



NEVADA OFF-HIGHWAY VEHICLES PROGRAM GRANT APPLICATION

Nevada Commission on Off-Highway Vehicles
Nevada Department of Conservation and Natural
Resources

Applicant Information

Organization Name: Nevada System of Higher Education – Desert Research Institute

Contact Person: JD Lancaster Associate Research Scientist
Name Title

Mailing Address: 755 E Flamingo Rd
Street Address Unit #
Las Vegas NV 89119
City State Zip Code

Phone: 702-862-5377 **Email:** jd.lancaster@dri.edu

Which best describes your organization? (Check one)

<input checked="" type="checkbox"/> State Agency	<input type="checkbox"/> Non-Profit Organization
<input type="checkbox"/> Federal Agency	<input type="checkbox"/> Community-Based Organization
<input type="checkbox"/> County/City Agency	<input type="checkbox"/> For Profit
<input type="checkbox"/> Local/Municipal Entity	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Individual	

If the applicant is a corporate or legal entity, proof of good standing in the entity's state of incorporation is required. NAC 490.1345 (Note: grantees must have the capacity to implement and accomplish proposed project and properly administer awarded funds).

Has the applicant previously received OHV Grant Program funding?

☒ No ☐ Yes

Does the applicant currently have open grants from the Nevada OHV Program?

☒ No ☐ Yes

Number of projects funded: 0
Amount of funding received: \$ 0
Number of projects completed: 0

Project Information

Project Name: Illegal OHV Trail Impacts at the Lost City

Select all that describes the project type(s) NRS 490.069 Sec.2c?

<input type="checkbox"/>	OHV compliance and enforcement	<input type="checkbox"/>	OHV safety training and education
<input checked="" type="checkbox"/>	Studies or planning for trails and facilities	<input type="checkbox"/>	Enhancement or maintenance
<input checked="" type="checkbox"/>	Mapping and signing	<input type="checkbox"/>	Construction of trails/facilities
<input type="checkbox"/>	Restoration of areas damaged by OHVs	<input type="checkbox"/>	Acquisition of land
<input type="checkbox"/>	Construction of trail features to minimize impacts on environmentally sensitive areas or important wildlife habitats		

Project Cost *(grant request and matching funds directly related to the project)*

OHV grant request	\$ 300,708
Matching Funds	\$ 0
Total Project Amount	\$ 300,708

What are the sources or partners for your leveraged (matching) funds?

<input type="checkbox"/>	Federal	<input type="checkbox"/>	In-kind
<input type="checkbox"/>	State	<input type="checkbox"/>	Private
<input type="checkbox"/>	City/County	<input type="checkbox"/>	Other: _____

Please describe leveraged (matching) funds (ex. another grant, volunteer hours, cash donation, etc.):

Not applicable

User group(s) that will be able to utilize this project (check all that apply):

<input checked="" type="checkbox"/>	Single Track Motorcycle	<input type="checkbox"/>	Snowmobiles
<input checked="" type="checkbox"/>	ATV/Quads	<input checked="" type="checkbox"/>	Dune Buggy
<input checked="" type="checkbox"/>	UTV/Side by Side	<input checked="" type="checkbox"/>	Mountain Bikers
<input checked="" type="checkbox"/>	Hiking/Backpacking	<input checked="" type="checkbox"/>	Equestrian
<input type="checkbox"/>	Snowshoers/Skiers	<input type="checkbox"/>	Other: _____

If applicable, please explain how this project will aid with managing user interactions:

Not applicable

Proposed Scope of Work

Please describe exactly what work will be completed. Programs, planning, NEPA, surveys, mapping, include miles of trail, trail type and any other pertinent information (NAC 490.1375). If purchase of equipment is included, please explain where/how it will be housed and maintained.

The Lost City, one of Nevada's most significant archaeological sites, is threatened by hundreds of miles of illegal OHV trails on lands that were formerly submerged beneath the Overton Arm of Lake Mead. Lost City was the site of an advanced settlement of agriculturalists and foragers from the Virgin River Branch Puebloan Culture who built houses along the confluence of Muddy and Virgin Rivers as early as 1,500 years ago. With the filling of Lake Mead behind Hoover Dam, the site was submerged for nearly 70 years until the early 2000s when lake levels began to drop, slowly exposing the site. Prior to the construction of Hoover Dam, these areas were the Virgin, Muddy, and Colorado River flood basins. The areas where illegal OHV trails are developing are the floodplains and terraces of these Rivers, where the people that occupied Lost City lived and is land that is now managed by the National Park Service (NPS). These rivers long served as the locus of human occupation in Southern Nevada. St. Thomas was founded in 1865 by Mormon Settlers in the same area as Lost City to take advantage of the prime farming land at the confluence of the rivers. The townsite, as well as the entire geographies of families that once settled along these rivers in early American history were, ironically, protected beneath Lake Mead. More recently, as the lake levels continue to fall, illegal off-road recreation is expanding in these newly emergent lands and leading to damage to prehistoric and historic archaeological resources that are protected by the Archaeological Resources Protection Act of 1979 and the National Historic Preservation Act of 1966. Archaeological resources are broadly defined, however, for the purposes of this proposal, these resources are any material remains of past human life or activities. Permanent damage to archaeological resources can occur when artifacts, including for example stone tools, pottery or basketry are fractured under the weight of the vehicle. These artifacts and associated features including structural ruins, pits, and animal and human remains can also be displaced by vehicle traffic, altering the context that tells the story of that resources, and decreasing its significance (See Photo 1). This damage occurs both at the surface and in the near subsurface below the road tracks.

The proposed project will: 1) use aerial imaging to map current OHV trails in the Lost City site area and advanced aerial thermography techniques to identify buried portions of the Lost City site along the OHV trails without causing ground disturbance and, 2) on-the-ground archaeological surveys to identify house structures and other Lost City site components along the OHV trails. On-the-ground surveys complement the aerial and thermal imaging by identifying accumulations of artifacts and other structural features that are otherwise not visible in the aerial and thermal imagery, and serve to ground truth the detected thermal signatures.

The information collected through this project will be shared with the leadership at Lake Mead National Recreation Area, who will be receiving funding from SNPLMA to create and implement a site-specific management plan for the Overton Arm. Specifically, the development of their site-specific management plan will take data from this proposed project, along with input from the OHV and local communities, to identify new forms of recreation in the Overton Arm (due to the loss of the water), while protecting these historic resources. Without this type of survey information, the park may be forced to permanently block off access to protect these areas (the area is currently closed, however illegal OHV incursions are occurring - see Photos 2 - 4). Knowing the locations of archeological sites relative to off-road activities, will enable the park to make informed decisions that can balance use with protection.

Aerial Imaging

Available GPS mapping of OHV trails in the Lost City area is not detailed enough to understand the true extent of the trails and their impacts to the Lost City archaeological site. Additionally, much of the surface sediments in the impacted areas were deposited at the bottom or near the shore of Lake Mead and buried the original ground surface of the Virgin and Muddy River valleys beneath a thin veneer of sediments that, in some places, obscures archaeological resources on that original surface. Aerial imaging will

accomplish two tasks of the project: 1) document the current extent of the off-road trail network in the Lost City site area, and 2) detect archaeological resources that are shallowly buried along the trails. DRI will use a Wingtra One Gen II Unoccupied Aircraft System (UAS) with a Sony RXR1R II 42 MP full frame digital camera to acquire aerial imagery with a resolution of approximately 1 cm per pixel over approximately 4,500 acres in the Lost City site area. Additionally, pre-planned flights along the currently known road network will be conducted using a thermal infrared imaging payload to obtain aerial thermography data. In similar environments, aerial thermography has successfully detected buried archaeological structures by utilizing the differences in heat retained in buried stone and masonry relative to surround sediments. DRI will process the aerial imagery to obtain digital elevation models (DEMs) of the Lost City site area which, in combination with high resolution color imagery, will enable the detection of two-track roads created by OHVs that are otherwise difficult to detect, and the identification of surface archaeological structures and features. Additionally, DRI will process and analyze the thermal imagery to identify potential buried archaeological materials along the road network.

The UAS flights will be conducted by experienced DRI 14 CFR Part 107 certified UAS Pilots. The project manager will ensure that all necessary permits and clearances are obtained from the Department of the Interior (DOI) and the FAA prior to flight operations. Flight operations will take up to 10 field days to complete. During flight operations, the flight crew will stay at a field camp established in the Echo Bay area, and work during two five-day rotations. The flight crew will consist of two DRI pilots, one serving as Remote Pilot in Command, and the other to serve as Visual Observer. Imagery data will be backed up nightly on secure storage and transferred to DRI processing servers upon completion of the rotation.

Archaeological Survey

To determine the extent of impacts to Lost City archaeological resources, DRI will complete an archaeological survey of the OHV impact areas. High priority areas will be identified from the aerial imagery of the trail network and thermal data showing buried archaeological materials. The objective of the ground-based surveys will be to: 1) identify surficial archaeological resources within the OHV trail impact areas, 2) assess the potential for buried archaeological materials in the impacted areas; and 3) document and assess damage to the archaeological resources.

DRI will complete ground surveys of up to 1,000 acres or up to 80 miles of trails within the impacted areas. The survey crew will consist of five DRI archaeologists, including a crew lead (either JD Lancaster or Greg Haynes). The survey is expected to occur over two five-day rotations. During the survey, the survey crew will stay at a field camp established in the Echo Bay area. The survey crew will walk in transects spaced evenly at 15 m intervals to search the OHV trail impact areas for archaeological resources. All identified archaeological resources will be documented on standard field forms accompanied by high resolution color photography and accurate (to within 1 meter/3-feet) GNSS locations (GNSS is a more accurate form of GPS location identification). Additional information describing the environmental context of archaeological resources will also be collected, in addition to an assessment for buried archaeological resources and photographic and GNSS documentation of OHV impacts to sites.

Following completion of the archaeological survey, DRI will assemble field data into NV State Historic Preservation Office (SHPO) standard site forms and, as necessary, architectural resource assessment forms. These forms are required for tracking of the protected resources at the state and federal levels, and serve as the baseline for continued condition and damage assessments. For resources that have already been identified, updated forms will be prepared. GNSS location and photographic data will be assembled into a standard geodatabase format that integrates with SHPO and NPS GIS databases, and will be used as the framework for assessing the overlap of roads and trails identified in aerial imagery and the identified archaeological resources. Using these data, DRI will prepare a technical report that describes the results of the aerial imagery acquisition and the archaeological survey, provides damage assessments for the identified archaeological resources, and evaluates the identified resources for eligibility to the National Register of Historic Places. The technical report will also provide recommendations for use in preparation of Environmental Assessments needed for NPS to develop a site-specific management plan for the Overton Arm area.

Currently the Lake Mead National Recreation Area is operating under an outdated and non-specific back country management plan from the 1980s, which does not provide clear guidance for recreational activities or cultural resource protections of the newly exposed land and now-inaccessible lake. Lake Mead was recently awarded SNPLMA funding to assess and develop new recreational opportunities in the Overton Arm area that considers the low-water environment. The archeological survey data DRI can provide through this NV OHV grant funding can help the park make informed decisions as it develops its site-specific management plan. It is DRI's hope that by improving the park's knowledge of the archeological site locations (which have not been previously surveyed) relative to current OHV use, NPS can make informed decisions that both protect these irreplaceable cultural resources while developing responsibly managed forms of recreation as part of their new plan. The park currently has the entirety of the (suspected) Lost City Area closed, so all OHV incursions into the area are illegal and no formal recreational opportunities are offered.

Equipment Purchases

To efficiently process the required imagery, DRI requests the purchase of a high-performance workstation configured specifically for processing aerial imagery with Agisoft Metashape. The workstation will be setup at the DRI Southern Nevada Science Center in Las Vegas, Nevada and all software licenses and hardware will be maintained by DRI's IT Department. This equipment purchase is specified in the attached budget.

The UAS and imaging payloads are part of DRI's UAS Fleet with a required daily recharge fee specified in the attached budget.

The equipment budget also includes expendable field supplies required for the archaeological survey including sample bags, rebar stakes and caps, pin flags, and notebooks. An estimate of these costs is included in the attached supplemental materials.

Project Deliverables

Please describe *quantitative* outcomes for your project. Examples could include miles of trail created, number of enforcement overtime hours, presentations held, programs facilitated, users engaged, pounds of trash collected, etc.

The proposed project will result in three key outcomes:

- 1) 4,500 acres of aerial imaging and mapping of the illegal OHV trail network identified in the imagery.
 - a) High resolution aerial imagery products and surface elevation data provided to Lake Mead.
 - b) GIS database of identified road network provided to Lake Mead.
 - c) Thermal imagery with signatures of possible archaeological resources and GIS location data provided to Lake Mead.
- 2) Archaeological survey to identify archaeological resources along up to ~80 miles of OHV trails in the Lost City site area.
 - a) Archaeological site forms provided to Lake Mead.
 - b) Integrated photographic documentation and GIS database of identified archaeological resources provided to Lake Mead.
- 3) Preparation of a technical report with detailed information on OHV use areas derived from mapping of the illegal OHV trails, identified archaeological resources and damage assessments, assessment of the potential for buried archaeological sites, and National Register of Historic Places evaluations of the identified resources.

Project Timeline: Funding Agreements are two years unless specified. Please complete the table below providing a timeline of your project.

Date	Project Goals	Deliverables
Jul-Sep, 25	<ul style="list-style-type: none"> • Completion of aerial imaging • Begin processing of aerial imagery • Begin Road network mapping • Begin archaeological survey preparation. 	<ul style="list-style-type: none"> • Quarterly report
Oct-Dec, 25	<ul style="list-style-type: none"> • Complete processing of aerial imagery • Complete road network mapping • Begin archaeological surveys 	<ul style="list-style-type: none"> • Quarterly report • Aerial imagery products delivered to NPS • Road network mapping delivered to NPS
Jan-Mar, 26	<ul style="list-style-type: none"> • Complete archaeological surveys • Begin development of site forms, GIS data products, damage assessments, and National Register of Historic Places evaluations of archaeological resources. • Begin preparation of final technical report. 	<ul style="list-style-type: none"> • Quarterly report • Initial fieldwork summary report.
Apr-Jun, 26	<ul style="list-style-type: none"> • Continue site form, GIS data products, damage assessment and National Register evaluations. • Continue preparation of final technical report. 	<ul style="list-style-type: none"> • Quarterly report
Jul-Sep, 26	<ul style="list-style-type: none"> • Completion of final technical report. 	<ul style="list-style-type: none"> • Quarterly report • Final technical report • Site forms • GIS database of archaeological resources
Oct-Dec, 26	Project Complete	None
Jan-Mar, 27	Project Complete	None
Apr-Jun, 27	Project Complete	None

Priorities and Scoring Narrative

Grants will be scored based on answers to the ten (10) criteria listed below. Each criteria carries a weight determined by the OHV Commission, voted upon during the open meeting on 9/7/2021. Please reference Grant Manual Appendix A.

<p>Law Enforcement Strategy that addresses registration enforcement, including Public Education & Outreach aimed at increasing renewals and new registrations: <i>How will your project increase the number of OHV registrations in the district. How will the equipment and time be used to increase OHV safety and awareness? Please reference the Law Enforcement Statistics reporting form.</i></p>
Not Applicable
<p>Planning, Environmental Studies, Conservation: <i>Describe how the environmental studies, conservation and/or planning will mitigate resources impacted by OHV recreation. How will your project contribute to the conservation of our natural resources, while enhancing OHV opportunities?</i></p>
<p>Lake Mead NRA will be working to implement a new site-specific management plan for the Overton Arm at Lake Mead that considers impacts to both natural and archaeological resources from OHV recreation and provides protections for the archaeological and natural resources in the impacted areas. Specifically, the site-specific management plan will allow the park to address the unique context of the Overton Arm area and examine how natural and archaeological resources are being impacted (or have the potential to be impacted) by illegal OHV roads. The data obtained by DRI will directly contribute to the defining the management and protection of these resources through: (a) aerial imaging to obtain high resolution imagery for the identification and mapping of the current illegal OHV trail network; (b) defining the location and historical significance of archaeological resources identified along the trails; and (c) assessing damage and the potential for damage to archaeological resources through archaeological surveys. These data will then be used to identify illegal roads that lead to environmentally or archaeological sensitive areas and allow for their closure and identify potential new approved roads that provide access to the water and/or other recreations sites of interest.</p>
<p>Enhancement or Maintenance of existing trails and facilities: <i>How will maintenance needs be prioritized and how often will your project hold a maintenance/ trails enhancement event? HOW will your project be maintained and WHO has committed to the ongoing maintenance of the facility or trail (note: a minimum of 2 maintenance/ trail events are required per year).</i></p>
Not Applicable
<p>Training: <i>Please describe the goals and objectives of your public safety training program. Is it a nationally recognized certification? What sets your safety training program apart from the others?</i></p>
Not Applicable

<p>Connectivity/Loops: <i>How will the project impact connectivity of OHV trails, facilities, and local communities? Please include maps of areas impacted by your project and describe those impacts.</i></p> <p>The project promotes the development of sustainable OHV trail connectivity in the Overton Arm area. The current illegal trail network in places consists of a confusing network of minimally used side trails developed when users drive off trail to reach another trail or location. The proposed project will identify where existing trails are impacting archaeologically sensitive areas and which trails can continue to be used while protecting natural and archaeological resources. Trails that provide connectivity or loops between different recreation areas of interest will then be identified as part of the park's site-specific management planning for possible new, and legal, OHV recreation opportunities.</p>
<p>Access: <i>Please describe how your project improves OHV access in the project area. Explain what access/opportunities would be lost or restricted if the project does not occur.</i></p> <p>The proposed project will provide critical data for the development of the park's site-specific management plan. Without the aerial imagery and archaeological survey data that DRI will provide, the park may be forced to permanently close off access to the Overton Arm for the protection of the resources located there. The data provided as part of this project will inform the park's planners of the locations of archaeological resources relative to off-road activities in the project area, enabling the park to explore developing new and legal OHV access and opportunities in the Overton Arm balanced with the protection of archaeological and natural resources.</p>
<p>Trail mapping and signing of existing trails and facilities: <i>If a mapping component is included in the grant, please describe how it will be integrated with the current web mapping application found on OHV.NV.GOV</i></p> <p>The proposed project will map illegal OHV trails in the Lost City/Overton Arm site area. Trail mapping on OHV.NV.GOV does not currently include unapproved trails; however, if an un-approved trail category could be established, the mapping produced during the proposed project will be used to update this trail network with existing but unapproved roads. If illegal roads are approved as part of the park's planning efforts to manage OHV recreation in the area, high quality mapping data resulting from the proposed project will be provided to OHV.NV.GOV.</p>
<p>Partnering and Leverage: <i>Who else is involved in this project? Please describe outreach with stakeholders, partners and local governments, that you have communicated with in planning this project.</i></p> <p>Senior leadership at Lake Mead National Recreation area are key partners in this project. If Lake Mead project schedules allow, the cultural resources staff at Lake Mead will provide technicians to assist with the aerial imaging and archaeological survey fieldwork. DRI and NPS have also communicated with Get Outdoors Nevada in developing this project.</p>
<p>Economic Integration: <i>How will this project improve OHV recreation opportunities that help local, regional, or state economies grow?</i></p> <p>Through the implementation of the site-specific management plan informed by the data from this project, we anticipate that new OHV recreation opportunities may be opened through management of the OHV trail network in the area.</p>

Demand for New Facilities: <i>Please provide justification for NEW facility/program development: restrooms, trails, signs, and other amenities.</i>
Not applicable

Project Budget

Proposed Budget: Provide your budget details to include all project expenses, including contracts, labor costs, volunteer or donated labor, equipment, travel, materials, etc. Each section needs to be broken down into specific item costs. You may create your own spreadsheet. (See Grant Manual Appendix B for example)

- Your budget must align clearly with your Scope of Work.
- Be specific. Each section needs to be broken down into individual line items and costs. For example, a lump sum for “travel” should be broken down into items such as lodging, per diem, gas etc.
- All travel expenses should be based off current GSA rates. Rates can be found [here](https://www.gsa.gov/travel/plan-book/per-diem-rates) or at <https://www.gsa.gov/travel/plan-book/per-diem-rates>.
- Reminder: Include all sources of funds for the completion of the project including federal, in-kind, private/city/county and state funds.
- **Attach copies of estimates to support your budget and identify what each contract will include.**

LAND MANAGEMENT AND ENVIRONMENTAL COMPLIANCE

Classification of Land Management:

<input type="checkbox"/>	City/Municipal
<input type="checkbox"/>	County
<input type="checkbox"/>	State
<input checked="" type="checkbox"/>	Federal
<input type="checkbox"/>	Private
<input type="checkbox"/>	Lease; Attach copy of lease with expiration date
<input type="checkbox"/>	R&PP; Attach copy of lease with expiration date
<input type="checkbox"/>	Other: _____

Landowner(s): U.S. Department of the Interior, National Park Service

If the proposed project is to be carried out on public land, attach any applicable written agreement with any government entity having jurisdiction over that land, including permits, leases, easements, and rights-of-way. NAC 490.135

Will there be ground disturbing activities (ex. construction, trail maintenance)?

☐

Yes

☒

No

Standards/guidelines that will be applied to your project (if applicable):

☐
☐
☐
☐
☐

Universal Access to Outdoor Recreation - A Design Guide

USFS Standard Specifications for Construction & Maintenance of Trails

BLM Handbook 9114-1 Trails

NOHVCC Handbooks

Other: _____

THE LANDOWNER MUST PROVIDE A LETTER STATING THAT:

(See Grant Manual Appendix C)

- a) Landowner has read the Request for Grant Application package.
- b) Landowner agrees with the application and the terms of the grant.
- c) Landowner holds an interest in the subject land that is sufficient in scope and authority to allow the applicant to complete the proposed project and operate and maintain the proposed project after its completion.
- d) Landowner is legally committing to maintain the trail/facility and will allow public motorized access to such trail/facilities for 25 years or the normal life of the project; and
- e) Landowner agrees to provide any match or other tasks in the application that are assigned to Landowner.

Federal Environmental Compliance:

If Federal funds or Land are a part of the project and NEPA was completed, indicate which document was produced, and **please attach the decision document to this application:**

☐
☐
☐
☐
☐

Record of Decision (ROD)

Finding of No Significant Impact (FONSI) and a Decision Record (DR)

Categorical Exclusion (CX)

SHPO 106 compliance/concurrence letter

Other compliance documents already completed.

☒ Not applicable

If NEPA or planning is a part of the project describe the steps in the Scope of Work.

Location, Maps, Photos

Nearest town/city/municipality of project (list multiple if applicable): Overton, Nevada
County(s): Clark

Required Maps: All maps must include a legend, north arrow, scale, and map name. Topographic maps are preferred. You may include *additional* aerial/google maps. (See Grant Manual Appendix D for examples)

The following map types are required:

1. General location map (showing project area within the state or county)
2. Detail map indicating specific project elements (e.g., structures, trail alignment)
 - Maps larger than 11x17 will not be accepted

Required Photographs: At least two (2) overviews of the project area from different angles and distances. (Good photographs at trail level and google aerials help the technical advisory committee and the Commission to understand the location, depth and breadth of your project.)

Trail projects: If the shapefiles for the trail system are available, please submit them in the e-file. The shapefiles of the trail will be required at project end. Contact the Program for assistance in the collection of the data if needed.

Disclaimer and Signature

I certify that my answers are true and complete to the best of my knowledge.

If this application is selected for funding, I understand that false or misleading information in my application or presentations may result in the termination of the grant.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

**APPLICATIONS DUE:
March 23, 2025 AT 11:59 PM, PST**

SUBMIT: ONE SINGLE ELECTRONIC FILE; PDF VIA EMAIL TO: KBarmore@ohv.nv.gov

OR

ONE FULL COLOR COPY OR MEMORY DEVICE ENCLOSED WITH APPLICATION
BY MAIL OR HAND DELIVERY
(8.5" X 11" ONLY. Maps should be no larger than 11"X17")

TO: NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES
OFF-HIGHWAY VEHICLES PROGRAM
ATTN: KADEN BARMORE
901 S. STEWART STREET, SUITE 1003
CARSON CITY, NV 89701

To request assistance in planning your project or for questions about the OHV Grant program, please contact

Kaden Barmore
KBarmore@ohv.nv.gov
(775) 684-2794

Budget Estimate

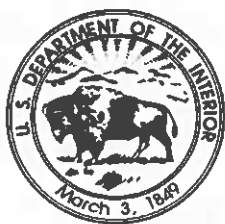
Title: Illegal OHV Trail Impacts at Lost City

Project Period: 6/1/25 - 6/31/26

	Rate	Units	Year 1 Amount	Units	Year 2 Amount	Total	
<u>SALARIES</u>							
<i>Professional/Senior Personnel</i>	<i>Per Month</i>						
JD Lancaster	\$ 10,559.14	5.10	\$ 53,852.00	0.00	\$ -	\$ 53,852.00	
G. Haynes	\$ 11,529.29	4.10	\$ 47,270.00	0.00	\$ -	\$ 47,270.00	
TBN Staff Research Scientist	\$ 5,017.17	2.60	\$ 13,045.00	0.00	\$ -	\$ 13,045.00	
TBN Staff Research Scientist	\$ 5,017.17	2.60	\$ 13,045.00	0.00	\$ -	\$ 13,045.00	
E. Chameroy	\$ 5,977.75	6.60	\$ 39,453.00	0.00	\$ -	\$ 39,453.00	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
Total Professional/Senior Personnel			\$ 166,665.00		\$ -	\$ 166,665.00	166,665.00
<i>Post Doctorate</i>							
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
<i>Technical</i>							
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
<i>Graduate Student</i>							
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
<i>Hourly</i>	<i>Per Hour</i>						
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
Total Salaries			\$ 166,665.00		\$ -	\$ 166,665.00	166,665.00
<u>FRINGE BENEFITS</u>							
Professional	51.20%		\$ 85,332.00		\$ -	\$ 85,332.00	
Post Doctorate	31.30%		\$ -		\$ -	\$ -	
Technical	55.10%		\$ -		\$ -	\$ -	
Graduate Student	27.50%		\$ -		\$ -	\$ -	
Hourly	2.90%		\$ -		\$ -	\$ -	
Total Fringe			\$ 85,332.00		\$ -	\$ 85,332.00	85,332.00
TOTAL SALARY AND FRINGE BENEFITS			\$ 251,997.00		\$ -	\$ 251,997.00	
<u>EQUIPMENT (items exceeding \$5K per unit)</u>							
Photogrammetry Processing Computer			\$ 6,456.00		\$ -	\$ 6,456.00	
List Equipment			\$ -		\$ -	\$ -	
TOTAL EQUIPMENT			\$ 6,456.00		\$ -	\$ 6,456.00	6,456.00
<u>TRAVEL</u>							
<i>Domestic Travel</i>							
		0.00	\$ -	0.00	\$ -	\$ -	
Camping	\$ 40.00	70.00	\$ 2,800.00	0.00	\$ -	\$ 2,800.00	
Per Diem	\$ 86.00	70.00	\$ 6,020.00	0.00	\$ -	\$ 6,020.00	
		0.00	\$ -	0.00	\$ -	\$ -	
		0.00	\$ -	0.00	\$ -	\$ -	
Motor Pool - Mileage Rate	\$ 0.35	1,600.00	\$ 560.00	0.00	\$ -	\$ 560.00	
Motor Pool - Daily Rate	\$ 40.00	28.00	\$ 1,120.00	0.00	\$ -	\$ 1,120.00	
Total Domestic Travel			\$ 10,500.00		\$ -	\$ 10,500.00	10,500.00
<i>Foreign Travel</i>							
Airfare -	\$ 2,200.00	0.00	\$ -	0.00	\$ -	\$ -	
Per Diem -	\$ 100.00	0.00	\$ -	0.00	\$ -	\$ -	
Transportation	\$ 50.00	0.00	\$ -	0.00	\$ -	\$ -	
Total Foreign Travel			\$ -		\$ -	\$ -	0.00
TOTAL TRAVEL			\$ 10,500.00		\$ -	\$ 10,500.00	
<u>PARTICIPANT SUPPORT</u>							
List Support Type	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
List Support Type	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
TOTAL PARTICIPANT SUPPORT			\$ -		\$ -	\$ -	0.00
<u>MATERIALS AND SUPPLIES</u>							
Field supplies	\$ 728.00	1.00	\$ 728.00	0.00	\$ -	\$ 728.00	
List Supplies	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
TOTAL MATERIALS AND SUPPLIES			\$ 728.00		\$ -	\$ 728.00	728.00
<u>OTHER DIRECT COSTS</u>							
Wingtra	\$ 164.14	13.00	\$ 2,133.82	0.00	\$ -	\$ 2,133.82	
Altum camera	\$ 107.18	13.00	\$ 1,393.34	0.00	\$ -	\$ 1,393.34	
Sony camera	\$ 57.71	13.00	\$ 750.23	0.00	\$ -	\$ 750.23	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
	\$ -	0.00	\$ -	0.00	\$ -	\$ -	
TOTAL OTHER DIRECT COSTS			\$ 4,277.39		\$ -	\$ 4,277.39	4,277.39
<u>SUBCONTRACTORS</u>							
Subcontractor Name			\$ -		\$ -	\$ -	
Subcontractor Name			\$ -		\$ -	\$ -	
TOTAL SUBCONTRACTORS			\$ -		\$ -	\$ -	0.00
Total Direct Costs			\$ 273,958.39		\$ -	\$ 273,958.39	273,958.39
Modified Direct Costs (DC less subs, equip, part supp)			\$ 267,502.39		\$ -	\$ 267,502.39	
Indirect Cost	10.0%		\$ 26,750.00		\$ -	\$ 26,750.00	26,750.00
TOTAL COST ESTIMATE			\$ 300,708.39		\$ -	\$ 300,708.39	300,708.39

Landowner Support Letter

United States Department of the Interior



NATIONAL PARK SERVICE

LAKE MEAD NATIONAL RECREATION AREA
INTERIOR REGION 8
601 NEVADA HIGHWAY
BOULDER CITY, NEVADA 89005



March 21, 2025

Attn: Nevada Off-Highway Vehicles Program
Department of Conservation and Natural Resources
901 S. Stewart Street, Ste 1003
Carson City, Nevada 89701

RE: Desert Research Institute Lost City Archeological Surveying Application

Dear Commissioners:

This letter is in support of the Nevada Off-Highway Vehicles Program proposal from the Desert Research Institute (DRI) to identify and document OHV impacts and unapproved trail/road proximity to sensitive and significant cultural resources affiliated with the archeological site Lost City in the Overton Arm section of the Lake Mead National Recreation Area.

Lost City was previously protected beneath Lake Mead but became exposed as the water levels lowered. The site has not been fully surveyed by either the park or in the original historic surveys that occurred prior to the formation of Lake Mead. The park will use the data collected by DRI to inform us of OHV usage behaviors and their impacts or potential impacts to sites. That information, along with public and OHV-user input, will be used to develop and implement a site-specific management plan as part of a SNPLMA award (which provides funds for the park to develop new roads or recreational access in the area, as needed). The site-specific management plan will better define back country activities and water access in the area while using the DRI data to more accurately protect this unique cultural resource, and potentially limit the need to close an area in its entirety. As an both an NPS entity and a Recreation Area, the park is committed to finding balanced solutions that support recreation long-term (25+ years and beyond) while also protect irreplaceable resources.

I have read the Request for Grant Application package and attachments, and I agree with the application and the terms of the grant. I agree to support the tasks in the application that are assigned to our team at Lake Mead National Recreation Area.

As the Superintendent of Lake Mead National Recreation Area, I hold interest in the subject land that is sufficient in scope and authority to allow the applicant to complete the proposed education and outreach project in partnership with our team from the National Park Service.

Portions of the project may be conducted on federal land and will be planned in conformance with the appropriate land management permits, licenses, clearances, and Federal environmental and Section 106 SHPO documentation necessary to comply with local, state and/or federal laws.

If you have any questions or concerns, please contact me at (760) 221-4367 or by email at mike_gauthier@nps.gov. You may also contact our Partnerships and Grants Management Specialist, Stefani Dawn, at 702-280-0388 or stefani_dawn@nps.gov.

Sincerely,

Mike Gauthier

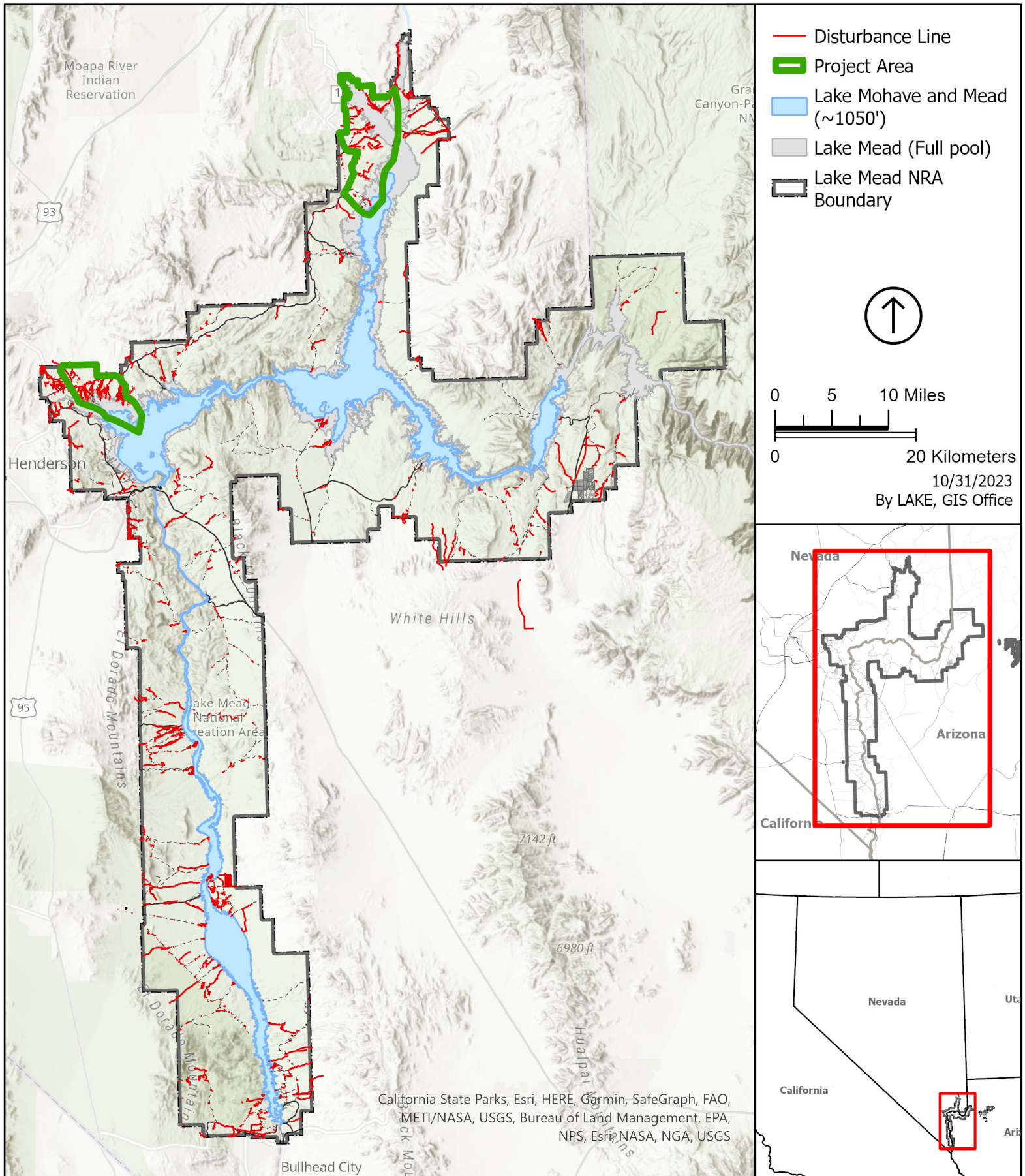
Superintendent, Lake Mead National Recreation Area

Maps

Illegal Roads Across the Park (Large Overview)

SNPLMA - Round 20 Proposal - Managing Illegal Roads to
Protect Recreation, Safety, and Resources: Phase 1

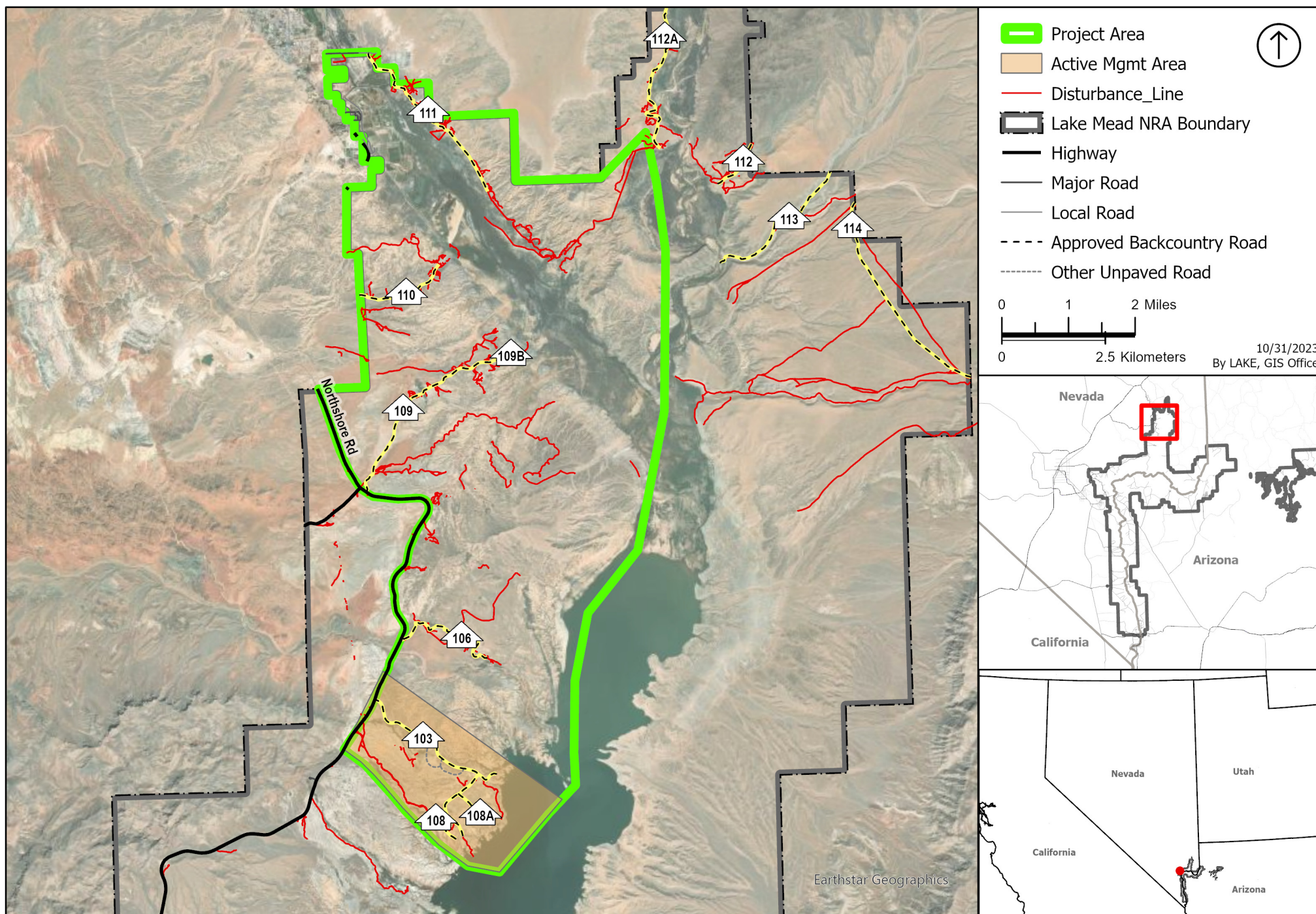
Lake Mead National Recreation Area
Arizona/Nevada
National Park Service
U.S. Department of the Interior



Illegal Roads at Overton Arm Project and Active Mgmt Areas

SNPLMA - Round 20 Proposal - Managing Illegal Roads to Protect Recreation, Safety, and Resources: Phase 1

Lake Mead National Recreation Area
Arizona/Nevada
National Park Service
U.S. Department of the Interior



Photos



Photo 1: An illegal road passing through an archaeological structural feature in the Lost City area.



Photo 2: An illegal road in the Overton Arm area.



Photo 3: An illegal road (foreground) in the Overton Arm/Lost City area.



Photo 4: OHVs on an illegal road in the Overton/Lost City area.

Equipment Estimates



Puget Sound Systems, Inc. Tax ID 20-0056154
2707 West Valley Highway N Cage Code 31YA3
Auburn, WA 98001

QUOTE

Quote # 000270164
Quote Date 03/23/25

Bill To	Ship To
DRI Jd Lancaster 755 E Flamingo Rd Las Vegas, NV 89119 US Phone: 702-862-5377	DRI Jd Lancaster 755 E Flamingo Rd Las Vegas, NV 89119 US Phone: 702-862-5377

Item	Qty	Unit Price	Total
Puget Workstation Core Ultra Z890 C121-L Fractal Design Define 7 ASUS ProArt Z890-Creator WiFi Intel Core Ultra 9 285K 3.7GHz 24 Core 36MB 125W Asetek 624S-M2 240mm CPU Cooler 2x DDR5-5600 32GB NVIDIA GeForce RTX 5080 16GB Onboard Sound Integrated Ethernet, WiFi, and Bluetooth 1TB NVMe PCIe Gen4 M.2 SSD Primary drive. 4TB NVMe PCIe Gen4 M.2 SSD Secondary drive. Super Flower LEADEX VII Gold 1300W Case Fans Upgrade Kit (PWM Ramping) Paperless Packet Puget Workstation Warranty: Lifetime Labor and Tech Support, 3 Year Parts Windows 11 Pro 64-bit Shipping & Handling: unselected	1	\$5,957.11	\$5,957.11

Pricing is valid for 30 days from the QUOTE date, unless impacted by substantial market changes. Payment or an approved purchase order is required upon placement of your order. This quote is based upon the acceptance of the Terms and Conditions found at pugetsystems.com/terms

These commodities, technology, or software are subject to the United States Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

For questions concerning this document, please contact sales@pugetsystems.com or (425) 458-0273

Subtotal	\$5,957.11
Shipping & Handling	<i>unselected</i>
Tax	\$498.91
Total	\$6,456.02

+ shipping & handling








Shopping Cart (62 Items)

PROMO CODE

Enter Promo Code

QUICK CART

Add Product By Item #

PRODUCT		QTY	PRICE	TOTAL
	5/8" #5 Rebar Stakes, 18", Bundle of 25 Item #: 39509 – In Stock	<input type="text" value="2"/>	\$54.95	\$109.90
	No. 550F Field Rite in the Rain Environmental Field Book Item #: 49325 – In Stock	<input type="text" value="7"/>	\$25.95	\$181.65
	Whirl-Pak Write On Sterile Sample Bags, 2.5 Mil, 4 oz. Item #: 79225 – In Stock	<input type="text" value="1"/>	\$85.75	\$85.75
	Aluminum Surv-Kaps for Rebar, 1-1/2" flat top for 5/8" rebar Item #: 39497 – Pre-order	<input type="text" value="50"/>	\$4.95 \$4.25	\$212.50
	Presco Steel Wire Stake Flags, 4" x 5" x 21", Orange Glo, Bundle of 100 Item #: 33524 – In Stock	<input type="text" value="2"/>	\$9.95	\$19.90
Subtotal				\$609.70
Shipping				\$118.21
755 E Flamingo LAS VEGAS NV 89119 Change			UPS Ground (4 Days) Change	
Total				\$727.91

Continue Shopping

Proceed to Checkout

 REQUEST A QUOTE  ADD TO MY LISTS