

Finding of No Significant Impact

Streamgage Installation at Rainbow Spring in Red Rock Canyon National Conservation Area

Environmental Assessment DOI-BLM-NV-S020-2014-0015-EA

Based on the analysis of potential environmental impacts (per Environmental Assessment [EA] DOI-BLM-NV-S020-2014-0015-EA), I have determined that installing a streamgage at Rainbow Spring in Red Rock Canyon National Conservation Area (NCA) with the mitigation measures described below will not have any significant impacts on the environment and an environmental impact statement is not required.

In addition, I have determined that the proposed action is in conformance with the Red Rock Canyon NCA Resource Management Plan (RMP). This finding and conclusion is based on my consideration of the Council Environmental Quality (CEQ) criteria for significance (40 CFR 1508.27) with regard to the context and intensity of the effects described in the EA.

Context: Rainbow Spring is located in the Red Rock Canyon NCA. The spring source itself is located just inside the Rainbow Mountain Wilderness. The site for the streamgage that will measure the discharge from Rainbow Spring is located downstream from the spring source just outside the wilderness. (The location is 634207 m E, 3990808 m N.) A continuous streamgage is desired to quantify streamflow from Rainbow Spring. The streamgage would collect baseline data from Rainbow Spring that can be used to make informed decisions about land management in the area. The total amount of disturbance is less than 0.001 acre. A Bureau of Land Management (BLM) special status species, the Spring Mountain pyrg (*Pyrgulopsis deaconi*) springsnail inhabits this recently restored spring. By monitoring water flow at this spring, BLM can ensure the proper management of this BLM sensitive species.

Intensity: Site establishment will require 3 people and 1-2 pickup trucks, plus one ATV. The trucks and ATV will only be driven and parked on established roads. Site operation and maintenance will require 1 or 2 people driving 1 truck that will be driven and parked on established roads. Quantifying streamflow from Rainbow Spring involves measuring stage by a pressure transducer and manually making discharge measurements until a stage/discharge rating can be computed. Discharge from the spring will be directly measured by flume or volumetric methods. Once the rating is computed, manual discharge measurements will continue to be made to calibrate the rating.

All equipment would be removed when the gage is decommissioned in approximately 2 to 10 years, based on funding and data collection needs. Any anchor bolts installed into bedrock or boulders would be cut sheer with the rock, covered with epoxy, and painted to match the rock when the gage is decommissioned.

1) **Impacts that may be both beneficial and adverse.** The EA considered both the beneficial and adverse impacts of the proposed action. There would be a substantial benefit to the BLM's ability to manage the BLM sensitive species if continuous streamflow data would be available. These continuous discharge measurements would inform BLM resource specialists how effective restoration treatments have been or if there are other factors that may impact or effect the streamflow and consequently the habitat of the Spring Mountain pyrg.

2) **The degree to which the proposed action affects public health and safety** Construction activities may temporarily impact wilderness users. However, impacts would occur on two days for less than 4 hours each. There would be no permanent impacts to public health and safety.

3) **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** The site, located on the Red Rock Canyon NCA, is in relative close proximity to several cultural and historic sites in the area. This action would not have any effects to these sites or other resources in the immediate area. The streamgage would be installed here because it is an ecological critical area, which is in need of monitoring.

4) **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** As the installation is temporary (2 —10 years), it is expected that once the gage is removed, there would not be any lasting effects on the human environment.

5) **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** There would not be unique or unknown risks to the human environment, since safety and conservation measures would be implemented. Little uncertainty exists as the action would be restricted to a small area and the techniques used are based on industry-standard and BLM best management safety practices.

6) **The degree to which to action may establish a precedent for future actions with significant effects or represents a decision in principle about future considerations.** The proposed action would be implemented within existing authorities, regulations and policies and does not establish a precedent for future actions.

7) **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** Under the proposed action, no significant cumulative effects were identified in the EA.

8) **The degree to which the action may adversely effect districts, sites, highways, structures or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural or historic resources.** Under the proposed action, the streamgage would be installed and consequently removed in such a way to maintain the site's integrity as a site eligible for listing in the National Register of Historic Places (NRHP).

9) **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under ESA of 1973.** No potential impact to threatened and/or endangered species is expected to result from the proposed action, as addressed in the EA.

10) **Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.** The Proposed Action is in conformance with the Red Rock Canyon NCA RMP, approved May 20, 2005. The RMP identifies a broad range of management activities that may be implemented under the "principles of multiple-use as required by the Federal Land Policy and Management Act (FLPMA), as well as managing/protecting sites known to be eligible for NRHP nomination.

Avoidance and Minimization Measures:

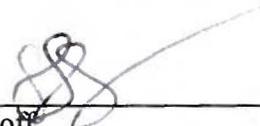
The following list identifies avoidance and minimization measures incorporated into the project design.

- Should any subsurface cultural remains be identified during the installation, the RRC/Sloan FO Archaeologist would be contacted of the discovery within 48 hours.
- All project actions must conform to applicable Best Management Practices (BMPs) and standard BLM weed stipulations.
- To prevent direct impacts to migratory birds, habitat-altering projects or portions of projects should be scheduled outside bird breeding season. In upland desert habitats and ephemeral washes containing upland bird species, the season generally occurs between February 15th and August 31st.
- If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area (size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active and birds have fledged. As the above dates are a general guideline, if active nest are observed outside this range they are to be avoided as described above.
- If equipment has been previously used for work in another spring, decontaminate all equipment before and after use with a 10% bleach solution or 409 solution which may harbor foreign chemical or biological matter following established protocols.
- Minimize physical disturbance to the waterway, banks, and surrounding vegetation. Use only existing travel routes and travel through open upland areas whenever possible.
- Provide education and guidance to USGS personnel on-site about springsnails to minimize any adverse impacts from work activities. Any in-stream work should be minimized to the extent practicable. Any need to enter the stream would be cleared of springsnails in the immediate area prior to entering the spring.
- If sedimentation is expected from work in and near stream, sediment, runoff, and erosion control measures would be installed before starting work (e.g., temporary silt fences immediately below work area). These would be cleared of any rocks and/or vegetation that may contain springsnails.
- If needed, salvage springsnails from the immediate area of disturbance where the streamgage is to be placed. Collect substrates with springsnails (e.g., vegetation, rocks) and place these in a container with water collected from the spring. Move salvaged springsnails and all vegetation and rocks to like habitat with similar water quality (e.g. temperature, pH, turbidity, dissolved oxygen, and free of chemical contaminants), substrates, depth, and flow to prevent or limit mortality.
- Restore all areas disturbed as a result of streamgage installation.
- The above BMPs would be followed during all monitoring activities of the streamgage.
- The BLM shall ensure that no project components are installed within the boundaries of the wilderness. If questions regarding the wilderness boundary arise, the proponent shall contact the BLM Wilderness Specialist immediately.

- The BLM shall ensure that no uses which are prohibited within wilderness (i.e., motorized equipment [power drills, generators] or mechanical transport and equipment [wheelbarrows, hand drills, carts]) cross into the wilderness during installation activities.

Signatures:

Recommended by:



10-8-14

Boris Poff
District Hydrologist

[Date]

Approved by:



10/9/14

Mark Spencer
Red Rock / Sloan Field
Manager

[Date]