

United States  
Department of  
Agriculture

Forest  
Service

Deschutes  
National  
Forest

Sisters Ranger District  
Post Office Box 249  
Sisters, OR 97759

File Code: 1950

Date: May 8, 2002

**Subject:** Trout Creek Swamp Restoration: Notice of Decision

Dear Interested Citizen:

On May 7, 2002, I made the decision to implement Alternative 2, with minor modifications, of the Trout Creek Swamp Restoration Environmental Assessment (EA). This decision will allow the re-establishment of historic stream channels, control of reed canarygrass, replacement of a culvert, and removal of encroaching conifers. The purpose of the work will be to restore the natural hydrologic function of Trout Creek Swamp.

I have enclosed a copy of the Decision Notice.

This decision may be appealed under 36 CFR 215. Appeals must be filed within 45 days from the date of publication of notice in The Nugget newspaper, Sisters, OR. Instructions for filing an appeal are found at the end of this Decision Notice.

Should you need additional information regarding this project you may contact Mike Riehle, Project Team Leader at 541-549-7702, or email at [mriehle@fs.fed.us](mailto:mriehle@fs.fed.us).

Sincerely,

/s/ William Anthony

WILLIAM ANTHONY

District Ranger

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**DECISION NOTICE AND FINDING OF NO SIGNIFICANT IMPACT**  
**Trout Creek Swamp**  
**Environmental Assessment**

**Sisters Ranger District, Deschutes National Forest**  
**Deschutes County, Oregon**

**Location**

This analysis area covers 76-acres, including the 40-acre Trout Creek Swamp, a year-round wet meadow within the Why-chus Late-Successional Reserve. The swamp is located about 10 miles west of Sisters, in Deschutes County, Oregon, on the Sisters Ranger District of the Deschutes National Forest (Figure 1). The swamp is just south of Whispering Pines Campground, at the junction of Forest Roads 1018 and 1520.

## Decision

Following review of the alternatives and effects disclosed in the Trout Creek Swamp Environmental Assessment (EA), the Why-chus Watershed Assessment (1998), and careful consideration of public comments, I have decided to authorize implementation of a modified Alternative 2. The selected alternative will restore the natural hydrologic function of Trout Creek Swamp. The actions proposed to meet this goal include:

- Created Ditches. Fill in the ditches to prevent water from flowing back into these created channels. Fill material would be brought in from the Black Butte Pit. Rock cross-drains would be designed to pass water under topsoil or fill.
- Historic Channels. Historic channels would be re-established. Small, lightweight equipment (such as a spiderhoe) would be used to excavate the channels so that they will be the same size as the historic channels would have been for this stream type. Where necessary, channels will be located to avoid isolated patches of reed canarygrass. Channels in the north end of the swamp (where there are several larger patches of reed canarygrass) will be excavated last, after work is completed in the weed-free areas of the swamp to minimize the spread of reed canarygrass.
- Encroaching Conifers. Hand-cut conifers will be hand-piled and burned only on top of reed canary grass patches. This would both help control the weed, and would minimize potential impacts to other sensitive resources in the swamp that could be damaged from pile burning. Some piles will be left on site for wildlife habitat. Willow or other native riparian shrubs may be planted to diversify wildlife habitat.
- Reed Canarygrass. Reed canarygrass would be treated primarily by burning piles of cut conifers on concentrations of the plants, and by cutting-and-flaming the dense pockets of reed canarygrass (burning the growing tips and seed heads).
- Culvert. Replace the culvert under Forest Road 1520, which allows water from the swamp to enter Trout Creek, with a larger, more "fish-friendly" design. This would allow for upstream fish passage for all life stages and would more closely resemble channel at bank-full flow.
- Timing of Work. Work would occur during the dry time of year to minimize impacts to the water quality and soil.

The modified Alternative 2 is different from the Alternative 2 described in the EA in the following elements:

- The lodgepole pine will only be cut, piled and burned by hand crews. No ground-based machine cutting will be conducted.
- Additional pre-treatment reed canarygrass control and monitoring will be performed, including pile burning, cutting-and-flaming, and covering with black plastic. The Sisters Ranger District will monitor the size of reed canarygrass patches and the effectiveness of the control measures for 5 to 10 years. The Forest will seek opportunities to enhance funding for monitoring through partnerships with interested groups. The monitoring and control program will be evaluated after 5 years, and if new techniques need to be evaluated the District will seek partnership opportunities to pursue more aggressive control methods.
- No ponds will be dug for fill because an appropriate fill source was found.
- Natural historic channels will be re-established only in areas where unchecked surface flow will pose a risk of eroding the fill in the ditches and the channel path is not well defined.

## Reasons For the Decision

I have concluded that implementation of the selected alternative would allow us to best meet the purpose and need of restoring Trout Creek Swamp, which provides important habitat for a unique variety of rare plants and animals, and is also an important source of clean water into the Trout Creek system. However, old ditches meant to drain the swamp to improve grazing have changed how water flows through and is stored in the swamp (referred to as "hydrologic function"). This has caused several problems, including:

- The reduced ability of the swamp to hold water or act as a reservoir of cold, clean water for the Trout Creek system. A reduced

water storage capacity also means greater extremes between high and low water flows downstream. Higher water flows can cause more erosion, and lower flows reduce the water available for plants and animals (such as the sensitive redband trout) and raise water temperature.

- The lowered water level and drier areas have allowed conifer trees to begin to grow in the swamp, slowly closing-in the meadow opening. Meadow habitats are relatively uncommon on the Sisters Ranger District, and there are several rare plants and animals that depend on these habitats.
- The ditches have been eroding (or "head cutting"), meaning that they have become a source of sediment pollution into Trout Creek.
- Reed canarygrass, an invasive non-native plant, may have been introduced into the swamp as forage for cattle and for erosion control. This plant appears to be out-competing many of the rare native plants.

I feel that Alternative 2, as modified, will strike a balance between promptly reducing the effects of the ditches while minimizing the effects of the disturbance in the wetland, because:

- Hand crews will be used to remove the lodge pole pine to minimize the impact on the wetland.
- Concerns from the public for the control of reed canarygrass are addressed in the selected alternative through the long-term commitment to pre and post project monitoring and control treatments. There will be a 5 to 10 year program of monitoring reed canarygrass and control treatments as part of the selected alternative.
- The selected alternative will be implemented in a timely schedule to address the potential of increased downcutting of the main ditch while allowing two seasons of monitoring and control experiments prior to the filling of ditches. This aspect strikes a balance between the risk of spreading weeds and the risk of continued erosion of the ditches causing the loss of more unique habitat for rare plants and mosses.
- Ponds will not be dug in the selected alternative due to concerns about the potential disturbance to plant habitats. The original need to dig ponds for fill for the ditches is no longer needed because an adequate fill source has been identified.
- A small test plot for ditch fill was suggested by the public as a test for the invasion of reed canary grass. The selected alternative will not implement a test because of the risk of erosion of the ditch fill with only a partial remedy implemented.
- Other public comments are being addressed in the selected alternative by avoiding high use weekends during the replacement of the culvert and restoring the hydrology to the swamp to protect water quality and fish habitat.

These measures will protect the unique character of Trout Creek Swamp while addressing the cause of its decline.

## Alternatives Considered

Several alternative actions were also considered, including the use of herbicides to control reed canary grass, but dropped from detailed study because they either did not meet the purpose and need for the project, were considered methods that would not be very effective, or due to concerns by the public and the perceived risks of using herbicides in riparian areas (including potential impacts to humans, wildlife and other vegetation) (see EA, pg. 9).

In addition to the selected Alternative 2 modified, the following alternatives were evaluated in detail.

- **Alternative 1** - The no action alternative. The objective of this Alternative was to allow the processes and habitat cycles in the project area to continue largely without intervention. This alternative was not selected because it did not begin restoration of the swamp, and it was felt that resource conditions would continue to degrade.
- **Alternative 2**, as modified, is described under the Decision on pages 1 and 2 of this document.
- **Alternative 3** - The objective was to minimize the use of machinery throughout the swamp in order to minimize physical impacts to plants and soils in the swamp. This alternative would not actively re-establish historic channels but instead rely on the higher water table slowly re-establishing the channels. In addition, conifers would not actively be removed, there would be no direct action taken to control reed canarygrass, and the culvert under Forest Road 1520 would not be replaced. This alternative was not selected because, though it would result in fewer short-term impacts to resources within the swamp, it would not restore Trout Creek Swamp as effectively as the selected alternative.
- **Alternative 4** - This alternative would use a combination of actions to meet the purpose and need for the project, similar to the

proposed action alternative, except that where effective, actions would be modified to minimize impacts on swamp resources. In addition, a variety of methods to control the spread of reed canarygrass would be applied. This alternative is considered very similar to the selected Alternative 2 as modified.

## Public Involvement

A letter was sent to 250 individuals and organizations on June 6, 2001. Articles regarding the project were printed in the local newspapers: The Bulletin, on June 9, 2001, and The Nugget, on July 4, July 11, and December 5, 2001. Seven comments were received during this period. Most comments were in support of the proposed actions except for concerns about possible use of chemical herbicides to control the reed canarygrass. Two people were also concerned about the potential impacts to the quality of fishing, both within the ditches in the swamp and in Trout Creek. One commenter who was concerned about the impacts to fishing quality was also opposed to the "government" doing anything in the swamp area.

The current EA was sent to about 15 individuals and organizations. Four comments were received during the 30-day comment period for the EA, 3 in support of the proposed action and one in opposition. The ID team met with the individual who was opposed to aspects of the project, and mitigation and monitoring measures were added to the selected Alternative to address his concerns. For information about specific comments, and how those comments were addressed, see the project file at the Sisters Ranger District.

The key issues brought up by the public, other local and state agencies and Forest Service specialists that this EA addressed included:

1. Access for Implementation of the Project - short-term impacts resulting from the use of heavy vehicles/machinery in the swamp to implement the restoration project.
2. Aquatic Species, Water Quality and Hydrology - short-term impacts on aquatic species (e.g. redband trout, amphibians) and water quality from machinery working in and around the existing channels and culvert.
3. Invasive Plants - concerns about the most effective methods for controlling reed canary grass, and how to assure the proposed actions do not result in the plant spreading; about the best method for disposing of the conifers that are encroaching into the swamp; and about the potential risk of introducing noxious weeds into the swamp.
4. Recreation Access - concerns about public access during the replacement of the culvert at road 1520.

## Finding of No Significant Impact (FONSI)

I have determined that implementing Alternative 2, as modified, is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement will not be prepared. This determination is based on the site-specific environmental analysis documented in the Environmental Assessment and supporting documents (e.g. the biological evaluation, biological assessment and consultation with the USFWS), which describe direct, indirect and cumulative impacts of this decision. This determination is also made with consideration of past, present, and reasonably foreseeable future actions on National Forest land and other ownerships within potentially affected areas, which could have a cumulatively significant effect on the quality of the human environment.

I have found the context of the environmental impacts of this decision is limited to the local area and is not significant. I have also determined the severity of these impacts is not significant, considering the following factors of intensity:

1. Impacts from this site-specific project are both beneficial and adverse. The adverse effects are short-term in nature (e.g. use of mechanical equipment in the swamp) and will not impair land productivity. The long-term effects are considered to be beneficial, especially for health of the swamp ecosystem, and restoration of the hydrologic function (Trout Creek Swamp EA, pgs. 26-48).
2. There is only minor potential for adverse impacts to public safety. Prescribed burning will affect air quality for short periods in the immediate vicinity of the activity.
3. There are no unique characteristics of the geographic area, such as cultural resources (EA, pg. 48) that will be adversely affected. Long-term effects to the Late-Successional Reserve are expected to be beneficial due to enhancing habitat diversity.

Proposed actions are intended to have a beneficial effect on the riparian/aquatic system and will improve the function and quality of an existing wetland. In addition, there would be a minor gain in acres of functioning wetland (EA, pg. 48). Aquatic Conservation Strategy objectives will be met under the selected Alternative (Trout Creek Swamp EA, pgs. 27-30).

4. The effects on the quality of the human environment are not likely to be highly controversial. There were few concerns expressed during public involvement (Trout Creek Swamp EA, pg. 7).
5. The environmental effects are predicted to be typical for this type of ecosystem restoration project. The adverse effects will be short-term and are not highly uncertain, nor are there unique or unknown risks involved with this type of hydrologic restoration (Trout Creek Swamp EA, pgs. 26-48).
6. The decision to implement restoration actions in the project area does not establish any future precedent for other actions that may have a significant effect. Future actions will be evaluated through the NEPA process and will stand on their own as to environmental effects and project feasibility.
7. Cumulative effects for wildlife, plants, and aquatic resources were considered in the EA (pgs. 26-48). These actions are not related to other actions that, when combined, will have significant impacts.
8. The field surveys for sites, objects, etc., listed or eligible for listing in the National Register of Historic Places have been completed. All known sites have been mitigated by avoidance and no activity will take place which will contribute to the loss or destruction of significant scientific, cultural, or historic resources. Any sites found during implementation of the project will be protected. The Forest Archeologist determined there were no historic properties within the project area, and found the proposed actions in compliance with Section 106 of the National Historic Preservation Act, and with the terms of the 1995 Programmatic Agreement with the Oregon State Preservation Office (project file, "Project Review for Cultural Resources").
9. As described in the Environmental Assessment (Trout Creek Swamp EA pgs. 26-48), Biological Evaluation, Biological Assessments, and letter of concurrence from the US Fish and Wildlife Service, activities are not likely to adversely impact threatened or endangered plants or animals. Required surveys for sensitive animals and plants that are thought to occur in the project area have been conducted for units included in this decision. Ground disturbing activities have been designed to avoid adverse impacts to known species (Trout Creek Swamp EA, pgs. 13-14).
10. This proposal is in compliance with all Federal, state, or local law requirements. Relevant Federal, state and local governments were included in the public participation efforts.

## **Other Findings**

Actions in the selected alternative are consistent with the management direction, standards, and guidelines in the Deschutes Land and Resource Management Plan as amended by the Northwest Forest Plan. The selected alternative is also consistent with recommendations in the Why-chus Watershed Assessment.

All manipulations of vegetation will comply with the requirements of 36 CFR 219.27(b). The vegetation management activities are consistent with the strategy of preventing unwanted vegetation, in accordance with the Pacific Northwest Region's Vegetation Management EIS (1988) and the mediated agreement (1989). The actions are also compatible with the Deschutes National Forest Weed Environmental Assessment (2002, pending).

## **Implementation Date**

This project will not be implemented sooner than 5 business days following the close of the appeal filing period established in the notice of decision in The Nugget. If an appeal is filed, implementation will not begin sooner than 15 calendar days following a final decision on the appeal. Implementation means actually doing the ground-disturbing actions described in this notice. Field preparations may proceed prior to implementation.

## **Administrative Review**

This decision is subject to administrative review (appeal) pursuant to 36 CFR 215. Any written notice of appeal of this decision must

be fully consistent with 36 CFR 215.14 and must include the reasons for the appeal. A written notice of appeal must be filed with the Reviewing Officer within 45 days of the date legal notice of this decision appears in The Nugget (Sisters, Oregon). The notice must be filed with:

Regional Forester  
Attn: 1570 Appeals  
USDA Forest Service  
P.O. Box 3623  
Portland, OR 97208-3623

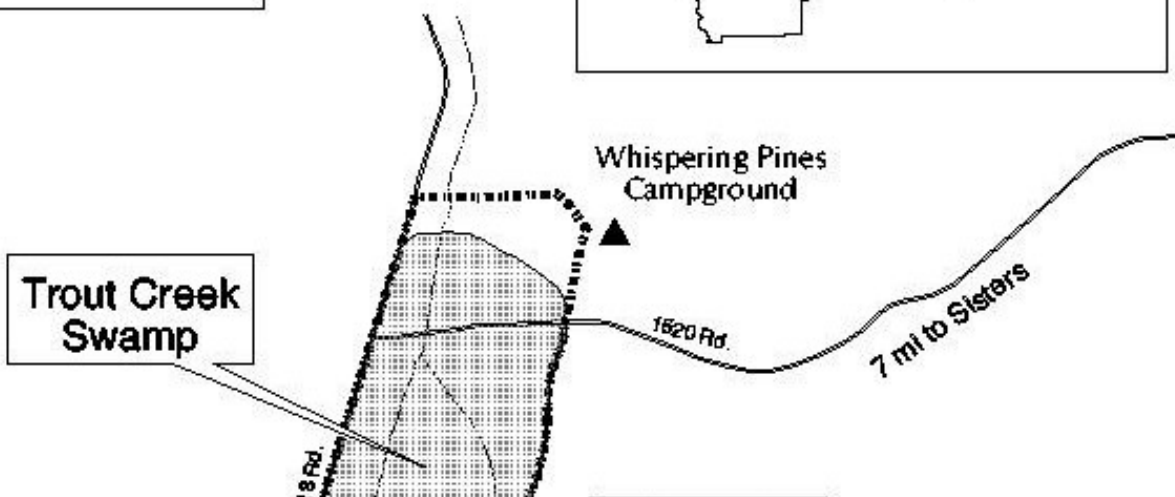
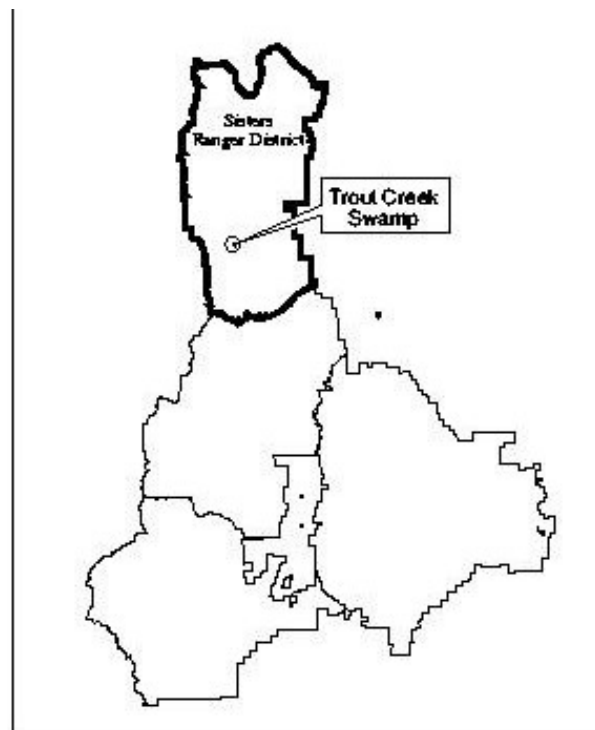
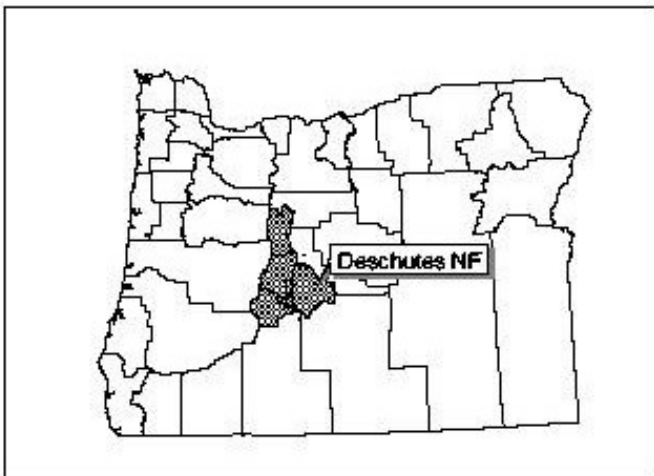
For further information, contact Mike Riehle in the Sisters Ranger District, P.O. Box 249, Sisters, Oregon, 97759, [mriehle@fs.fed.us](mailto:mriehle@fs.fed.us), 541 549-7702.

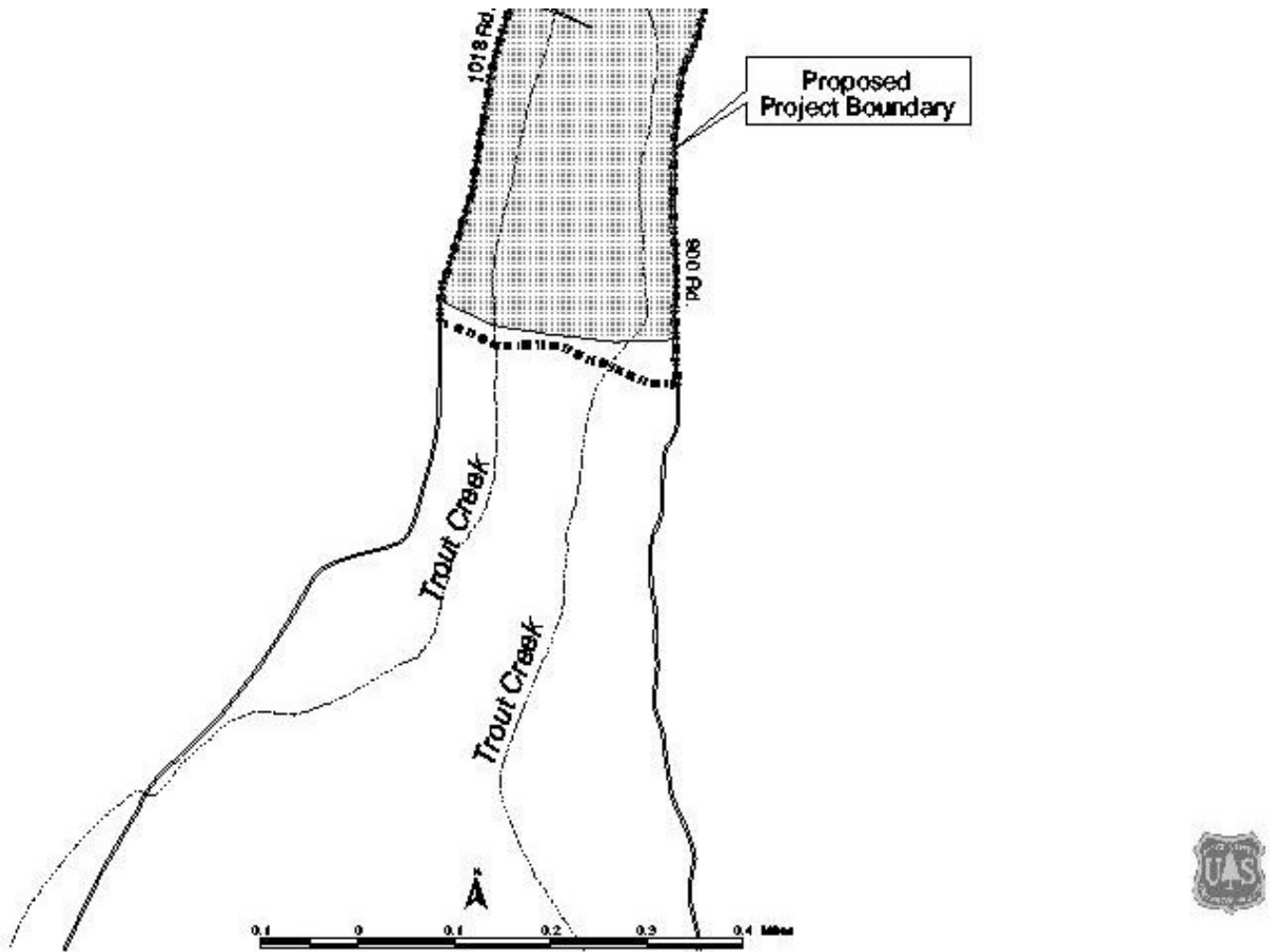
/s/ William Anthony \_\_\_\_\_  
WILLIAM ANTHONY  
District Ranger

\_\_\_\_\_ Date

Figure 1 - Location Map

### Proposed Trout Creek Swamp Project Area





[Deschutes and Ochoco National Forests Website](http://www.fs.fed.us/centraloregon/manageinfo/nepa/documents/sisters/troutcrswamp/tcsea-dn.html)

<http://www.fs.fed.us/centraloregon/manageinfo/nepa/documents/sisters/troutcrswamp/tcsea-dn.html>

Last Update: 5/16/02

R.A. Jensen