

# Arctic Freshwater Biodiversity Monitoring Plan Iceland 2015-16 Implementation



The **Arctic Freshwater Biodiversity Monitoring Plan** outlines the framework for improving circumpolar monitoring efforts in Arctic freshwaters, including ponds, lakes, rivers, and their associated tributaries and wetlands. The **Freshwater Plan** provides Arctic countries, monitoring professionals and volunteers with a set of guidelines for common approaches and indicators in future monitoring activities, and for collecting existing data. The **Freshwater Plan** will facilitate information collection and analysis, identify and fill knowledge gaps, and provide better information for use in policy and decision-making.

The **Freshwater Plan** is the second of four long-term, integrated biodiversity monitoring plans produced by the **Circumpolar Biodiversity Monitoring Program (CBMP)** of the **Conservation of Arctic Flora and Fauna (CAFF)**, the biodiversity working group of the Arctic Council, and was approved in 2013.

Canada and Sweden co-led the **Freshwater Plan's** development, which involved the work of experts from Arctic nations, Permanent Participants and other Arctic Council working groups. These experts identified focal ecosystem components, key drivers and indicators, and designed optimal sampling schemes, common parameters and standardized monitoring protocols for application across circumpolar Arctic freshwaters.



## Top CBMP Freshwater Priorities in 2017

- Finalize the strategy to manage differences in sampling and processing methodologies among data sources, to facilitate circumpolar comparisons of data (Project 4)
- Assess regional and circumpolar spatial and temporal trends in Arctic freshwaters using aggregated circumpolar dataset (Projects 5 and 6)
- Develop first draft of State of Arctic Freshwater Biodiversity Report and first drafts of papers for an accompanying special issue of a scientific journal (Projects 5 and 6)
- Secure funding for Freshwater Expert Network activities (data assessment and report writing)
- Secure funding for Freshwater Steering Group Science Coordinator (to facilitate writing and completion of State of Arctic Freshwater Biodiversity Report)

## Links with National Priorities

There are no defined national priorities for monitoring of biodiversity of Icelandic freshwater ecosystem. However, there are ongoing monitoring projects and existing datasets that are suitable for further research and documentation of climate change and biodiversity in Icelandic freshwaters.

The sub-arctic location, isolation of the island, relatively few species, glaciers and geothermal water with wide temperature range, makes it a suitable area for research projects and monitoring of biodiversity. This also gives a good opportunity's to study the traits of climate change on biodiversity, production and how that will affect the community in northern areas.

For more information on the institutes of the Icelandic Freshwater Expert Network members, please visit:

### Marine and Freshwater Research Institute:

- [www.hafogvatn.is](http://www.hafogvatn.is)

### Natural History Museum of Kopavogur:

- [www.natkop.is](http://www.natkop.is)

### Myvatn Research Station:

- [www.ramy.is](http://www.ramy.is)

# Freshwater Expert Network Summary of 2015-16 Achievements

**Árni Einarsson:** director of the **Myvatn Research Station**. He has a broad scientific background in freshwater ecology including the paleolimnology, invertebrates, fishes, birds, ecological interactions and effects of climatic and human impacts in Lake Mývatn. Contact: [Árni Einarsson](#)

**Jon S. Ólafsson:** senior scientist and Ph.D. in Limnology at the **Institute of Freshwater Fisheries**, which conducts research on river and lake biota. Contact: [Jon S. Ólafsson](#)

**Thora Hrafnisdóttir:** freshwater biologist at the **Natural History Museum of Kópavogur**. Contact: [Thóra Hrafnisdóttir](#)

**Guðni Guðbergsson:** the Icelandic Freshwater Steering Group representative and division manager at the **Marine and Freshwater Institute**, which conducts research on river and lake ecology. Contact: [Guðni Guðbergsson](#)

## Funding

The Icelandic Freshwater Steering Group (FSG) member and Freshwater Expert Network (FEN) members' contributions to the CBMP has been in accordance with their respective institutional budgets. Available funding has only secured a travel budget for the Icelandic FSG member to attend one to two FSG meetings as well as for three members for the Denmark workshop in 2015. At present, no secure funding is available for the work of the Icelandic Freshwater Expert Network.

A request has been made annually to fund four months of labor from specialists at relevant research institutes in Iceland.

## Communication

The national network provides input to CAFF reports and publication as well as contributes with talks and poster at conferences and workshops.

## Data

The Icelandic FEN has collected metadata for existing monitoring programs in Iceland and available datasets, which is the first comprehensive overview for the country. The geographical distribution of monitoring sites in Icelandic freshwater has been mapped and ranked according to data quality.

The Marine and Freshwater Research Institute have compiled data series for several categories in a database for further use for comparison and analyses for the Freshwater CBMP.

Analyses of data and writing of a report for the Icelandic State of Arctic Freshwater Biodiversity Report is now ongoing.

## For more information

### Guðni Guðbergsson

Marine and Freshwater Research Institute  
Árleyri 22  
112 Reykjavík, Iceland  
Telephone: +354 575 2000  
Email: [guðni.guðbergsson@hafogvatn.is](mailto:guдни.guðbergsson@hafogvatn.is)  
Website: [www.hafogvatn.is](http://www.hafogvatn.is)

### Joseph Culp and Willem Goedkoop

CBMP Freshwater Steering Group Co-Chairs  
[joseph.culp@ec.gc.ca](mailto:joseph.culp@ec.gc.ca); [willem.goedkoop@slu.se](mailto:willem.goedkoop@slu.se)

### Conservation of Arctic Flora and Fauna (CAFF)

Borgir, Nordurslød  
600 Akureyri, Iceland  
[www.caff.is/freshwater](http://www.caff.is/freshwater)  
[www.cbmp.is](http://www.cbmp.is)  
[caff@caff.is](mailto:caff@caff.is)

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