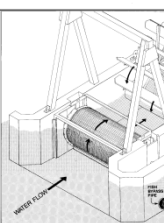
	<h2 style="text-align: center;">Fish Screening Task Force (FSTF)</h2>	
Date:	October 23, 2013	
Time:	8:30 a.m. to 1:00 p.m.	
Location:	Oregon Department of Fish & Wildlife 4034 Fairview Industrial Dr SE Salem, OR 97301	
Type of Meeting:	Fish Screening Task Force (FSTF)	
The following attended all or part of the meeting:		
Fish Screening Task Force Members:	Mike Britton (partial attendance via telephone) Tony Brauner Jeff Oveson Tony Stroda Mark Wharry	
ODFW Staff:	Pete Baki Ken Homolka (partial attendance) Shannon Hurn (partial attendance via telephone) Rick Kepler Lisa Kingsley Elizabeth Moats Nick Myatt (partial attendance via telephone) Alan Ritchey	
Public:	Nick Josten, Warmsprings Hydro, LLC (partial attendance via telephone) Randy Kinney, Warmsprings Irrigation District (partial attendance via telephone) Fred Warner Sr., Baker County (partial attendance)	
Not Attending:	Lynden Brown, Gordon Summers	
Agenda		
<p>Initial agenda items included:</p> <ul style="list-style-type: none"> • Call to Order, Welcome, and Introductions (<i>Chair Mark Wharry</i>) <ul style="list-style-type: none"> • Meeting Minutes, Correspondence, and Other Business • Fish Screening Task Force Member Reports/Follow Ups • State and Federal Programs Status <ul style="list-style-type: none"> • Peoples Screen • Drewsey • Unscreened Diversion Update • Funding • Warmsprings Dam and Mason Dam Fish Screen Exemption Task Force Recommendation • Chair and Vice Chair Elections • Other Business <ul style="list-style-type: none"> • Future Meeting Dates and Locations • Adjourn 		

Meeting Summary

Motions:

Minutes

Tony Brauner moved to approve the July 18, 2013 meeting minutes as written. Jeff Oveson seconded the motion, and the Task Force approved 5-0.

Officer Elections

Tony Brauner moved to nominate Gordon Summers for Chair. Tony Stroda seconded the motion, and the Task Force approved 5-0.

Mike Britton moved to nominate Lynden Brown for Vice Chair. Jeff Oveson seconded the motion, and the Task Force approved 5-0.

Warmsprings Dam Screen Exemption Recommendation

Tony Stroda moved to support the mitigation request for a screening exemption at the Warmsprings Irrigation District hydroelectric intake. Jeff Oveson seconded the motion, and the Task Force approved 4-0.

Mason Dam Screen Exemption Recommendation

Tony Brauner moved to support the mitigation request for a screening exemption at Mason Dam. Tony Stroda seconded the motion, and the Task Force approved 4-0.

Call to Order, Welcome, and Introductions

Mark Wharry, Chair, called the meeting to order at 8:35 a.m., and introductions were made.

Meeting Minutes, Correspondence and Other Business

Meeting Minutes

Handout:

July 18, 2013 Meeting Minutes

The Task Force reviewed the minutes from the July 18, 2013 meeting.

Motion:

Tony Brauner moved to approve the July 18, 2013 meeting minutes as written. Jeff Oveson seconded the motion, and the Task Force approved 5-0.

Correspondence

Pete Baki read a letter presented to Oregon Department of Fish and Wildlife (ODFW) thanking the Enterprise Screen Shop, especially Keith Roundy, Rod Odegaard, and Chuck Simpson, for their assistance with installation of a fish screen on a diversion ditch from Eagle Creek to the Stoddard Ponds.

Future Meeting Dates and Locations

The Task Force selected the following meeting dates and locations:

February 28, 2014 in Salem

June 19-20, 2014 in Hines

October 9-10, 2014 in Tillamook

Chair and Vice Chair Elections

The Task Force discussed the selection of officers for 2014.

Election of Chair

Motion:

Tony Brauner moved to nominate Gordon Summers for Chair. Tony Stroda seconded the motion, and the Task Force approved 5-0.

Election of Vice Chair

Motion:

Mike Britton moved to nominate Lynden Brown for Vice Chair. Jeff Oveson seconded the motion, and the Task Force approved 5-0.

Fish Screening Task Force Member Reports/Follow Ups

Mike Britton

An intake in Bend for North Unit Irrigation District (NUID) is not screened to meet current fish screening criteria. The district plans to install an in-conduit hydroelectric project. An agreement with ODFW was reached and the intake will be screened within 10 years.

A fish kill occurred in a side channel of the Deschutes River. The channel was dried due to late season irrigation. The channel is often dried at the end of the season, and this has not occurred before.

The Crooked River intake for NUID is screened with traveling belt screens. The screens are clogging with particulate and not meeting approach velocity criteria, so the district will try installing baffles. Two of the panels will have the baffles installed this spring. If successful at reducing the velocity and particulates, the remaining panels will have baffles added.

This year was tough for growers in the NUID area. Spring storms caused significant field damage and crop loss, and fall ripening vegetables were disrupted by extreme wet conditions in September. Crops rotted before they could be harvested.

Mike Britton left the meeting after this report.

Tony Brauner

Changes are occurring in the Rogue River. The channel is moving and large volumes of sedimentation are occurring. Some areas where there was plenty of water in the past have filled in with sediment and there are new gravel bars developing. Tony Brauner expressed concern that with the amount of river movement intakes could be affected and screens could need to be moved.

Mark Wharry

The intake for West Extension Irrigation District on the Umatilla is a challenging location to screen. It is a large diversion with a large number of fish species present. Wharry is designing a

new screen for the intake. After considering several options, a concept has been selected. The design is at a 35% complete stage. Additional design work will be completed after receiving confirmation of concept approval from National Marine Fisheries Service.

Tony Stroda

The Army Corps of Engineers is drawing down Fern Ridge Reservoir, which is causing large amounts of turbidity in the Long Tom River below the dam.

Tony Stroda’s farm had a successful agriculture year with good peppermint yield.

Jeff Oveson

The federal government shutdown fell during site review for technical proposals for projects to be completed during the next in water work period. One project that was reviewed will complete habitat restoration work on five landowner’s property over several years on Catherine Creek.

State and Federal Programs Status

Peoples Screen

Baki provided an update on the screen installed at People’s Irrigation District near Prineville. The screen was used to take water during this irrigation season. There have been some problems with the cleaning system due to hydraulic issues. A new system is being designed that would utilize a pitman arm (a gang wiper system).

Despite issues with the system, water users were able to take water throughout the season and are happy to continue working with us toward a solution. They are glad that we are addressing the issues.

Unscreened Diversion Update

A new ODFW District Biologist in Klamath Falls has requested to review the comments submitted during review of the list. Comments have not been received for the Deschutes area. Once those comments are received and recently installed screens are removed, the revised list will be distributed to the Task Force. Baki will send letters to the top 350 on the list letting them know their intake was identified as being on the Unscreened Diversion Inventory and providing information on the cost share program. The letter will be clear that it is not an enforcement letter or a change to existing water rights, but informational only.

Funding

Budget cuts of \$240,000 this biennium to the Fish Screening and Passage Program resulted in cutting two and a half positions and removal of the funding for projects that are not completed by ODFW (outside projects)

Pump Screen Baffle Testing

Pump screens greater than 3 cfs are required to be baffled. Currently, only one manufacturer provides approved baffled screens. A new hydraulic test facility is being opened at Oregon State University that will be used to test approach velocities of 5 cfs Clemons pump screen with baffles. The screen is needed for a diversion in the Enterprise area. Clemons will provide the screen and cover the cost of testing at no cost to ODFW.

Warmsprings Dam and Mason Dam Fish Screen Exemption Task Force Recommendation

Baki presented information on three options available to projects that are required to provide fish screens. They can ask for a contested case hearing under with the Oregon Fish and Wildlife Commission (OFWC) (ORS 498.306(10)(e)), request the Fish Screening Task Force excuse them from the requirement to screen under certain circumstances (ORS 498.306(13)), or request an exemption from screening from the OFWC by making other adequate provision for the protection of game fish in the water body (ORS 498.316).

The Task Force will review two proposals that are requesting an exemption under ORS 498.316 and make a recommendation to the OFWC. ODFW staff will also make a recommendation. The OFWC will make the final determination of whether the mitigation is suitable to offset impacts. The two projects will also request a fish passage waiver, which will require the project proposals to seek a recommendation from the Fish Passage Task Force and approval from the OFWC.

Warmsprings Dam

Handout:

Draft Agreement for Warm Springs Mitigation Funding

Elizabeth Moats, ODFW Hydropower Coordinator, presented the proposal to the Task Force. Nick Josten, Warm Springs Hydro, LLC, Randy Kinney, Warm Springs Irrigation District (WID), and Shannon Hurn, ODFW District Fish Biologist, were available via phone to answer questions.

The Warmsprings project applied to the Federal Energy Regulatory Commission (FERC) for a hydroelectric project on Warmsprings Dam. As part of the application review process, a new water right and a screen would be required.

Warmsprings Dam is located on the Malheur River and jointly owned by WID and US Bureau of Reclamation (BOR). The dam is currently operated for irrigation from April 15 to October 15, and there are no minimum flows required outside of the irrigation season.

Warmsprings Reservoir is managed by ODFW to provide a hatchery rainbow trout fishery. Yellow perch and other warmwater game fish (brown bullhead, white crappie, and bluegill) are also in the reservoir. Bull and redband trout are located upstream of the reservoir, but are not expected to be impacted by the project.

The existing outlet would be used for the hydroelectric project, located 70 feet below the full pool elevation.

WID completed a desktop analysis comparing other hydroelectric projects to estimate entrainment by the installation of the project. The analysis resulted in an estimated 35-124 rainbow trout. That number was less than expected by ODFW.

Contributing factors according to the applicant include dissolved oxygen content at the outlet

and the ability for fish to swim away from the water being withdrawn. Warmsprings Hydro, LLC argues that adult rainbow trout would be able to swim away from the water withdrawn and that given this, no entrainment would occur. ODFW disagrees with this assessment. Oxygen levels would be adequate for rainbow trout to survive at the outlet except from mid-June thru summer. Warmwater species are more tolerant of lower oxygen levels and would be able to survive longer into the summer.

Because the dam is used for flood control, the screen must meet maximum flows from the outlet of 2,000 cubic feet per second (cfs). To meet current fish screening criteria, a screen would need to be 6,000 to 15,000 square feet, and the cost would make the hydropower project cost prohibitive. BOR opposes installing screens on dams they own.

The mitigation proposal includes funding the Warmsprings Reservoir stocking program. It would provide \$3,000 annually with a 3% annual increase to ODFW for the life of the license. This would cover approximately 80% of the stocking program. If there are surplus funds in the account, WID agreed to use those funds for fish habitat enhancement projects in the Middle Fork Malheur basin.

ODFW staff believes this mitigation proposal is adequate to protect the hatchery rainbow trout fishery in Warmsprings Reservoir.

Wharry commented that the Task Force values the opinion of the local ODFW District Biologist and asked Hurn her opinion of the project. Hurn responded that there is not a lot of native trout or other native fish above the reservoir or below the dam that are expected to be impacted by the project, and she is supportive of the mitigation proposal.

Wharry noted that the proposal is to protect the rainbow trout fishery, but does not address native trout. Wharry asked Hurn if native trout are in the reservoir. Hurn responded that there may be some minor usage by redband trout, but no bull trout have been found in the 12 miles above the reservoir. Due to water withdrawals, there is very little habitat available for trout.

Wharry asked how the reservoir is operated for flood control. Kinney responded that BOR requires 2,000 cfs be able to be spilled thru a gate controlled spillway. If more than 2,000 cfs is required to be spilled, the dam can be crested.

Wharry asked how the mitigation rate of \$3,000 was determined. Moats responded that the cost per pound of fish was determined based on current costs, and the cost of 30-50 thousand fish is \$3,000. Wharry responded that the cost seems cheap. Hurn responded that the fish are only raised in the hatchery for a few months and can be shipped in large numbers making the cost per fish fairly inexpensive.

Kinney noted that due to water levels the reservoir is not stocked each year. The funds would be provided annually for stocking and if funds exceed the amount needed for stocking, habitat work could be completed.

Mark Wharry asked whether an exemption has been granted by the OFWC in the past. Baki responded that this is unprecedented. Rick Kepler, Water Program Manager, explained that one

previous exemption was granted by the ODFW director, but it did not go through the current process.

Jeff Oveson asked what habitat work would be expected. Moats responded that a one-time habitat project could potentially be completed, perhaps a structure placement project. Oveson cautioned that habitat projects tend to be expensive, and the amount of funding available would likely not be enough to provide for much habitat improvement.

Oveson asked how the number of fish stocked is determined. Hurn responded it is based on anticipated reservoir water levels.

Motion:

Tony Stroda moved to support the mitigation request for a screening exemption at the Warm Springs Irrigation District hydroelectric intake. Jeff Oveson seconded the motion, and the Task Force approved 4-0.

Mason Dam

Handout:

Mason Dam Hydroelectric Project Fish Screening Exemption Proposal

Elizabeth Moats, ODFW Hydropower Coordinator, presented the Warm Springs Dam Hydropower Screen Exemption proposal to the Task Force. Fred Warner Senior, Baker County Commissioner, was available and Nick Myatt, ODFW Regional Manager, was available via phone to answer questions.

Baker County has applied to the Federal Energy Regulatory Commission (FERC) for a hydroelectric project on Mason Dam. As part of the application review process, a new water right and a screen would be required.

Mason Dam is located on the Powder River and owned by BOR. The dam is currently operated for irrigation from April through September, and there is a minimum flow of 10 cfs downstream outside of the irrigation season.

Phillips Reservoir, located above the dam, is managed by ODFW to provide a rainbow trout fishery. Redband trout, yellow perch, northern pikeminnow, tiger trout, tiger muskie, and native suckers are also in the reservoir. Bull trout are located upstream of the reservoir, but are not expected to be impacted by the project.

Baker County completed a literature review comparing other hydroelectric projects to estimate entrainment by the installation of the project. ODFW requested an on-site entrainment study, but FERC gave Baker County clearance to perform a literature review in lieu of an entrainment study. Much of the information in the screen exemption proposal comes from the entrainment assessment. The county compared Mason Dam to other hydro projects with associated entrainment data and used that to estimate the level of entrainment. Because no other entrainment data exists, ODFW agreed to use the most conservative entrainment estimated plus an additional conservation factor. Mitigation will need to provide for hatchery rainbow trout and

native redband trout.

Because the dam is used for flood control, BOR opposes installing screens on the outlet. To meet current fish screening criteria, a screen would cost an estimated \$2 million. The assurance that the screen would not become clogged in emergency flood control situations are not acceptable to BOR, and they have indicated that the structural integrity of the dam could be affected which would create a risk to downstream residents.

The water intake is on the bottom of the reservoir approximately 87 feet below full pool elevation. Trout are most at risk when the water level in the reservoir drops to below 30 feet, which occurs in 23% of years. The entrainment rates used accounted for the very dry years when water levels are only 10-20 feet above the intake.

Contributing factors according to the applicant include dissolved oxygen content at the outlet and the ability for fish to swim away from the water being withdrawn. Baker County states that adult rainbow and redband trout would be able to swim away from the water outlet. ODFW did not agree that fish would not be entrained. Oxygen levels would be adequate for rainbow trout to survive at the outlet except from June thru September. Other species are more tolerant of lower oxygen levels and would be able to survive except during August and September.

Baker County proposes to mitigate for 957 redband and 910 hatchery rainbow trout. The mitigation proposal includes supplementing the Phillips Reservoir stocking program (providing \$1,000 annually to ODFW for stocking 1,000 rainbow trout per year for the life of the license), screening the Shaw-Stewart diversion (protecting an estimated 377 fish), and developing a fund to screen unscreened diversions in the Powder Basin (protecting the remaining 580 fish).

ODFW staff believes this package mitigates for not providing screens at the Mason Dam intake.

Wharry commented that the Task Force values the opinion of the local ODFW District Biologist and Myatt if this package would be acceptable. Myatt responded that Tim Bailey, ODFW District Fish Biologist, has worked with the applicants to meet requirements for the protection of fish.

Wharry asked whether the entrainment estimate was based on anticipated low water. Warner responded that the estimate accounted for the lowest water years plus a conservation estimate.

The Task Force confirmed that the estimated funds are based on current costs and confirmed that inflation would be accounted for in the final agreement. This project is located in non-anadromous waters. The mitigation screen at Shaw-Stewart diversion would not receive funding assistance from the ODFW screening cost share program.

Oveson asked if fish that currently make it downstream of the structure survive, and if that survival rate is expected to be changed once the turbines are installed. Moats responded that some fish survive going through the dam, but there is not an estimate of what percentage. Warner explained that the pressure the fish undergo currently is higher than would be expected once the turbines are installed, so he anticipates greater survival when the hydropower project is operating.

Wharry asked for confirmation that the screen would meet criteria. Alan Ritchey, ODFW Fish Screening and Passage Program Manager, responded that the screen would be required to meet current fish screening criteria.

Wharry asked whether barriers other than screens (behavioral barriers) were considered. Ritchey responded that they had not been considered. Currently, no behavioral barriers meet ODFW screening criteria.

Wharry asked whether the reservoir is operated for flood control. Moats responded that the dam is used for flood control almost annually.

The Task Force asked about the cost of the proposed mitigation. Moats responded this project protects both stocked and native fish, so the cost is greater than the Warmsprings proposal.

Motion:

Tony Brauner moved to support the mitigation request for a screening exemption at Mason Dam. Tony Stroda seconded the motion, and the Task Force approved 4-0.

The Task Force had not been asked to recommend an exemption in the past, and they felt the information presented provided adequate information to review the request. Stroda noted his appreciation for the staff who worked with the applicants to prepare the request.

Other Business

The terms for Tony Brauner and Mark Wharry have expired. Their positions have been advertised and several qualified applicants are being considered. The Commission is expected to select new members in the near future.

Adjourn

The meeting adjourned at 11:25 a.m.