



# 2012 Flood Repair Projects

NACHES AND CLE ELUM RANGER DISTRICTS

Okanogan-Wenatchee National Forest

Naches Ranger District  
10237 U.S. Highway 12  
Naches, WA 98937  
(509) 653-1401

Cle Elum Ranger District  
803 W. 2nd Street  
Cle Elum, WA 98922  
(509) 852-1100

## UPCOMING PROJECTS:

1808 Road 3

1601 Road 3

3100 Road System 4

3100 Road MP 10.4 5

3120 Road 5

## 2013 PROJECTS

1700 Road System

1501 Road System

1901 Road System

3111-115 Road

3300 Road System

## “Why haven’t you fixed the roads?!”

In May 2011, the Naches and Cle Elum Ranger Districts experienced a 100-year flood impacting 40 roads, multiple campgrounds, and other recreational areas. The flood damage was so extensive the Forest Service general funds were not sufficient to repair the damaged areas.

In June 2011, after documenting the extent of the damage, the Okanogan-Wenatchee South Engineering Zone applied for and was granted Federal Lands Highway funding. Emergency Relief for Federally Owned Roads, known as **ERFO**, is making it possible for the Naches and Cle Elum Districts to begin to plan and implement flood repair pro-



jects. The intent of the ERFO program is to defray unusually heavy expenses associated with the repair of federally owned roads damaged by natural disaster or catastrophic failure.

The Naches and Cle Elum districts have created an **ERFO Team**, consisting of specialist and planners, to work on the ten most heavily damaged road sites on both districts. The team is in the planning process of five projects this year and will complete five more in 2013.

This packet outlines the proposed actions of the five 2012 ERFO Flood Repair Sites. Based on the extent of the damage and the urgency to address vehicular access, the team proposes the following repair designs. At this time, we are asking for public input and feedback.

## Project Locations

- Forest Service Road 1808 at mile post 4.2. Naches District T15N, R12E, Section 16
- Forest Service Road 1601 at mile post 0.3. Naches District T16N, R15E, Section 30.
- Forest Service Road 3120 at mile post 4.0. Cle Elum District T18N, R15E, Section 10.
- 3100 Road System including mile post 0.9, 1.0, 1.1, 1.6, and 2.2. Cle Elum District T17N, R16E, Section 14 and Section 10.

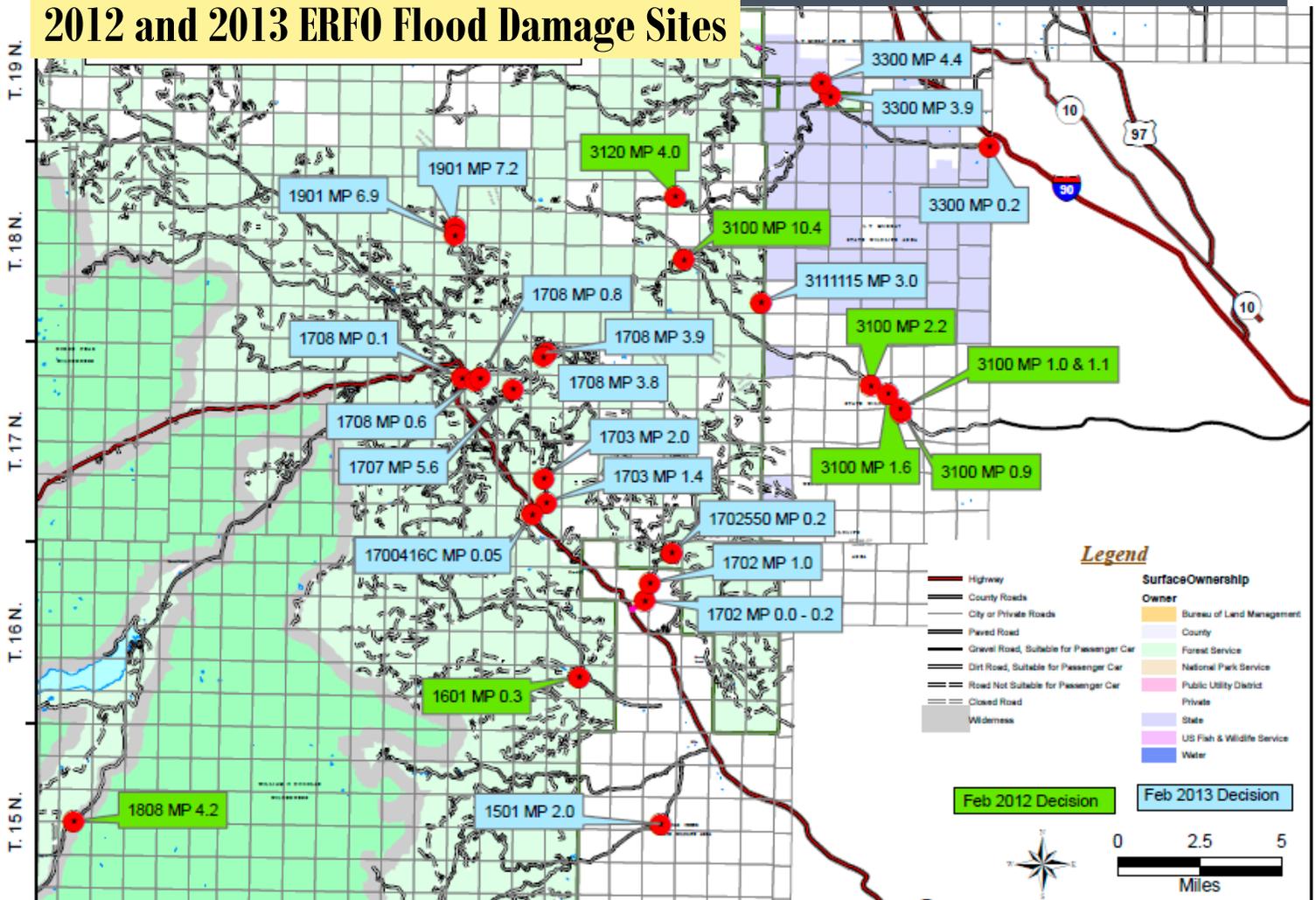


- Forest Service Road 3100 at mile post 10.4. Cle Elum District T18N, R15E, Section 22.

Detailed site locations on next page.



## 2012 and 2013 ERFO Flood Damage Sites



## Naches and Cle Elum District Flood Damage Sites

**\* Want to stay involved in all of the upcoming ERFO Flood Repair Projects?**  
 Please contact us and let us know you are interested.  
 509-653-1420 or  
[mdking02@fs.fed.us](mailto:mdking02@fs.fed.us)

## Objectives

The objectives of the proposed 2012 Flood Repairs are:

- Re-establish safe motorized access to the variety of recreational, administrative, vegetation management, and firefighting users that access these areas
- Restore local hydrologic processes and protect the road area, to a reasonable extent, from future flood events and erosion
- Maintain aquatic and wildlife habitat objectives and guidelines. Refer to Project Consistency on page 6.

# 1808 Flood Repair



The road crossing failed when the 60” pipe filled with rock and sand being transported by the creek. This forced floodwaters over the top of the road causing the current exposed pipe condition.

**Proposed Design:** The ERFO team proposes to replace the culvert pipe with a concrete ford at mile post 4.2. A ford, or low water crossing, is a shallow area where a river or stream may be crossed. This design would allow for the channel to move sediment and water freely while also allowing vehicles to pass in a shallow amount of water.

Forest Service Road 1808 is an arterial road from the popular Bumping Lake road. It is also know as Deep Creek Road. FSR

1808 leads to Twin Sisters and is an access point to the William O’ Douglas Wilderness.

*“Public support of acts affecting the public is absolutely required.”*  
-Gifford Pinchot

# 1601 Flood Repair

Forest Service Road 1601 is in the Nile drainage and is an important access route for hunters, horseback riders, and other recreationalists. The road is also known as Dry Ridge. This area is going to be part of a landscape level restoration project which will necessitate vehicular access for the next 10 to 20 years. During the 2011 flood event, high flows and large quantities of debris was too much for the current pipe to withstand. In early December, a restoration crew removed the pipe and surrounding loose bank. The exposed pipe posed a risk of creating an ice dam over the winter season. The damaged pipe also created the risks of a greater

blockage and additional erosion during the upcoming spring season.

**Proposed Design:** The ERFO team proposes to install a bottomless-box culvert in place of the pipe. A bottomless-box culvert is a concrete pre-made overpass structure that is highway safety rated. The travel surface will be approximately 12ft wide.



# 3100 Road System Flood Repair



Mile post 0.9



Mile post 1.0



Mile post 1.1

Forest Service Road 3100, Manastash Road, has five flood damaged sites that are being grouped into one environmental analysis. These five sites are mile post 0.9, 1.0, 1.1, 1.6, and 2.2.

This portion of road is unique as it is jointly managed by the Forest Service and Washington State Department of Natural Resources (DNR). Both agencies will complete an environmental analysis in order to meet specific standards and process requirements at the state and federal level.

**Mile Post 0.9**

The edge of the road has eroded leaving an over steepened road embankment.

**Proposed Design:**

The road will be narrowed to 16 feet through the site (this width is still greater than the defined 12 ft road specification).

This will allow for armoring of the toe of fill at the stream to prevent further erosion.

**Mile Post 1.0**

The edge of the road and road shoulder has eroded. The location of large woody debris and the channel shape focused water flow against the road embankment and will continue to erode the area if left in current condition.

**Proposed Design:**

The team proposes to shift the road away from the stream. An inset flood plain with large woody debris and boulders will be constructed at the toe of the road fill to alleviate flood pressures on the road.

**Mile Post 1.1**

The stream channel has shifted 100 feet across the canyon and now flows within three feet of the road edge.

**Proposed Design:**

The road will be shifted away from the stream location. This will place the road on the natural slope above the current stream bed.

**Mile Post 1.6**

The stream has shifted across the canyon floor and completely obliterated several hundred feet of road and a snow park.

**Proposed Design:**

The road will be shifted away from the stream onto the hill slope, placing the road above the current stream bed. Note that at this time, the snow park will not be reconstructed at this site.

**Mile Post 2.2**

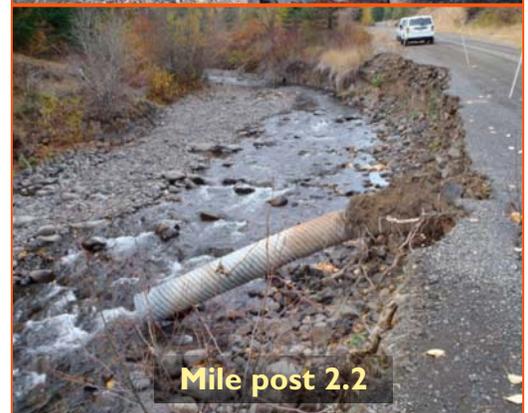
The stream is meandering into the road eroding the embankment.

**Proposed Design:**

The road will be shifted away from the stream toward a rock face. This will give the stream as much room as possible to function.



Mile post 1.6



Mile post 2.2

# 3100 Mile Post 10.4 Flood Repair



done solely by the Forest Service. At this site, the pipe culverts failed allowing floodwaters to flow over the road surface. Approximately 70 feet of road was damaged.

### Proposed Design:

A 12 foot bottomless arch will be installed to convey water flowing in the new channel. Additionally, a 24 inch pipe will be installed approximately 40 feet from the arch to maintain floodplain connectivity across the road.

*“A public official is there to serve the public and not to run them.”*

*-Gifford Pinchot*

Forest Service Road 3100 is on the Cle Elum Ranger District and near Manastash Ridge. Unlike the other FSR 3100 flood

repair sites, the project area for mile post 10.4 is entirely on Forest Service land and the subsequent analysis will be

# 3120 Flood Repair

Forest Service Road 3120 is located on the Cle Elum District and the damaged area is at mile post 4.0. It appears that the pipe bedding failed, allowing water to flow around the outside of the pipe. Although this culvert does not pass water year-round, during high flow time periods it can move a substantial amount of water. Unfortunately, the area has also been degraded by users that drove around the jersey barriers. The vehicle tracks have cause erosion, extra sedimentation, and degraded habitat.

### Proposed Design:

The ERFO team proposes to replace the pipe with a larger arched pipe. The angle of the pipe will also be adjusted to better meet the present channel alignment of the seasonal creek. The Forest Service also proposes to rehabilitate the eroded area where vehicle tracks were made. The team is in the process of seeking additional funding for these restorative actions. This will include re-vegetating and adding coarse woody debris to the area.



# Project Consistency

The goals and purpose of the proposed 2012 Flood Repair Projects are consistent with recommendations present in relevant national and regional direction. Each project will follow the direction for land and habitat management areas as per the Wenatchee National Forest Land and Resource Management Plan (1990) as amended by the Northwest Forest Plan Standards and Guidelines for Management of Habitat for Late Successional and Old-Growth Forest Related Species within the Range of the Northern Spotted-owl (1994). By applying site specific road designs and implementing appropriate maintenance requirements, all five projects will be consistent with the Aquatic Conservation Strategy objectives.



In compliance with the National Environmental Policy Act (NEPA), each project is classified as a Categorical Exclusion (CE) 36 CFR 220.6(d)(4) for the "Repair and maintenance of roads, trails, and landline boundaries". Each CE document will summarize the project's purpose and will analyze the potential effects of the project on the built and natural environment. As part of the Endangered Species Act consultation process, a Biological Evaluation will also be completed for each project. Although we are enacting public scoping for all of the proposed projects at the same time, each of the five projects are individually analyzed and have separate project files.



The ERFO team is currently in the planning process for all five 2012 Flood Repair Projects. The proposed actions presented here represent the IDT's initial proposal to address specific issues in the project areas. Your personal knowledge of the area can help the IDT identify additional issues and opportunities not previously defined. In addition, your comments can provide the input necessary to develop alternative proposals.

Specific comments are of the greatest value. **Receipt of comments by January 16, 2012 would be most helpful**, although comments receive anytime during the analysis period will be accepted and given consideration. These comments will become part of the public record for these projects. Please be aware that unless you request that this information not be disclosed and provide adequate reason; it will become public record.

Each District Ranger will make a decision on the projects within their respective

district. Five separate **Decision Memos showing a Categorical Exclusion are expected to be completed by February 20, 2012.** Additional information about this project, including detailed project descriptions, can be obtained by contacting Michelle King at (509) 653-1420, Monday through Friday during normal business hours. If you would like to stay involved in the current and upcoming ERFO Flood Repair Projects, please contact us and ensure that you are on our ERFO mailing list.

Thank you for your assistance.  
Sincerely,

IRENE L. DAVIDSON  
Naches District Ranger

JUDY HALLISY  
Cle Elum District Ranger



## What do you think?

### How to Comment:

 **Please address all comments to:**

Michelle D. King, NEPA Planner  
Naches Ranger District  
10237 US Highway 12  
Naches, WA 98937

 **Or email your comment to:**

[comments-pacificnorthwest-wenatchee-naches@fs.fed.us](mailto:comments-pacificnorthwest-wenatchee-naches@fs.fed.us)