Watershed Management Program

Record of Decision

SUMMARY

Bonneville Power Administration (BPA) has decided to adopt a set of prescriptions (goals, strategies, and procedural requirements) that apply to future BPA-funded watershed management projects. Various sources—including Indian tribes, state agencies, property owners, private conservation groups, or other Federal agencies—propose watershed management projects to the Northwest Power Planning Council (Council) for BPA funding. Following independent scientific and public reviews, the Council then selects projects to recommend for BPA funding.

BPA adopts this set of prescriptions to standardize the planning and implementation of individual watershed management programs and projects. This decision is based on consideration of potential environmental impacts evaluated in BPA's Watershed Management Program Final Environmental Impact Statement (DOE/EIS-0265) published July 8, 1997, and filed with the Environmental Protection Agency (EPA) the week of July 14, 1997 (EPA Notice of Availability published July 18, 1997, 62 FR 65, 16154). BPA will distribute this Record of Decision to all known interested and affected persons, groups, tribes, and agencies.

For Further Information:

Contact Eric N. Powers (EC-4), Bonneville Power Administration, P.O. Box 3621, Portland, Oregon, 97208-3621; phone number (503) 230-5823; fax number (503) 230-5699. For copies of the Watershed Management Program Final EIS, please call BPA's toll-free document request line at (800) 622-4520 and ask for the EIS by title.

DECISION

Background:

BPA's responsibilities include mitigation for fish and wildlife habitat losses caused by development of the Federal Columbia River Power System. BPA generally meets this responsibility by funding projects submitted to and recommended by the Council. Project submissions come from Indian tribes, state agencies, property owners, private conservation groups, and other Federal agencies. Based on past experience, BPA expects that future fish mitigation and watershed conservation and rehabilitation actions with potential environmental effects would include in-channel modifications and fish habitat improvement structures; riparian restoration and other vegetation treatment techniques; agricultural management techniques for crop irrigation, animal facilities, and grazing; road management techniques; forest management techniques; urban area techniques; recreation management techniques; mining reclamation; and similar watershed conservation actions. In the past, BPA has addressed all watershed mitigation project issues and impacts under a case-by-case approach. The approach required that many common issues be readdressed as they arise with each successive project. BPA will apply the adopted prescriptions to ensure that individual BPA-funded projects are planned and managed

with appropriate consistency across projects, jurisdictions, and ecosystems, as well as across time.

Range of Alternatives Considered:

The Watershed Management Program EIS considered six alternatives, representing the range of reasonable alternatives. Alternative 1 was "No Action," or continuation of a case-by-case approach to project implementation. The eight-step process would not be formally adopted to implement watershed management projects. Under this alternative, environmental review and decisionmaking would continue to be conducted at the individual project level through separate categorical exclusions, environmental assessments, or environmental impact statements

Alternative 2, "Base Response," would have standardized the planning and implementation of individual watershed projects funded by BPA, but only with respect to those prescriptions already required by regulation or law. This alternative was a component of all action alternatives, including the selected alternative.

Alternative 3, "Aquatic Habitat Objectives Emphasis," incorporated the Base Response alternative, and added only those prescriptions oriented toward achieving the aquatic habitat objectives of watershed management projects.

Alternative 4, "Cost and Administrative Efficiency Emphasis," incorporated the Base Response alternative, and added only those prescriptions oriented toward achieving cost and administrative efficiency.

Alternative 5, "General Environmental Protection," incorporated the Base Response alternative, and added only those prescriptions oriented toward protecting fisheries, water quality, wildlife, recreation, local economic productivity (related to the natural or physical environment, and including, for instance, agricultural or forestry uses), or other resources. This alternative was environmentally preferable but was not chosen because it contains elements that would conflict with project aquatic habitat objectives, or because its cost would detract from BPA's watershed management program. For example, one prescription in this alternative would be to, "Identify opportunities to foster public appreciation watershed ecosystems, processes, and management activities." (EIS, p. 23) While BPA considers this a worthy goal and encourages such activity to the extent it does not conflict with project aquatic habitat objectives, its cost is not appropriately borne by BPA's watershed management program. On the other hand, as explained below, all practicable environmentally oriented prescriptions are included in the selected alternative.

Alternative 6, "Balanced Action," incorporated the Base Response alternative and added selected prescriptions from Alternatives 3, 4, and 5 as BPA considered them appropriate for program-wide application. BPA considered all prescriptions included in the other alternatives but *not* in this alternative as inappropriate because of conflict with reasonable achievement of the aquatic habitat objectives of watershed management projects, cost and administrative efficiency, and/or environmental protection. However, the selected alternative does include all practicable means to avoid or minimize environmental harm, as may generally be expected to result from planning and implementing BPA-funded watershed management projects. BPA expects that the standard

project planning process adopted here will result in determining appropriate site-specific environmental protection measures.

BPA is basing its choices among the range of alternatives considered on the following factors:

- Achievement of the Fish and Wildlife Program's aquatic habitat objectives through an ecosystem-based approach for watershed management projects to be funded by BPA;
- Achievement of cost and administrative efficiency;
- Compliance with all applicable laws and regulations; and
- Environmental protection.

The Action Selected:

BPA has decided to adopt the set of prescriptions (goals, strategies, and procedural requirements) identified in the final EIS as "Alternative 6, Balanced Action (BPA's Preferred Alternative)." This decision will standardize the planning and implementation process, while achieving balance among all decision factors: (1) meeting the aquatic habitat objectives of watershed management projects, (2) achievement of cost and administrative efficiency, (3) compliance with all applicable laws and regulations, and (4) protection and improvement of other environmental resources when such actions would support watershed management.

Under this action, BPA will support a wide range of actions to support fisheries, fish habitat, and aquatic ecosystems consistent with Council's program. BPA will strongly emphasize the achievement of aquatic habitat objectives in the least costly manner. Project managers will apply program-wide measures, as appropriate, to provide maximum benefit practicable to other resources, including soils, vegetation, wildlife, and air quality. These measures would also be implemented in a manner that would avoid or reduce adverse impacts on land use and local economies dependent on agriculture, forestry, and recreation.

The primary differences between this action and the past approach (No Action) will be (1) application of a standard planning process, and (2) application of program-wide mitigation measures, as appropriate, to protect the environment (as listed below, following the planning process description and associated prescriptions). These two differences will allow BPA to implement watershed management programs more efficiently and with greater consistency than under the past case-by-case approach.

BPA will require that BPA-funded projects follow the eight basic steps of the standard planning process. For each project, managers will develop a Project Management Plan that addresses each step, commensurate with project scale and complexity. This process is interactive and flexible. Steps may occur "out of sequence" or simultaneously, and there may be many feedback loops between steps. For example, the results of one step may require that managers re-evaluate earlier steps. Project Management Plans may also become more detailed over time, as projects develop increasing definition and as more is known about project boundaries, stakeholder interests, biological resources, and other project-specific issues.

Standard Planning Process and Prescriptions. The standard planning process steps are described below, along with required prescriptions appropriate under each step.

1. **Define the Area of Concern/Interest.** In the first step, project proponents/project managers delineate the affected watershed boundaries and project issues, focusing primarily on those watersheds that would benefit most from watershed management techniques. Project managers will also seek to establish projects that could take advantage of existing land management systems or that could eliminate existing management inefficiencies. Specifically, project managers will carry out the following:

   a. Coordinate with water resource agencies to verify viability of new water sources and uses and to design and implement features necessary to protect aquatic systems and other water users.

   b. Contact the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Services (NMFS) to determine whether threatened or endangered species are known to occur or potentially occur in the vicinity of the project area.

   c. Identify any minority and/or low-income populations that may be adversely affected by the mitigation project being considered (Environmental Justice).

   d. For projects involving ground-disturbing activities, make preliminary identification of the presence of historic and archeological resources.

   e. For projects involving soil disturbance or channel relocation, make preliminary identification of the presence of hazardous and toxic wastes.

   f. If possible, establish partnerships for achieving project objectives, including agreements with non-electric power development management programs, to ensure coordinated and expeditious program implementation.

2. **Involve Stakeholders.** In the second step, managers gather input from affected groups and persons. This step is similar to the project scoping and public involvement that occurs in a National Environmental Policy Act (NEPA) analysis, and may be part of a NEPA process tiered to the Watershed Management Program EIS. Interested parties may include landowners or other individuals; interest groups; tribes; and city, county, state, regional, or Federal agencies. Project managers will actively seek public input and will plan cooperatively with government agencies or other entities to maximize planning and management efficiencies. Specifically, project managers will carry out the following:

   a. Consult with affected local governments, adjacent landowners, tribes, and Federal and state agencies regarding fish, wildlife, habitat, or other issues.

   b. Develop an effective public involvement program that includes a variety of ways to solicit public input, including mailings, public notices, and public meetings and workshops both early in and throughout the planning process, and by notification in the local paper of record

and in BPA's monthly newsletter; consider alternative means of eliciting public input, such as postings on the Internet and radio advertisements.

c. Wherever possible, form partnerships with government agencies or other entities so as to reduce costs, increase benefits, and/or eliminate duplicate activities.

3. **Develop a Statement of the Desired Future Condition.** Under the standard planning process, project managers develop a statement that expresses a clear conceptual picture of the ideal long-term state towards which efforts are directed. BPA will support concepts that keep long-term management costs low, while ensuring coordination with watershed-level planning efforts. Specifically, project managers will carry out the following:

   a. Identify a desired future condition that responds specifically to achievement of aquatic habitat objectives.

   b. Facilitate the development of a statement of desired future condition, in cooperation with watershed activities.

   c. Identify a desired future condition that is self-sustaining (low-maintenance), including the development of a sense of responsibility and "ownership" in the general public for watershed conditions.

   d. Consider concepts that include sustainable revenue generation (e.g., crop production, timber harvest) to reduce initial or long-term Federal costs, consistent with aquatic habitat objectives.

4. **Characterize the Historical and Present Site Conditions and Trends.** Project managers identify current and past conditions of the project area in terms of composition, structure, function, stresses, and other variables. BPA supports the collection of the information necessary to achieve watershed management objectives and to monitor results. Specifically, project managers will carry out the following:

   a. Consult with the State Historic Preservation Office (SHPO) and affected tribes to identify potential occurrences of cultural resources.

   b. Survey for threatened or endangered plant or animal species before disturbing land or conducting other activities that may affect such species if the USFWS and/or NMFS identify these species as potentially occurring in the vicinity of the project area.

   c. Identify and map basic physical conditions such as soil conditions, topography, hydrology, vegetation, and biological information within the proposed areas for watershed management projects.

   d. Establish baseline information for watersheds against which change can be measured (related to the "measurable aquatic habitat objective" standard included in step 5).

5. **Establish Project Goals**. In step 5, project managers establish management goals for each project, including those goals established by the Council. Project managers identify the specific targets (in terms of conditions, outputs, features, or functions) against which progress and success will be measured. Specifically, project managers will carry out the following:

   a. Establish measurable aquatic habitat and physical habitat objectives (e.g., water quality standards, number of habitat units, list of indicator species).

   b. Include, as project goals:

      - protection and improvement of a variety of fish habitats, including spawning beds, overwintering and rearing areas, resting pools, and protective cover, especially of high-quality native or other habitat for species of special concern (whether at the project site or not), including endangered, threatened, or sensitive species;
      - development of riparian habitat that could benefit water quality, fish, and wildlife;
      - mitigation of habitat losses in-place, in kind, wherever possible;
      - protection or improvement of natural ecosystems and species diversity over the long term;
      - development of habitat that complements the activities of the region's tribes, state and Federal fish, wildlife, water resource agencies, and private landowners; and
      - a future condition that is self-sustaining after initial improvements have been completed.

6. **Develop and Implement an Action Plan for Achieving the Goals.** Project managers create a Project Management Plan that details the actions to be taken to achieve project goals, including the specific techniques, standards, and guidelines to be implemented and protocols for coordination with others. BPA will consider support of a wide range of management techniques and other actions to achieve watershed management objectives. Specifically, project managers will carry out the following:

   a. Take no action inconsistent with tribal legal rights, or with other legally mandated protections such as those under the Endangered Species Act (ESA).

   b. Ensure that the project does not result in disproportionately high and adverse human health or environmental effects on minority or low-income populations, in accordance with Executive Order 12898 (Environmental Justice).

   c. Follow State and Federal regulations for all activities in or near streams and wetlands, whether for maintenance or improvement, including (1) the Clean Water Act, Section 401, Section 404; (2) Protection of Wetlands, Executive Order 11990; and (3) Floodplain Management, Executive Order 11988; and (4) Rivers and Harbors Act of 1879 (Section 10).

d. Avoid activities that might adversely affect threatened and endangered species or their habitat. Document compliance with Section 7 of the ESA.

e. Use only EPA-approved pesticides and herbicides, and use only in the manner specified by EPA.

f. For projects involving use of herbicides/pesticides, prevent use of herbicides/pesticides in or near surface water, unless the herbicide has been EPA-approved for such use.

g. Screen streambank and habitat structures from sensitive viewing locations or develop designs that comply with Wild, Scenic, or Recreational River management guidelines, as appropriate.

h. For projects involving prescribed burns, obtain required permits and use state-defined smoke management guidelines to determine allowable smoke quantities.

i. If consultation with the SHPO and tribes indicates a potential for cultural resources, conduct cultural resource surveys to document any resources that are present.

j. Incorporate a cultural resource management plan or other SHPO-approved actions where deemed necessary.

k. Ensure that barriers are not created that unduly restrict access for physically disabled persons where public access is allowed.

l. Specify that any new public-use facilities are free of barriers to persons with physical disabilities.

m. Ensure that the project does not shift problems to another watershed or portion of a watershed.

n. Consider the full range of management techniques available, including adaptive management strategies, and use the methods that best achieve the aquatic habitat objective in a cost-effective manner, as determined on a case-by-case basis.

o. Consider the results of similar, previous projects, and consult the literature and other people doing similar types of projects to incorporate adaptive management strategies as the plan develops.

p. Apply the potential program-wide mitigation measures listed on pages 8 through 13 of this Record of Decision, as appropriate, to protect the environment.

q. For forest lands, enter a collective management agreement with Federal and state landowners to implement actions outlined in the 1995 Federal Wildland Fire Management Policy and Program Review.

r. Favor watershed management activities with coincidental benefits for wildlife, e.g., riparian habitat restoration.

s. Encourage the use of available local supplies and labor to accomplish project goals and objectives.

t. Identify opportunities for work skill training in conjunction with watershed management activities. For example, encourage construction contractors to use the local employment security office to hire staff for positions that involve on-the-job training.

u. For projects involving vegetation control, conduct weed control programs using joint multi-agency planning. Protocols could be adapted from the U.S. Forest Service (USFS) 1988 Final EIS for Managing Competing and Unwanted Vegetation.

v. Consider recreational opportunities suitable for physically disabled persons where existing access allows.

7. **Monitor Conditions and Evaluate Results**. Once a Project Management Plan is being implemented, project managers start a program to (1) monitor implementation of relevant standards and guidelines; (2) verify achievement of desired results; and (3) determine soundness of underlying assumptions. BPA will encourage and support decision-oriented monitoring that can be used to evaluate the success of watershed management efforts and to make necessary adjustments to better achieve objectives. Specifically, project managers will carry out the following:

   a. Monitor specific performance standards for status and trend of progress toward aquatic habitat objectives (established under Steps 4 and 5).

   b. File as-implemented and 1-year monitoring reports with BPA's Watershed Management Program.

8. **Adapt Management According to New Information.** In this step, project managers respond to new information and technology by adjusting management actions, directions, and goals; management planning, action, monitoring, and feedback are established as a continuous cycle. BPA will encourage and support adaptive management actions that respond to problems or opportunities identified through monitoring. Project managers will also be encouraged to apply new knowledge, insights, or technologies that may contribute to meeting aquatic habitat objectives. Specifically, project managers will carry out the following:

   a. Use monitoring information to guide annual management priorities and activity planning.

   b. Consult the literature and obtain peer review during the development of adaptive management strategies.

Potential Program-Wide Mitigation Measures. Project managers will consider incorporating the following resource-specific mitigation measures as appropriate to protect the environment:

1. **Soils.** Project managers will seek to establish a desired future condition of stability and soil conservation without incurring the following impacts: disturbing soils on unstable slopes; disturbing the upper soil horizons or accelerating erosion well beyond that occurring under natural processes; compacting of soil such that plant growth is prevented or severely restricted or runoff is increased; or allowing sufficient deposition of salts or other materials into soils that vegetation growth is inhibited. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Monitor newly disturbed soils for evidence of erosion, and implement active controls, such as plowing and seeding of new gullies (or temporary stabilization for later seeding during dry season).

   b. Where soil-disturbing activities are being considered, survey soil conditions to find and map potentially fragile soil types (such as shallow "scablands") and allow only those activities that would not disturb soils in these areas.

   c. Develop and implement project erosion control plans that select and apply several complementary techniques to address all erosion and sedimentation processes. For example, seeding a disturbed area encourages vegetative soil stabilization. Mulching the site not only holds seed in place, but also provides interim soil protection against raindrop splash and sheet and rill erosion.

   d. Assure quality control of project plans through technical reviews by qualified peers and appropriate agency personnel.

   e. For projects involving prescribed burns, conduct a pre-burn inventory to identify areas to avoid, including areas that may be vulnerable to increased erosion. Develop an approach to avoid these areas.

2. **Water and Fish Resources.** Project managers will seek to establish a desired future condition without incurring the following water resources impacts: violating water quality standards; placing dredge or fill materials into wetlands under the jurisdiction of the Corps and not covered under a nationwide permit, as defined under Section 404 of the Clear Water Act; reducing in-stream flows to the extent that riparian vegetation is likely to be permanently reduced or eliminated; or infringing upon existing, priority water rights. They will further seek to establish that condition without the following impacts on fish: adversely affecting a fish species listed or proposed for ESA listing; adversely modifying designated critical habitat for listed fish species; adversely affecting fish species listed by state fish and wildlife or tribal agencies as species of special concern (such as endangered, threatened, sensitive, etc.); removing habitat that has been identified by state or tribal agencies as unique, rare, or important to fish distribution; directly killing fish or fish eggs; permanently removing or degrading spawning habitat; temporarily reducing habitat that in turn may result in increased fish mortality or lowered reproductive success; or avoidance by fish of biologically important

habitat for substantial periods (e.g., blockages of upstream passage), possibly resulting in increased mortality or lower reproductive success. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

a. Develop and implement project erosion control plans that select and apply several complementary techniques to address all erosion and sedimentation processes. For example, seeding a disturbed area encourages vegetative soil stabilization. Mulching the site not only holds seed in place, but also provides interim soil protection against raindrop splash and sheet and rill erosion.

b. Assure quality control of project plans through technical reviews by qualified peers and appropriate agency personnel.

c. Select, implement, and enforce applicable Best Management Practices (e.g., those of the USFS or BLM) based on site-specific conditions, technical and economic feasibility, and the water quality standards for those waters potentially affected.

d. Isolate in-stream construction from flow, and remove fish above or below the construction site during construction. Coordinate in-channel projects with state, local, and tribal fisheries agencies and obtain permits as needed.

e. Monitor water quality downstream from activities with potentially significant adverse affects on water quality, such as those land-disturbing activities occurring within 15 meters (50 feet) of the wetted perimeter of a stream or wetland. Implement corrective actions for conditions approaching maximum allowable degradation under state regulation.

f. Stop application of fertilizer if signs of eutrophication are detected.

g. For projects involving wetland and/or island creation, construct wetlands and islands during the dry season.

h. For projects involving wetland creation, ensure adequate strategy to control nutrients excreted by large concentrations of waterfowl.

i. Monitor dissolved oxygen levels in water released from deep impoundments and take actions to eliminate low-oxygen discharges if found.

j. Withdraw surface waters or groundwater only where such withdrawal is necessary for the use and management of the property and when such withdrawal is demonstrated not to cause significant adverse effects on aquatic life, riparian communities, or adjacent land use.

k. Coordinate with state water resource and/or rights to verify viability of new water sources, obtain water rights for withdrawal of water from the state where the project is being considered, and design and implement features necessary to protect aquatic systems and other water users.

l. Develop water impoundments or diversions in consultation with state water agencies and state and tribal fish and wildlife agencies. Obtain Corps permits, where needed.

m. For projects involving prescribed burns, conduct a pre-burn inventory to identify areas to avoid, including areas that may be vulnerable to increased erosion. Develop an approach to avoid these areas.

n. Coordinate with adjacent landowners and management agencies to discuss and resolve potential problems.

o. Monitor groundwater quality under managed lands and near project areas that may contribute to groundwater contamination by herbicides, nutrients, petroleum hydrocarbons, and other soluble substances. Take corrective actions for conditions found to exceed state groundwater quality standards.

p. Use hydraulic models for design of in-stream structures to ensure that all stream-channel morphology variables are adequately addressed.

q. Coordinate with state, local, and tribal water resources and water quality agencies or departments to share data collection efforts in project areas.

3. **Vegetation.** Project managers will seek to establish a desired future condition without incurring the following impacts: adversely affecting a plant species listed or proposed for ESA listing; adversely modifying designated critical habitat for a listed plant species; adversely affecting plant species that are listed by state or tribal agencies as species of special concern (such as endangered, sensitive, monitor, etc.); removing or disturbing plant communities that have been identified by state or tribal agencies as unique or rare (such as late-successional forest or native shrub-steppe); or promoting or spreading noxious weeds. Depending on site-specific conditions and activities, potentially appropriate measures include:

a. Incorporate a weed control plan in consultation with local weed control officials.

b. Survey for listed or other plant species of concern before disturbing lands for planting, if the USFWS identifies such species as potentially occurring in the vicinity of the project area.

c. Acquire seeds and plants from stock derived under similar environmental conditions. Local stock is preferred; on-site stock is the ideal.

d. For projects involving wetland creation or expansion, survey for and avoid sensitive features during early planning.

e. For projects involving vegetation control, develop specific protocols for use of herbicides, mechanical, and biological methods, in cooperation with local weed control boards. Protocols could be adapted from the USFS 1988 Final EIS for Managing Competing and Unwanted Vegetation.

f. For projects involving vegetation control, conduct weed control programs more efficiently and with a greater regional effect by using joint multi-agency planning.

4. **Wildlife.** Project managers will seek to establish a desired future condition without incurring the following impacts: adversely affecting a species listed or proposed for ESA listing; adversely modifying designated critical habitat for listed species; adversely affecting candidate species under the ESA, or species listed by state fish and wildlife or tribal agencies as species of special concern (such as endangered, sensitive, monitor, etc.); or removing habitat that has been identified by state or tribal agencies as unique, rare, or important to wildlife distribution (such as big game winter range, waterfowl nesting areas, late-successional forest, native shrub-steppe). Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Before implementing any active management technique, identify sensitive wildlife habitats or features (e.g., eagle and other raptor nests, mule deer winter range) and establish buffers and timing restrictions in consultation with state and/or tribal wildlife biologists.

   b. Restrict access, either seasonally or spatially, to protect sensitive wildlife areas, including recently planted areas, riparian areas, nesting areas (e.g., heron colonies), and wildlife concentration areas (e.g., wintering areas for waterfowl or for deer).

   c. Use interpretive signs and on-site custodian care to reduce adverse impacts of recreation on sensitive wildlife habitats.

   d. For projects involving introduction, reintroduction, or augmentation of wildlife populations, test animals for diseases before release.

   e. Coordinate wildlife control efforts with state wildlife agencies and with Animal Damage Control, U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service. If threatened or endangered species are involved, coordinate with the USFWS.

   f. Avoid vegetation removal during the nesting season for birds. Where such removal is unavoidable, conduct nest surveys for sensitive bird species before disturbing lands.

   g. Conduct inventories and establish fire breaks around riparian areas before conducting prescribed burns (unless riparian areas are expected to benefit from the treatment).

   h. Inventory vegetation in areas proposed for land-disturbing activities and avoid high-quality native vegetation communities (as defined by state or tribal agencies).

5. **Land and Shoreline Use.** Project managers will seek to establish a desired future condition without incurring the following impacts: converting to nonagricultural purposes farmland with a rating of 160 or greater according to the USDA rating system (7 CFR 658.4); establishing uses not compatible with adjacent land uses and ownerships; conflicting with adopted environmental plans and goals of the community where the project is located; or disrupting or dividing the physical arrangement of an established community. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

a. Meet with county officials during early planning of mitigation areas, to try to develop the project in a manner consistent with county zoning and planning efforts.

b. For projects involving land use changes, meet with county commissioners and land use officials, who can provide local wisdom and help ensure coordinated, efficient, and effective use of multi-jurisdictional resources.

c. Elicit public input, which allows for application of local knowledge and for development of plans consistent with the local land use values.

d. Survey proposed alignments of water distribution systems to ensure that no rights-of-way or access routes are blocked.

e. For projects involving prescribed burns, identify acceptable weather conditions and air quality concerns, and develop contingency plans in the event of fire escaping to adjacent lands.

6. **Cultural and Historic Resources.** Project managers will seek to establish a desired future condition without incurring the following impacts: adverse effects on properties on or eligible for the National Register, or disturbance of Native American cultural items or religious places, or adverse effects on the exercise of Native American religion, pending consultation with the appropriate tribe(s). Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Enter into Programmatic Agreements with SHPOs, tribes, and others to ensure the following:

      i. Consult with the SHPO and affected tribes to identify potential occurrences of cultural resources.

      ii. Where there is potential for adversely affecting cultural resources, conduct cultural resource surveys to document any resources present.

      iii. Where properties on or eligible for the National Register are under management control, incorporate a cultural resource management plan.

      iv. Identify opportunities to foster public appreciation of the relationship between natural resources and tribal culture.

7. **Economics.** Project managers will seek to establish a desired future condition without incurring the following impacts: involuntary displacement of property owners or restriction of commercial use; disruption of traffic or business activities during construction or ongoing operation; reducing local tax revenues, either directly or indirectly, to the extent that greater than 1 percent of total annual revenues are lost. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Encourage using available local supplies and labor to accomplish project goals and objectives.

   b. Train and maintain a qualified and adequate work force to plan and various watershed restoration projects safely and effectively.

c. Establish inter-local agreements with fire districts, the USFS, and other appropriate agencies to assist in controlled burn activities.

d. Involve local and downstream water users and local water agencies to ensure that project water users do not significantly affect productivity or production costs of water-dependent agriculture.

8. **Recreation / Visual.** Project managers will seek to establish a desired future condition without incurring the following impacts: creating hazards that might pose a risk to the public; disrupting recreational activities in stream channels and on lands adjacent to stream channels; and supporting recreational activities that conflict with aquatic habitat objectives or with tribal rights. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Identify safe public recreational opportunities that do not jeopardize project aquatic habitat objectives.

   b. Identify recreational opportunities suitable for physically disabled persons.

9. **Air Quality.** Project managers will seek to establish a desired future condition without incurring the following impacts: violating Federal, state, or local ambient air quality standards; causing or contributing to a new violation of the National Ambient Air Quality Standards; increasing the frequency or severity of an existing violation; delaying the timely attainment of a standard; emitting more than the threshold amount of a criteria pollutant in a non-attainment area; contributing to an existing or projected air quality violation; exposing sensitive receptors (e.g., campgrounds, businesses, or residences) to irritating or harmful pollutant concentrations. Depending on site-specific conditions and activities, potentially appropriate measures include the following:

   a. Restrict prescribed fire to specific conditions, such as when (1) weather conditions and forecasts are favorable to a controlled burn, (2) air quality is sufficiently high to allow local smoke emissions, and (3) smoke dispersion conditions are favorable.

   b. Use state-defined smoke management direction to determine allowable smoke quantities.

   c. For projects involving the aerial application of herbicides, develop specific protocols for use of herbicides, including protocols to protect air quality. Protocols could be adapted from the USFS 1988 Final EIS for Managing Competing and Unwanted Vegetation.

Monitoring and Enforcement:

BPA will provide guidance to project proponents on applying the standard planning process and prescriptions adopted by this decision, and will enforce this decision through funding conditioned on substantial application of the standard planning process and prescriptions. BPA may choose to disregard minor deviations that BPA considers not relevant to environmental concerns. (Project proponents are cautioned not to assume that BPA will disregard any deviation.) BPA may audit individual Project Management Plans for consistency with program requirements.

BPA will also provide project managers and interested parties an opportunity to identify problems in applying the standard planning process and prescriptions, and to suggest improvements. BPA will regularly evaluate the collective experience working under the standard planning process and prescriptions, and adapt them as BPA considers appropriate. If BPA proposes substantial changes in the standard watershed management project planning process and prescriptions that are relevant to environmental concerns, then BPA shall prepare a supplement to the Watershed Management Program EIS and request public comment prior to adopting such changes.

Cultural and Historic Resources:

BPA may yet propose one or more Programmatic Agreements for protection of cultural and historic resources in order to accomplish program-wide satisfaction of BPA responsibilities under the National Historic Preservation Act (NHPA). Until execution of such an Agreement, BPA will accomplish NHPA compliance for individual undertakings.

Issued in Portland, Oregon, on August 27, 1997.

Sue F. Hickey
Chief Operating Officer