Memorandum 2/11/2018

**MB1: Promoting of ecosystem services of Arctic wetlands for sustainable development**

This memo provides a summary of reports submitted on the session MB5 organized at the Arctic Biodiversity Session in Rovaniemi, Finland, October 9-12 organized by the XXXXXX.

**Attendance:** 40

**Arctic Biodiversity Assessment recommendation themes most prominently addressed in the session:**

- Climate change
- Ecosystem-based Management
- Improving knowledge and public awareness
- Mainstreaming biodiversity

**Key points raised in the session that were important to note:**

- The huge importance of wetlands is not recognized nearly enough. They make up vast areas of the arctic and act as providers of ecosystem services, on several scales.
- Arctic wetlands maintain biodiversity locally and globally due to flyways, protect permafrost from thawing, store the large pool of soil carbon, provide primary production, protect inland ecosystems from the impact of the sea (both erosion and pollution), purify water and regulate water cycle.
- Defining ecosystem services is a complex issue e.g. are wetland bird’s ecosystem services considered on a local, regional or global scale? Depending on your viewpoint, it could be all of them.
- It is crucial to view wetlands from an ecosystems approach, based on functions, biodiversity and structure.
- A case study on mapping of ecosystems services and functions, collaboration between Shell and Wetlands International, creating a crosslinked map showing linkages between natural functions and ecosystem services of wetlands and stakeholder interest. This study has demonstrated that adopting an ecosystem services mapping approach based both on the information of the status of natural ecosystem parameters and stakeholder analyses is a good tool for wetlands management planning in-line with the Sustainable Development Goals.
- Waterbirds can showcase the importance of wetlands as providers of ecosystem services. By using mapping tools, it is possible to show, in a visual and understandable way, critical sites etc., which is very useful when bringing important information to decisionmakers.
- Arctic wetlands are widely distributed ecosystems and the subject of crosscutting interest of a number, stakeholders due to their diverse ecosystem services.
- It is critical to include a stakeholder’s perspective, where a stakeholder is someone who is affected or affecting the ecosystem service. However, cooperation and interaction seem, to be only happening within narrowly focused projects.
The coordination of stakeholder interests and needs could be based on the assessment of wetlands ecosystem services and introducing a principle of an equal access. The approaches driven by Sustainable Development Goals are well in-line with this principle.

**Recommendations/actions identified for how to deal with the issues raised in the session:**

- The ecosystem services concept should be adopted as solution for stakeholder’s input to wetlands conservation and wise use and as a way to help achieve the Sustainable Development Goals and Aichi Biodiversity Targets.
- All stakeholders should assist in the accumulation of the comprehensive information on the natural functions and uses of Wetlands.

**Take home message from the session:**

- Applying an ecosystems approach when describing and discussing functions of wetlands could assist in highlighting the importance of proper management and designation of protected areas, as wetlands are providers of many services, direct and supportive. For example, tools for assessment and mapping have been developed and are in use within multi-lateral agreements for to identify critical sites for migrating birds.
- Wetlands are the specific ecosystems which demand an integrative approach for monitoring, a "species approach" is not applicable. There is no one leading species-based indicator.
- Evaluating ecosystem services is not easy task but is possible and the application of the concept is worth the effort and can be very effective.