Proposed Action: Installation of a High Efficiency Sprinkle Irrigation System

Project No.: 1992-026-01

Project Manager: Tracy Hauser

Location: Grande Ronde Basin, Union County, Oregon

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B5.1 – Actions to Conserve Energy or Water

Description of the Proposed Action: BPA proposes to fund the Union Soil and Water Conservation District (SWCD) for the installation of a high efficiency sprinkle irrigation system known as a “wheel line irrigation system” that services approximately 65 acres of the upland property on the Hefner Ranch. Currently the property is flood irrigated that has proven over the years to be both inefficient and has resulted in water quality issues from flood water returns to the main channel of the irrigation ditch on the property. The conversion from flood to sprinkle irrigation for this property would be more efficient at distributing water over the entire acreage, as well as reducing water consumption by 40 to 60 percent.

Methods used to construct the project would consist of utilizing existing ditch lines to complete the work if possible. An approximate 10-foot-long ditch line would be dug at a right angle using a backhoe from the existing ditch network with an approximate width of 1.5 feet to the pump pad. A 100-square-foot area would be excavated within existing uplands to create the pump pad. The pipe to be installed through the hay field would have a maximum depth of 3 feet. All other equipment for the wheel line system would be installed above ground and would have less impact than the current flood irrigation system in place. Total ground disturbance for the construction of the proposed wheel line irrigation system would equate to approximately 0.5 acres.


Findings: In accordance with Section 1021.410(b) of the Department of Energy’s (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

(1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
(2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
(3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.
/s/ Travis D. Kessler
Travis D. Kessler
Contract Environmental Protection Specialist
Salient CRGT, Inc.

Reviewed by:

/s/ Chad Hamel
Chad Hamel
Supervisory Environmental Protection Specialist

Concur:

/s/ Katey Grange      Date: March 5, 2020
Katey Grange
NEPA Compliance Officer

Attachment(s): Environmental Checklist
Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

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**Project Site Description**

The proposed project would occur on the Hefner Ranch within the Grande Ronde Basin in Union County, Oregon. The project area contains flat topography in agricultural land use and has hay and other cover crops. The nearest waterbody is Catherine Creek, which lies approximately 250 feet south of the project area. There are no wetlands present within the project area.

**Evaluation of Potential Impacts to Environmental Resources**

<table>
<thead>
<tr>
<th>Environmental Resource Impacts</th>
<th>No Potential for Significance</th>
<th>No Potential for Significance, with Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Historic and Cultural Resources</td>
<td>✔</td>
<td>☐</td>
</tr>
<tr>
<td><strong>Explanation:</strong> BPA consulted with the Oregon State Historic Preservation Office (SHPO), Confederated Tribes of the Umatilla Indian Reservation (CTUIR), and the Nez Perce Tribe with a no historic properties affected determination. SHPO concurrence was received on June 3, 2019 (SHPO Case No. 18-1486).</td>
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<tr>
<td>2. Geology and Soils</td>
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<tr>
<td><strong>Explanation:</strong> Ground disturbing activities would temporarily disturb top soil in the excavation work areas. Although the project area is generally flat and would not carry high velocity erosive flows, Best Management Practices (BMPs) would be implemented to prevent soils from eroding outside of the work site. The project site is located in a historically farmed area where previous impacts have disturbed the soils.</td>
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<tr>
<td>3. Plants (including Federal/state special-status species and habitats)</td>
<td>✔</td>
<td>☐</td>
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<tr>
<td><strong>Explanation:</strong> There are no ESA-listed or sensitive plant species known to exist on the site. Any vegetative impacts that would occur on the site would be temporary and reseeded with an irrigated pasture mixture following the installation of the water line. The mixture consists of orchardgrass, tall fescue, perennial ryegrass, meadow brome and white clover.</td>
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<tr>
<td>4. Wildlife (including Federal/state special-status species and habitats)</td>
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</tr>
<tr>
<td><strong>Explanation:</strong> The minor ground disturbance that would occur from the installation of the sprinkler system would not affect ESA listed wildlife or wildlife habitat. The southern tip of the site is within 250 feet of the Catherine Creek riparian area, which contains a mixture of forested and scrub-shrub vegetation and variety of fish and wildlife species. However, there are no known nesting trees or priority wildlife habitat that would affect ESA listed species. Construction activities would likely create minor noise impacts to the riparian area of Catherine Creek closest to the site. Wildlife near this area would temporarily avoid the elevated noises, but would return to the area once construction activities have ceased.</td>
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</tr>
</tbody>
</table>
5. **Water Bodies, Floodplains, and Fish**
   (including Federal/state special-status species, ESUs, and habitats)
   
   **Explanation:** There would be no impact to adjacent waterbodies or floodplains with the temporary ground disturbance proposed for the water line. Although Catherine Creek lies approximately 250 feet to the south of the southern tip of the project area, there would be no effect to the creek or its surrounding floodplain.

6. **Wetlands**
   
   **Explanation:** Minor ground disturbance would occur on uplands within previously disturbed areas in the footprint of the existing irrigation system and would not impact any wetlands.

7. **Groundwater and Aquifers**
   
   **Explanation:** The minor ground disturbance that would occur from the installation of the sprinkler system would not occur at a depth that would affect groundwater or aquifers.

8. **Land Use and Specially-Designated Areas**
   
   **Explanation:** The minor ground disturbing activities proposed would not affect land use and specially-designated areas. Access to the project site is on existing easements and all activities are compatible with local land uses.

9. **Visual Quality**
   
   **Explanation:** The proposed work would have minor effect on visual quality due to the construction of the wheel line irrigation system. Any change to the view shed would be minor and would not drastically change the views across the site.

10. **Air Quality**
    
    **Explanation:** A temporary increase in emissions from vehicles accessing the field site would be very minor and short term during construction, but would resume to normal conditions immediately once the project is completed.

11. **Noise**
    
    **Explanation:** The proposed work would not result in an increase in ambient noise. Any noise emitted from construction equipment would be short term and temporary and would cease following project completion.

12. **Human Health and Safety**
    
    **Explanation:** The proposed work is not considered hazardous nor does it result in any health or safety risks to the general public.

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**Evaluation of Other Integral Elements**

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

- Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.
  
  **Explanation, if necessary:**

- Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.
  
  **Explanation, if necessary:**
Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

**Explanation, if necessary:**

- Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

**Explanation, if necessary:**

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**Landowner Notification, Involvement, or Coordination**

**Description:** The sponsor (SWCD) has worked with the underlying land owner during project planning and would notify the landowner of the construction schedule prior to implementation.

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Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

**Signed:** /s/ **Travis D. Kessler**  
**Date:** **March 5, 2020**

**Travis D. Kessler, ECF**  
Contract Environmental Protection Specialist  
Salient CRGT, Inc.