



Montana Fish, Wildlife & Parks

2300 Lake Elmo Drive
Billings, MT 59105

NOTICE OF DECISION

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TO: Environmental Quality Council
Director's Office, Dept. of Environmental Quality
Montana Fish, Wildlife & Parks*

Director's Office	Lands Section
Parks Division	Design & Construction
Fisheries Division	Legal Unit
Wildlife Division	Federal Aid Coordinator (when P-R, D-J project)
Regional Supervisors	

Mike Volesky, Governor's Office *
Sarah Elliott, Press Agent, Governor's Office*
Maureen Theisen, Governor's Office*
Montana Historical Society, State Preservation Office
Janet Ellis, Montana Audubon Council
Montana Wildlife Federation
Montana State Library
George Ochenski
Montana Environmental Information Center
Wayne Hirst, Montana State Parks Foundation
FWP Commissioner Shane Colton*
DNRC Area Manager, Southern Land Office
Scott Barndt, USFS, Bozeman; Scott Shuler, USFS, Livingston; Scott Bosse, GYC, Bozeman
Other Local Interested People or Groups
* (Sent electronically)

Ladies and Gentlemen:

A draft Environmental Assessment (EA) was prepared for the removal of brook trout from Goose Creek and Huckleberry, Mutt, and Jeff lakes in the headwaters of the Stillwater River. The draft EA was circulated for 30 days to interested agencies, groups, and persons, and a news release was sent to all regional media outlets (Billings television stations only). The EA was also posted on Montana Fish, Wildlife & Parks' (FWP) website. Four people attended a public meeting held at the Lupine Inn in Red Lodge on May 16. Responses to comments offered at the meeting and via letter, mail, calls and visits are included in the attachment.

After reviewing this proposal and corresponding comments, it is my decision to proceed with this project to remove brook trout from the Goose Creek drainage. If you have questions regarding this decision notice or wish a copy of the final EA, you may email me at ghammond@mt.gov, or call me at 247-2951.

Sincerely,

Gary Hammond
Regional Supervisor

RESPONSE TO COMMENTS REGARDING THE REMOVAL OF BROOK TROUT FROM GOOSE CREEK AND THREE LAKES

Red Lodge Meeting Questions/Comments (Summary):

WILDERNESS

QUESTION: Why is the state allowed to use poison in the wilderness area?

RESPONSE: Montana is allowed to manage the fisheries in a wilderness area through "Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (as amended June, 2006)." Chemical treatment in this case is allowed "to prepare for the reestablishment of indigenous fish species" and is subject to approval by the U.S. Forest Service.

COMMENT: Although this person agrees with the cutthroat restoration objectives, he is adamantly against using any chemical in the wilderness. Treatment outside the wilderness he would support.

TREATMENT

QUESTION: How will we confine the chemical to the treatment area?

RESPONSE: We will use the minimum concentration indicated by bio-assay trials, carefully monitor the rotenone's progress by using sentinel fish in live cars, and will have potassium permanganate ready to detoxify any chemical leaving the area.

QUESTION: If the rotenone will persist in Huckleberry Lake as long as a month, could a large rainstorm remobilize the chemical? How long do you plan to monitor?

RESPONSE: Response to possible heavy rain increasing flows out of Huckleberry Lake and causing a slug of rotenone treated waters to go downstream into Goose Creek and Stillwater River after the project is complete:

Stream flow is closely correlated to drainage area. Stream flow in the unnamed drainage that contains Huckleberry Lake in August when all the snow is melted off would likely be strongly correlated to drainage area. Huckleberry Lake is 15.3 acres in size. The drainage area for Huckleberry Lake is approximately 65 acres (meaning all the precipitation that would fall in that 65 acres would flow into Huckleberry Lake). The drainage area for unnamed drainage that contains Huckleberry, Mutt and Jeff lakes is 343 acres. The entire Goose Creek drainage is approximately 4600 acres. Therefore, the drainage area of Huckleberry Lake represents approximately 18% of the drainage area of the unnamed tributary to Goose Creek that contains the lakes. The drainage area of Huckleberry Lake represents approximately 1.4% of the total drainage area of Goose Creek. Assuming that Huckleberry Lake contributes 1.4% of the flow in Goose Creek we can make an educated guess on what the potential flows out of Huckleberry Lake

would be and what the potential concentration of rotenone would be in Goose Creek and the Stillwater River.

We are proposing to treat Huckleberry Lake with a 5 parts per million (ppm) concentration of rotenone. In August the outlet of Huckleberry Lake has only a negligible flow. Goose Creek at this same time of year generally flows between 5 and 10 cfs. If a localized heavy rain fell on the watershed and increased the flows 2, 5, 10 or 50 times the outflow of Huckleberry Lake could potentially flow 0.5, 1.25 and 2.5, 12.5 cfs. Under the worst-case scenario, if the outflow were flowing 12.5 cfs the rotenone in the lake would be diluted by the freshwater entering the lake. But to error on the side on caution, we will assume that all the water leaving the lake is at 5 ppm rotenone. With the outlet of Huckleberry Lake flowing 12.5 cfs we could expect the flows in Goose Creek to be around 250 cfs at the mouth with the Stillwater River (this is assuming that rain intensity covers the watershed equally). At this flow the concentration of rotenone would be 0.028 ppm. Lethal dose for fish over a multiple day exposure to the chemical is 0.03 ppm. This concentration is near lethal for fish at the mouth of the Goose Creek. However, this calculation does not consider that the chemical will naturally break down as it travels downstream in the creek. It also does not account for the additional dilution that would occur from the Stillwater River. Considering these additional factors, the likelihood of such an event producing a fish kill beyond the proposed treatment area after the project is complete is very low.

QUESTION: Why not detoxify the lakes too?

RESPONSE: We could still consider that option, but could risk incomplete removal. Also, the detoxifying agent, potassium permanganate, may persist in the deep water and sediments.

COMMENT: FWP will need to ensure a good mix in the lake or we may have areas of high chemical concentration.

COMMENT: FWP should be aware that potassium permanganate is a powerful oxidizer that can also kill aquatic life, especially on cloudy days or at night when the sunlight can't break it down.

QUESTION: When will the treated water be fit for consumption?

RESPONSE: The rotenone has no effect when passed through a mammal's digestive tract. Nevertheless, the area will be posted with warning signs for one month following treatment in accordance with FDA guidelines.

QUESTION: Will the planted Yellowstone cutthroat trout become self-sustaining?

RESPONSE: Goose Creek has excellent trout habitat and should support spawning. The Huckleberry Lake may need to be stocked periodically because available spawning habitat in the outlet may not have sufficient water flow later in the summer when eggs emerge. Mutt and Jeff lakes will most likely become self-sustaining.

QUESTION: Will the stocked cutthroats survive?

RESPONSE: They will be stocked nearly a full year after treatment, and many invertebrates will have recolonized the stream and lakes that will provide adequate food for stocked fish. In similar projects, stocking 1 year after the project was complete produced favorable results.

ALTERNATIVES

QUESTION: Wouldn't it be easier to protect the Goose Lake cutthroats by moving a few rocks to shore up the existing barrier approximately 1½ miles downstream from the lake?

RESPONSE: The barrier would have to be able to withstand a 100-year storm event. Meeting this criterion would require the use of concrete. Construction logistics would include helicopter use in remote, difficult terrain and would require approval from USFS officials in Washington D.C. The project would be expensive and delayed.

QUESTION: Why isn't this project being funded by federal dollars? It involves fish species that could be listed as threatened.

RESPONSE: This treatment is considered a management action initiated and funded by the state. Reestablishment of native species is also one of FWP's goals.

COMMENT: We have Yellowstone cutthroat trout stocked throughout the Absaroka-Beartooth Wilderness Area. Using sportsman's money to eradicate brook trout and reestablish a small cutthroat population represents a poor cost/benefit ratio.

EA PROCESS

QUESTION: Once a decision is made, what recourse does a dissenting party have—legal?

RESPONSE: A person dissatisfied with a regional decision may appeal to the Director of FWP. That decision can be appealed to the FWP Commission and finally through the court system.

Questions/Comments Received via Calls, E-mails, Visits, and Letters (Summaries):

COMMENT: A long-time backpacker noted that the current situation with cutthroat and brook trout is no different than it was in the late 1950's and 1960's. He doesn't believe the fish kill is necessary, but that FWP will do what it wants anyway.

RESPONSE: We are fortunate that the natural barrier in Goose Creek has prevented brook trout invasion into Goose Lake thus far. The current situation resulted from the introduction of non-native brook trout into the drainage. Our intent is to reclaim it for native Yellowstone cutthroat trout. Our decision will be based upon a consideration of all comments received and whether the proposed project still appears viable and supportable.

COMMENT: The use of chemicals raises a red flag because of fears of their entry into the human food chain. Consider allowing people to harvest more fish instead.

RESPONSE: Rotenone, derived from the root of a plant in South America, is used by natives to catch fish for consumption with no adverse effect. The limit for brook trout is already liberal at 20 daily. Higher limits are unlikely to encourage more harvest, and even intense harvest would not eradicate all the brook trout. Other similar projects that have attempted to use angling as a means of reducing fish numbers have met with little success.

COMMENT: Huckleberry Lake has been a favorite place for an easy family hike and excellent children's fishing experience. The brook trout are abundant enough to provide plenty of action, and they taste better than cutthroats.

RESPONSE: If Huckleberry Lake were treated, Yellowstone cutthroat trout could be stocked at a higher frequency (every 3-4 years) that would provide high catch rates for children. Maintaining such opportunities for children is very important. Those who prefer the taste of brook trout would be disappointed, but cutthroat trout from high mountain lakes are still tasty.

COMMENT: Huckleberry Lake is strategically located and produces brook trout generally 1" to 2" longer than most lakes. This fishery is particularly attractive to families with small children.

RESPONSE: Maintaining a good children's fishing lake would be a priority. We would stock Huckleberry Lake with cutthroats every 3-4 years and monitor it frequently, with help from experienced backpackers. It should continue to provide an attractive fishery to families with small children.

COMMENT: "I can not think of a better use of fisheries funds than the removal of brook trout from the Goose Lake drainage area. I have wandered and fished over this area for many years and remember well when we would wonder is three Goose Lake YCT's would be over the weight limit! Mutt & Jeff and Huckleberry Lake have had Brookies in them since the early 50's and probably well before then. The Goose Lake Cuts are well worth protecting from their potential destruction by the more aggressive non native brookies. I am very pleased that this action is being planned and that these Goose Lake trout are now providing healthy brood stocks for other drainages in the State. Goose Lake has always been a winner. Lets keep it so. Thank you all for your efforts in this matter."

COMMENT: Two letters of support are attached, one from the Woolmans and the other from Beartooth Alliance.

The Woolman's
114 Highway 212
Silver Gate, MT 59020

April 30, 2007

Mr. Gary Hammond
Regional Supervisor, Region 5
Montana Fish, Wildlife and Parks
2300 Lake Elmo Drive
Billings, MT 59105

Re: Yellowstone Cutthroat Restoration in Goose Creek Draft Environmental Assessment

As a resident and property owner in the Silver Gate/Cooke City area, I want to thank you for the opportunity to comment on the Yellowstone Cutthroat Restoration program described in the Draft Environmental Analysis dated April 12.

This project seems very well founded. I believe that the Yellowstone cutthroat population in Goose Lake plays an important role in both the ecology and economy of the Cooke City area. Since I am a very active member of Trout Unlimited and serve on the National Leadership Council's Native Trout Committee, I fully understand the importance of protecting non-hybridized populations for reproductive use.

It is my opinion that preferred alternative would serve to protect the native, indigenous population of Yellowstone cutthroats which are so uniquely suited to the ecology of our mountains. The EA also calls for the elimination of the invasive brook trout. Similar efforts are also being done by MFW &P in the Soda Butte headwaters above Cooke City. So the area residents are aware that this type of effort is extremely important if we are to protect our native fish.

Thank you for the sound science and considerable effort that went into this EA. We urge you to continue working to protect the Yellowstone cutthroat both here in our area and all parts of Montana where sustainable populations exist.

Sincerely,



Marcia Woolman



Beartooth Alliance - PO Box 1141 - Cooke City, MT 59020

Goose Creek EA Comments

May 1, 2007

Mr. Gary Hammond
Regional Supervisor, Region 5
Montana Fish, Wildlife and Parks
2300 Lake Elmo Drive
Billings, MT 59105

Re: Yellowstone Cutthroat Restoration in Goose Creek Draft Environmental Assessment

Beartooth Alliance (BA), an affiliate of Northern Plains Resource Council, would like to thank you for the opportunity to comment on the Yellowstone Cutthroat Restoration program described in the Draft Environmental Analysis dated April 12.

This project seems very well founded. It is our belief that the Yellowstone cutthroat population in Goose Lake plays an important role in both the ecology and economy of the Cooke City area. It is our opinion that preferred alternative would serve to protect the non-hybridized, self sustaining indigenous population of cutthroats while adequately dealing with the problem posed by the invasive brook trout.

Beartooth Alliance is conservation group based in Cooke City, and our membership consists of both seasonal and year-round residents in the area. Many of our members come to the area to fish, and support the work of BA because we work to protect the rights of people to fish and recreate in the area. Furthermore, we also have a number of members whose livelihood depends on the business of tourists and seasonal residents. We feel that the restoration of a thriving Yellowstone cutthroat population would increase visitors' enjoyment of the area, and help stimulate economic growth in the future.

We thank you for the thought and consideration that went into this EA. We urge you to continue working to protect the Yellowstone cutthroat

Sincerely,

Nellie Israel
Chair, Beartooth Alliance Board of Directors