



Memorandum

OREGON DEPARTMENT OF FISH AND WILDLIFE UMPQUA WATERSHED DISTRICT

Date: October 20, 2003

To: Files

From: Dave Loomis

Subj: Preliminary Stocking Plans for Diamond Lake for possible DEIS Alternatives

As part of the discussion of possible alternatives for future actions at Diamond Lake, I was requested to outline some preliminary fish stocking levels and sizes for a six year period under some of the alternatives in the DEIS (draft October 2003). These preliminary annual stocking plans have not been approved, but are necessary for comparison purposes of the alternatives related to angler effort, fish harvest, and analysis of several affected environment and environmental consequences. The suggested stocking plans are based on my professional opinion of the best approach under each alternative to meet the purpose and need of the overall actions with each respective alternative. Actual stocking numbers could vary based on a number of factors, including availability of eggs/fish, facility capacity, actual costs, available funding, monitoring results, timing of implementation, management direction/decisions and others. The following general size groups of fish are planned: fingerling-size (4-inch), legal-size (8-inch), catchable-size (9-inch), put-and-take-size (12-inch), and trophy-size (15-inch)

Alternative 1 (No Action/ Legal-size trout)

2004-2009. Stock approximately 24,000 "legal-size" (8-inch) Eagle Lake (EL) rainbow trout at 3 fish per pound (3/lb) annually.

Total stocking numbers over 6-year period would be 144,000 legal-size trout.

Alternative 2 (Proposed Action/ rotenone + fingerlings/catchables)

2004 Stock approximately 24,000 legal-size EL rainbow (early season only) prior to proposed draw down of lake
2005 Stock approximately 24,000 legal-size EL rainbow (early season only) prior to proposed treatment of lake
2006 Stock approximately 100,000 rainbow fingerlings (50/lb) and 10,000 "catchable-size 9-inch" EL trout (2.5/lb)
2007 Stock approximately 200,000 rainbow fingerlings and 10,000 catchable-size trout
2008 Stock approximately 300,000 rainbow fingerlings and 10,000 catchable-size trout
2009 Stock approximately 300,000 rainbow fingerlings and 10,000 catchable-size trout

Fingerling release numbers increased based on projected ecological improvement of lake and increased survival and growth of trout. Catchable-size trout numbers based on predicted results of fish survival and growth.

Total stocking numbers over 6 year period would be 48,000 legal-size (8-inch), 40,000 catchable-size (9-inch), and 900,000 fingerling (4-inch) rainbow trout

Alternative 3 (rotenone + Put-and-take-size trout)

- 2004 Stock approximately 24,000 legal-size EL rainbow trout (early season only)
- 2005 Stock approximately 24,000 legal-size EL rainbow trout (early season only)
- 2006 Stock approximately 24,000 legal-size EL rainbow trout and 100,000 “put-and-take” rainbow trout (1/lb or 1-pound each, 12-inch)
- 2007 Stock approximately 24,000 legal-size EL rainbow trout and 200,000 put-and-take trout
- 2008 Stock approximately 24,000 legal-size EL rainbow trout and 300,000 put-and-take trout
- 2009 Stock approximately 24,000 legal-size EL rainbow trout and 400,000 put-and-take trout

Put-and-take trout stocking numbers increased based on projected ecological improvement of lake, predicted results of fish growth, survival and contribution to fishery harvest. Assumes numbers of large sterile trout are available from private hatchery sources.

Total stocking numbers over 6-year period would be 144,000 legal-size trout and 1,000,000 put-and-take trout.

Alternative 4 (Mechanical/Biological)

- 2004 Stock approximately 85,000 catchable-size trout (EL rainbow) and 15,000 trophy-size trout (15-inch rainbow)
- 2005 Stock approximately 100,000 catchable-size trout (EL rainbow and 50,000 trophy-size trout (rainbow)
- 2006 Stock approximately 200,000 catchable-size trout (Experimental stocking groups) and 50,000 trophy-size trout (experimental stocking groups)
- 2007 Stock approximately 200,000 catchable-size trout (continue experimental stocking) and 50,000 trophy-size trout (continue experimental stocking)
- 2008 Stock approximately 200,000 catchable-size trout (continue experimental stocking) and 50,000 trophy-size trout (continue experimental stocking)
- 2009 Stock approximately 200,000 catchable-size trout (continue experimental stocking) and 50,000 trophy-size trout (continue experimental stocking)

Catchable-size trout stocking numbers increased based on review and approval of management plan and stocking experiment. Also, assumed experimental stocking groups of 50,000 or larger annually and would be available at public hatcheries. Trophy-size trout groups would be available at public or private hatcheries at minimum 25,000 annual releases. Overall trout stocking numbers would be based on projected ecological improvement of lake (most likely delayed compared to alternatives 2 & 3), assumed success of implementation of intensive mechanical removal efforts especially in first two years, and predicted results of fish experimental stocking program.

Total stocking numbers over 6-year period would be 985,000 catchable-size trout and 265,000 trophy-size trout.