

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

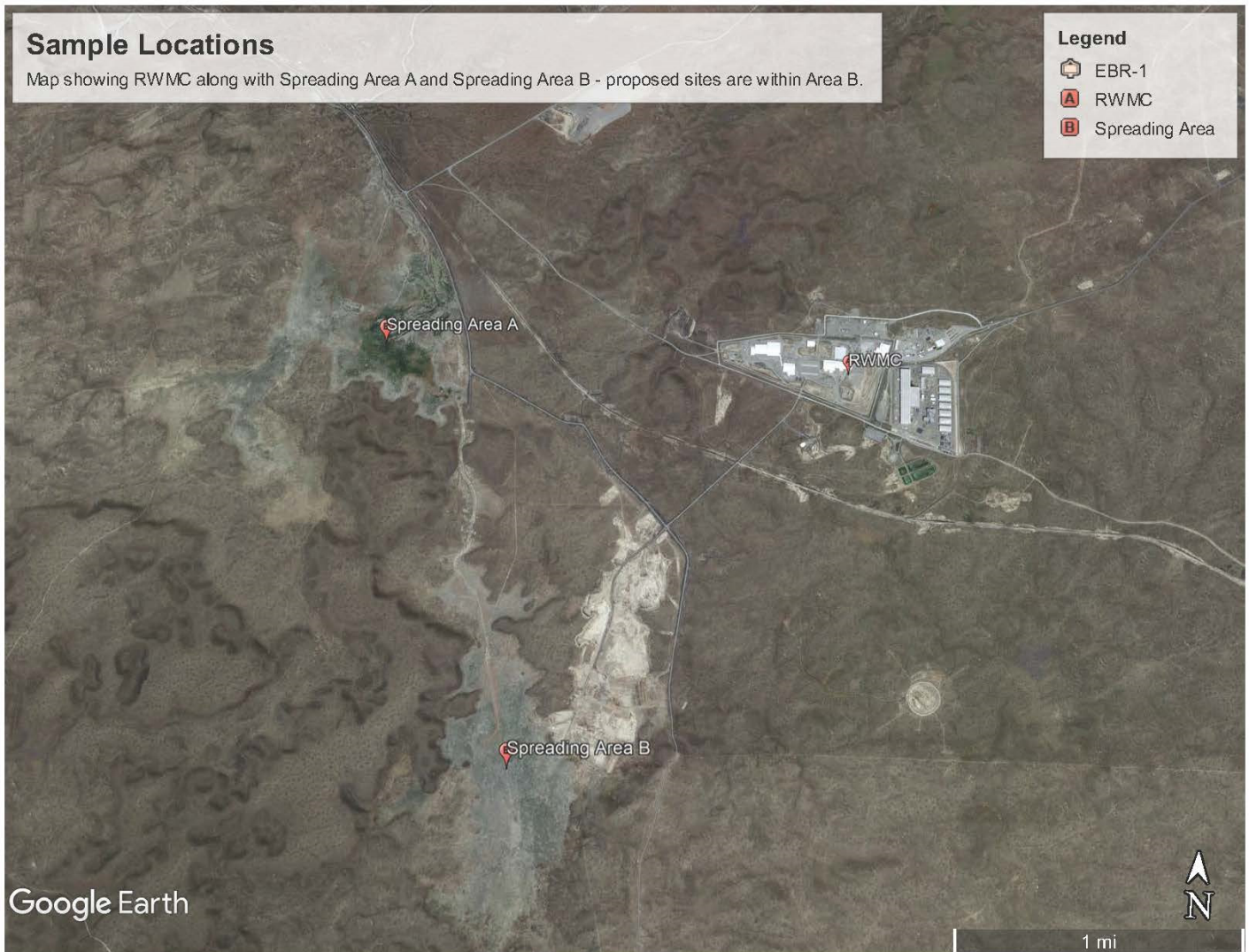
**SECTION A. Project Title:** United States Geological Survey (USGS) Flood Study

**SECTION B. Project Description and Purpose:**

Past flooding events at the INL Site have created large sedimentary interbeds in wells that affect groundwater flow in the Eastern Snake River Plain Aquifer. The proposed action examines past sedimentary deposits in well cores in the southwest corner of the INL Site and surficial material deposits in the INL Spreading Areas to evaluate the relationship between historic flooding deposition and glacial outburst flows at the INL Site.

The proposal requires excavation (by hand with a shovel) of soil to a depth of 5 feet and about 5 feet in diameter at the INL Spreading Areas to examine sediment structures for evidence of deposition from recent glacial outwash. The project then compares the surficial sediment structures from the Spreading Areas with subsurface structures identified in cores from wells at the INL in the southwestern corner of the INL. Excavation is proposed in Spreading Area B at the INL (See Figure 1) in already trenched areas if possible.

Figure 1. Location of the INL Spreading Areas at the INL Site.



**SECTION C. Environmental Aspects or Potential Sources of Impact:**

### Air Emissions

Minor amounts of fugitive dust will be generated while traveling to and from excavation sites.

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### Discharging to Surface-, Storm-, or Ground Water

The proposed project is in an area where INL diverts water from the Big Lost River for flood control. The project would not affect the floodplain in the spreading area, but flood waters could impact the project. Project personnel need to be aware of the potential for flooding during the spring or any time there is a potential to divert the Big Lost River into the spreading area.

### Disturbing Cultural or Biological Resources

The proposed action has the potential to disturb biological and cultural resources.

### Generating and Managing Waste

The proposed action would generate common office trash.

### Using, Reusing, and Conserving Natural Resources

Fuel will be used to access and return from sites. Paper products will be used for note-taking.

**SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:** Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

**References:** 10 CFR 1021, Appendix B, B3.1 "Site characterization and environmental monitoring"

**Justification:** Project activities are consistent with 10 CFR 1021, Appendix B, B3.1 "Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and Resource Conservation and Recovery Act (RCRA). (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to:

- a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;
- b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);
- c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;
- d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment;
- e) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);
- f) Sampling and characterization of water effluents, air emissions, or solid waste streams;
- g) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);
- h) Sampling of flora or fauna; and

Archaeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)  Yes  No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 10/11/2018