



— BUREAU OF —  
RECLAMATION

# **Use of Electric Bicycles on Select Reclamation Lands in the Lower Colorado Basin**

**Final Environmental Assessment and Finding of No Significant  
Impact LC-24-22  
Lower Colorado Basin**

## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# **Finding of No Significant Impact**

## **(FONSI)**

**LC-24-22**

**for**

**Final Environmental Assessment (EA) for Use of Electric Bicycles on Select  
Reclamation Lands in the Lower Colorado Basin**

**Boulder City, Nevada**

Based on a thorough of the analysis of the potential environmental impacts presented in the EA, The Bureau of Reclamation (Reclamation) finds that implementation of the Proposed Action will not significantly affect the quality of the human environment within or adjacent to the project area, therefore an Environmental Impact Statement will not be prepared.

Accordingly, this FONSI is submitted to document environmental review and evaluation of the Proposed Action Alternative in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Prepared: \_\_\_\_\_

National Environmental Policy Act Coordinator

Recommended: \_\_\_\_\_

Manager, Environmental Compliance Group

Approved: \_\_\_\_\_

Chief, Resource Management Office

## **Background**

Reclamation prepared an EA for the purpose of expanding access and to increase recreational opportunities for all visitors on public lands, especially for those with physical limitations or disabilities. By exempting electric bikes (E-bikes) from the definition of off-road vehicles (ORVs), Reclamation would be able to treat E-bikes the same as non-motorized bicycles and allow for their use on existing roads and multi-use trails where non-motorized bicycles are already allowed.

Reclamation's E-bike policy LND P04 Recreation Program Management provides that Reclamation may open recreation areas to E-bikes in accordance with Secretarial Order (SO) 3376 Increasing Recreational Opportunities through the use of Electric Bikes and as permitted by 43 CFR part 420, Off-Road Vehicle Use, which establishes regulations for ORV use on Reclamation lands. Under 43 CFR Part 420, E-bikes are considered ORVs unless the Regional Director has expressly determined that E-bikes should be treated the same as non-motorized bicycles. As part of that regulation, 43 CFR § 420.5(a)(7) permits E-bikes to be treated the same as non-motorized bicycles on Reclamation lands when certain conditions are met: (1) E-bikes are used on roads and trails upon which mechanized, non-motorized use is allowed; (2) E-bikes are not used in a manner where the motor is being used exclusively to propel the E-bike for an extended period of time; and (3) the Regional Director has expressly determined, as part of a land-use planning or implementation-level decision, that E-bikes should be treated the same as non-motorized bicycles.

The areas being proposed for E-bike use are popular recreation destinations along established roads and multi-use trails where non-motorized bicycles are already allowed. Many of the areas already see significant E-Bike use, as the laws governing them are not widely known and are difficult to enforce. If these areas are officially opened to E-Bikes, Reclamation's managing partners and agencies with concurrent or overlapping jurisdiction can regulate them as they determine necessary. By treating E-Bikes the same as non-motorized bicycles, Reclamation would be able to streamline regulatory processes and co-manage the use of popular roads and trails more efficiently.

## **Alternatives Considered**

### **No Action Alternative**

Under the no action alternative, E-bikes would continue to be treated the same as ORVs on Reclamation lands and could only be operated in areas that have been opened to ORV use, in accordance with 43 CFR § 420. Access to Reclamation lands could not be expanded to include E-bike use, and recreational opportunities, including for those with physical limitations or disabilities, could not be increased.

### **The Proposed Action**

Under the proposed action, the Reclamation's Lower Colorado Basin Regional Director could authorize E-bike use on existing roads and multi-use trails within the areas described within the EA. Selected roads and multi-use trails could be authorized for E-bike use and would be documented in subsequent decision memoranda. The Regional Director could allow for Class 1, Class 2, and Class 3 E-bikes, as defined in 43 CFR § 420.5(h), on select roads and multi-use trails that are already open to

non-motorized bicycle use. This regulation defines an electric bicycle as a two- or three-wheeled cycle with fully operable pedals and an electric motor of not more than 750 watts (1 horsepower) that meets the requirements of one of the following three classes:

Class 1 electric bicycle means an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

Class 2 electric bicycle means an electric bicycle equipped with a motor that may be used exclusively to propel the bicycle, and that is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour.

Class 3 electric bicycle means an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.

The Regional Director would have the discretion to determine where and what classes of E-bikes, as defined by 43 CFR § 420.5(h), should be treated the same as non-motorized bicycles. The use of all E-bikes would remain prohibited on other Reclamation lands that have not been specifically opened to E-bike use. Furthermore, E-bikes would not be authorized on any Reclamation land where they have been prohibited by another entity with concurrent or overlapping jurisdiction. No new roads, trails, ground disturbance, or alterations to current facilities or structures are proposed as part of this action.

## **Environmental Commitments**

The following measures will be implemented as part of the proposed action to reduce or eliminate impacts to resources:

The Proposed Action would be in accordance with all Federal, state, and local statutes, regulations, and Executive Orders.

In the event of an unanticipated discovery of a cultural resource, all operations in the area of the discovery would cease, and a Reclamation archaeologist would be contacted. “Discovery” is defined as the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits, human remains, or places reported to be associated with Native American religious beliefs and practices.

The trails within the Project Area are subject to periodic inspection and maintenance. Additional impacts, should any occur resulting from the use of E-bikes, would be corrected as part of Reclamation’s annual operations and maintenance program.

Trails within the Project Area managed by partners and agencies with overlapping jurisdiction would have discretion on how to actively manage the use of E-bikes on those trail segments. This would include where, when, and how E-bikes can be used, and the classes of E-bikes that are authorized.

## **Environmental Impacts and Findings**

Implementation of the Proposed Action Alternative will not result in significant impacts to any of the resources evaluated in the EA. The reasons for this determination are summarized by resource below.

### **Natural Resources**

Under the Proposed Action, the existing roads and multi-use trails would continue to be utilized by a variety of user groups, including bicyclists. Use of all classes of E-bikes as defined in 43 CFR § 420.5(h) could become an authorized activity unless deemed inappropriate in certain areas by Reclamation or a managing partner. The effects from E-bikes are similar to non-motorized bikes, and visitors using E-bikes are expected to have similar impacts to natural resources as non-motorized bikes. Most trail surfaces within the area are paved, and the non-paved trail surfaces range from compacted natural surfaces to pavement atop artificial surfaces, such as repurposed railroad beds. And given that most road and trail segments on Reclamation lands are within or adjoin developed areas, possible impacts from harassment, collisions, and temporary displacement of wildlife are not anticipated to change measurably from the current impacts of non-motorized bikes.

No measurable impacts to natural resources are anticipated because bicycles are currently being used on the roads and multi-use trails, and the effects from e-bikes are expected to be the same as non-motorized bikes.

### **Cultural Resources**

The Proposed Action would restrict the usage of E-bikes to existing roads and multi-use trails where bicycle usage is already permitted. Non-motorized and E-bikes are comparable in terms of noise production; there would be no auditory effects. Differences in visual appearance and time of effect would be negligible as well and, likewise, result in no visual effects. Finally, as the Proposed Action authorizes no new roads or trails and consists of no ground disturbance or alteration of facilities, there would be no anticipated physical effects.

Reclamation considered two potential impacts of e-bike usage offered elsewhere: an increase in erosion and an increase in backcountry access, which could result in adverse effects to historic properties caused by increased visitation. However, no increased erosion is anticipated, as E-bike usage would be restricted to existing, surfaced, roads and multi-use trails, and research on soil displacement on natural surface trails suggests no significant difference in trail degradation between non-motorized and electric bicycles. Furthermore, the subject trails are included in the Reclamation annual operations and maintenance program, and any observed erosion would be addressed.

The Bureau of Reclamation has therefore determined that the Proposed Action would have no potential to affect historic properties, if present, under Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR § 800.

## **Recreation**

Under the Proposed Action, recreational opportunities would be expanded for visitors on public lands. The physical environment would not be affected by the change of the E-bike classification since the impact to the trail would be similar to non-motorized bikes on the improved trail surfaces within the Project Area. There may be an overall increase in the number of bikes on the roads and trails, although in many cases the recreational user will merely be changing the equipment they use and not be an additional user.

The Proposed Action aims to guide and improve recreational and visitor opportunities on Reclamation lands by decreasing future conflicts, minimizing resource impacts, and providing a more inclusive experience. There would be no management effects to the recreation environment from this action; the only management change would be updating the current definition of E-bikes from an ORV classification to that of a non-motorized bike.

The effects from E-bikes are expected to be the same as non-motorized bikes and therefore the Proposed Action is not anticipated to cause any detectable impacts to Recreation.

## **Public Involvement**

The draft EA was posted to Reclamation's website and a press release was issued to invite the public to comment between May 14 and June 13, 2025. No comments were received.



# 1.0 Introduction

This Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA. The purpose of this EA is to evaluate the potential impacts of the proposed project and its alternative on the physical and human environment and determine if the impacts will be significant, thus warranting the preparation of an Environmental Impact Statement. Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. Reclamation verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. Reclamation has also voluntarily considered the Council on Environmental Quality's rescinded regulations implementing NEPA, previously found at 40 C.F.R. Parts 1500–1508, as guidance to the extent appropriate and consistent with the requirements of NEPA and Executive Order 14154.

Non-motorized bicycles are a popular form of recreation on Reclamation roads and trails, which include but are not limited to areas along canals, reservoirs, scenic areas, and dams. Electric bike (E-bike) use has shown rapid growth in recent years as both an alternative form of transportation and for recreational purposes. Reclamation's E-bike policy LND P04 Recreation Program Management provides that Reclamation may open recreation areas to E-bikes in accordance with Secretarial Order (SO) 3376 Increasing Recreational Opportunities through the use of Electric Bikes and as permitted by 43 CFR part 420, Off-Road Vehicle Use, which establishes regulations for off-road vehicle (ORV) use on Reclamation lands. Under 43 CFR Part 420, E-bikes are considered ORVs unless the Regional Director has expressly determined that E-bikes should be treated the same as non-motorized bicycles. As part of that regulation, 43 CFR § 420.5(a)(7) permits E-bikes to be treated the same as non-motorized bicycles on Reclamation lands when certain conditions are met: (1) E-bikes are used on roads and trails upon which mechanized, non-motorized use is allowed; (2) E-bikes are not used in a manner where the motor is being used exclusively to propel the E-bike for an extended period of time; and (3) the Regional Director has expressly determined, as part of a land-use planning or implementation-level decision, that E-bikes should be treated the same as non-motorized bicycles.

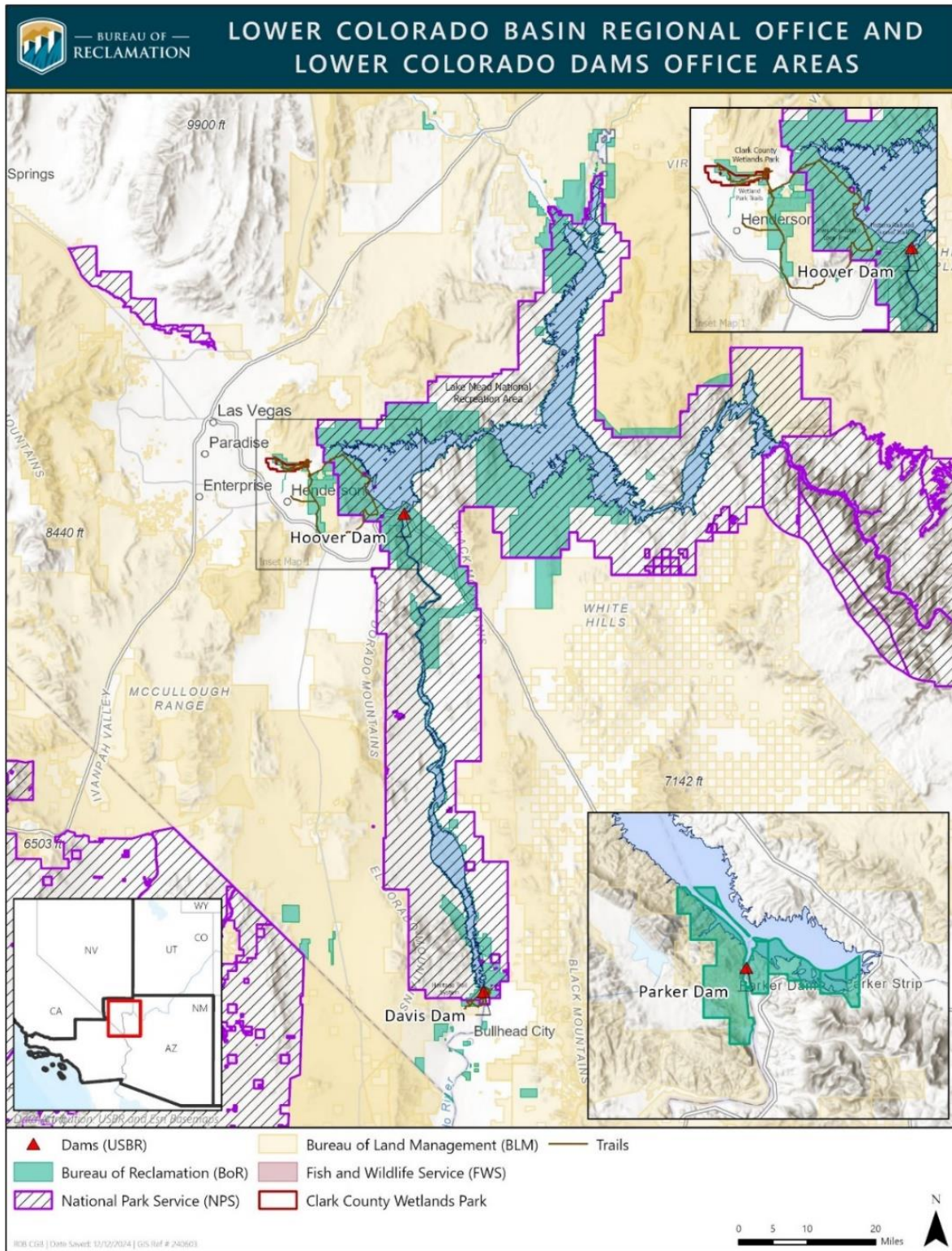
The areas being proposed for E-bike use are popular recreation destinations along established roads and multi-use trails where non-motorized bicycles are already allowed. Many of the areas already see significant E-Bike use, as the laws governing them are not widely known and are difficult to enforce. If these areas are officially opened to E-Bikes, Reclamation's managing partners and agencies with concurrent or overlapping jurisdiction can regulate them as they determine necessary. By treating E-

Bikes the same as non-motorized bicycles, Reclamation would be able to streamline regulatory processes and co-manage the use of popular roads and trails more efficiently.

## **1.1 Purpose and Need**

The purpose and need of the Proposed Action is to expand access on public lands and to increase recreational opportunities for all visitors, especially those with physical limitations or disabilities, and to encourage the enjoyment of lands and waters managed by the Department of the Interior. Implementation of the Proposed Action would be responsive to SO 3376 by exempting E-bikes, as defined by 43 CFR § 420.5(h), from the definition of off-road vehicles, thereby allowing the usage of E-bikes where other types of bicycles are allowed within the Lower Colorado Basin Regional Office Area (LCBROA) and those areas managed by the Lower Colorado Dams Office (LCDO), hereinafter collectively referred to as the Project Area (Figure 1). Figure 1 depicts the Project Area by including the relevant Reclamation lands (consisting of both acquired and withdrawn) within the LCBROA and those managed by the LCDO. Lands acquired by Reclamation were obtained through various means for specific purposes and withdrawn lands are those federal lands administered by Reclamation that have been reserved by the Secretary of the Interior for specific purposes.

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**Figure 1- Map of Lower Colorado Regional Office and Lower Colorado Dams Office Areas**

## **2.0 Alternatives**

### **2.1 No Action Alternative**

Under the no action alternative, E-bikes would continue to be treated the same as ORVs on Reclamation lands and could only be operated in areas that have been opened to ORV use, in accordance with 43 CFR § 420. Access to Reclamation lands could not be expanded to include E-bike use, and recreational opportunities, including for those with physical limitations or disabilities, could not be increased.

### **2.2 Proposed Action Alternative**

Under the proposed action, the Bureau of Reclamation's Lower Colorado Basin Regional Director would be able to authorize, as part of an implementation level decision, E-bike use on existing multi-use trails and roads within the Project Area (Figure 1). Selected roads and multi-use trails within the Project Area could be authorized for E-bike use and documented in subsequent decision memoranda, informed by the analysis contained within this EA. The Regional Director could allow for Class 1, Class 2, and Class 3 E-bikes, as defined in 43 CFR § 420.5(h), on roads and multi-use trails within the Project Area that are already open to non-motorized bicycle use. This regulation defines an electric bicycle as a two- or three-wheeled cycle with fully operable pedals and an electric motor of not more than 750 watts (1 horsepower) that meets the requirements of one of the following three classes:

Class 1 electric bicycle means an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

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Class 3 electric bicycle means an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.

Under the Proposed Action, E-bike use could be authorized on existing roads and multi-use trails within the Project Area that are already open to non-motorized bicycle use. The Regional Director would have the discretion to determine where and what classes of E-bikes, as defined by 43 CFR § 420.5(h), should be treated the same as non-motorized bicycles. The use of all E-bikes would remain prohibited on other Reclamation lands within the Project Area that have not been specifically opened to E-bike use. Furthermore, E-bikes would not be authorized on any Reclamation land

where they have been prohibited by another entity with concurrent or overlapping jurisdiction. No new roads, trails, ground disturbance, or alterations to current facilities or structures are proposed as part of this action.

### **2.2.1 Mitigation Measures**

The Proposed Action would be in accordance with all Federal, state, and local statutes, regulations, and Executive Orders.

In the event of an unanticipated discovery of a cultural resource, all operations in the area of the discovery would cease, and a Reclamation archaeologist would be contacted. “Discovery” is defined as the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits, human remains, or places reported to be associated with Native American religious beliefs and practices.

The trails within the Project Area are subject to periodic inspection and maintenance. Additional impacts, should any occur resulting from the use of E-bikes, would be corrected as part of Reclamation’s annual operations and maintenance program.

Trails within the Project Area managed by partners and agencies with overlapping jurisdiction would have discretion on how to actively manage the use of E-bikes on those trail segments. This would include where, when, and how E-bikes can be used, and the classes of E-bikes that are authorized.

## **2.3 Alternatives Considered but Not Evaluated in Detail**

The use of E-bikes on Reclamation lands within the Project Area is currently not authorized, and alternatives that were considered are derived from the different classes of E-bikes that could be authorized. Since the Regional Director would have discretion under the analysis of the Proposed Action in determining if, where, and what classes of E-bikes should be treated the same as non-motorized bicycles, and managing partners and agencies with overlapping jurisdiction would also have discretion on how to actively manage E-bikes, no other alternatives have been evaluated in detail.

## 3.0 Affected Environment and Environmental Consequences

The following section presents a description of the existing condition for the selected resource areas being reviewed as well as an analysis of the impacts of the Proposed Action and No Action alternatives on those resources.

### 3.1 Affected Environment

The relevant roads and multi-use trails within the Project Area are located on Reclamation's acquired and withdrawn lands along the Colorado River and its tributaries of the Las Vegas Wash, Virgin River, and Muddy River that flow into Lake Mead. These lands occupy portions of the Mojave and Sonoran deserts in the southern Basin and Range physiographic province along the shared borders of Arizona, California, and Nevada. Basin and Range topography is characterized as flat basins with ephemeral lakes bounded by steep slopes between high, narrow, elongated mountain ranges. Scientific evidence supports occupation of this region that began approximately 13,000 years ago; Tribal Nations contend their ancestors occupied the area since time immemorial.

The Project Area lies within the Mohave Desert Scrub Ecosystem. Scrublands include Mohave mixed scrub and creosote bush/bursage plant communities; a minor catclaw community is interspersed within the two larger communities. Vegetation in the Project Area is dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Shrubs include brittle bush (*Encelia farinosa*), snakeweed (*Gutierrezia sarothrae*), cheeseweed (*Hymenoclea salsola*), ratany (*Krameria sp.*), rush milkweed (*Asclepias subulata*), sweetbush (*Bebbia juncea*), and saltbush (*Atriplex species*). Tree species within the Project Area include catclaw acacia (*Acacia greggii*), screw-bean mesquite (*Prosopis pubescens*), and Fremont's cottonwood (*Populus fremontii*). Annual wildflowers and herbs include the little desert trumpet (*Eriogonum trichopes*), desert globemallow (*Sphaeralcea ambigua*), desert lupine (*Lupinus sp.*), and Indian paint brush (*Castilleja sp.*). Cacti species include beavertail cactus (*Opuntia basilaris*), pencil cholla (*Cylindropuntia ramosissima*), and buckhorn cholla (*Cylindropuntia acanthocarpa*). The trails within the Project Area cross through desert tortoise (*Gopherus agassizii*) habitat, a federally threatened and a state-protected species, though no desert tortoise designated critical habitat is within any of the road or trail systems.

Archaeological site types and features found within the Project Area include the large communities and smaller hamlet/family structures along the River's tributaries; trails; ground ovens; rock rings, cleared circles, and alignments; geoglyphs/intaglios, predominantly in California and Arizona; rock art sites, the majority of which are petroglyphs; and caves and shelters. Many of these places are considered significant, if not sacred, to the tribes of the Colorado River today with no imposed or perceived discontinuity between the time of their construction and use and the present. Some of the peaks, and other geographic features, along the river, too, remain sacred.

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Early Euro-American use and occupation of the area was primarily related to the mining, forestry, and ranching industries, with limited agriculture along permanent water sources. Euro-American

attempts at simple small-scale irrigation, mirroring local tribes' methods, began with their entry into the region in the 1850s. Significant archaeological sites related to this period consequently consist of abandoned mines and mining prospects; homesteads, camps, and isolated cabins; charcoal kilns; and irrigation works. Efforts at soil conservation, range preservation, forest development, and public land recreation improvements undertaken by the depression-era Civilian Conservation Corps are most notable in Nevada, while Reclamation's development of the Colorado River to deliver water and power to the southwestern United States further transformed the region, which has seen tremendous growth in population.

The roads and trails within the Project Area, with the exception of those located on Reclamation dams, are managed under partner agreements and/or leases with non-federal government agencies. Many portions of the trails have an urban interface and are within or adjacent to a developed area with existing infrastructure including roadways and government facilities. The existing user groups of the trails are predominantly walkers, hikers, runners, bicycle riders and, where allowable, horseback riders. Trail surfaces range from compacted natural surfaces to pavement atop artificial surfaces, such as repurposed railroad beds, though most of the trails have been paved. These types of trails allow for casual recreation as well as commercial events such as running and bicycle races. Although currently not authorized, bicycle usage does also currently include E-bikes and their use is expected to continue to grow as they become more popular and more affordable. Additionally, there is some unauthorized use of motorcycles and ATVs along trails, and for certain authorized O&M activities, managing partners use other types of motorized vehicles on trails as well.

The specific trails within the Project Area that could be authorized for E-bike use are the River Mountains Loop Trail (RMLT), Historic Railroad Tunnel Trail (HRTT), Wetlands Park Loop Trail (WPLT), and the Heritage Trail System (HTS). Maps of these trails can be found in Figures 2 and 3. The maps contain distances that were calculated using a Geographical Information System and may not correspond with distances that have been publicly posted or published on websites, trail maps, or other contexts. These discrepancies are likely attributed to the inclusion or exclusion of segments that are spurs or connectors to other trail heads or systems, and additions or alterations from the original trail designs. For the purpose of this analysis, the most comprehensive approach was taken to include as much of the system that the trails represent.

The RMLT, including its recognized spurs and connectors, is approximately 40.46 miles in total length, of which roughly 28.36 miles overlap Reclamation withdrawn lands. The RMLT is comprised of both paved and concrete segments used primarily by hikers and bicyclists, and in certain segments an adjacent trail exists for equestrian use. The RMLT surrounds the River Mountains and connects lands within the City of Boulder City, City of Henderson, and Lake Mead National Recreation Area (NRA).

The HRTT is approximately 4.85 miles in total length, of which roughly 3.89 miles overlaps Reclamation withdrawn lands. The HRTT is considered historically significant and follows the original railroad bed that was previously used to haul materials for the construction of Hoover Dam. The HRTT extends from the Lake Mead NRA visitor center to the Hoover Dam and contains five tunnels along its path.

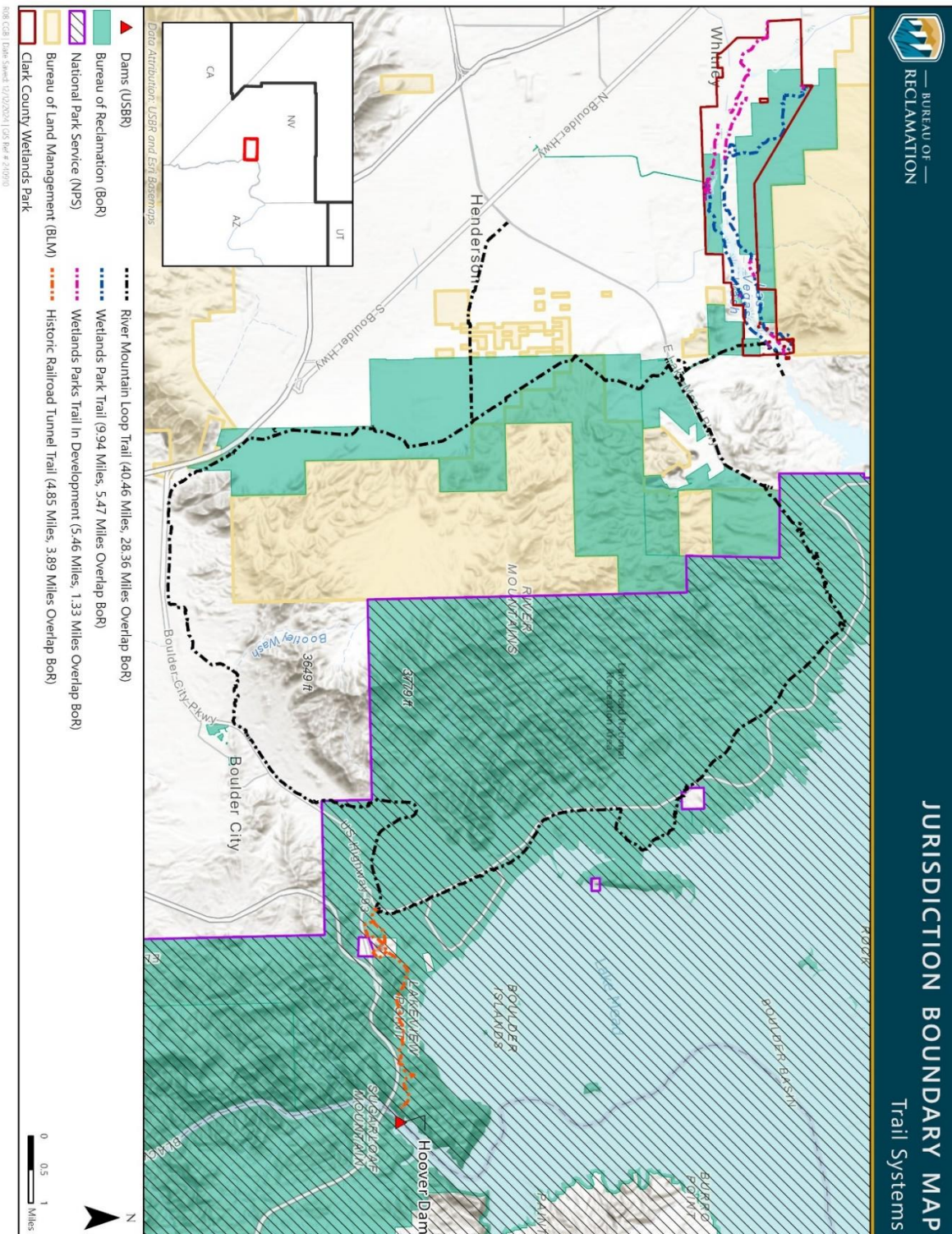


Figure 2 - Map of River Mountain Loop Trail, Wetlands Park Loop Trail, and Historic Railroad Tunnel Trail



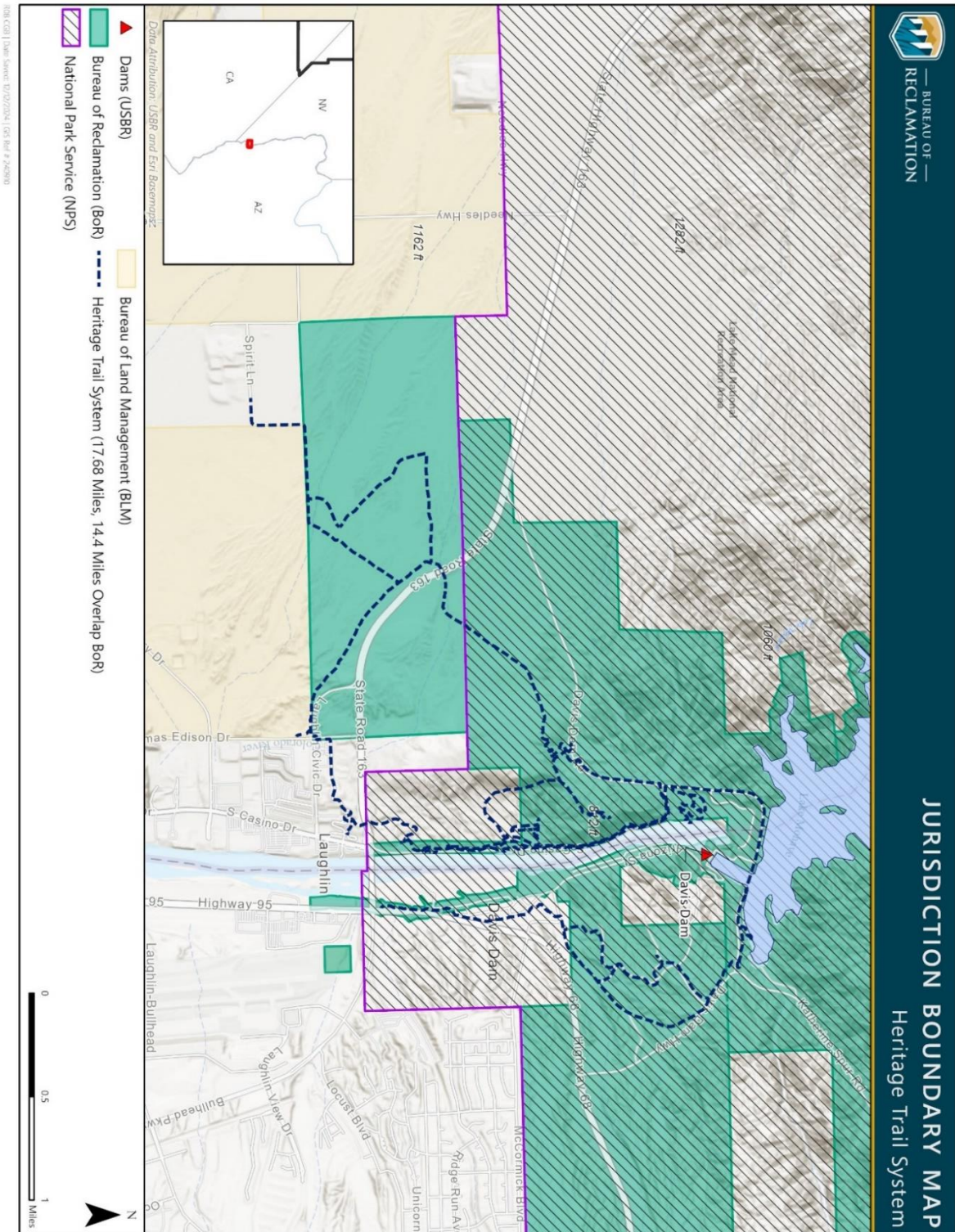


Figure 3 - Map of Heritage Trail System

The WPLT is approximately 15.4 miles in total length, and roughly 6.79 miles overlaps Reclamation withdrawn lands. Portions of the WPLT are being paved or otherwise still under development, but the total length of the trail system is included for the purposes of this analysis. The WPLT serves as a perimeter trail in Clark County Wetlands Park and loops around both the north and south sides of the Las Vegas Wash.

The HTS with its spurs and connectors is approximately 17.68 miles in total length, of which roughly 14.4 miles overlaps Reclamation withdrawn lands. The HTS crosses Davis Dam and connects both sides of the Colorado River. This trail system is the product of a collaboration with Mohave County Parks, City of Bullhead City, City of Laughlin, Bureau of Reclamation, and National Park Service.

### **3.2 Resources not Discussed in Detail**

The following resources were considered and are either analyzed under other resource sections or not further addressed in this document because they would not be impacted by the Proposed Action.

- Air Quality – Since their motors are electric, E-bikes do not produce emissions and therefore would not affect air quality on the roads and trails on which they are used.
- Noise – E-bikes utilize an electric motor that can emit a low, steady humming noise when engaged and the sound could potentially be heard by wildlife and visitors. However, the sound emitted is temporary and localized within the immediate vicinity of the passing E-bike and is not anticipated to significantly affect the overall soundscape on existing multi-use trails.
- Environmental Justice – Although Environmental Justice communities are present within the Project Area, permitting the use of E-bikes on existing roads and multi-use trails would not result in adverse environmental or health impacts on any community, including Environmental Justice communities.
- Human Health – Authorizing the use of E-bikes on existing roads and multi-use trails would expand access to recreational use on Reclamation lands and may result in an increase of physical activity for some individuals and user groups. No adverse impacts to Human Health have been identified.
- Visual Resources – Potential impacts to visual resources are discussed under “Cultural Resources.”
- Indian Trust Assets (ITA) – There are no ITAs in or adjacent to the relevant roads and multi-use trails in the Project Area.
- Indian Sacred Sites – There are no Indian Sacred Sites identified within the location of the relevant roads and multi-use trails in the Project Area.
- Soils/Hydrology – Permitting the use of E-bikes on existing roads and multi-use trails would not include new construction; therefore no impacts to Soils/Hydrology would occur.

- Floodplains and Wetlands – Although some existing roads and multi-use trails may cross or be adjacent to areas within a Floodplain or Wetland, the use of E-bikes on existing roads and trails would not alter or impede the function of the floodplain or wetland.
- Traffic Circulation – The existing roads and multi-use trails may see some increase in use by permitting the use of E-bikes; however, the circulation and flow of traffic on roadways would not significantly change. Therefore no impacts to Traffic Circulation are anticipated.

## **3.3 Environmental Consequences**

### **3.3.1 No Action Alternative**

Under the No Action Alternative, there would be no change to the management of the trail system. The relevant existing roads and multi-use trails within the Project Area would continue to be available for use by the public, and E-bike use would remain prohibited, which may have a negative impact on recreational users by withholding recreational opportunities for potential E-bike users. There would be no additional impacts to resources. Natural resources would continue to experience the same impacts associated with the activities currently authorized on the existing roads and multi-use trails, including hiking, walking, running, equestrian, and non-motorized bicycles. Those characteristics of adjacent historic properties qualifying them for inclusion in or eligibility for the National Register would not be altered. Reclamation land would remain in its current designated status for recreational users. Reclamation would retain the current definition that classifies E-bikes as ORVs, thereby prohibiting their use. E-bikes are currently not prohibited by any of the managing partners that oversee portions of the roads and trails within the Project Area, but their use would remain unauthorized on Reclamation lands, including in areas under managing partner agreements that would otherwise allow for their use. Restricting rising E-bike use on Reclamation lands will continue to be difficult to enforce due to its authorized use on adjacent federal, municipal, and private lands. Therefore, despite the current prohibition, unauthorized E-bike use on Reclamation lands would continue, and likely increase.

### **3.3.2 Proposed Action**

#### ***Natural Resources***

Under the Proposed Action, the existing roads and multi-use trails within the Project Area that cross through the plant communities and wildlife habitats that are supported by the Mohave Desert Scrub Ecosystem would continue to be utilized by a variety of user groups, including bicyclists. Use of all classes of E-bikes could become an authorized activity unless deemed inappropriate in certain areas by Reclamation or a managing partner.

The effects from E-bikes are similar to non-motorized bikes, and visitors using E-bikes are expected to have similar impacts to natural resources as non-motorized bikes. Generally, impacts to natural resources can occur from construction or operations and maintenance activities that cause ground disturbance. No new ground disturbance is anticipated from authorizing E-bikes on existing roads and trails and their use will not result in any new construction projects or measurable changes in

O&M activities. Most documented effects of bicycles on natural resources have been specific to the use of mountain bikes on mountain bike trails (Kuwaczka, L.F. et al, 2023; International Mountain Biking Association, 2015). Though mountain bikes may be used on the multi-use trails within the Project Area, Reclamation does not manage any trails specifically designed for mountain bike use within the Project Area. Most trail surfaces within the area are paved, and the non-paved trail surfaces range from compacted natural surfaces to pavement atop artificial surfaces, such as repurposed railroad beds. And given that most road and trail segments on Reclamation lands are within or adjoin developed areas, possible impacts from harassment, collisions, and temporary displacement of wildlife are not anticipated to change measurably from the current impacts of non-motorized bikes.

No measurable impacts to natural resources are anticipated because bicycles are currently being used on the roads and multi-use trails, and the effects from e-bikes are expected to be the same as non-motorized bikes.

### **Cultural Resources**

The Proposed Action would restrict the usage of E-bikes to existing roads and multi-use trails where bicycle usage is already permitted and therefore would have no anticipated effects to historic properties, if present. Non-motorized and electric bicycles are comparable in terms of noise production; there would be no auditory effects. Differences in visual appearance and time of effect would be negligible as well and, likewise, result in no visual effects. Finally, as the Proposed Action authorizes no new roads or trails and consists of no ground disturbance or alteration of facilities, and as a review of the available literature has indicated that the ecological effects of non-motorized bicycles and electric bicycles are similar, including for trail-bed soil displacement, there would be no anticipated physical effects (Kuwaczka, L.F. et al, 2023; International Mountain Biking Association, 2015; Nielson, T. et al, 2019; National Park Service, 2021).

In addition, the Proposed Action would have no reasonably foreseeable effects to historic properties, if present. Reclamation considered two potential impacts of e-bike usage offered elsewhere: an increase in erosion and an increase in backcountry access, which could result in adverse effects to historic properties caused by increased visitation. However, no increased erosion is anticipated, as e-bike usage would be restricted to existing, surfaced, roads and multi-use trails, and research on soil displacement on natural surface trails (offered above) suggests no significant difference in trail degradation between non-motorized and electric bicycles. Furthermore, the subject trails are included in the Reclamation annual operations and maintenance program, and any observed erosion would be addressed.

Reclamation anticipates no increase in backcountry access, as no new trails are proposed. The trails currently permit access; most, if not all, of the areas accessed by these trails do not meet the definition of “backcountry,” and the areas accessed by the trails are otherwise accessible by authorized unimproved motor vehicle trails (two-tracks) and paved roads.

The Bureau of Reclamation has therefore determined that the Proposed Action would have no potential to affect historic properties, if present, under Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR § 800.

Implementation of the Proposed Action would have no negative impacts on historic properties, should they exist. Because no adverse impacts are anticipated, there would be no measurable impacts.

### **Recreation**

The Proposed Action would change the current E-bike classification from ORV to that of non-motorized bikes. Under the Proposed Action, by allowing this form of use, recreational opportunities would be expanded. The Proposed Action is necessitated by an increase in recreational use trends both in number and types of users, changing recreational use patterns, technology, and public demand. The physical environment would not be affected by the change of the E-bike classification since the impact to the trail would be similar to non-motorized bikes on the improved trail surfaces within the Project Area. While the impacts from E-bikes on well maintained and sustainable trails remains low, there may be an overall increase in the number of bikes on the roads and trails, although in many cases the recreational user will merely be changing the equipment they use and not be an additional user.

The effects of this action on the social environment would be to authorize a previously unauthorized use on Reclamation roads and trails, which has the potential to increase visitation and types of use on Reclamation lands. Given that this use is currently authorized on adjacent lands within roads and trails that connect with those on Reclamation land, Reclamation lands are already experiencing the change in use. The Proposed Action would allow for E-bike use to be consistent across adjacent and overlapping jurisdictions and would minimize the potential for future conflicts through consistent management of these sections of roads and trails.

The Proposed Action aims to guide and improve recreational and visitor opportunities on Reclamation lands by decreasing future conflicts, minimizing resource impacts, and providing a more inclusive experience. There would be no management effects to the recreation environment from this action; the only management change would be updating the current definition of E-bikes from an ORV classification to that of a non-motorized bike.

The effects from E-bikes are expected to be the same as non-motorized bikes and therefore the Proposed Action is not anticipated to cause any detectable impacts to Recreation.

## **4.0 Coordination and Consultation**

The Bureau of Reclamation has considered the effect of the undertaking on historic properties, if present, in accordance with 54 U.S.C. 306108 and has determined that the undertaking has no potential to cause effects in accordance with 36 CFR 800.3(a)(1). Consultation with Reclamation's consulting partners, pursuant to 36 CFR 800, is, therefore, not required.

### **4.1 Scoping/Public Involvement**

Reclamation conducted internal scoping and review for the EA and contacted managing partners by email for initial input and comments.

The Draft EA will be posted on Reclamation's web site for a period of 30 days and a press release will be issued to local media of its availability in order to provide an opportunity for the public to review and provide comments.

The FONSI and Final EA as well as a press release will be posted on Reclamation's web site. The press release will also be issued to local media to inform the public of the availability of the FONSI and Final EA.

## **5.0 List of Preparers**

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## **6.0 References**

International Mountain Bicycling Association. 2015. A Comparison of Environmental Impacts from Mountain Bicycles, Class 1 Electric Mountain Bicycles, and Motorcycles: Soil Displacement and Erosion on Bike-Optimized Trails in a Western Oregon Forest. <https://www.americantrails.org/resources/a-comparison-of-environmental-impacts-from-mountain-bicycles-class-1-electric-mountain-bicycles-and-motorcycles-1>

Kuwaczka, L.F. , Mitterwallner, V., Audorff, V., Steinbauer, M.J. 2023. Ecological impacts of (electrically assisted) mountain biking. *Global Ecology and Conservation*. Volume 44, e02475, pp 1-20.

National Park Service. 2021. E-Bikes Literature Review.

Nielson, T., Palmatier, S. M., & Proffitt, A. 2019. Literature Review: Recreation Conflicts Focused on Emerging E-Bike Technology. Boulder County: Parks & Open Space. <https://bouldercountyopenspace.org/i/research/e-bikes/>