

LAKE MANAGEMENT PLAN

Updated April, 2009 – C. Donley

Water(s): Hog Canyon (Hog) Lake (Spokane Co.)

Location: Hog Canyon Lake is Located 7.5 miles east of Sprague, WA. Hog Canyon Lake is one of two headwater lakes and the smallest headwater lake in the Negro Creek Drainage that flows into Sprague Lake.

	Size:	Max. Depth:	Volume:
Hog Canyon Lake	44.5 acres	13 ft	239 acre feet

Water Source: Hog Canyon Creek, groundwater seeps and spring, and limited overland flow.

Outflow: Hog Canyon Creek is the outlet stream from Hog Canyon Lake. This stream is not a perennial stream but a series of interconnected beaver ponds and wetlands between Hog Canyon and Fishtrap Lakes. This stream flows during spring months but is dry, except for the wetland portion most of the year.

There is a large dam on Hog Canyon Lake that was constructed by WDFW in the late 1950s for fish management purposes. The increase in lake size due to the dam allowed for the expansion of the trout fishery.

Management History:

Hog Canyon Lake has been managed as a winter trout fishery (December 1 to March 31) since the late 1950s. Fishing can be characterized as excellent to fair depending on the absence/presence of undesirable fish species. Small springs and ponds in the headwaters of this lake are a constant source of brown bullhead and tench, preventing permanent eradication of these rough fish species. The presence of these source populations of rough fish make it necessary to treat this lake with rotenone on a periodic basis to provide for a utilizable recreational trout fishery. Temporal separation of rotenone treatments is determined by snow pack and high water events. The drier the winter the less likely that undesirable fishes will contaminate the lake.

Hog Canyon has been treated with piscicides 8 times. Toxaphene was used to rehabilitate the lake in 1958, 1961 and 1969 (partial use of Toxaphene and rotenone). Since 1969, the lake has been treated with rotenone 5 times: 1976, 1983, 1989, 1998 and 2003.

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. Protected species of waterfowl and other birds frequently are found here at times, as well.

Current Management Objectives:

Hog Canyon Lake is a winter lakes opener, December 1 to March 31, production fishery. Five fish limit, no more than two greater than 14 inches, no gear restrictions. Provide 2 to 5 rainbow trout per angler trip with a carryover harvest rate of 50 to 65 percent.

1. Fishery Objectives:

Species	Type	Category	Fish/Hour	Fish/Angler	Exploit. Rate
Rainbow	Production	Opening Day	2	3 to 5	50% 1 yr cohort 50% 2 yr cohort
Rainbow	Production	Remainder of season	1	2 to 3	50% 1 yr cohort 50% 2 yr cohort

2. Angler use objective (# angler days): Season – 6,500 angler days on water

3. Stocking Objectives:

	Species	Number of Fish Stocked			Planting Month
		Total	/Acre	/Pound	
Year 1	Rainbow	10,000	225	≤ 5	March -April
	Rainbow	15,000	335	<100	April-May
Year 2	Rainbow	10,000	225	≤ 5	March -April
		15,000	335	<100	April-May
Year 3	Rainbow	10,000	225	≤ 5	March -April
		15,000	335	<100	April-May
Year 4	Rainbow	10,000	225	≤ 5	March -April
		15,000	335	<100	April-May
Year 5	Rainbow	10,000	225	≤ 5	March -April
		15,000	335	<100	April-May

Management Strategies:

- Plant rainbow trout catchables Spring 2010 and spring fry during successive springs. Because of size restriction in harvest regulations and December openers catchable plants are used to increase mean size of age 1+ trout. Without using catchables there would be undersized fish ≤ 8 inches and oversized fish ≥ 14 inches, but very few harvestable sized fish for anglers to utilize.
- Check yearling growth; should be ~11 inches on May 1st, adjust stocking rate as necessary.
- Harvest 50% of age 1 fish by end of season.
- Monitor all fish species periodically with creel, netting and/or electrofishing.
- Control undesirable species with rotenone when trout survival is inadequate to produce an acceptable fishery.