I have decided to authorize rehabilitation efforts to enhance the meadow in Big Marsh. This project would be accomplished through cutting and girdling encroaching lodgepole pine into the meadow, and prescribed burning. Activities are designed to set the ecological clock back to maintain the meadow/marsh habitats and stop conifer establishment. Prescribed burning at appropriate intervals would maintain the restored condition.

Trees to be cut are generally 15-25 years old on approximately 100 acres and not larger than 6 inches in diameter. Those trees ranging from 3 - 6 inches are considered few and scattered, and they would be killed by girdling the cambium. Trees to be cut are located along the east side of the marsh and are not likely of commercial value. After cutting, trees would be loosely piled, left in place, or stacked into “wildlife piles” to block motorized vehicle access into the marsh and/or to provide wildlife habitat for resident and neotropical birds and small mammals.

Burning would take place on approximately 900 acres in 90-200 acre portions (see Map) over the next 5 years. Natural barriers caused by wet and dry seasons calls for a range of accomplishable acreage to be burned in a given year. Burning would be completed in the fall and result in a mosaic of intensities. Typically, emissions that result are very low due to low fire intensities and the small volume of material to burn. All burning would comply with the Oregon smoke management guidelines and would be performed with an approved burning plan.

Location

The project area is located on the Crescent Ranger District, Deschutes National Forest in the Big Marsh watershed. The Deschutes National Land and Resource Management Plan allocates this area to Oregon Cascade Recreation Area as amended by the Northwest Forest Plan/Congressionally Withdrawn. It is also within a Key Watershed. The legal location is:

T. 25 S., R. 6 E., Section 13, 24, 25, and 26
T. 25 S., R. 7 E., Section 18 and 19
Willamette Meridian, Klamath County.

Background Information and Proposed Actions

This project continues restoration activities that have been ongoing in the marsh since the Forest Service acquired the private property in 1982. Designed to address restoration opportunities identified in the 1997 Big Marsh Watershed Analysis, this project implements the management strategies defined by the Big Marsh Wild and Scenic River Plan. As the hydrologic function and meadow habitat is restored and improved, it will also benefit the yellow rail (an avian species) and the Oregon spotted frog, which are an emphasis in the marsh.

Relationship to Extraordinary Circumstances and Findings

In determining the appropriateness of using the categorical exclusion, a determination of the potential impact to the resource conditions identified in FSH 1909.15 Section 30.3(2) must be made. Biological
Evaluations are on file at the Crescent Ranger District. 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.**

   Listed species with potential to be within the project area, or critical habitat, are the northern bald eagle, northern spotted owl, and the Canada lynx. There would be **No Effect** to these species or their habitat. Also, the project meets all of the applicable Project Design Criteria under the 2006-2009 Programmatic Biological Assessment for central Oregon.

   There are no known federally listed plant species within or near the project area.

   **Forest Service Sensitive Species**

   **Plant species** – Sensitive plants found in the project area are water clubrush (*Schhœnoplectus subterminalis*), slender sedge (*Carex lasiocarpa*), Buxbaum’s sedge (*Carex buxbaumii*), and slender cotton grass (*Eriophorum gracile*). Effects to sensitive plants caused by project activities are not expected to occur and a determination of **No Impact**.

   **Fish Species** – There are redband trout in Big Marsh Creek and the project was determined to have **No Impact**.

   **Wildlife Species** – Sensitive wildlife species associated with this project are the Oregon spotted frog (*Rana pretiosa*), Pacific fisher (*Martes pennantii*), Yellow rail (*Coturnicops noveboracensis*), and the California wolverine (*Gulo gulo*). For the yellow rail, Oregon spotted frog, and Pacific fisher, activities may impact individuals, but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species (MIIH). For the California wolverine, there would be **No Impact**.

2. **Flood plains, wetlands, or municipal watersheds**

   The project has been determined to have no effect to hydrologic function. The project strives to maintain plant communities suitable for a meadow environment, potentially improving how the area stores and discharges water. There are no designated municipal watersheds.

3. **Congressionally designated areas such as wilderness, wild and scenic rivers, and national recreation areas.**

   The closest wilderness designation is within five miles to the south/southwest (Mount Thielson). The project would not affect opportunity for solitude, primitive recreation, scenic, and historical values.

   Big Marsh Creek is designated as Wild and Scenic and flows through the middle of the project area. Outstandingly Remarkable Values (ORVs) include scenery/vegetation, geologic and wildlife. For scenery/vegetation, proposed activities would restore processes which would perpetuate vegetation and scenery at conditions expected in a meadow-dominated environment. Wildlife unique to these types of environments found in Big Marsh would benefit from restoration of hydrologic function and maintenance of meadow habitats. The Big Marsh Creek and Little Deschutes River Wild and Scenic River Plan supports this type of activity on page 6: “Appropriate noncommercial methods of reducing conifer encroachment into the marsh include prescribed fire and natural flooding.”

   The project area is not within or adjacent to any national recreational area.

4. **Inventoried Roadless Areas**

   There are no Inventoried Roadless areas in or near the project area and no temporary or permanent roads would be constructed. The nearest inventoried roadless area is approximately nine miles to the northwest of the project area.
5. **Research Natural Areas**

There are no existing or proposed Research Natural Areas in the project area.

6. **American Indian and Alaska Native religious or cultural sites, archaeological sites, or historic properties of areas.**

Surveys were conducted for Native American religious or cultural sites, archaeological sites, and historic properties or areas that may be affected by this decision. A **No Properties Affected** determination was made. Consultation has occurred under the Programmatic Agreement with the State Historic Preservation Office (SHPO). All cultural sites would be avoided. The Cultural Resources Report and SHPO concurrence are on file and located at the Crescent Ranger District.

**MONITORING**

Prescribed burning would occur on approximately 5 percent of the grass communities in Big Marsh. Site-specific ocular monitoring in the marsh has shown reed canary grass response to be variable in the past. The objective is to minimize the abundance of reed canary grass, an invasive species. Monitor for a minimum of five years every springtime to determine vigor, size, and density. To accomplish this, implement the following:

- Map plant communities within the project area pre- and post-implementation.
- Take pre-implementation core samples of the reed canary grass roots to determine average depth and density.
- Post-implementation, sample the roots again to compare results.

Information from the monitoring would be used to determine how much and where prescribed burning in the marsh would be implemented in the future. Through the monitoring process, if it is shown that burning is encouraging an increase in density or extent of reed canary grass populations, further burn activities in affected areas would be avoided. Control of existing reed canary grass in the Big Marsh area is being evaluated under the Ochoco and Deschutes National Forest Invasive Plant Environmental Impact Statement.

**Public Involvement**

On December 15, 2006, a letter announcing the proposed project was sent to 92 interested people and organizations requesting their comments on the project.

**Comment:** Monitoring should be used to assure native plant recovery and stimulation.

**Response:** Reed canary grass has potential to displace native species, and it’s response to planned activities is a monitoring requirement of this decision. Also, Big Marsh is one of the areas on the Crescent Ranger District that receives additional monitoring for all aspects of hydraulic recovery and species diversity. This is accomplished and documented yearly through district employees and other agency personnel.

**Comment:** There was a concern that burning consecutively for 5 years is an unnatural process.

**Response:** Fire was likely an important component of the disturbance regime in Big Marsh, as evidenced by the encroachment of lodgepole pine seedlings into the meadow. Consecutive burning would take advantage of natural barriers when environmental conditions are favorable. None of the reintroduction of fire is planned to overlap in the five year cycle; thereby restoring a fire interval more similar to what likely occurred prior to human influence.
Reason for Categorical Exclusion and Findings

Based on the analysis and previous experience with this type of project, and considering the project design features and conditions described below, I have determined that no extraordinary circumstances\(^1\) are associated with the activities described in this document design to restore the marsh. This finding is based on the surveys, mitigation measures, and monitoring requirements designed into this activity. I find that this project falls within a category established in the Forest Service Handbook (FSH 1909.15, Section 31.2 (6)) that does not individually or cumulatively have significant effects on the human environment. Therefore, this project is categorically excluded from preparation of an environmental impact statement or environmental assessment. This finding is also based upon:

Key Watersheds and Aquatic Conservation Objectives: The project area overlaps two Tier 1 Key Watersheds (Upper and Lower Big Marsh Creek). I have found that the proposed management activity is consistent with the Aquatic Conservation Strategy objectives. I have reviewed the 1997 Big Marsh Watershed Analysis and I utilized this information to be informed on the ecological functions within this watershed. Specifically, page 5-16 Objective E states “Utilize prescribed fire to restore the marsh and uplands to a more natural state.” I have used the watershed analysis to support the finding that the management action “meets” or “does not prevent attainment” of the Aquatic Conservation Strategy objectives. The analysis includes a description of the existing condition, a description of the range of natural variability of the important physical and biological components of a given watershed, and how the proposed project or management action maintains the existing condition or moves it within the range of natural variability (1994 ROD, Attachment B, p. B-10).” Also, no road construction will occur, and restoration activities have been prioritized for this watershed.

Oregon Cascades Recreation Area (OCRA): The 1990 Deschutes Land and Resource Management Plan on page 4-146 calls for conserving, protecting, and managing in a substantially undeveloped condition the unique values associated with OCRA.

M14-15 - Planned activities would be subordinate to the natural landscape and would meet Partial Retention visual quality objectives.

M14-16 – Project activities are designed to return the hydrologic setting in the Big Marsh Creek meadow to feature natural vegetative communities associated with the marsh prior to the diversion of the creek.

M14-20 – Prescribed burning is the selected activity to restore the meadow/marsh habitat for dependent wildlife species.

Project Design Features and Mitigations

The following measures have been incorporated to reduce potential effects to resources as guided by the Deschutes Forest Plan. The following conditions are incorporated into the decision, have been used numerous times in similar activities on the district, and have proven to be highly effective:

Wildlife

1. In the event of the discovery of a listed species in the project area, a wildlife biologist would review new information and evaluate the need for seasonal restrictions and/or consultation with the U.S. Fish and Wildlife Service if needed.

---

\(^1\) 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.
2. To protect nesting yellow rails, a limited operating period would be required prohibiting all work between May 1 and August 15 for those operations in the marsh.

3. No snags are anticipated to be felled during project activities, however, if one is discovered as an occupational safety hazard, the area will be avoided, or it may be felled as a last case scenario.

4. If an active great grey owl nest is located within 0.25 mile of the project activity with the potential for disturbance, a limited operating period would be placed on all activities between March 1 and June 30 of the year the nest(s) are active.

Invasive Plants

5. All equipment will be free of soil, seeds, vegetative matter, or other debris that could contain or hold seeds or propagules.

I have reviewed the physical and biological conditions of project with resource specialists. My conclusion is there are no extraordinary circumstances exist which would indicate this action could have a significant effect on the quality of the human environment.

Public Comment

This decision is subject to public notice, comment, and appeal pursuant to 36 CFR 215.5. Written, facsimile, hand-delivered, oral, and electronic comments concerning this action will be accepted for 30 calendar days following publication of a notice in The Bulletin. The publication date in the newspaper of record is the exclusive means for calculating the comment period for this proposal. Those wishing to comment should not rely upon dates or timeframe information provided by any other source. The regulations prohibit extending the length of the comment period.

Written comments must be submitted to: Christine Frisbee, Crescent Ranger District, PO Box 208, Crescent, OR, 97733. The office business hours for those submitting hand-delivered comments are: 7:45 A.M. to 4:30 P.M. Monday through Friday, excluding holidays. Oral comments must be provided at the Responsible Official’s office during normal business hours via telephone (541) 433-3200 or in person. Electronic comments must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to comments-pacificnorthwest-deschutes-crescent@fs.fed.us. In cases where no identifiable name is attached to a comment, a verification of identity will be required for appeal eligibility. If using an electronic message, a scanned signature is one way to provide verification. E-mails submitted to e-mail addresses other than the one listed above, in other formats than those listed, or containing viruses will be rejected.

It is the responsibility of persons providing comments to submit them by the close of the comment period and ensure that their comments have been received. Individuals and organizations wishing to be eligible to appeal must meet the information requirements of 36 CFR 215.6.

For further information contact Joan Kittrell, Wildlife Specialist, at the Crescent Ranger District, PO Box 208, Crescent, OR, 97733, or by phone at (541) 433-3237.

_________________________   _____________________
C. Christine Frisbee                          Date
District Ranger