



United States  
Department of  
Agriculture

Forest  
Service

Blue Mountain  
Ranger District

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**File Code:** 1950  
May 5, 2003,

Dear Forest User:

On May 1, 2003 as Blue Mountain District Ranger on the Malheur National Forest, I made a decision to replace culverts that are currently barriers to fish passage at 8 road crossings on Granite Boulder Creek, Vincent Creek, and Vinegar Creeks, with either open-bottom arch culverts, or box culverts with open bottoms; both of these types of culverts act as a natural streambed. This decision authorizes another 3 culverts to be replaced with low-water crossings (engineered, rocked fords). Additionally, the decision implements the construction at three locations above fish bearing portions of Vincent and Vinegar Creek, on roads that receive very little traffic; armored drain dips will be constructed to keep water from either flowing down roads during high flows, or washing out culverts entirely. The project would begin implementation in 2003, and would open about 9 miles of stream to all life stages for 2 threatened, and one sensitive fish species by the time of its completion in 2004. This action occurs in Granite Boulder Creek, Vincent Creek, and Vinegar Creek subwatersheds.

Please find the associated Decision Notice/Finding Of No Significant Impact and Appendix to the Environmental Assessment that responds to substantive comments enclosed herewith.

This public notice is appearing in the *Blue Mountain Eagle*, John Day, Oregon, May 7, 2003. This decision is subject to appeal pursuant to Forest Service regulations at 36 CFR 217. Appeals must be filed within 45 days from the date of publication of this notice in *Blue Mountain Eagle*. Notice of Appeals must meet the requirements of 36 CFR 217.9.

For additional information or clarification, contact James Kelly-Project Leader, Brian Lynch—District NEPA Coordinator, or myself at (541) 575-3000.

Thank you for your ongoing interest in land and resource management planning and implementation on the Blue Mountain Ranger District.

Sincerely,

/s/

Michael L. Montgomery  
District Ranger

Enclosures:  
Decision Notice and Finding Of No Significant Impact and Appendices

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JK/jk

**Decision Notice**  
**and**  
**Finding of No Significant Impact**  
**for the**  
**Blue Aquatic—Culvert Replacement Environmental Assessment**  
**USDA Forest Service**  
**Malheur National Forest**  
**Blue Mountain Ranger District**  
**Grant County, Oregon**

**Decision Notice**

**Introduction**

The Blue Aquatic—Culvert Replacement Environmental Assessment (hereafter referred to as the EA), Biological Evaluation (BE) and Biological Assessment (BA), was released for a 30-day public review on March 2, 2003, this analysis documents two alternatives considered in detail. Based on the analysis in the EA and public comment received, the Forest Service has reached a decision, documented in this Decision Notice, on the replacement of eight culverts and the repair of four additional road crossings. The project area is located on the Blue Mountain Ranger District, approximately 25 air miles east of John Day, Oregon and is entirely on National Forest System lands.

**Decision**

Based on the analysis in the EA, for this project, the availability of funds and consideration of public comments, I have decided to implement Alternative Two, the Proposed Action. This action occurs in Granite Boulder Creek, Vincent Creek, and Vinegar Creek subwatersheds. This decision authorizes the replacement of culverts, thereby removing barriers to fish passage at 8 road crossings with either open-bottom arch culverts, or box culverts with open bottoms; both of these types of culverts act as a natural streambed. This decision authorizes 3 culverts to be replaced with low-water crossings (engineered rocked fords). Additionally, the decision implements the construction at three locations above fish bearing portions of Vincent and Vinegar Creek (on roads that receive very little traffic), armored drain dips that will be constructed to keep water from either flowing down roads during high flows, or washing out culverts entirely. The project would begin implementation in the year 2003 and would open about 9 miles of stream to all life stages for 2 threatened and one sensitive fish species by the time of its completion in 2004.

When compared to Alternative Two, Alternative One would forego an opportunity to improve important fish habitat and would leave fish barriers in streams that support 2 threatened fish species and one sensitive fish species leaving 9 miles of stream habitat closed to various life stages of threatened and sensitive fish.

## **Other Alternatives Considered**

### **Alternative One**

In addition to the selected alternative, I considered one other alternative in detail, Alternative One—No Action. Under the No Action Alternative, current management plans would continue to guide management of the project area. This Alternative would have allowed the continual fish passage barriers thus limiting connectivity and the increased chance of future crossing failures to persist.

### **Alternative dropped from consideration**

Another alternative dropped from detailed consideration would have developed stream structure to improve fish habitat by establishing complexity through the placement of large woody material. While I feel this remains a viable project, because of tribal opposition and opposition from members of the public, during public scoping, I directed the interdisciplinary team (IDT) to drop this alternative from detailed consideration. I made this decision in order to try to assure the removal of barriers to threatened fish species to proceed without delay—as funds are now available to replace culverts, that will make possible the reestablishment of connected fish populations above and below these culverts. By showing side-by-side an action alternative that met the need for eliminating passage barriers for threatened fish at 8 crossings and eliminating potential high water flow problems at 3 other crossings—with a no action alternative in manner that sharply presented the issues to myself and the public (40 CFR 1502.14), the EA as written, provides a clear basis for choice among options presented. In this manner based on the information and analysis presented, the IDT rigorously explored and objectively evaluated reasonable alternatives to proposed action in this project.

*Major design features of the decision are:*

- ❑ Remove barriers to fish passage at 8 road crossings in Granite Boulder Creek, Vincent Creek, and Vinegar Creek (see Map 1, Vicinity Map, Appendix A). To complete this work the following actions will occur:
  - Replacing 5 culverts with single span structures, which will be either open-bottom arch culverts, or box culverts with open bottoms; both of these types of culverts act as a natural streambed. These replacement structures would be installed in Granite Boulder Creek, Vincent, Vinegar Creeks and Blue Gulch a tributary of Vinegar Creek.
  - Replacing 3 culverts with low-water crossings (engineered rocked fords). These replacement structures would be installed in Vincent and Vinegar Creeks.
- ❑ Install 3 armored drain dips in roads over existing culverts up stream of fish bearing reaches where these configurations are needed for high flow relief and to reduce the potential of erosion and sediment release into fish-bearing streams. These improvements would be implemented in Vincent and Vinegar Creeks.
- ❑ Disturbed ground around each stream crossing will be planted with native (certified “weed free”) and/or non-invasive grass seed, native trees or shrubs if available, and mulch will be placed on bare soils to reduce erosion and moisture loss.

- **Timing:** All in-stream work would be completed<sup>1</sup> between July 15 and August 15 in Granite Boulder Creek (for bull trout spawning), Vinegar Creek and Blue Gulch (potential bull trout spawning) and July 15 until August 15, in Vincent Creek. Should all work not be completed in one operating season and ODFW cannot provide an extension of the work period, then the remaining work would be implemented in 2004-2005. Construction of armored drainage dips would not be limited to the July 15-August 15 in-stream work period as work would not affect streams.
- The crossings would accommodate an estimated 100-year return interval peak flow with overtopping over the road if the pipe arch capacity was exceeded.
- Unimpeded fish passage for all species and life stages would be provided during normal low flow and spring flow conditions (usual migration times).
- The reestablishment of the natural stream gradient, to the extent possible, at each of the four sites.
- All construction will commence after July 15 and may extend into the fall.
- Roads will be closed during construction.
- Mitigation (see page 3)
- Monitoring (see page 9)

## **Mitigation**

*The following mitigation will be adhered to:*

### **Mitigation for Working within RHCAs**

Actions would occur within stream channels (e.g. culvert placement, culvert removal), from July 15 through August 15 reducing possible stress on fish populations due to potential sediment delivery (Oregon Guidelines for Timing of In-Water Work to Protect Fish and Wildlife Resources, 1997). By accomplishing project work during this time, when stream flows are at their lowest levels, sediment input to streams would be minimized. This time is outside fish spawning periods, reducing possible impacts to spawning adults and their eggs. Exact timing may be altered depending on stream conditions, fish movement, and depth of water flow. Changes in timing will require a recommendation by a fisheries biologist or hydrologist, consultation with appropriate agencies and approval of the Responsible Official. Disturbed ground around each stream crossing will be planted with native and/or non-invasive grass seed, native trees or shrubs if available, and mulch will be placed on bare soils to reduce erosion and moisture loss.

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<sup>1</sup> Should in stream work be needed beyond this time frame to complete this project, ODFW provides extensions on a case-by-case basis depending upon flows.

**Sediment Mitigation for Project Points 1, 2, 3, 5, 6, 7, 8 and 11 (see EA Appendix A Map 3)**

- Erosion control measures, such as hay (straw) bales (certified weed-free) and filter cloth, will be used to prevent soil erosion into the stream channel. All imported and on site construction material not used in the project shall be hauled out upon completion. Disturbed ground around each new stream crossing will be planted with native and/or non-invasive grass seed, native trees or riparian shrubs if available, and mulch will be placed on bare soils to reduce erosion and moisture loss.
- Riprap will be provided from clean, erosion resistant rock from an upland source.
- The concrete foundations will be allowed to cure before backfilling and contact with stream water. Once the concrete foundations are complete and cured the stream will be rerouted between them.
- Pumped water will pass through filter bags and/or catch basins to settle out solids before returning to the stream or the water will be pumped to a flat area where it would seep into the soil.
- Each culvert removal and replacement will be completed in the same manner. The existing pipe will be removed with an excavator and all excavated material will be stored on the existing roadway above the high water line. The stream will be redirected away from the foundation area and isolated with sandbags and plastic sheeting. Concrete foundation sites will be excavated and then dewatered by pumping.
- The natural stream gradient based on measurements up and downstream, would be restored to the extent possible at each of the sites.

**Sediment Mitigation for Project Points 4, 5, 7, 8, 9, and 10 (see EA Appendix A Map 3)**

- Erosion control measures, such as hay bales and filter cloth, will be used to prevent soil erosion into the stream channel.
- All imported and on site-construction material not used in the project shall be hauled out upon completion. Disturbed ground around each new stream crossing will be planted with native and/or non-invasive grass seed, native trees or shrubs if available, and mulch will be placed on bare soils to reduce erosion and moisture loss.

**Best Management Practices**

Throughout the project, these Best Management Practices (BMPs) will be used to minimize adverse impacts to aquatic habitat.

- Operate machinery in road prism.
- Install temporary structures to protect the creek from construction sediment. Sediment filter fences or sediment traps will be installed at the downstream end of all culverts prior to beginning culvert installations, catch basin cleaning, and inlet/outlet ditch cleaning or construction. Sediment devices will remain in place until soils become stabilized. Soils may be stabilized by natural seed processes or promoted by artificial methods.
- A Forest Service employee qualified/certified in road construction will monitor the construction activities to ensure work is conducted in a workman-like manner and resource objectives are met.
- Require a delivery/storage/application plan to prevent petroleum products or other deleterious materials from entering water systems.
- Excess and unsuitable material will be taken to an upland disposal area.
- Areas of stream bank disturbance will be seeded or planted. Existing vegetation will be retained, as possible, and replanted to promote vegetation.

- An oil and hazardous substance spill contingency plan will be in place.
- Accomplish any instream work between July 15 and August 15 in Granite Boulder Creek (bull trout spawning), Vinegar Creek and Blue Gulch (potential bull trout spawning) and July 15 until September 15 in Vincent Creek.
- There is an existing borrow pit on FS Road 2010 that will be used to get grid-rolled or pit run rock for project sites. No waste sites have been identified if there is excess soil at project sites after implementation.

In addition to the above BMPs, this alternative will employ the following standard Regional BMPs (General Water Quality Best Management Practices, Pacific Northwest Region 1988) to protect water quality. (See Appendix B of the EA for a complete description of BMPs):

- R-1. General Guidelines for the Location and Design of Roads
- R-2. Erosion Control Plan
- R-3. Timing of Construction Activities
- R-4. Road Slope Stabilization (Planning)
- R-5. Road Slope and Waste Area Stabilization (Preventive)
- R-7. Control of Surface Road Drainage Associated with Roads
- R-10. Construction of Stable Embankments (Fills)
- R-11. Control of Side cast Material
- R-12. Control of Construction in Streamside Management Units
- R-13. Diversion of Flows Around Construction Sites
- R-14. Bridge and Culvert Installation and Protection of Fisheries
- R-15. Disposal of Right-of-Way and Roadside Debris
- R-16. Specifying Riprap Composition
- R-17. Water Source Development Consistent with Water Quality Protection
- R-18. Maintenance of Roads
- R-19. Road Surface Treatment to Prevent Loss of Materials
- R-22. Restoration of Borrow Pits and Quarries

#### **Traffic Mitigation**

- During construction, appropriate traffic control signs will be used at the following road junctions: FR 2010 and FR 2010618 (two locations); FR 4559 and FR 4550; FR 2010 and FR 2010292 (two locations).

#### **Mitigation For Historic Mining Concerns**

- If mercury from historic mining is found during project work, it would be treated in the appropriate and legal manner and the contractor would report such a finding to the Contracting Officers Representative (COR).

### **Mitigation for Noxious Weeds**

Prior to implementation of this project, all vehicles and equipment would be washed and inspected for noxious weed seed or vegetative material. Following implementation surveys would be conducted twice per year (spring and fall to pick up different flowering/seed dispersal times of plants) to locate noxious weeds. These surveys would be conducted for two years following project completion. If noxious weeds are found they would be hand pulled, plastic bagged and disposed of in a landfill or approved site. Seeding of disturbed ground will be performed following operations. Local native species seed will be used. See also Appendix B--Vegetation Management Strategy

### **Prevention of Noxious weeds**

This strategy refers to detection or amelioration of site conditions that stimulate or favor competing vegetation. Prevention does not involve direct treatment of competing vegetation, but anticipates potential vegetation problems and takes steps to avoid reaching a damage threshold. Use of natural controls is the key concept behind this approach.

The spread of noxious weeds are mainly due to vehicle traffic, recreational use, and ground disturbing activities. Several things may be done to prevent the invasion of noxious weeds on disturbed ground: 1) require vehicles and equipment be washed and inspected, 2) not park or stage vehicles with known infestations and 3) seed or mulch and seed the disturbed area with local native plants.

## **EARLY TREATMENT**

Early treatment involves initiating action to control competing vegetation before a damage threshold is reached. Control during the early development stages is usually easier, less costly, and can require fewer treatments.

Noxious weeds could occupy the disturbed ground created by this project by moving in from adjacent areas or carried in on equipment.

### **Decision Rationale**

I have decided to implement Alternative Two because it best meets the desired objectives to improve fish passage and accommodate large stream flow events with minimal, if any, stream channel and road impacts. Replacing the culverts will greatly improve upstream fish passage for threatened steelhead trout and bull trout, sensitive Chinook salmon as well as resident rainbow trout, thereby providing better population linkages between up and downstream populations. Impacts to the Vincent and Vinegar Creek channels resulting from high flows, and potential culvert blockages, will be lessened considerably because of the larger flow routing capacity of the new pipe arches. By selecting this alternative, about 9 miles of streams and essential habitat would be open to all life stages of threatened and sensitive species of fish in the Middle Fork of John Day River. I have decided to use rocked fords at three project points; two of these sites are on roads recommended for decommissioning (see discussion of Galena Watershed Analysis and Road Analysis, page 8 this decision document) and will be closed to traffic behind gates and used only occasionally for valid, but currently inactive mining claims. I have decided to use rocked fords because the advantages of fords are: 1) that there are no fills to fail; 2) fords can be constructed to channel water to the middle of the channel to protect the banks which reduces bank erosion, 3) fords are nearly maintenance free. Both fords and culverts would pass the high flows, which contain more sediment. The District hydrologist consulted with the San Dimas Technology Center, which concurred with a recommendation of rocked fords for closed roads.

The reason I have not selected Alternative One is because a decision to maintain the existing culvert

configuration by implementing Alternative One, or delay Alternative Two implementation would continue with an existing condition of blocked upstream fish passage for threatened steelhead trout, threatened bull trout, and sensitive Chinook salmon as well as resident rainbow trout, for various life stages of these fish, thereby leaving barriers to population linkages between up and downstream populations. By selecting this alternative about 9 miles of streams would continue to have fish barriers to one or more life stages of 2 threatened and one sensitive species of fish. Impacts to the Vincent and Vinegar Creek channels resulting during high flows, and potential culvert blockages, would also be more likely to occur.

### **Fish Passage**

By replacing the culverts to remove barriers to fish passage at 8 road crossings with bottomless pipe arches and/or rocked fords—will result in unimpeded upstream fish passage for all life stages of threatened and sensitive fish during most stream flows on about 9 miles of stream. The natural stream bottom in the new crossings will facilitate passage at a wide range of flows because the stream gradient will be similar to the channel above and below the crossing and the substrate will create velocity breaks and deeper water for fish to rest. Unimpeded fish passage should aid in reestablishing the connectivity of fish populations above and below the culverts. A fully “connected” population increases the gene flow and variability of individual genotypes, leading to a healthier fish population that is better able to withstand and/or recover from disturbance.

### **High Stream Flow Routing**

The larger pipe arches will accommodate stream flows estimated at the 100-year return interval flow (the current culverts have different capacities but none could accommodate a 100-year flow or larger). The greater capacity of the pipe arches will also allow more natural wood and sediment routing downstream during higher flows that would, over time, improve aquatic and riparian habitat downstream from the crossings. By installing drain dips up streams from culvert replacement on roads that receive very little traffic, the potential for road and stream channel degradation due to culvert blockage and uncontrolled overtopping will be reduced.

### **Threatened and Endangered Species**

This decision will have no effect on individuals or populations of bald eagles or Canada Lynx, as there is no habitat near the project site. As well this decision will have no effect on any listed threatened or endangered species of plants.

The fisheries biological assessment and supporting documentation for the Blue Aquatic Culvert Replacement Project has been reviewed by the interagency Level 1 team and found consistent with the Aquatic Conservation Strategy of the Northwest Forest Plan. The Level 1 team has concurred with the effect determination of May Affect, Likely To Adversely Affect on Mid-Columbia steelhead trout due to potential impacts to individuals (the long term effect is beneficial to the populations and species). In addition, a 7d determination under the Endangered Species Act has been made that concludes there will be no irreversible or irretrievable commitments of resources. Based on the information contained and the biological assessment and the interagency reviews and consistency findings, I have determined that there will be no significant effect on any listed fish species as a result of this decision. This decision is based on a biological opinion, dated 3/21/2003, received from the NOAA Fisheries and another biological opinion on 3/12/2003 from USF&WS.

## **Consistency With Applicable Plans, Laws and Regulations**

This decision is consistent with the following environmental laws, which are relevant to the proposed activities. Some laws require specific coordination with regulating agencies.

### **Malheur National Forest Land and Resource Management Plan (1990)**

The proposed action was developed to meet direction in the Malheur National Forest *Land and Resource Management Plan* as amended (also referred to as LRMP or Forest Plan). The proposed action will utilize methods to meet or exceed standards and guides.

### **Aquatic Conservation Strategies**

The Blue Aquatic Culvert Replacement Project is in compliance with LRMP and PACFISH:

**LRMP:** This action responds to the goals and objectives outlined in the Malheur National Forest *Land and Resource Management Plan* (LRMP 1990), and helps move the project area toward desired conditions described in that plan LRMP MA3B Standard 42 -- "Design and maintain roads to protect fisheries values and riparian area habitat."

**PACFISH:** "Implementation of Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and portions of California," and commonly referred to as PACFISH:

**PACFISH-RF-4** —"Construct new, and improve existing, culverts, bridges, and other stream crossings to accommodate a 100-year flood."

**PACFISH-RF-5** —"Provide and maintain fish passage at all road crossings of existing and potential fish-bearing streams."

## **Galena Watershed Analysis and Road Analysis**

The Galena Watershed Analysis Supplement was completed in 2002. This undertaking was a systematic procedure to characterize the aquatic, riparian, and terrestrial features within the watershed. Information gathered during watershed analysis was used to recommend land management activities, and develop monitoring programs. Also, the Galena Watershed Analysis—Supplement 2002, described a desired condition in the project area watersheds with the following, "Sediment sources are minimized and culverts would be suitably sized and positioned so that fish can pass through unobstructed."

Appendix G of the above mentioned watershed analysis contained a thorough Road Analysis which recommended adding or repair such as culverts, drain dips, and rocked fords. On page 37, this road analysis stated, "culverts on fish bearing stream reaches present a barrier to some life stage of native fish during some flow conditions. Culverts that become blocked or get washed out can also create barriers to fish and aquatic migration. Barriers adversely affect anadromous steelhead, salmon, and Bull Trout (T&E Listed Species), and resident trout in the analysis area. Other fish and aquatic species in the riparian ecosystems are also affected." The analysis also has recommendations for road decommissioning applicable to some of the roads in this project which have road segments recommended for decommissioning but include segments of roads that currently access mining

claims, however none of these claims are known to have active operations in progress, and the Forest has not received plans of operations for them in recent years. The road crossings where Alternative Two will implement rocked fords will permit fish passage until a time decommissioning can take place.

## **Public Involvement**

Public scoping was initiated in the spring of 2002, when a notice of intent to prepare an Environmental Analysis on this area was published in the March 12, 2002 edition of the *Blue Mountain Eagle*. Personal contacts were made with Federal, State and Tribal fisheries agencies during the course of the analysis.

The EA was released for a 30-day public review period on March 02, 2003. The purpose of the comment period was to provide the opportunity for the public to review and comment on proposed actions prior to decision. Approximately 149 copies of the EA were mailed out for public review one letter was received. Forest Service comments as an Appendix to the EA will be issued with this finding.

## **Monitoring**

Regional Office requirement for annual monitoring of Forest Service Road system to pass all life's stages of fish where culverts occur on fish bearing streams will assure the effectiveness of this project. Noxious weeds will be monitored twice per year (see Mitigation for Noxious Weeds, page 6). By this decision all mitigation measures will be included in any contract implementing this proposed action which would be inspected and monitored by a Forest Service Contract Officer (CO), or Contract Officer's Representative (COR).

## **Finding of No Significant Impact**

I have reviewed the Council on Environmental Quality Regulations for Significance (40 CFR 1509.27) and I have determined that the decision is not a major federal action that would significantly affect the quality of the human environment either individually or cumulatively; nor would this decision affect the quality of the human environment in either context or intensity. The finding is based on the following factors:

1. The analysis documented in the EA did not identify any individually significant adverse short or long-term impacts (EA page 22-31).
2. There will be no effects on public health and safety. Potential conflicts during construction and public traffic on major access routes are minimized by appropriate advisory signing and/or traffic control (EA page 22-31).
3. The decision will not result in any effects to unique geographic characteristics of the area, cultural or historic resources, parklands, prime farmlands, wild and scenic rivers or ecologically critical areas. No parkland, prime farmland or wild and scenic rivers are found in the project area. No adverse affects to cultural resources and historic places are expected. Short term, site-specific adverse effects may occur in riparian areas; but these effects are documented in the EA and the PACFISH objectives are met (see Aquatic Conservation Strategies page 8 and EA page 22-31).
4. The analysis completed and comments received did not identify any significant scientific controversy or disagreement concerning effects of the decision on the quality of the human environment (see EA page 3).

5. The decision will not result in any effects on the human environment that are highly uncertain or involve unique or unknown risks (EA page 22-31).
6. The decision implements the Malheur National *Land and Resource Management Plan*, (LRMP or Forest Plan) as amended, Management Area direction and it does not establish a precedent for future action. The activities are not connected to any other action. Implementation of this decision will not trigger, nor is it part of, a larger action (EA page 23 and Appendix C of EA ).
7. The environmental analysis shows the decision will not result in any known significant cumulative or secondary effects. The environmental analysis also shows that no cumulatively significant impact on the environment would occur by this decision (EA page 23 and Appendix C of EA ). .
8. The decision would not adversely affect sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places nor would this decision cause loss or destruction of significant scientific, cultural, or historical resources. The National Historic Preservation Act requires consideration be given to the potential effect of federal undertakings on historic and prehistoric cultural resource sites. Region 6 of the Forest Service entered an agreement in 1995 with the Oregon State Historic Preservation Office and the Advisory Council on Historic Preservation. In accordance with this agreement, this project was determined to have limited potential to affect historic properties and thus is exempt from case by case review (see EA page 5).
9. This decision in compliance with the Endangered Species Act. Biological Assessments on the effects to threatened animal species have been completed and incorporated into the EA (see EA appendix B). The effects determination in the BA found that the project May Affect, Likely To Adversely Affect Mid-Columbia steelhead trout, and Mid-Columbia bull trout. Effects would only occur during project implementation, as fish present in the area of implementation would be disturbed. This adverse affect would be on individuals present in the area of operation and not on the population as a whole, causing a short-term insignificant adverse affect while culverts were being replaced by single span structures, or rocked fords that are not fish barriers. However, the project is a beneficial effect for the long term, for both Mid-Columbia steelhead trout and Mid-Columbia bull trout; as all life stages can now pass through these streams at most flows.
10. This decision in compliance with relevant Federal, State and local laws passed for the protection of the environment, as described previously.

Mitigation measures in the EA (page 18) and Mitigation for Working within RHCAs, page 3, shows a thorough effort to address the brief consequences of stream disturbance by implementing measures such as hay (straw) bales and filter cloth, used to prevent soil erosion into the stream channel. These brief consequences will last no more than one or two days at any one project point, followed by complete avoidance of the streambed during the rest of the construction period. Therefore, preparation of an Environmental Impact Statement pursuant to Section 102 (2) of the National Environmental Policy Act of 1969 is not required.

## **Tribal Consultation**

Consultation with the Confederated Tribes of the Umatilla Indian Reservation and the Confederated Tribes of the Warm Springs Reservation of Oregon occurred prior to my decision(see Alternative dropped from consideration, page 2). Under existing treaties, these tribes retain certain rights related to a variety of resources, including fish (Treaty with the Walla Walla, Cayuse, and Umatilla Tribes, June 9, 1855; and

Treaty with the Tribes of Middle Oregon, June 25, 1855). Consultation also occurred prior to my decision with the Burns Paiute Tribe of Harney County, Oregon.

## **Environmental Justice**

Federal agencies are directed to focus attention on the human health and environmental effects to ethnic minorities (American Indians, Hispanics, African Americans, and Asian and Pacific Islander Americans), disabled people, and low-income groups. By implementing Alternative 2 no disproportionately high effects to these populations would occur, nor would there be adverse environmental effects on minority populations, low-income populations, or Indian tribes. None of these groups would be affected by this decision in any manner. The project are is located 30 air miles from John Day, Oregon no access would be limited during the implementation of this project.

## **Findings required by other laws**

### **National Historic Preservation Act**

The National Historic Preservation Act requires consideration be given to the potential effect of federal undertakings on historic and prehistoric cultural resource sites. Region 6 of the Forest Service entered an agreement in 1995 with the Oregon State Historic Preservation Office and the Advisory Council on Historic Preservation. In accordance with this agreement, this project was determined to have limited potential to affect historic properties and thus is exempt from case by case review.

### **Federal Water Pollution Control Act Amendments of 1972 (PL 92-500)**

This act led to the use of Best Management Practices as the point and non-point source pollution control tool for this project. These design features will maintain water quality that meets the requirements of this act.

### **Clean Air Act**

This act establishes standards for particulate matter in the air. This project meets the standards as described in this act.

### **Clean Water Act**

This act establishes standards for sediment in streams and water temperature. This project meets the standards as described in this act.

### **National Forest Management Act**

This act establishes guidelines for National Forest Management. This project is consistent with these guidelines since there will be no vegetation manipulation.

### **Administrative Appeal Rights**

The decision is subject to appeal pursuant to 36 CFR 215.7. Any written notice of appeal of this decision must be fully consistent with 36 CFR 215.14. To appeal this decision, an appeal must be postmarked and

submitted to the Appeal Deciding Officer with 45 days of the date of legal notice in the *Blue Mountain Eagle*. The Notice of Appeal must be filed with: Regional Forester, Attn. Appeal Deciding Officer, and 333 SW First Street, Portland, OR 97208-3623.

Implementation may begin in 2003 for in-stream work and would be completed<sup>2</sup> between July 15 and August 15 in Granite Boulder Creek (for bull trout spawning), Vinegar Creek and Blue Gulch (potential bull trout spawning) and July 15 until August 15, in Vincent Creek. Should all work not be completed in one operating season and ODFW cannot provide an extension of the work period, then the remaining work would be implemented in 2004-2005. Construction of armored drainage dips would not be limited to the in-stream work period restrictions, as work would not affect streams.

For further information, contact James Kelly, Team Leader, at PO 909 John Day, OR 97845; or by telephone at (541) 575-3000.

Responsible Official: \_\_\_\_\_ Date: \_\_\_\_\_

Michael L. Montgomery  
District Ranger  
Blue Mountain Ranger District  
Malheur National Forest

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<sup>2</sup> Unless a waiver is obtained by ODFW authorizing an extension of these periods.

Addressing substantive comments in a hand written letter to the Forest Service from:

Karen Coulter  
Blue Mountains Biodiversity Project  
27803 Williams Lane  
Fossil, OR 97830

To the District Ranger regarding:  
Blue Aquatics—Culvert Replacement  
Michael Montgomery  
Blue Mountain Ranger District Ranger  
Malheur National Forest  
P.O. Box 909  
John Day, OR 97845

April 10, 2003

**Comments [from Blue Mountains Biodiversity Project] re: Blue Aquatics—Culvert Replacement**

**Question: In general, we are supportive of the intent of this project and the mitigations proposed. However we have the following questions and concerns: Wouldn't the three "armored drain dips" actually funnel sediment into the streams over time as vehicles crush the rocks – especially as the drainage dips would be designed "to direct excess flows and channel back into streams" (evidently flows that already passed over an unpaved road and thus bearing sediment) and "the overflow ditch and rock would come down to the stream." (EA, p.17) It's a little hard to visualize from EA descriptions how and where these "armored overflow drainage dips" and mounds would be constructed – the dip outside the channel width after the water has already passed over the road?**

**Answer:** Please understand these roads get very little use. District engineers estimate an average of 20 vehicles per year. These drainage dips are intended to prevent water running down the road and rutting the road. (See drawing of drain dip at the end of this Appendix.)

The proposed dips are only intended as "storm-proofing" at the road-crossing sites. They are intended to function only during: A) extremely high flow conditions (if the culvert was overwhelmed by runoff); or B) if the culvert should plug. If either of these circumstances should occur the dips are designed to direct water across the road and directly back into the natural stream channel. Should high flows occur it is preferable to divert water in this manner rather than having water run down the roadway, causing road damage, erosion and sedimentation.

The dips will be constructed in the roadbed directly above the natural stream channel. Any mounds constructed will be on the down hill side of the dip, to exaggerate relief at the dip location, with the intent of preventing flows from diverting outside of the dip area.

**Question: The mound along the top of the embankment over the stream and thus subject to percolation of water underneath, collapse and failure into the stream?**

**Answer:** The dips would only receive water during extremely high flow conditions if the culvert was overwhelmed by runoff or if the culvert should plug. Road surfaces would be packed and surfaced with rock. The brief time water would be on road surface and condition of road surface make failure unlikely. Conditions after work is completed would be far superior to current conditions of water flowing down road surface without a drain dip and rock, which is now causing erosion and sedimentation.

**Question: Please clarify how these dip/mound structures would prevent sediment from upstream being transported over the road and down to the stream through an overflow drainage ditch—especially in the event of a 100-year flood.**

**Answer:** It is not the intention to prevent sediment from upstream from passing the culvert. These culverts are not designed to handle a 100-year events and could possibly wash out in such high flows.

Any major runoff event, especially a 50-or 100-year event is expected to transport large volumes of sediment— at such times this is a natural stream process. The intent of the dips is to prevent road damage as well as avoid adding large volumes of road related sediment to the natural stream sediment transport process.

**Question: These armored dips and mounds sound like a way to save money that could result in failure aggravating the sedimentation problem the project seeks to correct.**

**Answer:** Armored drain dips are designed to resolve chronic sediment problems and reduce the problem at relatively low cost. With a limited amount of funds the Forest Service is trying to focus restoration funding where it can provide the greatest benefits. This low cost activity will result in lower potential for road failure than the current condition.

**Please clarify: How much would [the] risk of sediment being transported downstream [would] be reduced by instead using open-bottomed arch or box culverts as proposed elsewhere? Even though direct effects to fish could be lessened by the dip; location above a falls barrier to fish passage, failure of the mound and/or downstream transport of sediment through the drainage ditch could be significant. Apparently, there is still vehicle use in these dip locations, which could wear down the rock surface and increase sedimentation as well. For the same reason, sites with rocked fords should be completely closed to traffic or open bottom culverts should be used there as well. Question: Fords pose the additional risks of directly crushing fish and disrupting feeding through turbidity of the stream. We suggest in the case of the rock ford locations that either the road(s) be decommissioned and the stream bed restored to as natural a condition as possible or that the**

**road(s) be subject to permanent closure and only activated for fire fighting purposes.**

**Answer:** Dips were designated where fish passage was not an issue (above fish bearing sections of streams). There is no greater risk of sedimentation or road failure with these structures and they are less expensive to implement. While it is true that the amount of sediment would not change if the road failed, the potential for road failure or erosion is reduced with the overflow ditch.

The sites with rocked fords will be closed to traffic behind gates and used occasionally for valid but currently inactive mining claims.

Roads whether closed or open require periodic inventory and maintenance. Current funding levels are inadequate for these tasks. These structures (engineered rocked fords) are designed to require less maintenance and thereby reduce potential impacts to streams and fish while maintaining access on the forest.

Two of the three roads were recommended for decommissioning (FR2010149 and FR2010292), but because of valid mining claims behind them, decommissioning them is being deferred (Galena Watershed Analysis—Supplement 2002, Appendix G). There has been very little mining activity on these claims in recent years, so permitted use is expected to be very minor if any. If any large mining activities should occur the Agency would require that an improved crossing be installed to reduce related impacts.

The other (FR2010159) road is not recommended for decommissioning, but it also provides some mining access and access for other resource management. Again, if any large mining activities should occur we can require that an improved crossing be installed to reduce related impacts. If this road were planned for any future timber harvest use, effect would be analyzed and the proper crossing structure would be installed prior to such use.

The advantages of engineered rocked fords are 1) that there are no fills to fail; 2) fords can be constructed to channel water to the middle of the channel to protect the banks which reduces bank erosion, 3) fords are nearly maintenance free. Both fords and culverts would pass the high flows, which contain more sediment. The District hydrologist consulted with the San Dimas Technology Center, which concurred with a recommendation of rocked fords for closed roads.

Grid rolled material (4 in. minus) will be used to construct and armor the fords on the upper FR2010292 and FR2010429 road crossings. This material is expected to be stable at bankfull flows. Experience shows that the voids between the grid rolled "particles" will be filled with fine sediment in the first year after construction. This sediment will be deposited from normal flows passing over the ford and be naturally caught by the roughness between larger particles. Without a ford this sediment would have continued to be transported downstream or deposited, depending on stream characteristics. Given the size of the fords and the size of material to be used in their construction. The District hydrologist estimated that a maximum of about one cubic foot of sediment would be deposited and held by the ford. Assuming construction maintains stream grade, additional sediment would pass over and either continue to be transported or be deposited downstream. Sediment deposited at fords would be dislodged during vehicle passage and either re-enter the stream flow or re-deposited close by, depending

on the flow at the time. The actual amount of sediment dislodged would be proportional to the period of elapsed time since the last crossing and the types of flows passing over the ford. Generally, after roads are closed, permitted trips on closed roads receive an expected average of no more than 52 trips a year, (however, as stated previously District engineers estimate these roads receive less than 20 trips per year). The roads in question are considered roads for high clearance vehicles, not passenger cars. This kind of use does not, "wear away," the grid rolled material at a perceptible rate; any sediment produced would either be deposited, or carried downstream depending on flows.

The ford on the FR2010159 road is expected to have the present tailings as its base. Grid rolled material (4 in. minus) would be used to armor the approaches and would not be expected to move with bankfull flows as demonstrated by the continued presence of downstream tailings. Again, either the tailings, or the grid rolled material, depending on flow and stream gradient, would be expected to catch sediment that could be dislodged in the manner described. The amount expected to be deposited and dislodged, do so in a similar manner. While use on this road may be higher than on the other two roads, it would still be within the expected average number of trips.

In summary, the fords are expected to reduce bank erosion (or its potential) at the crossing and eliminate the risk of sediment from culvert fills entering the stream. Sediment transport and deposition may be modified slightly due to the use of fords instead of culverts; culverts would be expected to continue transporting the sediment downstream. Generally, fords do not plug, causing erosion and maintenance concerns. The counter side to these arguments for the use of fords on these closed roads which have little traffic but on which we want to maintain access until additional analysis is conducted, is that an imperceptible amount of sediment, expected to be undetectable against the normal, "background" amount of sediment transported, could "wear away" over time and be transported/deposited downstream. Since the amount of sediment would be undetectable, it would not add cumulatively to the effects of background sediment, already being transported by Vincent Creek.

It is remotely possible, that low volume of traffic across rocked fords may harm or disrupt fish in the manner suggested, however any permitted use is expected to be very minimal and will be subject to evaluation by MNF Biologists. However, the only ford below the barrier falls is in a location where Vincent Creek commonly goes dry during summer months.

***Question: We prefer the first alternative – decommissioning. We ask that only native grass seed be used to revegetate sites – the Umatilla and other National Forests may be good sources of information on available native seed. Is it definite that the falls (on p. 3, EA) is blocking fish access upstream? Have there been fish surveys for Bull trout, steelhead and Redband trout that confirm this? Are the 25 feet of falls a straight drop or gradual? What is the exact location of this falls, so we may check it out?***

**Answer:** Alternative 1 is not an alternative that would decommission roads. Alternative One, the no action Alternative, would leave crossings in their current condition, permitting barriers to one or more life stages of 2 threatened fish species and 1 sensitive

species. By selecting alternative one as requested about 9 miles of streams would remain blocked for upstream fish passage for threatened steelhead trout, threatened bull trout, and sensitive Chinook salmon as well as resident rainbow trout, for various life stages of these fish, thereby leaving barriers to population linkages between up and downstream populations. Galena Watershed Analysis—Supplement 2002, Appendix G discussed road decommissioning in this area, the EA addresses current fish barrier on the roads that may be decommissioned with rocked fords (see decommissioning discussion above). A future environmental analysis (Blue Roads) to decommission roads would address this concern.

Only native weed free seed and shrubs collected from the watershed and propagated will be used to revegetate these sites.

The EA stated on page in, 1.5 Response To Public Comments, page 3, “the Forest Service re-surveyed stream reaches on Vinegar Creek which revealed a 25 foot falls that would present a barrier to fish access above these falls.” This is a typographical error in that Vinegar Creek should have read, “Vincent Creek,” this error was noted in the Errata section of the EA on FSWEB shortly after publication, all analysis in the EA had been directed to the correct location. The falls on Vincent Creek is a definite fish barrier. Neither the District fish biologist nor District hydrologist were aware of the falls before public scoping of this project in 2002. A member if the public wrote a letter calling attention to these falls as a barrier and that culverts above these falls would not need culvert work to pass migrating fish. The District fish biologist contacted ODFW biologist Jeff Neal of the John Day office, who was familiar with these falls on Vincent Creek. Mr. Neal described the falls as a series of three falls, which form a fish barrier. Mr. Neal provided an approximate location to us. With this information the District hydrologist walked in and surveyed this segment of Vincent Creek in October 2002, to verify location and to inspect the fish barrier. The falls on Vincent Creek are located approximately midway between roads FR2190429 and FR2190986 near or just south of the corners of T. 10 S., R. 35 E., sections 29, 30, 31, 32. The District hydrologist confirmed the description of the falls provided by Jeff Neal. The falls are actually a series of three falls, approximately 25, 15, and 10 feet in height that occur in about 250 linear feet as one moves upstream. The lower two are cascades or step pool falls, and may, or may not permit fish passage, if conditions are favorable. The uppermost falls is a “headwater” falls, meaning that the bed of the stream is a nearly vertical escarpment and is “cliff-like,” with no step pools or cascades interrupting the 10-foot drop of water. Due to the height of the falls and the lack of intermediate jump pools, this falls is considered a natural fish barrier, as described by ODFW. District hydrologist checked the top and bottom of the two lower (cascade) falls and saw no fish.

***Question: NEPA requires a full range of alternatives – not just the proposed action and “No Action.” Other alternatives directing the purpose and need could have included using the larger open – bottomed culverts in all locations or using all open – bottomed culverts except for the rocked for locations. The cumulative effects discussion is also inadequate to meet NEPA requirements as it is a listing of effects rather than a qualitative and quantitative assessment (analysis) of the cumulative impact of combined current and foreseeable future impacts.***

**Answer:** A reasonable range of alternatives was considered as required in 40 CFR 1502.14 (a). The IDT thoroughly explored and objectively evaluated reasonable

alternatives taking into consideration public comments. In Section 2.2 on page 8 the EA, discussed alternatives considered, but were eliminated from detailed study. Passage barriers to various life stages of fish and crossings that do not meet guidance for high water flows was a need, met by the Proposed Action (Alternative 2).

A preliminary purpose and need identified by the District Ranger a Project Initiation Letter of June 2002, asked the team to consider “stream complexity,” and to address fish habitat lacking complex structure by placing large wood in the stream. An alternative that considered improving stream complexity by the placement of large woody debris (LWD) was an alternative at one stage of the planning process. The District Ranger directed the team to change the purpose of this project (which initially considered stream complexity along with connectivity) and to drop this alternative from consideration due to concerns from tribal government and concerns from members of the public including opposition by the *Blue Mountains Biodiversity Project*; see Section 2.2 of the EA on page 8. The Agency takes the position that establishing stream complexity is still a viable project that the District will pursue when time and funding allows. The decision to drop the LWD was made to allow the fish barrier removal project to proceed in a timely manner, as funding is available this fiscal year for the replacement of these structures and the important action of removing fish barriers and reconnecting habitat for threatened species.

Prescriptions for culverts were made in a site-specific manner, after interdisciplinary planning to meet fish passage concerns, high flow concerns, and engineering and hydrological requirements and constraints. By designing alternatives that proposed various types of culvert structures for the sake of another alternative, an unreasonable and exponential number of unnecessary choices would have been created. By contrasting an action alternative that met the need for eliminating passage barriers for threatened fish at 8 crossings and eliminating potential high water flow problems at 3 other crossings— with a no action alternative in manner that sharply presented the concerns to the decision maker and the public (40 CFR 1502.14). The EA as written, provides a clear basis for choice among the options presented.

“Cumulative impact,” is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal), or person undertakes such other actions (40 CFR 1508.7). The analysis in Chapter 3 of the EA clearly shows that cumulative effects of the proposed action when added to other past, present, and reasonably foreseeable future actions would result in an individually minor and a collectively insignificant action over time. Mitigation measures (EA page 18), discusses a thorough effort to address the brief consequences of disturbance by implementing measures such as hay (straw) bales certified “weed-free” and filter cloth, used to prevent soil erosion into the stream channel. Consequences likely would last no more than one or two days at any project point followed by complete avoidance of the streambed during the rest of the construction period.

***Question: Using hay bales to control erosion introduces the possibility of introducing noxious weeds and non-native grasses as the bales disintegrate and receive rain—even weed free hay introduces non-native grasses. What about using straw with no seed heads or weeds?***

**Answer:** As part of mitigation measures (EA page 18) there would be contract specifications used, which require certification of weed-free straw bales and weed-free

grass seed, or annual grain that has no potential for survival beyond the first year. We are planning on using native grass seed the forest has available.

**Question: If spotted frogs are found, there must be mitigation planned to protect them (re: the pool surveys, EA, p.23). How do you know they will simply abandon the site and not be crushed or disrupted re: reproduction and feeding?**

**Answer:** Seven of the eleven culvert sites were surveyed. They included project points 1, 5, 7, 8, 9, 10, and 11. There is no breeding habitat at any of the sites surveyed. There are no shallow pools above or below the culverts that would provide potential egg laying sites or tadpole rearing ponds. No spotted frog adults, tadpoles or egg masses were seen. There is potential that spotted frogs may be resting or feeding adjacent to the streams during project implementation. There is potential that individuals could be disturbed by equipment. There will be no planned mitigation to protect spotted frogs other than what was stated in the EA, "Pools will be surveyed prior to culvert removal to determine presence of spotted frogs. If individuals are present activities will cause them to abandon the site for an estimated 3 or 4 days per site." If spotted frogs are found on a case-by-case basis, a District biologist would prescribe an appropriate measure to assure this species is not inadvertently harmed. This project will cause no modification of habitat to populations of spotted frogs as a whole, although one or more individual animals may be affected, there will be no impact to populations of spotted frogs as a whole due to this project.

**Question: We appreciate plans to only use equipment shovel heads in the stream itself and all other mitigation plans, which we view as essential to protect the listed and sensitive fish species. We ask that the work be watched by Forest Service personnel throughout the process to ensure that all these mitigations are followed.**

**Answer:** The Decision Notice/FONSI implements all mitigation measures which will be included in any contract implementing this proposed action which would be inspected and monitored by a Forest Service Contract Officer (CO), or Contract Officer's Representative (COR).

**Question: The cumulative effects of some of the other foreseeable future projects won't necessarily result in "improvement of fish habitat and fish populations in the project area and downstream in the Middle Fork John Day River" as suggested (EA, p.26) – especially not the Blue and Crawford "Vegetation Management" projects (commercial timber sales.) What are the current status and plans for these two projects? It was our understanding the Blue Veg. Was cancelled and Crawford was not reactivated after a successful appeal.**

**Answer:** This is beyond the scope of this project and should be brought up under another decision process. We would at this time direct you to the District Schedule of Proposed Actions (SOPA) mailed periodically or find the SOPA at the Forest Website: [www.fs.fed.us/r6/malheur](http://www.fs.fed.us/r6/malheur).

**Question: We ask that a full prevention plan be employed to prevent the spread of noxious (exotic) weeds and that herbicide use be avoided.**

**Answer:** As part of mitigation measures there would be contract specifications used which require certification of weed-free straw bales and weed-free grass seed, or annual grain that has no potential for survival beyond the first year. We are planning on using native grass seed the forest has available.

**Question: Is funding for follow-up noxious weed surveys guaranteed?**

**Answer:** Mitigation measures to monitor for noxious weeds, as per forest protocol is also required. Additionally, the mitigation measures in the EA will assure this type of monitoring twice a year.

**Question: It's obvious from the EA discussion on p. 30 that implementing future commercial timber sales in the watershed would be counterproductive to restoring already impaired hydrological functioning and could have adverse effects to Threatened and Sensitive fish species this project is designed to help restore. The area has been grossly over-logged and roaded; we advise that there should be no more commercial logging or roading in the watershed.**

**Answer:** This is beyond the scope of this project and not relevant to this decision. This project does not make any decisions about logging.

**Question: The EA does not disclose how much sediment would be produced by the proposed action, where, and with what effects to the fish specie and other aquatic life. (E.g., p 9)**

**Answer:** The EA (pp 24-25) states there is a chance that downstream from this project fish could be affected (killed or injured) during implementation of this project. While it is stated clearly that some harm may occur to fish there is also as great a chance (due to the time of implementation) that no fish will be harmed at all. The EA states plainly, populations of steelhead, bull trout and redband trout would benefit from improved connectivity of stream habitat and fish spawning. This project would open about 9 miles of stream to all life stages of 2 threatened and one sensitive fish species by the time of its completion.

**Question: If effects would "remain minimal", what is "minimal?"**

**Answer:** On page 27 of the EA this is defined as, "During the construction phase of the project, a very minor amount of sediment, less than a half of a cubic yard, may be introduced into the stream."

**Question: What are expected short-term water temperature increases and possible long-term stream temperature decreases? It is our understanding that state 303d listing does not allow for more impacts to listed streams in the category (e.g. temperature) for which they are**

**listed. “Pathway indicators” and “limiting RMO factors” (p. 11) are not defined. What are they?**

**Answer:** The EA states on page 27, “All of the streams being affected by this project are on the State of Oregon designated 303(d) list for elevated water temperature. It is unlikely that culverts now are contributing to increased water temperatures because water is shaded within the culvert itself. The cumulative effect of the existing culverts not being designed to pass the 100-year flood is that streams would have increased stream sediment and habitat would be reduced after large flood events.” The EA further states on page 28, regarding the Proposed Acton, “The improved shade [after revegetation] would not provide enough improvement to remove the streams from the listing; however, it would incrementally provide improved water quality and help move the stream towards delisting.” While any impact on temperature would be so slight it could not be measured, in either alternative, temperatures are more likely to decrease rather than increase after project implementation, thereby providing fewer effects rather than more, particularly if a wash out occurred as a result of no action.

Pathway indicators and limiting Riparian Management Objectives (RMOs) are used to describe environmental conditions such as temperature sediment, etcetera and are evaluated in the BA for the project. No short or long term impacts to water temperature would occur because of this project.

**Question: Is funding for follow-up effectiveness monitoring guaranteed?**

**Answer:** Funding for all federal activity is subject to Congress. The general monitoring for effectiveness of actions can be found on page 13 of the BA. However, a Regional Office requirement for annual monitoring of Forest Service Road system to move road crossings toward the ability to pass all life’s stages of fish, where culverts occur on fish bearing streams, will assure the effectiveness of this project.

***We would appreciate a full response to our question and concerns. Thank you for planned efforts to eliminate barriers to fish passage and reduce potential sedimentation of streams and associated planned mitigation of project impacts.***

*The answers herein are a full response to the questions and concerns and have explained why these comments do not warrant further response (40 CFR 1503.4).*

