## Tennile Lakes? Basin Particership

# PRESENTATION

20 E ANN DUA

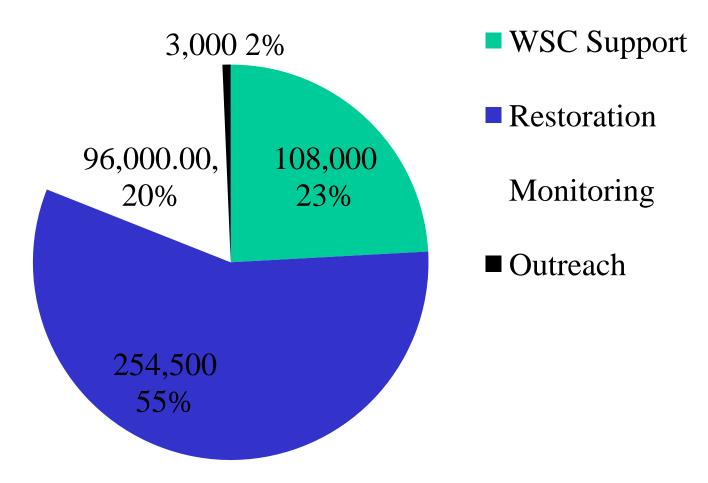


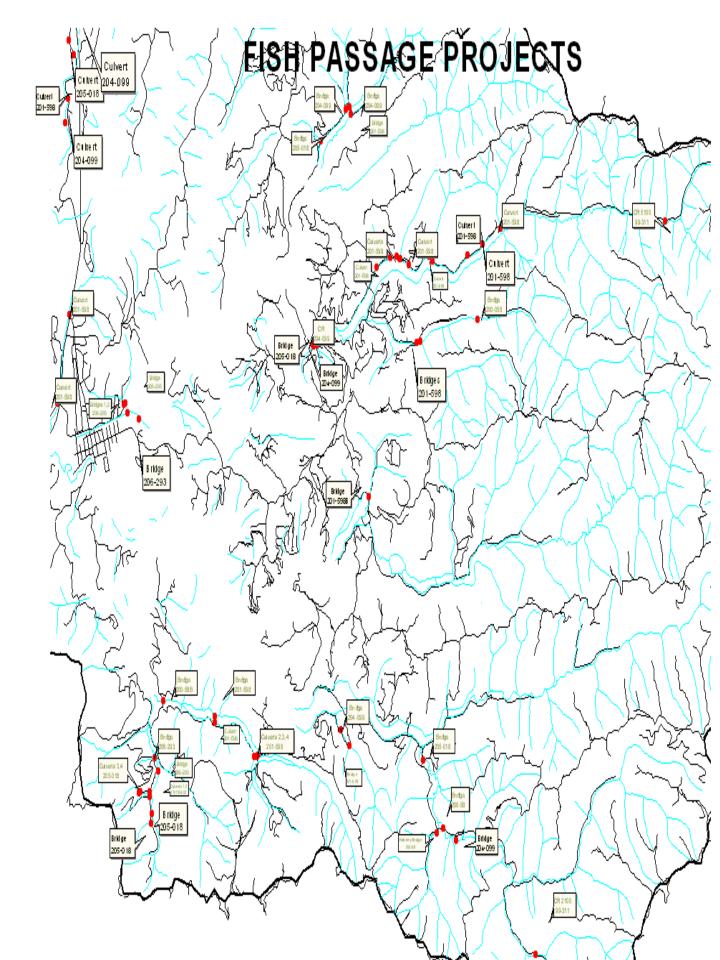
# **Tonight's Presentation Includes:** Funding Projects Monitoring utreach re Project **nique Projects**

7/28/2010 Johnson Cr. Erosion

# **TLBP 2011 Grants Submitted** Recommend for funding \$172,000 (Pending) Not Awarded \$43,280 \$454,500 Funded

## TLBP FY' 2011 Funding per Project Type





### **2011' PROJECTS**

Monson Bridge #1

Monsen Bridge #2

Swanson Bridge #6 Swanson Fencing

Tenmile Riparian

Enhancement







#### October 18, 2010 OWEB Grant Cycle Southwest Oregon Review Team (Region 2)

Application No.:	211-2028	Project Type: Restoration
Project Name:	Monson Fish Passage and Sediment Abatement	
Applicant:	Tenmile Lakes Basin Partnership	
Basin:	SOUTH COAST	County: Coos
OWEB Request:	\$71,689.00	Total Cost: \$92,128.00

#### **Ecosystem Process and Function**

The project will benefit watershed function and structure through the improvement of access to habitat for coho, steelhead and cutthroat trout as well as improve water quality conditions through the project reach and below.

#### **Regional Review Team Recommendation to Staff**

Fund with Conditions. The applicant must justify Project Manager time and provide for additional project qualified inspection.

3

#### **Regional Review Team Priority**

12 of 13

#### Distribution of Recommended Award Amounts

Capital Amount	<b>EM Portion</b>	<b>PE</b> Portion	Non-Capital Amount
\$71,689.00	6		

#### Staff Follow-Up to the Regional Team Review

Staff followed up with the applicant about the RRT concerns. The applicant provided information on project inspections. A project committee, which includes a state certified engineer, inspects projects prior to, during and after project completion. The applicant provided the names of the project committee and the name of the engineer with documentation confirming state certification. The applicant provided additional detail on the Project Manager (PM) work activities and the basis for the timeline. PM work activities and time estimated for the project are based on experience from construction of over 40 other bridge structures in the watershed over the last ten years. These tasks and timelines cover activities ranging from pre-implementation and permitting, contracting and material procurement, project implementation and oversight, to project close out and reporting. The applicant provided enough documentation from silimar projects along with workplan information to justify the time period the PM will work.

#### Staff Recommendation to the Board

Fund.

#### Staff Recommended Award

Capital Amount	<b>EM Portion</b>	<b>PE Portion</b>	Non-Capital Amount
\$71,689.00			

Total Recommended Board Award \$71,689.00

#### Oregon Watershed Enhancement Board Region 2 (Southwest Oregon) Review Team Evaluation for April 19, 2010 Applications

APPLICATION NO.:	211-2002	PROJECT TYPE: Restoration
PROJECT NAME:	Tenmile Lakes Watershed Ripar	ian Enhancement 2011
APPLICANT:	Tenmile Lakes Basin Partnership	p
BASIN:	SOUTH COAST	COUNTY: Coos
OWEB FUNDS REQU	ESTED: \$41,615	TOTAL COST: \$59,814

#### **APPLICATION DESCRIPTION:**

The project proposes to implement riparian restoration activities on agricultural stream reaches within the Big, Johnson, Wilkins and Adams Creek sub-basins of the Tenmile Lakes watershed, along with four riparian segments along rural Coos County Highways, for a total of 26,400 linear feet of riparian enhancement. All proposed project components and locations have been identified as high priorities within the Tenmile Lakes Action Plan (2006) and Tenmile Lakes TMDL. Agricultural land-use practices have impacted riparian areas by channelizing stream reaches and allowing access by livestock to riparian areas. This has resulted in reduced vegetation and actively eroding banks. The project builds on similar riparian protection, sediment abatement and fish passage restoration activities completed on this stream. Project sites have been identified within the Tenmile Lakes Watershed Assessment as having less than 50% shade values and increased stream bank erosion. Planting actions will follow approved, site-specific planting prescriptions for each location.

The project will contain both plant establishment work on existing sites and development and planting of sites identified through assessment work. The project will first remove non-native species through hand and mechanical means. Preventive predation measures will be installed on previous planting as needed and on new plantings. 4,045 native conifer and deciduous seedlings will be planted in identified locations protected by livestock exclusion fencing. Plantings will be dictated by planting plans developed for each site.

Project partners providing project match include participating landowners, Coos County, Eel-Tenmile STEP volunteers and Tenmile Lakes' Basin Partnership. OWEB funds would be used for preimplementation, project management, travel, contracted services, supplies and materials, and fiscal administration.

#### **REGIONAL TEAM REVIEW:**

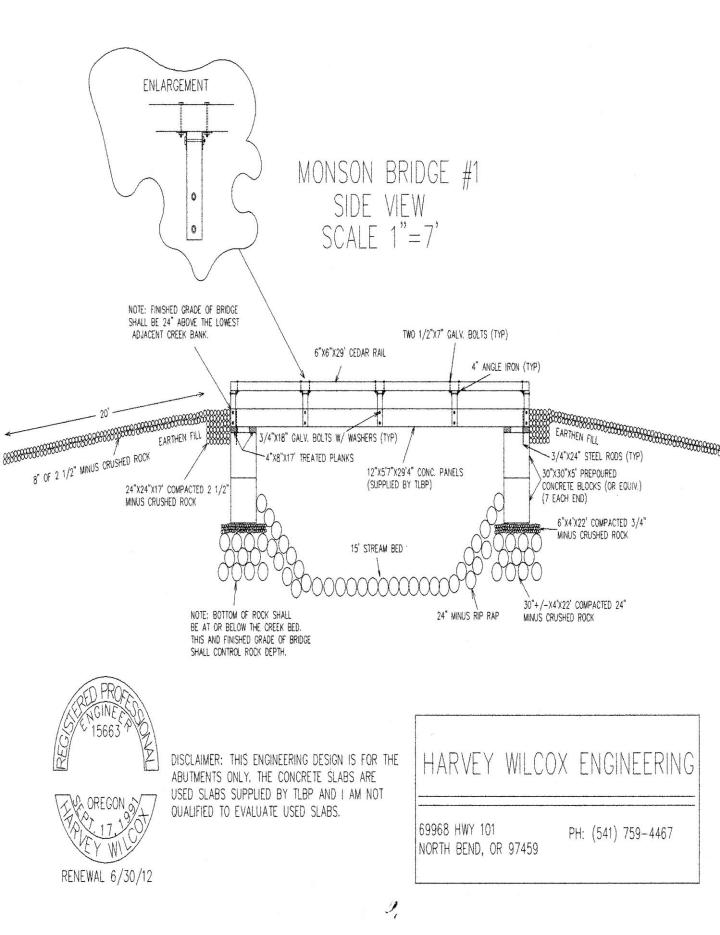
The RRT appreciated the improved quality of the application and wanted to let the applicant know that the quality of the application writing and presentation helped in review of the proposal. Planting prescriptions are good. The project is a mix of plant establishment work and new riparian plantings. The establishment work will help address issues with non-native blackberry that will help the survival success of the plantings. It is important to make sure the investment in riparian restoration is successful and this work will help to make it successful. The previous planting areas have suffered some elk browse damage. The applicant has adapted to meet this and is using more spruce because they have learned elk don't like to eat them. The planting plan for new riparian areas to be planted looks good. The Tenmile Lakes watershed has some critical water quality issues associated with the lake, and restoration of riparian areas along the streams which feed it will help the situation. This watershed is an important one for coho production, and project components will help protect and buffer those important stream habitats. The

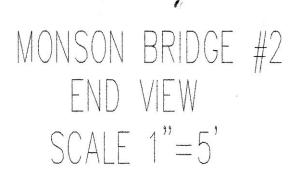
Oregon State Board of Examiners for Engineering and Land Surveying

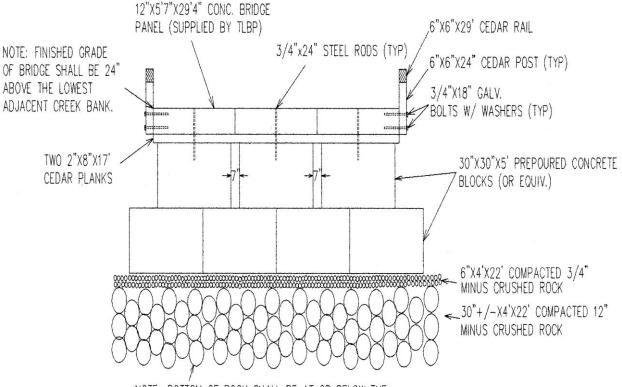
## HARVEY ALLEN WILCOX

Examiner

Registered As	Cert.#	Status	Explres
Professional Land Survey	or 02244PLS	Active	06/30/2012
Professional Engineer	15663PE	Active	06/30/2012
Certified Water Right	142CWRE	Active	06/30/2012
Fuendane	(高陽登力		Sec. A light







NOTE: BOTTOM OF ROCK SHALL BE AT OR BELOW THE CREEK BED. THIS AND FINISHED GRADE SHALL CONTROL ROCK DEPTH.

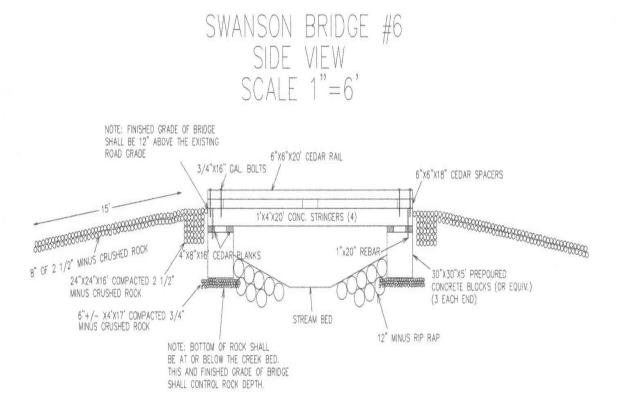


OREGON

DISCLAIMER: THIS ENGINEERING DESIGN IS FOR THE ABUTMENTS ONLY. THE CONCRETE SLABS ARE USED SLABS SUPPLIED BY TLBP AND I AM NOT QUALIFIED TO EVALUATE USED SLABS.

HARVEY WIL	COX ENGINEERING
69968 HWY 101 NORTH BEND, OR 97459	PH: (541) 759-4467

RENEWAL 6/30/12





CORPS OF ENGINEERS, PORTLAND DISTRICT EUGENE FIELD OFFICE 1600 EXECUTIVE PARKWAY, SUITE 210 EUGENE, OREGON 97401-2156

REPLY TO ATTENTION OF:

August 13, 2009

Operations Division Regulatory Branch Corps No. NWP-2009-100

Mr. Michael Mader Tenmile Lakes Basin Partnership P.O. Box L Lakeside, Oregon 97449-0809

Dear Mr. Mader:

The U.S. Army Corps of Engineers has received Tenmile Lakes Basin Partnership's (Tenmile) permit application requesting Department of the Army authorization to remove a fish passage barrier in Big, Shutter, Adams, Johnson, Blacks, Wilkins, Benson, and Noble Creeks. The project is located near Lakeside, Coos and Douglas Counties, Oregon. The sites are in Sections 1, 2, 6, 8, 10, 11, 14, 15, 16, 18, 21, 22, 25, 26, 27, 28, 29, 30, 32, 33, 34, 36 of Township 23 South, Range 12 West and Sections 28, 34 of Township 22 South, Range 12 West.

Tenmile will remove existing corrugated metal pipe culverts. Thirteen bridges measuring from 20 to 40 feet long and 12 feet wide will be installed. Eight bridges (numbered 1-8 (Enclosure 1) to be installed during the 2009 in-water work window and five bridges (numbered 9-13 Enclosure 1) to be installed during the 2010 in-water work window. Riprap shall be placed below the ordinary high water to stabilize the abutments. Approximately 93 culverts, measuring 18 inches to 42 inches in diameter and 20 feet to 70 feet in length will be installed (Enclosure 1). The projects are shown on the enclosed drawings (Enclosure 2).

This letter verifies that Tenmile's project is authorized under the terms and limitations of Nationwide Permit (NWP) No. 14 Linear Transportation. Tenmile's activities must be conducted in accordance with the conditions found in NWP Regional Conditions, Portland District (Enclosure 3), NWP General Conditions (Enclosure 4), Oregon Department of Environmental Quality (DEQ) 401 Water Quality Compliance Conditions (Enclosure 5), Oregon Department of Land Conservation and Development (DLCD) Coastal Zone Management Concurrence Conditions (Enclosure 6), and the project specific conditions lettered (a) through (j) below. Failure to comply with any of the listed conditions could result in the Corps initiating an enforcement action.

a. Permittee shall notify the Regulatory Branch with the date activities in waters of the United States are scheduled to begin. Notification shall be sent by email to <u>cenwp.notify@usace.army.mil</u> or mailed to the following address:

Department of State Lands 775 Summer Street NE, Suite 100 Salem, OR 97301-1279 503-986-5200 Permit No.: Permit Type: Waterway:

Expiration Date: Corps No.:

County:

	41997-RF
3	General Permit
2	Tenmile Lakes
	Watershed
	Coos and Douglas
	April 30, 2014
	NA
L	PERMIT

#### TENMILE LAKES BASIN PARTNERSHIP-GENERAL PERMIT

#### IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

- 1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
- This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
- 3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
- 4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action, which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
- 5. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
- 6. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within twenty-one (21) calendar days of the date this permit was issued.
- 7. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
- 8. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.
- 9. Authorization from the U.S. Army Corps of Engineers may also be required.

<u>NOTICE</u>: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 503-986-5200.

Lori Warner-Dickason, W Region Manager Wetlands & Waterways Conservation Div Oregon Department of State Lands

April 30, 2009 **Date Issued** Authorized Signature



Coos County Planning Department Coos County Courthouse Annex, Coquille, Oregon 97423 Mailing Address: 250 N. Baxter, Coos County Courthouse, Coquille, Oregon 97423 Physical Address: 225 N. Adams, Coquille, Oregon (541) 396-3121 Ext.210 FAX (541) 756-8630 / TDD (800) 735-2900 <u>planning@co.coos.or.us</u> Patty Evernden, Planning Director

September 2, 2011

Mike Mader, Ten Mile Lakes' Basin Partnership PO Box L Lakeside OR 97449

RE: Monson Bridge Projects Township 23, Range 12, Section 25 Tax Lot 100

Mr. Mader:

After reviewing your project and floodplain information staff has found that this property is consistent with Section 3.2.550 of the Coos County Zoning and Land Development Ordinance (LDO). The information provided also satisfies the floodplain requirements of Section 4.6.230(4) "Other Development".

Therefore, have completed all requirements to be consistent with the LDO and you may proceed. If you need additional signatures on your state or federal permits please deliver or mail them to the Planning Department for processing.

Thank you and if you have any questions about this please contact me at 541-396-3121 ext 210 or <a href="mailto:planning@co.coos.or.us">planning@co.coos.or.us</a> .

Jill Rolfe, Administrațive Planner

Coos County Planning Department

#### ATTACHMENT B



#### LAND USE INFORMATION FORM

This information is needed to determine if the proposed project complies with statewide planning goals and is compatible with local comprehensive plans (ORS 197.180). The form must be submitted before OWEB releases project funds. OWEB will release project funds only if the project either is not regulated by, or is compatible with, the local comprehensive plan and zoning ordinance. If a project is regulated by the local comprehensive plan and zoning ordinance, OWEB will void grant agreements for projects the county determines to be incompatible with the local comprehensive plan and zoning ordinance. If the county requires additional local approvals for a project regulated by the local comprehensive plan and zoning ordinance, OWEB will not release project funds until these conditions are satisfied.

#### 1. TO BE COMPLETED BY THE APPLICANT/GRANTEE

Applicant/Grantee Name: Tenmile Lakes Basin Partnership

Project Name: Tenmile Lakes Riparian Enhancement

#### 2. TO BE COMPLETED BY CITY/COUNTY OR TRIBAL PLANNING OFFICIAL

Complete this section only after section 1, above, has been completed. Check the box below that applies:

This project is not regulated by the local comprehensive plan and zoning ordinance.

This project has been reviewed and is compatible with the local comprehensive plan and zoning ordinance.

This project has been reviewed and is not compatible with the local comprehensive plan and zoning ordinance.

Compatibility of this project with the local planning ordinance cannot be determined until the following local approvals are obtained:

Conditional Use Permit Plan Amendment Other

**Development Permit** Zone Change

An application has \_\_\_\_\_ has not \_\_\_\_\_ been made for the local approvals checked above.

Signature of Local Official

Date

Print Name Title:

Phone:

Email: planning@Co.Cus.br.

\*Must be an authorized signature from your local City/County or Tribal Planning Department, regardless of which box is checked above.

#### PUBLIC NOTICE REQUEST FOR PROPOSALS FOR BRIDGE and CULVERT CONSTRUCTION AND PLACEMENT

The Tenmile Lakes Basin Partnership and the City of Lakeside is seeking proposals for the construction and placement of 1 bridge and 5 culverts within Templeton Valley of the Tenmile Watershed.

Proposal and Project information is available at Lakeside City Hall, (Front Desk). 915 North Lake road, Lakeside, OR. Phone (541) 759-3011.

Closing date is Monday, June 6th, 2011 at 4:30 PM. The bid will be awarded by the Lakeside City Council at the June 9th council meeting.

A project site tour with the interested bidders is scheduled for Friday, May 27th 2011. Please notify us if you wish to participate.

For more information contact Mike Mader, Projects Manager, (541) 759-2414.

PUBLISHED: The World - May 12, 13, and 14, 2011 (ID- 20183923)

Monson Bridges Location Map T23s R12w Sec 26/27 Acres = 400 Property Owner: Brad Monson Tenmile Lakes Watershed Coos County N



Monson Bridge Site #2 SC #286

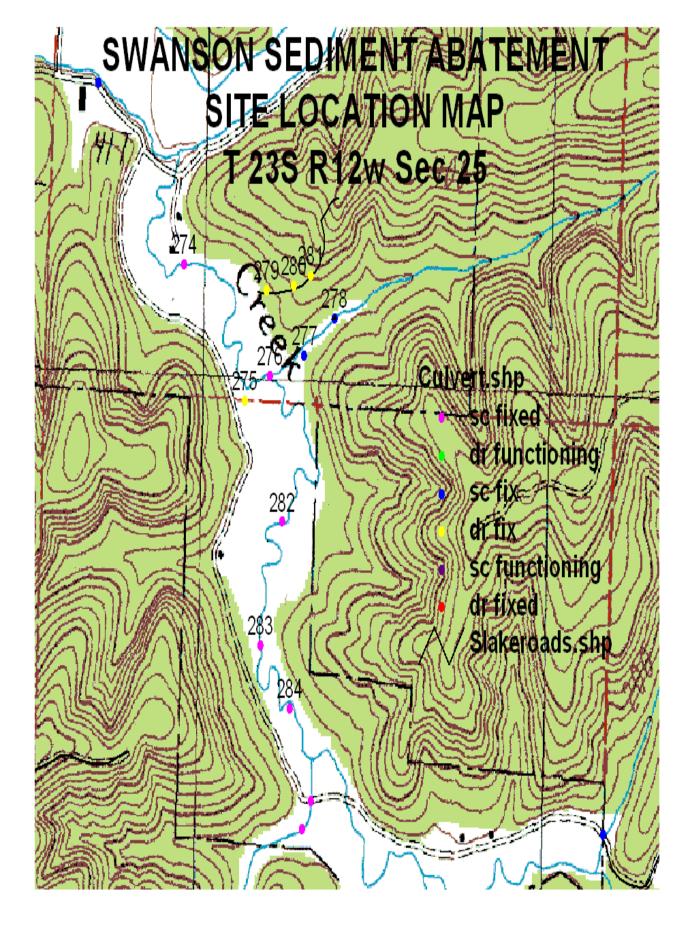
Image State of Oregon

Temple

Image © 2010 DigitalGlobe © 2010 Google 10 T 411935.69 m E 4821816.48 m N elev 36 ft



102010 Google









#### **Tenmile Watershed** 2011 Project Bid Information Monson Bridge Project

		Bid Amount for	
	Bid Complete	211-2028	Monson
COMPANY	LIC # /Insur.	Monson Bridges 1 & 2	Lowest Bid
Moserte & Sons	46179	38432	
All coast const	176156 NEED	39750	
Legacy Const Inc	185342 Ves	80881.29	
Constribes Blue Eight	188885 read adt	36,564,20	
Knife River	056603 needs	40,750	
Jarvis Ros	161009 NOSE IN	29,267	29,267
-		-	
INFORMATION			
ENTER BY:			

3:38



#1

















### MONSON #1

## Project Cost = 32,287.00 Cubic yards removed = ~100 Improve Fisheries access = 8 miles

# MONSON #2









#### TENMILE LAKES BASIN PARTNERSHIP PROJECT COMPLETION FORM

Grant Contract Number:	OWEB #211-2028
Project Name:	Monson Bridges 1 & 2
Project Site:	Monson Bridge #2
Project Site Landowner:	Brad Monson
TLBP Project Manager:	Michael Mader
TLBP Project Engineer:	Harvey Wilcox
Project Contractor:	Jarvis Roads

This form is to ensure all parties, Site Landowner, the Project Engineer, and the TLBP Project Manager, agreed that the above listed Watershed Enhancement Project is completed to all parties satisfaction.

monsol Project Site Landowner

**BP** Project Manager

**BP** Project Engineer

Contractor

Date

Date

Date



# MONSON #2

# Total Project Cost = \$32,287.00 Cubic yards removed = ~100 Improved Fisheries access = ~7.5 miles

# SWANSON SEDIMENT <u>ABATEMENT #2</u> Swanson Bridge #6 Ditch Relief Culverts 1-4 Streambank Stabilization Fencing

# Ditch Relief Site #1

























#### **TENMILE LAKES BASIN PARTNERSHIP PROJECT COMPLETION FORM**

Grant Contract Number:	OWEB #211-2003
Project Name:	Swanson Sediment Abatement #2
Project Site:	Swanson Bridge #6
Project Site Landowner:	Richard Swanson
TLBP Project Manager:	Michael Mader
TLBP Project Engineer:	Harvey Wilcox
Project Contractor:	Jarvis Roads

This form is to ensure all parties, Site Landowner, the Project Engineer, and the TLBP Project Manager, agreed that the above listed Watershed Enhancement Project is completed to all parties satisfaction.

Project Site Landowner

**BP** Project Manager

TLBP Project Engineer

Contractor

<u>10-26-11</u> Date

1)/26/11 Date 16/26/11

Date

Date

### SWANSON #6 Cubic yards removed = ~27 Improved Fisheries access = ~1 mile



















































## Swanson Sectment Abatement Total Grant Funds = \$127,414.00

### Tenmile Riparian Enhancement













### **BIG CREEK**

#### ROBERTSON UPPER

Assessment and the providence of the second

#### ROBERTSON LOWER



#### MIDDLE JOHNSON CREEK









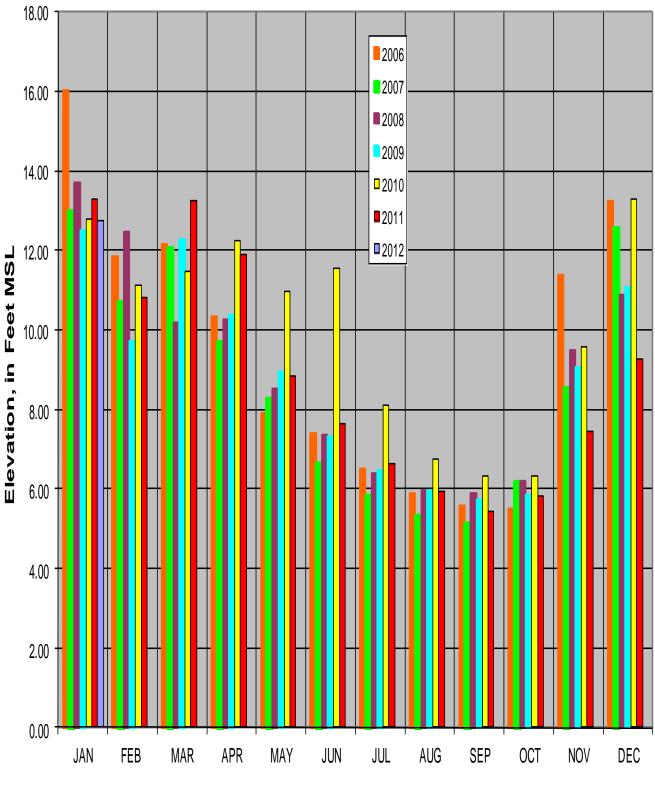
Tenmile Riparian Enhancement Current costs = \$21,752.00

# MONITÓRING





#### **Tenmile Lake Monthly Mean Elevations**



Month

### Harmful Algal Bloom Screening

A Battanta

16- 101-

#### October 17, 2011 OWEB Grant Cycle Southwest Oregon Review Team (Region 2)

<b>Application No.:</b>	212-2033	Project Type: Monitoring	
<b>Project Name:</b>	Tenmile Lakes Watershed Monitoring		
Applicant:	Tenmile Lakes Basin Partnership		
Basin:	SOUTH COAST	County: Coos	
OWEB Request:	\$124,100.00	Total Cost: \$194,130.00	

#### **Application Description**

Tenmile Lake's water quality is declining as a result of nuisance weeds and toxic algae, dramatic increases in sedimentation, and land-use activities. A TMDL and associated Water Quality Management Plan (WQMP) was developed and approved in 2006. The approved Tenmile Watershed Water Quality Assurance Project Plan (TLBP 2005) and WQMP, lists the baseline and trend water quality monitoring needs as well as data analysis that project partners are seeking OWEB funding to support. Monitoring priorities identified are lake water column nutrients and chlorophyll a, algae composition, and tributary sediment delivery. In addition, funding will implement delta building, invasive species, effectiveness monitoring of 29 watershed enhancement projects and establishment of a Coastal Lakes Algae toxin lab.

The first goal of this multifaceted project is to continue the monitoring components within the 2005 Tenmile Watershed Quality Assurance Project Plan (QAPP) that was developed in coordination with ODEQ, by taking a more strategic approach with our effectiveness monitoring. The second goal is to focus resources towards data analysis and interpretation of existing data sets as recommended by the DEQ and our reporting partners. Monitoring will involve: water quality, lake algae and nutrient, delta building, winter storm turbidity, invasive species presence/absence, and post-project effectiveness. Tenmile Lakes Basin Partnership (TLBP) has removed stream temperature monitoring data collection and will instead focus on stream temperature data analysis. TLBP will also significantly reduce the number of project effectiveness sites. The number of sites that will be monitored for effectiveness will have a change in the monitoring frequency of riparian sites, from twice a year to once every 5 years, to reflect the longer duration that these sites need to show significant changes.

Project partners include Tenmile Lakes lakeside lakefront property owners, M&D Environmental, South Slough National Estuarine Research Reserve, DSL, USFS, BLM, DEQ and the City of Lakeside. OWEB funds will be used for project management, staff, contracted services, travel, supplies and materials and fiscal administration.

#### **REVIEW PROCESS**

#### **Regional Review Team Evaluation**

The RRT found the application to be well thought out. It demonstrated good strong partnerships and good lines of communication. The RRT was happy to see the applicant moving towards doing more data analysis. The RRT felt looking at land use is a good focus for the applicant and partners. The project has strong direct ties to TMDL implementation. Many different agencies are using the data from this program.

The RRT had discussions about the frequency of monitoring for algae and invasive species. The discussion ended up determining that the frequencies proposed were sufficient. The RRT also wanted to determine the feasibility of Oregon Health Association helping to support the toxin monitoring. The RRT was confused by the toxin lab discussion, there seemed to be some overlap and it was unclear if the applicant had their own lab or if they were referring to the lab at the South Slough NEER and confused the issue in their referencing

## WATERSHED OUTREACH

### LAKESIDE LIBRARY SUMMER PROGRAM

## Annual Barbecue

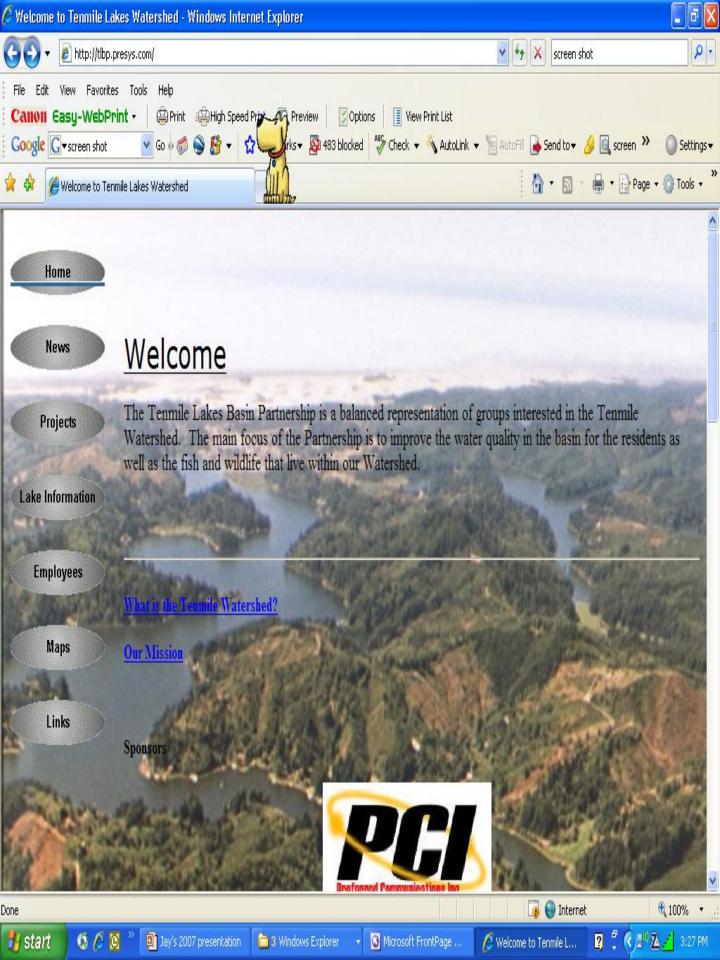
## Tugman Park Kids Free Fishing Day

BEST OF THE CREEK" WINTER STEELHEAD DERBY



### LAKE TOURS



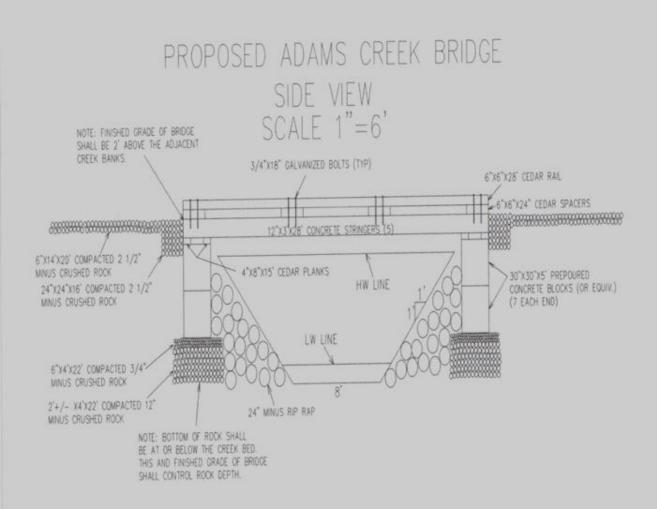


# FUTURE PROJECTS

12/29/08 Adams Cr. Bridge #1 M/F

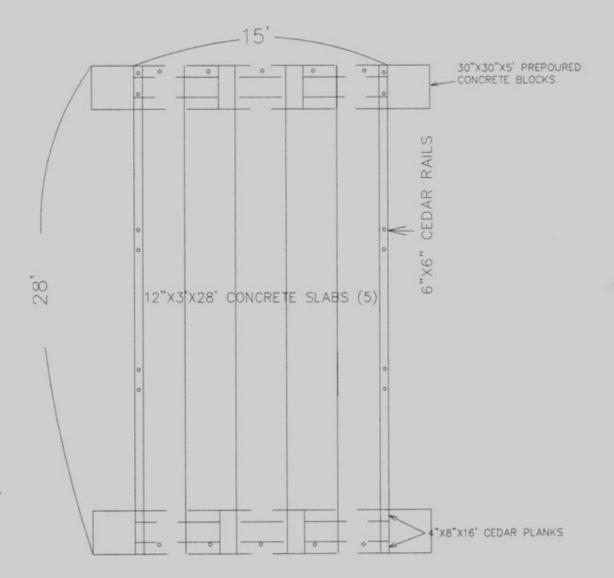


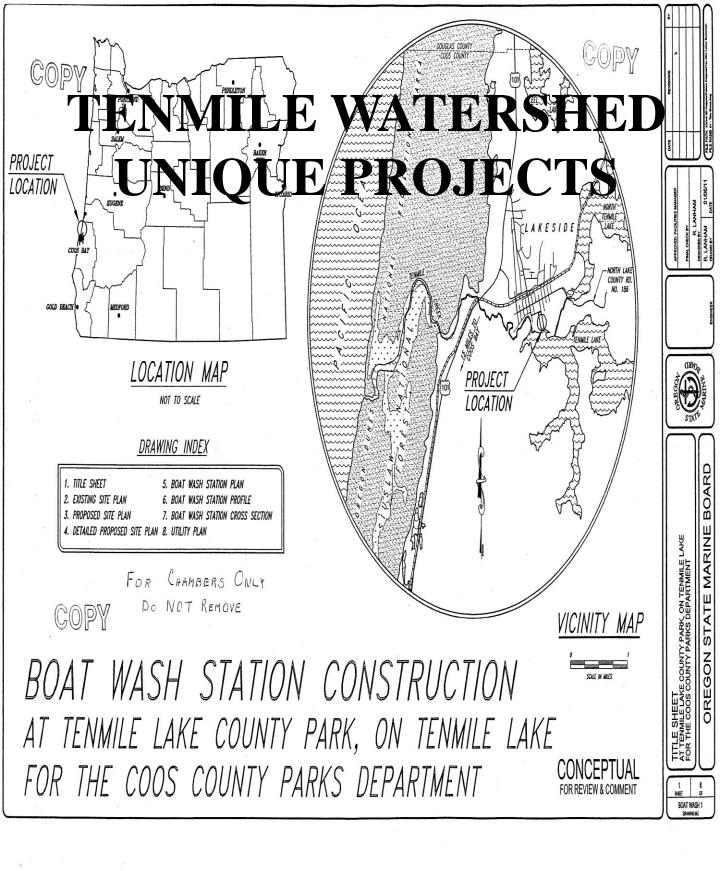


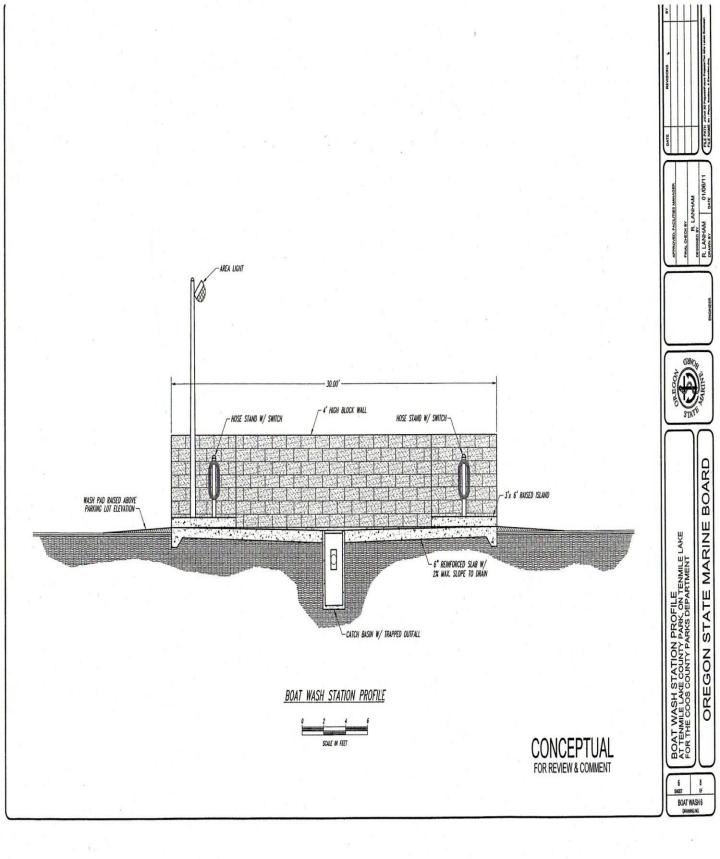


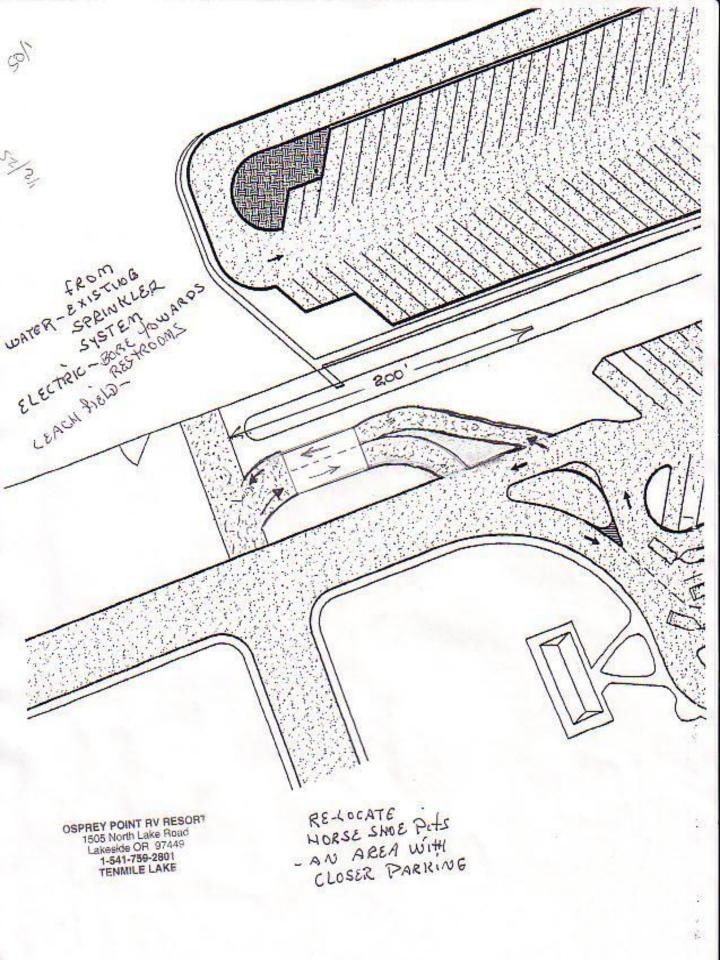
÷.

### PROPOSED ADAMS CREEK BRIDGE PLAN VIEW SCALE 1"=5"









#### October 17, 2011 OWEB Grant Cycle Southwest Oregon Review Team (Region 2)

<b>Application No.:</b>	212-2032	Project Type: Restoration
<b>Project Name:</b>	Tenmile Lakes Boat/Trailer Spray-off Stations	
Applicant:	Tenmile Lakes Basin Partnership	
Basin:	SOUTH COAST	County: Coos
OWEB Request:	\$43,280.00	Total Cost: \$115,365.00

#### **Application Description**

An inventory for aquatic plant species in coastal lakes conducted in 2003-2005 revealed a high degree of association between the number of invasive species present in a water body and whether that water body had a boat ramp. Additionally, although many lakes with boat ramps already contain one or two species of invasive aquatic plants, they often do not contain the same species. Tenmile Lakes is a heavily used water body. This means there is still potential for spread of invasive species just among the larger lakes of the central Oregon coast. Add to this, the potential for additional species such as quagga/zebra mussels from outside the area, and the impacts to native species could be tremendous.

This proposal is to construct two permanent, two-bay boat wash stations at Tenmile Lake's Coos County Park in the City of Lakeside, Oregon. The applicant will utilize Oregon State Marine Board engineering to complete stations. The two stations would consist of a concrete and asphalt drain pad, low pressure hot water supply, refuse (weed) disposal container, and signage. Water and electrical connections would be made to existing park facilities. Effluent would be processed through an independent drain field.

Initial approach utilized only one spray-off station for boaters entering Tenmile Lakes. A second station was added for boats exiting park to prevent Tenmile Lake nuisance species being transferred to other Oregon water bodies. In addition, the original OSMB budget and diagrams planned in the future for stations to have hot water. Research shows that 140 degree water is necessary to kill mussel species. Tankless water heaters have been added to this budget. No similar project exists in Oregon. The mostly likely comparable project is the Hauser Lake Eurasian watermilfoil rinse station in Idaho. The importance of this project is that it will be the first of its kind in Oregon and can be utilized as a pi lot project for the state to determine effectiveness of this type of project.

Project Partners providing project match include USFS and Coos County Parks Department. OWEB funds would be used for contracted services, supplies and materials and fiscal management.

#### **REVIEW PROCESS**

#### **Regional Review Team Evaluation**

Invasive species are a huge concern in this water quality limited lake system which sees a high level of recreational use and is an important coho system. Weed management is part of the water quality plan that has been developed for the lake. The stations will be located at the only public ramp on the lake. The RRT discussed the source of water for the spray-off stations and if it complied with Oregon water law. The RRT determined through discussion that the use of the water for spray-off stations was consistent with the water right. It was noted that if they generate more than 2500 gallons of water per day at the stations, they will need a permit. While ODFW was not listed as a partner in the project, ODFW is very supportive of the project and appreciated that the water being used is hot water. Since the proposed spray-off stations are a voluntary measure and not a regulatory requirement, it is eligible for OWEB funding. While nothing will probably stop the eventual introduction of invasive species into a system, this kind of effort will definitely slow it down, benefit coho in the system, and it is an important measure to take. It was noted that there is significant USFS

RAC match funding tied to this project and this could be lost if not funded. Reviewers wondered if there was any way to reduce the cost of the project to OWEB.

#### **Ecosystem Process and Function**

The project would help protect from introduction of invasive species which harm natural ecosystem processes.

**Regional Review Team Recommendation to Staff** Fund.

#### **Regional Review Team Priority**

10 of 12

#### Distribution of Recommended Award Amounts

**Recommended Amount** \$43,280.00

**EM** Portion

**PE** Portion

#### Staff Recommendation to the Board

Do Not Fund; falls below staff-recommended funding line.

#### Staff Recommended Award

**Recommended Amount** 

**EM** Portion

P	E	Portion	
	-		

**Total Recommended Board Award** 

\$ 0.00



**Communication** Roles

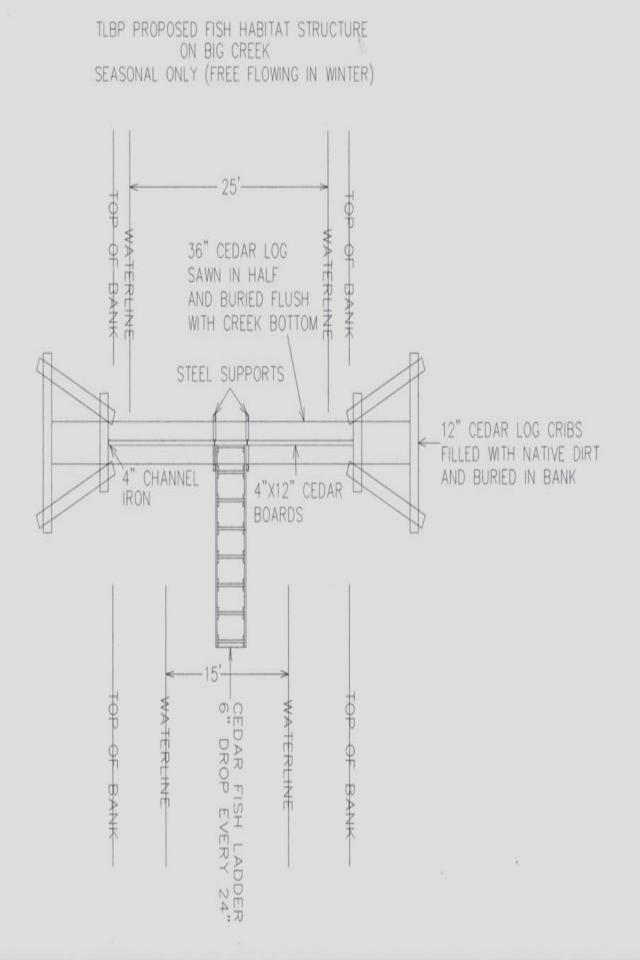
### Tenmile Lakes Water Quality Management Planning

Cary Million

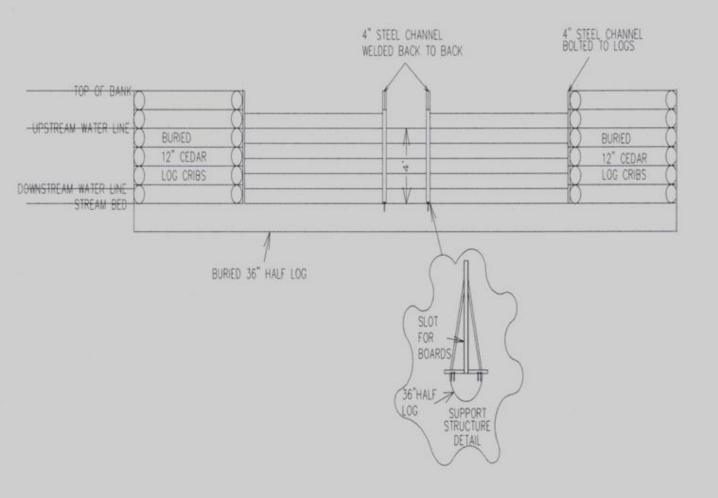
Red Lands

-

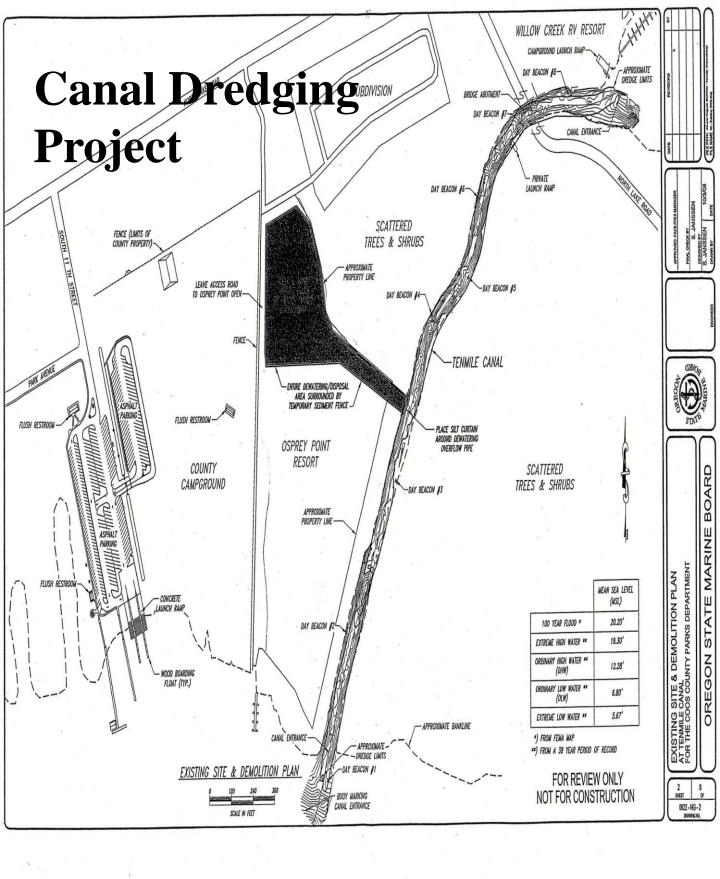
## HABITAT STRUCTURES



### TLBP PROPOSED FISH HABITAT STRUCTURE ON BIG CREEK SEASONAL ONLY (FREE FLOWING IN WINTER)



# Big Creek Meadow Resource Group





### Brazilian Waterweed

Reducing your impacts to this area will keep your shoreline stable and minimize negative impacts to the lakes. Viewing the lakes from your property often seems to conflict with maintaining



healthy riparian zones. But with help lakefront owners can often find a compromise in planning lakefront landscaping that protects the lakes as well as providing beautiful views. Impacts to these areas below 12.21 msl requires contacting DSL for authorization and falling of trees may require a permit from the Oregon Depart-

ment of Forestry. When developing or improving your property some riparian friendly solutions include: 1) Minimize use of nonnative shrubs, 2) Develop a filter strip of native plants above the high water mark. 3) Minimize use of fertilizers and herbicides. For more information and assistance please contact:

Coos Bay ODF	541.269.4136
Department of State Lands	541.378.3805
Tenmile Lakes Basin Partnership	541.759.2414

#### LAKEFRONT EROSION

Whether building a new three bedroom on Lindross Arm or just adding an out building to an existing home on Big Creek Arm, this is where "lake friendly" planning should begin. The Tenmile

Lakes are filling in with sediment 1000 times faster than before the Tenmile area was settled. Development of lakefront lots are contributing to this problem. With a little common sense and basic understanding of your property, new homes and addi-



tions may be completed with minimal impacts to the lakes while achieving your goals for your lakefront property. Some common "lake friendly" recommendations include: 1) Ensure you have all permits. 2) If not doing the work yourself, hire a qualified contractor familiar with Tenmile issues like steep ground and drainage issues. 3) Have and implement an Erosion Control Plan that includes silt fences and seeding exposed soils with grass mix. For more information and assistance please contact:

Coos Bay ODEQ	541.269.2721
Coos Bay ODEQ Tenmile Lakes Basin Partnership	541.759.2414
Department of State Lands	541.378.3805

# TENMILE LAKES Stewardship

GUIDE FOR LAKEFRONT

A

PROPERTY OWNERS We sure are lucky! We own lakefront property along the shorelines of beautiful North and South Tenmile Lakes. With this ownership comes a responsibility to ourselves and other lake users to do what we can to maintain the quality of the lakes.

Sometimes this is a tough compromise. For example, clearing shoreline vegetation to increase the view can impact slope stability and damage the filter strip that is important in reducing sediment inputs into the lakes which in turn, affects weed and algae growth.

This brochure is your guide to taking proper care of your lakefront property and the Lakes. It will give you some general information about Tenmile, discuss important issues with owning lakefront property, describe actions that need authorization or permits, and provide specific information that you need to protect our Lakes so we can continue to enjoy them in the future.

### --5--7--5--7--5--7--5--7--5--7

Pre-1974 Septic System Survey Worked with county health department to inspect 26 lakefront homes in 2006 and 2007. Only 8 were determined to be functioning properly.



### Oregon DEQ Onsite Advisory Committee

Final Report of Recommended Changes to Rules Governing Onsite Systems

For

Oregon Department of Environmental Quality Onsite Wastewater Management Program

February 8, 2010

TLBP VANESTO CREDIT OUR

**OREGON WATERSHED ENHANCEMENT BOARD CITY OF LAKESIDE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF STATE LANDS DEPARTMENT OF FISH &** WILDLIFE JIM LARSEN **BRAD MONSON DICK SWANSON MESSERLE** and Sons **Mr. HARVEY WILCOX JARVIS ROADS Eel~Tenmile S.T.E.P.**