

## **National Conservation Strategies**

### **Introduction**

National conservation strategies are intended as a framework to guide future actions and investment by the FHPs while allowing the FHPs to develop meaningful goals and approaches to conserve fish habitat. By establishing and communicating a national framework to partners, these strategies emphasize the need to focus on the process-level issues, not just the symptoms, to reverse the decline in fisheries and aquatic resources by directly addressing the contributing factors. This enhances progress toward the National Fish Habitat Partnership mission to protect, restore, and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life for the American people.

FHPs are encouraged to incorporate the concepts of these conservation strategies into their strategic planning and development of site specific goals and approaches to achieve results at a system level. Melding of the FHPs approaches with the national conservation strategies will assist partners to focus on the common factors responsible for most of the fisheries and habitat problems occurring today, namely: loss of connectivity, hydrologic alteration, water quality alteration, and alteration of aquatic communities (from NFHAP 2<sup>nd</sup> ed. 2012, Appendix 5: Science and Data Strategy).

Variability among FHPs and local conditions is recognized in the development of conservation strategies. FHPs will determine the extent to which each conservation strategy fits their scope and resources. Each FHP should find identity with one or more of the conservation strategies. Goals and approaches for one FHP may not fit conditions for another. Example actions listed under each conservation strategy are not meant to be exhaustive or prescriptive, but to demonstrate types of actions that may be undertaken. Example actions are listed in broad terms to stimulate development of specific actions meaningful for individual FHPs.

While not identified as a specific conservation strategy, it is incumbent upon the FHPs to assess the effectiveness of actions taken to protect, restore, and enhance habitats that support fish and aquatic communities. Through evaluation of specific actions taken to address those factors identified as responsible in the loss of fisheries habitats, FHPs can focus and foster implementation of efforts of proven effectiveness.

The NFHP Board in cooperation with the FHPs and their work plans will develop a set of meaningful and measurable targets for each of the listed conservation strategies. Effectiveness reporting measured against these targets in the annual Board progress reports will, over time, provide a meaningful description of progress for the public. Future revisions of the conservation strategies and habitat targets will recognize that habitat conservation is a long term endeavor.

Partnerships, working relationships, communication, planning, and funding are prerequisites to implementation of any conservation measure and are therefore not included as conservation strategies.

### **Conservation Strategies**

1. Protect intact and healthy waters.

Example actions:

- Develop inventories and data support systems for priority waters.
- Participate in land and water use planning and decisions at all geographic and governmental levels to protect aquatic values.
- Incorporate climate change into development of land and water use plans.
- Acquire land, water rights/reservations, or easements.
- Implement management actions to maintain habitat values.
- Prevent direct habitat alteration.
- Avoid aquatic community alteration.
- Implement best management practices to minimize habitat alteration.
- Implement state and regional aquatic invasive species plans.
- Utilize applicable administrative and statutory opportunities at all governmental levels to protect habitat (hydrologic conditions, connectivity and water quality).

2. Restore hydrologic conditions for fish.

Example actions:

- Restore natural variability in river and stream flows.
- Restore natural variability in estuary and natural lake surface water elevations.
- Secure favorable conditions for reservoirs.
- Secure favorable operating agreements on regulated systems.
- Acquire water rights for streams, lakes and reservoirs.
- Work with water users to incorporate fish habitat values into water management.
- Reconnect rivers to floodplains.
- Restore ground and surface water hydrologic connections.
- Manage vegetation to restore stream flow.

3. Reconnect fragmented fish habitats.

Example actions:

- Identify access impairments to spawning, nursery, rearing and refugia areas.
- Facilitate fish passage through removal of physical barriers.
- Restore concrete stream channels to natural form and structure.
- Incorporate fish friendly designs in construction and rehabilitation of water diversion structures.
- Eliminate chemical/water quality barriers.
- Restore habitat conditions (physical, temperature, lack of water, etc.) in degraded reaches that fragment systems.
- Daylight currently buried stream segments.

4. Restore water quality.

Example Actions:

- Identify sources of watershed degradation.
- Control excessive rates of sedimentation, phosphorus, nitrogen and toxic inputs to aquatic systems.
- Control thermal impairments.
- Control sources of pollutants.
- Control surface runoff through land use practices.
- Develop or maintain functioning wetlands and vegetation buffers.