

THE FORGOTTEN FISH: RECOVERING BULL TROUT

April, 2019

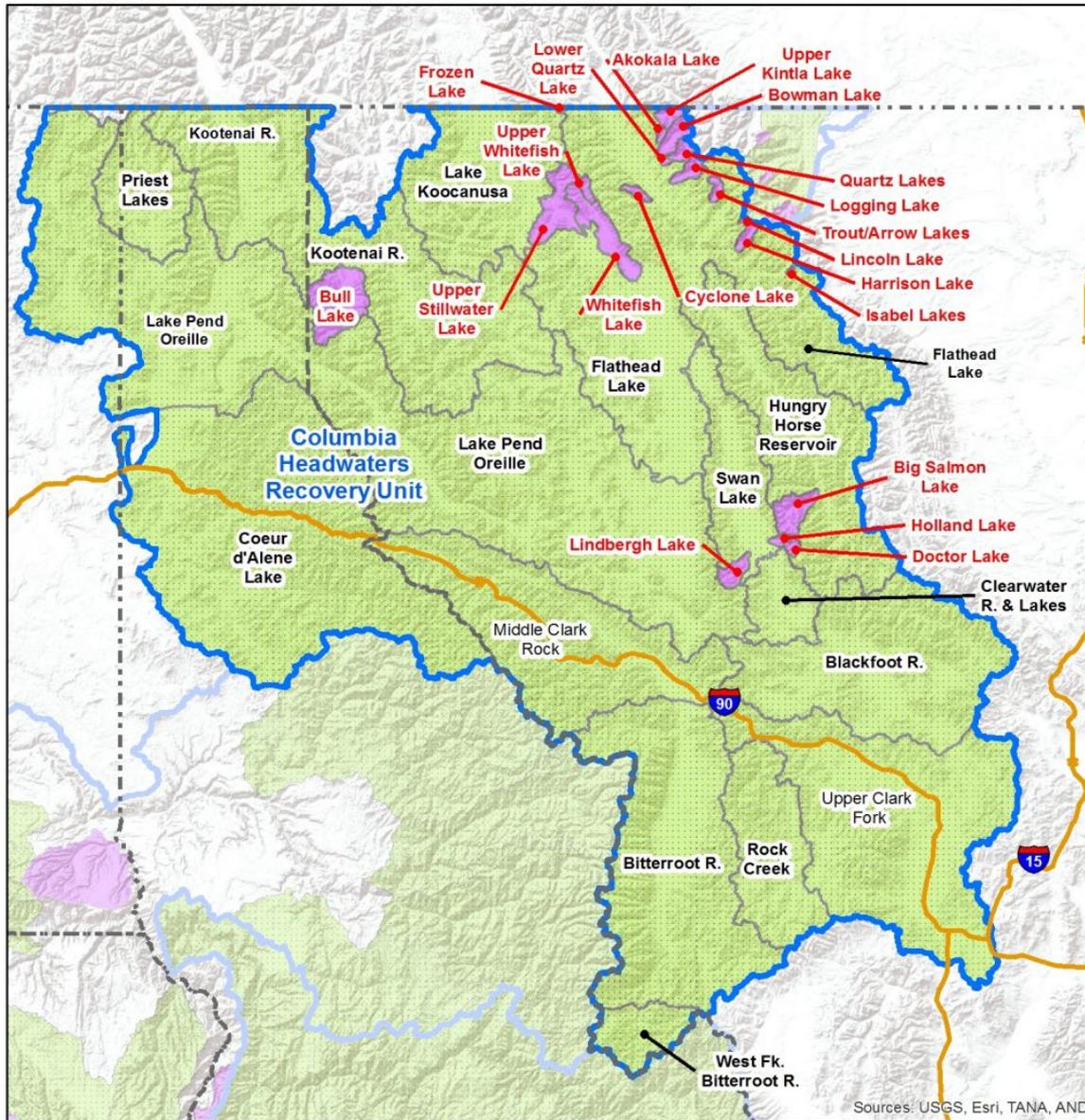


Background & chronology of the USFWS's bull trout recovery planning efforts to date

- **1999**-Columbia River DPS listed under ESA
- **2002**-Draft recovery plan developed (primarily demographic recovery targets)
- **2010**-Critical habitat designated
- **2013**-USFWS announces draft recovery plan will be available by January, 2014
 - Convenes State and Federal Management Team (“SFMT”)—comprised of USFWS, Idaho, Washington, Oregon and Montana—to develop a “revised” recovery plan
- **September 2015**-Final Recovery Plan



Upper Columbia Headwaters



Core_Area	Complexity
Akokala Lake	Simple
Big Salmon Lake	Simple
Bitterroot River	Complex
Blackfoot River	Complex
Bow man Lake	Simple
Bull Lake	Simple
Clearwater River & Lakes	Complex
Coeur d'Alene Lake	Complex
Cyclone Lake	Simple
Doctor Lake	Simple
Flathead Lake	Complex
Frozen Lake	Simple
Harrison Lake	Simple
Holland Lake	Simple
Hungry Horse Reservoir	Complex
Isabel Lakes	Simple
Kootenai River	Complex
Lake Koocanusa	Complex
Lake Pend Oreille	Complex
Lincoln Lake	Simple
Lindbergh Lake	Simple
Logging Lake	Simple
Lower Quartz Lake	Simple
Middle Clark Fork	Complex
Priest Lakes	Complex
Quartz Lakes	Simple
Rock Creek	Complex
Swan Lake	Complex
Trout / Arrow Lakes	Simple
Upper Clark Fork	Complex
Upper Kintla Lake	Simple
Upper Stillwater Lake	Simple
Upper Whitefish Lake	Simple
West Fork Bitterroot River	Complex
Whitefish Lake	Simple

Legend

Core Areas

Complexity

Complex

Simple

States

Interstate

Recovery Units



0 20 40 Miles

Sources: USGS, Esri, TANA, AND

Recovery Plan

- *The ESA does not require a species, in this case bull trout, to be recovered throughout its historic range or even to a majority of the currently suitable habitat. Instead, the ESA requires that we recover listed species such that they no longer meet the definitions of “threatened species” or “endangered species”, i.e., are no longer in danger of extinction now or into the foreseeable future.*

Concerns with the Bull Trout Recovery Plan

- The USFWS excluded tribes from the SFMT
- The final recovery plan contains only threats-based recovery targets; demographic targets have been abandoned entirely
- The SFMT's threats assessment tool allows too much room for subjectivity
- The USFWS has explicitly said that the bull trout does not need to *“to be recovered throughout its historic range or even to a majority of the currently suitable habitat.”*
- May lead to the abandonment of bull trout recovery efforts within waters that are important to your particular area of interest



Delisting Criteria

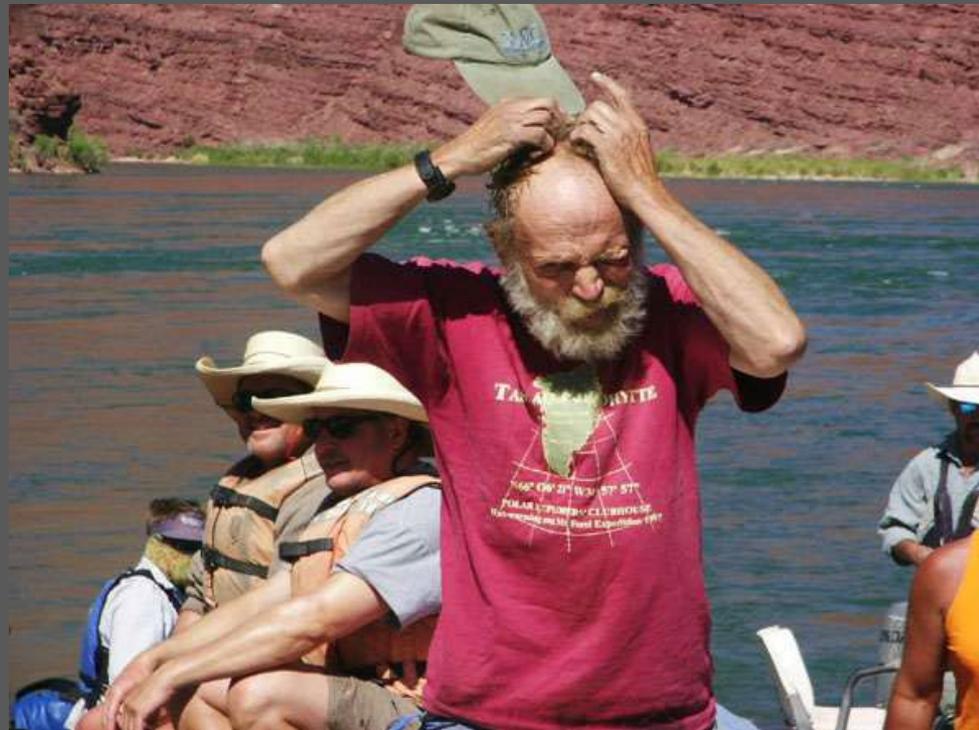
Table 1. Recovery (Delisting) Criteria: For each recovery unit, number of core areas (and local populations) where threats must be effectively managed; reaching this ‘threshold’ would initiate the delisting evaluation process.

Recovery Unit	Existing		Threshold	
	Total Number of Extant Core Areas	Total Number of Local Populations within Extant Core Areas	Minimum Number of Core Areas with Threats Effectively Managed	Minimum Number of Local Populations within Effectively Managed Core Areas
Coastal RU ¹	20	84	15	63
Mid-Columbia RU	24	142	18	107
Upper Snake RU	22	207	17	156
Columbia Headwaters RU ² (simple core areas)	20	20	15	15
Columbia Headwaters RU ² (complex core areas)	15	143	12	108
Klamath RU ³	3	8	3*	8*
Saint Mary RU	4	7	4	7

¹Reintroduced population in Clackamas River core area is considered a potential local population until confirmed as established; if successful, it may contribute toward meeting the Coastal RU thresholds.

²For the Columbia Headwaters RU: primary threats are effectively managed in 75 percent of simple core areas and 75 percent of complex core areas.

So how do you move forward
recovering Bull Trout with a
Recovery Plan you are not happy
with?



You move forward

Significant Recovery Efforts in WRIA 62

- **Albeni Falls Dam**
 - Fish Passage Underway.....it's just not funded
- **Pend Oreille PUD FERC Settlement (Box Canyon Dam)**
 - Restore 164 Miles of Tributary Streams
 - Fish Passage at Box Canyon Dam
- **Seattle City Light FERC Settlement (Boundary Dam)**
 - \$392 Million Restoration Deal
 - Restoration of Tributaries in the Project Area
 - Removal of Mill Pond Dam
 - Coldwater Pipe for Sullivan/Outlet Creek
 - Fish Passage at Boundary Dam
- **Kalispel Tribe Fish Accord/BPA Projects**
 - \$39.5 Million over 10 years
 - Expansion of Existing Projects
 - Northern Pike Suppression Project



Federal Power Act gives FERC authority to issue licenses

- **Non-federal hydropower projects**
 - Section 4(e) - mandatory conditions
 - Section 18 - prescribe fish passage
- Adequate protection, mitigation, and enhancement (PM&E) of fish and wildlife

Boundary Dam Fish & Aquatic PM&E's

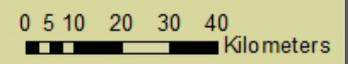
- Upstream fish passage at Boundary Dam
- Improvements throughout the watershed
- Culvert replacements in tributaries
- Aquatic invasive species control & prevention
- Structural modification to improve TDG
- Mill Pond Dam removal
- Sullivan Lake cold water release structure
- Conservation hatchery

Fish Passage

- Adfluvial
- Fluvial
- Resident



Canada



Boundary Dam

Box Canyon Dam

Albeni Falls Dam

Cabinet Gorge Dam

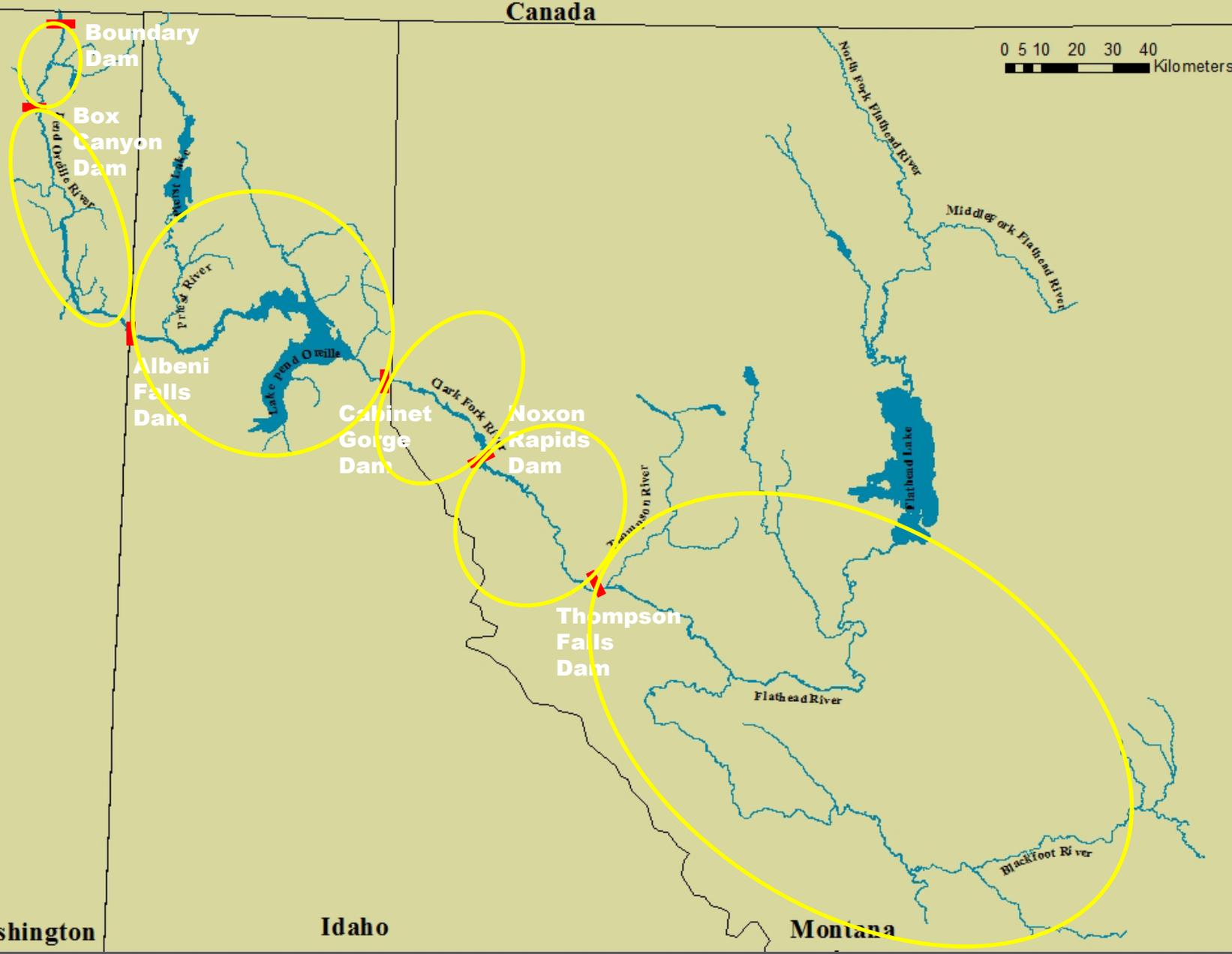
Noxon Rapids Dam

Thompson Falls Dam

Washington

Idaho

Montana



Canada

0 5 10 20 30 40
Kilometers

Boundary Dam

Box Canyon Dam

Albeni Falls Dam

Cabinet Gorge Dam

Noxon Rapids Dam

Thompson Falls Dam

Washington

Idaho

Montana

Box Canyon Dam

30 40
Kilometers

Box
Canyon
Dam

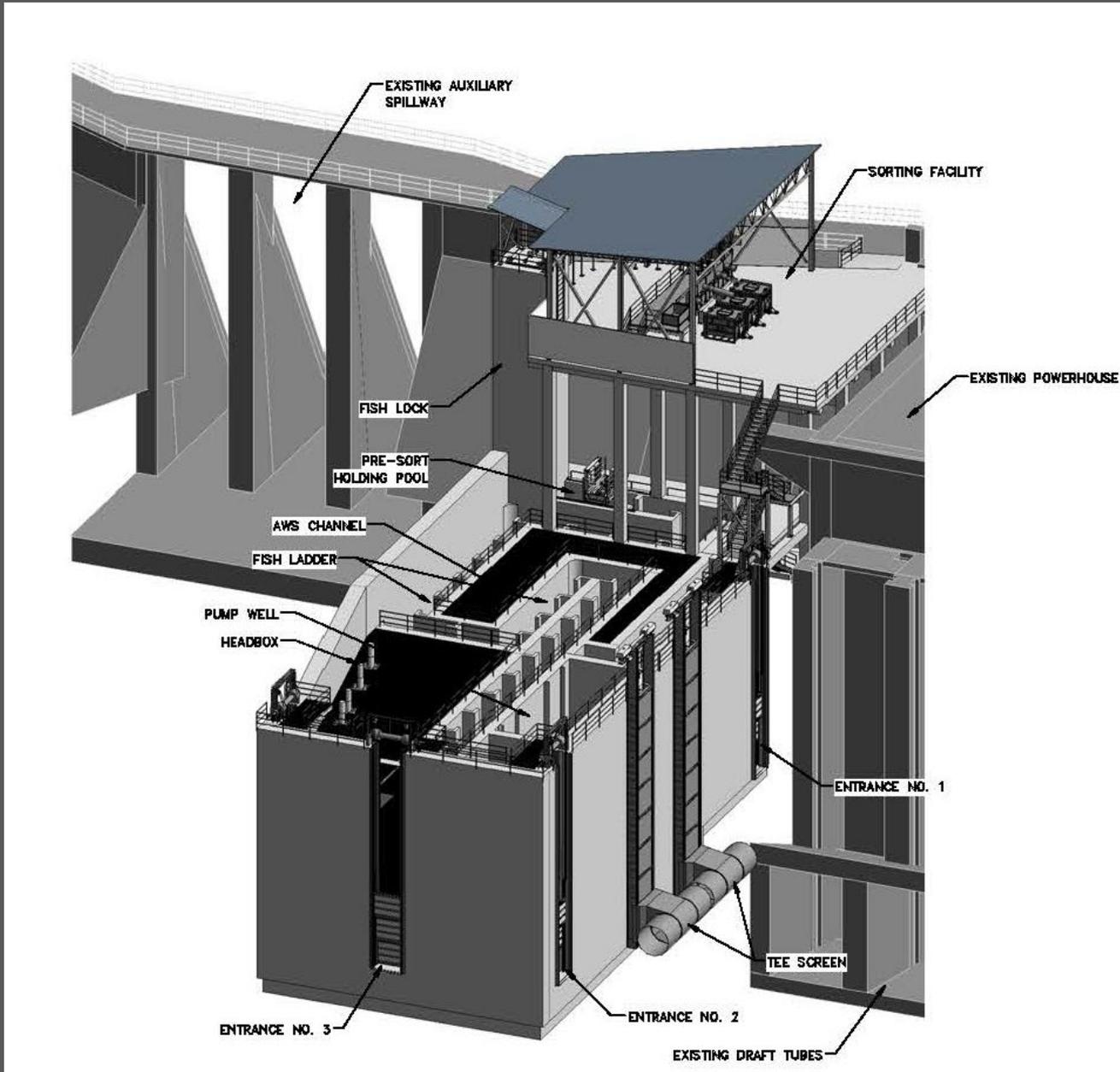
Pend Oreille PUD
69 mw
62' in height

Upstream Passage
Operational by fall
2019



Montana

Box Canyon – Upstream Fish Passage



Fisheries Projects

Instream restoration



Non-native fish removal



Bull trout research

Culvert Removal Projects



Bull Trout Conservation Hatchery

“Decision analysis for the reintroduction of Bull Trout into the lower Pend Oreille River, Washington”

- Joseph R. Benjamin¹, William R. Brignon², and Jason B. Dunham³