

Freshwater Biodiversity Policy

Policy No: 25-02

Policy Title: Freshwater Biodiversity

Policy Statement: Conserve, protect, and restore native freshwater biodiversity

Principles Applied:

- A freshwater ecosystem includes aquatic, hyporheic, and riparian zones including their biotic (living) and abiotic (non-living) components, influences, and interactions; in a flowing water system this could be considered the “riverscape”.
- Native biodiversity can be considered a living indicator of overall ecosystem health.
- Freshwater species include those that accomplish all or part of their lifecycle in, or on, inland freshwater ecosystems and/or are dependent on freshwater habitats for food or habitat.
- Freshwater species face a variety of natural and human-caused stressors and extinction rates of freshwater species are occurring at a faster rate than their terrestrial and marine counterparts.
- Coldwater species and those that occupy a narrow ecological niche may be disproportionately at risk given the impacts of land use and climate change.
- Addressing stressors that threaten freshwater biodiversity tend to have benefits to the freshwater ecosystem as a whole, which in turn provides ecosystem services to communities (including flood and drought attenuation, water quality improvements, water security, recreational opportunities, harvest opportunities, Indigenous rights, food production, economic opportunity, etc.).
- Tools to protect and recover freshwater biodiversity can be grouped in the following categories: habitat (including quality, quantity, and connectivity), harvest and population management, and interactions with non-native species (including hybridization and competition).

- Priority is given to the persistence of native species within their native range, followed by naturalized populations where they currently exist.

Policy Rationale and Considerations:

This policy builds on and complements but does supersede Freshwater Conservation Canada's "Fish Species Management" policy (#10-04), by integrating a broader view of freshwater communities. Freshwater Conservation Canada strives to conserve, protect, and restore native freshwater biodiversity through our projects and programs, outreach and communications, and advocacy. Given the diversity of biota that may inhabit a freshwater ecosystem, projects and programs may or may not have a specific focus on fishes but must take the health of the ecosystem into account.

Objectives of Policy Statement:

Freshwater Conservation Canada recognizes that Canada's native freshwater biodiversity has been compromised or threatened in many locations in the last century and some species and populations may not currently be recoverable in their native range due to irreversible changes to watershed condition. Protection and wise management of native freshwater biodiversity and the ecosystems that support these species and populations is paramount, followed by restoration of native species and communities where they have been lost or are under threat.

Implications to Organization:

Freshwater Conservation Canada acknowledges that the conservation, protection or recovery of native freshwater biodiversity may require trade-offs that force difficult decisions. For example, decisions around range expansion and assisted migration, recovery stocking, genetic integrity, invasive species and pathogens, population management, and migration barriers may not immediately be widely accepted and require sound planning, training, communications and the application of the best available science. It is also acknowledged that the absence of action is a decision in and of itself that may have negative implications. When participating in or developing policies, providing input to partners and agencies, and delivering programming, Freshwater Conservation Canada will endeavor to make decisions and provide advice that is pragmatic and realistic, yet bold and ambitious where possible. Staff and chapters will strive to stay up to date on the science and best practices of freshwater ecosystem restoration, science communication, species at risk recovery, invasive species management, and other related disciplines to guide decision making, provide thoughtful advice, and deliver effective programming.

Delivery:

Freshwater Conservation Canada will work collaboratively with partners, agencies, and communities to implement this policy. The organization will continue to focus on action-oriented work to conserve, protect, and restore freshwater ecosystems. In addition to habitat-related programs and projects, Freshwater Conservation Canada will take on projects related directly to freshwater species or population management. This could include but is not limited to salvages, recovery stocking, translocation, and range expansion; population monitoring and assessment to guide and inform works; and providing advice and input into population management. An outreach and awareness component shall be incorporated into programs and projects.

Effective Date:

Last Board Approval Date: