I have decided to authorize implementation of a riparian meadow/hydrologic function restoration project on Spruce Creek and an adjacent un-named stringer meadow. Approximately 100 acres of riparian area will receive the following treatments: thin select lodgepole pine 3 inches or less in diameter, spot burn willow clumps, plant riparian-dependant vegetation, and fence willow/plantings to protect from browse.

The Spruce Creek Riparian Rehabilitation project was developed after observing the high level of riparian meadow degradation resulting from fire exclusion, reduced beaver activity and a lowered water table. These factors have facilitated the encroachment of lodgepole pine that is out-competing riparian vegetation and reducing the amount and extent of forage species and a highly valuable habitat type. Recovery of an elevated water table, riparian dependant vegetation, and properly functioning meadow hydrology will provide valuable habitat for wildlife and improve water quality.

**Location**

The project area is located on National Forest System land. Project activities will be limited to Spruce Creek between the intersection with Forest Service road 5830 and the confluence with Hemlock Creek as well as an un-named stringer meadow which lies adjacent to lower Spruce Creek. The legal description of the project area is T 25 S, R 07 E, Sections 2, 3, 34 and 35.

**Background Information**

Riparian meadows are quickly being encroached upon by lodgepole pine trees that are out-competing riparian dependant vegetation. Beavers (*Castor canadensis*) play an important role in maintaining these eco-types. Beavers crop trees and shrubs and use them to construct in-stream dams, which can elevate the surface water level and the ground water level in the riparian area. An elevated water table reduces the level of lodgepole encroachment, improves growing conditions for riparian-dependant grasses, sedges, forbs and shrubs and maintains higher flows and cooler water temperatures during summer months through groundwater exchange. During the past decade, it appears that the level of beaver activity and the associated benefits have dramatically declined. Beaver dams, which were described as abundant in 1989 stream survey reports, are now scarce. With the reduction in beaver activity, the stream has downcut, drying the surrounding riparian area. Willow clumps have become decadent and lodgepole encroachment is prolific.

Fish species found in Spruce Creek include brook trout (*Salvelinus fontinalis*) and brown trout (*Salmo trutta*); neither species is native to this area. Native redband trout (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*) have been extirpated or displaced by non-natives.

**Public Involvement**

A public scoping letter was sent out on August 30, 2006. No comments were received on this project during the scoping period.

A legal notice announcing the availability of the preliminary decision notice for public review appeared in *The Bulletin* on September 19, 2007. The 30-day public comment period ended on October 19, 2007. One comment, expressing approval for the project, was received from the Oregon Chapter of the Sierra Club. There was a concern expressed that the project would affect matsutaki mushroom production. The
project area does not extend into matsutaki mushroom habitat and is not expected to affect matsutaki production.

**Relationship to Extraordinary Circumstances and Findings**

In determining the appropriateness of using the categorical exclusion, a determination of the potential impacts to the resource conditions identified in FSH 1909.15 Section 30.3(2) must be made\(^1\). The following is the list of the potential effects to the resource conditions from the project activities.

1. **Federally Listed Threatened or Endangered Species or Designated Habitat or Species Proposed for Federal Listing or Proposed Critical Habitat.**

   Surveys for threatened, endangered, candidate, proposed, and sensitive species have been completed within the project area. Project implementation will have *No Effect* on bull trout. Project implementation will have *No Effect* on threatened or endangered wildlife species. Habitat for the Pacific fisher, a Federal candidate species, is present in the project area. Implementation of the project *May Impact Individuals or Habitat, but is not likely to contribute to Federal listing* of the Pacific fisher. Biological Evaluations are on file at the Crescent Ranger District.

2. **Forest Service Sensitive Species**

   The project will have *No Impact* to the regionally sensitive redband trout or Region 6 sensitive wildlife species. There are no sensitive plant species within the project area. Biological Evaluations are on file at the Crescent Ranger District.

3. **Flood plains, Wetlands, or Municipal Watersheds**

   Flood plains: Executive Order 11988 provides direction to avoid adverse impacts associated with the occupancy and modification of flood plains. Flood plains are defined by this order as, “… the lowland and relatively flat areas adjoining inland and coastal waters, including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent [100-year recurrence] or greater chance of flooding in any one year.”

   Wetlands: Executive Order 11990 is to avoid adverse impacts associated with destruction or modification of wetlands. Wetlands are defined by this order as, “…areas inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.”

   This project is designed to improve flood plain and wetland function. There are no municipal watersheds within the project area.

4. **Congressionally Designated Areas Such as Wilderness, Wild and Scenic Rivers, and National Recreation Areas.**

   The project area is not within or adjacent to these areas. The nearest wilderness area is the Mount Thielsen Wilderness located approximately four and a half miles to the southwest of the project area.

5. **Inventoryed Roadless Areas**

   There are no inventoryed roadless areas in or near the project area. The project will not construct any temporary or permanent roads. The nearest inventoryed roadless area is approximately two miles to the southwest of the project area.

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\(^1\) As defined by the Interim Direction “Clarification of Extraordinary Circumstances for Categories of Actions Excluded from Documentation” appearing in the Federal Register Vol. 67, No. 164, August 23, 2002.
6. Research Natural Areas

There are no existing or proposed Research Natural Areas on the Crescent Ranger District.

7. American Indian and Alaska Native religious or Cultural Sites, Archaeological Sites, or Historic Properties of Areas

This project was found to be exempt from further case-by-case review under the 2003 Programmatic Agreement (PA) among the Forest Service, the Advisory Council on Historic Preservation, and the Oregon State Historic Preservation Officer (SHPO). Activities such as those proposed for Spruce Creek have little or no potential effect to historic properties according to the PA.

Project Design Features and Mitigations

The following project design features and mitigations will reduce the potential for adverse effects and are incorporated into the decision:

1. A contract provision to protect Proposed, Endangered and Threatened wildlife species and/or proposed or designated Critical Habitat will be required in the event of the discovery of a listed species in the project area. A wildlife biologist will review new information and evaluate the need for seasonal restrictions and/or consultation requirements if needed.

2. Equipment will be cleaned prior to use to minimize the introduction of invasive plant species.

3. Low impact equipment will be used to minimize ground disturbance to protect riparian resources and reduce the risk of creating conditions susceptible to invasive plants.

4. To reduce fine sediment deposit in Spruce Creek, slash will be hand piled outside of the riparian area.

5. Sphagnum mats are present in the project area and provide a suitable habitat for unique plants. To provide protection of mats, burning will take place during the wet season and will focus on spot burning of willow clumps.

6. To prevent harassment of calving elk and/or fawning deer, and to prevent disturbance or injury to young of the year, no management activities will be conducted in the project area from May 1 through June 30.

This project has been found to be consistent with the Deschutes Land and Resource Management Plan as amended by Inland Native Fish Strategy and its Riparian Management Objectives established to reduce potential impacts to aquatic habitat. A copy of the analysis can be located at the Crescent Ranger District.

No consultation was needed with the US Fish and Wildlife Service because the project design criteria for the protection of the Oregon spotted frog and the bald eagle were consistent with the Joint Terrestrial and Aquatic Programmatic Biological Assessment (USDA and USDI, 2006-2009).

Reason for Categorical Exclusion and Findings

This decision is categorically excluded from documentation in an Environmental Assessment or Environmental Impact Statement in accordance with 40 CFR 1508.4 and Forest Service Environmental Policy and Procedure Handbook 1909.15. This action falls within Category 31.2(7) of the Forest Service Environmental Policy and Procedures Handbook 1909.15, established by the Chief of the Forest Service,
which may be excluded from documentation in an environmental impact statement or environmental assessment. This category includes habitat improvement activities.

This project is similar to others that recently have been implemented to restore hydrologic function in riparian meadow habitats. Riparian vegetation and beaver activity are critical to the long term maintenance of properly functioning meadow streams.

I have concluded that the proposed activities are consistent with the intent of improving the habitat and aquatic features of the creek and are in accordance with the Deschutes National Forest Land and Resource Management Plan as amended by the Inland Native Fish Strategy (INFISH). I conclude that no extraordinary circumstances exist which indicate this action could have a significant effect on the quality of the human environment.

**Best Available Science and Conclusion**

My conclusion is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. Based on the conclusions regarding the effects to the resource conditions listed above, I have found that no extraordinary circumstances exist with the proposed project activities that may result in a significant individual or cumulative effect on the quality of the human environment.

**Implementation, Administrative Appeal and Review**

This decision is not subject to appeal pursuant to 36 CFR 215.12(1). Actions for which notice and opportunity to comment have been published and on which all comments received during the comment period were in favor (215.6), and on which the Responsible Official’s decision does not modify the proposed action; and decision for actions that have been categorically excluded from documentation in an environmental assessment or environmental impact statement in FSH 1909.15, Section 31.1 and 31.2, except as noted in 215.7(b). The proposed actions of the project have not been changed since the preliminary Decision Memo comment period. This decision may be implemented immediately.

For further information contact Paul Powers, Fisheries Biologist, at the Crescent Ranger District, P.O. Box 208, Crescent, OR 97733, or by phone at (541) 433-3236.

/s/ C. Christine Frisbee

C. Christine Frisbee
District Ranger

13 Dec. 2007