

# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

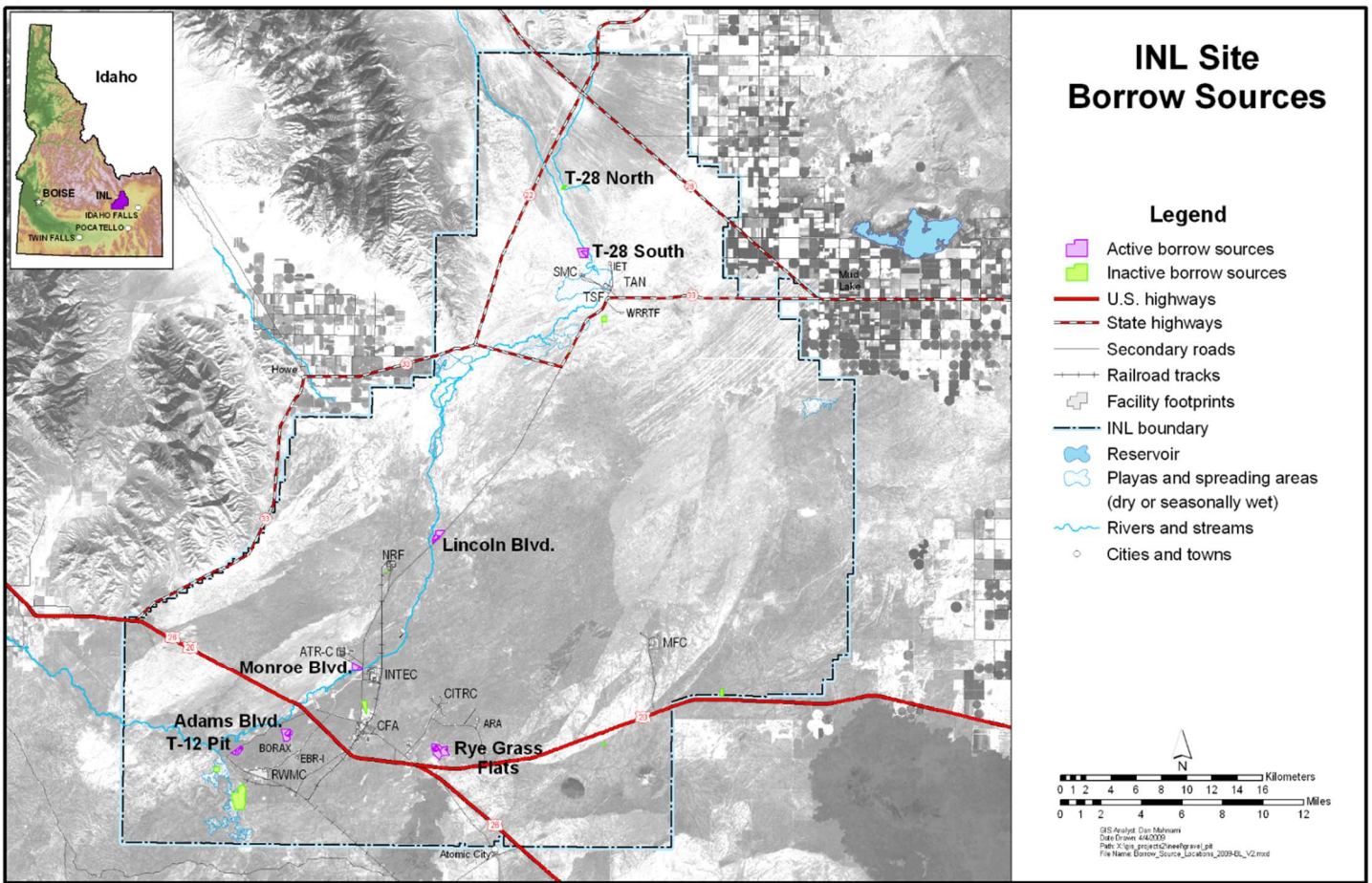
**SECTION A. Project Title:** Idaho National Laboratory Gravel Source and Borrow Pit Operations (Overarching)

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

The proposed action includes using active gravel sources and borrow pits across the Idaho National Laboratory (INL) for construction and operations activities and corrective, preventive, and predictive maintenance-related activities. For example, obtaining gravel from an active pit to maintain a priority 1 (i.e., emergency or evacuation) road, to gravel a parking lot, or to fill in low spots on a priority 3 (wildland fire) road. The INL contains six active gravel/borrow pits that support on-Site maintenance operations, new construction, and environmental restoration and waste management activities. These active gravel/borrow sources are listed below and shown in Figure 1:

- Adams Blvd. Gravel Pit
- Lincoln Blvd. Gravel Pit
- Monroe Blvd. Gravel Pit
- Ryegrass Flats Soil Borrow Pit
- T-12 Gravel Pit
- T-28 South Gravel Pit

Figure 1. Locations of identified borrow sources at the INL Site.



These borrow sources are managed by Sitewide Facility & Operations (SFO) in accordance with various regulations governing air quality, water quality, biological and cultural resources, and industrial safety. This EC covers operating and expanding the six active gravel sources and borrow pits within approved footprints depicted in Figures 2-7. Boundaries are approximate. Projects must work with the SFO to establish actual working boundaries. Table 1 lists the approved acreage for each gravel/borrow pit.

Table 1. Approved acreage for INL gravel/borrow pits.

Gravel/Borrow Pits	Approved Footprint (in acres)
Adams Boulevard (Sand/Gravel)	150.1
Lincoln Boulevard (Sand/Gravel/Topsoil)	104.8

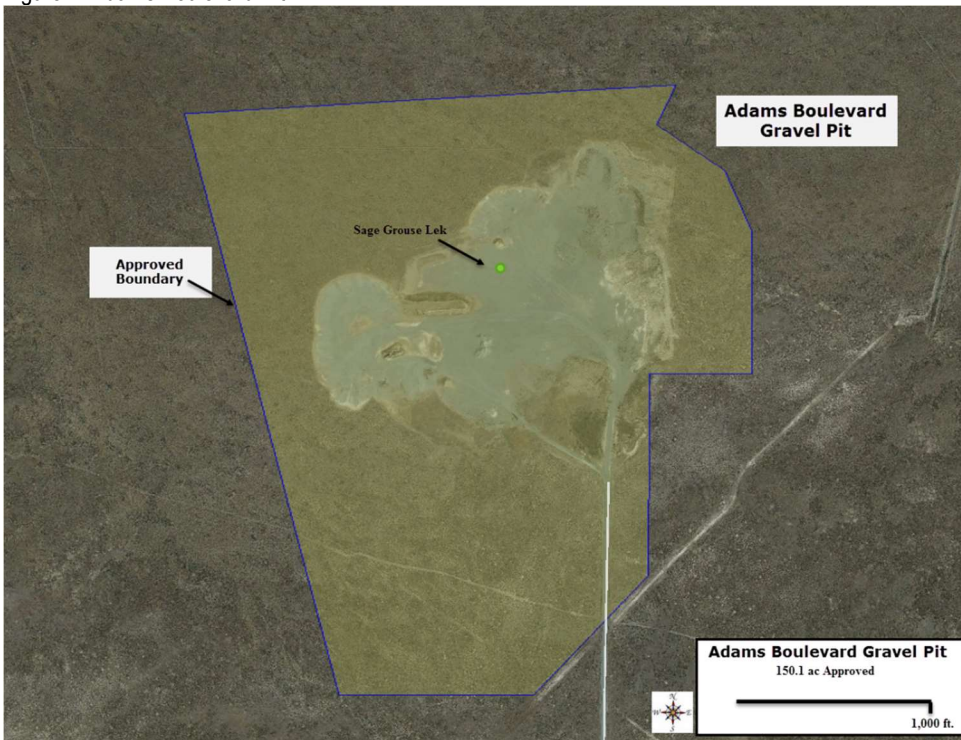
# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

Monroe Boulevard (Sand/Gravel)	80.3
Rye Grass Flats (Silt/Clay)	253.4
T-12 (Sand/Gravel)	74.8
T-28 South (Sand/Gravel)	135.7

### Adams Boulevard Gravel Pit

A sage grouse lek is in the Adams Blvd Gravel Pit. To comply with the 2014 *Candidate Conservation Agreement for Greater Sage-grouse on the Idaho National Laboratory Site*, noise control and time of day and seasonal restrictions limit operations. Specifically, personnel must avoid the pit area before 10am and after 6:30pm from March 15 to May 15.

Figure 2. Adams Boulevard Pit.



### Lincoln Boulevard Gravel Pit

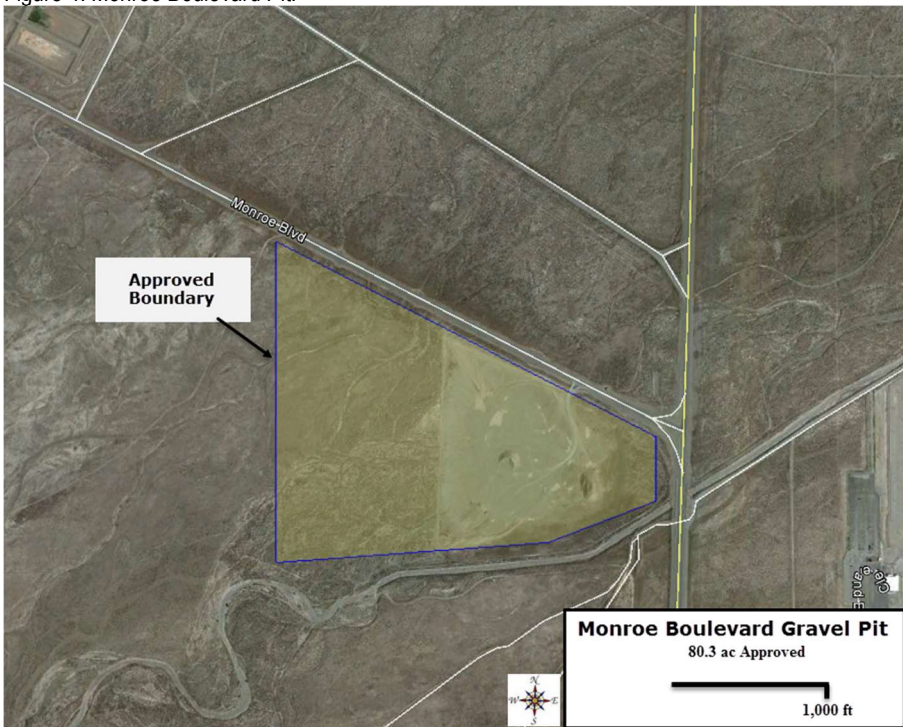
Figure 3. Lincoln Boulevard Gravel Pit.

# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory



## Monroe Boulevard Gravel Pit

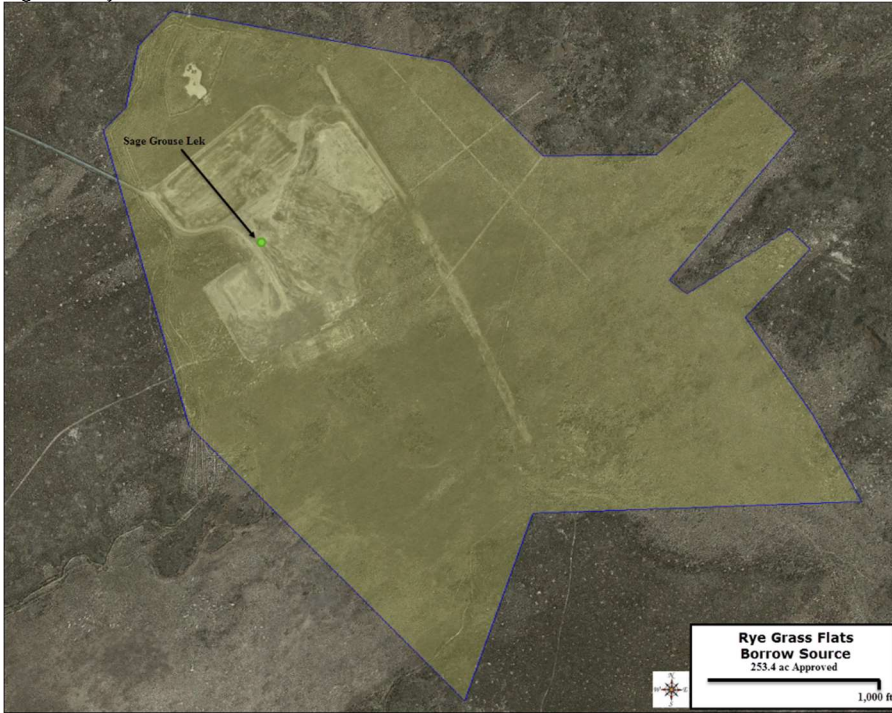
Figure 4. Monroe Boulevard Pit.



## Ryegrass Flats Borrow Pit

A sage grouse lek is in the Ryegrass Flats Borrow Pit. To comply with the 2014 *Candidate Conservation Agreement for Greater Sage-grouse on the Idaho National Laboratory Site*, noise control and time of day and seasonal restrictions limit operations. Specifically, personnel must avoid the pit area before 10am and after 6:30pm from March 15 to May 15. Those requesting to use this borrow pit must reseed the area with an approved mixture of native seeds. Non-native seed is not permitted. Those using this facility must consult with the Environmental Surveillance and Ecological Research (ESER) contractor regarding seed mix, fertilizer, time of seeding, mulch, and future monitoring.

Figure 5. Rye Grass Flats Borrow Source



**T-12 Gravel Pit**

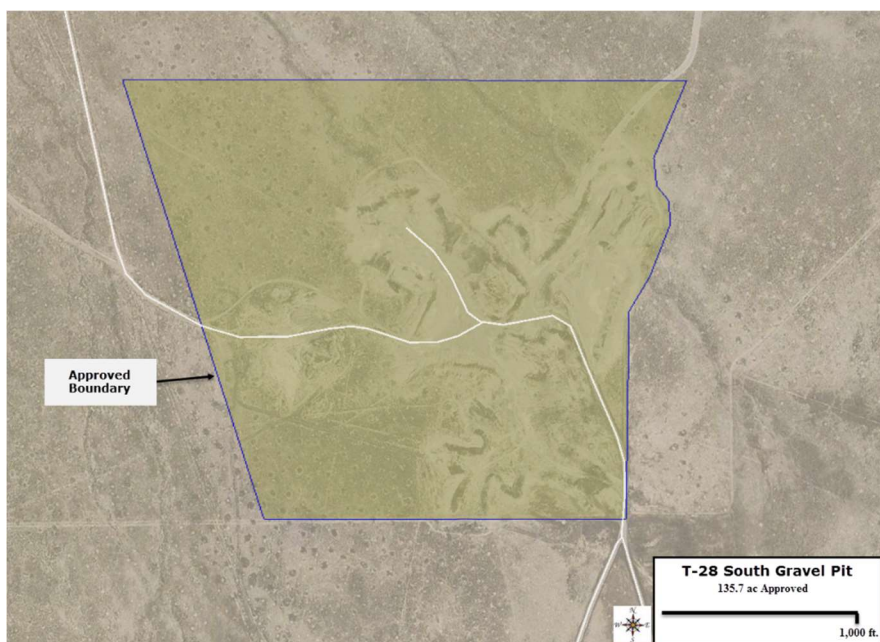
A sage grouse lek is in the T-12 Gravel Pit. To comply with the 2014 *Candidate Conservation Agreement for Greater Sage-grouse on the Idaho National Laboratory Site*, noise control and time of day and seasonal restrictions limit operations. Specifically, personnel must avoid the pit area before 10am and after 6:30pm from March 15 to May 15.

Figure 6. T-12 Gravel Pit.



**T-28 South Gravel Pit**

Figure 7. T-28 South Gravel Pit.



This environmental checklist (EC) covers activities described above for maintenance-related activities and does not require additional ECs for each separate request for material. However, non-maintenance (or non-routine) activities must follow the guidance given in this EC and must complete a project-related EC that covers the purpose of the project requiring the use of gravel/borrow material. This EC does not cover the construction of new gravel/borrow pits, reactivation of old gravel/borrow pits or cinder pits, or expansion of approved gravel/borrow pits beyond approved footprints. Activities that require a mechanical gravel crusher also require a separate EC. All potential users of INL Borrow Sources must submit Form 450.AP01 before removing material from any INL Borrow Source and must follow any specific direction provided by the INL Borrow Source Coordinator.

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

#### **Air Emissions**

Activities addressed by this EC have the potential to contribute to air emissions from the operation of fuel burning equipment and use of maintenance equipment. If mobile sources (equipment) will be used temporarily, they must meet Idaho Administrative Procedures Act (IDAPA) 58.01.01.625 visible emission opacity requirements.

Fugitive dust may be generated during proposed work.

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

There are no jurisdictional wetlands, streams or rivers, or permanent bodies of water on any of the gravel/borrow pit locations. The Ryegrass Flats pit is located within a closed basin that experiences short, intermittent flows from three drainages during periods of high run-off, rain, and rapid snow melt. Water flows to this site are not expected to curtail retrieval activities. No on-site locations would receive surface flow from a contaminated site or waste management area.

Two gravel pits, Monroe and Lincoln Boulevard, are within the Big Lost River floodplain, and T-28 South is in the Birch Creek floodplain. These three pits (Monroe, Lincoln Blvd., & T-28 South) are also within the stormwater corridor. T-12, Adams, and Rye Grass Flats are outside of the floodplain and stormwater corridor. Gravel pits can have large effect on floodplains by capturing flow during a flood, thus increasing erosion of nearby banks and altering streamflow downstream. In the same light, floods can have a negative impact on gravel pits, on the equipment stored in them, and on activities conducted within the pit. The T-28 (south) pit has experienced flooding in the past. Currently, Birch Creek is diverted upstream of the INL north boundary so flooding T-28 is rare. In addition, flow that does bypass the diversion is again diverted at the T-28 (north) gravel pit out onto the desert. Project personnel working in Monroe, Lincoln Blvd., and T-28 South gravel pits should be aware of the potential to lose access the pits during flood events. Equipment, experiments, a gravel sources can be affected during flood events.

#### **Disturbing Cultural or Biological Resources**

Cultural resource surveys completed within 40-acre plots at each gravel/borrow pit revealed no significant resource. However, potentially significant archaeological sites were identified in the vicinity of the 40-acre plots and along access corridors. Therefore, archaeological surveys must be completed before any expansion beyond the surveyed 40-acre plots. In addition, while access to and from the 40-acre plots via the existing dirt two-tracks is not

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

restricted, additional surveys must be completed if the existing access roads tracks are upgraded. Whenever possible, mining activities and road upgrades will be designed to avoid adverse impact to cultural resources identified during archaeological surveys at each borrow source site.

Due to high rates of soil deposition in the gravel/borrow pits, the probability of encountering buried cultural materials is high. If cultural artifacts or bone are unexpectedly encountered, work activities will temporarily halt and the CRMO will be contacted immediately. Work may continue in the area once the CRMO has evaluated the inadvertent discovery and given written permission to proceed.

Activities will involve vegetation removal and soil disturbance and may require pesticide application conducted on areas with native or naturalized vegetation.

Disturbance of the area may impact migratory birds and bird nests on the INL Site.

Activities may occur in pits with active sage grouse leks. All off-road travel and locations and areas which might be disturbed by traffic or other activities must also be surveyed by Biological Resource Personnel prior to beginning work. Instructions and requirements must be implemented during construction/operation. The following conditions also apply:

- Nesting bird surveys are required from April 1 to September 1 in order to comply with the Migratory Bird Treaty Act
- Revegetation with native seed will be required on areas that show extensive vegetation removal or soil disturbance
- Noise control within a specified distance of a lek requires time of day and seasonal restrictions (March 15 – May 15).

### Generating and Managing Waste

Small amounts of non-hazardous waste such as RCRA empty oil, antifreeze, brake fluid containers may be generated. Potential waste materials will be evaluated for waste minimization prior to generation, and industrial waste generated during proposed activities will be evaluated for recycling opportunities prior to disposal at the INL Landfill Complex.

All solid waste will be managed by WGS using approved laboratory procedures.

Although not expected, spills from vehicles/equipment may generate hazardous waste.

### Releasing Contaminants

Vehicle chemicals such as diesel fuel, antifreeze, brake fluid, power steering fluid, hydraulic fluid, windshield washer fluid, etc. will be used in the heavy equipment and will be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. The facility Chemical Coordinator will enter these chemicals into the INL Chemical Management Database. All chemicals will be managed in accordance with laboratory procedures. When dispositioning surplus chemicals, project personnel must contact the facility Chemical Coordinator for disposition instructions.

Pesticides may be applied to control weeds.

Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility PEL. If the PEL cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS.

### Using, Reusing, and Conserving Natural Resources

Project activities will mine a natural resource (gravel/borrow material) from within active dig faces of approved pits on the INL Site. Most material will be removed from the pit for use on maintenance related activities; however, the activity also results in stockpiling unused material in the pit. Fuel would be used in vehicles while preparing pits for operations, mining, and transporting to specific locations.

All materials would be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow. The project would practice sustainable acquisition.

<b>SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:</b> 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

**DOE-ID NEPA CX DETERMINATION  
Idaho National Laboratory**

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:** The primary reference for expansion of gravel/borrow pits on the INL is the Programmatic SNF&WM EIS (see #1 below).

- (1) U.S. Department of Energy (DOE), 1995, "Programmatic Spent Nuclear Fuel (SNF) and Idaho National Engineering Laboratory (INEL) Environmental Restoration and Waste Management Environmental Impact Statement," DOE/EIS-0203-F, U.S. Department of Energy, April 1995.
- (2) U.S. Department of Energy (DOE), 1997, "Environmental Assessment Plan for New Silt/Clay Source Development and Use at the Idaho National Engineering and Environmental Laboratory," DOE/EA-1083, U.S. Department of Energy, May 1997.

**Justification:** DOE's 1995 EIS on Spent Nuclear Fuel and Waste Management (SNF) addressed the expansions of several INLs gravel/borrow pits (see reference above). In addition, DOE's 1997 EA on New Silt/Clay Sources addressed the creation and expansions of three INL borrow pits (see reference above).

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: 12/11/2019