

Outline: Long-Term Monitoring Plan for the Shiretoko World Natural Heritage Site (Draft)

1. Objective

Long-term monitoring is implemented for adaptive management of the heritage site based on scientific knowledge, within the scope of the management measures stipulated in the Management Plan for the Shiretoko World Natural Heritage Site.

This Plan was formulated in order to define the monitoring items and contents required for “effective and efficient” implementation of adaptive management.

2. Basic Monitoring Policy

This Plan establishes the evaluation items required for implementation of adaptive management, and defines the monitoring items and contents used to obtain the necessary data for each evaluation item.

1) Evaluation items

The following evaluation items are applied to determine whether the criteria of the Shiretoko World Natural Heritage Site are being upheld, whether UNESCO and IUCN recommendations are being complied with, and whether management is being carried out according to the Heritage Site Management Plan:

- I The productivity of a unique ecosystem is being maintained.
- II The interaction between marine and terrestrial ecosystems is being maintained.
- III Biodiversity is being maintained at the same level as when the site was inscribed on the World Heritage List.
- IV Conservation of marine ecosystems within the heritage site is being balanced with stable fishing through sustainable use of fisheries resources.
- V Impact of river constructions has been lessened so as to maintain river ecosystems that can support salmonid species reproduction.
- VI Excessive influence of high sika deer (*Cervus nippon yezoensis*) population density on the ecosystem of the heritage site is not occurring.
- VII Recreational utilization of the site and other human activities are being balanced with conservation of the natural environment.

VIII Effects, or potential effects of climate change are being tracked early.

2) Monitoring items

A list of monitoring items (Appendix.7) used to obtain the necessary data for each evaluation item has been prepared. Multiple items are set to evaluate each individual item. There are 37 monitoring items in all, classified as follows in accordance with the implementing body.

i) Monitoring items implemented by relevant government agencies

*In this case, "relevant government agencies" refers to the Ministry of the Environment, the Forestry Agency, and the Hokkaido Government.

ii) Monitoring items implemented in cooperation with local governments, related bodies, experts, and other government agencies besides those mentioned in i)

Surveys and research that does not fit the above two classifications will be considered and implemented under a third classification, "iii) Other surveys and research"

3) Monitoring methods and evaluation criteria

As much as possible, monitoring methods, evaluation indicators and evaluation criteria are to be "easily implementable," "indicators that allow advance detection of future changes," and "easy to evaluate." The methods and criteria may be flexibly revised, even during the implementation period, as the situation requires.

4) Implementation of monitoring and sharing of results

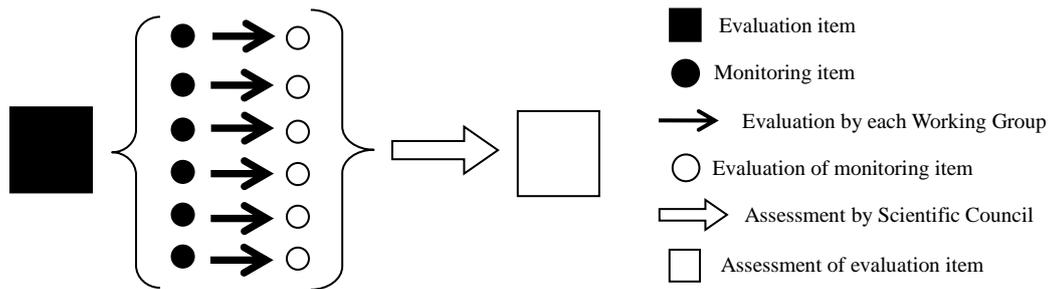
Monitoring is implemented through close collaboration and cooperation between all relevant parties, and information on monitoring and survey results are shared as needed.

3. Evaluation procedure

Evaluation items are assessed based on the evaluation of monitoring items. Each monitoring item is evaluated individually based on the monitoring results.

The Scientific Council makes assessments of each of the eight evaluation items. In principle, each individual Working Group, etc. makes evaluation of each monitoring item.

Schematic diagram of evaluation procedure



Evaluation item for each Working Group are to be individually assigned in accordance with the field of specialization, as follows, so as to harness the specialized expertise of each Working Group. Each Working Group is to make assessments of the monitoring item(s) relevant to that Working Group's evaluation items.

For monitoring results which it is difficult for a Working Group to assess, a committee member selected from the Scientific Council or Working Groups is to make assessments on behalf of the Working Group. Also, monitoring items which only apply to evaluation items VI, VII and/or VIII are to be assessed by the Scientific Council.

4. Framework of the plan

1) Duration of plan

The duration of one period of the plan is 10 years, with the first period beginning in April 2012 and ending in March 2022. Deliberations on the continuation and/or revision of the plan are to be held every five years or so.

2) Other

Relevant government agencies determine the contents of monitoring projects each year based on this Plan, and perform the necessary monitoring and surveys for that fiscal year to the extent of their ability. Each fiscal year, the delegation of duties may be revised as needed. Each Working Group makes assessment of the monitoring results used to evaluate that Working Group's designated evaluation items.