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Diamond Lake Restoration Project Final Environmental Impact Statement

Umpqua National Forest



DIAMOND LAKE RESTORATION PROJECT FINAL ENVIRONMENTAL IMPACT STATEMENT

Douglas County, Oregon--November 2004

Lead Agency: USDA Forest Service, Umpqua National Forest

Cooperating Agencies: Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife

Responsible Official: James A. Caplan, Forest Supervisor
Umpqua National Forest

For More Information Contact: Sherri Chambers, Team Leader
North Umpqua Ranger District
18782 North Umpqua Highway
Glide, OR 97443
Phone: 541-496-3532

Abstract: This Final Environmental Impact Statement (FEIS) documents alternatives considered for the restoration of Diamond Lake, which is degraded by an abundance of non-native tui chub fish. Diamond Lake is located on the Umpqua National Forest, Diamond Lake Ranger District in the Southern Cascade Mountains, 68 air-miles northwest of Klamath Falls, Oregon and 60 air-miles east of Roseburg, Oregon. The purpose of and need for action includes the need to restore water quality and the recreational fishery; both are substantially diminished compared to conditions prior to the tui chub population expansion that began around 1992. Mitigation measures and management requirements for watershed management, human health and safety, fish, groundwater, soil, wildlife, recreation, cultural resources, and plants are also considered. Five alternatives are considered in detail, including: Alternative 1, no action; Alternative 2, designed to improve water quality and the recreational fishery by using rotenone (a fish toxicant) to kill tui chub followed by a put, grow, and take fish stocking strategy using mostly fingerling trout; Alternative 3, designed to improve water quality and the recreational fishery while lessening the risks of the fishery on lake ecology by using rotenone and instituting a put and take fish stocking strategy using larger-sized fish; Alternative 4, designed to improve water quality and the recreational fishery by using no toxicants and relying instead on mechanical tui chub removal in combination with a fish stocking strategy using larger predacious fish; and Alternative 5, designed to improve water quality and the recreational fishery by using both liquid (in the shallow, weedy areas of the lake) and powdered rotenone in the Lake and instituting a put-grow-and-take fish stocking strategy. The Forest Service has identified Alternative 5 as the preferred alternative.



The large tui chub population has affected lake conditions such that toxic algae blooms have occurred during the summers of 2001, 2002, and 2003. These toxic blooms present risks to human health, trigger lake closures, and cause the normally blue lake to turn green (as shown in the above photograph).

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