#### LAKE MANAGEMENT PLAN

*Updated June, 2008 – C. Donley* 

Water: Williams Lake (Stevens Co.)

**Location:** Williams Lake is located 14.5 miles north of Colville

**Size:** Max Depth: Volume: Williams Lake 38 acres 47 ft 1,058 acre feet

**Water Source:** Mostly groundwater seep, with limited overland flow. There is no defined intermittent or year-round stream that feeds into this lake.

**Outflow:** Intermittent outflow leading to adjacent wetlands. Outflow will be dry during time of treatment

#### **Management History:**

Williams Lake has been historically managed as a production winter season trout fishery. Williams Lake has provided a consistent winter ice fishery that has been popular for all of the greater Colville to Spokane angling base. The number of winter only fisheries in the greater Spokane area is limited to four production trout lakes. The limited amount of winter fishing opportunity renders Williams Lake highly desirable to provide wintertime recreation.

The presence of undesirable species of fish is the greatest impediment to maintaining trout fisheries in this water. For many years Williams Lake provided an excellent winter fishery with a fish population free of undesirable fish species. Until the 1990s the lake had not been treated with rotenone to eliminate undesirable fish. In the last two decades there appears to be a trend in regards to an increase in illegal introduction of undesirable fish species into Williams Lake. The lake has been treated with rotenone twice since 1996. In 1996, the lake was treated to eliminate largemouth bass and carp. In 2002, the lake was treated to eliminate illegally introduced goldfish. Currently the problem fish species is yellow perch. The increased desire by "bucket biologists" to confound our fish management efforts on this lake has lead to a considerable loss of recreational and economic value for the greater Colville area. In an attempt to prevent repeated illegal stocking, WDFW has enacted the fishing regulation that precludes anglers from harvesting any species other than trout from this water. The intent of the regulation is to diminish the value of illegal introductions if the fish cannot be harvested.

*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:**

Williams Lake is a winter opener, December 1 to March 31, production fishery. Five trout limit, no size or gear restrictions. Provide 2 to 5 rainbow trout per angler trip with a carryover harvest rate of 10 to 15 percent. Fishery should generate a minimum of 2,500 angler-trips per season.

## 1. Fishery Objectives:

Species	Type	Category	Fish/Hour	Fish/Angler	Exploit. Rate
Rainbow	Production	Opening Day	2	3 to 5	85% - 90% 1
					yr cohort
Rainbow	Production	Remainder of	1	2 to 3	85%-90% 1
		season			yr cohort

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

## 3. Stocking Objectives:

		Number of Fish Stocked				
<u>Lake</u>	Species	Total	/Acre	/Pound	<b>Planting Month</b>	
Williams	Rainbow	15,000	394	<100	April-May	
	Rainbow	7,500	175	≤ 5	March-April, first year post rehabilitation	
Year 2	Rainbow	18,000	473	<100	April-May	
Year 3	Rainbow	18,000	473	<100	April-May	

#### **Management Strategy:**

- Plant rainbow fry and catchables in spring.
- Check yearling growth; should be about 11 inches, adjust stocking rate as necessary.
- Harvest 85%-90% of yearling 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.