LAKE MANAGEMENT PLAN
Updated June, 2008 – C. Donley

Water: Frater Lake (Pend Oreille Co.)

Location: Frater Lake is located 6.5 miles south of Ione. Frater Lake has an intermittent drainage to Leo Lake and is the northern most lake in the Little Pend Oreille Chain Lakes.

	Size:	**Max. Depth:**	**Volume:**
Frater Lake	15 acres	15 ft	90 acre feet

Water Source: Mostly groundwater seeps, with limited overland flow. Intermittent creek flows all but the driest of years.

Outflow: Intermittent outflow leading to Leo Lake part of the Pend Oreille Chain Lakes and eventually to the Little Pend Oreille River.

Management History:

Frater Lake has been managed since the 1950s as production westslope cutthroat water. The lake has been managed as a lowland lakes opener, but typically because of its elevation and aspect late May and June are the most productive fishing months. This lake is known to have rapid growth rates for fall fingerling stocked cutthroat, with age 2 fish reaching 14 inches. Because of its small size and proximity to highway 20 very few fish carry-over past age 2.

For many years Frater Lake provided an excellent fishery despite the fact that the lake had a population of competing pumpkinseed sunfish. Lake productivity, and the fact that the sunfish population was not expanding rapidly, allowed for continued successful fish management. The sunfish were in the lake for at least 20 years prior to them reaching a density that negatively affected the recruitment and harvest of cutthroat trout. By 2006, densities of pumpkinseed sunfish had developed sufficiently to preclude cutthroat recruitment, and stocking of cutthroat in this water was suspended. The origin of pumpkinseed sunfish in this water is unknown, but it is likely that they were illegally introduced some time in the past 30 years. Historically this lake had been treated with rotenone (1952, 1960, 1968) but the treatments were done to eradicate tench and redside shiner. There are current reports of tench in this water, but there numbers are believed to be considerably lower than pumpkinseed sunfish.

*T&E Flora and Fauna***:** Professionals from many resource agencies have visited this site countless times during the last 50 years. No known report exists of any threatened or endangered species habitually found in or near these lakes. Occasional visits from both bald and golden eagles occur, although no nests of these two species are known in the area. Protected species of waterfowl and other birds frequently are found here at times, as well.

Current Management Objectives:

Frater Lake is a lowland lake opener, last Saturday in April to October 31, production fishery. Five fish limit, no size or gear restrictions. Provide 2 to 5 westslope cutthroat trout per angler trip with a carryover harvest rate of 0 to 5 percent. Fishery should generate a minimum of 1,000 angler-trips per season.

1. Fishery Objectives:

Species	Type	Category	Fish/Hour	Fish/Angler	Exploit. Rate
Cutthroat	Production	Opening Day	1	1 to 3	95%-100% 2 yr cohort
Cutthroat	Production	Remainder of season	1.5	2 to 5	95%-100% 2 yr cohort

2. Angler use objective (# angler days): Season – 1,000 angler days on water

3. Stocking Objectives:

		Number of Fish Stocked			
Lake	**Species**	**Total**	**/Acre**	**/Pound**	**Planting Month**
Frater- year 1	Cutthroat	2500	166	<20	April-May
Year 2	Cutthroat	5000	333	<150	October
Year 3	Cutthroat	5000	333	<150	October
Year 4	Cutthroat	5000	333	<150	October
Year 5	Cutthroat	5000	333	<150	October

Management Strategies:

- Plant westslope cutthroat spring fry for the first year following rehab and then fall fry in October in successive years following rehab. Fall fry are more cost effective and proven at providing successful fisheries in District 1 waters.
- Check yearling growth; should be about 11 inches, adjust stocking rate as necessary.
- Harvest 95%- 100% of age 2 fish by end of season.
- Monitor all fish species periodically by electrofishing or netting.
- Control undesirable species with rotenone when trout survival is inadequate to produce an acceptable fishery.