United States Department of Agriculture | Forest Service | Ashley National Forest | Supervisor's Office
355 North Vernal Avenue
Vernal, UT 84078

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Date: April 27, 2010

Dear Friend of the Ashley:

The Ashley National Forest in cooperation with Utah Division of Wildlife Resources (UDWR) proposes to restore genetically pure Colorado River cutthroat trout (CRCT; *Onchorhynchus clarki pleuriticus)* populations to suitable habitats within the High Uintas Wilderness. Implementation of this proposal would require the use of rotenone (a fish toxicant) to remove competing and hybridizing nonnative fish species from selected streams and lakes within the High Uintas Wilderness on the Roosevelt/Duchesne Ranger District. Nonnative fish species to be removed are primarily brook trout *(Salvelinus fontinalis)*, Yellowstone cutthroat trout *(Onchorhynchus clarki bouvieri)* and hybridized cutthroat trout. Following successful treatment, genetically pure CRCT would be reintroduced into the newly enhanced habitat.

Headwater subdrainages and basins proposed to be treated and monitored over a period of ten or more years include selected lakes and associated stream segments in the Garfield Basin and Swasey Hole in the Yellowstone River drainage; Fish Creek (a tributary to Moon Lake), Ottoson Basin and Oweep Creek in the Lake Fork River drainage; and Fall Creek in the Rock Creek drainage (See attached map and Table 1).

The UDWR has the responsibility and authority to administer protection and management of fish and wildlife populations on National Forest System lands. However, the Forest Service has the jurisdiction and responsibility for occupancy, use, and management on National Forest System lands.

The Forest Service is inviting public comment on this proposal. The specific proposal is described in the Proposed Action below. To be most useful comments concerning this proposal should be received by the Forest Service on or before May 27, 2010. Please refer to the "Public Involvement" section for additional information about submitting comments.

Background

Colorado River cutthroat trout are currently cooperatively managed as a conservation species among the states of Colorado, Wyoming and Utah, the U.S. Forest Service (USFS), U.S. Bureau of Land Management (BLM), U. S. Fish and Wildlife Service (USFWS) and the Ute Tribe Fish and Game Department. CRCT is designated as a species of special concern by Colorado and Wyoming, and a Tier I specie in Utah (those species that are either federally listed or for which a conservation agreement has been implemented), and classified as a sensitive species by Region 4 of the USFS and by the BLM in Colorado, Wyoming and Utah. Recently CRCT were petitioned for listing as a threatened species under the Endangered Species Act; however, in April 2004, the U.S. Fish and Wildlife Service ruled that listing CRCT for ESA protection was not warranted at this time. Present efforts by state and federal agencies to restore CRCT, and the existence of signed conservation strategies for the species are cited as providing the basis, in part, for not

listing CRCT. The 2004 USFWS decision to not list CRCT under ESA protection is presently being challenged in court.

A Conservation Strategy and Agreement has been developed to direct implementation of conservation measures for CRCT in Colorado, Utah, and Wyoming as a collaborative and cooperative effort among resource agencies. The UDWR and ANF are signatories of this Agreement and Strategy. The goal of this conservation strategy is: "To ensure the long-term viability of CRCT throughout their historic range. Areas that currently support CRCT will be maintained, while other areas will be managed for increased abundance. New populations will be established where ecologically and economically feasible, while the genetic diversity of the species is maintained. The cooperators envision a future where threats to wild CRCT are either eliminated or reduced to the greatest extent possible". To achieve this goal, one objective is to "Secure and enhance conservation populations". Efforts to meet this objective include removing nonnative fish species. Introduction of nonnative trout species has been identified in the Conservation Strategy and Agreement as a factor contributing to the decline of CRCT. Brook trout commonly replace most subspecies of cutthroat trout when occupying the same habitat. Additionally, hybridization readily occurs among cutthroat trout subspecies and with rainbow trout. Given this knowledge, removal of nonnative trout species from selected lakes and streams within historic habitat is necessary.

Proposed Action

The proposed action would be to remove all fish from selected lakes and stream segments containing nonnative fish species. The piscicide rotenone would be used to remove these fish.

Several pre-treatment surveys including those for fish, amphibians and macroinvertebrates would be completed prior to the application of rotenone to selected treatment areas. Water quality and quantity would also be evaluated and utilized as part of the planning process prior to treatment. The size and volume of lakes, location and extent of streams and seeps would be measured and calculated prior to treatment. Downstream treatment distances would be determined based on natural barriers. The amount of rotenone required for treatment of selected areas would be calculated prior to treatments and would be based on up-to-date flow measurements and on-site assays.

Fish populations in areas proposed to be treated have been surveyed in the recent past. However, all areas would be resurveyed using electrofishing equipment prior to treatment to determine pre-treatment species composition and relative abundance. Amphibian surveys would be completed before treatment of lakes or streams. Many of the proposed areas have been surveyed for amphibians in the recent past but would be resurveyed prior to treatment.

There are no ground-disturbing activities anticipated other than what is necessary to transport personnel, equipment and supplies by foot or horseback on established trails. Cross country foot travel would be necessary to access treatment areas. Because of the remoteness and size of some lakes proposed for treatment, Rotenone and equipment may need to be flown in by helicopter and/or fixed-wing aircraft. The efficient distribution of rotenone on selected lakes would require the use of small rafts or boats and small motors.

After personnel and material transport and setup are completed, the anticipated time to implement the application on each selected area is one day, but may vary depending on unforeseen circumstances. Selected lakes and stream segments would be treated as necessary to ensure thorough coverage and removal of all fish. Rotenone would only be applied by certified applicators employed by the UDWR or ANF. Equipment, materials, and crews would be packed up and removed from the area beginning the day after the treatment. Overall, treatments are expected to require one day for setup of drip stations and neutralization stations; one day to apply rotenone; and several days for neutralization and clean-up. These time estimates would vary based on the transport method used, the size and complexity of each project, and site conditions.

Following neutralization of streams, crews would monitor and survey treated lakes and streams to determine treatment success. Success would be defined as no detectable fish. Each segment would be treated at least twice. If fish are detected following a second treatment, a third treatment may be implemented to reach project goals. Treated areas and reintroduced CRCT would be monitored closely for several years to document success of the treatment, reestablishment of CRCT populations, macroinvertebrate assemblages and amphibian populations.

Rotenone

Powdered rotenone, applied at an approximate rate of 0.5 parts-per-million (ppm), would be used to treat selected lakes. Liquid emulsifiable rotenone (Noxfish, 5% Active Ingredient, EPA Registration No. 432-172; or Prenfish, 5% Active Ingredient, EPA Registration No. 655-422) would be used to treat the flowing water sections. Rotenone would be applied at the rate of 0.5 ppm from drip stations located at 0.5 – 1.0 mile intervals for a 6-hour period. Pressurized backpack sprayers would be used to apply chemical to springs and backwater areas containing fish not effectively treated by drip stations. A small amount of sand and gelatin mixed with powdered rotenone (7.5 % Active Ingredient), may be used to create chemical dams to prevent fish from escaping into small side tributaries or swamps. Florescent dye would be added to the water as the dripping begins to determine when the rotenone reaches the next station or the barrier, and sentinel fish would be placed in live cages throughout the stream to monitor the effectiveness of the treatment. A bioassay would be run on the rotenone prior to the treatment to verify its degree of toxicity. Some adjustments may occur during the treatment depending on site conditions and observations.

Potassium Permanganate

Powdered potassium permanganate (Cariox, EPA Registration Number 8429-9) would be used as a neutralizing agent for the rotenone. The application rate of potassium permanganate ($KMnO_4$) would be determined after the pre-treatment factors of water temperature and hardness are measured. It is expected that the application rate of potassium permanganate applied immediately at the neutralization station would be approximately 1 part per million. The neutralization zone for the project would be a stream length of approximately 200 yards. The process of neutralization rotenone treated streams may require the use of small motorized equipment to effectively dispense neutralizing agent.

Forest Service Responsibility

The Forest Service's responsibility in this effort is limited to the approval of proposed activities within the High Uintas Wilderness, and the use of piscicides (fish toxicants) within designated wilderness on National Forest System Lands. The analysis will be documented in an Environmental Impact Statement (EIS) and will address the effects of the proposed project on wilderness resources and values, recreational resources, aquatic species, terrestrial wildlife and water quality.

The Regional Forester is the responsible and approving official for piscicide treatments within wilderness areas on National Forests within the region of jurisdiction. The decision to be made as a result of this analysis is confined to the use of piscicides and proposed associated activities within the High Uintas Wilderness on National Forest System Lands. The Forest Service will not make any decisions related to the management of fish populations. Selection of a "no action" alternative would not necessarily preclude the UDWR from managing fish populations within the High Uintas Wilderness.

Public Involvement

We would like to receive your comments on the proposal, specifically as they relate to the use of rotenone and associated proposed activities within the High Uintas Wilderness. To be most useful in our analysis, we need to receive your comments by May 27, 2010. Please send your comments to Ron Brunson, Roosevelt/Duchesne Ranger District, P.O. Box 981, Duchesne Utah 84021 or email at rbrunson@fs.fed.us.

If you have any questions about the proposal, please contact Ron Brunson at (435) 781-5202.

Please note that comments received become part of the public record and can be released to others upon request.

Thank you for your interest and participation in the management of the High Uintas Wilderness on the Ashley National Forest!

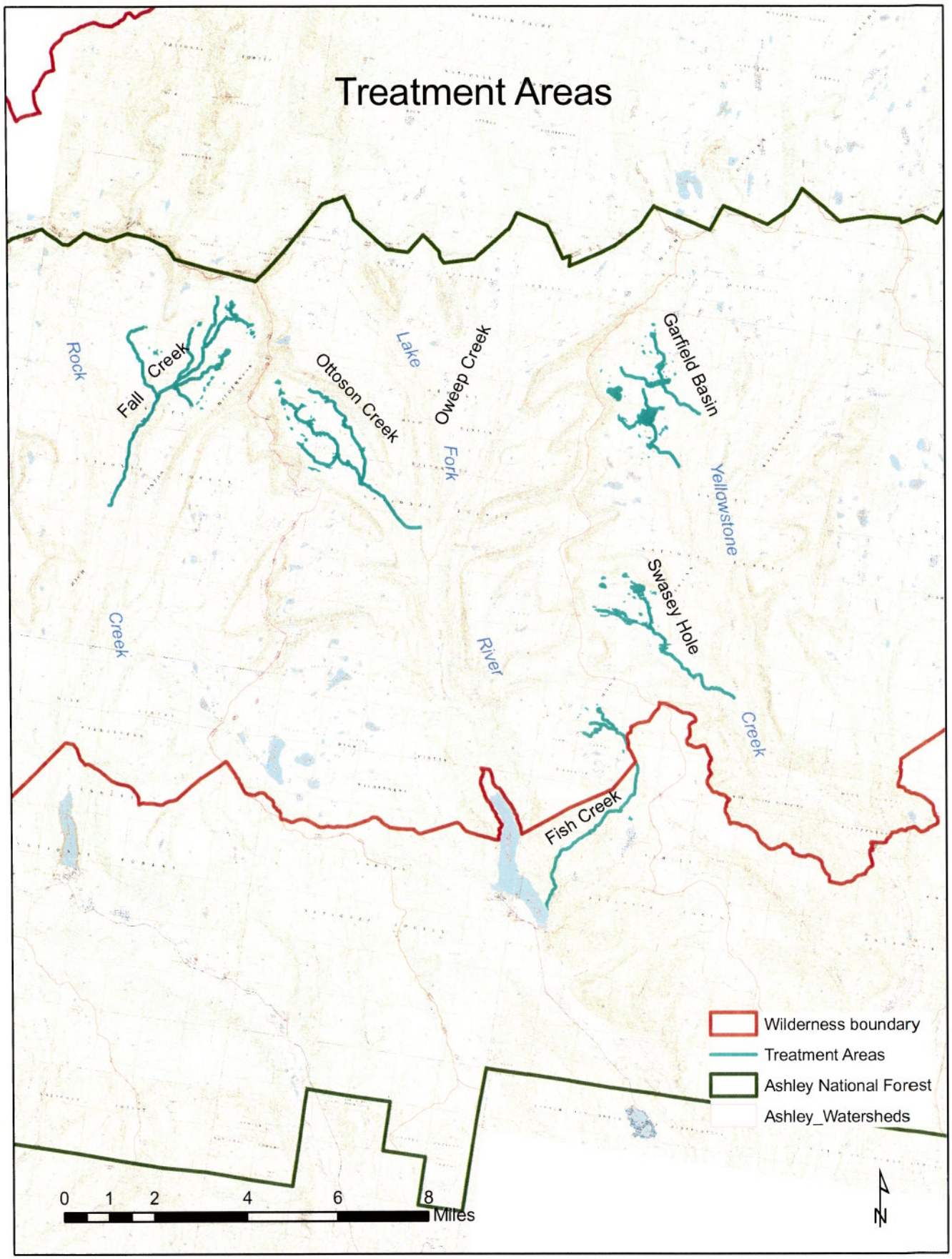
Sincerely,

John R. Kirkaldie
District Ranger

Enclosure

Table 1. Location summary and legal description of areas proposed to be treated with rotenone within the High Uintas Wilderness on the Ashley National Forest.

Treatment Area	Streams and Lakes	Legal Description
Yellowstone Creek		
Garfield Basin	Little Superior Lake, Superior Lake, Doll Lake, Five Point Lake, Gem Lake, Approximately four miles of stream connecting these lakes downstream to Garfield Creek Several small ponds/lakes and seeps within the basin	Uintah Special Meridian T 4 N, R 5 W Sec. 17, 20, 21, 29, 28, 33
Swasey Hole	Swasey Lakes, several small ponds and seeps. Approximately three stream miles to near the confluence with Yellowstone Creek.	Uintah Special Meridian T 3 N, R 5 W Sec. 8, 9, 16, 17, 21, 22, 23
Lake Fork River		
Fish Creek	Toquer Lake, four small lakes and several small ponds and seeps. Approximately five miles of Fish Creek	Uintah Special Meridian T 3 N, R 5 W, Sec. 28, 29, 33, T 2 N, R 5 W Sec. 4, 5, 7, 8, 18
Ottoson Basin	Upper Ottoson Lake, Lower Ottoson Lake, X-89 Lake, Amoeba Lake, several ponds and seeps. Approximately six stream-miles in the basin and Ottoson Creek	Uintah Special Meridian T 4 N, R 7 W, Sec. 25, 36 T 4 N, R 6 W, Sec. 30, 31, 32, T 3 N, R 6 W, Sec. 4, 5, 6, 9
Oweep Creek	Oweep Creek, one small lake and several small ponds and seeps. Approximately 12 stream-miles of Oweep Creek	Uintah Special Meridian T 4 N, R 6 W Sec. 3, 13, 14, 15, 22, 23, 26, 27, 34,
Rock Creek		
Fall Creek	Fall Creek, Phinney Lake, Anderson Lake, several small lakes, ponds and seeps. Approximately seven stream-miles of Fall Creek.	Uintah Special Meridian T 4 N, R 7 W Sec. 21, 22, 27, 28, 32, 33, 34 T 3 N, R 7 W Sec. 5, 8


Treatment Areas
Rock
Creek
Fall Creek
Ottoson Creek
Lake
Oweep Creek
Fork
Garfield Basin
Yellowstone
Swasey Hole
River
Creek
Fish Creek
Wilderness boundary
Treatment Areas
Ashley National Forest
Ashley_Watersheds
0 1 2 4 6 8
Miles
N