

## **Chapter 2: Alternatives Including the Proposed Action**

Chapter 2 describes and compares five action alternatives to accomplish the proposed action, as well as the No Action alternative. The action alternatives identify different approaches to standardize the planning and implementation of individual wildlife mitigation projects funded by BPA. All action alternatives are based on the same planning process. Each one contains prescriptions (goals, strategies, and procedural requirements) that would be applied to BPA-funded wildlife mitigation projects under a standardized program.

As described in Chapter 1, BPA needs to mitigate for wildlife habitat that was lost during development of the Federal Columbia River Power System. BPA accomplishes this mitigation by funding projects recommended by the Council.

Many of the projects recommended by the Council are submitted as proposals from various sources (“project proponents”), including Indian Tribes, state agencies, property owners, private conservation groups, or other Federal agencies. Project proponents develop proposals (to various degrees of detail) and submit them to the Council for consideration. Following independent scientific review and public review, Council then selects projects to recommend for BPA funding.

At present, BPA addresses each project and its accompanying NEPA analysis on a case-by-case basis. BPA works closely with project proponents to develop a Project Management Plan. BPA then funds the project, and the project proponents (now called “project managers”) implement the project according to the Project Management Plan and an accompanying Memorandum of Agreement.

BPA's proposed action is to establish a comprehensive program that addresses the common issues and environmental impacts associated with mitigation projects. With such a program in place, BPA implementation of individual wildlife mitigation projects would change in two fundamental ways.

- First, BPA's site-specific involvement would be greatly reduced as project proponents take the lead in preparing Project Management Plans according to the program requirements.
- Second, because this EIS explores, identifies, and discloses many of the environmental impacts expected from mitigation projects, environmental analysis of individual projects would have a narrower, more project-specific focus, so long as project managers follow the program requirements. Broad environmental analysis would be required only if anticipated impacts or project components were to differ substantially from those evaluated in this EIS.

## 2.1 THE ALTERNATIVES

Six alternatives are evaluated in this EIS ( five action alternatives plus the No Action alternative). While each of the five action alternatives identifies a different approach to standardizing the planning and implementation of individual wildlife mitigation projects funded by BPA, they are all based on a single planning process (see Section 2.1.1).

Sections 2.1.2 through 2.1.7 describe each of the alternatives, including No Action. The alternatives present a range of possible strategies, goals, and procedural requirements (referred to collectively as management prescriptions) to be applied to BPA-funded projects. Following these descriptions, Section 2.1.8 outlines the actual site-specific techniques that might be used under any of the alternatives to support and achieve wildlife mitigation.

### 2.1.1 The Process for Project Implementation Common to All Alternatives

Each action alternative is developed from an ecosystem-based project planning process.<sup>1</sup> The process seeks to solve problems within the context of landscapes (as defined by the human and natural environment) rather than the context of land parcels (ownership and jurisdictional lines). The goal of this process is to encourage Federal actions that support both a sustainable environment and a sustainable economy.

BPA would require that BPA-funded projects follow the eight basic steps of the standard planning process. For each project, managers would 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 more is known about project boundaries, stakeholder interests, biological resources, and other project-specific issues.

The steps are as follows:

1. **Define the Area of Concern/Interest.** In this step, project managers delineate the project boundaries and project issues.
2. **Involve Stakeholders.** In the second step, managers gather input from affected agencies, land owners, Tribes, individuals, and organizations. This step is similar to the project scoping and public involvement that occurs in a NEPA analysis. Interested parties may include individuals; interest groups; Tribes; and city, county, state, regional, or Federal agencies.

---

<sup>1</sup> This process is adapted from *The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies*, a report of the Interagency Ecosystem Management Task Force, June 1995.

3. **Develop a Statement of the Desired Future Condition.** Under BPA's 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.
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.
5. **Establish Project Goals.** In step 5, project managers identify the specific targets (in terms of conditions, outputs, features, or functions) against which progress and success will be measured.
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.
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.
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.

### **2.1.2 No Action**

Alternative 1, No Action, is to continue the current case-by-case approach to project implementation. The eight-step process would not be formally adopted to implement wildlife projects. Environmental review and decisionmaking would be conducted at the individual project level through separate categorical exclusions, environmental assessments, or environmental impact statements. BPA would continue to maintain a high level of involvement in making site-specific decisions.

### **2.1.3 Alternative 2: Base Response**

This alternative proposes to standardize the planning and implementation of individual wildlife mitigation projects funded by BPA, but only with respect to those prescriptions (i.e., goals, strategies, and processes) required by regulation or law. **Alternatives 3 through 6 will include all prescriptions listed under Alternative 2 as part of their actions.** The required prescriptions are described below, under the appropriate process step.

**1. Define the Area of Concern/Interest**

*Under all action alternatives, project managers would:*

- 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.
- Make preliminary identification of the presence or absence of listed and proposed threatened and endangered species and their habitat within the area that may be affected by the project.
- Identify any minority and/or low-income populations that may be adversely affected by the mitigation project being considered (Environmental Justice).
- *[For project involving property acquisition]* Make preliminary identification of the presence of historic and archeological resources.
- *[For project involving property acquisition]* Make preliminary identification of the presence of hazardous and toxic wastes, using the American Society for Testing and Materials (ASTM) Standards on Environmental Site Assessments for Commercial Real Estate (E 1527-94 and E 1528-93).

**2. Involve Stakeholders**

*Under all action alternatives, project managers would:*

- Consult with affected state fish and wildlife agencies, cities, local governments, and adjacent landowners.
- Consult with the Tribal governments of potentially affected Tribes.

**3. Develop a Statement of the Desired Future Condition**

*No standard prescriptions required.*

**4. Characterize the Site Conditions and Trends**

*Under all action alternatives, project managers would:*

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

## 5. Establish Project Goals

*No standard prescriptions required.*

## 6. Develop and Implement an Action Plan for Achieving the Goals

*Under all action alternatives, project managers would:*

- Take no action inconsistent with Tribal legal rights, or with other legally mandated protections such as the Endangered Species Act (ESA).<sup>2</sup>
- Address any disproportionately high and adverse human health or environmental effects on minority or low-income populations, in accordance with Executive Order 12898 (Environmental Justice).
- Follow State and Federal regulations for all activities in or near wetlands, whether for maintenance or enhancement, including (1) the Clean Water Act, Section 404; (2) Protection of Wetlands, Executive Order 11990; and (3) Floodplain Management, Executive Order 11988.
- Construct wildlife developments in consultation with water agencies and state and Tribal fish and wildlife agencies. Obtain required permits.
- Avoid activities that may adversely affect threatened and endangered species or their habitat. Document compliance with Section 7 of the ESA.
- Use only Environmental Protection Agency (EPA)-approved pesticides, and use only in the manner specified by EPA.
- *[For projects involving use of herbicides]* Prevent use of herbicides in or near surface water, unless the herbicide has been EPA-approved for such use.
- Screen structures from sensitive viewing locations or develop designs that blend into the landscape in areas managed as National Scenic Areas.
- *[For projects involving prescribed burns]* Obtain required permits and use state-defined smoke management direction to determine allowable smoke quantities.
- If consultation with the SHPO and Tribes indicates a potential for cultural resources, conduct cultural resource surveys to document any resources that are present.
- *[For projects involving property acquisition (including leases), and where properties on or potentially eligible for the National Register of Historic Places are known to exist on the property]* Incorporate a cultural resource management plan or other SHPO-approved actions.
- Ensure that barriers are not created that unduly restrict access for physically disabled persons where public access is allowed.

---

<sup>2</sup> See the **Consultation, Review, and Permits** discussion in Chapter 5.

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

**7. Monitor Conditions and Evaluate Results**

*No standard prescriptions required.*

**8. Adapt Management According to New Information.**

*No standard prescriptions required.*

**Note: Each of the prescriptions under Alternative 2 applies to each of the other four action alternatives described below.**

**2.1.4 Alternative 3: Biological Objectives Emphasis**

Under this alternative, in addition to those prescriptions under Alternative 2, BPA would standardize the planning and implementation process **by supporting only those actions intended specifically to achieve biological objectives**; however, project managers would retain a great deal of flexibility to adapt application of specific techniques and other actions to best meet the biological objectives of the project. Specific management techniques are listed in Appendix A.

Biological objectives would focus on the Council's habitats and species priorities, but would also include more comprehensive wildlife mitigation objectives, such as protection or improvement of natural ecosystems and general species diversity over the long term.

**1. Define the Area of Concern/Interest (Alternative 3)**

In addition to the prescriptions required under Alternative 2, project managers would undertake the following:

- Select boundaries defined by habitat type and species identified as Council priorities, as listed in Table 1-1 (Council 1995).

**2. Involve Stakeholders (Alternative 3)**

Under Alternative 3, no requirements for stakeholder involvement are proposed, other than those prescribed under Alternative 2.

**3. Develop a Statement of the Desired Future Condition (Alternative 3)**

Under Alternative 3, BPA would support desired future conditions that focus exclusively on achieving wildlife mitigation. Social, economic, and other resource conditions would be considered only as they relate to supporting biological objectives.

Project managers would undertake the following:

- Identify a desired future condition that responds specifically to achievement of biological objectives.

#### **4. Characterize the Site Conditions and Trends (Alternative 3)**

With the focus on achieving wildlife objectives, BPA would support characterization of environmental elements that project managers need to understand in order to achieve wildlife mitigation effectively.

In addition to the required prescriptions, project managers would undertake the following:

- Identify and map soil conditions, topography, hydrology, vegetation, and other physical and biological systems within areas proposed for habitat improvements.
- Establish baseline information for habitat and species against which change can be measured (related to the "measurable biological objective" standard included in step 5).

#### **5. Establish Project Goals (Alternative 3)**

Project managers would undertake the following:

- Establish measurable biological objectives (e.g., number of habitat units, acres and/or habitat types, list of indicator species).
- Include, as a project goal:
  - \* protection of high-quality native or other habitat or species of special concern (whether at or adjacent to the project site), including endangered, threatened, or sensitive species;
  - \* development of riparian or other habitat that can benefit both 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; and
  - \* development of habitat that complements the activities of the region's Tribes and state and Federal wildlife agencies.

#### **6. Develop and Implement an Action Plan for Achieving the Goals (Alternative 3)**

Under Alternative 3, BPA would support a wide range of management techniques and other actions, with the condition that they be the best methods to achieve wildlife mitigation. Only minimal attention would be paid to cost of environmental

consequences. Management techniques intended to provide other resource benefits would be considered only as they relate to achieving the biological objective.

In addition to the required prescriptions, project managers would undertake the following:

- Consider the full range of management techniques available, and use the method that best achieves the biological objective, as determined on a case-by-case basis; to include (but not be limited to) reintroduction of wildlife species, major habitat restoration projects, use of prescribed fire, predator control, pesticide use (including herbicides), restriction of public access, purchase of private lands, water diversions, fencing, livestock removal, or other techniques as described in Appendix A.
- Control nuisance animals or unwanted or competing plant species where they are hindering establishment of vegetation.

#### **7. Monitor Conditions and Evaluate Results (Alternative 3)**

Under Alternative 3, BPA would encourage and support more rigorous and comprehensive monitoring of mitigation objectives than under the other alternatives.

Project managers would undertake the following:

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

#### **8. Adapt Management According to New Information (Alternative 3)**

Under Alternative 3, BPA would encourage and support adaptive management actions that respond to problems or opportunities identified through monitoring. Project managers would also be encouraged to apply new knowledge, insights, or technologies that might contribute to meeting biological objectives.

Project managers would undertake the following:

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

#### **2.1.5 Alternative 4 - Cost and Administrative Efficiency Emphasis**

Under this alternative, in addition to the prescriptions under Alternative 2, BPA would standardize the planning and implementation process by **supporting only the least costly approach(es) to achieving the project's biological objectives**. Project managers would emphasize minimizing administration costs and maximizing site-specific application of mitigation funds.

Biological objectives would be limited to the Council's habitats and species priorities. Achievement of more comprehensive wildlife mitigation objectives, such as protection or improvement of natural ecosystems and general species diversity over the long term, would occur only incidentally to achievement of the priority objectives.

As with Alternative 3 (Biological Objectives), BPA would support only those actions directly aimed at achieving wildlife mitigation. However, under Alternative 4, project managers would also be restricted in the specific techniques and other actions available to them (i.e., only the least costly techniques would be available). A list of management techniques is found in Appendix A.

### **1. Define the Area of Concern/Interest (Alternative 4)**

Under Alternative 4, BPA would consider support of focused planning that seeks out opportunities to minimize costs associated with land acquisition and subsequent actions required to achieve wildlife mitigation.

In addition to the required prescriptions, project managers would undertake the following:

- When identifying potential mitigation sites, examine public lands first to determine opportunities for adjustments, land exchanges, and reciprocal management agreements that eliminate management inefficiencies and inconsistencies.
- Select lands requiring a minimum financial output, with emphasis on existing Federal or state lands.
- If possible, obtain financial or land management partnerships for achieving project objectives, including agreements with non-electric power development mitigation programs, to ensure coordinated and expeditious program implementation.

### **2. Involve Stakeholders (Alternative 4)**

Under Alternative 4, stakeholder involvement would be streamlined, with fewer non-partner stakeholders identified and with a lower level of public involvement (e.g., fewer meetings and publications).

A major emphasis would be placed on identifying stakeholders that can enter cooperative planning and share administrative and implementation costs. BPA staff would undertake a much lower level of project involvement than under the other alternatives, deferring almost completely to project proponents to develop and administer project-specific plans according to the requirements of this alternative.

In addition to the required prescriptions, project managers would undertake the following:

- Develop a simple and efficient public involvement program that includes solicitation of public input (by posting in the local paper of record and in BPA's monthly newsletter).
- Wherever possible, form partnerships with government agencies or other entities so as to reduce project costs, increase benefits, and/or eliminate duplicate activities.
- Tie Project Management Plans into existing Federal or state management plans whenever possible (e.g., use or adapt fire management plans already developed for USFS, BLM, or State lands near the mitigation area).
- Limit non-partner stakeholders to those with immediate interests in the project, such as adjacent landowners, representatives from local government, and jurisdictional Tribal authorities.

### **3. Develop a Statement of the Desired Future Condition (Alternative 4)**

Under Alternative 4, BPA would support concepts that focus exclusively on wildlife mitigation with the lowest possible cost. Social, economic, and other resource conditions would be considered only as they relate to lowering costs of achieving and/or supporting biological objectives.

Project managers would undertake the following:

- Identify a desired future condition that responds specifically to achievement of biological objectives.
- Facilitate the development of a statement of the desired future condition, in cooperation with local, state, Federal, and Tribal governments; and non-governmental stakeholders (rather than having BPA facilitate).
- Identify a desired future condition that is self-sustaining (low maintenance).
- Consider concepts that include sustainable revenue generation (e.g., crop production, timber harvest) to reduce initial or long-term Federal costs, consistent with biological objectives.

### **4. Characterize the Site Conditions and Trends (Alternative 4)**

BPA would support only those efforts to characterize the ecosystem listed under the standard project management prescriptions common to all action alternatives (Alternative 2).

### **5. Establish Project Goals (Alternative 4)**

The overall goal under Alternative 4 would be to reduce program and administrative costs. BPA would encourage goals to include self-sustaining or low-maintenance

mitigation areas, and would emphasize developing low-maintenance plans requiring lower budgets (or lower amounts of initial trust funds established by BPA to fund the project). Consideration would be given to economic use of mitigation lands to augment annual funding. Social, economic, and other resource conditions would be considered only as they relate to supporting the least costly approach to achieving biological objectives.

Project managers would undertake the following:

- Include, as a project goal, sustainable ecological systems substantially independent of active management needs.
- For forest lands, adapt the recommended goals outlined in the Federal Wildland Fire Management Policy and Program Review (USDI and USDA, 1995). (The report recommends that agencies develop a plan-by-plan strategy to introduce landscape-scale prescribed burns across agency boundaries. The report also directs agencies to seek opportunities to enter into partnerships with Tribal, state, and private land managers to achieve this objective.
- Include, as a project goal, sustainable revenue generation (e.g., crop production, timber harvest) to reduce initial or long-term Federal costs, consistent with biological objectives.

#### **6. Develop and Implement an Action Plan for Achieving the Goals (Alternative 4)**

Under Alternative 4, BPA would support a more passive, less aggressive strategy for achieving wildlife mitigation. Project managers would have to select techniques that could achieve biological objectives with the lowest project costs.

In addition to the required prescriptions, project managers would undertake the following:

- Rely primarily on natural regeneration rather than active restoration to achieve biological objectives.
- Develop management plans that do not require the more costly techniques such as irrigation systems, purchase of water rights, purchase of private lands (including farmland or timber lands), fertilization, major habitat creation or water development, or provision of developed recreational opportunities, unless use of such methods clearly results in the least costly approach to achieving biological objectives.
- Allow public recreation, providing it requires only minimal funding and does not interfere with achieving wildlife mitigation.
- Consider charging for permits to access mitigation lands, and apply revenue to achieve the project's biological objectives.

- For forest lands, enter a collective management agreement with Federal and state landowners to implement actions outlined in the Federal Wildland Fire Management Policy and Program Review (USDI and USDA, 1995).
- Dedicate to the project any revenue gained from commerce that results from use of the property.

#### **7. Monitor Conditions and Evaluate Results (Alternative 4)**

Because emphasis would be placed on passive management and natural regeneration, no specific monitoring requirements would be established under the cost and administrative efficiency alternative.

#### **8. Adapt Management According to New Information (Alternative 4)**

There would be no specific requirements. Managers would, however, seek and apply new information or approaches to improve administrative or cost efficiency.

### **2.1.6 Alternative 5 - General Environmental Protection [Environmentally Preferred]**

Under this alternative, in addition to the prescriptions under Alternative 2, BPA would standardize the planning and implementation process by **supporting added measures to protect fish, recreation, local economic productivity (related to the natural or physical environment, and including, for instance, agricultural or forestry uses), or other resources, while achieving biological objectives.** Project managers would also apply program-wide measures as appropriate to protect the environment, including soils, fish and water resources, vegetation, non-target wildlife, land use, local economies related to the environment, recreation, and air quality (see program-wide mitigation measure discussions under each resource in Chapter 4). This is the environmentally preferred alternative. Management techniques likely to have adverse environmental impacts would be minimized or avoided. A list of management techniques is found in Appendix A.

#### **1. Define the Area of Concern/Interest (Alternative 5)**

Under Alternative 5, BPA would consider support of broad-scale planning that takes into account many different resources. Definition of the area of concern might include a comprehensive and rigorous analysis of economic, social, cultural, and ecological conditions that might influence area boundaries.

In addition to the required prescriptions, project managers would undertake the following:

- Identify those areas outside of the property that may be affected by or that may benefit mitigation actions, including adjacent landowners and uses, local economic bases (to the county level), Tribal and other traditional uses, and wildlife or fish travel corridors.

- Identify locally limited or diminished social, economic, and environmental conditions, and seek opportunities to provide benefits to these conditions along with wildlife mitigation objectives.
- Address concerns over additions to public land ownership and impacts on local communities, such as reduction or loss of local government tax or economic base, or consistency with local governments' comprehensive plans.

## **2. Involve Stakeholders (Alternative 5)**

Under this alternative, BPA would support more stakeholder and public involvement than under the other alternatives. Stakeholder involvement would focus on identifying relevant environmental issues, concerns, and opportunities. Involvement might include more project information being presented to the public, including public meetings, advertisements, and/or fact sheets.

In addition to the required prescriptions, project managers would undertake the following:

- *[For projects involving property acquisition, including leases and easements]* Invite affected interests to participate in an advisory project management planning group; those invited should include management agencies, adjacent landowners, county commissioners, and Indian Tribes where the project might affect a Tribal "usual and accustomed area" (see Chapter 3).
- Elicit public input by a variety of means, including mailings, public notices, and public meetings and workshops early in the planning process; consider alternative means of eliciting public input, such as postings on the Internet and radio advertisements.
- Make special efforts to translate technical information into a format easily readable by laypersons.
- Prepare non-English-language publications where such publications are necessary to communicate issues to stakeholders.
- 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.
- Provide non-binding mediation to agencies or Tribes disputing project management planning, including selection of a mutually acceptable mediator within 30 days of written request, all parties' commitment of best efforts to resolve the dispute in mediation, and suspension of related legal action for at least 60 days from the start of mediation and completion of two mediation sessions.

### **3. Develop a Statement of the Desired Future Condition (Alternative 5)**

Under Alternative 5, BPA would support concepts that seek improvement of a wide range of social, economic, and natural resource conditions in a manner that would complement or increase efficiency of wildlife mitigation projects.

Project managers would undertake the following:

- Identify a desired future condition that responds specifically to achievement of biological objectives.
- Identify a desired future condition that responds to existing social and economic conditions.
- Identify a desired future condition that includes those principal benefits that the mitigation area is intended to provide to stakeholders, consistent with the primary goal of achieving wildlife mitigation.

### **4. Characterize Site Conditions and Trends (Alternative 5)**

Because a wide range of social, economic, cultural, and natural resource issues would be considered under Alternative 5, BPA would encourage characterization of the full spectrum of environmental elements to ensure that wildlife mitigation projects protect and improve general environmental resources in addition to achieving wildlife mitigation.

In addition to the required prescriptions, project managers would undertake the following:

- Identify all relevant ecological, social, and economic systems that might be affected by the project (long-term and short-term).
- Establish, for both wildlife and general environmental resources, environmental baseline conditions against which change can be measured (related to performance standards described in step 5).

### **5. Establish Project Goals (Alternative 5)**

Under Alternative 5, BPA would encourage project managers to include social, economic, cultural, and natural resource protection and improvement goals that complement the primary goal of wildlife mitigation.

Project managers would undertake the following:

- Identify, as a project goal, protection and improvement of environmental resources other than wildlife.

- Establish specific performance standards (goals) for relevant economic, social, cultural, and other environmental resources systems and features (e.g., fish, soils, water quality).
- Identify, as a project goal, improvement of forest, rangeland, and aquatic health, in cooperation with the BLM and USFS under their implementation of the Eastside and Interior Columbia River Basin EISs (BLM and USFS 1996a, 1996b).
- *[For projects involving wetlands]* Consider the objectives of the North American Waterfowl Management Plan.
- Include, as a project goal:
  - \* protection of high-quality native or other habitat or species of special concern (whether at or adjacent to the project site), including endangered, threatened, or sensitive species;
  - \* development of riparian or other habitat that can benefit both 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; and
  - \* development of habitat that complements the activities of the region's Tribes, state and Federal wildlife agencies, and private landowners.

#### **6. Develop and Implement an Action Plan for Achieving the Goals (Alternative 5)**

Under Alternative 5, BPA would support certain actions providing side benefits for fish, recreation, local economic productivity, or other resources. Management techniques likely to have adverse environmental impacts would be minimized or avoided. Additional program-wide standards, guidelines, and mitigation measures would be established to ensure protection of environmental resources.

In addition to the required prescriptions, project managers would undertake the following:

- Favor wildlife management activities with side benefits for fish (e.g., riparian habitat restoration).
- Apply the potential program-wide mitigation measures detailed in Chapter 4, as appropriate to protect the environment.
- Follow the BLM and USFS standards and guidelines developed to protect general environmental resources within the planning area (Eastside and Interior Columbia River Basin EISs; BLM and USFS 1996a, 1996b).

- Encourage economic uses consistent with biological objectives (including crop, livestock, and timber production).
- Use available local supplies and labor to accomplish project goals and objectives.
- Identify opportunities for work skill training in conjunction with wildlife mitigation activities. For example, encourage construction contractors to use the local employment security office to hire staff for positions that involve on-the-job training.
- To protect farm land, acquire lands not currently under commercial agricultural use.
- *[In counties already containing a large amount of Federal lands]* Favor selection of public lands for acquisition (rather than private lands).
- Encourage public use consistent with wildlife objectives; identify safe public recreational opportunities that do not jeopardize project biological objectives or significantly alter local social settings.
- Maintain existing primary access roads open for public vehicular travel as practicable.
- Use conservation tillage practices for crop production on mitigation lands.
- Identify scientific educational opportunities.
- *[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 Final Environmental Impact Statement for Managing Competing and Unwanted Vegetation (USFS 1988).
- *[For projects involving vegetation control]* Conduct weed control programs using joint multi-agency planning.
- *[For projects involving property acquisition (including leases and easements)]* Require special use permits for resource harvest; deny permits where the use might interfere with protection of general environmental resources.
- Use fertilizers with the lowest environmental cost that can still achieve acceptable results.
- Identify opportunities to foster public appreciation of the relationship between natural resources and Tribal culture.
- Identify recreational opportunities suitable for physically disabled persons.

- Identify opportunities to foster public appreciation of wildlife and wildlife mitigation activities.

#### **7. Monitor Conditions and Evaluate Results (Alternative 5)**

Under Alternative 5, BPA would encourage and support more comprehensive monitoring of general environmental resources than under the other alternatives.

Project managers would undertake the following actions:

- Monitor performance standards (established under Step 5) for local economic productivity and tax base, social conditions, cultural resource protection, and natural resources (e.g., fish, wildlife, soils, water quality).

#### **8. Adapt Management According to New Information (Alternative 5)**

Under Alternative 5, BPA would encourage and support adaptive management actions that respond to environmental problems or opportunities identified through monitoring. Project managers would also be encouraged to apply new knowledge, insights, or technologies that might contribute to environmental protection and improvement, consistent with the objectives of wildlife mitigation.

Project managers would undertake the following:

- Use monitoring information to guide annual management priorities and activity planning for protection and/or improvements of social, economic, and environmental conditions.

#### **2.1.7 Alternative 6 - Balanced Action [BPA's Preferred Alternative]**

BPA's preferred alternative seeks to standardize the planning and implementation process by undertaking the prescriptions of Alternative 2 and **by achieving balance among the purposes individually emphasized in the other action alternatives(#s 3-5): (1) meeting the biological objectives of wildlife mitigation projects, (2) achievement of cost and administrative efficiency, and (3) protection and improvement of other environmental resources when those actions would support wildlife mitigation.**

Under Alternative 6, BPA would support a wide range of actions to achieve wildlife mitigation consistent with Council's goals and priorities. BPA would place a strong emphasis on achieving the biological objectives in the least costly manner. Also, project managers would apply program-wide measures as appropriate to protect the environment, including soils, fish and water resources, vegetation, non-target wildlife, land use, local economies related to the environment, recreation, and air quality (see section on program-wide mitigation measures under each resource discussed in Chapter 4).

Unlike other alternatives, this alternative would develop new mitigation projects similar to those previously developed. The primary difference between the preferred alternative and the existing situation (No Action) is that, under Alternative 6, (1) BPA would establish a standard planning

process and (2) project managers would apply program-wide mitigation measures, as appropriate, to protect the environment. These two differences would allow BPA to implement wildlife mitigation programs more efficiently and with greater consistency than under the current case-by-case approach.

### **1. Define the Area of Concern/Interest (Alternative 6)**

Under Alternative 6, project managers would focus primarily on the Council's priority habitat types and species.

Public lands would be favored as mitigation sites so as to minimize potential economic effects. Project managers would also seek to establish projects that could take advantage of existing land management systems or that could eliminate existing management inefficiencies.

In addition to the required prescriptions, project managers would undertake the following:

- Select boundaries, focusing on habitat type and species priorities and accompanying elements that the Council has identified in its Fish and Wildlife Program. (See Table 1-1; Council 1995.)
- When identifying potential mitigation sites, examine public lands first to determine opportunities for adjustments, land exchanges, and reciprocal management agreements that eliminate management inefficiencies and inconsistencies.
- Consider long-term lease or easement acquisition where public lands are not available.
- If possible, establish partnerships for achieving project objectives, including agreements with non-electric power development mitigation programs, to ensure coordinated and expeditious program implementation.
- Address concerns over additions to public land ownership and impacts on local communities, such as reduction or loss of local government tax or economic base, or consistency with local governments' comprehensive plans.

### **2. Involve Stakeholders (Alternative 6)**

Under Alternative 6, project managers would actively seek public input and would plan cooperatively with government agencies or other entities to maximize planning and management efficiencies.

In addition to the required prescriptions, project managers would undertake the following:

- 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 posting notice 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.

- 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 (Alternative 6)**

Under Alternative 6, BPA would support concepts that keep long-term management costs low, while ensuring coordination with watershed-level planning efforts.

Project managers would undertake the following:

- Identify a desired future condition that responds specifically to achievement of biological objectives.
- Facilitate the development of a statement of desired future condition, in cooperation with watershed activities.
- Identify a desired future condition that is self-sustaining (low maintenance).

### **4. Characterize the Site Conditions and Trends (Alternative 6)**

With the primary focus on achievement of biological objectives, BPA would support the collection of the information necessary to achieve wildlife mitigation and to monitor results.

In addition to the required prescriptions, project managers would undertake the following:

- Establish baseline information for habitat and species against which change can be measured (related to the "measurable biological objective" standard included in step 5).

### **5. Establish Project Goals (Alternative 6)**

Under Alternative 6, project managers would establish mitigation goals for each project, including those goals established by the Council.

Project managers would undertake the following:

- Establish measurable biological objectives (e.g., number of habitat units, acres and/or habitat types, list of indicator species).

- Include, as a project goal:
  - \* protection of high-quality native or other habitat or species of special concern (whether at or adjacent to the project site), including endangered, threatened, or sensitive species;
  - \* development of riparian or other habitat that can benefit both 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 and state, Federal wildlife agencies, and private landowners; and
  - \* a future condition that is self-sustaining after initial improvements have been completed.
- For forest lands, consider the recommended goals outlined in the Federal Wildland Fire Management Policy and Program Review (USDI and USDA, 1995). (The report recommends that agencies develop a plan-by-plan strategy to introduce landscape-scale prescribed burns across agency boundaries. The report also directs agencies to seek opportunities to enter into partnerships with Tribal, state, and private land managers to achieve this objective.)
- Allow, as a project goal, sustainable revenue generation (e.g., user fees, crop production, timber harvest) to reduce initial or long-term Federal costs *only* if consistent with biological objectives.

#### **6. Develop and Implement an Action Plan for Achieving the Goals (Alternative 6)**

Under Alternative 6, BPA would consider support of a wide range of management techniques and other actions to achieve wildlife mitigation.

In addition to the required prescriptions, project managers would undertake the following:

- Consider the full range of management techniques available, and use the method that best achieves the biological objective in a cost-effective manner, as determined on a case-by-case basis. See Appendix A for a complete list of techniques.
- Apply program-wide the potential program-wide mitigation measures in Chapter 4, as appropriate to protect the environment.
- Favor natural regeneration over active restoration where the same biological objectives can be achieved in a reasonable amount of time.

- Consider passive or active recreation, providing it does not interfere with achieving wildlife mitigation.
- For forest lands, enter a collective management agreement with Federal and state landowners to implement actions outlined in the Federal Wildland Fire Management Policy and Program Review (USDI and USDA, 1995).
- Dedicate to the project any site-specific user fees or revenue gained from commerce that results from the exclusive use of the property. (Revenues generated from hunting licenses or other wildlife recreation-related fees that cannot be directly linked to wildlife mitigation activities or that are identified in site-specific management plans will be excluded.)
- Favor wildlife management activities that have side benefits for fish, e.g., riparian habitat restoration.
- Encourage the use of available local supplies and labor to accomplish project goals and objectives.
- Identify opportunities for work skill training in conjunction with wildlife mitigation activities. For example, encourage construction contractors to use the local employment security office to hire staff for positions that involve on-the-job training.
- *[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 Final Environmental Impact Statement for Managing Competing and Unwanted Vegetation (USFS 1988).
- *[For projects involving vegetation control]* Conduct weed control programs using joint multi-agency planning.
- Control nuisance animals or unwanted or competing plant species where they are hindering establishment of vegetation.
- Use predator control only when needed to increase rare species or to establish new populations of species susceptible to predators.
- Consider recreational opportunities suitable for physically disabled persons where existing access allows.

## **7. Monitor Conditions and Evaluate Results (Alternative 6)**

Under Alternative 6, BPA would encourage and support decision-oriented monitoring that can be used to evaluate the success of mitigation efforts and to make necessary adjustments to better achieve objectives.

Project managers would undertake the following:

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

## **8. Adapt Management According to New Information (Alternative 6)**

Under Alternative 5, BPA would encourage and support adaptive management actions that respond to problems or opportunities identified through monitoring. Project managers would also be encouraged to apply new knowledge, insights or technologies that may contribute to meeting biological objectives.

Project managers would undertake the following:

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

### **2.1.8 Available Management Techniques**

While the alternatives present a range of possible strategies, goals, and procedural requirements for wildlife mitigation projects, Project Management Plans will need to include actual site-specific techniques to support and achieve wildlife mitigation. The standardized requirements would influence the implementation of these techniques. Table 2-1, following, lists techniques that may be employed under some or all of the alternatives. The techniques are organized by function; in most cases, more than one specific technique can be employed at the same time. Appendix A provides a full description of each technique.

Table 2-1. Relative Use of Techniques Among Alternatives<sup>3</sup>

Technique	Alt 1: No Action (assuming case-by- case decisions)	Alt 2: Base Response	Alt 3: Biological Objectives	Alt 4: Cost and Admin. Efficiency	Alt 5: General Environ- mental Protection	Alt 6: Balanced Approach
<b>RESOURCE ACQUISITION</b>						
Fee-title Acquisition and Transfer						
Easement Acquisition						
Long-term Lease						
Cooperative Management				+		+
<b>PLANT PROPAGATION</b>						
Transplanting			+	-		
Seeding			+	-		
Irrigation	-	-	+	-		-
Fertilization			+	-	-	
<b>HABITAT CREATION AND CONVERSION</b>						
Creating or Expanding Wetlands			+	-	-	
Artificial Islands	-	-	+	-	-	-
Artificial Nest Structures	+	+	+	-	-	+
<b>WATER DEVELOPMENT TECHNIQUES</b>						
Wells	-	-		-	-	-
Diversions	-	-	+	-	-	-
Springs	+	+	+	-	-	+
Check Dams/Impoundments	-	-	+	-	-	-
Guzzlers	+	+	+	-	-	+
Water Rights Acquisition	-	-	+	-	-	-

+ = frequent use      - = infrequent use      X = not used

**Bonneville Power Administration Wildlife Mitigation Program Final EIS**

<b>Technique</b>	<b>Alt 1: No Action (assuming case-by- case decisions)</b>	<b>Alt 2: Base Response</b>	<b>Alt 3: Biological Objectives</b>	<b>Alt 4: Cost and Admin. Efficiency</b>	<b>Alt 5: General Environ- mental Protection</b>	<b>Alt 6: Balanced Approach</b>
<b>WATER DISTRIBUTION TECHNIQUES<sup>4</sup></b>						
Pipelines	-	-	-	-	-	-
Culverts	+	+	+	-	-	+
Drainage Ditches	*	*	*	*	*	*
<b>FIRE MANAGEMENT TECHNIQUES</b>						
Active Management	+	+	+	-	-	+
Let Burn	x	x	x	x	x	x
<b>VEGETATION MANAGEMENT: IMPROVEMENT AND CONTROL</b>						
Herbicides	-	-	+	-	-	-
Mechanical Removal	-	-	+	-	+	-
Biological Control	*	*	+	-	-	-
Hand Pulling	-	-	-	-	+	-
Prescribed Burn	-	-	+	-	-	-
Water Level Manipulation	-	-	+	-	-	-
<b>SPECIES MANAGEMENT TECHNIQUES</b>						
Introduction	-	-	+	-	-	-
Predator/ Nuisance Animal Control	-	-	+	*	-	-
<b>MULTIPLE USE TECHNIQUES</b>						
Crop Production	-	-	*	+	+	*
Timber Production	-	-	*	+	+	*
Grazing	-	-	*	+	+	*
Education and Recreation (Public Use Management)	-	-	*	-	+	-

4

**+** = frequent use      **\*** = infrequent use      **x** = not used

Technique	Alt 1: No Action (assuming case-by- case decisions)	Alt 2: Base Response	Alt 3: Biological Objectives	Alt 4: Cost and Admin. Efficiency	Alt 5: General Environ- mental Protection	Alt 6: Balanced Approach
Facility Development	-	-	-	-	-	-
<b>TRANSPORTATION / ACCESS TECHNIQUES</b>						
Land Use Restrictions	-	-	+	+	-	-
Road Construction	-	-	-	-	-	-
Road Maintenance	-	-	-	-	+	-
Road Decommissioning	-	-	+	-	+	+

+ = frequent use      - = infrequent use      x = not used

## 2.2 COMPARISON OF ALTERNATIVES AND SUMMARY OF IMPACTS

Each of the five action alternatives identifies a different approach to standardizing the planning and implementation of individual wildlife mitigation projects funded by BPA.

Under **Alternative 1, No Action**, BPA would continue to implement each wildlife mitigation project on a case-by-case basis.

**Alternative 2, Base Response**, contains only those prescriptions required by law, and represents the **minimum restrictions and guidance** that BPA must place on project managers developing BPA-funded wildlife mitigation projects. **Alternatives 3-6 also contain these minimum requirements.**

Under **Alternative 3, Biological Objectives Emphasis**, BPA would support **only those actions intended specifically to achieve biological objectives**; however, project managers would retain a great deal of flexibility to adapt application of specific techniques and other actions to best meet the biological objectives of the project. Other resources and issues would be considered only to the minimum extent required by law, as outlined in Alternative 2, Base Response.

Under **Alternative 4, Costs and Administrative Efficiency Emphasis**, BPA would support **only the least costly approach** to achieving the project's biological objectives. Project managers would be limited in the techniques and resources available to them the implement their proposed projects.

Under **Alternative 5, General Environmental Protection**, the environmentally preferred alternative, BPA would support added measures to protect **fish, recreation, local economic productivity (related to the natural or physical environment), or other resources, while achieving biological objectives**. Project managers would also apply potential program-wide mitigation measures as appropriate to protect the environment. Project managers could consider a wide range of project objectives under this alternative, although a wide range of objectives might reduce the resources available for meeting the project's biological objectives.

**Alternative 6, Balanced Response**, BPA's preferred alternative, **seeks to achieve balance among the purposes individually emphasized in the other action alternatives (#s 3-5): (1) meeting the biological objectives of wildlife mitigation projects, (2) achievement of cost and administrative efficiency, and (3) protection and improvement of other environmental resources when those actions would support wildlife mitigation**. Alternative 6 would result in new mitigation projects similar to those previously developed. The primary difference between the preferred alternative and the existing situation (No Action) is that, under Alternative 6, (1) BPA would establish a standard planning process and (2) project managers would apply potential program-wide mitigation measures as appropriate to protect the environment. These two differences would allow BPA to implement wildlife mitigation programs more efficiently and with greater consistency than under the current case-by-case approach.

Table 2-2 provides a summary and comparison of the environmental consequences of each alternative. Table 2-3 provides a comparison of the alternatives against the decision factors (achievement of biological objectives, cost and administrative efficiency, and compliance with laws and regulations, and protection and improvement of environmental resources).

2

Bonneville Power Administration Wildlife Mitigation Program Draft EIS

Table 2-2. Summary of Affected Environment and Environmental Consequences

Environmental Resource	Existing Conditions	Alternative 1: No Action	Alternative 2: Base Response (Impacts Common to All Action Alternatives)	Alternative 3: Biological Objectives Emphasis	Alternative 4: Cost and Administrative Efficiency Emphasis	Alternative 5: General Environmental Protection Emphasis	Alternative 6: Balanced Action (Preferred Alternative)
<b>Soils</b>	Diverse across the Columbia Basin. Sources include glacial till, basalt erosion, windborne loess deposits, and volcanism. Soils are vulnerable to erosion, which can lead to poor soil productivity and water quality.	Based on recently completed projects, only minor soil disturbances would occur during implementation of projects.	In general, soil conditions would improve at new wildlife mitigation sites as lands are protected from ground disturbance. Some soils would be disturbed during initial project implementation.	Relatively high amounts of short-term erosion might occur during the initial project phases; however, over the long term, soil conditions would greatly improve over existing conditions.	Only minor soil disturbances are expected, as project managers would rely mostly on natural regeneration to achieve objectives.	Soils would be protected, although continued commercial uses of some mitigation lands might result in some ongoing erosion.	This alternative would generally benefit soils. Moderate short-term soil erosion would occur at some new sites as projects were implemented, followed by increasing soil stability.
<b>Fish/Water Resources and Quality</b>	The Basin's water resources provide Tribal values and use, irrigation, recreation, fish and wildlife habitat, transportation corridors, drainage, flood control, drinking water, and power. Soil erosion is one of the most common sources of water-quality and fish-habitat reductions.	Individual projects would continue without program-wide requirements, so impacts could vary widely. Overall, fish and water quality would benefit as vegetation near water is restored and/or protected.	Ground-disturbing activities to increase habitat values would potentially reduce water quality and fish habitat in the short term. State water regulations would be followed under all alternatives, so no significant adverse impacts are expected.	Short-term impacts followed by long-term benefits would be expected as a wide range of projects is implemented.	Relatively few actions affecting fish or water would occur.	Project managers would include side benefits to fish in project management plans; fish and water resources would therefore be expected to improve.	Some initial sediment contribution to streams or other water features might be unavoidable during project implementation, but the long-term trend would be toward improved protection.
<b>Wildlife</b>	Many sensitive wildlife species in the Basin are associated with native shrub-steppe and old-growth forests. Wetlands, riparian, cliffs, talus, and caves are other important habitat types.	Target wildlife habitats and species would increase. Some wildlife disturbance would occur when projects first begin.	All alternatives benefit target wildlife species and habitats as well as a variety of other species. Habitat changes and human disturbances could adversely affect some non-target wildlife species.	This alternative has the highest potential for short-term disturbance of wildlife, but also the highest potential for long-term gains in target and incidental species and habitats.	This alternative has the lowest potential for short-term disturbance of wildlife, but also the lowest potential for long-term gains in target and incidental species and habitats.	No significant adverse impacts are expected, because program-wide mitigation measures would be applied, as appropriate. Continued economic use of some mitigation lands may reduce local habitat values.	No significant adverse impacts are expected on wildlife. As with Alternative 5, program-wide measures would be applied to protect wildlife, as appropriate.
<b>Vegetation</b>	Basin contains three general vegetation zones: coniferous forest, sagebrush, and perennial grassland. Crop production, grazing, logging, and hydroelectric projects have greatly altered basin vegetation types, and native plant communities are relatively rare.	Overall, native plant communities would continue to benefit (after some initial impacts) from the activities associated with wildlife mitigation.	All alternatives would require some initial disturbance of vegetation as projects are implemented. Over time, vegetation communities associated with target wildlife habitat (including riparian, forest, wetlands, and shrub-steppe) would increase.	Use of active techniques would accelerate development of desired plant communities, although a narrow focus on biological objectives could reduce those plant communities that do not support target species.	This alternative disturbs vegetation least because it relies heavily on natural revegetation.	Relatively low initial vegetation disturbance because the more intensive habitat improvement techniques would be used infrequently. Program-wide measures would be applied, as appropriate, to protect rare plants and sensitive plant communities.	As with Alternative 5, there would be relatively low initial vegetation disturbance. Program-wide measures would be applied, as appropriate, to protect rare plants and sensitive plant communities.
<b>Land and Shoreline Use</b>	Land ownership includes large areas of private crop- and forest land; private residential, recreational, and industrial properties; and state, Tribal, and Federal ownership.	Without program-wide standards, impacts on land and shoreline use could vary widely, depending on the circumstances surrounding each project.	Land and shoreline uses would change at new wildlife mitigation sites, including some localized losses of grazing, timber production, and farming.	Changes in land and/or shoreline use might be greater at some new mitigation sites under this alternative, as project managers maintain a narrow focus on achieving biological objectives.	This alternative has the lowest potential for significant changes in land use. High-value commercial properties would be avoided because of the higher costs associated with obtaining such properties.	Potential conflicts in land and/or shoreline use would be avoided during the extensive early planning process included in this alternative.	As under Alternative 5, early planning and application, as appropriate, of program-wide measures would serve to avoid most significant conflicts in land and/or shoreline use.
<b>Cultural and Historic Resources</b>	Most identified cultural resources in the Basin are archeological sites such as campsites, rock art, burial grounds, and rock shelters. There are 13 Federally recognized Native American Tribes with interests and/or reservations in the Columbia River Basin within the United States.	BPA would continue to lead cultural resource protection efforts on a project-by-project basis.	Potential impacts on cultural resources would be directly related to the amount of ground disturbance that would occur. This alternative presents the minimum level of protection required by law.	This alternative has the highest potential for ground-disturbing activities related to habitat improvement, and correspondingly high potential for disturbing unknown cultural resources.	This alternative would have a relatively low amount of ground disturbance, due to reliance on natural regeneration of vegetation (rather than more intensive techniques).	Extra efforts to protect cultural resources would reduce the potential for impacts, although some disturbances might result from commercial and/or recreational use on some new mitigation sites.	A moderate amount of ground would be disturbed as new projects are implemented. Surveys would be conducted where needed to avoid impacts on cultural or historic resources.
<b>Economics</b>	Major sources of employment in the Basin include agriculture, forestry, real estate, retail, services, and government. Much of the affected environment is rural and sparsely populated.	No program-wide standards would be present to protect natural-resource-based economies, although BPA typically would consider such protection on a case-by-case basis. Commercial use of mitigation lands and associated taxes would decrease.	Loss of revenues and local taxes from resource lands is unavoidable where such uses have historically occurred. These impacts would add to the cumulative effect of ongoing regional reductions that have occurred in available timber and grazing lands.	This alternative has the greatest potential for short-term local employment and revenues, although economic benefits over the long-term would be minimal.	There would be very little effect on local or regional economies.	Providing side benefits to local economies would be a project goal, so some projects developed under this alternative would benefit local economies.	As with the other alternatives, relatively minor changes in local economies and/or tax bases are expected.
<b>Recreation and Visual</b>	The Basin provides a variety of outdoor recreational opportunities. Many people from the more populated areas of western Oregon and Washington visit rural Basin areas for recreation.	Access restrictions would be necessary and unavoidable at some new mitigation sites to protect sensitive wildlife habitats.	Access restrictions would be necessary and unavoidable at some new mitigation sites in order to protect sensitive wildlife habitats.	Recreational use of mitigation lands would be minimized so that funds could be focused on achieving biological objectives.	As with Alternative 3, recreational use would be minimized so that funds could be focused on achieving biological objectives.	There would be a potential net increase in recreational opportunities at lands selected for new mitigation sites.	Recreational use would be allowed, but some net loss in opportunities may occur as emphasis shifts to achieving biological objectives.
<b>Air Quality</b>	Most of the Basin is rural and generally has fewer air quality problems than do the population centers. Smoke from field-burning and wind-borne dust sometimes creates air quality problems in the Basin.	Burning amounts would be developed on a case-by-case basis.	Smoke from prescribed burning would locally reduce air quality and visibility. State and local regulations would be followed.	This alternative has the greatest potential for prescribed burns and associated smoke generation.	This alternative would have the least potential for prescribed burns and associated smoke generation.	There would be relatively low use of fire, fertilizers, and herbicides; and relatively low associated impacts on air quality.	Relatively minor impacts would be associated with drifting smoke.

Table 2-3. Predicted Performance Summary

Decision Factor	Alternative 1: No Action	Alternative 2: Base Response Emphasis	Alternative 3: Biological Objectives Emphasis	Alternative 4: Cost and Administrative Efficiency Emphasis	Alternative 5: General Environmental Protection	Alternative 6: Balanced Action (Preferred Alternative)
<b>Achievement of Biological Objectives</b>	Meets objectives, but without benefit of consistent management direction.	Meets only minimum objectives with minimal consistent management direction.	Greatest predicted achievement of biological objectives among alternatives.	Meets only the minimum objectives.	Potentially reduced achievement of objectives as some funds are directed towards protection or improvement of non-wildlife resources.	Meets objectives.
<b>Cost and Administrative Efficiency</b>	Inefficient because BPA would need repeatedly to address common issues for every project.	Provides efficient process for implementation, but requires that many issues be addressed on a case-by-case basis.	Highest predicted costs because of the focus on best achieving biological objectives with minimal regard to costs.	Lowest predicted costs.	Potentially high costs because funds would be directed to general environmental protection. Provides opportunity for shared efforts among agencies and other land managers that could increase efficiency of interrelated projects and/or programs.	Provides efficient process for implementation, but requires some additional costs for general environmental protection.
<b>Compliance with Laws and Regulations</b>	In compliance.	In compliance.	In compliance.	In compliance.	In compliance, with additional assurances for documentation of compliance. May be inconsistent with agency statutory authorities.	In compliance.
<b>General Environmental Protection</b>	Protects the environment through requirements set forth in individual EISs or EAs prepared for each project.	Ensures only the minimum level of environmental protection required by law.	Ensures only the minimum level of environmental protection required by law.	Ensures only the minimum level of environmental protection required by law.	Provides maximum protection and improvement of environmental resources, consistent with achievement of biological objectives.	Provides general environmental protection, consistent with achievement of cost efficiency, biological objectives, and legal compliance.