LAKE MANAGEMENT PLAN

Updated July 2015 – Randall Osborne

Water(s): Badger Lake (Spokane Co.)

Location: Badger Lake is located 18 kilometers southwest of Cheney, WA.

	Size:	Max. Depth:	Volume:
Badger Lake	101 hectares (246 acres)	33.5 meters (110 feet)	11,439 acre feet

Water Source: There is an unnamed intermittent tributary and springs.

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

Management History:

Badger Lake has been managed as a trout fishery for several decades. Until the early 1950's, it was planted primarily with cutthroat trout. Following the rehabilitation in 1950, Badger Lake was stocked with both cutthroat trout and rainbow trout. Planting of rainbow and cutthroat trout has continued until the present, and these species are the staple of this fishery.

Badger Lake has been treated 5 times with rotenone (1950, 1958, 1978, 1995, 2002). 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 an overabundant pumpkinseed sunfish population that is limiting trout recruitment through interspecific competition, and largemouth bass and smallmouth bass that are compromising overall trout fry survival. The 2013 treatment did not occur due to water right issues.

*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:

Badger Lake is a lowland lakes opener (4th 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*:

		Number of Fish Stocked			
Lake	**Species**	**Total**	**/Acre**	**/Pound**	**Planting Month**
Year 1	Rainbow	15,000	60	2.5	March/April
Year 2	Rainbow	20,000	80	100	April/May
	Cutthroat	30,000	120	20	May/June
Year 3	Rainbow	30,000	120	100	April/May
	Cutthroat	45,000	180	20	May/June
Year 4	Rainbow	30,000	120	100	April/May
	Cutthroat	45,000	180	20	May/June
Year 5	Rainbow	30,000	120	100	April/May
	Cutthroat	45,000	180	20	May/June
Year 6	Rainbow	30,000	120	100	April/May
	Cutthroat	45,000	180	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 1st 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.