

# Fish Screening Program

## Economic Incentives for Water Users to Protect Fish

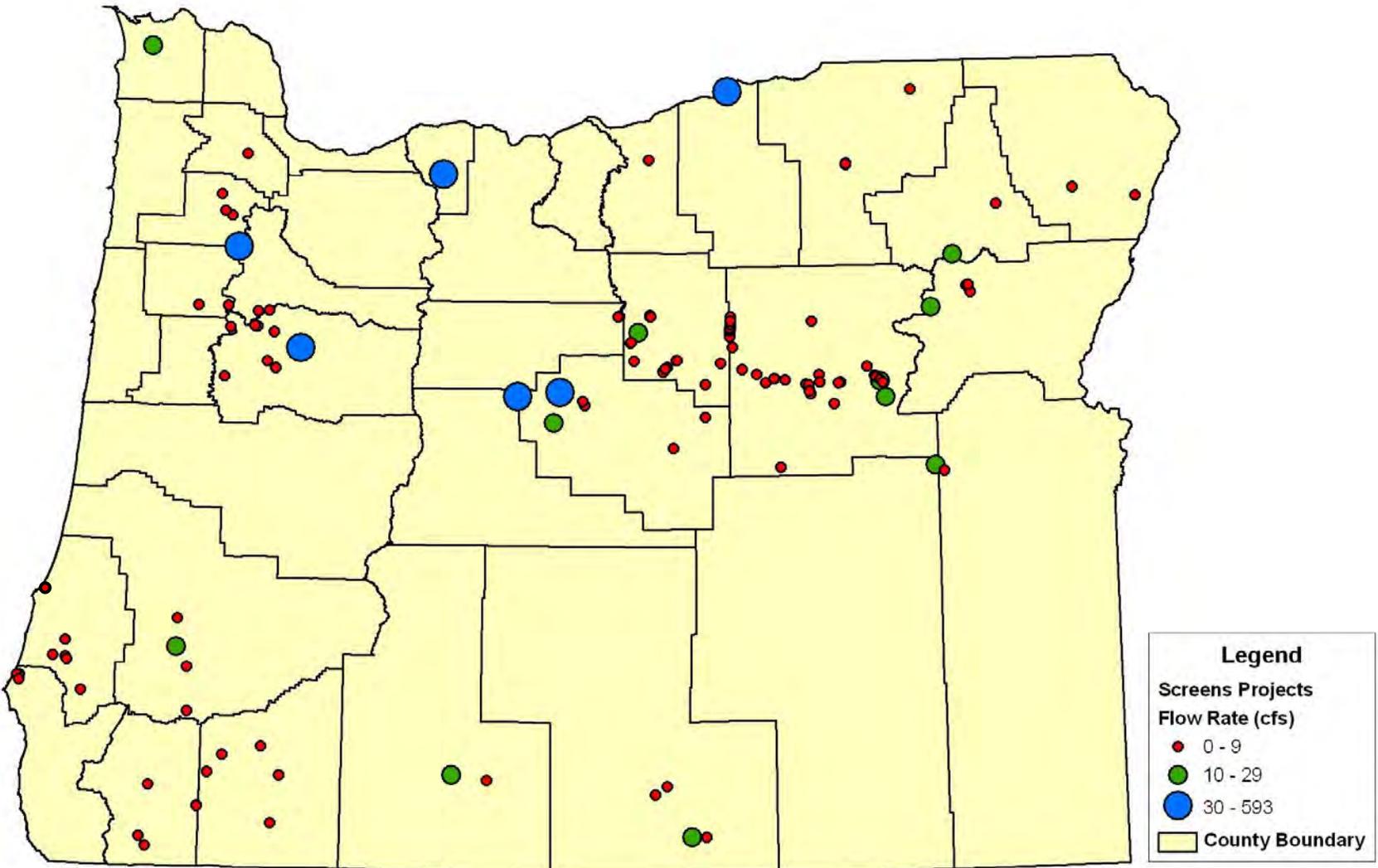
**2007-2009**

**Report to the Legislature**



Prepared by the Oregon Department of Fish and Wildlife





Cover Photo: The Narrows Fish Screen on the ZX Ranch  
Paisley, Oregon



Roy Elicker, Director

*Oregon Department of  
Fish and Wildlife*

### Greetings!

Welcome to the Fish Screening Program's 2009 legislative report. Since 1991, the Program has provided cost share incentives and technical assistance to encourage water users to voluntarily install fish-friendly screens at their water diversions. Fish screens prevent fish from entering irrigation diversions, municipal systems, or industrial intakes.

The Program's cost share opportunities and tax credit are very successful and popular. The cost share assists the water user with the expense of installing a fish screen. The water user may also qualify for a tax credit of up to \$5,000. Since 2003, these incentives have resulted in the voluntary installation of nearly 400 fish-friendly screens throughout the state.

The cost share program's \$4 million allocation of Measure 66 funds have leveraged nearly \$3.4 million in match to date in the 2007-2009 biennium. Projects are located throughout the state and benefit both small and large water users. Valuable partnerships have been forged with water users who volunteer to cost share projects.

The benefits of fish screens are clear. Ninety-eight percent of young salmon survive an encounter with a properly designed fish screen. Oregon's sport and commercial fisheries are improved and fish screens are a critical component of native fish restoration. Fish screens help achieve both sustainable agriculture and sustainable fisheries.

Tens of thousands of water diversions remain unscreened in Oregon, placing fish at risk. The Fish Screening Program has made great progress but there is still a lot of work to do. This report reflects the cooperative efforts of many partners to address the issue. Please join us in celebrating their accomplishments.

Sincerely,

A handwritten signature in black ink that reads "Roy Elicker". The signature is written in a cursive, slightly slanted style.

Roy Elicker, Director

## History

Highly popular and cost-effective, this is one of the top fish screening programs in the nation. Its directive is to share the cost of installing fish screens with water users. The cost share includes monetary, engineering, and design assistance, as well as a tax credit.

The Fish Screening Program was adopted in 1995 after a 4-year pilot program and is directed by ORS 496.141 to report to the Joint Committee on Ways and Means. A fish passage component of the Program reports to the Legislature separately.

This report covers the time period of July 1, 2007 to December 31, 2008.

## How The Fish Screening Program Benefits Water Users, Fisheries and Anglers

- ▶ Water users receive financial incentives to install fish screens.
- ▶ Juvenile and adult fish are not prevented from upstream and downstream migration.
- ▶ Fish populations increase providing anglers with more fishing opportunities.

## What is a Fish Screen?

Water from streams and rivers is redirected for irrigation, power, drinking water and other uses. Diversions used to redirect the water can also pull fish into pumps, irrigation canals and fields — reducing survival and preventing migration. Fish screens are fish-friendly devices placed at the diversion entrance. They allow diverted water to pass through while preventing fish from entering.

## The Benefit of Fish Screens at Water Diversions

- ▶ 98% of young salmon survive an encounter with a properly designed screen.
- ▶ Prevents fish from entering places they should not be (like an irrigation system).
- ▶ Improves the protection, survival, and restoration of native fish.
- ▶ Achieves both sustainable agriculture and sustainable fisheries.

*The Fish Screening Program has installed nearly 400 screens throughout Oregon since 2003.*



# Successful Cost Share 2007-2009

## Incentives

Incentives in the form of cost share and a tax credit encourage water users to voluntarily screen their diversions. As a result, nearly 400 fish screens have been installed throughout Oregon since 2003.

### Cost Share Grants

Water users can receive financial help to install a fish screen by cost sharing their project with ODFW. Water user match can include cash, other grants or in-kind services. There are two cost share opportunities:

- ▶ *Measure 66 Lottery Funds (M66)* Used to cost share up to 60% or \$75K for a new fish screen or up to 100% for replacement.
- ▶ *Fisheries Restoration and Irrigation Mitigation Act (FRIMA)* Provides 65% cost share to irrigation diversion projects that have a local, state, tribal or federal sponsor or co-applicant. The 35% matching funds must be non-federal. FRIMA has provided \$3.9 million in federal cost share funds to Oregon for screening and passage projects since 2001.

M66 and FRIMA can be combined as long as the water user contributes at least 10% of costs. FRIMA was only authorized through 2007 and must be re-authorized by the U.S. Legislature for continued funding.

### Oregon State Tax Credit

Once a new fish screen is inspected and certified by ODFW, the water user may be eligible for a tax credit equal to 50%, or up to \$5,000, of net certified costs. The screen does not need to be cost shared or installed by ODFW; any newly installed fish screen may be eligible. The water user is allowed to take the tax credit over a five-year period as either an individual or a corporation.

## Application Process

### Approval

Water users apply for cost share funding to install a screen at their pump or gravity diversion. Once approved, the water user and ODFW enter into a grant agreement. Costs incurred before approval are not eligible for reimbursement.

### Review and Inspection

Screen projects can be installed by ODFW or the water user.

- ▶ ODFW engineers ensure that state and federal criteria are met by reviewing project designs.
- ▶ ODFW inspects and certifies the project once installed.

### Reimbursement

After the project is inspected and certified the Applicant is reimbursed for their portion and may be eligible for a tax credit up to \$5,000 (see above).

*\$486,984 in State tax credits have been granted since 1995.*



## Background

### Featured Projects

So far this biennium, 139 fish screens have been installed, 42 more are planned for installation by the end of June 2009. The cooperative water users installing these projects have contributed nearly \$3.4 million in matching funds.

Fish screens come in a wide range of types and sizes including pump, rotary drum and panel screens. The projects featured here represent the challenges posed by various locations and the diverse nature of fish screen designs.

CFS or 'cubic feet per second' refers to the volume of water being screened. 1 cfs = 448.83 gallons per minute. Volume of water screened and number of projects installed are the primary measurements used to track Program success.

Projects are located throughout the state benefiting both small and large water users. Valuable partnerships have been forged with water users who volunteer to cost share projects.

***1 cfs = 448.83 gallons  
per minute.***

*Volume of water screened  
and number of projects  
installed are used to track  
Program success.*



## Project Summary

Project Number: S-01-0016    Project Name: CEDC Screen

Project Type:    15 cfs vertical panel wiper screen

Completion Date:    January 2008

Stream:    South Fork Klaskanine River

Basin:    North Coast Basin

Water Use:    Water from this diversion is used for fish culture.



The cleaning brushes are adjusted to ensure proper screen cleaning at the CEDC screen.

### Project Description:

This project was one part of a larger effort to improve screening and fish passage at South Fork Klaskanine Hatchery. The diversion dam was difficult for fish to pass, and the fish screens did not meet state or federal criteria.

The new screen was fabricated by the Program's The Dalles shop and installed by program staff and the water user.

### Project Location:

The site is near Astoria, in Clatsop County, Oregon.

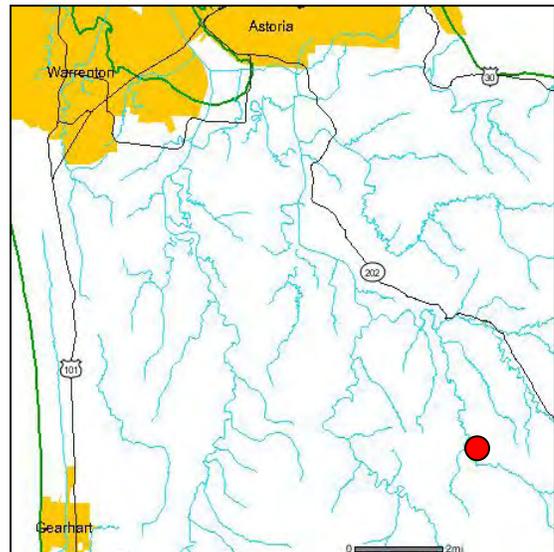
46.05183 N Latitude  
123.72593 W Longitude

### Cost Breakdown:

Measure 66: \$42,098

Water User: \$51,165

**Total:            \$93,263**



### Fish Species Affected:

Cutthroat Trout; Steelhead; and Chinook, Chum, Coho Salmon, and other non-game native fish.

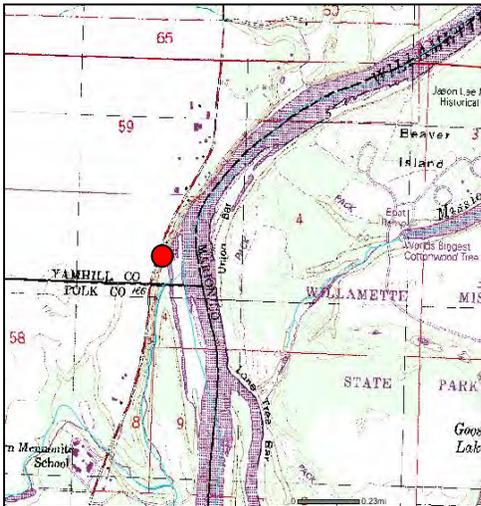
# Project Summary

Project Number: S-02-0032    Project Name: Palmer Creek

Project Type:     85.42 cfs ISI stainless steel pump screen  
Completion Date:    May 2008  
Stream:             Willamette River  
Basin:              Willamette Basin  
Water Use:         Water from this diversion is used for irrigation.



Stainless Steel Pump Screen at Palmer Creek Irrigation District on the Willamette



## Project Description:

This project replaced an older screen that did not meet fish screening criteria with a new pump screen. The old screen was not self-cleaning, had large mesh, and primarily acted as a debris screen. The new screen, purchased from Intake Screens Incorporated (ISI), meets current state and federal fish screening criteria. This screen has both internal and external cleaning brushes, was placed on a retrieval track that allows the screen to be moved in and out of position, and has a docking inlet that isolates and seals the screen structure.

ISI designed and installed the screen, while ODFW staff provided design approval, technical assistance, and construction inspections.

## Project Location:

The site is located approximately seven miles north of Salem, in Yamhill County, Oregon.

45.07623 N Latitude  
123.07076 W Longitude

## Cost Breakdown:

|                              |                  |
|------------------------------|------------------|
| FRIMA:                       | \$ 75,000        |
| ODFW Measure 66:             | \$ 75,000        |
| Palmer Creek Water District: | \$100,108        |
| <b>Total:</b>                | <b>\$250,108</b> |

## Fish Species Affected:

Summer and Winter Steelhead, Spring and Fall Chinook, and other non-game native fish.

## Project Summary

Project Number: S-02-0036      Project Name: LaComb Irrigation District

Project Type:      65 cfs horizontal flat plate screen

Completion Date:      December 2007

Stream:      Crabtree Creek

Basin:      Willamette Basin

Water Use:      Water from this diversion is used for irrigation.



LaComb Irrigation District Fish Screen

### Project Location:

The site is 11 miles northeast of Lebanon, in Linn County, Oregon.

44.59617 N Latitude  
122.65833 W Longitude

Cost Estimate:      \$248,500

### Cost Breakdown:

|                             |                  |
|-----------------------------|------------------|
| FRIMA:                      | \$161,175        |
| LaComb Irrigation District: | \$404,614        |
| <b>Total:</b>               | <b>\$565,789</b> |

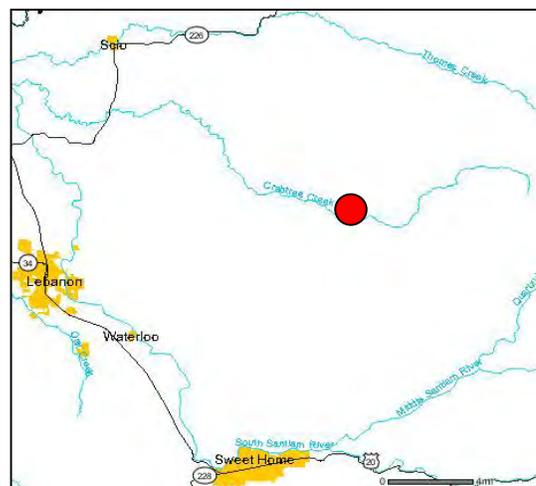
### Fish Species Affected:

Spring Chinook, Winter Steelhead, and other non-game native fish.

### Project Description:

A horizontal flat plate Farmer's Conservation Alliance (FCA) screen replaced an existing screen that did not provide adequate protection for fish. A concrete channel was constructed to ensure uniform water flow to the new screen that was designed to meet state and federal criteria for fish protection. A bypass was constructed to safely return fish to Crabtree Creek.

FCA designed and engineered the screen, LaComb Irrigation District managed the project, and ODFW staff provided design approval, technical assistance, and construction inspections.



## Project Summary

Project Number: S-05-0061    Project Name: Jones Dam

Project Type:     40 cfs panel screen

Completion Date:    July 2007

Stream:             McKay Creek

Basin:              Deschutes Basin

Water Use:         Water from this diversion is used for irrigation.



Trash racks are installed in front of the screen to ensure larger debris does not cause damage.

### Project Location:

The site is near Prineville, in Crook County, Oregon.

44.37923 N Latitude  
120.82618 W Longitude

### Cost Breakdown:

Measure 66: \$34,213

Water User: \$22,807

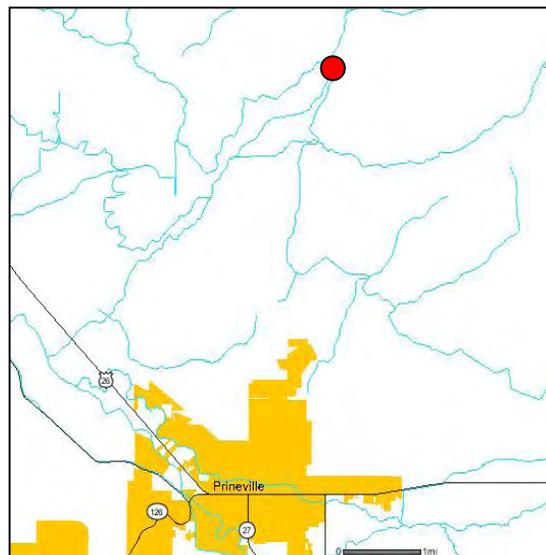
**Total:         \$57,020**

### Project Description:

This project installed a panel screen with water burst cleaning system on McKay Creek, which is a tributary to the Crooked River. The Program's The Dalles shop constructed and installed the screen while the Ochoco Irrigation District installed the power necessary for operation of the cleaning system.

### Fish Species Affected:

Redband Trout and other non-game native fish.



# Project Summary

Project Number: S-05-0070    Project Name: Twin Buttes Ranch #3

Project Type:    3 cfs solar powered rotary drum screen

Completion Date:    June 2008

Stream:    Beaver Creek

Basin:    Deschutes Basin

Water Use:    Water from this diversion is used for irrigation.



Twin Buttes #3 screen is solar powered.

## Project Description:

This project screened a previously unscreened diversion that delivers water to a storage facility ultimately used for irrigation. The screen was fabricated and installed by the Program's The Dalles shop, and the landowner provided assistance with the installation and some materials. After participating in the successful installation of this project, the water user is working with ODFW to screen his other two diversions.

## Fish Species Affected:

Redband Trout and other non-game native fish.

## Project Location:

The site is near Post, in Crook County, Oregon.

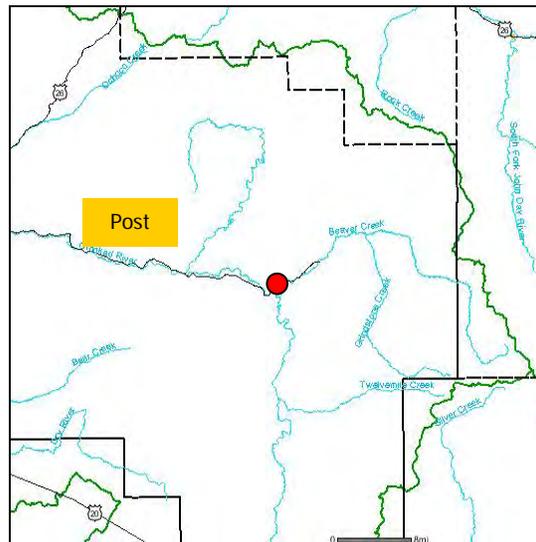
44.10237 N Latitude  
120.04431 W Longitude

## Cost Breakdown:

Measure 66: \$13,981

Water User: \$ 9,321

**Total:            \$23,302**



# Project Summary

Project Number: S-06-0203    Project Name: Stafford #1

Project Type:    4.79 cfs rotary drum screen

Completion Date:    October 2007

Stream:    Badger Creek

Basin:    John Day Basin

Water Use:    Water from this diversion is used for irrigation.



Head gates are installed at some screen sites for flow control and to protect the fish screen.

## Project Description:

This project constructed a rotary drum fish screen and head gate system at a previously unscreened diversion. The screen was constructed in the Program's screen shop in John Day. ODFW staff installed the screen.

This screen was one of six installed on Badger Creek, in the John Day Basin, to protect ESA-threatened summer steelhead

## Fish Species Affected:

Summer Steelhead and other non-game native fish.

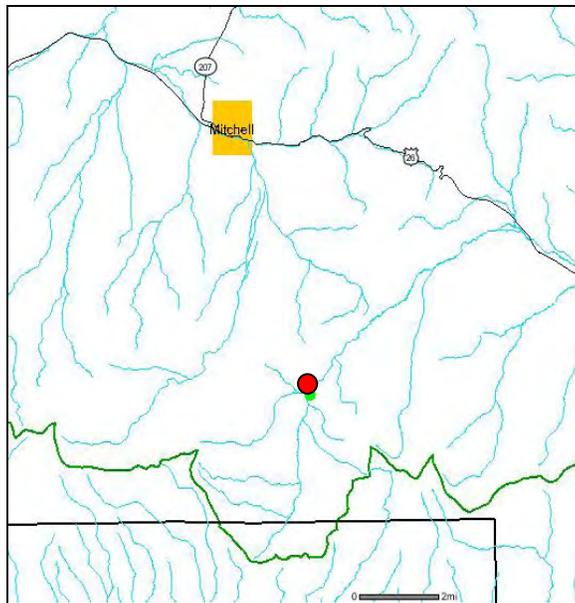
## Project Location:

The site is located seven miles south of Mitchell, in Wheeler County, Oregon.

44.48088 N Latitude  
118.11539 W Longitude

## Cost Breakdown:

|               |                 |
|---------------|-----------------|
| Measure 66:   | \$ 5,533        |
| BPA:          | \$ 4,859        |
| NMFS:         | \$32,057        |
| <b>Total:</b> | <b>\$42,449</b> |



## Project Summary

Project Number: S-06-0271    Project Name: Williams Replacement

Project Type:    13.6 cfs solar powered drum screen

Completion Date:    April 2008

Stream:    Bear Creek

Basin:    John Day Basin

Water Use:    Water from this diversion is used for domestic, irrigation, and stock water.



The Williams system has two bays that house rotary drum screens.

### Project Description:

A dual bay rotary drum screen was installed by the Program's John Day shop. This screen is critical for allowing downstream juvenile steelhead migration to Bridge Creek, which provides summer thermal refuge.

### Fish Species Affected:

Redband Trout, Threatened Summer Steelhead, and other non-game native fish.

### Project Location:

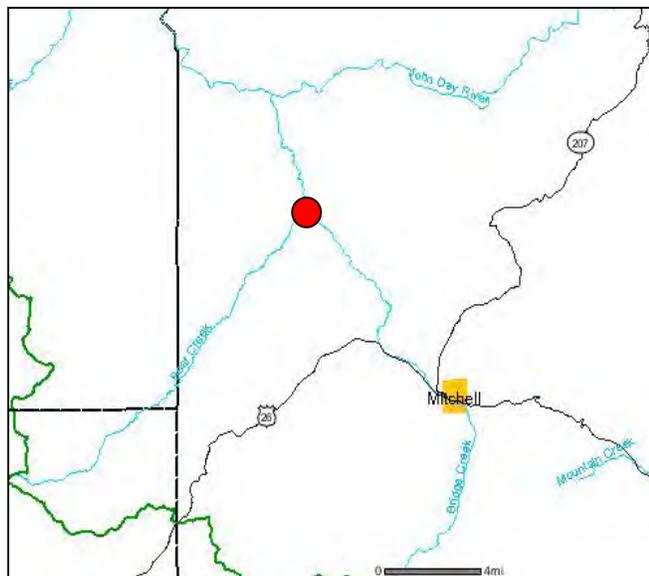
The site is located eight miles northwest of Mitchell, in Wheeler County, Oregon.

44.67274 N Latitude  
120.28464 W Longitude

### Cost Breakdown:

Measure 66: \$46,150

**Total:            \$46,150**



# Project Summary

Project Number: S-07-0041    Project Name: Columbia Irrigation District

Project Type:    593 cfs custom stainless steel pump screen

Completion Date:    July 2008

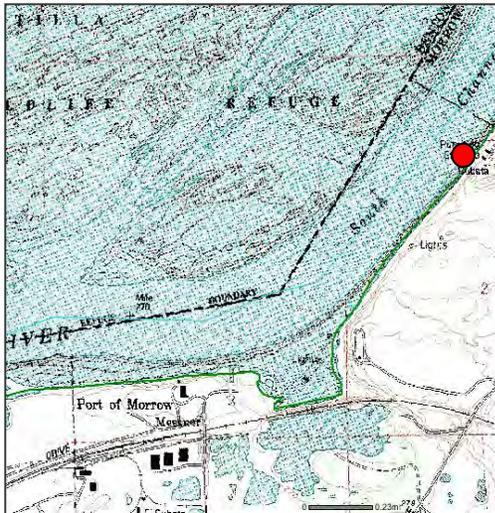
Stream:    Columbia River

Basin:    Columbia Basin

Water Use:    Water from this diversion is used for irrigation.



Installation of this fish screen was made more difficult due to its location in the Columbia River.



### Cost Breakdown:

Measure 66: \$300,000

Water User: \$604,046

**Total:            \$904,046**

### Project Description:

The Columbia Irrigation District diverts water directly from the Columbia River through twelve pumps. In the 1970's individual fish screens were fitted to these shoreline pumps. After installation, it was determined that the screens had high velocity hot spots that fish were likely unable to move away from due to their proximity to the shoreline and the lack of current. Because of their location near the shoreline, debris accumulation was also disruptive to water availability for the water users.

A new state-of-the-art stainless steel screen was designed by an outside contractor to extend out into the Columbia River approximately 200 feet. At this location, river flow will move fish and debris past the screen in a much more efficient manner. The screens are cleaned with an airburst cleaning system, which is controlled by timers. This project was constructed using outside contractors.

### Project Location:

The site is near Boardman, in Morrow County, Oregon.

45.86389 N Latitude  
119.65556 W Longitude

### Fish Species Affected:

White Sturgeon, Summer Steelhead, Sockeye and Spring and Fall Chinook Salmon, and other non-game native fish.

## Project Summary

Project Number: S-09-0010    Project Name: Lone Pine Ditch

Project Type:    27 cfs solar powered belt curtain screen

Completion Date:    December 2007

Stream:    Anthony Creek

Basin:    Powder Basin

Water Use:    Water from this diversion is used for irrigation.



ODFW operates 10 feeding stations on the Elkhorn Wildlife Area and feeds 1400 elk and 800 deer during the winter months.

### Project Location:

The site is located eight miles west of North Powder, in Baker County, Oregon.

45.04208 N Latitude  
118.09356 W Longitude

### Cost Breakdown:

Measure 66: \$ 73,536  
NRCS: \$ 86,000  
**Total: \$159,536**

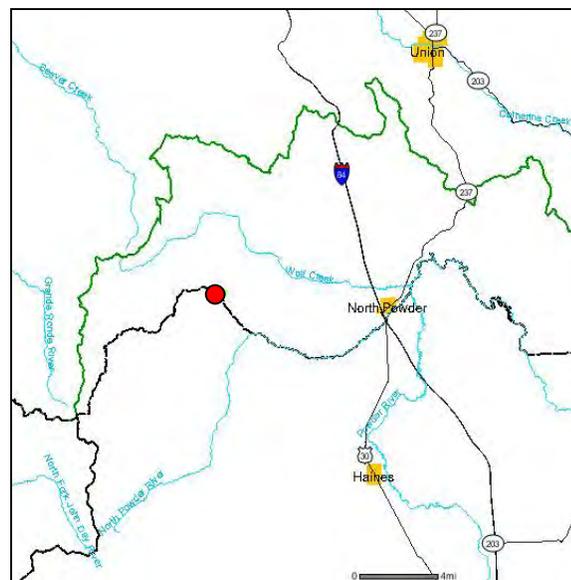
### Project Description:

This screen was installed in Anthony Creek, which is a tributary to the North Powder River on the ODFW Elkhorn Wildlife Area (EWA). The Wildlife Area uses this diversion for irrigation, but because it was unscreened, there were impacts to migratory redband and bull trout.

The Program's John Day and Enterprise shops fabricated and installed the components with contributions of monies and supplies from Natural Resource Conservations Service (NRCS) and EWA.

### Fish Species Affected:

Bull and Redband Trout and other non-game native fish.



## Project Summary

Project Number: S-10-0014    Project Name: Three Valleys Ranch #1

Project Type:     14 cfs triple bay rotary drum screen  
Completion Date:   April 2008  
Stream:             North Fork Malheur River  
Basin:              Malheur Basin  
Water Use:         Water from this diversion is used for irrigation.



The water user provided valuable assistance with the installation of this screen.

### Project Description:

The water user consolidated two previously unscreened diversions into one and provided labor and equipment for installation of the fish screen. The Program's John Day shop fabricated and installed the screen components. The water user also worked with ODFW to install a screen at another location through cost share with ODFW.

### Fish Species Affected:

Redband and Bull Trout, Mountain Whitefish, and other non-game native fish.

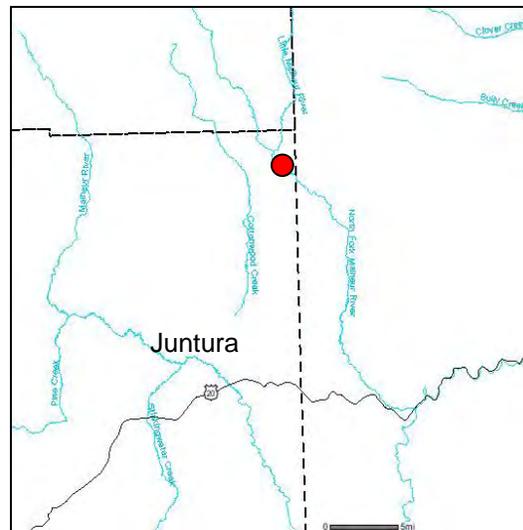
### Project Location:

The site is 25 miles north of Juntura, in Harney County, Oregon.

44.00098 N Latitude  
118.24787 W Longitude

### Cost Breakdown:

Measure 66: \$ 60,163  
Water User: \$ 41,109  
**Total:        \$101,272**



## Project Summary

Project Number: S-13-0034    Project Name: O’Keeffe Cleland

Project Type:    25 cfs rotary drum screen

Completion Date:    August 2007

Stream:    Deep Creek

Basin:    Goose and Summer Lakes Basin

Water Use:    Water from this diversion is used for irrigation.



O’Keeffe Cleland 25 CFS Fish Screen

### Project Location:

The site is near Adel, in Lake County, Oregon.

42.17454 N Latitude  
119.93675 W Longitude

### Cost Breakdown:

|                |                  |
|----------------|------------------|
| FRIMA:         | \$ 44,856        |
| Measure 66:    | \$ 72,222        |
| Local In-Kind: | \$ 7,539         |
| Lakeview SWCD: | \$ 47,340        |
| <b>Total:</b>  | <b>\$171,957</b> |

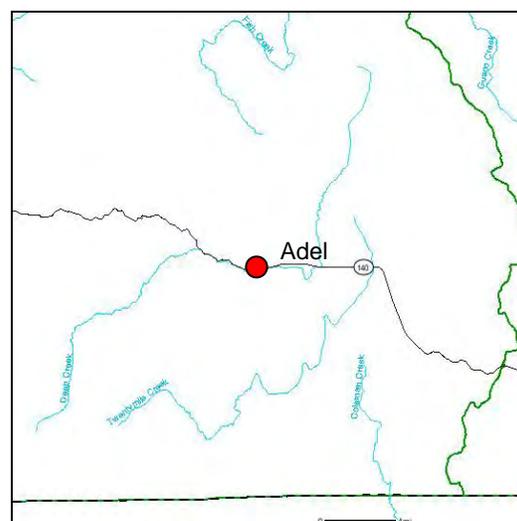
### Fish Species Affected:

Warner Tui Chub, Vulnerable Redband Trout,  
Threatened Warner Sucker, and other non-game native fish.

### Project Description:

The fish screen system installed at this large previously unscreened diversion included a rotary drum fish screen with trash rack, paddle wheels, overhead gantry and walkways, and an 80 foot long bypass system.

The Program’s Central Point shop managed the project, fabricated the screen components, and assisted with installation of the screen. The water user provided in-kind work, equipment, and materials to improve access, which was necessary for the construction equipment to reach the site. They also helped with the construction of the screen box. A local contractor excavated and then backfilled the construction site.



## Project Summary

Project Number: S-13-0040      Project Name: Taylor #1

Project Type:      7.5 cfs solar powered rotary drum screen

Completion Date:    December 2008

Stream:              Honey Creek

Basin:                Goose & Summer Lakes Basin

Water Use:            Water from this diversion is used for irrigation.



Two paddle wheels use the flowing water to produce power for this screen.

### Project Location:

The site is near Lakeview, in Lake County, Oregon.

42.42621 N Latitude  
120.10069 W Longitude

### Cost Breakdown:

Measure 66: \$30,728

Water User: \$20,485

**Total: \$51,213**

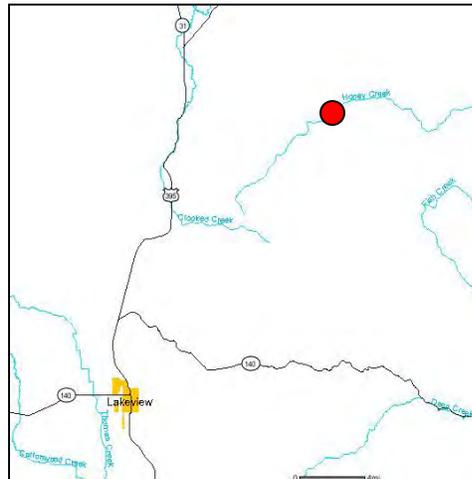
### Project Description:

Honey Creek is a high priority stream for restoration of the Warner Basin. This screen was constructed in a reach of Honey Creek that provides excellent habitat. The landowner has worked to enhance the riparian area; these efforts have provided a significant step toward restoration of Honey Creek.

This screen was installed at a previously unscreened diversion site. The landowner installed one other screen during the past year, and has two additional screens planned for the near future.

### Fish Species Affected:

Warner Tui Chub, Vulnerable Redband Trout, Threatened Warner Sucker, and other non-game native fish.



## Project Summary

Project Number: S-14-0010      Project Name: Hess

Project Type:      7 cfs traveling belt screen

Completion Date:      July 2008

Stream:                  Sprague River

Basin:                    Klamath Basin

Water Use:              Water from this diversion is used for irrigation.



Debris is carried over the top of this screen and then manually removed by the water user.

### Project Description:

A traveling belt screen was installed at a diversion in the Sprague River. The Program's Central Point shop managed the project, fabricated the screen components, and assisted with installation of the screen. The water user provided in-kind work, equipment, and materials to improve access, which was necessary for the construction equipment to reach the site. They also helped with the construction of the screen box. A local contractor excavated and then backfilled the construction site.

### Project Location:

The site is near Bonanza, in Klamath County, Oregon.

42.45423 N Latitude  
121.30838 W Longitude

### Cost Breakdown:

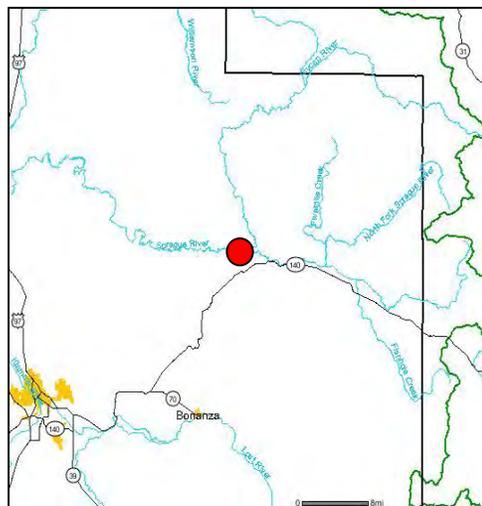
Measure 66: \$38,819

Water User: \$25,879

**Total:                  \$64,698**

### Fish Species Affected:

Sensitive Redband Trout, Endangered Shortnose Sucker, and other non-game native fish.



## Project Summary

Project Number: S-17-0028 Project Name: Morgan Creek STEP Facility

Project Type: 2.5 cfs pump screen and a barrier screen

Completion Date: August 2008

Stream: Morgan Creek

Basin: South Coast Basin

Water Use: Water from this diversion is used to rear 640,000 and acclimate 447,000 Chinook salmon pre-smolts.



Intake Screen



The barrier screen keeps wild fish from interacting with the hatchery fish

### Project Description:

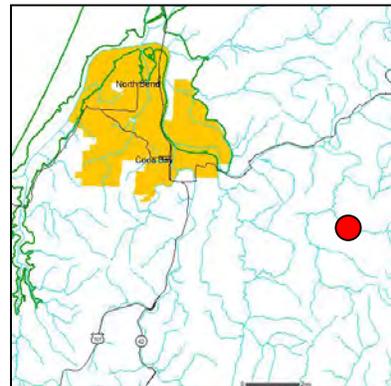
A CTC brand pump screen, booster pump, walkway and jib-crane were installed at the facilities water intake. A panel screen, with walkway, was installed as a barrier at the outflow of the raceways. The barrier screen isolates the fish rearing or acclimating in the hatchery from wild upstream and downstream migrating fish. The Program's Central Point shop fabricated the barrier screen, jib-crane, and walkways and installed all components including the intake screen.

### Cost Breakdown:

Measure 66: \$19,977

Water User: \$13,318

**Total: \$33,295**



### Project Location:

The site is near Coos Bay, in Coos County, Oregon.

43.33833 N Latitude  
124.07966 W Longitude

### Fish Species Affected:

Cutthroat Trout, Winter Steelhead, Threatened Coho and Chinook Salmon, and other non-game native fish.

# Budget Analysis

## Summary

- ▶ General Funds used for screen maintenance have been eliminated, greatly reducing the Agency's ability to repair and maintain fish screens.
- ▶ FRIMA funding may be lost if it is not re-authorized by U.S. Legislature this year.
- ▶ \$3.4 million additional funds were leveraged through the Program's cost share funds.

## Key to Program Funding

| Fund      | Name  |
|-----------|---|
| BOR       | Bureau of Reclamation (for Upper Klamath Lake)      |
| BPA       | Bonneville Power Administration                     |
| FRIMA     | Fisheries Restoration & Irrigation Mitigation Act   |
| GF        | General Fund  |
| M66       | Measure 66 Lottery Funds                            |
| MA        | Mitchell Act  |
| PCSRF     | Pacific Coast Salmon Restoration Fund               |
| Surcharge | ODFW Sport Fishing License Surcharge                |
| USFWS     | US Fish & Wildlife Service (for Upper Klamath Lake) |

## Funding Cycles

The Program's state and federal funding cycles overlap, resulting in a complex budget. In addition, dollar amounts and funding sources vary.

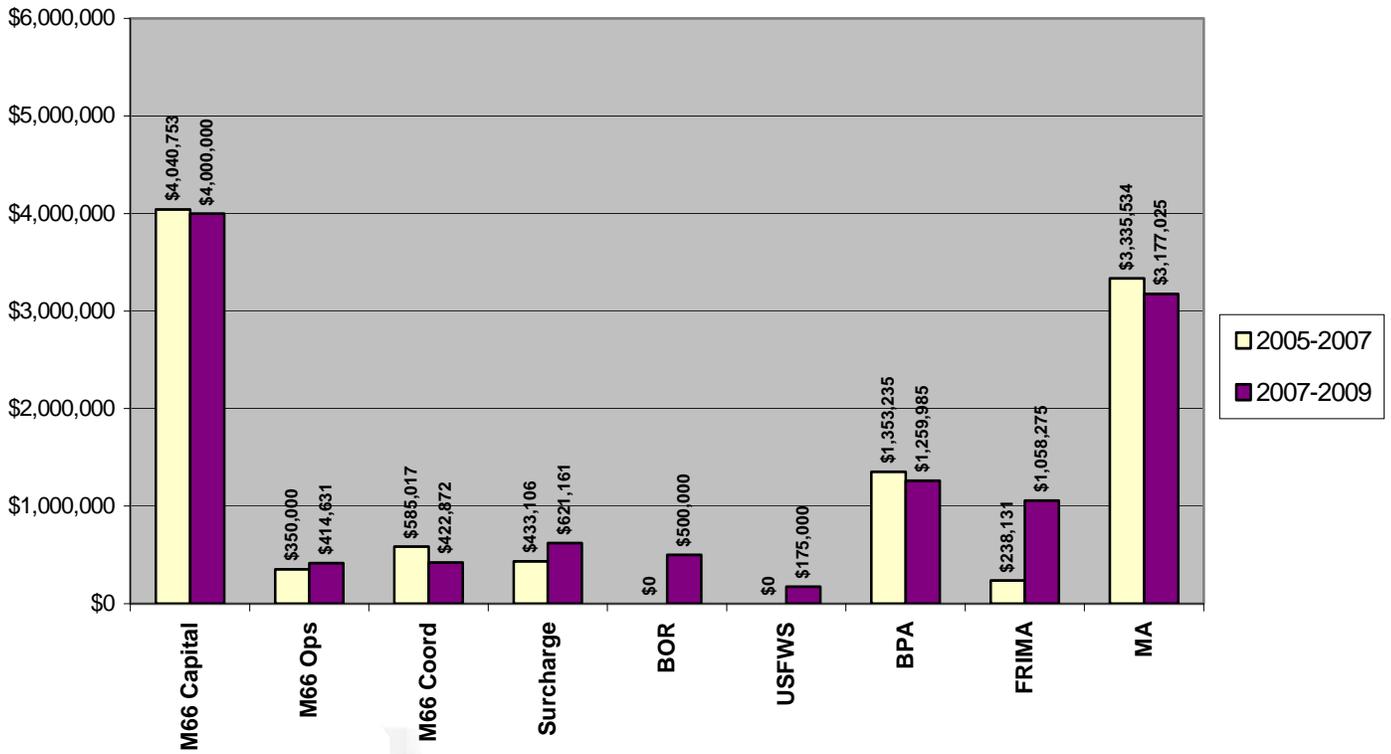
| Funding Cycles      |  |         |        |         |        |         |
|---------------------|--|---------|--------|---------|--------|---------|
| OR Biennium         |  | 2005-07 |        | 2007-09 |        |         |
| M66 Capital         |  | \$4M    |        | \$4M    |        |         |
| M66 Operations      |  | \$350K  |        | \$415K  |        |         |
| M66 Coordination    |  | \$585K  |        | \$423K  |        |         |
| Surcharge           |  | \$433K  |        | \$621K  |        |         |
| Miscellaneous       |  | \$0     |        | \$0     |        |         |
| GF                  |  | \$0     |        | \$0     |        |         |
| PCSRF               |  | \$0     |        | \$0     |        |         |
| Calendar Year       |  | 2005    | 2006   | 2007    | 2008   | 2009    |
| BPA                 |  | \$868K  | \$919K | \$455K  | \$805K | Unknown |
| Federal Fiscal Year |  | 2005    | 2006   | 2007    | 2008   | 2009    |
| BOR                 |  | \$0     | \$0    | \$250K  | \$250K | Unknown |
| FRIMA               |  | \$283K  | \$238K | \$383K  | \$676K | Unknown |
| MA                  |  | \$1.6M  | \$1.7M | \$1.7M  | \$1.4M | Unknown |
| USFWS               |  | \$0     | \$0    | \$0     | \$175K | Unknown |

# Budget Analysis

## Comparison of 2005-2007 and 2007-2009 Allocations

This comparison of the current and previous biennium illustrates where funding was decreased and increased.

Program Budget Allocations



# Budget Analysis

## Program Allocations and Expenditures

Figures represent Program allocations and expenditures for the 2007-2009 biennium as of December 31, 2008.

| <b>Allocations – All Funds</b>  |                     |                    |
|---------------------------------|---------------------|--------------------|
| <b>Source of Funds</b>          | <b>Allocated</b>    | <b>% of Budget</b> |
| Measure 66 Capital              | \$4,000,000         | 36.52%             |
| Measure 66 Operations           | \$414,631           | 3.79%              |
| Measure 66 Coordination         | \$422,872           | 3.86%              |
| Sport Fishing License Surcharge | \$621,161           | 5.67%              |
| Bonneville Power Administration | \$1,259,985         | 11.50%             |
| FRIMA Funds (USFWS)             | \$1,058,275         | 9.66%              |
| Mitchell Act (NMFS)             | \$3,177,025         | 29.00%             |
| Upper Klamath Lake (BOR)        | \$500,000           | 4.56%              |
| Upper Klamath Lake (USFWS)      | \$175,000           | 1.6%               |
| <b>Total</b>                    | <b>\$11,628,949</b> | <b>100.00%</b>     |

| <b>Expenditures and Obligations – All Funds</b> |                    |                    |                      |
|---|--------------------|--------------------|----------------------|
| <b>Source of Funds</b>                          | <b>Expended</b>    | <b>Obligated</b>   | <b>Total</b>         |
| Measure 66 Capital                              | \$1,684,466        | \$1,576,585        | \$3,261,051          |
| Measure 66 Operations                           | \$412,587          | –                  | \$412,587            |
| Measure 66 Coordination                         | \$199,025          | –                  | \$199,025            |
| Sport Fishing License Surcharge                 | \$340,671          | –                  | \$340,671            |
| Bonneville Power Administration                 | \$743,862          | –                  | \$743,862            |
| FRIMA Funds (USFWS)                             | \$568,178          | \$775,689          | \$1,343,867          |
| Mitchell Act (NMFS)                             | \$833,899          | –                  | \$833,899            |
| Bureau of Reclamation                           | \$23,445           | –                  | \$23,445             |
| <b>Total</b>                                    | <b>\$4,806,133</b> | <b>\$2,352,274</b> | <b>* \$7,158,407</b> |

\* Total includes expenditures as of December 2008 plus funds obligated to projects under construction.

# Budget Analysis

## Contractor and Supplier Expenditures

The Program uses private contractors when possible during all phases of a project: inventory and assessment work, engineering and design, fabrication, construction and maintenance. They generate work and income in communities throughout the state and help the Program install more fish screens than is possible with limited staff. Screen designs are sent out for bid to private contractors. Program engineers review contractor plans.

Water users are encouraged to purchase pump screens and components directly from their local irrigation contractors.

## Water User Match

### In-kind

Water User match can be in-kind construction or installation related materials, equipment or labor included in the cost of the project. \$19,351 worth of in-kind was contributed by 16 water users.

### Cash

Water users can also provide match by purchasing materials, hiring contractors or paying ODFW for their portion of the project.

## Personnel

Personnel are located in Salem headquarters and at four screen shops where projects are constructed. The challenge is to manage the multiple funding streams and keep Program positions fully funded. \$2,592,777 in Personal Service was expended as of December 31, 2008.



### Contractor Expenditures by House District

| District      | Contractor \$    | Supplier \$      |
|---------------|------------------|------------------|
| 1             | \$0              | \$1,411          |
| 2             | \$0              | \$10,472         |
| 3             | \$0              | \$105            |
| 4             | \$0              | \$925            |
| 5             | \$0              | \$672            |
| 10            | \$10,563         | \$2,595          |
| 23            | \$0              | \$1,585          |
| 32            | \$0              | \$10,982         |
| 54            | \$0              | \$3              |
| 55            | 4,889            | \$105,738        |
| 56            | \$41,799         | \$25,328         |
| 57            | \$2,244          | \$70,809         |
| 59            | \$22,292         | \$93,847         |
| 60            | \$66,176         | \$113,671        |
| <b>Totals</b> | <b>\$147,963</b> | <b>\$438,143</b> |

### Contractor Expenditures by Senate District

| District      | Contractor \$    | Supplier \$      |
|---------------|------------------|------------------|
| 1             | \$0              | \$11,883         |
| 2             | \$0              | \$1,030          |
| 3             | \$0              | \$672            |
| 5             | \$10,563         | \$2,595          |
| 12            | \$0              | \$1,585          |
| 16            | \$0              | \$10,982         |
| 27            | \$0              | \$3              |
| 28            | \$46,688         | \$131,066        |
| 29            | \$2,244          | \$70,809         |
| 30            | \$88,468         | \$207,519        |
| <b>Totals</b> | <b>\$147,963</b> | <b>\$438,143</b> |

### Personnel FTE

| Location      | FTE              |
|---------------|------------------|
| Central Point | 8.00             |
| Enterprise    | 4.00             |
| John Day      | 23.00            |
| The Dalles    | 8.00             |
| Salem         | 9.33             |
| <b>Total</b>  | <b>52.33 FTE</b> |

# Budget Analysis

## State Funding

With the exception of M66, state funds fluctuate every biennium. Sport fishing license surcharge is dependant upon license sales. General fund dollars have been eliminated.

### General Funds (GF)

**\$0**

The \$400,000 in GF received in past biennia has been eliminated. GF were used for major fish screen maintenance. ORS 498.306(5) requires that the Fish Screening Program provide major maintenance for screens it cost shares on diversions less than 30 cfs.

Measure 66, the Program's major funding source for new screen construction, cannot be used for major maintenance. The Program does not receive enough major maintenance funding from other sources. The loss of GF has only worsened the problem. Screens are left un-repaired, reducing their effective lifespan and diminishing the State's return on investment. The situation will only intensify as the Program cost shares more and more screens with Measure 66 funds.



## 25-Cent Sport Fishing Surcharge (Surcharge)

**\$621,161**

A 25-cent surcharge on Oregon sport fishing licenses is dedicated to Program administration including: personal services and services and supplies; two administrative positions; inventory work; fish screen maintenance; and the Fish Screening Task Force. At the recommendation of the Task Force, ODFW is seeking an increase in the 25-cent surcharge to 75-cents. This increase, if passed, will allow ODFW to address statutorily mandated fish screen maintenance. This increase is included in SB2222. The surcharge has not been increased since its inception in 1991.

### Measure 66 State Lottery Funds (M66)

Administered by Oregon Watershed Enhancement Board (OWEB)

|              |                  |
|--------------|------------------|
| Capital      | \$4,000,000      |
| Operations   | \$414,631        |
| Coordination | <u>\$422,872</u> |

**Total \$4,837,503**

The majority of the Program's cost share is funded by M66. Funds are used toward engineering and construction of fish screens and limited program support.

Although M66 allows for up to 35% operational funds along with 65% capital construction funds, the cost share program receives far less than the 35% allowed. This biennium, the cost share Program received just 10.4% (\$414,631) in M66 operational funds. Originally this was not an issue since GF made up the difference, but GF has been eliminated resulting in a lack of operational funds. The Program's 2003-2005 biennium Secretary of State audit revealed that \$600,000 in operational funds are needed for the Program to be in compliance with Measure 66.

*97 water users participated with the program to install screens during this biennium.*

# Budget Analysis

## Federal Funding

Federal funding is dependant on the renewal of grants. Funds are allocated in a federal fiscal year cycle with the exception of BPA, which is granted per calendar year.

### Mitchell Act (MA)

Administered by National Oceanic & Atmospheric Administration (NOAA) Fisheries

#### \$3.2 million

Mitchell Act has historically provided the major source of funding for fish protection through screening in the Columbia River Basin. In Oregon, MA funds have funded over 750 fish screens and provided for their maintenance. All of these screens are located on streams where ESA protected fish are located.

MA funding has decreased significantly since 1993. Meanwhile, costs for personnel, materials and transportation have increased substantially. Since 2001, costs have risen approximately 38%.

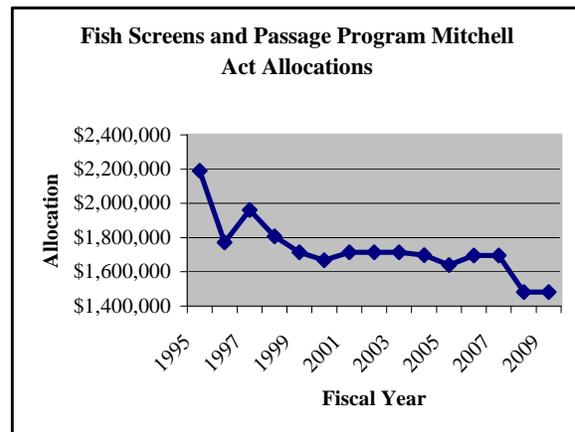
The reduction of MA funding has eliminated the opportunity for this source to be used to construct new screening and passage facilities. The Program is having a difficult time merely maintaining the existing MA facilities. Most of the screens have been put on a reduced maintenance schedule that is resulting in considerable loss of fish at some diversion sites.

Continued reduction or elimination of MA fish screen funding could mean:

- Closure of up to three fish screen fabrication and maintenance shops and a loss of up to 30 positions.
- Up to \$5 million loss to the economies of Eastern Oregon's rural communities.

- Over 750 fish screens and ladders may not be operated and maintained.
- Oregon could no longer provide technical assistance to water users on fish screening and passage in the Columbia River Basin.
- The State Fish Screening and Passage Cost Share Program would no longer be able to construct fish screens and fishways using state lottery funds since this program uses the excess capacity of these MA funded shop facilities.

Without these funds in 2010, ODFW will be forced to lay off many experienced fish screen technicians and will not be able to adequately maintain existing fish screens in the John Day, Deschutes, Umatilla, and Grande Ronde sub-basins.



### Bonneville Power Administration (BPA)

#### \$1.2 million

BPA funds are used for the replacement of fish screens in the Columbia River Basin constructed under the MA program (see above). Some of these screens are worn out or do not meet criteria.

## Budget Analysis

### Fisheries Restoration and Irrigation Mitigation Act (FRIMA)

Administered by U.S. Fish and Wildlife Service (USFWS)

**\$1,058,275**

FRIMA provides 65% cost share to irrigation diversion projects that have a local, state, tribal or federal sponsor or co-applicant. The 35% matching funds must be non-federal. FRIMA has provided \$3.9 million cost share funds to Oregon for 27 screening and passage projects in 11 counties since 2001. FRIMA funds are often combined with state funds to increase the assistance available to water users. An important benefit of FRIMA is the ability to use FRIMA funds to conduct much needed inventory work to identify diversions needing fish screening. FRIMA was only authorized through 2007 and must be re-authorized by the U.S. Legislature for continued funding.

At the time of this printing, the FRIMA reauthorization was awaiting action by the U.S. House of Representatives.



*FRIMA was only authorized through 2007 and must be re-authorized by U.S. Legislature for continued funding.*

## Other Program Activities

### Research and Development

Program engineers and fish screen technicians continue to develop innovative fish screen technology, improving effectiveness and efficiency. Providing power for screen operation and adequate cleaning is key to screen effectiveness.

### Hydraulic Power for Cleaning System

To keep screen panels clean specialized hydraulic pumps, cylinders, and automatic direction control circuits were developed and have been used on several screen projects. Electrical controls are installed with the hydraulic system to protect equipment, improve operation and efficiency, and simplify maintenance.

### Alternative Power Sources

Program engineers are investigating the potential use of alternative power sources for fish screens including paddle wheel, hydrogen fuel cell, and solar technologies.



Solar panel installation

### The Role of the Fish Screening Task Force

The Fish and Wildlife Commission appoints a seven-member citizen task force to advise the Department regarding fish screening policy, funding and technology issues. The Task Force is made up of one public-at-large, three agriculture, and three fishing and fish conservation representatives.

### Task Force Members

#### Representing Agriculture

- ▶ **John Benton** is an orchardist in Hood River. He is a past irrigation district board member and actively works with the Hood River Watershed Group and Hood River SWCD. Mr. Benton supports watershed restoration projects, fish screening and fish passage.
- ▶ **Carol Bradford** is Manager of the Medford Irrigation District. She actively works on fish screening and passage improvement and supports water conservation.
- ▶ **Reed Stewart** has over 25 years of experience in the irrigation industry and is the Irrigation Division Manager for Pendleton Grain Growers, Inc. He is active in several agricultural organizations throughout Oregon.

#### Representing Fishing and Fish Conservation

- ▶ **Frank Bird**, a fisheries biologist with years of experience with the National Oceanic and Atmospheric Administration and Bureau of Land Management. He also worked with watershed councils in southwestern Oregon.
- ▶ **Lynden Brown** is a retired high school biology teacher. She is interested in fish issues and wants to insure viable fisheries for the future.
- ▶ **Tony Brauner** is a retired high school education and CEO of an intrastate trucking firm. He is a licensed fishing guide and is actively involved with fish habitat and conservation work.

#### Representing Public-at-Large

- ▶ **Mark Wharry** is an engineer with over 10 years experience working on fish screening and passage projects in the Pacific Northwest.

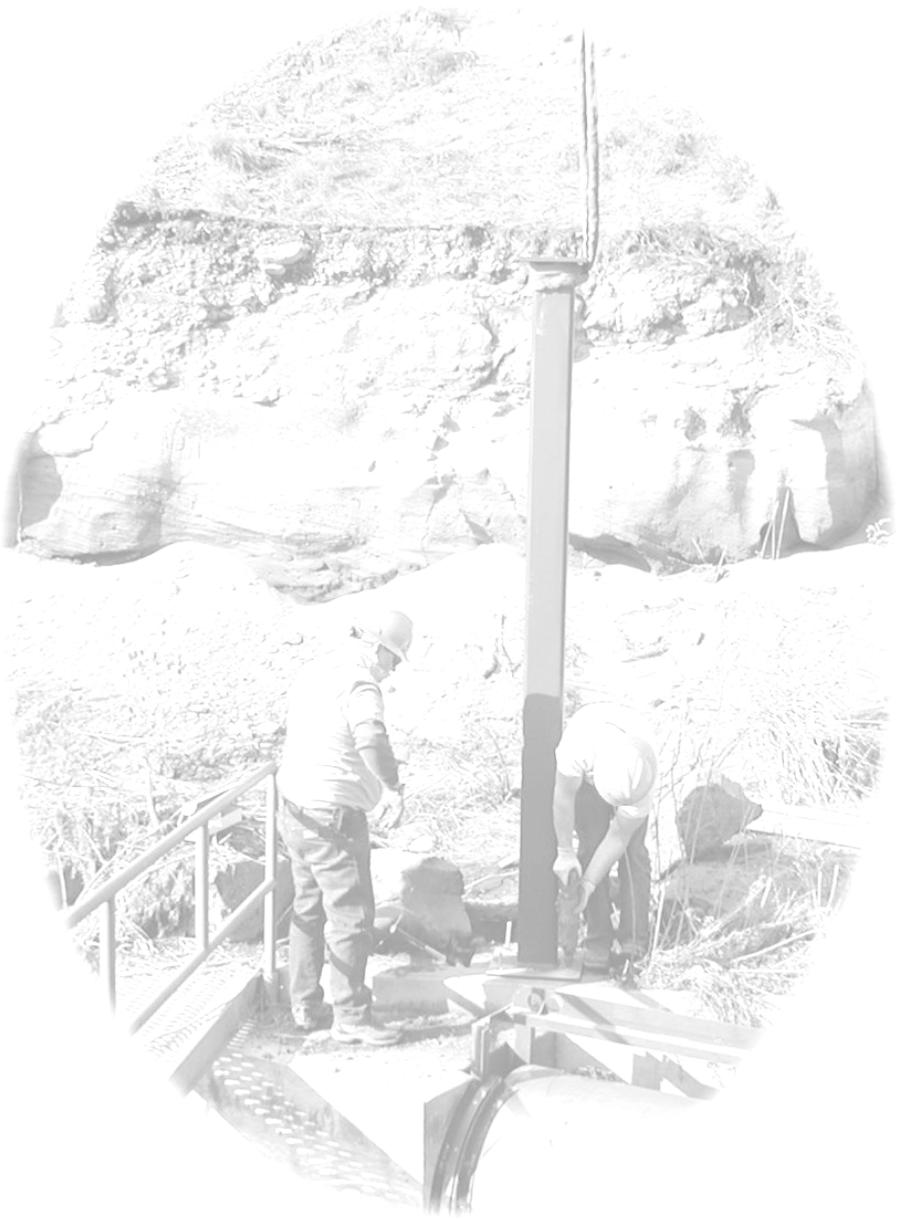
# Screens Installed July 1, 2007 to December 31, 2008

## Summary of Installed Screens by House and Senate Districts

CFS or 'cubic feet per second' refers to the volume of water being screened. 1 cfs = 448.83 gallons per minute. Volume of water screened and number of projects installed are the primary measurements used to track Program success.

| <b>Screens Installed by House District</b> |             |                 |
|--|-------------|-----------------|
| District                                   | # Installed | cfs             |
| 1  | 14          | 15.35           |
| 2  | 2           | 11.07           |
| 3  | 1           | 1.80            |
| 4  | 8           | 8.20            |
| 15   | 2           | 3.90            |
| 17   | 10          | 169.35          |
| 23   | 2           | 2.52            |
| 24   | 4           | 6.66            |
| 32   | 2           | 15.67           |
| 52   | 1           | 30.00           |
| 53   | 1           | 153.00          |
| 55   | 12          | 104.94          |
| 16   | 2           | 18.20           |
| 57   | 10          | 628.40          |
| 59   | 48          | 104.53          |
| 60   | 20          | 69.57           |
| <b>Total</b>                               | <b>139</b>  | <b>1,343.15</b> |

| <b>Screens Installed by Senate District</b> |             |                 |
|---|-------------|-----------------|
| District                                    | # Installed | cfs             |
| 1   | 16          | 26.42           |
| 2   | 9           | 10.00           |
| 8   | 2           | 3.90            |
| 9   | 10          | 169.35          |
| 12  | 6           | 9.18            |
| 16  | 2           | 15.67           |
| 26  | 1           | 30.00           |
| 27  | 1           | 153.00          |
| 28  | 14          | 123.14          |
| 29  | 10          | 628.40          |
| 30  | 68          | 174.09          |
| <b>Total</b>                                | <b>139</b>  | <b>1,343.15</b> |



## Fish Screens Installed July 1, 2007 to December 31, 2008

| County Name | House District | Senate District | Basin       | Project Title                       | Stream                      | Flow Rate | Project # |
|-------------|----------------|-----------------|-------------|-------------------------------------|-----------------------------|-----------|-----------|
| Baker       | 57             | 29              | Powder      | Lone Pine Ditch                     | Anthony Creek               | 27.00     | 09-0010   |
| Baker       | 60             | 30              | Powder      | City of Sumpter Screen              | McCully Fork                | 5.00      | 09-0024   |
| Baker       | 60             | 30              | Powder      | Pine Creek-Kerns                    | Pine Creek                  | 1.80      | 09-0029   |
| Baker       | 60             | 30              | Powder      | Willow Creek Pump                   | Willow Creek                | 4.89      | 09-0031   |
| Baker       | 60             | 30              | Powder      | Willow Creek-Kerns #2               | Willow Creek                | 2.21      | 09-0040   |
| Benton      | 15             | 8               | Willamette  | Webber Pump                         | Willamette River            | 2.37      | 02-0256   |
| Clatsop     | 32             | 16              | North Coast | C.E.D.C. Screen                     | South Fork Klaskanine River | 15.00     | 01-0016   |
| Coos        | 1              | 1               | South Coast | Bandon Crossings #1                 | Twomile Creek               | 0.80      | 17-0018   |
| Coos        | 1              | 1               | South Coast | Allen Dairy #1                      | Coquille River              | 1.67      | 17-0023   |
| Coos        | 1              | 1               | South Coast | Bandon Crossings #2                 | South Twomile Creek         | 0.86      | 17-0025   |
| Coos        | 1              | 1               | South Coast | Morgan Creek STEP Facility          | Morgan Creek                | 2.50      | 17-0028   |
| Coos        | 1              | 1               | South Coast | Dement Ranch                        | South Fork Coquille River   | 1.58      | 17-0029   |
| Coos        | 1              | 1               | South Coast | Wiley                               | South Fork Coquille River   | 0.37      | 17-0034   |
| Coos        | 1              | 1               | South Coast | Rock Creek Livestock                | South Fork Coquille River   | 0.70      | 17-0035   |
| Coos        | 1              | 1               | South Coast | Jernstedt                           | South Fork Coquille River   | 0.67      | 17-0036   |
| Crook       | 55             | 28              | Deschutes   | Jones Dam                           | McKay Creek                 | 40.00     | 05-0061   |
| Crook       | 55             | 28              | Deschutes   | Mahogany Butte Ranch #1             | Mill Creek                  | 2.40      | 05-0067   |
| Crook       | 55             | 28              | Deschutes   | Twin Buttes Ranch #3                | Beaver Creek                | 3.00      | 05-0070   |
| Crook       | 55             | 28              | Deschutes   | Wolf Cr Screen                      | Wolf Creek                  | 3.00      | 05-0078   |
| Crook       | 55             | 28              | Deschutes   | White Deer Ranch                    | Crooked River               | 15.00     | 05-0083   |
| Crook       | 55             | 28              | Deschutes   | Dice-Copeland Pump                  | Ochoco Creek                | 2.56      | 05-0091   |
| Curry       | 1              | 1               | South Coast | McKenzie #1                         | Floras Creek                | 0.72      | 17-0030   |
| Curry       | 1              | 1               | South Coast | McKenzie #2                         | Floras Creek                | 0.98      | 17-0031   |
| Curry       | 1              | 1               | South Coast | Brown Livestock # 1                 | Willow Creek                | 0.68      | 17-0032   |
| Curry       | 1              | 1               | South Coast | Brown Livestock # 2                 | Willow Creek                | 0.48      | 17-0033   |
| Deschutes   | 53             | 27              | Deschutes   | North Unit Irrigation District Pump | North Unit Main Canal       | 153.00    | 05-0062   |
| Douglas     | 2              | 1               | Umpqua      | Roseburg Forest Products #2         | South Umpqua River          | 10.00     | 16-0019   |
| Douglas     | 1              | 1               | Umpqua      | Sonka #2                            | South Umpqua River          | 2.66      | 16-0100   |
| Douglas     | 1              | 1               | Umpqua      | Fryer                               | South Umpqua River          | 0.68      | 16-0130   |
| Douglas     | 2              | 1               | Umpqua      | Cline Ranch                         | Cow Creek                   | 1.07      | 16-0131   |

## Fish Screens Installed July 1, 2007 to December 31, 2008

| County Name | House District | Senate District | Basin    | Project Title         | Stream                    | Flow Rate | Project # |
|-------------|----------------|-----------------|----------|-----------------------|---------------------------|-----------|-----------|
| Gilliam     | 59             | 30              | John Day | Rock Creek-Wilkins    | Rock Creek                | 2.13      | 06-0243   |
| Grant       | 59             | 30              | John Day | John Day River #40    | John Day River            | 3.88      | 06-0148   |
| Grant       | 59             | 30              | John Day | Roberts Creek #1      | Roberts Creek             | 12.00     | 06-0208   |
| Grant       | 59             | 30              | John Day | Widows Creek Ranch #1 | Bridge Creek              | 0.72      | 06-0210   |
| Grant       | 59             | 30              | John Day | Meredith              | Beech Creek               | 0.78      | 06-0222   |
| Grant       | 59             | 30              | John Day | Lemons Pump           | John Day River            | 0.58      | 06-0232   |
| Grant       | 59             | 30              | John Day | Cummings Creek #1     | Cummings Creek            | 0.05      | 06-0234   |
| Grant       | 59             | 30              | John Day | Cummings Creek #2     | Cummings Creek            | 0.05      | 06-0235   |
| Grant       | 59             | 30              | John Day | Auxier                | John Day River            | 0.95      | 06-0240   |
| Grant       | 59             | 30              | John Day | Hufstader Pump        | John Day River            | 0.49      | 06-0245   |
| Grant       | 59             | 30              | John Day | Monchamp Pump         | John Day River            | 0.45      | 06-0246   |
| Grant       | 59             | 30              | John Day | Longview Pump #1      | John Day River            | 0.50      | 06-0247   |
| Grant       | 59             | 30              | John Day | Longview Pump #2      | John Day River            | 3.90      | 06-0248   |
| Grant       | 59             | 30              | John Day | Longview Pump #3      | John Day River            | 1.62      | 06-0249   |
| Grant       | 59             | 30              | John Day | Longview Pump #4      | John Day River            | 0.72      | 06-0250   |
| Grant       | 59             | 30              | John Day | Longview Pump #5      | John Day River            | 0.72      | 06-0251   |
| Grant       | 59             | 30              | John Day | Longview Pump #6      | John Day River            | 0.50      | 06-0252   |
| Grant       | 59             | 30              | John Day | Longview Pump #7      | John Day River            | 0.72      | 06-0253   |
| Grant       | 59             | 30              | John Day | Longview Pump #8      | John Day River            | 1.16      | 06-0254   |
| Grant       | 59             | 30              | John Day | Longview Pump #9      | John Day River            | 0.72      | 06-0255   |
| Grant       | 59             | 30              | John Day | Longview Pump #10     | John Day River            | 0.56      | 06-0256   |
| Grant       | 59             | 30              | John Day | Longview Pump #11     | John Day River            | 1.67      | 06-0257   |
| Grant       | 59             | 30              | John Day | Lemons #2             | Ingle Creek               | 1.33      | 06-0262   |
| Grant       | 59             | 30              | John Day | Lemons #3             | Ingle Creek               | 2.40      | 06-0263   |
| Grant       | 59             | 30              | John Day | Driscoll Pump         | John Day River            | 0.90      | 06-0273   |
| Grant       | 59             | 30              | John Day | Hettinga Pump         | John Day River            | 0.59      | 06-0287   |
| Grant       | 59             | 30              | John Day | Brown                 | South Fork John Day River | 1.46      | 06-0290   |
| Grant       | 59             | 30              | John Day | Long Creek #2         | Long Creek                | 3.00      | 06-0121   |
| Grant       | 60             | 30              | John Day | John Day River #16    | John Day River            | 12.00     | 06-0212   |
| Grant       | 60             | 30              | John Day | John Day River #21    | John Day River            | 4.00      | 06-0213   |

## Fish Screens Installed July 1, 2007 to December 31, 2008

| County Name | House District | Senate District | Basin    | Project Title                      | Stream                   | Flow Rate | Project # |
|-------------|----------------|-----------------|----------|------------------------------------|--------------------------|-----------|-----------|
| Grant       | 60             | 30              | John Day | John Day River #22                 | John Day River           | 4.00      | 06-0214   |
| Grant       | 59             | 30              | John Day | Ruby Creek #1                      | Ruby Creek               | 1.13      | 06-0215   |
| Grant       | 60             | 30              | John Day | Dixie Creek #4                     | Dixie Creek              | 1.44      | 06-0224   |
| Grant       | 60             | 30              | John Day | John Day River #17                 | John Day River           | 3.00      | 06-0233   |
| Grant       | 60             | 30              | John Day | Dog Creek #3                       | Dog Creek                | 0.95      | 06-0236   |
| Grant       | 60             | 30              | John Day | John Day River #12                 | John Day River           | 2.00      | 06-0237   |
| Grant       | 60             | 30              | John Day | John Day River-Kimball Pump        | John Day River           | 1.40      | 06-0241   |
| Grant       | 60             | 30              | John Day | Berry Creek-Larson                 | Berry Creek              | 1.20      | 06-0244   |
| Grant       | 60             | 30              | John Day | Ingle Creek #6                     | Ingle Creek              | 2.40      | 06-0264   |
| Grant       | 60             | 30              | John Day | Ingle Creek #5                     | Ingle Creek              | 0.79      | 06-0265   |
| Grant       | 60             | 30              | John Day | Ingle Creek #14                    | Ingle Creek              | 0.90      | 06-0270   |
| Grant       | 60             | 30              | John Day | Ingle Creek #4                     | Ingle Creek              | 0.79      | 06-0286   |
| Grant       | 60             | 30              | John Day | John Day River-Clyde Holliday Pump | John Day River           | 0.30      | 06-0296   |
| Harney      | 60             | 30              | Malheur  | Three Valleys Ranch #1             | North Fork Malheur River | 14.00     | 10-0014   |
| Harney      | 60             | 30              | Malheur  | Three Valleys Ranch #3             | North Fork Malheur River | 6.50      | 10-0016   |
| Hood River  | 52             | 26              | Hood     | Coe Branch                         | Coe Branch               | 30.00     | 04-0024   |
| Jackson     | 55             | 28              | Rogue    | Sutton                             | Little Butte Creek       | 0.20      | 15-0352   |
| Jackson     | 4              | 2               | Rogue    | Collings                           | Evans Creek              | 0.40      | 15-0358   |
| Jackson     | 4              | 2               | Rogue    | Noble Dairy #4                     | Applegate River          | 1.07      | 15-0359   |
| Jackson     | 4              | 2               | Rogue    | Knock                              | Evans Creek              | 0.57      | 15-0367   |
| Jackson     | 4              | 2               | Rogue    | Bear Creek Mobile Park             | Bear Creek               | 0.22      | 15-0370   |
| Jackson     | 55             | 28              | Rogue    | Fischer                            | Rogue River              | 0.28      | 15-0371   |
| Jackson     | 4              | 2               | Rogue    | Haynes                             | Applegate River          | 0.58      | 15-0380   |
| Jefferson   | 59             | 30              | John Day | Williams #2                        | Cherry Creek             | 4.91      | 06-0195   |
| Jefferson   | 59             | 30              | John Day | Williams #3                        | Cherry Creek             | 5.82      | 06-0196   |
| Josephine   | 3              | 2               | Rogue    | Dollarhide                         | Althouse Creek           | 1.80      | 15-0324   |
| Josephine   | 4              | 2               | Rogue    | Brumbaugh                          | Waters Creek             | 0.14      | 15-0368   |
| Josephine   | 4              | 2               | Rogue    | Little Elm Ranch #1                | East Fork Illinois River | 2.61      | 15-0378   |
| Josephine   | 4              | 2               | Rogue    | Little Elm Ranch #2                | East Fork Illinois River | 2.61      | 15-0379   |
| Klamath     | 56             | 28              | Klamath  | Hess                               | Sprague River            | 7.20      | 14-0010   |

## Fish Screens Installed July 1, 2007 to December 31, 2008

| County Name | House District | Senate District | Basin                | Project Title                | Stream              | Flow Rate | Project # |
|-------------|----------------|-----------------|----------------------|------------------------------|---------------------|-----------|-----------|
| Klamath     | 56             | 28              | Klamath              | C7 Ranch                     | Sprague River       | 11.00     | 14-0027   |
| Lake        | 55             | 28              | Goose & Summer Lakes | O'Keeffe                     | Deep Creek          | 25.00     | 13-0034   |
| Lake        | 55             | 28              | Goose & Summer Lakes | Farr                         | Deep Creek          | 4.00      | 13-0035   |
| Lake        | 55             | 28              | Goose & Summer Lakes | Taylor Ranch #1              | Honey Creek         | 7.50      | 13-0040   |
| Lake        | 55             | 28              | Goose & Summer Lakes | Taylor Ranch #4              | Honey Creek         | 2.00      | 13-0043   |
| Linn        | 17             | 9               | Willamette           | LaComb Irrigation District   | Crabtree Creek      | 65.00     | 02-0036   |
| Linn        | 17             | 9               | Willamette           | Doerfler Pump #3             | Crabtree Creek      | 2.85      | 02-0236   |
| Linn        | 17             | 9               | Willamette           | Spring Bank Pump             | South Santiam River | 1.63      | 02-0245   |
| Linn        | 17             | 9               | Willamette           | Hendricks Farm #3            | North Santiam River | 1.60      | 02-0257   |
| Linn        | 17             | 9               | Willamette           | Breyman Pump                 | Santiam River       | 1.93      | 02-0258   |
| Linn        | 15             | 8               | Willamette           | K2A Pump #1                  | Thomas Creek        | 1.53      | 02-0259   |
| Linn        | 17             | 9               | Willamette           | K2A Pump #2                  | Riverview Ditch     | 3.22      | 02-0260   |
| Linn        | 17             | 9               | Willamette           | K2A Pump #3                  | Riverview Ditch     | 3.22      | 02-0261   |
| Marion      | 17             | 9               | Willamette           | Palmer Creek Water District  | Willamette River    | 85.42     | 02-0032   |
| Marion      | 17             | 9               | Willamette           | Doerfler Pump #2             | Marion Creek        | 1.28      | 02-0235   |
| Marion      | 17             | 9               | Willamette           | Santiam Farms                | Willamette River    | 3.20      | 02-0246   |
| Morrow      | 57             | 29              | Umatilla             | Columbia Irrigation District | Columbia River      | 593.00    | 07-0041   |
| Polk        | 23             | 12              | Willamette           | Rainbow Ranch                | Luckiamute River    | 1.42      | 02-0252   |
| Polk        | 23             | 12              | Willamette           | Mulkey                       | Soap Creek          | 1.10      | 02-0255   |
| Umatilla    | 57             | 29              | Umatilla             | Birch Creek-Weinke #1        | Birch Creek         | 0.45      | 07-0044   |
| Umatilla    | 57             | 29              | Umatilla             | Birch Creek-Gambill          | Birch Creek         | 1.12      | 07-0045   |
| Umatilla    | 57             | 29              | Umatilla             | Birch Creek-Weinke #2        | Birch Creek         | 0.39      | 07-0046   |
| Umatilla    | 57             | 29              | Umatilla             | Couse Creek Winsor           | Couse Creek         | 1.25      | 07-0047   |
| Umatilla    | 57             | 29              | Umatilla             | Birch Creek-Weinke #3        | Birch Creek         | 0.45      | 07-0048   |
| Union       | 57             | 29              | Grande Ronde         | Mill Creek-Warnock           | Mill Creek          | 1.61      | 08-0034   |
| Wallowa     | 57             | 29              | Grande Ronde         | Upper Imnaha Diversion       | Imnaha River        | 1.10      | 08-0033   |
| Wallowa     | 57             | 29              | Grande Ronde         | Wallowa River-Peterson       | Wallowa River       | 2.03      | 08-0035   |
| Washington  | 32             | 16              | Willamette           | Walters Nursery #3           | Dairy Creek         | 0.67      | 02-0248   |
| Wheeler     | 59             | 30              | John Day             | Badger Creek-Page            | Badger Creek        | 1.56      | 06-0015   |
| Wheeler     | 59             | 30              | John Day             | Mountain Creek-Quant #2      | Mountain Creek      | 3.93      | 06-0016   |

## Fish Screens Installed July 1, 2007 to December 31, 2008

| County Name | House District | Senate District | Basin      | Project Title            | Stream                   | Flow Rate | Project # |
|-------------|----------------|-----------------|------------|--------------------------|--------------------------|-----------|-----------|
| Wheeler     | 59             | 30              | John Day   | Mountain Creek-Quant #3  | Mountain Creek           | 4.03      | 06-0077   |
| Wheeler     | 59             | 30              | John Day   | Rock Creek #1            | Rock Creek               | 2.00      | 06-0155   |
| Wheeler     | 59             | 30              | John Day   | Rock Creek #6            | Rock Creek               | 5.28      | 06-0199   |
| Wheeler     | 59             | 30              | John Day   | Badger Creek-Stafford #1 | Badger Creek             | 4.79      | 06-0203   |
| Wheeler     | 59             | 30              | John Day   | Badger Creek-Stafford #3 | Badger Creek             | 2.26      | 06-0205   |
| Wheeler     | 59             | 30              | John Day   | Badger Creek-Stafford #4 | Badger Creek             | 3.06      | 06-0206   |
| Wheeler     | 59             | 30              | John Day   | Badger Creek-Stafford #5 | Badger Creek             | 3.06      | 06-0207   |
| Wheeler     | 59             | 30              | John Day   | John Day River Obrist #2 | John Day River           | 0.89      | 06-0239   |
| Wheeler     | 59             | 30              | John Day   | Bear Creek - Williams    | Bear Creek               | 13.60     | 06-0271   |
| Wheeler     | 59             | 30              | John Day   | Rowe Creek Obrist #1     | Rowe Creek               | 0.80      | 06-0272   |
| Wheeler     | 59             | 30              | John Day   | John Day River Obrist #1 | John Day River           | 0.79      | 06-0277   |
| Wheeler     | 59             | 30              | John Day   | Bear Creek Long Pump #1  | Bear Creek               | 0.09      | 06-0278   |
| Wheeler     | 59             | 30              | John Day   | Bear Creek Long Pump #2  | Bear Creek               | 0.90      | 06-0283   |
| Wheeler     | 59             | 30              | John Day   | Bear Creek Long Pump #3  | Bear Creek               | 0.90      | 06-0284   |
| Wheeler     | 59             | 30              | John Day   | Williamson               | West Branch Bridge Creek | 0.18      | 06-0285   |
| Yamhill     | 24             | 12              | Willamette | Aebi Pump #1             | North Fork Yamhill River | 1.11      | 02-0249   |
| Yamhill     | 24             | 12              | Willamette | Van Dyke Pump #1         | North Fork Yamhill River | 2.20      | 02-0251   |
| Yamhill     | 24             | 12              | Willamette | Van Dyke Pump #2         | North Fork Yamhill River | 0.82      | 02-0253   |
| Yamhill     | 24             | 12              | Willamette | Stoller Pump             | Yamhill River            | 2.53      | 02-0254   |

139 Total Projects

Total CFS 1343.15

## Contact Information

### Salem Headquarters

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541-826-8774

### John Day Screen Shop

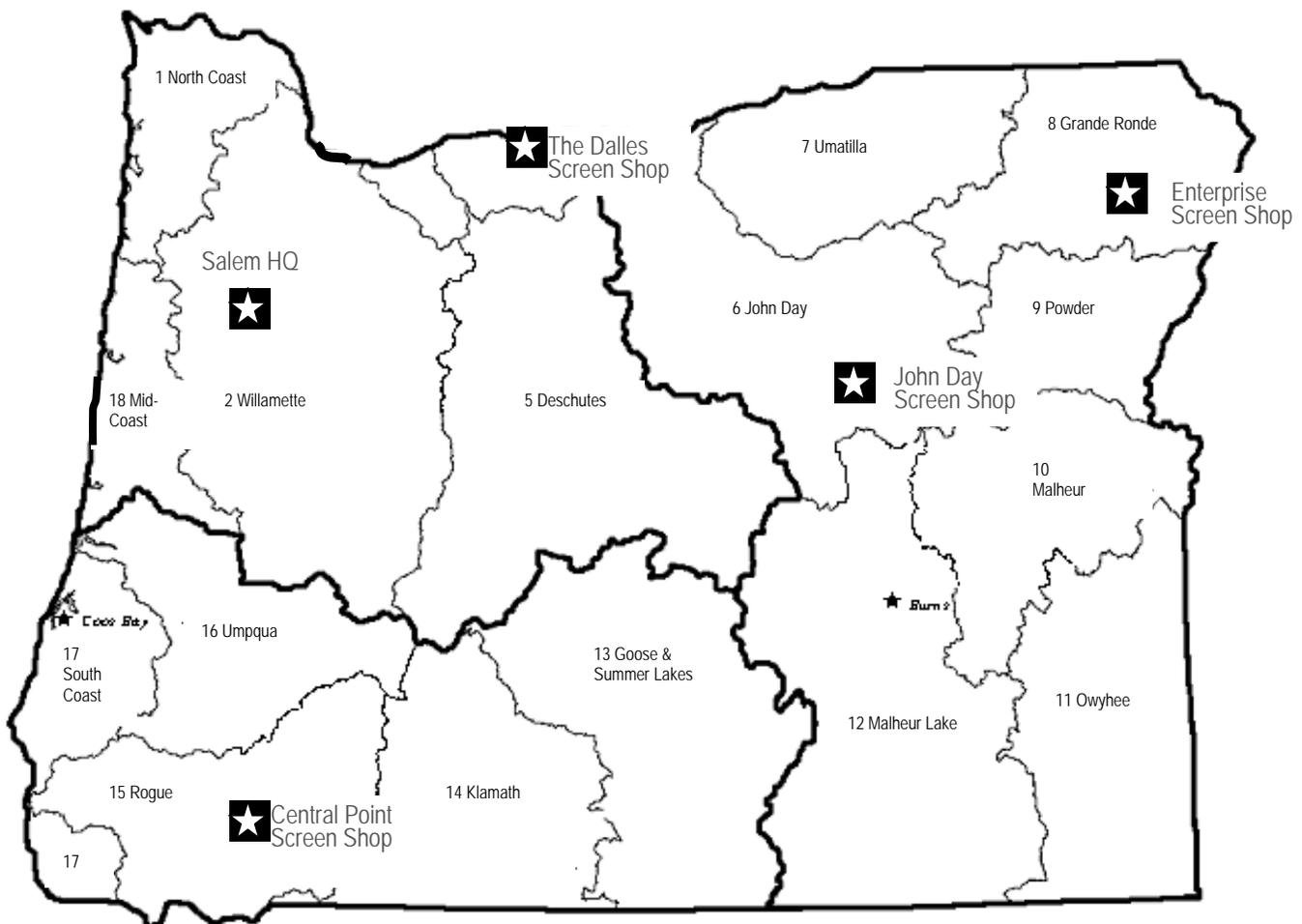
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Fish and Wildlife**

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