

Selenium and trout

Describes current research and actions in relationship to selenium and cutthroat trout.

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Selenium effect on trout

- Analysis on tissue from cutthroat trout in the mining areas shows that levels of selenium are higher at stations determined to be “background” (i.e. not impacted from mining) compared to cutthroat trout collected in streams that are elevated in selenium as a result of phosphate mining. (reference appendix 3C Final Environmental Impact Statement, FEIS, for Smoky Canyon Mine, Panels F and G)
- There are springs in areas that have never been mined that have selenium concentrations *above* the regulatory standard for surface water. (These standards are established to be protective of fish and other aquatic resources.) In these areas, the naturally occurring geology contributes selenium through these springs to streams. Geologically, this condition has been in place for millions of years. (reference surface water results in FEIS)
- Creeks around Smoky Canyon are recognized by the Idaho Fish and Game as well as the Forest Service to be a “robust” for cutthroat trout. (reference Caribou-Targhee Revised Forest Plan FEIS: http://www.fs.fed.us/r4/caribou-targhee/projects/caribou_plan/index.shtml)
- Numerous studies have been conducted to determine if selenium can have adverse impacts on fish. Currently there is consensus from reproductive studies that cold-water fish (like cutthroat trout) can tolerate higher levels of selenium in their tissue than warm-water fish. (reference appendix 3C FEIS)
- Fish population surveys conducted by the Idaho Fish and Game, U.S. Forest Service, U.S. Geological Survey and other independent researchers all conclude the cutthroat population is healthy and stable in the Salt River watershed. (reference appendix 3C FEIS)
- The Idaho Fish and Game document in their current Management Plan for Conservation of Yellowstone Cutthroat Trout in Idaho states that at this time there is no information documenting adverse impacts to Yellowstone Cutthroat trout populations due to mining in either the Blackfoot or Salt River watersheds. (reference: <http://fishandgame.idaho.gov/cms/fish/programs/yellowstone.pdf>)

According the to the Idaho Fish and Game, an important factor to consider relative to the decreasing number of cutthroat trout in the Blackfoot River watershed, is the rapid increase in numbers of pelicans at Blackfoot Reservoir. Since 1990, between 1,200 to 1,400 pelican nests have been established at the reservoir. In this time the number of adult cutthroat spawners migrating upstream in the Blackfoot River above the reservoir has gone from 1,663 in 1995 and 4,747 in 2001 down to 20 in 2005 and 2006 respectively. (reference: <http://fishandgame.idaho.gov/cms/fish/programs/yellowstone.pdf>)