

## Agenda Item Summary

### BACKGROUND

Diamond Lake has been recognized for decades as a premier trout fishery. Unfortunately, the fishery and the lake's ecosystem have been disrupted twice by the illegal introduction of tui chub. Rotenone was used to eradicate the chub in 1954 and 2006. After the 1954 treatment, Diamond Lake enjoyed a period during the 1960s, 1970s and 1980s where the lake attracted about 100,000 angler trips per year and had an average harvest of 2.7 trout per trip. Stocking stabilized at 300,000 – 400,000 fingerlings per year. Based on the success of that time period, the Oregon Fish and Wildlife Commission (Commission) approved a plan to manage Diamond Lake as a Basic Yield, hatchery production fishery under the Trout Plan in 1990 (OAR 635-500-7003).

Tui chub were re-discovered in the lake in 1992, and fishing conditions and water quality rapidly deteriorated. In 1996, the Commission reaffirmed the aforementioned management plan and supported strategies using rotenone to eradicate the chub. In August 2001, the Commission adopted interim experimental fish introductions to provide a trout fishery despite the growing number of chub. The Commission also provided Oregon Department of Fish and Wildlife (department) staff direction to withdraw from using a department contractor to initiate the development of a NEPA document. In October 2001, state representative Susan Morgan brought together all the federal, state and county agencies with management and regulatory authority at Diamond Lake to form an interagency group tasked with resolving the issues at Diamond Lake. To consider the alternatives, the United States Forest Service (USFS) assumed the lead role in developing an Environmental Impact Statement (EIS). The department and the Oregon Department of Environmental Quality (DEQ) were official cooperators in the process to develop the EIS and played an active role in public outreach and fund raising for the project. In 2004, the final EIS was approved (FEIS). Alternative 5 was selected as the preferred alternative. This alternative specified that rotenone be used to treat the lake and allowed a modified post-treatment fish stocking program.

As specified in the FEIS, when sufficient biological information becomes available, the department is required to develop, design and implement an ecologically sound fish management plan for Diamond Lake that is within the department's statutory authority and related policies. The plan development is required to take into consideration the, "environmental, biological, economic, and community values of the people of Oregon." The draft 2009 Diamond Lake Fish Management Plan (Attachment 3) fulfills the FEIS agreement to develop a revised fish management plan for Diamond Lake.

The revised 2009 Diamond Lake Management Plan modifies the current plan which directs Diamond Lake to be managed under the Basic Yield Management Alternative of the Oregon Trout Management Plan.

Additions have been made to the plan to provide management direction to monitor the fishery to evaluate potential impacts and avoid stressing the lake's ecosystem. The plan would also provide for the prevention and control of illegal fish introductions and other invasive species. These management objectives are reflected in the draft Oregon Administrative Rules (OAR's) for Diamond Lake (Attachment 4).

## **PUBLIC INVOLVEMENT**

On March 24, 2009 a draft management plan was sent to federal, state, and county agencies that had participated in the EIS process. A copy was also sent to Diamond Lake Resort and to the media upon request. On March 30, 2009 the media was sent notices to invite the public to meetings being held in the Medford, Roseburg, and Eugene areas. Staff provided a copy of the draft plan to The Medford Tribune which then published an article with highlights from the draft plan.

On April 7, 2009, staff met with the three Douglas County Commissioners. The Commissioners were supportive of the basic yield alternative and strategy to modify the 1990 plan with wording to include monitoring the fishery and preventing and educating people about invasive species. They were also supportive of the plan being similar to the past management of Diamond Lake during the 1960s, 1970s, and 1980s. The Commissioners were hopeful that the final Commission presentation could be in September at Grants Pass. The Grants Pass meeting would be more proximate to Diamond Lake for public comment. They were also interested in considering a rule change in 2010 to increase the daily bag limit on the lake.

The first meeting was held April 8, 2009 at our office in Central Point. At the meeting 3 people attended and provided public comment on the draft plan. In general the attendees appeared supportive of the plan. Specific comments provided included the need for more monitoring and boat checks to help control illegal introductions of invasive species. They wondered about the Blue Ribbon Water bill and its relationship to Diamond Lake. Lastly, they asked if we had the results of the otolith testing to potentially identify the origin of the golden shiners found in Diamond Lake last summer. The Roseburg and Eugene meetings were held on April 9<sup>th</sup> and 22<sup>nd</sup> respectively.

The May 15, 2009 Commission meeting provided the opportunity to receive additional comment from the public and the Commissioners. Per the comments received, the draft plan was revised to include more history of the FEIS and Record of Decision stocking guidelines, and the three methods that will be used to balance lake health and fishery objectives. These methods include DEQ's Water Quality/TMDL guidelines for Diamond Lake, the use of a variety of biological indices and a stocking model. The revised draft also notes the need to conduct monitoring and fish stocking activities on an ecological rather than a calendar year. The plan notes the use of adaptive management to improve monitoring and evaluations, and includes the use of the "best available science" to incorporate new monitoring techniques or modeling applications as they become available.

Department staff also met with its partner agencies in late May. The meeting was a briefing to explain the plan process and various aspects of the plan. Variations in data and improvements to monitoring by an ecological year were discussed and included in the revised plan.

Throughout the course of the summer, the department has also received written comments from about 40 other individuals. Most of these comments have been in support of the plan. Maintaining legal, trophy and predacious fish stocking was noted in some comments as was the need to stock in concert with balancing the lake's ecosystem and continuing invasive species efforts. There were a couple comments to discontinue fishing derbies or to make derbies pay for fish stocking. Some comments were outside the realm of the department's authority such as changing the speed limit, spraying for mosquitoes, or providing more restrooms.

## ISSUE 1

### DIAMOND LAKE MANAGEMENT STRATEGIES

#### ANALYSIS

The 2004 FEIS created a cooperative partnership between the department and various agencies. Within the FEIS, an action plan was developed to task the different agencies to help conduct pre- and post-treatment monitoring of the lake's water quality, trophic communities, and fishery to measure the lake's recovery. Some of the information collected is comparable to data collected since the lake was first stocked with trout. The data collected since the lake was treated in 2006 shows an improvement in water quality, an increase in the lake's food resources, and a growth rate of trout similar to the "heyday" fishery of the 1960s, 1970s, and 1980s.

The attached Diamond Lake Fish Management Plan summarizes post treatment fishery and biological data and provides an overview of Diamond Lake's past management directions, fishery economics, the impacts of chub, post-treatment fish management and the lake's ecological recovery. The analysis in the draft Diamond Lake Fish Management Plan provides the basis for establishing trout fishery management strategies under the Basic Yield Management Alternative of Oregon's Trout Management Plan. The Basic Yield Management Alternative is designed to maintain the natural productivity of Diamond Lake and to use this productivity to grow hatchery fingerling trout to a harvestable size. The Basic Yield Management Alternative also allows for supplemental stocking of legal or trophy sized trout to enhance the trout fishery.

In addition to Basic Yield management guidelines, the Draft Diamond Lake Management Plan also has provisions to adjust trout stocking rates or the size of trout stocked based on angler harvest, trout growth rates, condition factor and modeling outputs. The plan describes the use of DEQ's Water Quality/TMDL standards, biological indices and a stocking model to balance stocking levels and the health of the lake. Adaptive

management will be used as the department learns how to better monitor or evaluate the various factors. The plan also includes continued invasive species prevention, education and monitoring.

This plan includes the input of the Commission and the public. The Diamond Lake Management Plan was developed along with final modifications to the current Diamond Lake Management administrative rules (OAR 635-500-7003) that include fishery & lake health monitoring and invasive species management rules. Final rules are included in Attachment 4.

## OPTIONS

1. Adopt Diamond Lake Management Plan and administrative rules as recommended by staff.
2. Review and modify the revised Diamond Lake Management plan and administrative rules.
3. Reject the Diamond Lake Management Plan and proposed rules.

## STAFF RECOMMENDATION

Option 1.

DRAFT MOTION	I move to adopt the Diamond Lake Management Plan and Oregon Administrative Rules as proposed by staff in Attachments 3 and 4.
EFFECTIVE DATE	January 1, 2010