

Protect and Recover other Native Terrestrial and Freshwater Species

Draft 8/30/11

The Challenge

The protection and recovery of terrestrial and freshwater species is an integral part of maintaining overall species diversity throughout Puget Sound. As a tidal estuary ecosystem, Puget Sound's terrestrial and freshwater species interact with marine species to form a complex and biologically rich food web which requires protection and responsible stewardship to maintain function and minimize disruption.

Relationship to recovery targets

A primary recovery target for this strategy is insects in freshwater, as they indicate biological health of wadeable, lowland streams. The target states that by 2020, 100 percent of Puget Sound lowland stream drainage areas monitored with baseline benthic invertebrate (B-IBI) scores of 42-46 or better retain these "excellent" scores and mean B-IBI scores of 30 Puget Sound lowland drainage areas improve from "fair" to "good." Another primary recovery target for this strategy is freshwater quality, which indicates that regional waters are safe for native wildlife. Freshwater quality also provides a key indication that freshwater, estuary, nearshore, marine, and upland habitats are protected, restored, and sustained. The target states that by 2020, at least 50 percent of all monitoring stations with suitable data have Freshwater Water Quality Index scores of 80 or higher, and by 2020, achieve a decrease in the number of impaired waters (303(d) list) in Puget Sound freshwaters.

A9. Implementation of other plans in a coordinated way and maintenance and enhancement of biodiversity

A9.1 Biodiversity Strategy: Implement existing biodiversity plans in a coordinated way while a more integrated planning approach is created.

The biodiversity of Puget Sound has provided valuable health, economic, and cultural benefits to humans, beginning with the earliest native residents. Many of these benefits are quantifiable in traditional terms, such as pounds of fish harvested or board-feet of timber produced. Other benefits, such as ecosystem services, are more difficult to quantify but are beginning to gain recognition through new and innovative metrics. The intrinsic value of biodiversity, such as its scenic beauty or contribution to quality of life, may never be fully measured but is nonetheless universally recognized as an important asset to protect.

Multiple state and federal agencies, local governments, non-profit organizations, and tribes operate programs that either explicitly benefit biodiversity in Washington State or have the potential to impact biodiversity. An integrated planning approach to identify programmatic overlap and gaps is important for maximizing the impact of biodiversity plans in Washington State. The Washington Biodiversity Council (2004-2010) (http://www.rco.wa.gov/biodiversity/about_the_council.shtml) spent a significant amount of effort creating a comprehensive framework for securing Washington State's biodiversity, the Washington Biodiversity Conservation Strategy (http://www.rco.wa.gov/doc_pages/other_pubs.shtml#biodiversity). The concepts and

recommendations described in the strategy are instructive for crafting an integrated planning approach to biodiversity.

Existing biodiversity plans and/or programs and policies that benefit biodiversity include:

- Washington Biodiversity Conservation Strategy
- WDFW's Comprehensive Wildlife Conservation Strategy
- WDFW's Priority Habitat and Species
- The Washington Natural Heritage Plan (produced by the Washington Natural Heritage Program in DNR)
- DNR's Aquatic Lands Enhancement Account
- Forest Practices Act (administered by DNR)
- Washington Wildlife and Recreation Program

Ongoing projects derived from the Washington Biodiversity Conservation Strategy are relevant to the Action Agenda:

Biodiversity Scorecard: Washington Biodiversity Council and University of Washington researchers collaborated to develop a draft scorecard model to track the status of the state's biodiversity, similar to PSP's dashboard indicators. The model considers the status of species and ecosystems, ecosystem processes, human activities, and ecosystem services. This project is now housed with the Washington Natural Heritage Program (DNR).

Conservation Opportunity Maps: These maps assess the distribution of important species, plant communities, and ecological systems, and overlay that with human population trends. They provide high-level guidance on where to invest in biodiversity conservation activities in Washington.

- The Washington Department of Fish and Wildlife has developed a data viewer application for the maps using ArcGIS, which enables users to see the data underlying the maps.
- The Washington Natural Heritage Program is enhancing the map viewer on the [LandScope Washington](#) site to include these maps and data.

Biodiversity Conservation Toolbox for Land Use Planners: This toolbox aims to put biodiversity conservation information for Washington planners in one place. It is organized in six main categories to address the primary needs that planners identified: resources, guidance documents, case studies, policy language, data and maps, and training and conferences.

- The Washington Department of Commerce, Growth Management Services, now hosts this toolbox on its [Critical Areas and Best Available Science](#) page.

Biodiversity Project Web Site: The Web site was created to provide a hub for biodiversity information in Washington State.

- [LandScope Washington](#), administered by the Washington Natural Heritage Program, now hosts the sections on stewardship and incentives, education, and Washington's ecoregions.

Performance Objectives for Ongoing Programs

[Placeholder]

Near-Term Actions

A9.1 NTA 1: Identify a single state agency or commission to serve as coordinating entity for biodiversity programs (the Washington Biodiversity Council developed recommendations for a sustainable leadership strategy, available [here](#)). This entity will be tasked with compiling biodiversity strategies and/or policies affecting biodiversity from across state and federal agencies, local governments, tribes, non-profits and others, and mapping these strategies to ensure they are complimentary and beneficial to terrestrial and freshwater species recovery.

Performance measure: formation of single entity to coordinate biodiversity activities in Washington State

A9.1 NTA 2: DNR will increase resources for incentive-based landowner conservation programs to make them more accessible and easier to use. DNR will target resources toward high-priority terrestrial and freshwater biodiversity conservation areas and aim to **[placeholder to define increment of activity, e.g. number of landowners participating in incentive-based conservation programs and/or acres of land conserved through such programs]** by 2013.

Performance measure: [Placeholder]

A9.1 NTA 3: Department of Commerce will accelerate the development of biodiversity markets with the goal of **[placeholder to define increment of activity, e.g. number of transactions or number of acres conserved through biodiversity market activity]** by 2013.

Performance measure: [Placeholder]

A9.1 NTA 4: WDFW will expand technical assistance to support the efforts of local governments to plan and manage for biodiversity conservation with the goal of **[placeholder to define increment of activity, e.g. number of local governments incorporating biodiversity as a planning/land use consideration]** by 2013.

Performance measure: [Placeholder]

A9.2 Terrestrial and Freshwater Species Recovery: Implement existing species recovery plans in a coordinated way.

Terrestrial and freshwater species recovery is a vital component of Puget Sound recovery, particularly its implications for biodiversity maintenance. Implementation of existing species recovery plans will be most effective if overlapping actions within these plans are identified and redundancies eliminated.

Existing terrestrial species recovery plans include:

- Fisher (<http://wdfw.wa.gov/publications/00228/wdfw00228.pdf>)
- Marbled Murrelet (<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08C>)
- Northern Spotted Owl (http://ecos.fws.gov/docs/recovery_plan/100915.pdf)
- Western Gray Squirrel (<http://wdfw.wa.gov/publications/pub.php?id=00119>)
- Sandhill Crane (<http://wdfw.wa.gov/publications/pub.php?id=00396>)
- Streaked Horned Lark (<http://wdfw.wa.gov/publications/pub.php?id=00391>)

Existing freshwater species recovery plans include:

- Oregon Spotted Frog (<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=D02A>)
- Western Pond Turtle (<http://wdfw.wa.gov/publications/pub.php?id=00398>)

Performance Objectives for Ongoing Programs

[Placeholder]

Near-Term Actions

A9.2 NTA 1: Appropriate state agencies will prioritize the implementation of restoration projects identified within existing terrestrial and freshwater species recovery plans.

Performance measure: [Placeholder]

A9.2 NTA 2: WDFW will use and augment existing species plans to create actionable work plans for imperiled terrestrial and freshwater species without existing or specified plans.

Performance measure: number of actionable work plans for imperiled species currently lacking such plans

DRAFT