



September 7, 1994

Dear Concerned Party:

Enclosed is a summary of the management plan for the Pacific Northwest Aquatic/Riparian Habitat Conservation Project for Nonfederal Lands. This management plan has evolved over the course of the summer, since an initial public meeting that we hosted in April 1994 and two subsequent "Technical Committee" meetings. The National Marine Fisheries Service, U.S. Fish and Wildlife Service and Environmental Protection Agency (agencies) agreed to this management plan on August 16, 1994, and have acquired a consulting firm, ManTech, to perform the work.

As you can see, the project focuses on technical issues. Implementation of the findings will await policy decisions by the agencies. If you are interested, the agencies would like your technical input to the products as they are developed. ManTech needs copies of any technical literature or pertinent literature citations pertaining to the first three tasks. That is, what literature do you believe must be critically reviewed to provide a rigorous technical foundation for protection and restoration of aquatic and riparian ecosystems? By September 30, 1994, please send this information to:

Richard Novitzki
ManTech Environmental Technology, Inc.
1600 SW Western Blvd.
Corvallis, OR 97333

We appreciate your interest in this project. Its success will in large part be a function of the level of information that you can provide us. There will be a public presentation of the results and an opportunity to hear how the agencies propose to use them in April 1995. Please fill out the enclosed form and return it to ManTech, so we can respond to your desired level of participation.

Sincerely yours,

Curt Smitch, Program Supervisor
Habitat Conservation Plan Program
U.S. Fish and Wildlife Service

Elizabeth Holmes Gaar, Sr Policy Coordinator
Office of Environmental Policy
National Marine Fisheries Service

Anita Frankel, Manager Forest/Salmon Initiatives
Environmental Protection Agency

Enclosures

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**PACIFIC NORTHWEST AQUATIC/RIPARIAN HABITAT
CONSERVATION PROJECT FOR NON-FEDERAL LANDS**

Management Plan

Developed For:

**National Marine Fisheries Service
Environmental Protection Agency
Fish and Wildlife Service**

Developed By:

**The Personnel Management Organization
Alexandria, Virginia**

17 August 1994

1.0 PROJECT SYNOPSIS

Many Pacific salmon stocks are depressed to the point that continued decline may result in additional Endangered Species Act (ESA) listings or even loss of some stocks. Although several factors have been implicated in these declines (hydropower, overutilization, disease and predation, destruction, modification and curtailment of habitat, artificial propagation and climatic variation), this specific proposal focuses on preventing further destruction of aquatic ecosystems. Several Federal, State, tribal and local community programs for conservation and restoration have been established. However, there is no coordinated region-wide (Washington, Oregon, California, and Idaho) Federal strategy for developing comprehensive habitat conservation plans pursuant to the ESA, for fostering nonfederal habitat protection and restoration, or for providing consistent education and training in conservation strategies. Therefore, the National Marine Fisheries Service, the Environmental Protection Agency, and the Fish and Wildlife Service (the Agencies) have identified the need to develop:

- 1) a process for developing two kinds of planning efforts: 1) habitat conservation plans pursuant to the ESA and pre-listing agreements that would meet ESA requirements; and 2) other comprehensive planning for nonfederal lands. Both types will be referred to hereafter as Planning Efforts. These Planning Efforts would be consistent with the ESA, the Clean Water Act and other applicable Federal regulatory requirements.
- 2) a training and outreach strategy to implement a coordinated Federal approach to and to foster nonfederal participation in the Planning Efforts.

The Agencies intend this initiative to address solely technical and informational needs to develop aquatic ecosystem Planning Efforts.

To meet these needs, the Agencies intend to assign or contract the following tasks:

- Task 1* Summarize key watershed processes and functions, natural ranges and central tendencies, and watershed alterations and conditions that affect aquatic ecosystems and general salmonid habitat requirements. Identify effective management systems by land use type and activity (silviculture, agriculture and urban) that facilitate the protection and restoration of key processes.
- Task 2* Develop planning effort elements, implementation strategies, and monitoring approaches to: 1) develop planning efforts, 2) monitor planning effort implementation and effectiveness and 3) document habitat improvements and failures achieved by the program.
- Task 3* List pertinent ecological information and State and Federal regulatory information that would be useful for landowners considering planning efforts.
- Task 4* Participate in a peer review of the technical material developed in Tasks 1 through 3.
- Task 5* Develop training information from the deliverables of Tasks 1 through 4, and present this material to the Agencies and at a public meeting.

2.0 PLAN DETAIL

Task 1

Title: Technical Foundation

Deliverable: Draft Technical Foundation Document

This task addresses the relationships between land-use practices, watershed processes, and aquatic/riparian characteristics to maintain and restore aquatic/riparian ecosystems. Such an analysis also addresses the needs of land management agencies and nonfederal entities that plan to implement practices affecting these ecosystems. The technical foundation will be primarily developed from the existing literature (key journal articles and recent review documents).

List of Task Activities:

1.0 Obtain a panel of experts representing the disciplines of aquatic/riparian ecology, hydrology, and geomorphology, and persons with expertise in the effects of silviculture, agriculture/grazing, and urbanization on aquatic/riparian ecosystems in the Pacific Northwest. This panel will first evaluate the Agencies' objectives and this research plan, and later will evaluate our deliverables.

1.1 Identify and obtain pertinent literature. Use existing reviews, information from similar State activities, a computerized literature search, and Agencies and expert panel suggestions to locate pertinent journal and grey literature. Obtain this literature through written and telephone requests, photocopying journals, and directly from the Agencies. Also, develop a letter to request published information from persons attending previous meetings of the nonfederal lands initiative. This letter will be printed and mailed by the Federal Agencies.

MILESTONE: Draft list of literature to be reviewed. The publications reviewed, synthesized, and incorporated in the draft and final reports will contain 80 to 100 journal and grey literature references. The initial list will be organized by subject area, such as land use type, ecological process, or both.

1.2 Review and synthesize available information. Identify watershed characteristics, structure, processes, and functions that affect aquatic/riparian ecosystems, which in turn affect salmonids. Identify ranges for the watershed characteristics, structure, processes, and functions reported in the literature. Stratify this information as appropriate (e.g., by State, ecoregion, stream type, etc.). Estimate and tabulate natural central tendencies of measures of process, function and condition by ecoregion or major land type where such data are available. Note watershed conditions that occur when watershed processes and functions lie outside natural central tendencies. Identify and tabulate catchment alterations and conditions that lead to process/function rates and structural conditions that deviate from the central tendencies. Describe catchment management practices that lead to protection/restoration of desirable process/function rates and structural conditions. Focus on how catchment processes affect riparian and aquatic ecosystems and document with literature references for silviculture, agriculture/range, and urban land uses. Identify major research needs.

MILESTONE: An annotated outline will be prepared and provided to the Agencies prior to the initiation of Task 3. The outline will be 10 to 20 pages and briefly will describe the content and format of the technical foundation document, including tables and graphics.

- 1.3 Prepare draft technical foundation document and provide to Agencies and expert panel.

MILESTONE: The draft technical foundation will be 90 to 150 pages, including figures, tables, and references. It will be written to be comprehended by technically trained college graduates.

- 1.4 Respond to Agencies and expert panel comments and integrate them into the technical report. Where contradictory viewpoints occur among reviewers, or between the reviewers and the contractor, these viewpoints will be identified along with suggestions for resolution.

DELIVERABLE: The Draft Technical Foundation Document will be revised after Agencies and expert panel review. The revised will form a chapter in the draft training manual.

Task 2

Title: Planning Effort Elements
& Monitoring Strategy

Deliverable: Draft Element & Strategy Document

This task will develop necessary and desirable elements to be included in Planning Efforts. The elements will be applied by the Agencies as appropriate to meet Planning Effort goals and the requirements of Federal regulations for aquatic/riparian ecosystems. A monitoring strategy will be developed for determining whether planning efforts were actually implemented and whether they had the desired ecological effects.

List of Task Activities:

- 2.1 Based on the product of Task 1, determine the elements to be incorporated in Planning Efforts.
- 2.2 Obtain information describing appropriate current monitoring strategies, including recognized inadequacies.

MILESTONE: Annotated outline of monitoring strategy. This outline will be prepared and provided to the Agencies before beginning Task 2.3. It will be about 10 pages and will include a limited number of figures.

- 2.3 Prepare and submit a strategy for monitoring Planning Efforts and offer criteria for evaluating comprehensively the success or failure of Planning Efforts. Include criteria for monitoring and assessing the planning, implementation and ecological results phases of planning efforts.

MILESTONE: Draft monitoring strategy. This strategy will be 20-50 pages, including tables, figures and references. It will be written to be comprehended by technically trained college graduates.

- 2.4 Respond to Agencies and expert panel comments and integrate them into the technical report. Where contradictory viewpoints occur among reviewers, or between the reviewers and the contractor, these viewpoints will be identified along with suggestions for resolution.

DELIVERABLE: The Draft Element and Strategy Document will be revised after review. The revised document will form a second chapter in the draft training manual.

Task 3

Title: Pertinent Information & Statutes **Deliverable:** Pertinent Information & Statutes Document

Identify existing information and sources that would be useful to landowners in preparing Planning Efforts. This information may include GIS data, other digital data, maps, or written/tabular data. It also will include state and federal laws and regulations pertinent to aquatic/riparian ecosystem management.

List of Task Activities:

- 3.1 Prepare a list of meteorological, geological, soil, hydrological, land use, water quality, biological, and any other identified information that may be available or recommended by expert panelists and Agencies for the Planning Effort. Data will be categorized by type and State, and will include sources.
- 3.2 Summarize pertinent existing State and Federal laws, regulations and programs designed to maintain and restore aquatic/riparian ecosystems. Federal statutes will include the Water Pollution Control Act and its amendments and derived regulations, the Endangered Species Act and programs developed to enforce it, and the Magnuson Fishery Conservation and Management Act.
- 3.3 Develop data and regulatory information lists with brief descriptive information, sources from which data can be retrieved, and references for further reading. Provide to Agencies for review.

MILESTONE: Draft ecological information and regulatory information lists. This will be a 10 to 20 page document consisting largely of summary and annotated tables and references. Much of it will be written as incomplete sentences to conserve space and make it more readable.

- 3.4 Respond to Agencies and expert panel comments and integrate them into the lists. Where contradictory viewpoints occur among reviewers, or between the reviewers and the contractor, these viewpoints will be identified along with suggestions for resolution.

DELIVERABLE: The Pertinent Information and Statutes Document will be revised after review. The revised document will form a third chapter in the draft training manual.

Task 4.0

Title: Peer Review of Technical Training Document **Deliverable:** Peer Reviewed Technical Report

Incorporate results of earlier tasks as chapters in a draft training manual and participate in a scientific peer review of the entire document.

List of Task Activities:

- 4.1 Identify candidate peer reviewers.
- 4.2 Assemble outputs of Tasks 1 through 3 (Technical Foundation, Planning Effort Elements & Monitoring Strategy, Pertinent Information & Statutes) into a cohesive document.
- 4.3 Participate in an interactive two-day peer review of the draft document.
- 4.4 **DELIVERABLE:** Respond to Agencies and peer review panel comments and integrate them into the Peer Reviewed Technical Report. Where contradictory viewpoints occur among reviewers, or between the reviewers and the contractor, these viewpoints will be identified along with suggestions for resolution. This will be a 120 to 220 page document written to be comprehended by technically trained college graduates and incorporating the revised deliverables from Tasks 1 through 3, as well as the comments of the peer review panel. This revised document will be the technical training manual and will be the basis for a pamphlet for the public.

Task 5.0Title: Training & Training MaterialsDeliverables: Training Package and Pilot Workshop

Design and develop training materials for presenting the final report from this project to key Agencies staff and to the public.

List of Task Activities:

- 5.1 Develop an outline of instruction and proposed visuals for training Agencies personnel in applying the document completed in Task 4. Prepare a form with which participants can evaluate the effectiveness of the training and recommend improvements before subsequent public presentations.

MILESTONE: Preliminary training package. The instructional outline will include objectives, major issues to be presented, and training aids for a one-hour presentation. The evaluation form will be one page long.
- 5.2 Complete draft visual aids, draft public information pamphlet, and evaluation form.
- 5.3 **MILESTONE:** Conduct a pilot training workshop for Agencies staff and collect evaluation data. The workshop will include a one-hour presentation and a one-hour discussion. It will be held in Portland, OR, at a facility provided by the Agencies.
- 5.4 **DELIVERABLE:** Revise training materials as required and complete the final Training Package and Pilot Workshop. The final training package will contain visual aids and other materials to assist key Agencies personnel in training other Agencies staff and the public in aquatic/riparian ecosystem protection, restoration and monitoring. The final training materials, in three reproducible copies and one electronic copy, will be delivered to the Agencies by 28 April 1995. The public presentation will include a one-hour presentation and a one-hour discussion period. It will be held in Portland, OR, at a facility provided by the Agencies.