1. Project Name: Umpqua Basin Fish Barrier Inventory	2. County: Douglas			
and Scoring Project				
3. Sponsoring Organization: Douglas Soil and Water	4. Date: August 16, 2007			
Conservation District				
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: **Douglas County** (See attached map for more details)

b. Sub Basin Name (4<sup>th</sup> Field Watershed; e.g. North Umpqua): Umpqua, North and South Umpqua

c. Watershed Name (5<sup>th</sup> Field Watershed; e.g. Little River): Upper Smith River, Middle Umpqua, Middle Cow Creek, Upper Cow Creek, Elk Creek/South Umpqua, Middle South Umpqua River,

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e. BLM District: Roseburg	e. BLM Resource Area Swiftwater,	South River
f. State / Private / Other lands involved? Xes	No	

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

The goal of this project is to complete the development of an accurate inventory of fish migration barriers in the Umpgua Basin and score them based on barrier magnitude and resource benefit if corrected. Previously received funding has facilitated the work on Phase 1 and Phase 2 of this ongoing project. Additional funding is needed to complete the comprehensive inventory of private lands in the identified fifth fields during Phase 3. This additional funding will complete the project. Over 2000 culverts have been surveyed to date and fourteen HUC 5<sup>th</sup> Fields have been completely surveyed on both public and private lands. The computer scoring model is operational and is being used by several groups to establish priorities for grant funding applications. The project is entering its 6<sup>th</sup> year of work and has three distinct phases. Phase 1 included the collection of baseline data, development of the scoring matrix, and the formation of the Umpgua Basin Fish Access Team (UBFAT). Phase 2 focused on the initial collection of field data (predominately public lands) and the creation of a computer model that executes the scoring matrix. Phase 3 is focused on data collection on private lands, scoring surveyed culverts, using the scores to identify priority projects and implementing these priorities as funding becomes available. Public outreach and education is also being emphasized during Phase 3. Data collected from the project is being posted to the Umpgua Explorer web site for use by project partners as well as the general public. All relevant partners continue to participate in this process, including BLM, US Forest Service, NOAA Fisheries, US Fish & Wildlife Service, Oregon Department of Fish and Wildlife, Oregon Department of Transportation, Oregon State University Libraries, Institute of Natural

Resources, Douglas County, the Partnership for the Umpqua Rivers, Elk Creek Watershed Council, Douglas Soil and Water Conservation District, Umpqua Soil and Water Conservation District, small woodland owners, private industrial timber, environmental interest groups, etc.

**9. Project Description:** (Describe how the project will be conducted and how its goals and objectives will be met.) The project started with the formation of a committee of natural resource representatives who worked to develop (1) criteria for evaluating potential fish barriers within the basin, (2) an accurate list of the known potential barriers within the basin, and (3) a score for each barrier that was identified and evaluated (surveyed). This committee became known as the Umpqua Basin Fish Access Team or UBFAT.

After the initial review of the fish migration strategic plans developed in other watersheds (Rouge Basin), UBFAT began to develop its own strategic plan that incorporated an acceptable scoring matrix that thoroughly and accurately weighed the various factors affecting salmonid migration at each potential barrier. Barrier types include culverts, bridges, dams, falls, and any other manmade or known natural barrier.

Phase 1 of the project was to develop the scoring matrix and collect all existing data on previously identified potential barriers throughout the basin. The scoring matrix was finalized as a result of several UBFAT meetings and consultations with local fishery biologists (see Attachment 1). In order to establish the scoring matrix many factors were evaluated to arrive at a logical format that was biologically based. In the process of forming the scoring matrix, severity factors were identified (see Attachment 2) that evaluate the physical characteristics of a culvert and biological capabilities of salmonids. Predominately, existing data was collected from public land managers and this data was in many different forms and formats. There was significant variance in the kind of information that was being collected by the different organizations and it became immediately apparent that the data sets were not compatible. Not only were the data sets incompatible, but they were incomplete for UBFAT purposes.

Phase 2 of the project focused on filling in the gaps in the data sets in order to enable them to be run through the scoring matrix. This involved extensive field work to collect data on all known potential barriers in the basin. After initial data collection efforts, it became apparent that survey efforts needed to be focused on fish bearing streams and the tributaries associated with them (see Rock Creek data sample, Attachment 3). With a refined focus on data collection, survey efforts continued and now over 2000 culverts have been surveyed. During this phase an extensive computer model was created to score (see Attachment 4) the surveyed culverts based on the protocol developed by UBFAT. This model has been completed and can be used as a powerful tool to compare barriers in many different ways. This tool is being used to score barriers throughout the basin and in individual 5<sup>th</sup> field watersheds.

Scores are being used by several of the project partners to identify priority projects for grant funding applications.

Phase 3 of the project is focusing on collecting data on private lands. This phase will not only collect data on private lands, but will stress landowner outreach and education. The tool that has been created will be most effective if it is used to score entire watersheds. With public outreach and education, the project will be able to begin utilizing the tool to prioritize work on the ground to make fish access and habitat improvements throughout the basin. This phase is underway with many surveys being conducted on private lands. The scoring model has been run on the culverts surveyed to date in the Umpqua Basin as well as some of the sub-basins. The scoring was used by the Partnership for the Umpqua Rivers to identify several high priority culverts for replacement. Funding is being sought for these projects at this time. This phase has proven to be the most labor intensive phase and is taking a considerable amount of time and funding to complete. See Attachment 5 for a graphical representation of the areas completely surveyed, areas still needing surveys on private lands and those identified for completion in this proposal.

10. How will cooperative relationships among people that use federal lands be improved? This project has served, and will continue to serve, as an outreach to the general public and large private landowners, stressing the importance of fish passage and the need to allocate limited funding wisely. This project, through the formation of the Umpqua Basin Fish Access Team, has served as the meeting place for private landowners, the private timber industry, and state and federal landowners to discuss issues and establish an understanding of the importance of providing salmonids access to essential spawning and rearing habitat. Current partners include BLM, USFS, ODFW, Douglas County, the Partnership for the Umpqua Rivers, Elk Creek Watershed Council, Smith River Watershed Council, Umpqua Soil and Water District, Industrial Timber (Roseburg Forest Products, Seneca, Lone Rock, Rosboro, Weyerhaeuser), Small Woodland owners, Municipalities, Ag Lands, etc.

**11.** How is this project in the best public interest and how will it benefit communities? This project is in the best interest of the entire Umpqua Basin. Data collected from the project is being posted to the Umpqua Explorer web site for use by project partners and the public. The project enables landowners (public and private) to better prioritize projects when spending public funds for improving fish access to critical habitats. The project also can be used as a tool to plan strategic restoration efforts throughout the basin. Current and future outreach efforts will inform landowners on critical topics related to the fisheries in the Umpqua Basin. Culvert restoration projects that directly benefit the fishery will result from this project. These restoration projects will create jobs for local contractors and businesses.

12. Who will accomplish the project?	
Contractor	Federal Workforce
County Workforce	Volunteers
Other (specify): Douglas SWCD staff will accon	nplish all data collection and data management

## 13. Is this project coordinated with other related project(s) on adjacent lands?

a.  $\square$  Yes  $\square$  No (If yes, then describe) This project

b. Are you seeking funds from other Resource Advisory Committees?  $\square$  Yes  $\square$  No (If yes, then describe) Funds are being sought from the Medford BLM RAC and the Rogue-Umpqua RAC for inventory work being done in each of those jurisdictions. See attached budget for breakdown.

# 14. If the project is on private land how does it benefit federal lands or resources? This phase of the project is tied to private lands which are adjacent to federal lands in the Roseburg BLM District. Conducting surveys on private lands will ultimately improve fish access (with fish passage and habitat improvement projects) and habitat for salmonids that migrate to public/Federal lands for spawning and rearing habitat.

15. Measure of Project Accomplishments			
a. Total Acres: 3,000,000	b. Total Miles:		
c. Number of Structures:	d. Estimated Number of People Reached		
e. Number of Laborer Days: 6000	(for environmental education and workforce training		
f Other (specify): Data posted to Umpaua Explorer web site			
i. Onlei (speeny). Data posted to ompeta Exploi et web site.			

g. Describe how long will the benefits of the project last:

## 16. Will the project generate merchantable materials?

No 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.
- $\boxtimes$  Restores and improves land health.
- $\boxtimes$  Restores water quality.

Yes

<b>18. Project Type</b> (Check at least one)			
Road Maintenance	Trail Maintenance		
Road Decommission/Obliteration	Trail Obliteration		
Other Infrastructure Maintenance (specify):			
Soil Productivity Improvement	Forest Health Improvement		
Watershed Restoration & Maintenance	Wildlife Habitat Restoration		
Fish Habitat Restoration	Control of Noxious Weeds		
Reestablish Native Species			
$\boxtimes$ Other Project Type (specify): Development of a fish passage structure inventory throughout the basin and a			

tool to prioritize restoration efforts.

**19. Project Initiation and Estimated Completion Dates:** (Describe the timing of the major phases of the project)

20. Status of Project Planning			
a. NEPA process complete:	<b>Yes</b>	🗌 No	Not Applicable
<b>b.</b> Consultation complete:	Yes	🗌 No	Not Applicable
<b>c.</b> DSL/ODFW* permits for in-stream work obtained:	<b>Yes</b>	🗌 No	Not Applicable
<b>d.</b> DSL/COE* 404 fill/removal permit obtained:	<b>Yes</b>	🗌 No	🛛 Not Applicable
e. SHPO* concurrence received:	<b>Yes</b>	🗌 No	Not Applicable
<b>f.</b> Project design(s) completed:	<b>Yes</b>	🗌 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: \$51,288	

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

	Fed. Agency Appropriated	Requested County Title II	Other	Total Available
Item	Contribution	Contribution	Contributions	Funds
Planning and Permits				
Design & Engineering				
Project/Contract Administration		2,000	2,000	4,000
Project/Contract Implementation <sup>1</sup>	4,000	40,025	55,225	99,250
Materials & Supplies <sup>2</sup>		3,000	3,000	6,000
Post-Project Monitoring				
Other		6,263	8,314	14,577
Total Cost Estimate	4,000	51,288	68,539	123,827

<sup>1</sup>This could be either the cost of the labor for project implementation or the cost of a contract. <sup>2</sup>If the project is implemented by contract, materials and supplies are likely included in the cost of the 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:

Phase I of the project was funded from the Roseburg BLM RAC and the Oregon Watershed Enhancement Board. Phase II funding came from the Roseburg BLM RAC and the Rouge-Umpqua RAC. Funding requests for to start Phase III came from the Roseburg BLM RAC and the Coos BLM RAC and OWEB. This funding request will finish the project and the amounts are based on proportion of the remaining work to be done in the Umpqua Basin. See Attachment 6 for budget details.

## 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?
As an assessment project there will be no direct ecological benefit. The resulting evaluation of the data collected and the scoring will enhance landowner, agency and Watershed Council ability to prioritize restoration work that will expand usable fish habitat.

- 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?
   Douglas Soil & Water Conservation District will oversee all hiring. Temporary employees will be hired from the local area.
- 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.)

This plan fits closely with the goals of the Oregon Plan and is incorporated into local Watershed Assessments. Survey results and scoring are being used in the Action Plan currently being written for the Umpqua Basin.

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

Ann Kercher, Walt Barton - Douglas SWCD Project Manager Umpqua Basin Fish Access Team Bob Kinyon, Terry Luecker - Partnership for the Umpqua Rivers Watershed Counsel Bill Cannaday, Jim Brick - Oregon Department of Fish & Wildlife Jake Winn - Bureau of Land Management, Roseburg District

**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.)