

## LAKE MANAGEMENT PLAN

April 20, 2017 – Bill Baker & Brian Walker

### Water(s): Rigley Lake (Stevens Co.)

**Location:** Rigley Lake is located 12.6 miles north of Colville

	<b>Size:</b>	<b>Max Depth:</b>	<b>Volume:</b>
<b>Rigley Lake</b>	7 acres	Unknown ft	105 acre feet (est.)

### Water Source:

Rigley Lake is fed by Pingston Creek.

### Outflow:

Rigley Lake is drained by Pingston Creek. Outflow is intermittent and will be dry during time of treatment.

### Management History:

Rigley Lake has been historically managed under selective gear rules as a quality trout fishery, with a 12” minimum size and 2 trout limit. Annually stocked with 500 catchable and 100 jumbo Rainbow Trout *Oncorhynchus mykiss*, Rigley Lake is a popular destination for Stevens County fly fishermen. Rigley Lake is subject to regular winter-kill, which precludes fry stocking of trout.

Large numbers of Green Sunfish *Lepomis cyanellus* were confirmed to be present in Rigley Lake via visual survey and boat electrofishing in summer 2016. Multiple year classes of Green Sunfish were present, indicating that prolific natural reproduction had occurred and that Green Sunfish were relatively unaffected by winter-time periods of low dissolved oxygen. Presence of Green Sunfish in Rigley Lake negatively impacts trout condition through competition for prey.

**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 eagle *Haliaeetus leucocephalus* and golden eagles *Aquila chrysaetos* occur, although no nests of these two species are known in the area.

### Current Management Objectives:

Rigley Lake is a Lowland Lake Trout Season water. The fishing season runs from the 4<sup>th</sup> Saturday in April-October 31. It has a two trout limit with a 12” minimum size and selective gear regulation. The target catch rate is 10 rainbow trout per angler trip.

### 1. Fishery Objectives:

Species	Type	Category	Fish/Hour	Fish/Angler	Exploit. Rate
Rainbow	Production	Lowland Lakes Trout Season Opening Day	5	10	25-30%
Rainbow	Production	Remainder of season	2	5	25-30%

### 2. Angler use objective:

(# angler days): Season – 900 angler days on water

### 3. Stocking Objectives:

<u>Lake</u>	Species	Number of Fish Stocked			Planting Month
		Total	/Acre	/Pound	
Rigley	Rainbow	500	72	≤ 2.5	April 2018
	Rainbow	100	15	≤ 1	
Year 2	Rainbow	500	72	≤ 2.5	April 2019
	Rainbow	100	15	≤ 1	
Year 3	Rainbow	500	72	≤ 2.5	April 2020
	Rainbow	100	15	≤ 1	

### Management Strategy:

- Plant rainbow catchables and jumbos in spring 2018 – because of the risk of winter-kill, the fishery has been managed with this strategy in previous years. Anglers should notice no difference in the fishery in 2018 and beyond except for the absence of Green Sunfish and improved trout condition.
- Monitor all fish species periodically by electrofishing or netting.
- Control undesirable species with rotenone when trout condition is inadequate to produce an acceptable fishery.