Draft Environmental Assessment

Mitchell Flash Flood Warning Mitigation Project

Mitchell, Oregon

FEMA-HMGP-4169-06

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Acronyms and Abbreviations

APE	Area of Potential Effects
CAA	Clean Air Act of 1970
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
ESU	Evolutionary Significant Unit
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act of 1981
F.R.	Federal Register
GIS	Geographic Information System
HMPG	Hazard Mitigation Grant Program
MBTA	Migratory Bird Treaty Act of 1918
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHMP	Natural Hazard Mitigation Plan
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRHD	National Register Historic District
NRHP	National Register of Historic Places

NWS	National Weather Service
ODEQ	Oregon Department of Environmental Quality
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OEM	Oregon Office of Emergency Management
OHWM	Ordinary High Water Mark
REO	Regional Environmental Officer
ROW	Right of Way
SHPO	State Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
WQMP	Water Quality Management Plan

Glossary

Area of Potential Effects (APE): Geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking.

FEMA Floodway: That portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e., where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot.

Floodplain: The lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.

Ordinary high water mark (OHWM): Point on a bank or shore up to which the presence and action of the water leaves a distinct mark by erosion, destruction of terrestrial vegetation, or other easily recognized characteristic.

Repeater: An electronic device that receives a signal and amplifies it so that it can travel a further distance.

SECTION ONE INTRODUCTION

The City of Mitchell, OR, has proposed the construction of a flash flood warning system to be funded under the 5% initiative (Equipment and systems for the purpose of warning citizens of impending hazards) set aside for the Hazard Mitigation Grant Program (HMGP) from the 2014 presidentially declared disaster 4169-DR-OR. This flash flood warning mitigation project has been identified as a priority by Wheeler County and the City of Mitchell. The State of Oregon's 2015 *Natural Hazard Mitigation Plan* (NHMP) addresses flood warning systems as priority actions for implementation by focusing resources on those communities with the greatest risks and vulnerabilities. Financial support from FEMA will bring the flash flood warning system to a functioning level, with expansion of the system to be made as additional funds become available.

The Proposed Action targets the minimum number of sensors and gauges needed to provide warning to the residents of the City of Mitchell in the event of an imminent flash flood. Table 2-1 provides the location and sensor type for the Proposed Action.

The HMGP provides grants to States, Territories, Tribes, and local governments to implement long-term hazard mitigation measures after a disaster declaration. Activities may include buyouts, retrofits, relocations, elevations, and minor flood control projects. The HMGP is administered by FEMA.

A Silver Jackets pilot project was approved by the U.S. Army Corps of Engineers (USACE), to provide technical assistance to the City of Mitchell in the development of flash flood warning proposal. This funding can only be used for planning efforts, and cannot be used for construction or to purchase equipment nor will be used as match to the proposed FEMA grant funding. The proposed project is also being receiving technical assistance contributions by National Weather Service (NWS), OEM, and USGS.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. §§ 4321–4327); the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 CFR Parts 1500–1508); and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions or projects.

The CEQ and FEMA regulations (44 CFR Section 10) that implement NEPA require NEPA documents to be concise, focus on the issues relevant to the project, and exclude extraneous background data and discussion of subjects that are not relevant or would not be affected by the project alternatives. See section four for a discussion of subjects that were excluded from this document.

SECTION TWO PURPOSE AND NEED

The HMGP provides grants to States, Territories, Tribes, and local governments to implement long-term hazard mitigation measures after a disaster declaration. The primary purpose of the Mitchell Flash Flood Mitigation Project is to provide advanced warning to the residents of the City of Mitchell when precipitation and/or creek conditions indicate a flash flood is imminent. These events occur very rapidly, and this warning system will potentially help to minimize the loss of life from future flash flood events.

According to the Oregon's 2015 *Natural Hazards Mitigation Plan* (NHMP), all of the Central Oregon's counties are considered moderately vulnerable to the flood hazard. The NHMP identifies the principle riverine flood sources in Wheeler County are Bridge and Keyes Creeks. Situated in a narrow canyon, at the narrowest point on Bridge Creek, the City of Mitchell may be more susceptible to severe flash floods than the more open areas of Wheeler County. There have been three major flash floods on Bridge Creek near Mitchell since 1884. The 1956 event destroyed most of the town center. The largest natural disaster in Oregon history was a flash flood at nearby Heppner in 1903, which claimed 247 lives.

The purpose of this draft EA is to analyze the potential environmental impacts of the Mitchell Flash Flood Warning Mitigation Project. FEMA will use the findings in this draft EA to determine whether an Environmental Impact Statement (EIS) is required or a Finding of No Significant Impact (FONSI) be issued.

SECTION THREE ALTERNATIVES

This section discusses the No Action Alternative, the Proposed Action, to which FEMA funding would contribute, and the alternatives that were considered and dismissed.

3.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, FEMA would not fund the construction of a flash flooding warning system. The community would continue to have little advanced warning in the event of a flash flood.

3.2 PROPOSED ACTION

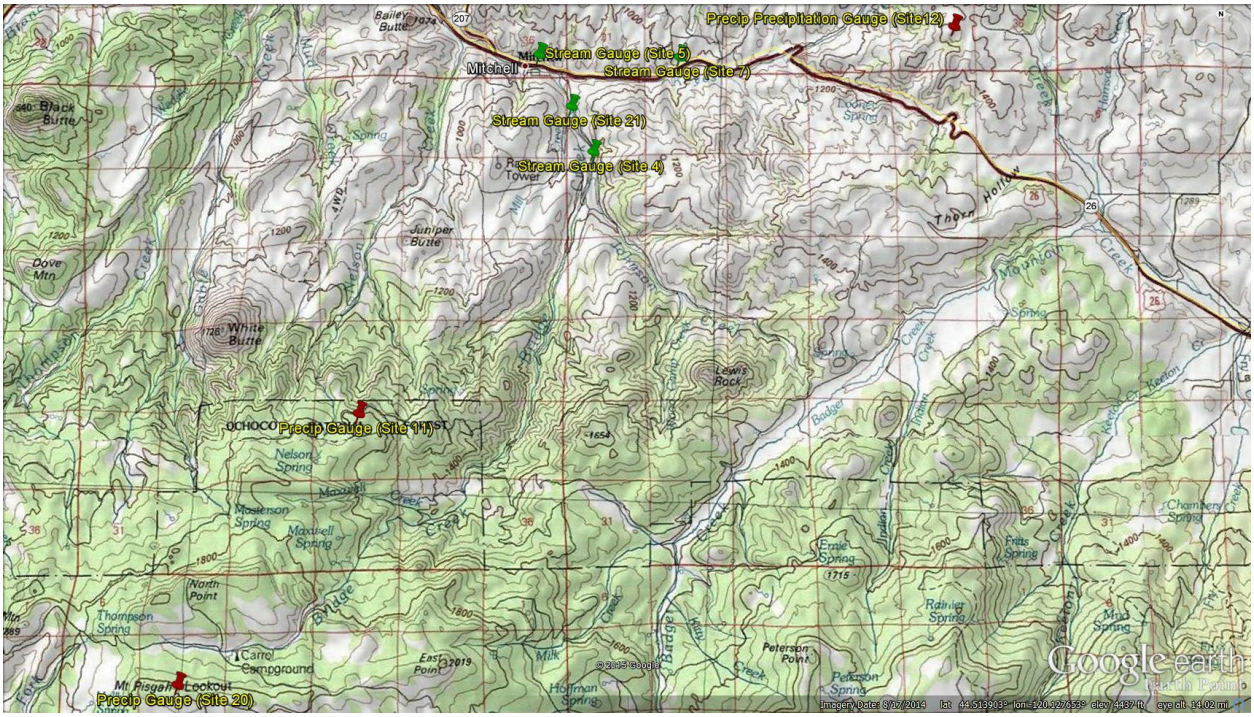
The description of the Proposed Action is based primarily on the City of Mitchell's HMGP grant application, conversations with the USACE's Silver Jacket representatives, and was further refined during a site visit.

The Proposed Action would consist of the following activities, which would be implemented at the seven (7) locations identified in Table 3-1 and Figure 3-1:

Table 3-1: Location and Gauge Type.

Gage Number	Site Name	Type	Latitude	Longitude	Elevation (ft)
11	Ochoco USFS	Precipitation	44.50287	-120.19404	5394
4	Confluence of Bridge Creek and Johnson Creek	Stream	44.549220	-120.13684	3038
7	Keyes Creek near ODOT stockpile	Stream	44.56608	-120.11502	3153
12	Keyes Summit (Communications site)	Precipitation	44.57012	-120.04768	4765
21	Bridge Creek (Domenighini Bridge)	Stream	44.55749	-120.14229	2930
5	Bridge Creek at E Main St Bridge	Stream	44.566874	-120.15041	868
20	Mt. Pisgah – ODOT Site	Precipitation	44.457071	-120.23599	6821

Figure 3-1: Location Map.



To fully implement the Proposed Action, upon completion of the environmental review process, the City of Mitchell will also:

- Obtain Special Use Permit from the U.S. Forest Service to install the precipitation gauge within the Ochoco National Forest (site 11).
- Develop and formalize agreements with ODOT, Frontier Communications, and the Rural Utility Group to secure access and use of co-located sites.
- Develop a response plan.

- Install gauges and protective fencing at sites identified in the introduction.
- Prepare and submit status reports and communicate project results to OEM.

For the precipitation gauges at sites 11, 12, and 20, ground disturbance would be minimal. The gauges would be secured to a 4” to 6” post and sunk into the ground. The gauges would be solar powered, with a small backup battery. As necessary, the precipitation gauges would have a protective fence consisting of three 12’ steel fencing, placed in a triangle formation, and pinned with “T” fence posts.

For the stream gauges at sites 4, 7, and 21, every attempt would be made to utilize existing utility poles and bridges/water crossings. The stream gauges would be housed inside a 2” diameter steel pipe, about 3’ in length. The pipe would be oriented vertically, and secured to the existing utility poles and/or bridges/water crossings using brackets. Each stream gauge will also have a small data collection box, solar panel, and backup battery. If necessary, the stream gauges could be attached to small posts and sunk in the ground directly adjacent to the existing utility and within the utility right of way (ROW). As with the precipitation gauges, if needed the stream gauges would have a protective fence consisting of three 12’ steel fencing, placed in a triangle formation, and pinned with “T” fence posts.

The stream gauge at site 5 will regularly record conditions data on Bridge Creek at Mitchell. While it will not provide warning of a flash flood, it will provide baseline data to assist in the analysis of the downstream effects of weather events. This pressure transducer would be housed inside a 2” diameter steel pipe, about 3’ in length. The pipe would be oriented vertically, and secured at the East Main Street Bridge with brackets.

An additional repeater would be affixed to the existing antennae at Keyes Summit (site 12) to allow the collection of data from sites 11 and 20.

Construction would occur over three weeks prior to the beginning of the 2016 “flash flood” season which begins in April. During construction vehicles would remain on the access roads, and the gauges and equipment needed to complete the construction would be walked to the project site. No work would be allowed in wetlands or water bodies. Mitigation measures including avoidance and minimization measures would be incorporated into the project to limit the potential for adverse impacts to wildlife, water and cultural resources.

3.3 ALTERNATIVES CONSIDERED AND DISMISSED

Several alternative sites were considered and dismissed because of access issues, lack of existing infrastructure, or the site was deemed unsuitable during the site visit.

- Ochoco NF (44.50235, -120.20511) - The area had been burned in a 2008 wildfire. While it had a clear view to the repeater site, the potential of dead trees falling on and damaging the precipitation gauge made the site less practical.
- ODOT Ochoco Summit TripCheck (44.5000347, -120.3885733) – It was decided that this site was in close proximity to the preferred Keyes Summit site.
- ODOT Keyes Repeater Site (44.55190, -120.04390) – ODOT stated this site is to be abandoned in the near future, so it was decided that the Keyes Summit site was a more logical choice.
- Construction of a flood control system, similar to the one in Heppner, Oregon was determined to be cost prohibitive.

SECTION FOUR AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section discusses the potential impacts of the No Action Alternative and the Proposed Action on five categories of environmental resources (physical, water, biological, cultural, and socioeconomic). The potential cumulative environmental impacts are also discussed (see Section 4.5).

The impact analysis follows the same approach for all resource categories. When possible, quantitative information is provided to establish potential impacts, and the potential impacts are evaluated qualitatively based on the criteria listed in Table 4-1.

Table 4-1: Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
None/negligible	The resource area would not be affected, or changes would either be non-detectable or, if detected, the effects would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects.
Moderate	Changes to the resource would be measurable and have both localized and regional impacts. Impacts would be within or below regulatory standards, but historical conditions would be altered temporarily. Mitigation measures would be necessary, and the measures would reduce any potential adverse effects.
Major	Changes to the resource would be readily measurable and would have substantial consequences on local and regional levels. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, but long-term changes to the resource would be expected.

Impacts are predicted based on the degree of change or loss of the resource from the baseline conditions. Impacts may be direct or indirect. Direct impacts are caused by an action and occur at the same time and place as the action. Indirect impacts are caused by an action and occur later or are farther removed from the area but are still reasonably foreseeable (40 CFR Part 1508).

Table 4-2 includes a discussion of subjects that were excluded from this document because they are not relevant or would not be affected by the project alternatives.

Table 4-4-2: Subjects Not Evaluated in Detail.

Subject	Analysis
Air Quality	Construction would create dust and vehicle emissions; however, the impacts would be minor and temporary. Units are solar powered, with a small backup battery and will have no emissions. Air quality impacts associated with traffic is not expected to increase above current levels.
Farmland Protection Policy Act	Construction of a flash flood warning system would not change, or alter in any way, the current land use.
Climate & Climate Change	Minor and temporary construction-related impacts would contribute a negligible amount to climate change or greenhouse gasses.
Wild and Scenic Rivers Act	While portions of the John Day River are listed as Wild and Scenic, the tributaries within the APE are not within those designated sections of river. The proposed action is not located in, or adjacent to, a designated Wild and Scenic River.
Coastal Zone Management Act	The project is in Wheeler County, which is not designated as a coastal county by the Oregon Coastal Zone Management Program.
Geology and Soils	The proposed project will not alter in any way the topography, nor would it cause measurable effects to the physical resources within the project area.
Noise	Construction activities would result in minimal noise, which would be temporary. Noise associated with traffic is not expected to increase above current levels.
Transportation	Transpiration systems are not expected to be effected by the construction of a flash flood warning system.
Recreation	Recreation in the area is common, however the proposed gauge locations are either co-located with existing equipment and protected by fence from access, located in the road ROW, or in remote areas used for the grazing of cattle. There are no anticipated effects on recreation.

4.1 WATER RESOURCES

4.1.1 Surface Water

The project area is in the John Day Basin which spans from the Blue Mountains east of the project area to the Cascade Range, and is approximately 8,100 square miles (BLM

2015). The John Day River bisects Wheeler County as it flows westward, then turns north and flows to the Columbia River (ODEQ 2015a).

The John Day has four subbasins: Lower John Day, Middle Fork John Day, North Fork John Day, and Upper John Day. The proposed project is primarily located in the Lower John Day subbasin.

Numerous streams flow through the project area including Bridge Creek, Keyes Creek, and Johnson Creek:

- **Bridge Creek:** A tributary of the John Day River, Bridge Creek flows from Mt. Pisgah, through the City of Mitchell, and then the Painted Hills Unit of the John Day Fossil Beds National Monument.
- **Keyes Creek:** The creek flows west from Keyes Mountain before meeting up with Bridge Creek just before it enters the City of Mitchell.
- **Johnson Creek:** This small stream flows north from Lewis Rock, where it converges with Bridge Creek.

4.1.2 Water Quality

Section 303(d) of the Clean Water Act of 1977, as amended (33 U.S.C. § 1313(d)(2)), establishes requirements for States and Tribes to identify and prioritize water bodies that do not meet water quality standards. Total Maximum Daily Loads (TMDLs) are the maximum amount of a pollutant that a stream can receive and still meet water quality standards. A stream that is below the TMDLs typically requires a Water Quality Management Plan (WQMP). Category 5 waters are water quality limited, do not meet standards, and require a WQMP. Category 4A waters are water quality limited, with a TMDL approved. Category 3 waters have insufficient data to determine whether a standard is met, and Category 2 waters attain some water quality standards.

Data from ODEQ was queried to determine whether any streams in the project area are considered impaired or waters of concern. Water quality concerns within or near the project area are as follows:

- **Bridge Creek:** Within the proposed project area, Bridge Creek is rated Category 5 for biological criteria, and sedimentation; Category 4A for temperature; and Category 3 for dissolved oxygen, flow modification, habitat modification. The John Day River Basin TMDL and WQMP was approved 12/17/2010 (ODEQ 2012).
- **Keyes Creek:** No impaired streams or waters of concern were identified (ODEQ 2010).
- **Johnson Creek:** Within the proposed project area, Johnson Creek is rated Category 3 for temperature (ODEQ 2012).

4.1.3 Wetlands

Executive Order (EO) 11990, Protection of Wetlands, requires Federal agencies, in planning their actions, to consider alternatives to wetland sites and to limit potential damage if an activity affecting a wetland cannot be avoided.

According to the National Wetlands Inventory (USFWS 2015b), stream gauge sites 4, 5, 7, and 21 are adjacent to wetlands identified as freshwater forested/shrub. Precipitation gauges at sites 11, 12, and 20 are not located in, or adjacent to wetlands. (See Appendix B).

4.1.4 Floodplains

EO 11988, Floodplain Management, requires Federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

The Flood Insurance Rate Map Panels FM4102450294B, FM4102450375B, FM4102470001B, and FM4102450325B (FEMA 1989), show floodplains associated with Bridge, Keyes, and Johnson Creeks that are designated Zone A/AE, which is subject to inundation by the 1-percent-annual-chance flood event (100-year floodplain). Precipitation gauges at sites 11, 12, and 20 are not located in, or adjacent to floodplains. The City of Mitchell has a developed residential and commercial area. The hillsides surrounding the streams are characterized by relatively steep slopes, resulting in a narrow floodplain.

Riverine flooding has not been a frequent problem in the City of Mitchell. However, small flash flooding events are common, and there is moderate potential for another significant event. Based on initial research provided by the Silver Jacket team, it is anticipated that a flash flood could be triggered by approximately .9” of rainfall in a half-hour period (Cahill 2015).

4.1.5 Consequences of Alternatives

No Action Alternative

Under the No Action Alternative, FEMA would not provide funding for the City of Mitchell’s flash flood warning system. There would be no impact to hydrologic resources and there would be no additional life/safety protection if flooding were imminent.

Proposed Action

Local, short-term minor impacts to surface water from sedimentation during construction could occur. To minimize impacts, vehicles are to remain on established roads, and

equipment will be walked to the construction location. No vegetation will be removed. By their very nature, stream gauges must be adjacent to the stream they are designed to measure, but no work in-water work will occur. These restrictions would minimize the release of sediments by limiting ground-disturbing activities. Long-term impacts to water quality are not expected.

Work in wetlands would be avoided. Impacts on floodplains or changes in flood hazards are not anticipated. The Proposed Action has been designed to provide warning to residents in the event of a flash flood, therefore these stream gauges are functionally dependent on being located near the water source they are designed to measure and are the only practicable alternative. The proposed action will not directly, or indirectly promote further development within the floodplain. As such, per 44 CFR § 9.11(d)(8)(iii), FEMA is required to minimize the effect of floods on human health, safety and welfare by giving special consideration to the unique hazard potential in flash flood areas. Because no vegetation would be removed, and stream gauges are functionally dependent on their location, there would be little potential for short or long-term impacts to the floodplain. FEMA utilized the 8-Step decision making process in determining effects of the proposed action on the floodplain (Appendix B).

4.2 BIOLOGICAL RESOURCES

4.2.1 Vegetation

Vegetation in Wheeler County is predominately high desert prairie with forested, mountainous terrain to the south and east. The Lower John Day River subbasin drains areas downstream of the confluence of the mainstem and North Fork Day River. Bridge Creek and its tributaries drain a portion of the Ochoco Mountains (ODEQ 2015b).

Predominant forest species in the mountainous areas of Wheeler County are Douglas fir, ponderosa pine, juniper woodland, non-forest, and mixed conifer forest. Dry-land farming is common Wheeler County and crops include forage land and wheat. Invasive non-native plants are also present in the project area, especially along streams and roads.

4.2.2 Wildlife and Fish

The U.S. Fish and Wildlife Service (USFWS) Office of Migratory Bird Management maintains a list of migratory birds (50 CFR § 10.13). The Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. §§ 703–711), provides Federal protections for migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. The act includes a “no take” provision.

Common MBTA bird species in this region include green-tailed towhee (*Pipilo chlorurus),* Brewer’s sparrow (*Spizella breweri*), Calliope hummingbird (*Stellula*

calliope), Cassin's finch (*Carpodacus cassinii*), white headed woodpecker (*Picoides albolavatus),* and Ferruginous hawk (*Buteo regalis*). Central Oregon is part of the Pacific Flyway and is considered a stopover location for avian species during migration. The nesting season for migratory birds is generally from April 15 through July 31, depending on species and location (City of Portland 2010).

Resident mammals include: coyote (*Canis latrans*), mule deer (*Odocoileus hemionus hemionus*), cougar (*Puma concolor),* porcupine (*Erethizon dorsatum*), deer mouse (*Peromyscus maniculatus*), bushy-tailed woodrat (*Neotoma cinerea*), voles (*Microtus* spp.), and yellow-pine chipmunk (*Tamias amoenus*) (ODFW 2015a).

Reptiles in the project area may include: western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), gopher snake (*Pituophis catenifer*), and striped whipsnake (*Masticophis taeniatus)*. Amphibians may include Pacific treefrog (*Pseudacris regilla*), and Great Basin spadefoot (*Spea intermontana*) (ODFW 2015a).

Fish species that could be found in the John Day River's tributaries of interest include, brown trout (*Salmo trutta*), largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), rainbow/redband trout (*Oncorhynchus mykiss)*, and black crappie (*Pomoxis nigromaculatus*) (ODFW 2015b).

4.2.3 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §§ 1531–1544), was established to conserve, protect, and restore Threatened and Endangered species and their habitats. Section 7 of the ESA (16 U.S.C. § 1536) requires Federal agencies to ensure that their actions do not jeopardize the continued existence of listed species and do not result in adverse modification to designated critical habitat.

The USFWS database identified one Threatened or Endangered species with potential to occur in the project area (USFWS 2015). There are two National Marine Fisheries Service (NMFS)–listed species with potential to occur in the project area. No Threatened and Endangered species have been observed within the project area, and only one NMFS species has been identified within the project area. While the project area has been identified as essential fish habitat for Chinook (*Oncorhynchus tshawytscha)*, StreamNet Mapper does not indicate the species as being observed within the project area. It should be noted that the USFWS identifies the John Day River as critical habitat for Bull Trout (*Salvelinus confluentus*). (ODFW 2015c) According to StreamNet Mapper, Bull Trout are not found in the tributaries within the project area, nor have they been identified as critical habitat (StreamNet Mapper 2015).

Gray Wolf

Of the Threatened and Endangered species identified as having the potential to be found in the potential project area, Gray wolves are known to vary in their habitat and elevation. No critical habitat for Gray wolves has been identified. While the project is located within East Wolf Management Zone, this area has not been identified as an area of known wolf activity by ODFW. Although gray wolf occur over a wide area, and are expanding their range in Oregon, none are known to occur in Wheeler County at this time (ODFW 2015c).

Chinook

Chinook (all runs) have been identified as being found in the John Day River, but in none of the tributaries associated with the project area. The project area has also been identified as essential fish habitat (EFH). However, as Chinook need cool, deeper water with larger gravel to survive, based on water quality, it appears that current conditions in Bridge, Keyes, and Johnson Creeks are not suitable (PSMFC 2015).

Steelhead

Steelhead within the Middle Columbia River ESU were listed as threatened in March of 1999 (reaffirmed in 2006). Critical habitat was designated on September 2, 2005. (NMFS 2010) The species are capable of surviving in a wide range of temperature conditions and spawn in gravel substrates free of excessive silt. Steelhead are unique in that some remain in freshwater throughout their lives and are called rainbow trout. Also unique, Steelhead can spawn more than once. Critical habitat for Steelhead is present at stream gauge sites 4, 5, and 21 (NFMS 2015).

4.2.4 Other Special-Status Species

The greater sage-grouse (*Centrocercus urophasianus*) is listed as a Candidate Species under the ESA. Candidate Species are those that are actively being considered by the USFWS for listing as Endangered or Threatened under the ESA. Candidate Species are afforded no protection under the ESA. Greater sage-grouse are known to inhabit elevations between 4,000 and 9,000 feet and require sagebrush cover. ODFW does not identify the proposed project area as a core area for the sage-grouse (ODFW 2011).

The Federal Bald and Golden Eagle Protection Act prohibits the taking of either species, including their parts, nests, or eggs. Bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) have a wide habitat and may be found in the proposed project area. However, when bald eagles were delisted in the lower 48 states in 2006, nesting locations were no longer actively tracked. In 2011, a Golden eagle nest was identified near the project area. Specific location information was not available (Isaacs 2012).

4.2.5 Consequences of Alternatives

No Action Alternative

Under the No Action Alternative, FEMA would not provide funding for the City of Mitchell's flash flood warning system. There would be no impact to biological resources.

Proposed Action

Vegetation

Local, short-term minor impacts to vegetation during the gauge construction is possible. However, as no vegetation removal required it is anticipated that any disturbance would be the result of pedestrian traffic. Vehicular traffic would not be permitted away from established roads. Long-term impacts to vegetation are not expected.

Wildlife, Fish, and Threatened and Endangered Species

The construction of the flash flood warning system could have minor, localized, and brief impacts on wildlife through noise or nuisance during the construction activities. It is anticipated that any potential disturbance by the construction activities would not be more than a few hours at each site.

The construction activities could result in temporary avoidance of the area by wildlife, with additional disturbance if the units require repair in the future. Impacts on wildlife from the temporary disturbance are considered minor because of the short duration of work. The proposed action would not modify or convert habitat.

Construction of the proposed project would occur during winter months, so impacts to migrating or nesting birds, and spawning fish is not anticipated. There would be no impact to ESA-listed aquatic species (e.g., Chinook or Steelhead) because there would be no work in water and there will be no removal of vegetation.

There would be no impact to Gray wolf, or Candidate species.

4.3 CULTURAL RESOURCES

Cultural resources is a broad category that can include physical resources (e.g. buildings, ruins, artifacts, or art) or intangible resources (e.g. language, stories, or traditions) of cultural significance. Most often, cultural resources are synonymous with historic properties as defined by the National Register of Historic Places (NRHP), including archaeological and architectural properties as well as sites or places of traditional cultural or religious importance to Native American Tribes or other social or cultural groups.

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 U.S.C. § 306108), requires that activities with a Federal nexus to undergo a review process to consider potential effect to properties that are listed, or eligible for listing in the NRHP. In accordance with Section 106, FEMA has delineated the Area of Potential Effects (APE) for the project area, which consists of seven locations, with no more than 144 sq ft of disturbance each. (See Appendix C).

4.3.1 Historical Context

Central Oregon has a broad and rich history of inhabitance by native groups. For thousands of years, native people fished along the along the abundant rivers, hunted game, and gathered roots, berries, herbs, and other sustenance. Trade between groups was common.

Euro-Americans began to inhabit the area as fur trappers from the Hudson's Bay Company and moved through the territory beginning in the early 1800's. By the 1840's, travelers flooded into, though, and around Central Oregon via the Oregon Trail. Once most of the prime farmland was settled in the Willamette Valley, cattle and sheep ranchers began to settle the east side of the Cascade Range where grazing land was abundant.

Created in 1899 from pieces of neighboring Grant, Gilliam, and Crook Counties, Wheeler County is the least populous in the State of Oregon. Two of the three John Day Fossil Beds National Monuments are located within Wheeler County-with the Painted Hills Unit located just 9 miles northeast of Mitchell (Wheeler County 2015).

Three catastrophic flash floods have occurred in Mitchell since its establishment in 1872. The town, once a trade center bustling with loggers, farmers, and prospectors, has declined in population due to shifting industry and the migration of residents to other areas of the state in search of work. Damages in the floods of 1884 and 1904 were significant, and resulted in the loss of lives. The flash flood on July 13, 1957 created an estimated 30 ft wall of water that washed through town and damaged much of the downtown area (Cannon 2015).

4.3.2 Identification of Historic Properties

A records search was conducted in the Oregon Historic Sites Database for National Register listed or eligible resources within the APE. A request was also sent to Oregon SHPO office for an archaeological records search for survey data and/or site information within the APE. FEMA has consulted on the APE and potential effects of the proposed project with the Oregon SHPO, the Burns Paiute Tribe of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs. (See Appendix C).

Aboveground Historical Resources

A records search of the Oregon SHPO database did not identify any above ground resources at site numbers 4, 7, 11, 12, 20, or 21. At site 5, records identify the Downtown Mitchel Historic District as being eligible for the National Register, based on a 2009 Reconnaissance Level Survey (RLS). Included in the initial RLS is the East Main Street Bridge over Bridge Creek. The initial survey recommended the c. 1929 bridge as an eligible and contributing element to the proposed National Register Historic District (NRHD). In 2011, the Oregon Department of Transpiration (ODOT) resurveyed the area and found that the East Main Street Bridge was not a contributing element to the proposed NRHD.

Archaeological Resources

Communication with the SHPO did not identify any archaeological surveys or sites within 500ft of each of the proposed gauge locations. Consultation letters were also sent to tribes that have identified the APE as a usual and accustomed area.

4.3.3 Consequences of Alternatives

No Action Alternative

Under the No Action Alternative, FEMA would not provide funding for the City of Mitchell's flash flood warning system. There would be no impact to cultural resources.

Proposed Action

Adverse impacts to cultural resources are not anticipated. While much of the APE is generally perceived to have a high probability for possessing archaeological sites, the minimization techniques discussed in other sections will also protect against effects to previously unidentified resources. Vehicles are to remain on established roads, equipment will be walked to the construction location, and no vegetation will be removed. While site 5 is located within Mitchell's eligible NRHD, the stream gauge will be located under the East Main Street Bridge, could be easily removed in the future, and will not be visible from the NRHD.

In the event of an unanticipated discovery all work would be required to cease in the immediate vicinity of the discovery until the appropriate parties (including the SHPO) are consulted and an appropriate resolution is established.

FEMA provided these Section 106 findings and determinations in a formal letter to the SHPO on August 20, 2015. Additionally, Section 106 consultation letters, dated August 20, 2015, were provided to the Burns Paiute Tribe, Confederated Tribes of the Umatilla Indian Reservation, and Confederated Tribes of Warm Springs (Appendix C).

4.4 SOCIOECONOMIC RESOURCES

4.4.1 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, directs Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations resulting from Federal programs, policies, and activities. Socioeconomic and demographic data for residents in the project vicinity were studied to determine whether the Proposed Action would have disproportionate impacts on minority or low-income persons.

Data from the U.S Census Bureau estimates the 2014 population of Wheeler County at 1,375 people. The racial make-up of Wheeler County is estimated to have 6.7% of the population identifying as non-white. Per capita income, in 2013 dollars, is $24,575 with 15.6% of the population living below the poverty level. Specific census data is not available for the City of Mitchell due to its small population of 175+/- (U.S. Census Bureau 2015).

4.4.2 Consequences of Alternatives

No Action Alternative

Under the No Action Alternative, FEMA would not provide funding for the City of Mitchell's flash flood warning system. There would be no early warning provided to the community, and could result in life/safety impacts.

Proposed Action

Adverse impacts to minority and low-income populations in the area are not anticipated. Properties currently at risk of a flash flood event, would remain so, but the proposed project would generally have a positive effect on public safety and emergency responders. The proposed project will benefit equally all residents or visitors in the area during a flash flooding event, regardless low-income or minority status.

4.5 CUMULATIVE IMPACTS

Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR § 1508.7). Cumulative effects are determined by combining the effects of these alternatives with other past, present, and reasonably foreseeable future actions.

As stated previously, the Mitchell Flash Warning System was designed to be built upon and/or expanded, as funding is available. It is anticipated that future site selections will also be reviewed and selected based on benefit provided, as well as least obtrusive to the surrounding environs. Should federal funding be involved in subsequent phases, additional Environmental/Historic Preservation reviews and effect determinations will be conducted.

Given the small scale and scattered site locations included in the Proposed Action, there are no expected adverse cumulative impacts on the resources discussed in this document. Furthermore, the proposed project will generally benefit residents or visitors in the area during a flash flooding event, regardless low-income or minority status.

SECTION FIVE AGENCY COORDINATION AND PUBLIC INVOLVEMENT

During project development, the City of Mitchell coordinated closely with USACE's Silver Jackets, USGS, Oregon Office of Emergency Management, U.S. Forest Service, ODOT, the Rural Technology Group, National Weather Service (NWS) – Pendleton Office, and local residents. Wheeler County produced a Natural Hazards Mitigation Plan (NHMP) in 2008 with an update in 2012. Both documents detail extensive public involvement during the planning process, including the approval of the flash flood warning project by the City Council in 2011. In addition to the City's coordination efforts, the following agencies and tribes were contacted during the preparation of this EA:

- Oregon State Historic Preservation Office
- Burns Paiute Tribe
- Confederated Tribes of the Umatilla
- Confederated Tribes of Warm Springs
- US Forest Service – Ochoco National Forest - Special Use Permit
- USDA – Natural Resources Conservation Service – Redmond Service Center

A public notice is required for the draft EA; a copy of this notice is provided as Appendix A. The public, Tribes, and agencies will have the opportunity to comment on the EA for 15 days after publication of the notice on **TBD** 2015. The notice identifies the action, the location of the proposed gauge locations, the participants, and the location of the draft EA, and indicates indicated how to submit comments. FEMA will review all substantive written comments for issues that need to be addressed with the County and will incorporate any resolutions into the final EA, as appropriate.

SECTION SIX PERMITTING, PROJECT CONDITIONS, AND MITIGATION MEASURES

A Special Use Permit issued by the Ochoco National Forest is required for the construction of the precipitation gauge at site 11. Access and maintenance agreements will be required by ODOT and private property owners for the co-location the other gauges in the system. An agreement with Frontier Communications will be required to utilize their location at Keyes Creek Summit (site 12), and to hang a repeater off their existing communication tower. Activities in the project area would comply with the project's scope of work methodology, described in Section 3.

The City of Mitchell would comply with the following project conditions and mitigation measures:

- In the event that cultural resources including human remains are discovered during project activities—and in compliance with State and Federal laws protecting cultural resources and human remains, including Section 106 of the NHPA—work in the immediate vicinity would cease, the area would be secured, and SHPO and FEMA would be notified in order to evaluate the discovery.
- The County is responsible for securing all applicable local, State, and Federal permitting before site work and for complying with any conditions therein.
- Any change to the approved scope of work would require re-evaluation for compliance with NEPA and other laws and EOs before implementation.

SECTION SEVEN CONCLUSION

The draft EA evaluates environmental and historic resources that could be affected by the Proposed Action. The evaluation does not identify any significant adverse impacts associated with the resources discussed within the document. Implementing the Proposed Action, which is small in scale, along with any conditions outlined in the initial site assessment, associated with permits or approvals, is expected to avoid or minimize adverse effects associated with the action.

Following public involvement, FEMA will determine whether to issue a FONSI for the Proposed Action.

SECTION EIGHT LIST OF PREPARERS

Federal Emergency Management Agency

Mark G. Eberlein, FEMA Region X Environmental Officer

Jessica M. Stewart, FEMA Region X Environmental Protection Specialist

William Kerschke, FEMA Region X Environmental Protection Specialist

SECTION NINE REFERENCES

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Appendix A
Public Notice

PUBLIC NOTICE
Federal Emergency Management Agency
Draft Environmental Assessment
City of Mitchell Flash Flood Warning System, Wheeler County

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide funding to Deschutes County for a fuels reduction project in Deschutes County, OR. Funding would be provided as authorized by Section 203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act.

FEMA has prepared a draft Environmental Assessment (EA) for the proposed project pursuant to the National Environmental Policy Act of 1969 and FEMA's implementing regulations at Title 44 of the Code of Federal Regulations Part 10. The draft EA evaluates alternatives for compliance with applicable environmental laws, including Executive Orders 11990 (Protection of Wetlands), 11988 (Floodplain Management), and 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations). The alternatives that are evaluated in the draft EA are (1) No Action and (2) the installation of up to seven (7) stream and precipitation gauges within the John Day subbasin (Proposed Action).

The draft EA is available to the public on FEMA's website at http://www.fema.gov/media-library/assets/documents/ **TBD** and will be available, at the Mitchell Fire Volunteer Department, 101 High Street, Mitchell, OR 97750.

If no significant issues are identified during the comment period on the draft EA, FEMA will finalize the draft EA, issue a Finding of No Significant Impact (FONSI), and fund the project. The FONSI will be available to the public at http://www.fema.gov/ **TBD**. Unless substantive comments on the draft EA are received, FEMA will not publish another notice for this project.

The deadline for submitting written comments on the draft EA is **TBD**.

Comments should be mailed to Mark G. Eberlein, Regional Environmental Officer, FEMA Region X, 130 228th Street SW, Bothell, WA 98021; emailed to mark.eberlein@fema.dhs.gov; or faxed to 425-487-4613.

Appendix B
Floodplain 8-Step

Mitchell Flash Flood Warning System

EXECUTIVE ORDER 11988 – FLOODPLAIN MANAGEMENT EIGHT-STEP DECISION MAKING

Executive Order 11988 (Floodplain Management) requires federal agencies "to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of the floodplain and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative." The Federal Emergency Management Agency's (FEMA's) implementing regulations are at 44 CFR Part 9, which includes an eight-step decision making process for compliance with this part.

The process includes a preliminary evaluation of whether a proposed action has the potential to affect floodplains or their occupants, or is subject to potential harm by location in floodplains. The eight-step process applies to the proposed Mitchell Flash Flood Warning System. Portions of the proposed flash flood warning system are within the 100-year floodplain of Bridge, Keyes, and Johnson Creeks. The construction of the flash flood warning system would not affect the floodplains, but the flood plains may affect the system equipment. The steps in the decision making process is as follows:

STEP 1: DETERMINE IF THE PROPOSED ACTION IS LOCATED IN THE 100-YEAR FLOODPLAIN, WHICH INCLUDES THE COASTAL HIGH HAZARD AREA (500-YEAR FLOODPLAIN FOR CRITICAL ACTIONS).

The City of Mitchell has experienced three significant flash floods since 1884, with the most recent in 1956. Under the Proposed Action, FEMA would provide funding to the City of Mitchell for the installation of a flash flood warning system (Undertaking). Designed to be constructed in phases, as funding allows, the first phase of the warning system will consist of three precipitation gauges and four stream gauges. These stream gauges will monitor data and provide warning to the City of Mitchell if a flash flood is imminent. The stream gauges are located in, or adjacent to, the 100-year floodplain of Bridge, Keyes, and Johnson Creeks (Zone A/AE per Flood Insurance Rate Map [FIRM] Panel Nos. FM4102450294B, FM4102450375B, FM4102450325B, and FM4102470001B, dated July 17, 1989 and April 17, 1989).

The approximate 100-year food elevation has not been identified for panels FM4102450294B, FM4102450375B, FM4102450325B, but is estimated to be 2801 feet in the City of Mitchell as represented on panel number FM4102470001B. The precipitation gauges are not located in, or adjacent to, the floodplain.

STEP 2: PROVIDE EARLY PUBLIC NOTICE (PRELIMINARY NOTICE).

Identified as a priority by the City of Mitchell and Wheeler County in their Natural Hazard Mitigation Plan (NHMP), this flash flood warning system has benefitted from early and long term involvement by the community. A Draft EA was also prepared for this Undertaking. It will be released for public review, and will be available for public review at a library or other location accessible to the public in the local community. The Draft EA will be posted to the FEMA, the web

addresses of which will be included in the Public Notice.

STEP 3: IDENTIFY AND EVALUATE PRACTICABLE ALTERNATIVES TO LOCATING IN THE FLOODPLAIN (INCLUDING ALTERNATIVE SITES, ACTIONS, AND THE "NO ACTION" OPTION). IF A PRACTICABLE ALTERNATIVE EXISTS OUTSIDE THE FLOODPLAIN, FEMA MUST LOCATE THE ACTION AT THE ALTERNATIVE SITE.

Several precipitation gauge alternatives were reviewed but eliminated from further consideration in the EA because they did not meet the project purpose and need, or they were not practical. However, by their very nature, stream gauges must be adjacent to the stream they are designed to measure-they are functionally dependent on their location in, or adjacent to, the floodplain.

STEP 4: IDENTIFY THE POTENTIAL DIRECT OR INDIRECT IMPACTS ASSOCIATED WITH THE OCCUPANCY OR MODIFICATION OF FLOODPLAINS AND THE POTENTIAL DIRECT AND INDIRECT SUPPORT OF FLOODPLAIN DEVELOPMENT THAT COULD RESULT FROM THE PROPOSED ACTION.

Ground-disturbing activities for the installation of the stream gauges has been designed to be minimal. Every attempt will be made to collocate the stream gauges with existing utilities. If necessary, a small metal post would be used to secure the stream gauges. No vegetation will be removed and there will be no in-water work. These stream gauges will not have an effect on the floodplain. It is possible, that during a flooding event, the floodplain will affect the gauges. These stream gauges are designed for this purpose.

Impacts on floodplains or changes in flood hazards are not anticipated. The Proposed Action has been designed to provide warning to residents in the event of a flash flood, therefore these stream gauges are functionally dependent on being located near the water source they are designed to measure and are the only practicable alternative. The proposed action will not directly, or indirectly promote further development within the floodplain. As such, per 44 CFR § 9.11(d)(8)(iii), FEMA is required to minimize the effect of floods on human health, safety and welfare by giving special consideration to the unique hazard potential in flash flood areas. Because no vegetation would be removed, and stream gauges are functionally dependent on their location, there would be little potential for short or long-term impacts to the floodplain.

STEP 5: MINIMIZE THE POTENTIAL ADVERSE IMPACTS AND SUPPORT TO OR WITHIN FLOODPLAINS TO BE IDENTIFIED UNDER STEP 4, RESTORE AND PRESERVE THE NATURAL AND BENEFICIAL VALUES SERVED BY FLOODPLAINS.

Local, short-term minor impacts during construction could occur. To minimize impacts, vehicles are to remain on established roads, and equipment will be walked to the construction locations. No vegetation will be removed. Work in wetlands would be avoided. By their very nature, stream gauges must be adjacent to the stream they are designed to measure, but no work in-water work will occur. These restrictions would minimize the release of sediments by limiting ground-disturbing activities. Long-term impacts to floodplain values are not expected.

STEP 6: REEVALUATE THE PROPOSED ACTION TO DETERMINE FIRST, IF IT IS STILL PRACTICABLE IN LIGHT OF ITS EXPOSURE TO FLOOD HAZARDS, THE EXTENT TO WHICH IT WILL AGGRAVATE THE HAZARDS TO OTHERS, AND ITS POTENTIAL TO DISRUPT FLOODPLAIN VALUES AND SECOND, IF ALTERNATIVES PRELIMINARILY REJECTED AT STEP 3 ARE PRACTICABLE IN LIGHT OF THE INFORMATION GAINED IN STEPS 4 AND 5. FEMA SHALL NOT ACT IN A FLOODPLAIN UNLESS IT IS THE ONLY PRACTICABLE LOCATION.

The stream gauges, as part of the flash flood warning system are functionally dependent on being located adjacent to the streams they are designed to monitor. There will be no long term effect to floodplain values.

Construction adjacent to the floodplain would occur between by April 2015, and there will be no work in water. Vehicles used to access the sites are to remain on established road, and the required equipment will be walked to the construction site. There will be no vegetation removal. The Proposed Action would be re-evaluated, should comments require, prior to issuance of the Final EA.

STEP 7: PREPARE AND PROVIDE THE PUBLIC WITH A FINDING AND PUBLIC EXPLANATION OF ANY FINAL DECISION THAT THE FLOODPLAIN IS THE ONLY PRACTICABLE ALTERNATIVE.

The Final EA, and decision document (Finding of No Significant Impact [FONSI] or Notice of Intent [NOI]) will provide the public with the agency's final decision regarding the project.

STEP 8: REVIEW THE IMPLEMENTATION AND POST -IMPLEMENTATION PHASES OF THE PROPOSED ACTION TO ENSURE THAT THE REQUIREMENTS STATED IN SECTION 9.11 ARE FULLY IMPLEMENTED. OVERSIGHT RESPONSIBILITY SHALL BE INTEGRATED INTO EXISTING PROCESSES.

The Proposed Action will be constructed in accordance with applicable floodplain regulations. Oversight responsibility will be built into the implementation and post-implementation phases.

REFERENCES

City of Mitchell. 2015. Mitchell Flash Flood Warning System. FEMA Grant Application, HMGP-4169.

FEMA (Federal Emergency Management Agency). 1989. Flood Insurance Rate Map (FIRM), City of Mitchell, Oregon, Wheeler County, dated April 17, 1989.

FEMA. 1989. Flood Insurance Rate Map (FIRM), Wheeler County (unincorporated areas). Panel Nos. FM4102450294B, FM4102450375B, FM4102470001B, dated July 17, 1989.

Appendix C
NHPA/Section 106

Oregon
Kate Brown, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE Ste C
Salem, OR 97301-1266
Phone (503) 986-0690
Fax (503) 986-0793
www.oregonheritage.org

June 1, 2015

Ms. Jessica Stewart
FEMA Region X
130 228th St SW
Bothell, WA 98021

RE: SHPO Case No. 15-0853
FEMA: City of Mitchell Flash Flood Warning System
Install gauges
Multiple Legals, Mitchell, Wheeler County

Dear Ms. Stewart:

Our office recently received a request to review your application for the project referenced above. In checking our statewide archaeological database, it appears that there have been no previous surveys completed near the proposed project area. However, the project area lies within an area generally perceived to have a high probability for possessing archaeological sites and/or buried human remains.

In the absence of sufficient knowledge to predict the location of cultural resources within the project area, extreme caution is recommended during project related ground disturbing activities. Under state law (ORS 358.905 and ORS 97.74) archaeological sites, objects and human remains are protected on both state public and private lands in Oregon. If archaeological objects or sites are discovered during construction, all activities should cease immediately until a professional archaeologist can evaluate the discovery. If you have not already done so, be sure to consult with all appropriate Indian tribes regarding your proposed project. If the project has a federal nexus (i.e., federal funding, permitting, or oversight) please coordinate with the appropriate lead federal agency representative regarding compliance with Section 106 of the National Historic Preservation Act (NHPA).

If you have any questions about the above comments or would like additional information, please feel free to contact our office at your convenience. In order to help us track your project accurately, please reference the SHPO case number above in all correspondence.

Sincerely,

Dennis Griffin

Dennis Griffin, Ph.D., RPA
State Archaeologist
(503) 986-0674
dennis.griffin@oregon.gov

RECEIVED
JUN - 4 2015
FEMA REGION X

U.S. Department of Homeland Security
FEMA Region X
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

August 20, 2015

Ms. Christine Curran
Deputy Oregon State Historic Preservation Officer
725 Summer Street NE, Suite C
Salem, Oregon 97301-1266

RE: SHPO Case No. 15-0853
FEMA DR-4169-OR Hazard Mitigation Grant Program
Flash Flood Warning System, City of Mitchell, Wheeler County
NHPA Section 106 Consultation Request

Dear Ms. Curran:

Please consider this follow up to previous consultation completed with Dr. Dennis Griffin of your office on June 1, 2015 regarding the above project. The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund the City of Mitchell (Applicant), through the Oregon Office of Emergency Management (OEM), for the installation of a flash flood warning system (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) through the Presidentially-declared disaster FEMA-4169-DR-OR. The proposed Undertaking is being reviewed pursuant to the Programmatic Agreement (Agreement) among FEMA, your office, and OEM; executed in accordance with Section 106 of the National Historic Preservation Act.

Proposed Undertaking

As discussed in previous communication with your office, the Applicant proposes to install a flash flood warning and data collection system within the Lower John Day subbasin in phases, as funding allows. The current grant application provides funding for equipment installation at seven independent data collection sites: four stream gauges and three precipitation gauges. Information collected by the gauges would be relayed via an existing 300 MHz radio system to a 3rd party website. As the project has been refined, many of the site locations would be collocated with existing utilities. Accordingly, five of the gauge installations meet Allowances in our Agreement based on the installation location and or installation method. Thus the scope of this consultation is for two remaining sites which do not meet Allowances. Site 11, within the Ochoco National Forest is located off FS road #459 (44.50287 - 120.19404) has been moved from its original location and now requires additional review. FEMA had consulted with your office on the previous site 11 location. Installation of the precipitation gauge consists of a 4" to 6" post sunk into the ground to which the gauge, small solar panel, and a backup battery would be attached. Vehicles would remain on the established road, and equipment would be walked to the installation location. Additionally, site 5 consists of a stream gauge to be affixed to a bridge support under the East Main Street Bridge in Mitchell (44.566874, -120.15041). The gauge would be housed inside a 2" diameter steel pipe, about 3' in length. The pipe would be oriented vertically, and secured on the East Main Street Bridge with brackets.

Area of Potential Effects
FEMA determined that the Area of Potential Effects (APE) for the Undertaking at site 11 includes the area with potential for ground disturbance, up to 12' by 12'. The APE for the Undertaking at site 5 is limited to the support structure for the East Main Street Bridge. The enclosed photos and maps illustrate the APEs.

Historic Property Identification and Evaluation
On August 3, 2015, Dr. Griffin provided confirmation via email that there were no known archaeological sites within or proximate to proposed site 11, based on Oregon's Archeological Records database. Based on this information and the small scale of the project and ground disturbance; further evaluation was determined unnecessary at this time. Consultation has also been initiated with Tribes to determine if there are any historic properties of religious or cultural significance to them near this location.

The Oregon Historic Sites Database indicates the East Main Street Bridge is eligible/contributing to the potential Downtown Mitchell Historic District. However, subsequent work undertaken on the c. 1929 structure by ODOT (SHPO Case No. 10-1159) has significantly altered its historic integrity (see enclosed photos). While the original bridge supports remain, the deck has been widened and the open arch rails have been replaced with solid prefabricated rails. Based on these alterations, the structure no longer retains sufficient integrity to be considered individually eligible, or as a contributing element to Mitchell's eligible historic district. As the proposed work is to be located under the bridge, there would be no visual impact to the character defining features of the eligible historic district.

Determination of Effects
Barring additional information regarding historic properties from your office or the Tribes, FEMA determined the proposed Undertaking would result in a No Historic Properties Affected finding. Additionally, FEMA will condition its approval of the project to protect any unexpected discoveries of historic or archaeological resources during site work.

To assist your review please find enclosed a project site map and photos. We respectfully request your concurrence with these findings or additional comment. Should you have any questions, please contact Jessica M. Stewart at (425) 487-4582 or jessica.stewart2@fema.dhs.gov. Thank you.

Sincerely,

Mark G. Eberlein
Regional Environmental Officer

Enclosures

cc: Dennis Sigrist, State Hazard Mitigation Officer, OEM (via email)

Figure 1: Precipitation Gauge, Site 11

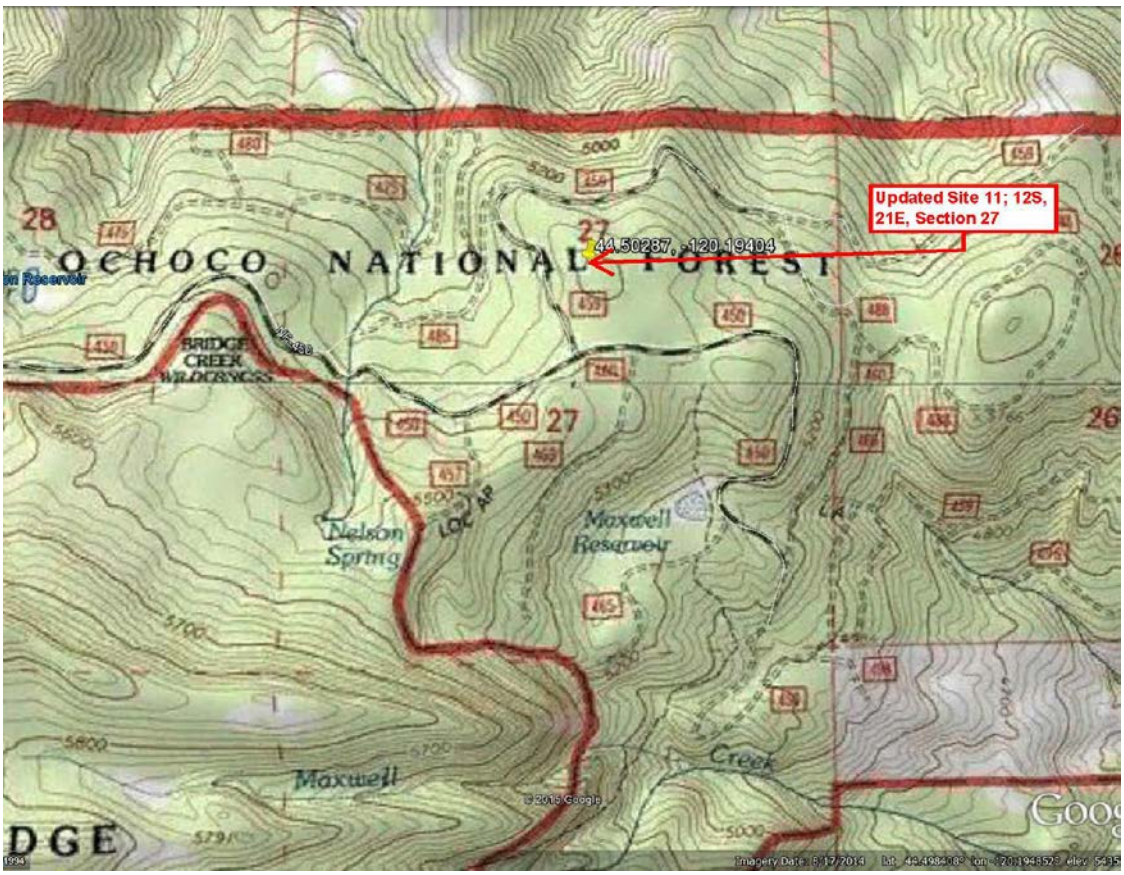

Figure 2: Precipitation Gauge, Site 11

Figure 3: East Main Street Bridge, New Rail, Site 5.

Figure 4: East Main Street Bridge, Original Supports, Site 5.

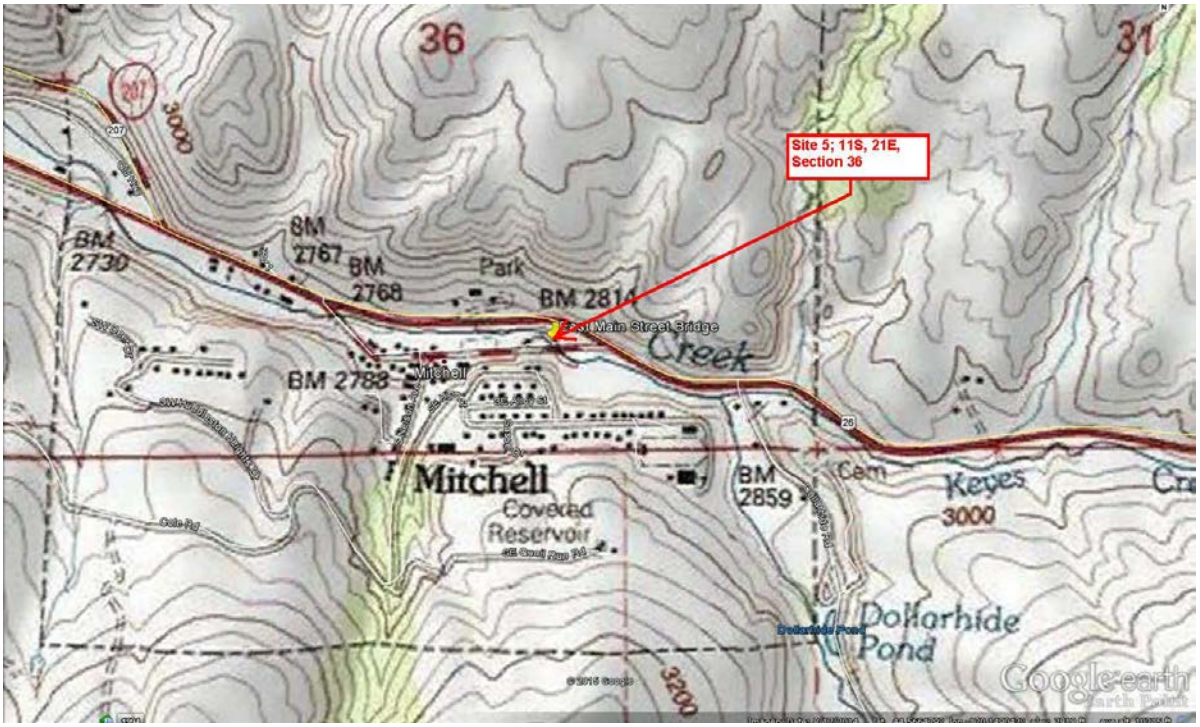

Figure 5: Stream Gauge, Site 5.

U.S. Department of Homeland Security
FEMA Region X
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

August 20, 2015

Honorable Charlotte Rodrique, Chairman
Burns Paiute Tribe
100 Pasigo Street
Burns, Oregon 97720

Re: FEMA DR-4169-OR Hazard Mitigation Grant Program
Flash Flood Warning System, City of Mitchell, Wheeler County
NHPA Section 106 Consultation Request

Dear Chairman Rodrique:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund the City of Mitchell (Applicant), through the Oregon Office of Emergency Management (OEM), for the installation of a flash flood warning system (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) through the Presidentially-declared disaster FEMA-4169-DR-OR. The proposed Undertaking is being reviewed pursuant to Section 106 of the National Historic Preservation Act.

Proposed Undertaking
The Applicant proposes to install a flash flood warning and data collection system within the Lower John Day subbasin in phases, as funding allows. The current grant application provides funding for equipment installation at up to seven independent data collection sites: four stream gauges and three precipitation gauges. Information collected by the gauges would be relayed via an existing 300 MHz radio system to a 3rd party website. As the project has been refined, many of the site locations would be collocated with existing utilities. Accordingly, six of the gauge installations either involve no ground disturbance, or are located in pre-disturbed ground adjacent to existing utilities. Thus the scope of this consultation is for the sole site that would require new ground disturbance. Located in the Ochoco National Forest, off FS road #459 (44.50287 -120.19404), installation of a precipitation gauge would consists a 4" to 6" post sunk into the ground to which the gauge, small solar panel, and a backup battery would be attached. Vehicles would remain on the established road, and equipment would be walked to the installation location.

Area of Potential Effects
FEMA determined that the Area of Potential Effects (APE) for the Undertaking at the Ochoco site includes an area of up to 12' by 12' with potential for ground disturbance.

Historic Property Identification and Evaluation
On August 3, 2015, Dr. Griffin from the Oregon SHPO provided confirmation via email that there were no known archaeological sites within or proximate to the proposed APE, based on Oregon's

Archeological Records database. Based on this information and the small scale of the project and ground disturbance; further evaluation was determined unnecessary at this time. If you have information regarding historic properties of religious or cultural significance to the Tribe you wish to share, this can further inform identification and evaluation efforts.

Determination of Effects
Barring additional information regarding historic properties from your office or the SHPO, FEMA determined the proposed Undertaking would result in a No Historic Properties Affected finding. Additionally, FEMA will condition its approval of the project to protect any unexpected discoveries of historic or archaeological resources during site work.

Should you have any questions, please contact Ms. Jessica M. Stewart, Historic Preservation Specialist at (425) 487-4582 or jessica.stewart2@fema.dhs.gov. Thank you.

Sincerely,

Mark G. Eberlein
Regional Environmental Officer

Enclosures

cc: Diane Teeman, Burns Piaute Tribal Archaeologist (via email)

U.S. Department of Homeland Security
FEMA Region X
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

August 20, 2015

Honorable Alan Crawford, Chairman
Confederated Tribes of the Umatilla Indian Reservation
46411 Timine Way
Pendleton, Oregon 97801

Re: FEMA DR-4169-OR Hazard Mitigation Grant Program
Flash Flood Warning System, City of Mitchell, Wheeler County
NHPA Section 106 Consultation Request

Dear Chairman Crawford:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund the City of Mitchell (Applicant), through the Oregon Office of Emergency Management (OEM), for the installation of a flash flood warning system (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) through the Presidentially-declared disaster FEMA-4169-DR-OR. The proposed Undertaking is being reviewed pursuant to Section 106 of the National Historic Preservation Act.

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Sincerely,

Mark G. Eberlein
Regional Environmental Officer

Enclosures

cc: Carey Miller, THPO, Confederated Tribes of the Umatilla Reservation (via email)

U.S. Department of Homeland Security
FEMA Region X
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

August 20, 2015

Honorable Eugene Green, Jr., Chairman
Confederated Tribes of the Warm Springs
1233 Veterans Street
Warm Springs, Oregon 97761

Re: FEMA DR-4169-OR Hazard Mitigation Grant Program
Flash Flood Warning System, City of Mitchell, Wheeler County
NHPA Section 106 Consultation Request

Dear Chairman Green:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund the City of Mitchell (Applicant), through the Oregon Office of Emergency Management (OEM), for the installation of a flash flood warning system (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) through the Presidentially-declared disaster FEMA-4169-DR-OR. The proposed Undertaking is being reviewed pursuant to Section 106 of the National Historic Preservation Act.

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Sincerely,

Mark G. Eberlein
Regional Environmental Officer

Enclosures

cc: Robert Brunoe, THPO, Confederated Tribes of the Warm Springs (via email)
Sally Bird, Cultural Recourse Manager, Confederate Tribes of the Warm Springs (via email)
Dennis Sigrist, OEM (via email)

Figure 1: Ochoco National Forest Precipitation Gauge Location

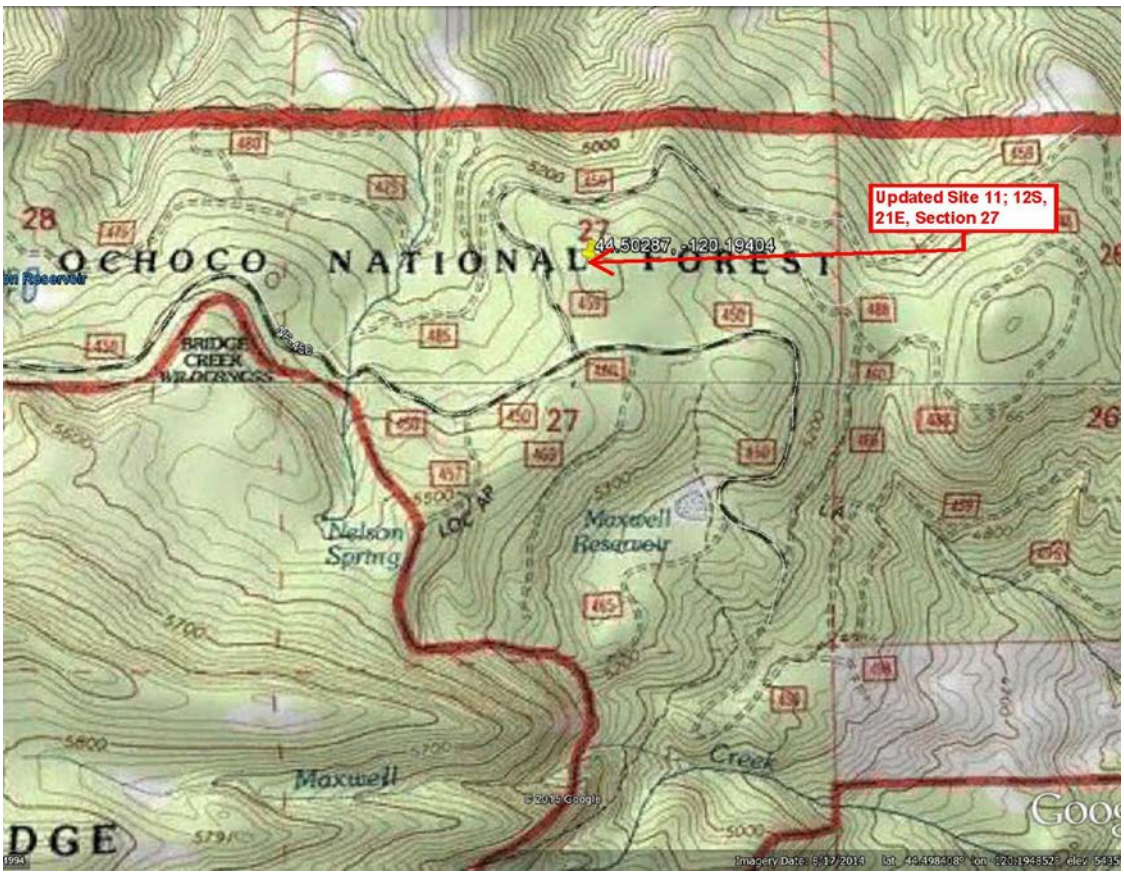

Figure 2: Ochoco National Forest Precipitation Gauge Location