1. **Project Name:** Rock Creek Fish Passage Improvement III  
2. **County:** Douglas
3. **Sponsoring Organization:** Douglas SWCD  
4. **Date:** August 16, 2007
5. **Sponsor’s Phone Number:** 541-957-5061  
6. **Sponsor’s E-mail:** walt.barton@oacd.org

7. **Project Location** (attach project area map)  
   a. **Description of Location:** On Rock Creek near the confluence with the North Umpqua River (See attached map for more details)
   b. **Sub Basin Name** (4th Field Watershed; e.g. North Umpqua): North Umpqua (HUC #17100301)
   c. **Watershed Name** (5th Field Watershed; e.g. Little River): Rock Creek (HUC #1710030110)
   d. **Legal Location:** Township 26S Range 3W Section(s) 1  
   e. **BLM District:** Roseburg  
   f. **BLM Resource Area:** Swiftwater
   f. **State / Private / Other lands involved?**  
      - Yes ☑  
      - No ☐

8. **Project Goals and Objectives:** (Describe the goals and objectives of the project. If applicable list species that will benefit from the project)

   **Overall project goal** is to make improvements at the diversion dam at the Rock Creek Fish Hatchery to enhance fish passage and facilitate and expand capacity of fish management activities. Species that will benefit from this action include all the wild fish in the Rock Creek Basin, specifically noted are: Coastal cutthroat trout, spring Chinook, summer steelhead, winter steelhead, coho and fall Chinook. This project has been proposed for two stages: I- Design/engineering, and II-Construction. The design phase of the project to date has been funded by two previous Title II Grants and some private funds. HDR Engineering has been retained by the District to perform the design work. Since the design work for the project began, it was determined that a phased approach was appropriate. The different phases include:
   1. Programming and Preliminary Engineering
   2. Schematic Design
   3. Design Development Services
   4. Construction Document Development
   5. Contract Administration Services

   **Overall project objectives include:**
   1. Restore fish passage to all wild fish species above the existing diversion dam.
   2. Provide a sorting facility to meet management needs for straying rates of hatchery fish.
   3. Provide a facility to monitor the success of aquatic management and restoration efforts in the Umpqua through counting adult fish returns and other activities.

   **Stage I objectives:**
   1. Develop a design with detailed engineering specifications to satisfy all legal requirements.
3. Work cooperatively with BLM, Partnership for the Umpqua Rivers, Fishing/River groups and other partners to ensure public acceptability and get the maximum benefit from improvements.

4. Identify and work with partners to develop additional funding sources for construction.

**Stage II objectives:**
1. Retain Consulting Engineering Firm to oversee project construction. (Phase 5 of Engineering Services)
2. Complete construction of fishway and sorting facility.

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**9. Project Description:** (Describe how the project will be conducted and how its goals and objectives will be met.)

The Rock Creek Watershed is a high priority for fish enhancement activities in the Umpqua Basin. As such, a set aside of $465,000 has been earmarked by PacifiCorp to fund improvements at the diversion dam. The current fishway located at the diversion dam is a significant fish passage barrier to nearly 45 miles of watershed above the site. It prevents passage of 90% of coastal cutthroat, 30-50% of adult summer steelhead, adult coho and fall Chinook, and 10% of adult winter steelhead. Although efforts are being made to repair culverts and improve habitat in the Rock Creek drainage, many fish are still not able to get past the diversion dam to enjoy and utilize the improved habitat.

Numerous interim measures have been attempted, but they have proven inadequate to achieve both passage and management objectives. ODF&W engineering staff conducted a feasibility and preliminary design project in 1999 to develop and evaluate options for the fishway. They evaluated 6 options ranging from no action or temporary repairs, to the installation of a new ladder with trapping and sorting facility. The study estimated that minimum repair of the fish ladder would cost approximately $400,000 (1999 dollars). However, repair alone would not facilitate fish management and monitoring activities, including trapping and sorting to identify wild and hatchery stocks to meet acceptable stray rates, counting adult fish, or developing a spawning survey program in Rock Creek drainage. Based on their preliminary findings, ODF&W engineers recommended repairing the fish ladder (which is currently on the far side of the stream), and constructing a footbridge for management activity access. One other alternative is to install a new ladder on the near side of the stream; this would eliminate the cost of a footbridge, but requires further detailed evaluation due to geologic concerns noted in the preliminary study.

Stage I of this project was to hire a private engineering firm to complete the design and engineering for this project. HDR Engineering was hired in December 2006 to provide engineering services. Because of the complexity of the project it was determined that the engineering services would be phased as described above with the goal of a construction start in the summer of 2008. Phase 1 has been completed and phase 2 is near completion at this time. Due to some geotechnical complexities and hydraulic concerns, the costs...
associated with design of the fish pass facility have increased significantly since initial estimates. We currently estimate that we will fall short of funding to complete the design work through phase 4. With this request the District can ensure the design process through the production of construction documents in time to apply for the appropriate permits to ensure construction can be started in 2008. Additional funding is being explored for phase 5: contract administration.

Stage II is the construction/repair of the fishway and fish management facility. Although many details will be dependent on the final design, the construction is scheduled to begin in Summer of 2008. Numerous potential funding sources have already been identified and grant applications submitted for construction including: PacifiCorp earmarked funds ($465,000), ODF&W Restoration and Enhancement grants, Oregon Watershed Enhancement Board watershed restoration grants, ODF&W Fish Passage grant program, Umpqua Fisheries Enhancement Derby. Additionally, the project plans to strengthen relationships with other stakeholders and user groups through joint fundraising efforts.

10. How will cooperative relationships among people that use federal lands be improved?
This project will demonstrate how effective cooperation among federal and state agencies can achieve the maximum benefit for the ecosystem. Fishermen and other upstream recreational users will benefit from the improved passage of fish and the resulting richer, more diverse ecosystem.

11. How is this project in the best public interest and how will it benefit communities?
The public and the ecosystem benefit when agencies with different mandates and management missions collaborate to solve a mutual concern. ODF&W is requesting assistance with this infrastructure improvement which will greatly enhance fish passage to the upstream portion of Rock Creek managed in large part by the BLM. Critical species will be given much improved chances for passage and entry into the upper watershed. Recreation and fishing opportunities will be improved through better fish passage. Improved management and monitoring will be made possible through site improvements to facilitate activities to evaluate the success and problems of salmon recovery efforts.

12. Who will accomplish the project?

<table>
<thead>
<tr>
<th>☒ Contractor</th>
<th>☒ Federal Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ County Workforce</td>
<td>☐ Volunteers</td>
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<tr>
<td>☒ Other (specify): Douglas SWCD staff and ODFW staff</td>
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13. Is this project coordinated with other related project(s) on adjacent lands?

<p>| | |</p>
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<tbody>
<tr>
<td>a.</td>
<td>Yes ☒ No ☐ (If yes, then describe) This project will improve fish access to portions of the watershed where habitat improvement and passage efforts are being implemented. BLM has replaced/is replacing culverts which are currently impeding access to several tributaries. ODFW is been working on reconnecting a side channel. PacifiCorp has a project increasing large woody debris in approximately 3 miles of East Fork Rock Creek that will also involve a 6 year monitoring component. The Umpqua Basin Fish Access Team has surveyed all of the stream/road intersections for potential barriers and ranked them for future restoration projects. Additional restoration work has been identified in the recently completed watershed assessment for Rock Creek</td>
</tr>
<tr>
<td>b.</td>
<td>Are you seeking funds from other Resource Advisory Committees? Yes ☐ No ☒ (If yes, then describe)</td>
</tr>
</tbody>
</table>

14. If the project is on private land how does it benefit federal lands or resources?

The project is on state owned and managed land. The site is located near the mouth of Rock Creek and directly impacts fish passage. A large portion of Rock Creek watershed is managed by Roseburg District BLM.

15. Measure of Project Accomplishments

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a. Total Acres:</td>
<td>b. Total Miles:</td>
</tr>
<tr>
<td>c. Number of Structures: 1 structure will be installed in stage II.</td>
<td>d. Estimated Number of People Reached (for environmental education and workforce training projects):</td>
</tr>
<tr>
<td>e. Number of Laborer Days:</td>
<td></td>
</tr>
<tr>
<td>f. Other (specify): Phase I: A detailed set of construction plans and specifications</td>
<td></td>
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<tr>
<td>g. Describe how long will the benefits of the project last:</td>
<td></td>
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16. Will the project generate merchantable materials?

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<tbody>
<tr>
<td>☐ Yes</td>
<td>☒ No</td>
</tr>
</tbody>
</table>

If yes, describe:

17. How does the proposed project meet purposes of the legislation? (Check at least one)

| ☒ | Improves maintenance of existing infrastructure. |
| ☐ | Implements stewardship objectives that enhance forest ecosystems. |
| ☐ | Restores and improves land health. |
| ☐ | Restores water quality. |
Secure Rural Schools and Community Self-Determination Act of 2000  
Public Law 106-393  
Title II Project Application for 2007 Funds (Round #7)  
Roseburg District Resource Advisory Committee

18. Project Type (Check at least one)

- Road Maintenance  
- Road Decommission/Obliteration  
- Other Infrastructure Maintenance (specify):  
- Soil Productivity Improvement  
- Watershed Restoration & Maintenance  
- Fish Habitat Restoration  
- Reestablish Native Species  
- Other Project Type (specify): fish passage

19. Project Initiation and Estimated Completion Dates: (Describe the timing of the major phases of the project)  
October 2007 – September 2008

20. Status of Project Planning

a. NEPA process complete:  
- Yes  
- No  
- Not Applicable

b. Consultation complete:  
- Yes  
- No  
- Not Applicable

c. DSL/ODFW* permits for in-stream work obtained:  
- Yes  
- No  
- Not Applicable

d. DSL/COE* 404 fill/removal permit obtained:  
- Yes  
- No  
- Not Applicable

e. SHPO* concurrence received:  
- Yes  
- No  
- Not Applicable

f. Project design(s) completed:  
- Yes  
- No  
- Not Applicable

g. If you answered yes to any of the questions above, please describe who will accomplish the work and when it will be complete:

* DSL = Dept. of State Lands, ODFW = Oregon Department of Fish and Wildlife, COE = Army Corps of Engineers, SHPO = State Historic Preservation Officer

21. Anticipated Project Costs

a. Total Title II funds requested: $104,500

Table 1. Project Cost Analysis (Includes all expenditures for the life of the project)

<table>
<thead>
<tr>
<th>Item</th>
<th>Fed. Agency Appropriated Contribution</th>
<th>Requested County Title II Contribution</th>
<th>Other Contributions</th>
<th>Total Available Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and Permits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design &amp; Engineering</td>
<td></td>
<td>90,000</td>
<td>254,000</td>
<td>344,000</td>
</tr>
<tr>
<td>Project/Contract Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project/Contract Implementation¹</td>
<td>500</td>
<td>5,000</td>
<td>17,500</td>
<td>23,000</td>
</tr>
<tr>
<td>Materials &amp; Supplies²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-Project Monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>9,500</td>
<td>5,450</td>
<td></td>
<td>14,950</td>
</tr>
<tr>
<td><strong>Total Cost Estimate</strong></td>
<td>500</td>
<td><strong>104,500</strong></td>
<td><strong>276,950</strong></td>
<td><strong>381,950</strong></td>
</tr>
</tbody>
</table>

¹This could be either the cost of the labor for project implementation or the cost of a contract.
22. Provide a budget narrative, including a description of other source(s) of funding for the project identified above and/or a clarification of any other aspects of the budget:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
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<tbody>
<tr>
<td>This budget is for engineering services only. Funding for construction currently is being sought through other sources. Current cost estimates for the construction (based on schematic design) are approaching $3.2 million. Other sources of funding listed above include PacifiCorp, Oregon Watershed Enhancement Board (not secured at this time), and agency in-kind from ODF&amp;W.</td>
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</table>

23. Monitoring Plan

a. What measures or evaluations will be made to determine how well the proposed project meets the desired ecological conditions? Who will be responsible for this monitoring item?

ODF&W will monitor fish passage at the site as part of their ongoing program; data collection and analysis are equivalent to approximately one full time position. When complete an analysis will be completed on fish passage. The analysis will include direct observation and modeling of passage efficiency under a variety of expected flows. If the monitoring shows that performance-based thresholds are not achieved within 2 years of the upgrade an analysis will be performed to determine the reasons. PacifiCorp will participate in monitoring and evaluation. Upstream fish presence studies will also be conducted as called for.

b. How will the project be evaluated to determine how well it contributes to local employment and/or training opportunities, including summer youth jobs programs such as the Youth Conservation Corps? Who will be responsible for this monitoring item?

The engineering phase of this project will not provide training or youth employment opportunities. Any occurring from the construction stage will be planned at that time.

c. What methods will be established to determine how well the proposed project improves the use of, or added value to, any products removed from federal lands consistent with the purposes of this Act? Who will be responsible for this monitoring item?

N/A

24. What are the analyses, plans, legislation, or other supporting documents that support and guide this application? (E.g. the Northwest Forest Plan, a watershed analysis, a late successional reserve assessment, or the Oregon Plan for Salmon.)

<table>
<thead>
<tr>
<th>Document</th>
<th>Details</th>
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</table>

25. Who are the key people responsible for this project? (List their names and titles)

26. Attach a map and photograph(s) of the project. (At a minimum, the map should show the project location, roads, and streams, and private versus BLM ownership. The photograph should show the project site or a representative portion of it. More than one photograph can be submitted, but they must all fit on one page. A digital photograph incorporated into this application is preferred; hard copies will be copied in black and white.)