Worksheet
Determination of NEPA Adequacy (DNA)

U.S Department of the Interior, Bureau of Land Management

A. Background

BLM Office: Prineville District Office **NEPA Log #:** DOI-BLM-OR-P040-2013-0012-DNA
Location: Camp Creek – upper gabion –5 air miles southwest of Paulina, Oregon.
Proposed Action Title: Camp Creek Gabion Removal and Restoration
Description of the Proposed Action:

The proposed action is to remove and restore the upper gabion (a dam made out of cages of rock that was installed to aggrade than channel upstream from the structure) on Camp Creek that is currently failing due to high flows in spring of 2012 which resulted in undercutting of the structure. During the summer of 2013, the gabion will be completely removed from the floodplain and channel and the channel will be stabilized in order to prevent upstream degradation lowering the channel down to the level below the gabion in a series of small drops. Four cross vanes will be constructed to stabilize the stream channel upstream of the gabion's location. Cross vanes v-shaped rock structures with the point pointed upstream that are used in stream restoration work to help stabilize the stream bed while directing flow towards the middle of the channel. The rock structures will consist of a 0.5 foot drop through the deepest part of the channel and be spaced approximately 35 feet apart. A channel slope of 1.5%, comparable to the channel slope downstream of the gabion, will be constructed between the structures. Prior to construction, a temporary coffer dam will be constructed upstream of the project area and the stream flow will be pumped around the work area to downstream of the project. This will enable the work to be performed in the dry. Oregon spotted frogs are also present at the site and will be captured and relocated before work commences.

The vanes will be constructed utilizing large, 1 to 4 cubic foot angular rock placed in a v-formation with the apex oriented up-stream. The apex of the vane will be flush with the upstream elevation of the channel and will have a drop of 6 inches. The arms will rise at approximately an 8% slope until they are flush with the bankfull elevation. This will help to redirect flow towards the middle of the channel and help prevent lateral and bank erosion. The vane will also utilize a layer of geotextile fabric along the upstream end, buried beneath the surface. This will help to prevent water from flowing through the structure and undermining its integrity.

At each location where the cross vane encounters the floodplain, a rock sill will be installed just below the surface of the valley and will extend a minimum distance of 8 feet into the terrace wall. The sill will be constructed of rock and cobble and will be two feet deep and two feet

wide. It will be wrapped in a layer of geotextile fabric to prevent over bank flows from eroding into the floodplain and thus bypassing the rock vanes.

A new channel will need to be constructed from about 30 feet downstream of the gabion to the upper most cross vane. Because of the scour pool located just downstream of the gabion, some work will need to be done to restore the channel through this area. The channel will be designed to have a bankfull depth of 5 inches and a bankfull width of 4 feet. Bankfull dimensions describe conditions where the water completely fills the stream channel and is generally associated with a flow with a recurrence interval of 1.5 to 2 years. Once complete, coir fiber netting will be staked down over disturbed areas within the floodplain to add roughness and reduce erosion during any possible overbank flows before vegetation can become established. Willows will also be planted along the disturbed sites the following fall or spring, depending and environmental factors.

An emergency CX, located at the Prineville BLM's website at http://www.blm.gov/or/districts/prineville/plans/index.php?display=Prineville , was required this December in order to perform maintenance necessary to stabilize the structure through the winter and spring. It was likely that the headcut that had formed due to the undercutting of the gabion would have worked its way upstream during periods of high flow, degrading the system above the gabion. The gabion was mended by placing gravel and rock, along with a layer of geo-textile fabric, in areas of undercutting while armoring the eroding area and redirecting flow back over the top of the gabion.

B. Land Use Plan Conformance

Land Use Plan Name: Brothers/LaPine Resource Management Plan.
Date approved (ROD): July 1989

The proposed action is in conformance with the above plan, even though it is not specifically provided for, because it is clearly consistent with the following land use plan decisions, objectives, terms, or conditions:

"Stream riparian areas . . . . will continue to be protected and managed to provide full vegetative potential" (p. 98)

C. Identify applicable National Environmental Policy Act (NEPA) documents and related documents that cover the proposed action

The following NEPA documents cover the proposed action:

Headcut Stabilization EA –DOI-BLM-OR-P000-2011-0024-EA - January 2012

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

The proposed action is a feature of the selected alternative within the Headcut Stabilization EA and is located within the same analysis area.

"A second method of addressing stream degradation may be the construction of log or rock weirs (Cross vanes). *Rock and log weirs are very low channel spanning structures that are often used to stabilize streambeds and halt channel incision."* (Headcut EA, p. 6)

"The project area for this EA encompasses all BLM managed stream corridors within the Prineville District." (Headcut EA, p. 13)

A complete list of all project design features that will be employed for this project can be seen in the Headcut Stabilization EA (p. 8-12)

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?

The ranges of alternatives in the existing EA are still relevant to current proposed project. During the timeframe between the completion of the Headcut Stabilization EA and this document, no new environmental concerns, interests or resource values have surfaced that would substantially change the alternatives analyzed within the existing NEPA. The range of alternatives analyzed remains valid.

3. Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessment, recent endangered species listings, updated lists of BLM

sensitive species)? Can you reasonably conclude that all new information and new circumstances would not substantially change the analysis of the new proposed action?

The existing analysis was completed in January of 2012 and is still relevant to this project. During the timeframe between the completion of the Headcut Stabilization EA and this document, no new information or circumstances have occurred that would substantially change the analysis of the current proposed action.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document(s)?

Yes, the effects from implementation of the new proposed project are similar to those analyzed in the Headcut Stabilization EA. These include:

"During construction activities, some bank and bed excavation may be necessary in order to key stabilization structures into the landscape and greatly reduce the probability of failure. These actions would likely result in increased sediment during construction and possibly immediately following the completion of the project." (Headcut EA, p. 17)

and

"Disturbed lands would also be more susceptible to erosion during high flows after project implementation until riparian vegetation can become reestablished."(Headcut EA, p.17)

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes, the public involvement and interagency review that was incorporated into the development of the Headcut Stabilization EA is adequate for this new project. The BLM consulted with the public and other agencies in April of 2011 prior to the development of the EA and again in November of 2011 following the completion of the EA.

E. Persons/Agencies/BLM Staff consulted

Name	Title	Resource/Agency represented
Mike McKay	Hydrologist	Hydrology
Jeff Moss	Fish Biologist	Fisheries
Elise Brown	Natural Resource Specialist	Wildlife/Botany
Ryan Griffin	Archeological Technician	Cultural Resources.

Note: Refer to the EA for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents.

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

Signature

Responsible official: H. F. "Chip" Faver _____ 7-9-13

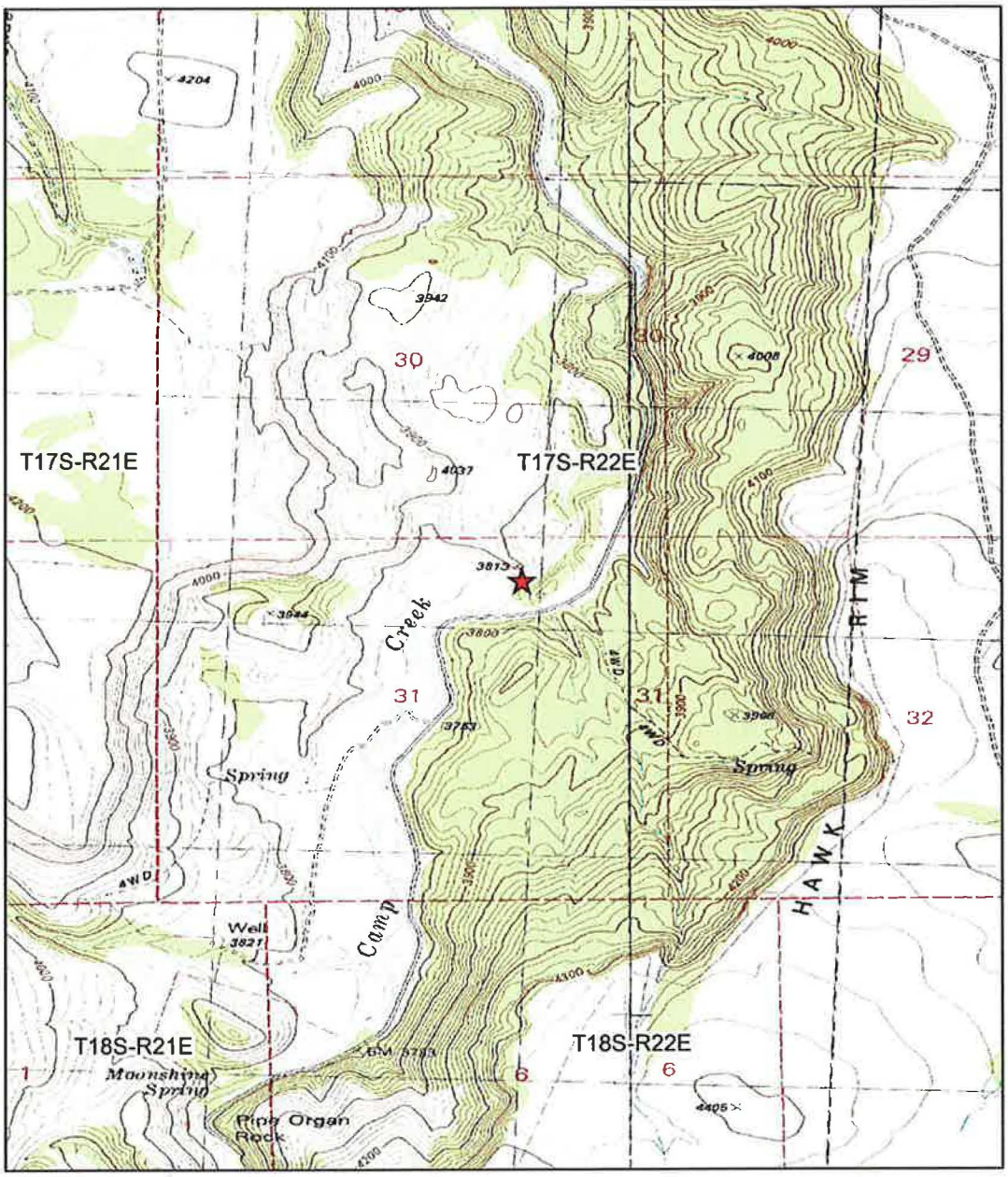
H. F. "Chip" Faver — Date

CORA Field Manager

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision.

Contact Person

For additional information concerning this review, contact: Mike McKay, Prineville Field Office, 3050 NE 3rd Street, Prineville, OR 97754, telephone (541) 416-6774, mmckay@blm.gov.



Camp Creek Gabion Removal Project Location

★ Gabion

No warranty is made by the Bureau of Land Management as to the accuracy, reliability or completeness of this data for individual or aggregate use with other data.

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