for the scientific evaluation of the OUV status by monitoring each attribute of biodiversity recognized under the criterion (x), including the status of salmonid species and marine mammals.
- Regarding paragraph 7 of the Decision, the Rusha River is undergoing dam modification work toward completion in 2024, and the effects will be evaluated by monitoring. Concerning driftwood from the upper reaches of the river, we will study the effectiveness of using gravel bar and lower floodplain areas in river bends to capture driftwood. Moreover, we will continue to conduct various kinds of monitoring for upstream migration of fish, and improvement measures will be taken as necessary.
- Regarding paragraph 8 of the Decision, the latest state of conservation of the property and implementation status of the Decision are described in this report.

There are no other conservation issues identified nor development projects which may impact on the OUV.

Public access to the conservation report is accepted.

2. Responses to the Decision of the World Heritage Committee Regarding the issues raised in the paragraphs of the 41st World Heritage Committee Decision 44 COM 7B. 186, the Government of Japan sincerely reports as follows:

2-1. Response to Paragraph 3 of the Decision

> 3. Welcomes the national focus on climate change adaptation through the enactment of the 2018 Climate Change Adaptation Act, which will facilitate the development of an adaptive management strategy for the property, and requests the State Party to submit the final strategy to the World Heritage Centre for review by IUCN and to ensure that full support is provided for its implementation and the ongoing protection of the Outstanding Universal Value (OUV) of the property;

Referring to "Climate Change Adaptation for Natural World Heritage Sites – A Practical Guide" (the World Heritage Centre, 2014) and other literature, the predicted impacts of climate change on the attributes of the OUV of Shiretoko are being reinvestigated and adaptation options are being studied.
The government of Japan aims to establish an adaptive management strategy that minimizes the climate change-driven impacts on the OUV of Shiretoko by the end of 2024.

2-2. Response to Paragraph 4 of the Decision

> 4. Also welcomes the continued cooperation between the States Parties of Japan and the Russian Federation to survey the Western Steller Sea Lion population, reiterates its concern however regarding the ongoing culling of the sea lions, given the continued absence of population data, and therefore urges the States Parties to accelerate the development of a population dynamic model, to the extent possible, in order to inform population management;

Aiming at minimizing damage to the fishery industry caused by Steller sea lions within a range where there is no risk of extinction of Steller sea lions, Japan has established the Basic Management Policy for managing the populations of Steller sea lions that migrate to the Japan Sea. As for the population structure of Steller sea lions, the mark-recapture data and other relevant information are being collected and analyzed, and, as a result, the origin of Steller sea lions that migrate to the Nemuro Strait is becoming better understood. The Basic Management Policy is therefore scheduled to be revised in JFY2024 to include the Steller sea lions distributed in the Nemuro Strait.
Under the revised policy, the numbers of individuals in the migratory populations of Steller sea lions will be estimated based on the data acquired in the breeding areas, migration, and other trends, and the catch quota in or including the Nemuro Strait will be set based on scientific evidence. In addition, under the revised policy, we

will work on the management of the culling of Steller sea lions with more consideration for the uncertainty of the data and the precautionary principle.

2-3. Response to Paragraph 5 of the Decision

> 5. Urges again the State Party to reconsider, reduce or eliminate if necessary the current levels of culling of the Western Steller Sea Lion population, taking international advice into consideration and adopting a precautionary approach until accurate and comprehensive data on this subspecies become available;

The Basic Management Policy for the Steller sea lions in Japanese waters is scheduled to be revised in 2024. Under the revised policy, the numbers of individuals in the migratory population of Steller sea lions will be estimated based on data acquired in the breeding area, migration and other trends of Steller sea lions that migrate to Japan, including the Nemuro Strait, and the management will be conducted based on scientific evidence, with further consideration of the precautionary principle.

In the current situation, the latest damage caused by Steller sea lions to the fishery industry in the waters around Nemuro decreased to 131 million yen, down to 36.8% compared to 357 million yen in 2013, when the largest amount was recorded. However, the value of landing also decreased significantly (58.0% in the waters around Nemuro and 40.7% in Rausu Town) during the same period. Thus, the damage caused by Steller sea lions to the fishery industry continues to be a threat to the sustainability of coastal fisheries.

To mitigate the situation non-lethal measures, such as reinforced fishing nets, will be continued. However, as only limited effects have been achieved so far, until the Basic Management Policy is revised, efforts to reduce the damage caused by Steller sea lions to the fishery industry will be made by keeping the current catch quota set within a range where there is no risk of extinction of the Asian population of Steller sea lions based on past catch records.

2-4. Response to Paragraph 6 of the Decision

> 6. Appreciates the revision of the Long-Term Monitoring Plan to improve monitoring of climate change-driven impacts, but also requests the State Party to ensure that the attributes of the property's OUV are fully reflected in the Long-Term Monitoring Plan to ensure aquatic biodiversity, specifically the salmonid species and marine mammals, are all included and monitored;

Monitoring is ongoing based on the Long-Term Monitoring Plan for the Shiretoko Natural World Heritage Site, developed in 2012. In 2022, 10 years after the development of the Monitoring Plan, a comprehensive evaluation was conducted using the data obtained thus far, based on the examination by the Scientific Committee and the opinions of local stakeholders. As a result, Shiretoko was evaluated to have maintained its value as a natural World Heritage, even now 15 years after its inscription. The complied Comprehensive Evaluation Report is attached as an annex.

Work is underway to complete the revision of the Long-term Monitoring Plan by March 2023. The revised plan will set out enhanced monitoring of climate change-driven impacts from 2022. Monitoring items reflect each attribute of biodiversity recognized under the criterion (x), including, the current status of biota, such as fish, shellfish, and seaweed in the waters around Shiretoko, and salmonid species such as pink salmon (*Oncorhynchus gorbuscha*) and southern Asian Dolly Varden (*Salvelinus curilus*) in river areas, along with marine mammals such as seals, Steller sea lions, and killer whales (*Orcinus orca*). Scientific evaluation of the status of the OUV is to be continued based on the results of this monitoring.

2-5. Response to Paragraph 7 of the Decision

> 7. Also takes note of the State Party's response to the 2019 IUCN Advisory mission's recommendations, and also encourages the State Party to:
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> a) Take measures to improve the representation of biological variables in river ecosystems, to enhance the current understanding of river restoration approaches and options,
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> b) Consider alternative methodologies to capture large wooden debris as a way to better balance river restoration needs with the fishery stakeholders' concerns,
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> c) Continue to monitor the impacts of the riverbed path pilot project, especially in relation to erosion, fish passage and disturbance to the benthic habitat, and take prompt remedial actions in relation to any identified impacts, as necessary, based on comprehensive scientific understanding;

a) Regarding the dam modifications on the Rusha River, improvement work is underway toward completion in 2024 conforming to the roadmap created based on the results from hydraulic model experiments and numerical simulation. To track changes in the Rusha River occurring over time due to the modifications, not only changes to riverbed topography, but also the numbers of migrating salmon, spawning beds, and juveniles migrating downstream are monitored. In addition, factors affecting the distribution of spawning beds, such as water depth, flow velocity, riverbed materials and distribution of driftwood are analyzed. The improvement of the natural spawning environment and reproductive efficiency of salmon associated with the dam modifications will also be evaluated.

b) As for driftwood transported from the upper river basin, we have confirmed that the driftwood was captured during high flow events at a river bend in the wide valley floor 300 meters upstream from the third dam. While paying close attention to the situation of driftwood after the partial dam removal, the effect of river bends on capturing driftwood will be examined as necessary.

c) As for the fish upstream migration, various monitoring activities will be continued to ensure that the riverbed path functions adequately as a passage route for salmonid species, and remedial measures will be implemented as necessary.

2-6. Response to Paragraph 8 of the Decision

8. Further request the State Party to submit to the World Heritage Centre, by 1 December 2022, an updated report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 46th session.

The latest state of conservation of the property and implementation status of the Decision are described in this report.

3. Other current conservation issues identified by the State Party which may have an impact on the property's Outstanding Universal Value

There are no other conservation issues identified by the State Party which may impact on the Outstanding Universal Value of the property.

4. In conformity with Paragraph 172 of the Operational Guidelines, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.

There are no development projects in and around the property which may affects the Outstanding Universal Value of the property.

5. Public access to the state of conservation

Acceptable. The State Party is content for the full report to be uploaded to the World Heritage Centre's State of Conservation Information System.

6. Signature of the authority

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