

StreamNet FY 97 “Quick” Plan

Goal: Provide the Fish and Wildlife Program, regional Endangered Species Act activities, and related regional and state programs with essential information on the region’s fish, wildlife, and related aquatic resources for use in policy, planning, and management.

Objective 1 - Data Development

ANADROMOUS FISH

Task 1.1 Prepare and maintain standardized data on salmonids and other anadromous fish, to include:

- a) Ocean range and distribution.
- b) Freshwater distribution, use, and barriers.
- c) Adult abundance (escapement, redd counts, trap counts, dam counts).
- d) Juvenile abundance (smolt monitoring, index of abundance, hatchery/wild ratio).
- e) Harvest (ocean, in-river, terminal).
- f) Natural production (survival, production factors, spawner recruit numbers).
- g) Hatchery production (release numbers, exploitation, maturation and return rates).
- h) Age (composition at return).
- i) Genetic origin, production type, stock and population identification.
- j) Historic and potential range (areas previously used for spawning/rearing).
- k) Spawner recruit data from Process for Analyzing and Testing Hypotheses (PATH) project.

RESIDENT FISH AND OTHER AQUATIC SPECIES

Task 1.2 Prepare and maintain standardized data on resident fish and other aquatic species, to include:

- a) Distribution and, when known, use for native salmonids.
- b) Distribution for sensitive fish and other aquatic vertebrate and invertebrate species.
- c) Distribution for key competitor/predator species.
- d) Hatchery production.
- e) Natural production (survival, production factors, spawner recruit numbers).
- f) Genetic origin, production type, stock and population identification.
- g) Historic range (areas previously used for spawning/rearing).

HABITAT

Task 1.3 Prepare and maintain standardized data relating to fish and aquatic habitat, to include:

- a) Prepare and begin to implement a strategy for interagency collection/compilation of “core variables” describing stream habitat.
- b) Incorporate historic anadromous data from the McIntosh project.
- c) Identify existing GIS layers depicting factors that influence spawning habitat for salmonids
- d) Identify available GAP and National Wetlands Inventory products for states within the region.
- e) Incorporate applicable USFS and BLM eastside (and westside) assessment datasets; determine the long-term role of StreamNet in maintaining these datasets.
- f) Incorporate locations of ESA critical habitats fish and aquatic wildlife.
- g) Prepare a strategy for future compilation of estuary and ocean habitat datasets.
- h) Prepare a strategy for a watershed/aquatic health dataset and for rating habitat.

FACILITIES

- Task 1.4 Prepare/maintain standardized data relating to facilities affecting fish/aquatic habitat.
- a) Integrate data on existing dams from the NWHS and the National Inventory of Dams.
 - b) Develop a strategy for adding data on irrigation diversions. Initiate compilation of relevant data.
 - c) Develop a strategy for adding data on man-made blockages and fish passage facilities
 - d) Develop and maintain a dataset on anadromous and resident hatchery facilities.
 - e) Prepare a recommendation regarding integrating the NWHS into StreamNet..

WILDLIFE AND NATURAL HERITAGE DATA

- Task 1.5 Secure an annual update of natural heritage program data.
- Task 1.6 Prepare and maintain standardized data on sensitive riparian-based vertebrate species.

FISH AND WILDLIFE MANAGEMENT AND ENHANCEMENT PROJECTS

- Task 1.7 Prepare and maintain standardized data relating to fish and aquatic management, to include:
- a) Maintain data that tracks Fish and Wildlife Program enhancement projects.
 - b) Prepare summary data on other habitat restoration, protection, and mitigation projects.
 - c) Identify the location of Fish and Wildlife Program funded and other watershed planning efforts.
 - d) Devise a strategy for maintaining data from Fish and Wildlife Program watershed initiatives.
 - e) Prepare a 1:100,000-scale dataset on federal wild and scenic rivers and state equivalents.

DATA REFERENCE

- Task 1.8 Document data incorporated into StreamNet with reference number and source; collect applicable source documents and provide same to the StreamNet Library.

RIVER SYSTEM OPERATIONS

- Task 1.9 Compile available historic data on mainstem hydro and storage dam operations.
- Task 1.10 Prepare a recommended approach for incorporating available in-season fishery, hydrologic, water quality, and dam operations data.

Objective 2 - Data Management

- Task 2.1 Design, develop, and maintain standard codes and data exchange formats for data being compiled as part of the StreamNet project. Prepare a recommendation regarding integration of StreamNet data exchange formats into Fish and Wildlife Program contract terms and conditions.
- Task 2.2 Update the existing data exchange format report.
- Task 2.3 At both the regional and state levels, provide database management and administration necessary for accomplishing StreamNet objectives.
- Task 2.4 Evaluate Fish and Wildlife Program data currently stored on the Council's VAX computer and determine data sets to be stored, maintained, and/or enhanced. Port applicable files to StreamNet.
- Task 2.5 Establish a protocol for compilation of a regional catalog of spatial data and compile a regional/state catalog of applicable and available data.

- Task 2.6 Establish and implement procedures for coordinating GIS activities among participants.
- Task 2.7 Establish procedures for managing important non-standardized datasets.
- Task 2.8 Store and make available current and select historical version of state River Information Systems.
- Task 2.9 Prepare and maintain a project data plan.

Objective 3 - Library / Reference Services

- Task 3.1 Continue to develop a collection of materials applicable to the mission of StreamNet. These include:
 - a) Documents used as source materials for data compiled in Objective 1.
 - b) Documents published by BPA under the Fish and Wildlife Program.
 - c) Documents from the Council’s Fish and Wildlife Program-related collection.
 - d) Documents related to NMFS ESA activities, including administrative records.
 - e) Additional books, journals, agency reports, gray literature, research reports, and documents.
- Task 3.2 Provide improved user access to the materials described in Task 3.1, including:
 - a) Provide an appropriate facility for the storage and use of the physical collection.
 - b) Organize and maintain the collection for appropriate on-site use.
 - c) Catalog the materials acquired by the StreamNet Library.
 - d) Develop a strategy for providing access to the Library Catalog and documents via Internet.
 - e) Develop a plan for the construction of a useful keyword thesaurus/subject heading list.
- Task 3.3 Catalog, index, and abstract materials acquired in Task 3.1a; catalog and index materials acquired in Task 3.1b; catalog materials acquired in Task 3.1c.
- Task 3.4 Manage the StreamNet Library and provide library services to the StreamNet user community.
- Task 3.5 Engage in networking activities with other agency and regional library service providers:
 - a) Collect information about other library collections/access policies.
 - b) Provide consultations on ways to coordinate catalogs and services.
 - c) Coordinate with others to improve services and avoid unnecessary duplication.
 - d) Facilitate communications between agency library service providers.

Objective 4 - River Reach System / Hydrologic Referencing

- Task 4.1 Monitor progress of the National Hydrographic Dataset. Incorporate the completed national product.
- Task 4.2 Establish graphic links and provide regionally consistent unique numbers for lakes and reservoirs. Prepare a recommendation regarding integration of high mountain lakes.
- Task 4.3 Complete a “visual pass” and make corrections to the National Hydrographic Dataset.
- Task 4.4 Complete routing and establish a unique stream ID for 100K streams.
- Task 4.5 Establish maintenance procedure for the 100K river reach system.
- Task 4.6 Maintain the 100K river reach system.

- Task 4.7 Acquire computerized coverages that provide a means for referencing StreamNet data to hydrologic units and geographic referencing systems.
- Task 4.8 Establish protocol for linking data collected at other scales to the 1:100,000-scale system.

Objective 5 - Data Delivery / Information Systems

- Task 5.1 Receive and respond to requests for data, source materials, and custom products.
- Task 5.2 Maintain and distribute the existing windows-based distributed system (DS) as needed.
- Task 5.3 Continue to develop, test, and document a functional client-server system to provide platform independent access to StreamNet data products through the Internet.
- Task 5.4 Maintain and enhance other components of the StreamNet home page
- Task 5.5 Provide training and orientation for users of the StreamNet data delivery systems.
- Task 5.6 Prepare an annual salmon and steelhead report for the Columbia Basin.
- Task 5.7 Prepare map products (e.g., map atlases) in hardcopy and/or electronic format that depict the distribution and (potentially) other features associated with anadromous and resident salmonids.
- Task 5.8 Prepare topical reports that describe content, methods used, and sources of select StreamNet datasets.

Objective 6 - Project Management / Coordination

- Task 6.1 Organize, facilitate, and/or participate in essential coordination meetings.
- Task 6.2 Prepare project administration reports.
- Task 6.3 Produce public information materials.
- Task 6.4 Develop and maintain a communication link among StreamNet participants regarding participation in educational and professional conferences.
- Task 6.5 Identify mechanisms for StreamNet to maintain and provide information that is critical to the Fish and Wildlife Program and regional endangered species activities.
- Task 6.6 Maintain communications between StreamNet and others to identify means for collaboration.
- Task 6.7 Participate in Fish and Wildlife Program advisory groups and other applicable forums.
- Task 6.8 Update the StreamNet strategic plan.
- Task 6.9 Compile a project record from white papers and other significant written materials.
- Task 6.10 Prepare a proposed work plan and budget for FY 1998.