SECTION A. Project Title: 2020 Supplemental Environmental Projects

SECTION B. Project Description:

There are 5 projects proposed as Supplemental Environmental Projects (SEPs) to settle the penalty for DOE-ID in connection with the settlement of an enforcement action taken by the Idaho Department of Environmental Quality (DEQ) for alleged violations of requirements of the Hazardous Waste Management Act (HWMA).

The SEPs are completed through agreement between DOE and the recipients to perform the work scope and provide progress reports to DOE. None of the projects take place on the Idaho National Laboratory (INL) and all are performed by the recipients or entities they contract with to complete the work.

SEP Project Descriptions:

1. The Upper Snake Region Riparian and Wetland Restoration Project is proposed as an SEP. This SEP contains five tasks related to water quality and wetland restoration work in Clark, Custer, and Jefferson Counties in Eastern Idaho. The work will be performed by the Idaho Department of Fish and Game (IDFG).

This project will reconstruct several berms, amend soils, create more micro topography, basin reconstruction, and revegetate areas on the Marty Tract of Mud Lake Wildlife Management Area in Jefferson County. Berm removal will take place with heavy duty equipment. Berms will be removed. Berms will then be graded back into the surrounding areas to open up and create more and larger seasonal wetlands with affiliate wet meadow habitat. Amending the soils will be done with bentonite and organic matter. When the original construction was completed the thin topsoil layer was not protected and was mixed in with the other dirt used when pushing up the berms. Bentonite will be added to the cells to increase water holding capacity. The organic matter will be added to the leveled off areas to increase productivity of the soil to facilitate vegetation growth in the wetland. Revegetation will occur to return disturbed areas and begin to restore the area to its seasonal wetland wet meadow potential.

Fencing will be constructed around Bear Canyon Spring areas to exclude livestock grazing and protect riparian areas found in the Little Lost Valley, Idaho. This project would create new fencing structures around the spring. This fencing project will aid the ability to return the springs to proper functioning condition by restricting livestock access. The old enclosure would be removed and replaced with a larger enclosure, from 0.47 to 0.8 acres. Fence wire would be marked to alert wildlife of the hazard. Construction activities would be conducted outside of the nesting season (April 1 to June 30) to minimize the potential impacts to migratory birds and/or special status species.

Fencing will be constructed to manage livestock grazing and protect riparian areas found by Beaver Creek near Spencer Idaho almost to the Montana state line. Construction would be on the private property line. Currently there is an existing perimeter fence which includes approximately 73 acres of the Bureau of Land Management (BLM)-administered lands in with private property. The proposed fence(s) would tie into the existing fence and effectively exclude the BLM land from the surrounding private land, thereby eliminating grazing from occurring in those areas. Fence wire would be marked to alert wildlife of the hazard. Construction activities would be conducted outside of the nesting season (April 1 to June 30) to minimize the potential impacts to migratory birds and/or special status species.

2. Funding will be provided to the Eastern Idaho Public Health District and the Southeastern Idaho Public Health District for use by the health districts in response to COVID-19 to purchase medical supplies and equipment, including personal protective equipment, and to conduct virus testing and contract tracing related to COVID-19. If a vaccine becomes available before the funding has been expended, it may also be used to purchase the vaccine and conduct vaccination clinics.

3. The Crooked Creek and Silver Creek Tributaries Restoration Project is proposed as an SEP to improve water quality primarily through riparian restoration. This SEP contains two subprojects related to water quality and riparian restoration work in Blaine and Clark Counties, north and west of the INL site. Work will be performed by The Nature Conservancy (TNC).

The Crooked Creek Watershed Restoration Project will install fencing in riparian areas and around springs, and provide off site watering for cattle to improve water quality and protect vegetation, construct structures to slow ephemeral streams to reduce erosion during spring runoff, and use "beaver mimicry restoration techniques" to restore parts of Crooked Creek to ecologically functioning conditions.

Project objectives will be to restore riparian, wet meadow and upland habitats to ecologically functioning condition using beaver assisted and beaver mimicry restoration techniques, commonly referred to as beaver dam analogs (BDA) and beaver mimicry strategies (BMS). The project area encompasses approximately 3 miles of Crooked Creek and the potential to increase habitat complexity on 120 acres of the riparian and flood prone zone. Multiple series of BDA complexes will be constructed as a collection of structures designed to work together. TNC anticipates constructing approximately 80 structures within the project area. The project will consist of multiple styles of BDA, but primarily focusing on post and wicker weave techniques.

The beaver mimicry aspect of this project will help enhance flow and lower stream temperatures directly and indirectly by restoring channel processes and facilitating natural beaver re-colonization. A variety of site-appropriate BMS, including cross-channel dams and partial dams will be constructed of deformable materials such as willow, sod, gravel and woody debris. BMSs will enhance sediment and water storage, encourage willow growth, and restore dynamic processes. Healthy riparian vegetation provides streamside shade, lowering water temperatures, enhancing groundwater storage, as well as providing important habitat for sage grouse.

TNC proposes to construct riparian fencing along portions of Crooked Creek and provide off site watering for cattle. There are small sections of fencing that requires upgrades to meet wildlife friendly standards. Wildlife fencing is designed to allow pronghorn and elk to successfully migrate while excluding cattle from streambanks. Improvements to riparian fencing would promote an increase in woody vegetation, increasing stream function and lower stream temperatures.

TNC is working with the United States Forest Service (USFS) and BLM to improve springs located in the Crooked Creek watershed. There are several springs located on public lands that require exclusionary fencing. Excluding cattle from the spring heads would improve spring function and ultimately disperse cattle throughout the watershed. Other improvements include replacing old defunct water lines and installing new water troughs to disperse cattle away from the springs.

TNC proposes to restore ephemeral streams. There are multiple ephemeral streams located on the private and public lands. Over time these ephemeral streams have been degraded and are now functioning as gullies transporting sediment into Crooked Creek and Myers Creek. Restoration techniques include implementing "Zeedyk" structures. These hand-built structures are designed to slow down and spread out water that is running off the landscape and causing headcuts and channel incisions. By constructing these Zeedyk structures in strategic places, they will capture sediment, increase soil moisture, promote vegetation, raise the water table, and reconnect streams to the floodplain. Creating these wet mesic areas are extremely important for sage grouse at different life stages, as well as other wildlife.

The Silver Creek Tributaries Restoration Project will restore about three quarters of a mile of Silver creek tributaries, upper Stalker Creek and lower Loving Creek, including:

- Increasing stream channel sinuosity where reaches have been straightened and confined using berms, dikes and dams. This will reconnect the channel with its floodplain and improve channel velocities.
- Reducing channel widths to replicate more natural spring-fed creek channel conditions.
- Increase instream habitat diversity, creating pools and channels.
- Active and passive riparian restoration through native vegetation planting and protection of suitable riparian buffer widths.

4. The City of Ammon Groundwater Conservation and Public Education Project is proposed as an SEP to provide water conservation and pollution prevention public education at a city water tank facility and further the city's efforts to conserve groundwater through conversion to use of untreated surface water for irrigation, and planting of drought tolerant plants. The project purpose is to educate and encourage water conservation, and to increase awareness of potential stormwater impacts and good stormwater and residential landscaping pollution prevention practices.

The city proposes to develop the land surrounding a municipal water tank and well into a publicly accessible park with a nature walk, landscaping with drought tolerant plants, water conservation and protection educational features, demonstration planters for waterwise irrigation, and a kiosk offering information on how the drinking water supply works from aquifer to tap.

The city proposes to connect two city parks to canal (surface) water irrigation to reduce the demand on the drinking water system that is supplied from groundwater. The task would install piping and pumps to provide water from canals within one half mile of the parks.

5. The Raft River Basin Hydrogeologic Investigation Project is proposed as an SEP to better characterize the hydrogeology of the Raft River Basin and its hydraulic connection with the Eastern Snake Plain Aquifer (ESPA). Idaho Water Resources Board (IDWR) goals are for a three-year multi-agency hydrogeologic investigation to; collect data from the aquifer utilized for water supply; update the conceptual hydrogeologic framework and water budget; develop an

understanding of surface water and groundwater interactions, and define recharge and discharge mechanisms. DOE is proposing to fund two of six main tasks proposed with the focus on well and borehole drilling and water quality monitoring. The groundwater monitoring networks in the ESPA and corresponding tributary basins would be enhanced through the addition of 12 new monitoring wells, and upgrades to existing wells. IDWR will deploy data loggers in new wells to automate daily water level collection. Water quality samples will be collected from newly drilled wells.

SECTION C. Environmental Aspects / Potential Sources of Impact

The proposal includes using heavy equipment for ground disturbance, with disturbed soils to be revegetated. Fencing will be built to protect and improve water quality and wildlife habitat. Fencing will be marked to alert wildlife of the hazard. Construction activities will be conducted outside of migratory bird nesting season to minimize the potential impacts to migratory birds and/or special status species.

TNC will be required to attain permits through the Idaho Department of Waste Resources (IDWR) for stream alteration. The application for the permit requires approval from IDWR, Army Corps of Engineers, and Idaho Department of Lands.

The proposal includes installation and improvement of groundwater monitoring wells, which will generate limited amounts of used personal protective equipment, miscellaneous industrial waste, and discharge of wastewater from the drilling operation to the ground. IDWR has procedures and extensive experience in drilling activities and proper handling of waste.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B1.11 Installation of fencing, including, but not limited to, border marking, that would not have the potential to cause significant impacts on wildlife populations or migration or surface water flow.

B1.13 Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short onsite access roads and rail lines (such as branch and spur lines).

B1.15 Siting, construction or medication, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities, such as activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.4, B6.5, B6.6, and B6.10 of this appendix.

B1.20 Small-scale activities undertaken to protect cultural resources (such as fencing, labeling, and flagging) or to protect, restore, or improve fish and wildlife habitat, fish passage facilities (such as fish ladders and minor diversion channels), or fisheries. Such activities would be conducted in accordance with an existing natural or cultural resource plan, if any.

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

RCRA. (This class of actions excludes activities in aquatic environments.) Specific activities include, but are not limited to: (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 or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells.

B5.5 Construction and subsequent operation of short (generally less than 20 miles in length) pipeline segments conveying materials (such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, oil, produced water, steam, and water) between existing source facilities (such as facilities for use, reuse, transportation, storage, and refining), provided that the pipeline segments are within previously disturbed or developed rights-of-way.

Justification: The activity consists of providing funding to organizations to improve earthen structures, build fencing and pipelines to protect natural resources and improve wildlife habitat, and installation and improvement of groundwater monitoring wells for groundwater quality research and improvement.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on 7/9/2020