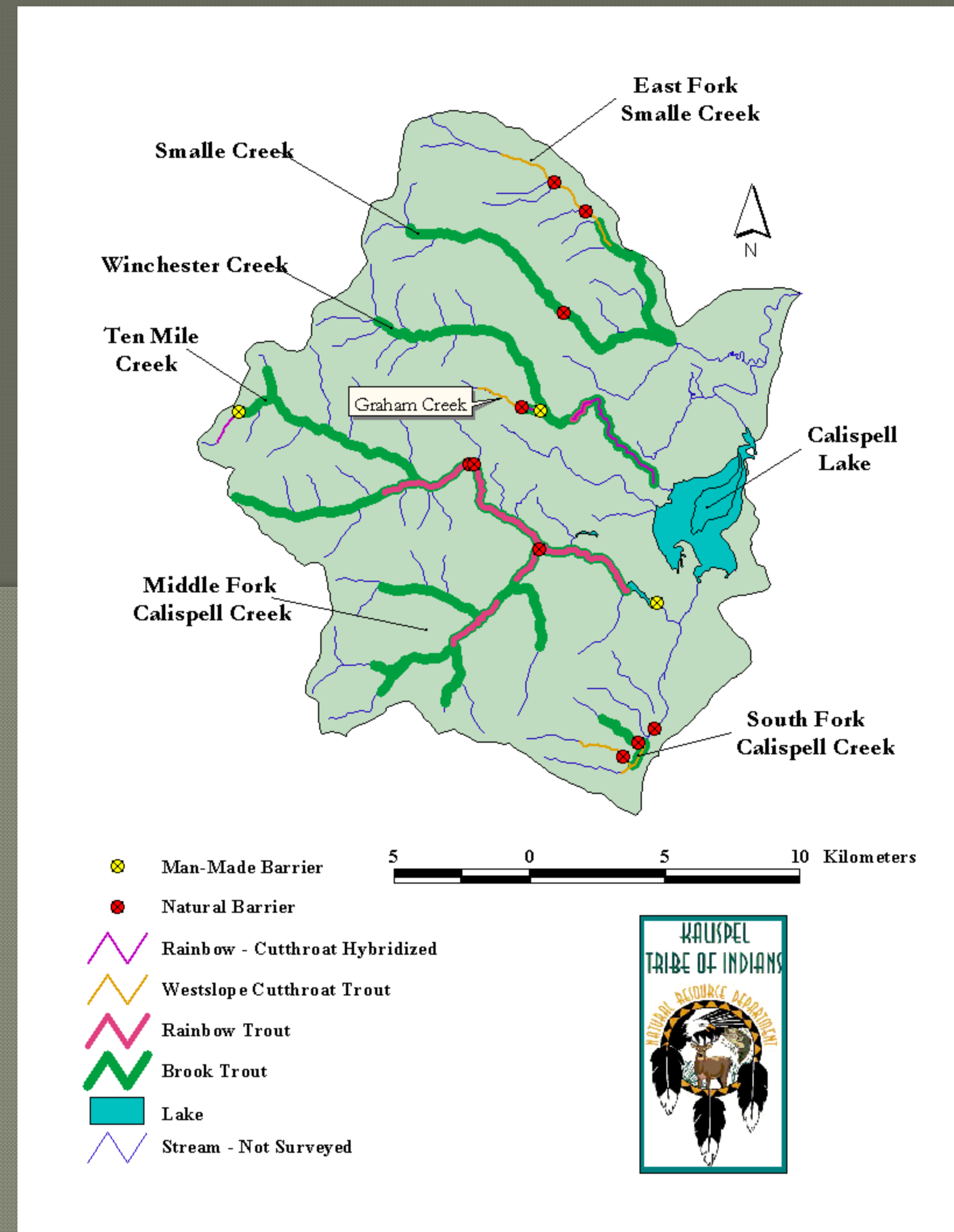


Native Westslope Cutthroat Trout Restoration

Westslope Cutthroat Trout Population Status



- Historically cutthroat trout were widely distributed throughout the lower Pend Oreille River Basin.
- Currently, cutthroat trout populations are depressed or extinct in many of the tributary streams.
- Rainbow trout hybridize with cutthroat and dilute their unique characteristics.
- Brook trout out-compete cutthroat trout and can eventually displace an entire population.

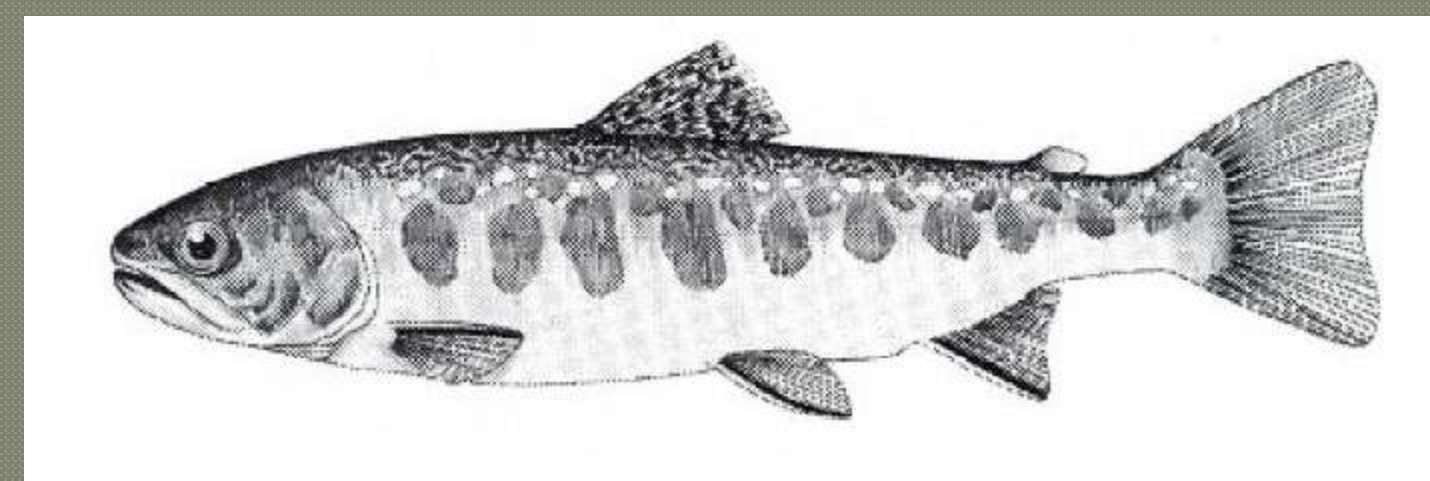
Currently in the Calispell Watershed, pure populations of cutthroat trout exist only above fish passage barriers where non-native fish have not yet invaded.



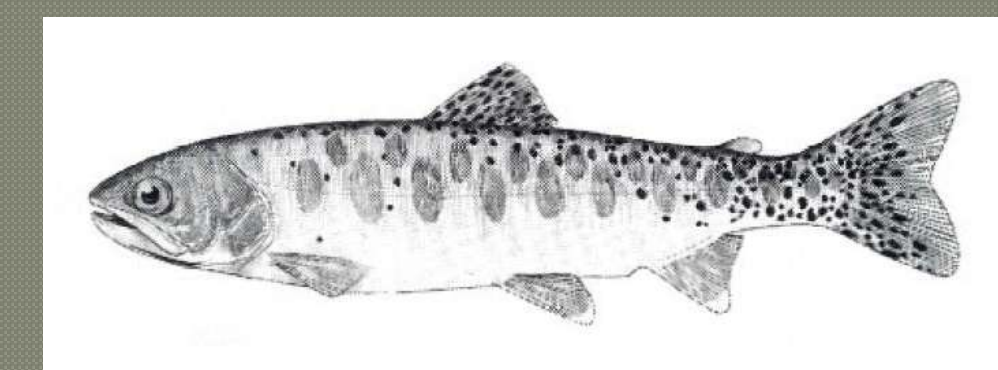
Brook Trout Vs. Cutthroat Trout

Brook trout have a competitive advantage over cutthroat trout

- **Juvenile brook trout are larger than juvenile cutthroat trout.**
 - Brook trout spawn in the fall while cutthroat spawn in the spring.
 - Brook trout eggs hatch in the spring while cutthroat embryos are still developing.
 - Larger, more aggressive brook trout juveniles displace the smaller cutthroat.



Juvenile Brook Trout



Juvenile Cutthroat Trout

- Brook trout are sexually mature at an earlier age
 - 1 year old vs. 3-5 years old
- Brook Trout may live longer than cutthroat trout
- Brook trout are more tolerant to degraded habitat
 - Can successfully spawn in fine substrate
 - More tolerant to warm water temperatures

Non-native Fish Removal

Antimycin

Non-native fish removal is a common management action for restoring native fish populations. Antimycin is the most effective agent for complete, long-term removal of non-native fish in streams

- Is an antibiotic.
- Concentrations used are very low.
- A detoxicant is used at the downstream end of the treatment reach to break down the antimycin to naturally occurring products.

“there would be no effect on human health even if the chemicals (antimycin) were not detoxified, did not breakdown, and people drank the “contaminated” water continuously for their entire lives.” Montana DEQ, 1999.

Advantages

- Complete removal can be achieved
- Effective concentrations used are very low.
- Concentrations used are not harmful to plants or wildlife through exposure, drinking of treated water or ingestion of fish.
- Antimycin degrades rapidly
- Antimycin loses most of its toxicity over a drop of 200 feet in stream elevation.

Disadvantages

- short term, temporary decrease in some macroinvertebrate populations.
- Extensive program required to educate the public, address concerns, and garner support.