

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

**SECTION A. Project Title:** USG #121 Test R2

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

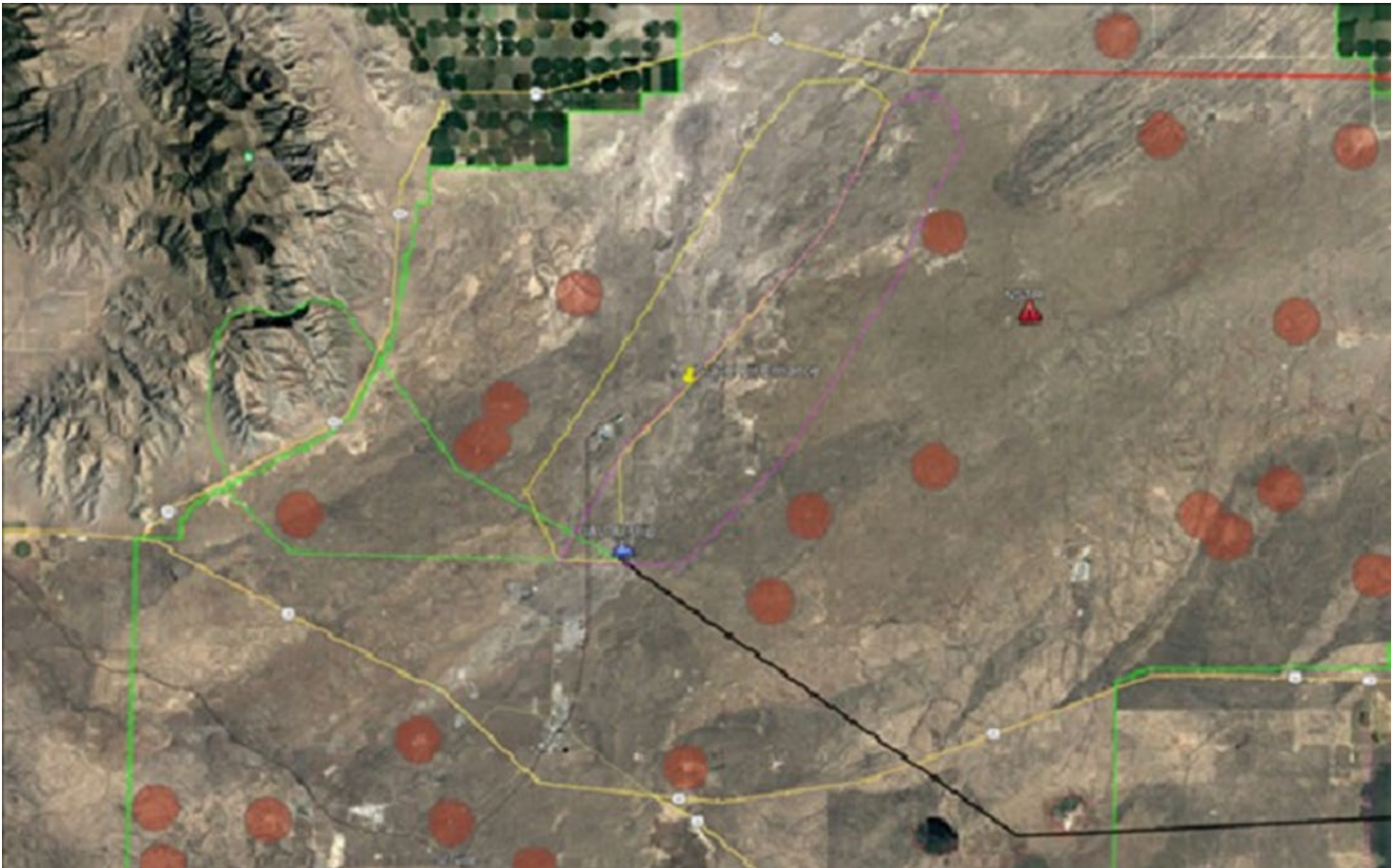
Revision 2:

The Idaho National Laboratory (INL) Wireless Test Bed (WTB) USG 121 Customer has requested the use of the INL test range, and off-site areas surrounding the INL desert site to perform radio frequency (RF) testing and research over a vast range of technologies. This research and testing will examine the various operational characteristics of fixed and mobile transceivers including the use of RF collection sensors and data recording devices.

Existing INL facilities and infrastructure, roads and disturbed grounds will serve as the primary work location for those involved in the USG 121 effort. INL T-roads furnish access to some test locations and the appropriate steps will be taken to coordinate with the INL Fire Marshal and Security as required. There may be a couple vehicles that will park at the edge of a T-road without vegetation. The effort is not anticipated to disturb the soil or associated foliage. Existing ground rods will be used when needed. Remote and portable WTB work locations will require temporarily placed restrooms; potable or wastewater utilities are not required.

Customer equipment is in the form of Vehicle mount, rack mount, manpack or handheld transceivers/radios/servers. The associated antennas range from small omni multiband antennas to half size cellular directional antennas. GPS antennas will be used to provide timing and are smaller than a baseball. External communication will be facilitated through commercial services. UAV/UAS's will be utilized through the event with RF equipment. The INL UAS runway will be used to support UAV flight in and around the INL range.

The flight paths are indicated in by the green, yellow, pink, and black paths. The red circles are LEK locations.



UAV/UAS's will take off and land at the UAV runway. The UAV/UAS's will avoid all LEK locations by at least 1 km radius before 9AM and 6PM. Tethered drones at <200 feet to be used in CITRC area locations. PBF 612 will be limited on parking with trailers and equipment which will require parking off pavement in the gravel and grass areas around the facility which are already disturbed areas void of any sagebrush. The duration of testing is expected to be approximately 2 weeks. Please refer to Table 1 and Maps 1,2 and 3 below for detailed location information.

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

Table 1

Description	Latitude	Longitude
CFA 699	43°31'55.36"N	112°56'42.14"W
CFA 1609	43°31'52.68"N	112°56'41.89"W
PBF 613	43°32'27.45"N	112°51'43.91"W
PBF 612	43°33'17.30"N	112°52'1.06"W
PBF 637	43°32'49.03"N	112°52'4.30"W
PBF 623	43°33'1.18" N	112°51'33.85"W
PBF TR 04	43°33'2.47" N	112°51'37.41"W
Cell Site 6	43°32'0.25" N	112°49'48.81"W
Crater Butte	43°35'41.66"N	113°8'58.28"W
UAS Runway	43°35'55.19"N	112°54'20.74"W
Howe Peak Parking Area	43°41'52.15"N	113°3'5.20"W
Rattlesnake Ridge	43°48'4.28" N	112°51'1.99"W
HFTB	43°31'17.73"N	112°53'50.98"W
WRRTF	43°49'51.62"N	112°41'28.70"W
T3 East	43°36'12.17"N	112°53'18.18"W
T3 West	43°37'28.09"N	112°57'35.50"W
T17	43°39'9.51" N	112°50'13.17"W
17-1	43°39'16.81"N	112°49'42.0
17-2	43°39'16.20"N	112°49'35.40"W
17-3	43°39'10.23"N	112°47'57.37"W
17-4	43°39'43.57"N	112°47'30.50"W
17-5	43°41'6.05" N	112°46'24.08"W
T20	43°41'49.42"N	112°49'10.61"W
T20 Entrance	43°42'4.49" N	112°49'43.89"W
Gate 1 Shelters	43°30'39.81"N	112°53'45.57"W
Filmore Roadway	43°31'31.18"N	112°49'36.10"W

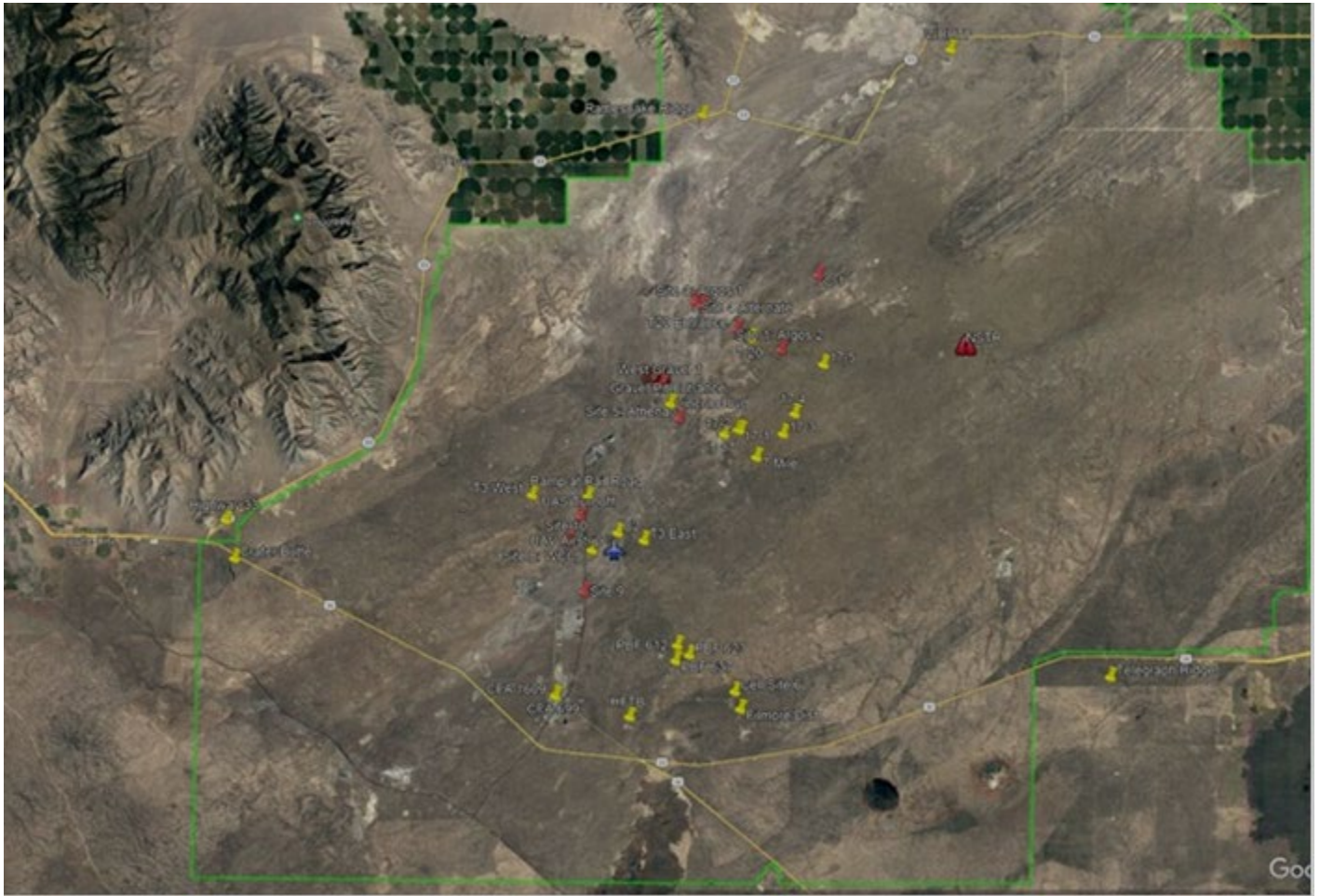
**DOE-ID NEPA CX DETERMINATION  
Idaho National Laboratory**

Highway 33	43°36'45.40"N	113°9'19.18"W
Telegraph Ridge	43°32'24.17"N	112°35'27.34"W
Ramp at Railroad	43°37'26.11"N	112°55'26.47"W
Lincoln Blvd	43°40'0.25" N	112°52'16.89"W
8 Mile	44°3'57.67"N	112°59'18.58"W
4 Corners	43°59'15.03"N	112°43'47.33"W
Gate 4 Parking	43°46'54.09"N	112°45'27.51"W
Antelope	43°43'20.75"N	113°32'26.51"W
Reno	44°3'46.66"N	112°43'55.42"W
RR South	43°35'0.97" N	112°55'27.71"W
Site 8	43°35'56.23"N	112°55'17.69"W
C 1	43°43'34.69"N	112°46'35.17"W
C 2	43°36'25.04"N	112°54'18.14"W
Site 5	43°39'35.95"N	112°51'57.60"W
West Gravel Alternate	43°40'36.00"N	112°52'45.00"W
West Gravel Alternate 2	43°40'44.40"N	112°53'13.32"W
West Gravel 1	43°40'32.32"N	112°52'36.83"W
West Gravel 2	43°40'37.56"N	112°52'33.21"W
West Gravel 3	43°40'42.40"N	112°52'28.08"W
Gravel Pit Entrance	43°40'1.37" N	112°52'18.50"W
Site 4	43°42'43.96"N	112°51'4.40 "W
Site 4 Alternate	43°42'50.85"N	112°51'20.12"W
Site 1	43°41'30.19"N	112°48'1.27 "W
Site 7	43°45'46.70"N	112°44'48.39"W
Site 9	43°34'46.34"N	112°55'35.23"W
Site 10	43°36'11.70"N	112°56'12.87"W
7 Mile	43°38'31.18"N	112°48'58.51"W
UAS Turnoff	43°36'52.15"N	112°55'44.83"W

# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

UAV Launch	43°31'48.45"N	112°49'44.93"W
Road Block South	43°39'39.35"N	112°52'47.79"W
Road Block North	43°40'25.40"N	112°51'46.43"W

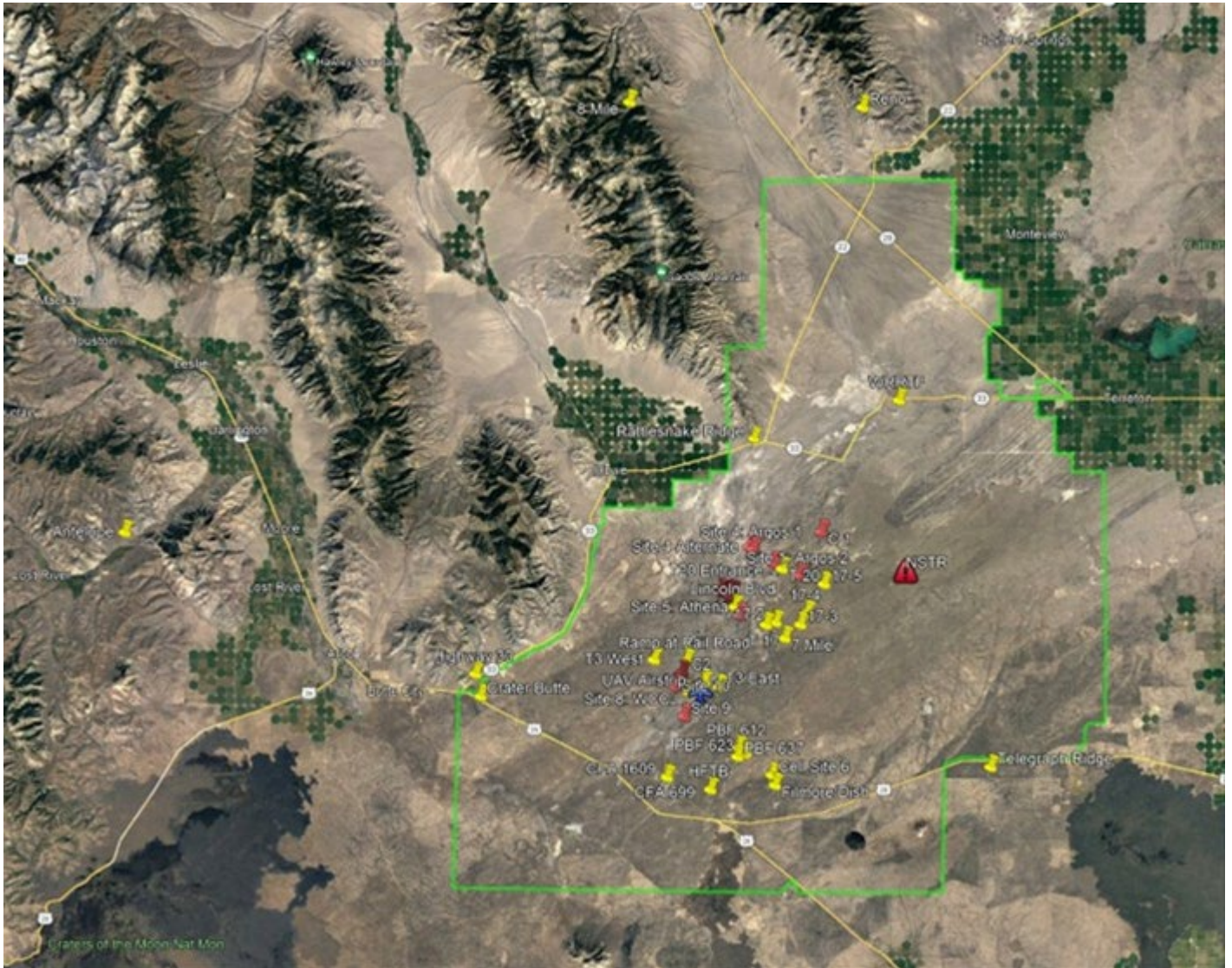
Map 1: Potential test locations.





# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

Map 2: Other potential offsite test locations.







# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

All previous Hold Points and Project-Specific Instructions from the original ECP remain valid.

Original ECP:

The Idaho National Laboratory (INL) Wireless Test Bed (WTB) USG 121 Customer has requested the use of the INL test range, and off-site areas surrounding the INL desert site to perform radio frequency (RF) testing and research over a vast range of technologies. This research and testing will examine the various operational characteristics of fixed and mobile transceivers including the use of RF collection sensors and data recording devices.

Existing INL facilities and infrastructure, roads and disturbed grounds will serve as the primary work location for those involved in the USG 121 effort. INL T-roads furnish access to some test locations and the appropriate steps will be taken to coordinate with the INL Fire Marshal and Security as required. There may be a couple vehicles that will park at the edge of a T-road without vegetation. The effort is not anticipated to disturb the soil or associated foliage. Existing ground rods will be used when needed. Remote and portable WTB work locations will require temporarily placed restrooms; potable or wastewater utilities are not required.

Customer equipment is in the form of Vehicle mount, rack mount, manpack or handheld transceivers/radios/servers.

The associated antennas range from small omni multiband antennas to half size cellular directional antennas. GPS antennas will be used to provide timing and are smaller than a baseball. External communication will be facilitated through commercial services. UAV/UAS's will be utilized through the event with RF equipment. The INL UAS runway will be used to support UAV flight in and around the INL range.

INL WTB staff will assist with customer equipment and utilize existing power and HVAC within INL approved workspace. Antennas will be placed outside of the buildings and the required coax cable will be ran through existing pass-through ports. At trailer locations, including locations where the customers use their vehicle as a workspace, the customer will integrate equipment into the trailer/vehicle and use trailer/vehicle HVAC and power. Antennas will be deployed outside of the trailer/vehicles and coax will be ran through pass-through ports or windows.

INL WTB work trailers require external AC and/or generator connections facilitated by INL electrician and/or site services. Deep cell batteries and/or portable generators may be used with vehicle workspace configurations. All batteries will be strapped down within the vehicle and hitch mount racks will hold/secure portable generators and fuel cans. If required and as directed by the fire marshal, a fire break up to 30-ft in radius may be mowed around field generators; no sagebrush will be mowed. No customer generated/provided excess material or waste will be left at INL. For all areas located outside the INL boundary, project personnel will coordinate with BLM to obtain all the necessary special use permits for this type of operation.

The duration of testing is expected to be approximately 2 weeks.

Please refer to Table 1 and Maps 1 and 2 below for detailed location information.

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

Table 1

Description	Latitude	Longitude
CFA 699	43°31'55.36 "N	112°56'42.14 "W
CFA 1609	43°31'52.68 "N	112°56'41.89 "W
PBF 613	43°32'27.45 "N	112°51'43.91 "W
PBF 612	43°33'17.30 "N	112°52'1.06" W
Crater Butte	43°35'41.66 "N	113° 8'58.28"W
UAV Runway	43°35'55.19 "N	112°54'20.74 "W
Howe Peak Parking Area	43°41'52.15 "N	113° 3'5.20"W
Rattlesnake Ridge	43°48'4.28" N	112°51'1.99" W
HFTB	43°31'17.73 "N	112°53'50.98 "W
WRRTF	43°49'51.62 "N	112°41'28.70 "W
T3 East	43°36'12.17 "N	112°53'18.18 "W
T3 West	43°37'28.09 "N	112°57'35.50 "W
T17	43°39'9.51" N	112°50'13.17 "W
T20	43°41'49.42 "N	112°49'10.61 "W
Gate 1 Shelters	43°30'39.81 "N	112°53'45.57 "W
	43°31'31.18 "N	112°49'36.10 "W



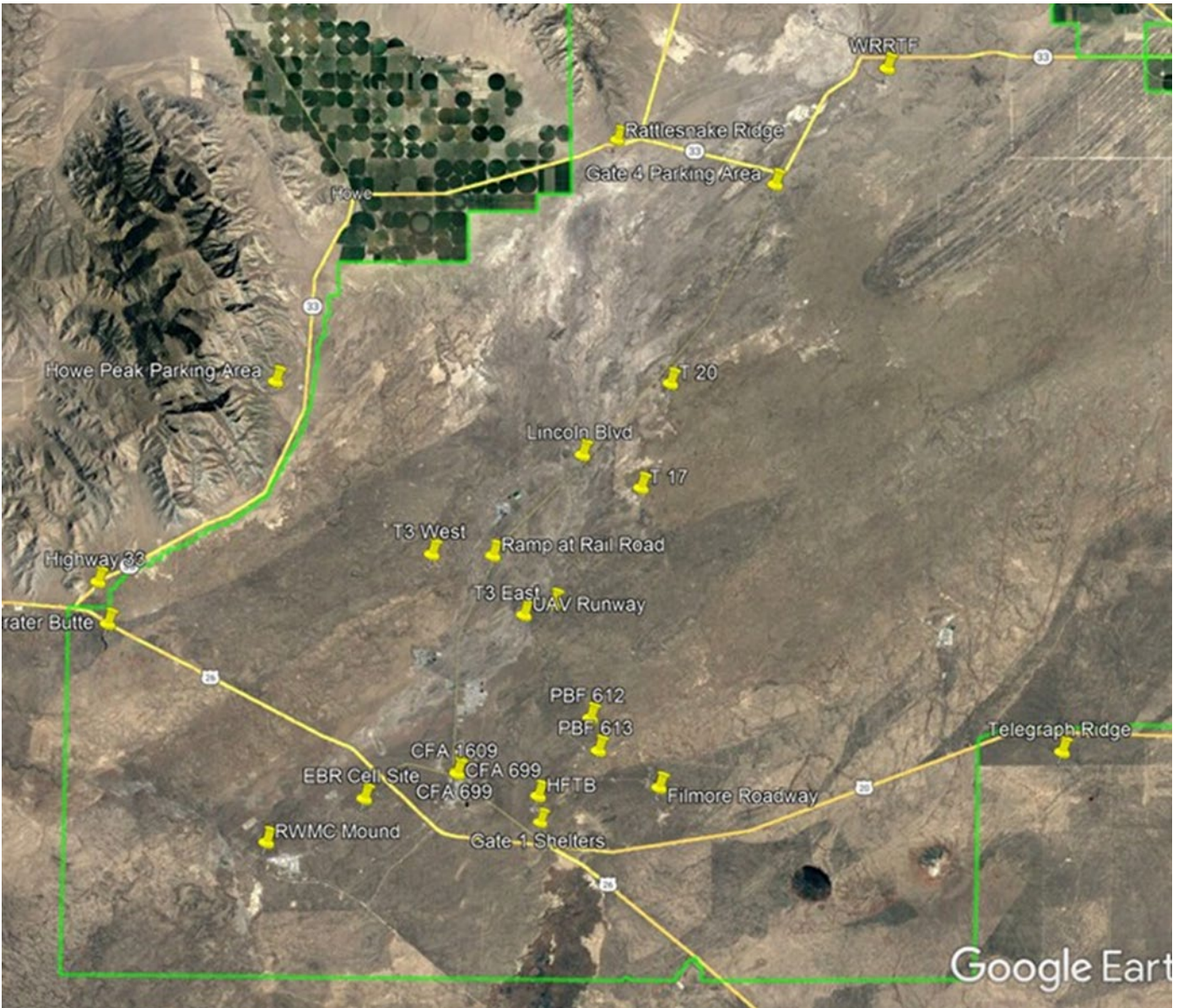
**DOE-ID NEPA CX DETERMINATION  
Idaho National Laboratory**

Filmore Roadway		
Highway 33	43°36'45.40 "N	113° 9'19.18"W
Telegraph Ridge	43°32'24.17 "N	112°35'27.34 "W
Ramp at Railroad	43°37'26.11 "N	112°55'26.47 "W
Lincoln Blvd	43°40'0.25" N	112°52'16.89 "W
8 Mile	44°3'57.67"N	112°59'18.58 "W
4 Corners	43°59'15.03 "N	112°43'47.33 "W
Gate 4 Parking	43°46'54.09 "N	112°45'27.51 "W
Antelope	43°43'20.75 "N	113°32'26.51 "W
Reno	44°3'46.66"N	112°43'55.42"W
RR South	43°35'0.97" N	112°55'27.71 "W
Site 8	43°35'56.23 "N	112°55'17.69 "W
C 1	43°43'34.69 "N	112°46'35.17 "W
C 2	43°36'25.04 "N	112°54'18.14 "W
Site 5	43°39'35.95 "N	112°51'57.60 "W
West Gravel (Alternate)	43°40'36.00 "N	112°52'45.00 "W
Site 4	43°42'43.96 "N	112°51'4.40" W

# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

Site 1	43°41'30.19 "N	112°48'1.27" W
Site 7	43°45'46.70 "N	112°44'48.39 "W

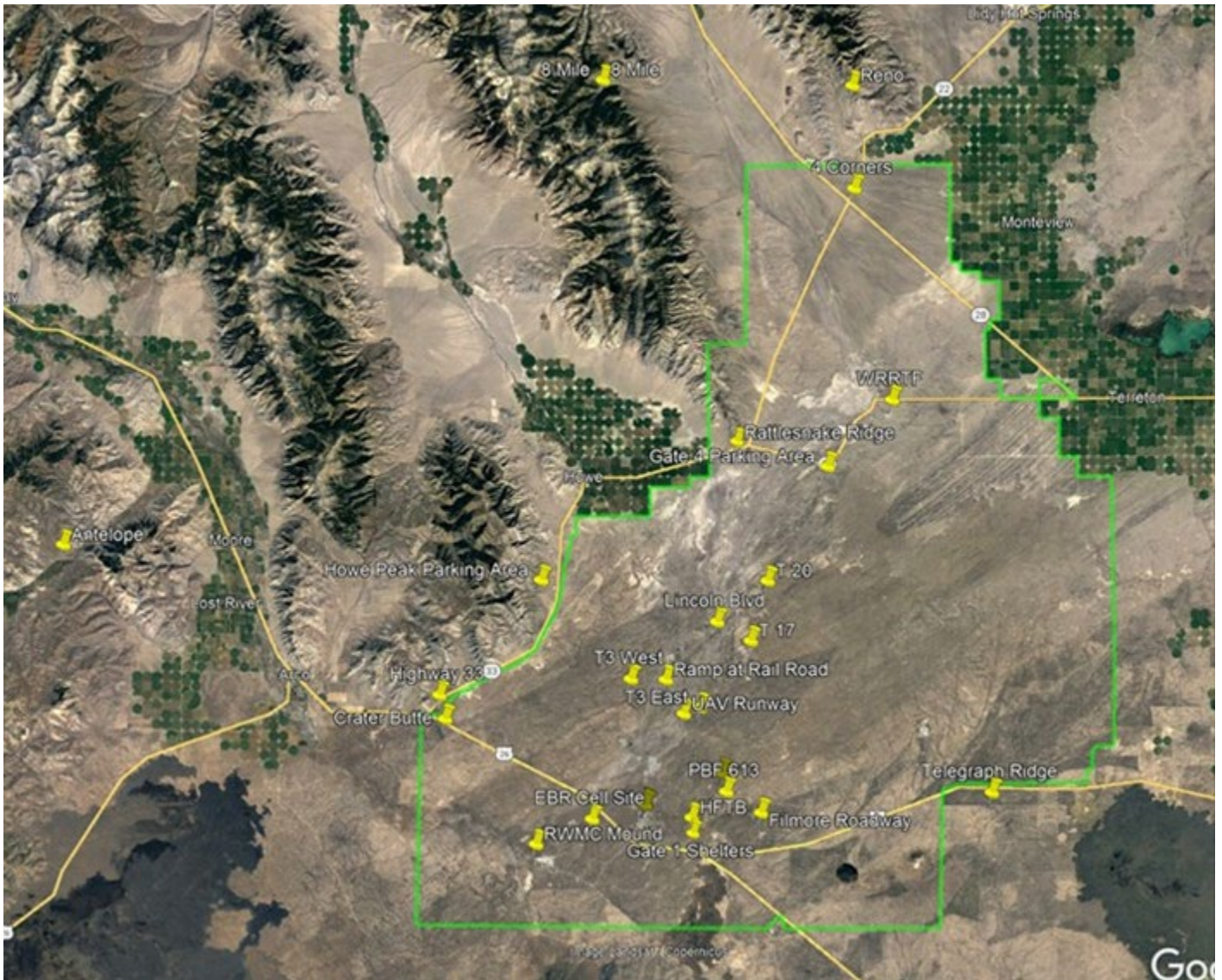
Map 1: Potential Test Locations





# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

Map 2: Other potential test locations.



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

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

**Air Emissions**

Air emissions from portable electrical generators, in place less than one year. These are exempted from permitting requirements based on their temporary status. This does not require permitting by INL.

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

NA

**Disturbing Cultural or Biological Resource**

There is the potential for this work to impact vegetation and for project personnel to interact with various wildlife species. A Biological Resource Review will be arranged within two weeks prior to the initiation of any activities that might disturb soil or vegetation and again following completion of project activities. A nesting bird survey is included with the Biological Resource Review for actions occurring between April 1 - October 1 per compliance with the Migratory Bird Treaty Act.

Please refer to cultural resource review BEA-22-29 R2 in regards to this project. Please contact Reese Cook (208)526-4029 if you have questions.

**Generating and Managing Waste**

Activities will generate industrial waste (e.g., common office trash). All Solid Waste will be managed by WGS.

**Releasing Contaminants**

Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility Environmental Staff. If the facility Environmental Staff 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**

Material will be recycled to the extent possible in an effort to minimize waste sent to the landfill.

**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:**

B3.11 "Outdoor tests and experiments on materials and equipment components"

**Justification:**

B3.11 Outdoor tests and experiments on materials and equipment components. Outdoor tests and experiments for the development, quality assurance, or reliability of materials and equipment (including, but not limited to, weapon system components) under controlled conditions. Covered actions include, but are not limited to, burn tests (such as tests of electric cable fire resistance or the combustion characteristics of fuels), impact tests (such as pneumatic ejector tests using earthen embankments or concrete slabs designated and routinely used for that purpose), or drop, puncture, water-immersion, or thermal tests. Covered actions would not involve source, special nuclear, or byproduct materials, except encapsulated sources manufactured to applicable standards that contain source, special nuclear, or byproduct materials may be used for nondestructive actions such as detector/sensor development and testing and first responder field training.

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

Approved by Jason L. Anderson, DOE-ID NEPA Compliance Officer on: 03/13/2023