STREAM MANAGEMENT PLAN

Updated March 22, 2017 – Bill Baker and Brian Walker

Water(s): Smalle Creek (Pend Oreille Co.)

Location: The Smalle Creek treatment area is located approximately 5 – 9 miles west of Cusick.

	Distance:	**Max Depth:**	**Discharge:**
Smalle Creek	~7.5 miles	N/A	Up to 1.75 cfs

Water Source: Numerous springs and seeps, rainfall and snowmelt run-off.

Outflow: Tributary to Calispell Creek (tributary to the Pend Oreille River).

Management History:

Smalle Creek is managed under Washington Department of Fish and Wildlife (WDFW) general stream regulations, including a 5 fish limit (no minimum size) for Eastern Brook Trout, and a 2 fish limit (8" minimum size) for all other trout (Daily bag limit = 5 fish total). Smalle Creek was presumably inhabited by native Westslope Cutthroat Trout (WCT), but has received stockings of Eastern Brook Trout (1933 – 1938, 1980 – 1981) and Rainbow Trout (1946 – 1948). Only Eastern Brook Trout are found above Smalle Creek Falls at this time. With the decline of WCT abundance and range, cooperative efforts between WDFW and the Kalispel Tribe of Indians Natural Resource Department (KNRD) have begun in Pend Oreille County to restore native WCT to selected stream sections. Smalle Creek is uniquely suited to WCT restoration due to the presence of a natural barrier to prevent reinvasion by non-native fish, excellent habitat, and a monoculture of Brook Trout in the project area. It is anticipated that following non-native fish eradication in Smalle Creek, reintroduced WCT will establish a self-perpetuating population and re-occupy the treated area.

*T&E Flora and Fauna***:** Professionals from many resource agencies have visited this site during the last 50 years. No known report exists of any threatened or endangered species habitually found in or near these lakes. The Smalle Creek treatment area is located within the Dirty Shirt wolf *Canis lupus* pack home range, but wolves are unlikely to occupy the area during treatment due to increased human presence, traffic, and activity in the days surrounding treatment.

Management Objectives:

1. Eradicate non-native Eastern Brook Trout from upper Smalle Creek and its tributaries.
2. Re-establish a self-sustaining, healthy population of WCT in the treated area.

The successful achievement of Objective 1 would be readily apparent following the final rotenone treatment when no fish carcasses are observed in the treatment section. Environmental DNA (eDNA) analysis will also be utilized throughout the Smalle Creek watershed to detect presence of Brook Trout. A reproducing population of WCT, expanding both in population size and spatial distribution, would indicate successful completion of Objective 2. Successful achievement of Objective 2 may take 3+ years.

1. Fishery Objectives:

None - While this fishery may experience very light angling pressure, species restoration and conservation are the main goals of this action. WCT size will be small (generally < 6 inches in length), and the fishery is unlikely to receive much interest from anglers.

2. Angler use objective: n/a

3. Stocking Objectives:

		Number of Fish Stocked			
Stream	**Species**	**Total**	**/Acre**	**/Pound**	**Planting Month**
Smalle Creek	WCT	100 – 300	n/a	n/a	Spring 2018; translocation from wild source populations.
Smalle Creek	WCT	1000 – 15,000	n/a	n/a	Spring 2018; remote site incubation (RSI) of fertilized gametes.
Smalle Creek	WCT	TBD	n/a	n/a	Additional translocation or RSI production as needed from 2019-2024.

Management Strategy:

Translocate 100 – 300 genetically pure wild WCT from geographically proximate populations to Smalle Creek in the first year following successful Brook Trout eradication. If needed (depending on the number of donor fish available), produce WCT fry from fertilized gametes and incubate in Remote Site Incubators (RSI) to augment the number of translocated fish.

Beginning the second year after translocation, monitor the restored WCT populations through electrofishing to assess population size, spatial distribution, genetic metrics, and ensure that non-

native fish have been eradicated (or have not been illegally reintroduced).

Continue population monitoring every 2-5 years as necessary.