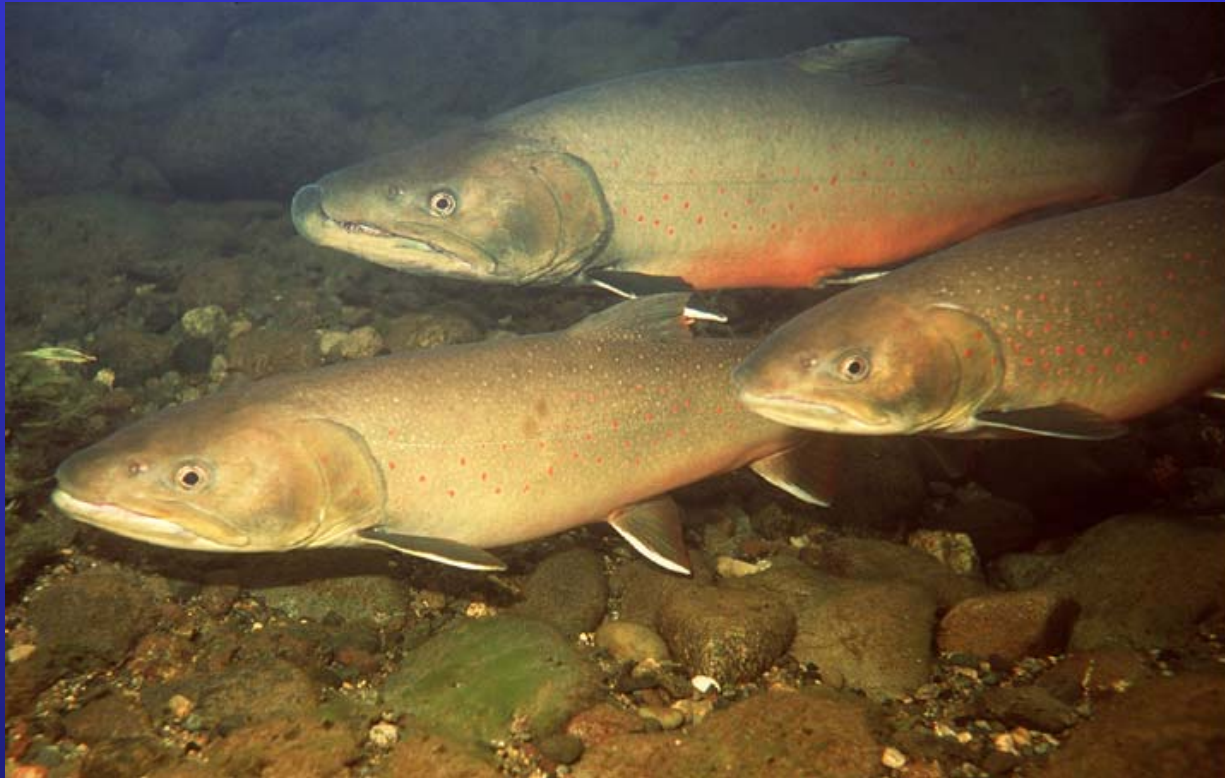


# Fisheries and the Proposed Mine



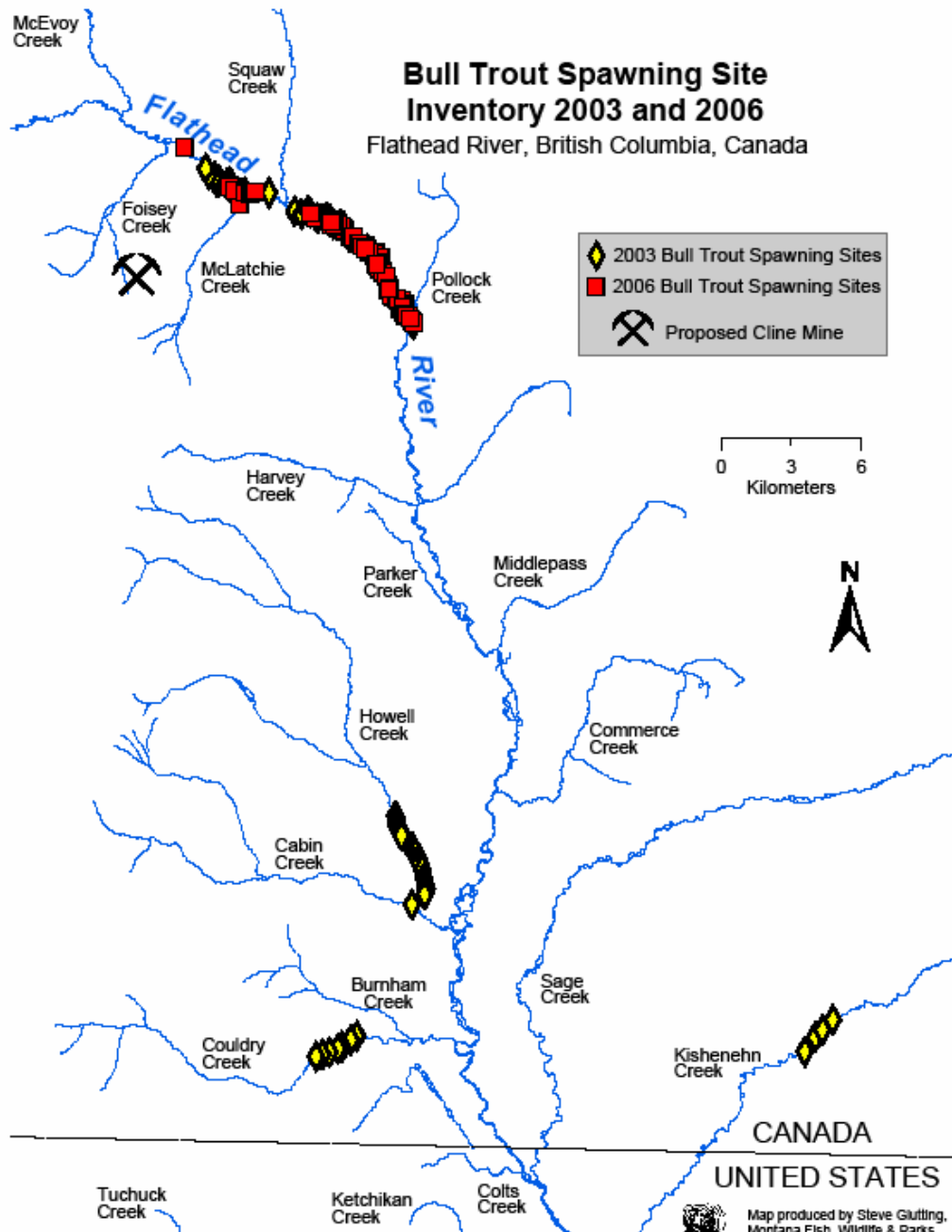
## Montana Fish, Wildlife and Parks Contact Information:

Mark Deleray 751-4543 [mdeleray@mt.gov](mailto:mdeleray@mt.gov)

Matt Boyer 751-4556 [mboyer@mt.gov](mailto:mboyer@mt.gov)

Clint Muhlfeld 270-9962 [cmuhlfeld@mt.gov](mailto:cmuhlfeld@mt.gov)

Tom Weaver 751-4551

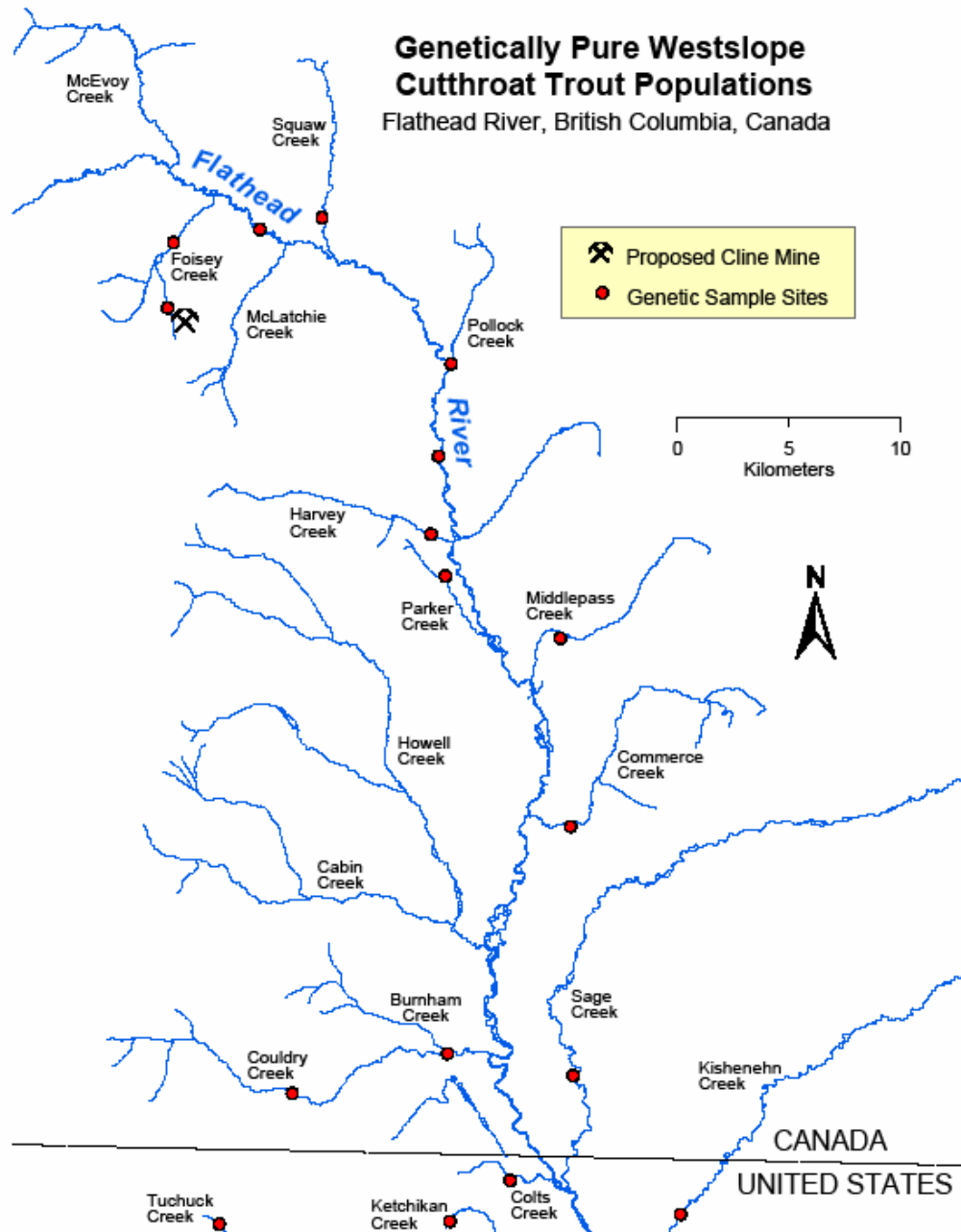


- Bull trout migrate from Flathead Lake to spawn in British Columbia
- In 2003, there were 62 bull trout redds in the upper reach
- Representing 37% of spawning in the North Fork
- Representing 21% of bull trout spawning for Flathead Lake
- In 2006, there were 78 redds in the upper reach

# Wigwam River Bull Trout Redd Counts

- Bull trout migrate from Lake Koocanusa to spawn in the Wigwam River Drainage
- In 2006, there were 444 bull trout redds in Lodgepole Creek
- Representing 19% of bull trout spawning in the Wigwam River Drainage
- Roughly 95% of Lake Koocanusa bull trout spawn in the Wigwam



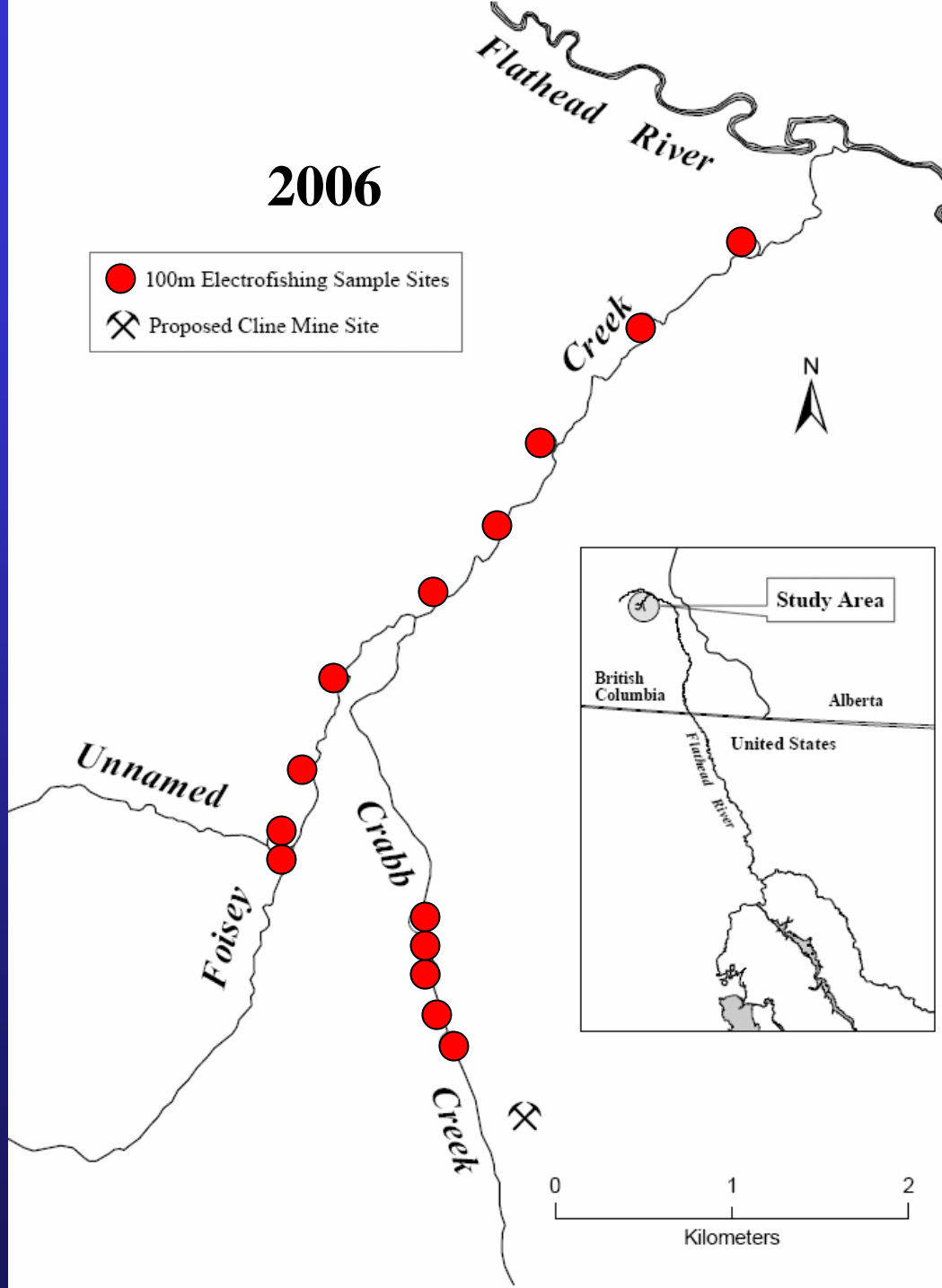


Note: Species Identity confirmed with PINES genetic analysis at the Conservation Genetics Laboratory at the University of Montana, Missoula.



Map produced by Steve Glutting,  
Montana Fish, Wildlife & Parks  
Data are from MFWP Statewide  
Genetics Database.

- Westslope cutthroat trout migrate from Flathead Lake to spawn in British Columbia
- Genetically pure westslope cutthroat trout inhabit only 10 to 20% of their historic range
- No hybridization was found in British Columbia surveys



- At mine site, there is an intact native fish community
- In 2006, surveys found bull trout, westslope cutthroat trout and sculpin in Foisey Creek
- Westslope cutthroat trout were found in Crabb Creek

# Potential Impacts to Fisheries

- Mining excavation, road building, vegetation clearing, settling pond and waste dump failures degrade water quality
- Degradations include introductions of heavy metals and sedimentation, reductions in flow and oxygen, and loss of physical habitat
- Water quality degradation will reduce reproductive success and survival of trout



# International Joint Commission Study Board Conclusions in 1988 Assessment of Previously Proposed Mine

- There would be impacts to bull trout and other fish species
- Baseline fisheries database was too limited to fully assess impacts
- To date, these data have not been collected



# Inadequacies in the 2006 Terms of Reference

- Inadequate Fisheries Database
- Too Limited Scope of Project Area
- Lack of Detailed Mining Plan
- Need for a Cumulative Effects Assessment





# Conclusions

- Headwaters near the proposed mine site contain critical habitat for native fish of Montana
- The inadequacies in the current fisheries database and Terms of Reference limit our ability to fully assess impacts
- The proposed mine will impact fisheries, threatening bull trout and westslope cutthroat trout populations