

## LAKE MANAGEMENT PLAN

*Updated July 2015 – Randall Osborne*

### **Water(s): Williams Lake (Spokane Co.)**

**Location:** Williams Lake is located 21 kilometers southwest of Cheney, WA.

	<b>Size:</b>	<b>Max. Depth:</b>	<b>Volume:</b>
<b>Williams Lake</b>	128 hectares (317 acres)	35.1 meters (115 feet)	13,087 acre feet

**Water Source:** There is an unnamed intermittent tributary from Badger Lake.

**Outflow:** Yes, unnamed intermittent stream that flows downstream into Downs Lake

### **Management History:**

Williams Lake has been managed as a trout fishery for several decades and has been treated 7 times with rotenone (1956, 1962, 197, 1982, 1988, 1995, 2003). Previous treatments primarily targeted dace, bullhead catfish, yellow perch, largemouth bass, smallmouth bass, and pumpkinseed sunfish. The lake is proposed to be treated in 2015 to control overabundant pumpkinseed sunfish and tench populations that are limiting trout recruitment through interspecific competition.

*Priority Habitats & Species:* Professionals from many resource agencies have visited this site countless times during the last 50 years. Besides bald eagles, no known report exists of any threatened or endangered species habitually found in or near this lake. Bald eagles occasionally visit the area and, although not yet verified, could use this area for nesting. Little to no impact on bald eagle nesting is anticipated because the application of rotenone occurs in the fall when nests would be inactive. Numerous species of waterfowl and other birds frequently are found here at times, as well.

### **Current Management Objectives:**

Williams Lake is a lowland lakes opener (4<sup>th</sup> Saturday in April to September 30) production trout fishery (5 fish limit, no size or gear restrictions). Angler harvest rate targets are 4 to 5 fish/angler/trip on the opener and 2 to 3 fish/angler/trip for the remainder of the season. The carryover harvest rate should be 10 to 15 percent.

**Fish Stocking Objectives following lake rehabilitation\*:**

<u>Lake</u>	Species	Number of Fish Stocked			Planting Month
		Total	/Acre	/Pound	
Year 1	Rainbow	20,000	63	2.5	March/April
Year 2	Rainbow	60,000	189	100	April/May
	Cutthroat	20,000	63	20	May/June
Year 3	Rainbow	90,000	283	100	April/May
	Cutthroat	25,000	79	20	May/June
Year 4	Rainbow	90,000	283	100	April/May
	Cutthroat	25,000	79	20	May/June
Year 5	Rainbow	90,000	283	100	April/May
	Cutthroat	25,000	79	20	May/June
Year 6	Rainbow	90,000	283	100	April/May
	Cutthroat	25,000	79	20	May/June

\* final stocking numbers may be adjusted pending outcome of rehabilitation proposal and annual fish availability

**Management Strategy:**

- A. Plant rainbow trout catchables (2.5 fpp) during spring 2016. Do not use catchables in this fishery again until fry recruitment reduces substantially from competition with unwanted fish species. Plant rainbow trout spring fry (100 fpp) and cutthroat trout spring fry (20 fpp) annually to maintain trout fishery.
- B. Check yearling growth; should be ~11 inches on May 1<sup>st</sup> of each spring. Adjust stocking density as necessary to achieve targeted trout growth.
- C. Monitor annually with Opening Day creel and gill netting, and periodically with electrofishing.
- D. Control undesirable species with rotenone when trout survival is inadequate to produce an acceptable fishery.