



# Finding of No Significant Impact Cottonwood Cove Road Improvements Project

August 2023

## Introduction

In compliance with the National Environmental Policy Act (NEPA) and cooperation with the Federal Highway Administration (FHWA) Central Federal Lands, the National Park Service (NPS) prepared an environmental assessment (EA) to examine alternative actions and environmental impacts associated with the proposed project to improve Cottonwood Cove Road at Lake Mead National Recreation Area (Lake Mead NRA or park). The purpose of the improvements is to address safety concerns and improve access for visitors and park staff driving to the Cottonwood Cove area. This project is needed to address the badly deteriorated roadway, correct deficiencies in the existing road, improve drainage to minimize life cycle costs related to frequent flood damage, and improve safety for NPS staff and the public.

The EA evaluated the impacts of rehabilitating approximately 6.8 miles of Cottonwood Cove Road from the Cottonwood Cove Lake Mead NRA Entrance Station to the Cottonwood Cove Marina. Two sections of the road are located within Lake Mead NRA and are maintained by the NPS. The remaining section of the road travels through the Avi Kwa Ame National Monument, which is managed by the Bureau of Land Management (BLM). The EA covered the impacts of the project for both agencies.

This finding of no significant impact (FONSI) documents the decision of the NPS to select the preferred alternative (selected alternative) for the Cottonwood Cove Road improvements at Lake Mead NRA. The statements and conclusions reached in this FONSI are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

## Selected Alternative and Rationale for the Decision

Based on the analysis presented in the EA, the NPS selected the proposed action, the NPS preferred alternative.

The selected alternative will provide improved access to the Cottonwood Cove area, improve the safety of those using the road to access the area, reduce stormwater impacts, maintain recreational access to Lake Mohave, and improve the visitor experience. Under the selected alternative, approximately 6.8 miles of Cottonwood Cove Road will be rehabilitated and widened. The roadway improvements will include full-depth reclamation, shoulder widening, and asphalt concrete paving with minor drainage work including new/improved low-water crossings. Two portions of the roadway will be aligned to allow travelers to maintain a speed of 45 miles per hour (mph) for most of the road. The selected alternative will also include the following actions:

- Improve the conditions at the entrance and ranger stations
- Pave the pullout area at the Lake Mead NRA monument
- Improve the accessibility of parking lots, curb cuts, sidewalks, and all other facilities associated with this project
- Improve the parking areas at the marina and concession area, including repaving the existing lot, paving overflow lots for additional parking, and enhancing drainage.

Pages 13 to 17 of the EA provide additional details on the elements of the selected action.

## **Rationale**

The proposed action/NPS preferred alternative was selected because it meets the purpose and need of the project while using the existing developed footprint to the extent possible. Specifically, this alternative improves the safety of park staff and visitors, maintains visitor access to Lake Mohave and water-related recreation, and minimizes the impacts on the natural and cultural resources

## **Resource Protection Measures**

To avoid, minimize, or mitigate impacts related to the selected alternative, the NPS will implement mitigation measures and best management practices (BMPs). Subject to the final design and approval of plans by relevant agencies, resource protection measures will include, but will not be limited to, the items listed in attachment A.

## **Other Alternative Considered – No-action Alternative**

In addition to the selected alternative, the EA analyzed the no-action alternative and its impacts on the environment. The no-action alternative, described on pages 12 and 13 of the EA, will not be selected for implementation because it does not meet the purpose and need.

Under the no-action alternative, Cottonwood Cove Road would remain in its current state with narrow lanes, unpaved shoulders, and deteriorating pavement conditions. The road would not be realigned, requiring drivers to slow driving speeds to navigate two curves along the road. These conditions are inadequate for the large vehicles and trailers that use the road. Additionally, the existing drainage features would remain unchanged. Although these features are structurally sound, they provide inadequate drainage, which results in flooding of the roadway. The park would continue to repair and clear the road of debris as needed, but the roadway conditions would continue to deteriorate. There would be no improvements to the entrance and ranger stations or the marina and concession area, and no accessibility upgrades would be made.

## **Public Involvement and Agency Consultation**

### **Civic Engagement and EA Review**

The NPS introduced the project and invited public comment via a press release dated October 1, 2021. Comments were accepted through November 1, 2021. On May 2, 2023, the NPS published the EA for public and agency review for 30 days, accepting comments through June 1, 2023.

During both the civic engagement and public review periods, the NPS posted all materials for public review and comment on the NPS Planning, Environment, and Public Comment (PEPC) website: <https://parkplanning.nps.gov/LAKE>. The availability of the documents and the public review dates were announced through press releases and social media posts. Public comments were accepted via the PEPC website, US mail, and email.

The NPS received four correspondences during the civic engagement. Comments and concerns were related to the potential for additional flooding and the need for the project as it relates to safety. Commenters also suggested additional elements for inclusion in the proposed action. These pieces of correspondence were reviewed by the planning team and were considered in developing the EA and the decision-making process.

During the EA review period, the NPS received 25 pieces of correspondence, several with substantive comments. Attachment B: Response to Public Comment provides a summary of substantive public comments received on the EA and the responses from the NPS, and Attachment C: Errata provides minor modifications to the text of the EA.

### **Consultation for Section 7 of the Endangered Species Act**

As required by Section 7 of the Endangered Species Act, the NPS consulted with the US Fish and Wildlife Service (USFWS) regarding the potential effects of the proposed action/preferred alternative on federally listed species. The NPS initiated consultation for this project with the USFWS on September 29, 2020 through a request to append the Cottonwood Cove Road improvements project to its programmatic biological opinion (PBO), and the USFWS issued a biological opinion (BO) on November 18, 2020. The NPS updated its request to append to its PBO to update project impacts and include critical habitat impacts that occur on both NPS and BLM lands. The updated consultation package was submitted on February 7, 2023. On May 23, 2023, the USFWS issued a BO stating that the proposed action is within the scope of the NPS and BLM PBOs and is therefore not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat.

### **Consultation for Section 106 of the National Historic Preservation Act**

**State Historic Preservation Office.** As required by Section 106 of the National Historic Preservation Act (NHPA), the park initiated consultation with the Nevada State Historic Preservation Office (SHPO) beginning on September 8, 2020. The park provided an assessment of effects, with a determination of no adverse effect on historic properties and the Cottonwood Cove Developed Area Historic District. Concurrence from the Nevada SHPO was not granted, and additional information was requested from Nevada SHPO at that time. The NPS has maintained a no adverse effect determination, as the proposed work will not significantly alter or remove character-defining elements of the Cottonwood Cove Developed Area Historic District. On June 30, 2023, the park sent an updated consultation package to the Nevada SHPO, which included a description of the area of potential effect, the results of the supplementary December 2022 archeological survey, and the rationale for the determination of no adverse effect on historic properties. Nevada SHPO responded with a letter dated July 27, 2023, providing concurrence on the determination of no effect.

**Tribal Nations.** The NPS initiated Section 106 consultation with 18 Tribal Nations on March 3, 2022 — Ak-Chin Indian Community, the Hopi Tribe, Chemehuevi Tribal Council, the Colorado River Tribal Council, Fort Mojave Tribal Council, Fort Yuma-Quechan Tribal Council, Gila River Indian Community Council, Havasupai Tribal Council, Hualapai Tribal Council, Kaibab Paiute Tribal Council, Las Vegas

Paiute Council, Moapa Band of Paiutes Tribal Council, Navajo Nation Tribal Council, Paiute Indian Tribe of Utah Tribal Council, Pueblo of Zuni Tribal Council, Salt River Pima-Maricopa Indian Community Council, and Shivwits Band of Paiutes. The letters described the project, the results of the cultural resources survey, and NPS's determination of no adverse effect. The letters also inquired about interest in additional consultation and participation in the project. The Hopi Tribe concurred with the determination of effect on March 15, 2022, and the Ak-Chin Indian Community responded on April 28, 2022, stating that it had no comments. The Cultural Manager for the Moapa Band of Paiutes responded on March 15, 2022, stating they had no questions or comments, but the Moapa Tribal Historic Preservation Officer replied via email on March 31, 2022, requesting additional information related to the project and requested a site visit. No other responses have been received from tribal groups. The park provided the information requested and completed a site visit in September 2022. The Moapa Tribal Historic Preservation Officer (THPO) requested an archeological survey that encompassed a wider buffer on either side of Cottonwood Cove Road. The park conducted the survey in December 2022 following the Moapa THPO's preferences. On June 30, 2023, the park sent an updated consultation package to the 18 Tribal Nations, which included a description of the area of potential effect, the results of the supplementary December 2022 archeological survey, and the rationale for the determination of no adverse effect on historic properties. The park received responses from two tribes. On July 5, 2023, the Fort Yuma Quechan Indian Tribe provided concurrence with the NPS determination of no adverse effect, and on July 19, 2023, the Yavapai-Prescott Indian Tribe acknowledged receipt of the consultation package and stated that the tribe would contact the park if necessary.

## **Finding of No Significant Impact**

As described in the EA, the selected alternative has the potential for adverse impacts on vegetation, special-status species, migratory birds, and cultural resources. Resource protection measures for these resources are provided in attachment A of this FONSI. Application of the mitigation measures and BMPs will reduce or eliminate the potential adverse impact of the selected alternative on park resources to less than significant.

### **Vegetation**

The selected alternative will require removal of soils and vegetation for the rehabilitation, widening, and realignment of Cottonwood Cove Road. A total of 31.7 acres will be affected by construction activities. The vegetation communities within the project area consist primarily of creosote bush shrubland with small portions of semi-desert wash woodland/scrub and semi-desert scrub shrublands. Creosote bush shrubland is the predominant vegetation community within Lake Mead NRA as well as the Avi Kwa Ame National Monument. The habitat within the project area is of diminished quality due to its location adjacent to an existing road, where it is repeatedly disturbed by vehicle wheels dropping off the paved road, maintenance activities after flood events, creation of flood control dikes, creation of access points to existing rights-of-ways by utility companies, and illegal off-road travel. Approximately 6.8 acres will be permanently lost from implementing the selected alternative. The remaining 24.9 acres will be restored once construction is complete using soils, plants, and seeds salvaged from the project area before construction following a project-specific revegetation plan. Although restoration to current conditions will take several years, NPS biologists will monitor the project area to ensure that revegetation is successful. The selected alternative represents an incremental addition to the existing developed footprint of the area and will not have a significant impact on vegetation.

## Special-status Species

Construction activities under the selected alternative will have direct and indirect impacts on Mojave desert tortoise, its designated critical habitat, and banded Gila monster. As noted above, 31.7 acres of desert habitat in the project area will be affected. Approximately 6.8 acres of habitat will be permanently lost (4.1 of which is designated critical habitat for desert tortoise). Due to its location adjacent to the existing Cottonwood Cove Road, this habitat is of lower quality for both desert tortoise and Gila monster. This area has been fragmented by the existing road for decades and the vegetation adjacent to the road is disturbed regularly by vehicles, maintenance activities, and flood events. A recent survey in the Cottonwood Cove area noted a low density of desert tortoises; prolonged drought conditions at the park have resulted in dying vegetation, creating habitat conditions that are of lower quality for desert tortoises.

During construction, desert tortoises and Gila monsters are also at risk of mortality from vehicle strikes, disturbance from the use of heavy equipment, and increased predation from a potential increase in trash, which could attract ravens. Mitigation measures and BMPs (see attachment A) will be implemented to reduce or eliminate these impacts. Use of the improved road by park visitors and staff has the potential to increase wildlife strikes, as straightening the curves will allow visitors and staff to drive at 45 miles per hour for the first 5.1 miles beyond the entrance station. To reduce the potential for desert tortoise and Gila monster injury or mortality, the NPS will install signs warning drivers of wildlife crossing with the potential to increase protection measures if wildlife strikes become an issue on Cottonwood Cove Road. The selected alternative represents an incremental addition to the existing development footprint of the park, which will result in a loss of habitat for desert tortoise and Gila monster; however, given the diminished quality of the habitat and measures that will be implemented to protect these species, the selected alternative will not have a significant impact on special-status species. The NPS submitted a request to append the Cottonwood Cove Road improvements project to the NPS and BLM PBOs on February 7, 2023. In a BO dated May 23, 2023, the USFWS approved the request and stated that the selected alternative (proposed action/NPS preferred alternative) is not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat.

## Migratory Birds

Migratory birds will also be affected by the selected alternative through noise disturbance and removal of potential habitat. As noted, the habitat that will be temporarily disturbed and permanently lost is of lower quality due to its location adjacent to Cottonwood Cove Road. Large areas of undisturbed desert scrub-shrub habitat exist within the park, which provide sufficient habitat for migratory bird species using the habitat near the project area; however, some birds could still use the habitat within the project area. To ensure that nesting birds and their eggs and nestlings are not harmed, vegetation restrictions will be implemented where feasible. If vegetation must be removed during migratory bird nesting season, a qualified biologist will conduct nest surveys in the project area and establish an appropriately sized buffer around any active nests identified to avoid impacts, and the area will be avoided until the young birds fledge. The selected alternative represents an incremental addition to the existing development footprint of the park, which will result in a loss of habitat for migratory birds; however, given the diminished quality of the habitat and protection measures that will be implemented, the selected alternative will not have a significant impact on migratory birds.

## **Cultural Landscapes and Historic Structures**

The selected alternative will result in changes to the circulation infrastructure and the introduction of new infrastructure into the Cottonwood Cove Developed Area Historic District. The NPS will reduce the impacts of the selected alternative to the extent possible by selecting construction materials that are compatible with historic materials and landscape and are consistent with the Secretary of Interior Standards for preservation. Although the selected alternative will result in changes and additions to the Cottonwood Cove Developed Area Historic District, it will not result in the loss or destruction of historic properties. The selected alternative will not alter the characteristics of the historic district that qualify the property for inclusion in the National Register of Historic Places. The selected alternative will have a significant impact on the Cottonwood Cove Developed Area Historic District.

## **Other Planned Actions and Environmental Trends**

To determine significance, this project's impacts were analyzed in conjunction with other past, current, and reasonably foreseeable planned actions and environmental trends, as identified on pages 26 and 27 of the EA. These projects were considered as part of the affected environment and have the potential for effects to overlap with the selected action through adverse and beneficial impacts, including ground disturbance, disturbance from construction activities, loss of vegetation/habitat, and conversely protection of desert tortoise habitat, and increasing temperatures and changing precipitation patterns due to climate change. The impacts of the selected alternative for vegetation, special-status species, migratory birds, and cultural resources will contribute temporary and permanent impacts from construction and operation of the improved Cottonwood Cove Road, but the incremental impacts of the selected alternative will not make a substantial contribution to the impacts on these park resources from other ongoing and future projects. (See the cumulative impacts analyses for the selection alternative on pages 31, 36, 37, 40, and 46 of the EA.)

## **Public Health, Public Safety, and Environmental Protection Laws**

There will be no significant impacts on public health or public safety. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

## **Conclusion**

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement. The selected alternative will not have a significant effect on the human environment in accordance with section 102(2)(c) of the National Environmental Policy Act. Based on the foregoing, the NPS has determined that an environmental impact statement is not required for this project and, thus, will not be prepared.

## Recommended

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Mike Gauthier  
Acting Superintendent, Lake Mead National Recreation Area

Date

## Approved

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Billy Shott  
Acting Regional Director  
Interior Regions 8, 9, 10, and 12, National Park Service

Date

## Attachment A: Resource Protection Measures

Topic	Resource Protection Measure	Authority	Responsible Party
General	A traffic management plan will be prepared specifically for this project. Cottonwood Cove Road will continue to remain open during construction, so visitors can still access the marina, campgrounds, motel, and other facilities. One-lane temporary signal operation and/or use of flagger operations may be required for the duration of the project with an allowance for 15- to 30-minute delays during construction. To the extent feasible, construction-related trips of workers and equipment, including trucks, will be reduced, traffic interference will be minimized, traffic flow will be maintained, and routing truck traffic near sensitive land uses will be avoided.	<i>NPS Management Policies 2006</i> , Section 8.2.5	FHWA
General	Project-related construction noise will be minimized using BMPs, including limiting work to daylight hours in the project area to avoid night-time noise disruption, properly maintaining construction equipment to minimize noise, and turning off any idling equipment when not in use.	<i>NPS Management Policies 2006</i> , Section 4.9	FHWA
General	Erosion control measures will be implemented to minimize impacts on water quality during construction activities. These measures could include sediment traps, erosion check structures, and/or weed-free fiber rolls or straw-filled wattles.	Clean Water Act <i>NPS Management Policies 2006</i> , Section 4.6.3	FHWA
General	Fugitive dust plumes will be reduced to the extent possible using water sprayed on the soil during earth-disturbing activities. Water used during road construction will be pumped from Lake Mohave, stored in a tank on the boat ramp or other location close to the water's edge, and hauled by truck. To the extent possible, puddling of water during soil dampening will be avoided, as this could attract desert tortoise predators.  Other measures could include maintaining the existing vegetation to the extent possible, limiting speed limits on unpaved roads, and limiting demolition work in high-wind conditions. The FHWA, on behalf of Lake Mead National Recreation Area (NRA), will coordinate with the Clark County Division of Air Quality to obtain a Dust Control Permit detailing the dust control activities and requirements.	Clean Air Act Nevada Revised Statute 445B.500 <i>NPS Management Policies 2006</i> , Section 4.7.1	FHWA



Topic	Resource Protection Measure	Authority	Responsible Party
General	<p>To limit construction emissions of nitrogen oxides and volatile organic compounds, the following will occur to the extent possible:</p> <ul style="list-style-type: none"> <li>– Construction-related trips of workers and equipment, including trucks, will be reduced.</li> <li>– Unnecessary idling from heavy equipment will be restricted.</li> <li>– Engine tampering to increase horsepower, except when meeting manufacturer’s recommendations, will be prohibited.</li> <li>– Cleaner equipment with the best available emissions control technologies will be used.</li> <li>– A construction schedule that minimizes cumulative impacts from other planned projects in the region will be identified, if feasible, through coordination with appropriate air quality agencies.</li> <li>– An inventory of all equipment prior to construction will be prepared and the suitability of add-on emission controls for each piece of equipment before groundbreaking will be identified.</li> </ul>	Clean Air Act Nevada Administrative Code 445B.305	FHWA
General	Concrete and asphalt batch plants are located outside the park. The contractor will use existing commercial sources of concrete and asphalt.	Clean Air Act Nevada Administrative Code 445B.305	FHWA
General	Diesel engines, motors, and equipment staging areas will not be located adjacent to Cottonwood Cove facilities, including the campgrounds, recreational vehicle (RV) park, resort, and marina.	Clean Air Act Nevada Administrative Code 445B.305	FHWA
General	FHWA will coordinate with the Nevada Department of Environmental Protection to determine whether a Stormwater Pollution Prevention Permit will be necessary for the project.	Clean Water Act	FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
General	FHWA, on behalf of Lake Mead NRA, will coordinate with the Nevada Department of Environmental Protection and the US Army Corps of Engineers, Sacramento District to determine if Clean Water Act Section 401 certification and a Section 404 permit will be required. If a permit is deemed necessary, it will include stipulations protective of water quality.	Clean Water Act	FHWA
General	BMPs for construction equipment will be followed to avoid exposure of the environment to risks, such as oil leaks and fuel spills. For example, all refueling of equipment will have spill containment pads in position before refueling activities; and equipment must be free of any fluid leaks (e.g., fuel, oil, hydraulic fluid) upon arrival at the work site and will be inspected at the beginning of each shift for leaks. Leaking equipment will be removed off-site for necessary repairs before the commencement of work. Waste leaks, spills, or releases will be reported immediately to the NPS. The NPS or the project proponent will be responsible for spill material removal and disposal to an approved off-site landfill.	NPS <i>Management Policies 2006</i> , Section 9.1.6.2	FHWA
Vegetation	Desert topsoil will be collected and stored as near its original location as possible to minimize vegetation impacts and potential compaction and erosion of bare soils. Replacement of the desert topsoil will include spreading, scarification, mulching, and seeding and/or planting species native to the immediate area. As necessary, desert topsoil replacement techniques will be used to re-establish desert crust surface and minimize impacts from invasive plant species.	NPS <i>Management Policies 2006</i> , Section 4.8.2.4	FHWA
Vegetation	Construction equipment will be pressure-washed and inspected before each entry into the park and the Avi Kwa Ame National Monument. Sterilized construction materials (e.g., topsoil, hay bales) will be used to minimize introduction or spread of unwanted plant species.	Executive Order 13751, "Safeguarding the Nation from the Impacts of Invasive Species"	FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
Vegetation	In addition to following Lake Mead NRA’s Weed Management Plan, a revegetation plan specific to this project will be developed for implementation following construction. Disturbed areas adjacent to the road will be restored to natural conditions to the extent possible. Revegetation work will use desert soil conserved along the corridor and native species from genetic stocks originating in Lake Mead NRA and Avi Kwa Ame National Monument. Revegetation efforts will also attempt the reconstruction of the natural spacing, abundance, and diversity of native plant species.	Executive Order 13751, “Safeguarding the Nation from the Impacts of Invasive Species”	FHWA
Vegetation	Following revegetation, restored areas will be monitored and managed to prevent colonization by nonnative invasive species. Park biologists will conduct post-construction, early detection/rapid response invasive plant surveys along the road corridor for 2 years after construction is complete.	Executive Order 13751, “Safeguarding the Nation from the Impacts of Invasive Species”	NPS
Special-status species – Mojave desert tortoise	Ground-disturbing construction activities will be scheduled outside of the active seasons for tortoises (generally spring and fall but also any time of the year following precipitation events) to the extent possible.	Endangered Species Act (ESA)	FHWA
Special-status species – Mojave desert tortoise	An authorized desert tortoise biologist or environmental monitor will be on-site during construction activities to ensure that construction activities will not harm desert tortoises. The monitor will survey the site on each day that work is being performed. Potential authorized biologists will complete the qualifications form (US Fish and Wildlife Service [USFWS] 2009) and submit it to the USFWS for review and approval as appropriate. The authorized biologist will be responsible for approving monitors or other personnel that may assist the biologist.	ESA	FHWA
Special-status species – Mojave desert tortoise, Banded Gila monster	All on-site personnel will receive awareness training for desert tortoise and banded Gila monster before entering the job site to include identification, biology, legal status and definition of take (desert tortoise), consequences of a bite (Gila monster), measures to minimize effects of project activities, and reporting requirements.	ESA Nevada Revised Statute 503.584 - 503.589	NPS
Special-status species – Mojave desert tortoise Banded Gila monster	All areas to be disturbed will have boundaries staked or flagged before beginning the activity, and all disturbance and project activities will be confined to the staked/flagged areas. Disturbance outside staked/flagged areas will be prohibited.	ESA	FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
Special-status species – Mojave desert tortoise, Banded Gila monster	Before surface-disturbing activities and on a daily basis, an authorized biologist will survey the area to ensure that no live tortoises, active tortoise burrows, or Gila monsters are present. If a tortoise is found on the project site, all work will cease until the authorized biologist can take appropriate action to prevent harm to the tortoise. This includes relocating the tortoises outside the project area and excavating the burrows according to USFWS-approved protocols. If signs of Gila monster are identified within the project area, mitigation measures to avoid impacts on the Gila monster will be employed, including restricting construction to periods of inactivity (typically November through March) to the extent possible, relocating any Gila monsters found within the project area to other suitable habitat, and limiting vehicle use to existing or designated routes.	ESA Nevada Revised Statute 503.584 - 503.589	FHWA/NPS
Special-status species – Mojave desert tortoise	All project vehicles will be driven at speeds within posted speed limits on existing roads and will not exceed 20 mph within project boundaries. Any tortoise observed in harm's way on a paved road will be moved off the road in the direction it was moving in accordance with USFWS-approved tortoise handling procedures. All tortoise observations on roads will be reported to NPS biologists to be included in the annual report. Handling of tortoises will be done by a qualified biologist or NPS resource management staff. Handling of tortoises by any other personnel will only occur if the tortoise were in eminent danger.	ESA	FHWA/NPS
Special-status species – Mojave desert tortoise	All project personnel will exercise caution when commuting to the project area and obey speed limits to minimize any chance of the inadvertent injury or mortality of species encountered on roads leading to and from the project site. All desert tortoise observations, including mortalities, will be reported directly to an authorized biologist, the NPS, and the USFWS.	ESA	FHWA
Special-status species – Mojave desert tortoise, Banded Gila monster Migratory birds	Open features that could entrap or injure tortoises, Gila monsters, birds, or other wildlife will be capped or covered, temporarily fenced, and/or escape ramps will be installed. Any excavated holes left open overnight will be covered and/or fencing will be installed to prevent wildlife access to the open holes. Any construction pipe, culvert, or similar structure will be inspected for wildlife before the material is moved, buried, or capped. These actions will be performed by construction personnel (all of which will have awareness training) and could be verified by an onsite biologist.	ESA Nevada Revised Statute 503.584 - 503.589 Migratory Bird Treaty Act (MBTA)	FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
Special-status species – Mojave desert tortoise	A litter control program will be implemented to avoid attracting ravens or other opportunistic predators to the project area.	ESA	FHWA
Special-status species – Mojave desert tortoise	To avoid introducing non-native species into the area, all construction equipment will be pressure-washed and inspected before use in Lake Mead NRA and the Avi Kwa Ame National Monument. No imported topsoil or hay bales will be used on the project site.	ESA	FHWA
Special-status species – Mojave desert tortoise	Any vehicle or equipment on the right-of-way within desert tortoise habitat will be checked underneath for tortoises before moving, regardless of the amount of time the vehicle or equipment was idle. If a desert tortoise is observed, an authorized biologist will be contacted.	ESA	FHWA
Special-status species – Mojave desert tortoise	All tortoises observed or handled as part of this project will be reported to the USFWS in accordance with the biological opinion.	ESA	FHWA/NPS
Special-status species – Banded Gila monster	Any Gila monster encounters during project construction will be reported immediately to the Nevada Division of Wildlife (NDW).	Nevada Revised Statute 503.584 - 503.589	FHWA
Special-status species – Banded Gila monster	Live Gila monsters found in harm's way on the construction site will be captured and detained in an appropriate environment by a qualified biologist trained in handling venomous reptiles until an NDW biologist can arrive for documentation purposes. Written information identifying mapped capture location, date, time, and circumstances (e.g., biological survey or construction) and habitat description (vegetation, slope, aspect, substrate) will be provided to NDW.	Nevada Revised Statute 503.584 - 503.589	BLM/FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
Special-status species – Banded Gila monster	In the event a Gila monster is injured during project activities, it will be transferred to a veterinarian proficient in reptile medicine for evaluation of appropriate treatment. NDW will be immediately notified of any injury to a Gila monster and which veterinarian is providing care for the animal. If an animal is killed or found dead, the carcass will be immediately frozen and transferred to NDW with a complete written description of the circumstances, habitat, and mapped location. Should NDW's assistance be delayed, biological or equivalent acting personnel on site should detain the Gila monster out of harm's way until NDW personnel can respond. The Gila monster should be detained until NDW biologists have responded. Should NDW not be immediately available to respond for photo-documentation, a digital camera will be used to take photographs of the Gila monster <i>in situ</i> at the location of the live encounter or dead salvage. The pictures will be provided to NDW and will include: 1) encounter location (landscape overview with Gila monster in clear view), 2) a clear overhead shot of the entire body with a ruler next to it for scale, and 3) a clear, overhead close-up of the head.	Nevada Revised Statute 503.584 - 503.589	BLM/FHWA
Special-status species – Mojave desert tortoise, Banded Gila monster	Signs will be added to warn drivers that they are approaching an area where they could encounter wildlife, especially desert tortoise. If wildlife strikes become an issue following the improvements to Cottonwood Cove Road, the NPS will re-evaluate the conditions and implement measures to reduce impacts (e.g., lower the speed limit, improve signs).	ESA Nevada Revised Statute 503.584 - 503.589	FHWA/NPS
Special-status species – Monarch butterfly Migratory birds	To the extent possible, vegetation removal will occur: <ul style="list-style-type: none"> <li>– outside of monarch migration season (between December and August)</li> <li>– outside breeding season for most birds (between September and February)</li> <li>– outside Costa's hummingbird nesting season (between July and December)</li> </ul> If construction activities cannot occur outside these seasons, a qualified biologist will survey the area no more than five days before clearing. If monarch butterfly activity is found within the project area, impacts will be avoided until the butterflies move through the area. If active nests (those containing eggs or young) are found during surveys, an appropriately sized buffer area will be established (e.g., plastic fencing) and will be avoided until the young birds fledge.	ESA	FHWA/NPS

Topic	Resource Protection Measure	Authority	Responsible Party
Cultural resources	Two tribal monitors will be on-site during construction activities to ensure that construction activities will not harm cultural resources.	National Historic Preservation Act (NHPA)	NPS/Tribal Nations
Cultural resources	A Tribal representative will provide a pre-construction blessing and cultural sensitivity training to all operation employees and contractors, including identification and notification protocols. This training will be coordinated by the NPS.	NHPA	NPS/Tribal Nations
Cultural resources	Should unknown archeological resources be uncovered during construction, work will be halted in the discovery area, and Lake Mead NRA or BLM staff (whichever agency is appropriate depending on the location of the resource) will consult with the Nevada State Historic Preservation Office (SHPO) and Tribal Nations according to 36 CFR 800.13 and, as appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990. Construction will not resume until authorized to do so by the agency's lead archeologist.	NHPA Native American Graves Protection and Repatriation Act	NPS/BLM/ FHWA
Cultural resources	Cut and fill slopes will be rounded at the tops and superficially contoured to minimize unnatural-looking straight lines and angles and to match the surrounding natural landscape of the area. The NPS will select materials that will be compatible with historic materials in terms of design, color, and texture; blend into the Cottonwood Cove Developed Area Historic District and landscape; and be in accordance with the Secretary of Interior Standards for preservation. Rocks disturbed during construction, exposed culvert ends, and flared end sections will be treated with a varnish to match local soil colors to reduce visibility to visitors. Metal items like guardrails and signposts will have a natural-colored metal or be stained/painted to match the surrounding colors.	NHPA	NPS/FHWA

Notes: BLM = Bureau of Land Management  
 FHWA = Federal Highway Administration  
 NPS = National Park Service

## Attachment B: Response to Public Comments

The Cottonwood Cove Road Improvements Project Environmental Assessment (EA) was available for public review and comment between May 2 and June 1, 2023. The National Park Service (NPS) received 25 pieces of correspondence during the public review period. All comments were read and analyzed to identify substantive comments. Section 4.6 of the NPS National Environmental Policy Act (NEPA) Handbook defines a substantive comment as a comment that does one or more of the following:

- Question, with reasonable basis, the accuracy of information in the NEPA document
- Question, with reasonable basis, the adequacy of the environmental analysis
- Present reasonable alternatives other than those presented in the NEPA document
- Cause changes or revisions in the proposal

In other words, substantive comments raise, debate, or question a point of fact or analysis. Comments that merely support or oppose a proposal or that merely agree or disagree with NPS policy are not considered substantive and do not require a formal response.

The following text summarizes the substantive comments received during the comment period and is organized into concern statements and responses. All page numbers contained herein refer to the Cottonwood Cove Road Improvements Project EA that was released for public review.

### Updated Project Area Information

**Concern Statement:** President Biden established the Avi Kwa Ame National Monument in March 2023, which encompasses the lands that surround Searchlight, Nevada. The EA should be updated accordingly to document the designation of the new national monument and any management changes that will occur in implementing road maintenance and land disturbance within the national monument.

**Response:** The new Avi Kwa Ame National Monument incorporates nearly 507,000 acres of land around Searchlight, Nevada currently managed by the Bureau of Land Management (BLM), Bureau of Reclamation, and NPS. The national monument encompasses a portion of Lake Mead National Recreation Area (Lake Mead NRA or the park) and the Piute Eldorado Valley Area of Critical Environmental Concern (ACEC). Approximately 1.4 miles of Cottonwood Cove Road that will be improved by this project are within the Piute Eldorado Valley ACEC/Avi Kwa Ame National Monument. The Presidential Proclamation notes that motorized vehicle use in the national monument will be limited to existing roads. Because this project will improve visitor safety on an existing road, it will not conflict with the national monument designation. The text has been edited to update the name of the BLM-managed land crossed by Cottonwood Cove Road from the Piute Eldorado Valley ACEC to the Avi Kwa Ame National Monument (See the errata, attachment C); however, the Piute Eldorado Valley ACEC Management Plan is still referenced, as it is the most current policy document for management of the BLM-managed land in the project area.

### Questions the Need for the Project

**Concern Statement:** The NPS should reconsider this project, as the impacts on natural resources do not justify the need for the proposed improvements. The existing road allows for visitor access with minimal impact on the natural environment.



**Response:** As noted on page 1 of the EA, the need for the Cottonwood Cove Road Improvement project is rooted in safety, as well as improving the road to maintain recreation access to Lake Mohave and reduce maintenance efforts following flood events. The project has been developed through multiple planning processes, including the current one and the Cottonwood Cove and Katherine Landing Final Development Concept Plans Environmental Impact Statement.

As part of the planning process for this project, Federal Highway Administration (FHWA) conducted a road safety audit in 2017, which included vehicle accident information. At the time of the report, the NPS had recorded 67 accidents on Cottonwood Cove Road, 12 of which resulted in injuries. Most of these accidents were attributed to the driver failing to give full time and attention to the driving conditions. Since the road safety audit, there have been an additional 23 accidents on Cottonwood Cove Road. These 80 accidents are reportable accidents that resulted in property damage. Additional accidents likely occurred that were not reported.

Based on the results of the road safety audit, FHWA recommended that the NPS consider correcting the superelevation at the curves, as they do not meet design standards. Superelevation is the tilt of the roadway at a curve that allows the driver to drive at a safe speed without skidding or tipping. During design development, the curves were straightened along Cottonwood Cove Road to prevent vehicles from leaving the travel lanes, which can result in resource damage and crashes, and to enable drivers to maintain a constant speed of 45 miles per hour (mph) for the approximate 5.1 miles between the entrance station and the ranger station. Further, the design standard for this road requires 3-foot-wide shoulders. The road was widened during the final design as the current shoulders are only 1-foot wide.

Drainage along the length of the road is also insufficient, leading to sedimentation on the road that must be cleared by park maintenance staff after flood events. This is a recurring effort that will be reduced greatly by the improved drainage proposed by the preferred alternative.

The NPS and FHWA have worked to minimize habitat disturbance to the greatest extent possible and will implement mitigation measures to protect park resources. All disturbed areas will be restored following construction and monitored for two years following construction to ensure successful restoration and reduce the risk of colonization of invasive species. The NPS has completed consultation with the US Fish and Wildlife Service (USFWS). Both the NPS and BLM have programmatic biological opinions (PBOs) for Mojave desert tortoise and the USFWS has concluded that the proposed action is within the scope of the PBOs and is therefore not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat. See the errata (attachment C) for additional information on consultation under Section 7 of the Endangered Species Act.

**Concern Statement:** Commenters suggested that the project is intended to increase the visitor capacity of Cottonwood Cove and noted that the current and proposed visitor capacity is not included in the EA.

**Response:** Currently, the Cottonwood Cove marina area has 418 formal parking spaces; visitors also park in the two unpaved lots. The project will increase the formal parking spaces to approximately 660 with no informal or overflow parking. However, the goal of this project is not to provide greater capacity but to provide safer access to Lake Mohave. With the lower water levels on Lake Mead, the park is seeing additional use of the Cottonwood Cove area. One of the benefits of this project is the increased safety for visitors who would have traditionally used Lake Mead but are now traveling to Lake Mohave due to the lower water levels. These visitors are less familiar with the current nature of the winding road through the area. The project will also eliminate some potential environmental

impacts. Frequently, accidents along park roads occur when vehicles run off the road and have to be retrieved by tow trucks, which results in additional resource damage that must be repaired and mitigated. Creating safer driving conditions and reducing accidents will lead to less resource damage from off-road travel.

## Questions the Preferred Alternative

**Concern Statement:** The NPS should reconsider whether providing an improved road for increased access is appropriate given the fluctuating water levels in the area. Further, there was a large drop in the park's visitation in 2022, which may be due to the lower water levels. Commenters questioned the current visitor capacity and the anticipated visitor capacity following the proposed improvements.

**Response:** As noted on page 11 of the EA, over the last five years visitation has ranged between 5 and 8 million visitors, and traffic counts at Cottonwood Cove Road have ranged between 47,000 and 65,000 vehicles. The NPS acknowledges that overall visitation to Lake Mead NRA was lower in 2022 (approximately 5.6 million visitors) compared to previous years (7 to 8 million visitors); however, it is natural for visitation to fluctuate. The visitation to the Cottonwood Cove area appears to have remained consistent, as the 2022 traffic count on Cottonwood Cove Road (approximately 55,500) is directly in line with the average number of vehicles over the past five years (approximately 55,700).

One of Lake Mead National Recreation Area's fundamental values is providing abundant opportunities for land- and water-based recreational pursuits, as stated on page 1 of the EA. Given the water level issues at Lake Mead, the NPS must provide the means for visitors to safely access Lake Mohave where water levels have remained more stable and appropriate for water-based recreation. The proposed improvements to Cottonwood Cove Road will allow for long-term access to the Cottonwood Cove area, thus addressing the need to continue to provide visitors with safe and reliable access to water-based recreation in the park.

**Concern Statement:** Improvements proposed at the Cottonwood Cove area (i.e., poured concrete and masonry walls) have previously been prohibited due to the difficulty of removing them. Commenters are questioning these proposed parking area improvements, given the previous restrictions. If these improvements are approved, the concessionaire should fund the construction and upkeep.

**Response:** The NPS does not implement restrictions on development as noted in the concern statement. For such restrictions, there would need to be a park policy, and that policy would have had to go through a planning process (either an EA or environmental impact statement). The Cottonwood Cove Road Improvements project, however, was developed through multiple planning processes, including the current one and the *Cottonwood Cove and Katherine Landing Final Development Concept Plans Environmental Impact Statement*. The improvements proposed at the marina are part of these planning processes and are not tied to the concessionaire contract. Although one concessionaire operates the services provided at the marina, the improvements are within Lake Mead NRA and are therefore maintained by the NPS.

## Suggests a New Alternative or Element of an Alternative

**Concern Statement:** The NPS should consider an alternative that limits the improvements to the existing developed footprint, instead of expanding it. Instead of widening the road, straightening the curves, and modifying the water crossings, the alternative should build up the shoulders to be nearly level with the

road using gravel. The improvements at the monument and paving the informal parking area at the marina should not be considered.

**Response:** As noted above, the Cottonwood Cove Road improvements, including widening the road, are required because the current design of the road does not meet road safety standards. The preferred alternative will address the issues with the superelevation of the road's curves and the requirement for 3-foot-wide shoulders. The suggestion of placing gravel at the shoulders to create a wider road is not feasible. The roadside ditches provide drainage. If the shoulders were filled with gravel, this would result in further sedimentation on the road, increased drainage issues, and increased maintenance needs. This suggestion would not meet the purpose of and need for the project.

Other improvements under the preferred alternative will include paving the overflow parking area at the marina and the area around the Lake Mead NRA monument along Cottonwood Cove Road at the NPS boundary. These are currently unpaved areas on which visitors regularly drive. Driving vehicles in unpaved areas can create fugitive dust, depending on conditions, and can exacerbate resource impacts. Paving these areas will reduce erosion of soils and will help keep visitors within the paved area, rather than driving further into undisturbed habitat.

**Concern Statement:** The NPS should consider additional or new mitigation measures to prevent sedimentation in Lake Mohave during construction.

**Response:** On page 6, the EA notes that FHWA will coordinate with the US Army Corps of Engineers, Sacramento District and the Nevada Department of Environmental Protection as the project progresses to determine if permits are necessary. Any permit obtained will include stipulations to protect water quality, which will be followed by contractors during the construction phase.

**Concern Statement:** The NPS should provide a pathway for golf carts through the new block wall separating the motel and trailer park.

**Response:** The intent of the block wall in the Cottonwood Cove marina area is to manage drainage in the parking lot and direct storm water to the south. A pathway in the wall cannot be considered, as the wall's main purpose is to control drainage during large events.

**Concern Statement:** The NPS should minimize wheel stops and curbed islands in the parking area to improve maneuverability for large vehicles and those towing boats/trailers.

**Response:** The marina parking lot improvements will not add any parking islands; the existing islands will be rebuilt in their existing location. The improvements will only include wheel stops in one location. The wheel stops will not allow visitors to park boats in these specific locations. The spaces with wheel stops will be located near the hotel and are a small percentage of the overall parking spots available. The improved parking lots will have hundreds of other spaces without wheel stops that could accommodate larger vehicles.

**Concern Statement:** The NPS should add informational kiosks and streetlights to Cottonwood Cove Road.

**Response:** Commenters suggested the addition of streetlights and information kiosks during the civic engagement public comment period. As noted on page 25 of the EA, the planning team considered these suggestions; however, these elements were dismissed from consideration because they would

add to the items that park maintenance staff have to track and repair. Additionally, lighting would be a departure from existing conditions throughout the park, as other park roads do not have lighting.

## **Safety Issues and Potential Impacts**

**Concern Statement:** The EA states that the current conditions of the road (11-foot-wide lanes and curves requiring vehicles to slow from the posted 45-mile-per-hour speed limit) are unsafe for visitors traveling on Cottonwood Cove Road but does not report on the number of accidents that have occurred from these conditions. There are concerns that widening the lanes could encourage speeding and decrease safety.

**Response:** As part of the planning process for this project, FHWA conducted a road safety audit in 2017, which included vehicle accident information. At the time of the report, the NPS had recorded 67 accidents on Cottonwood Cove Road, 12 of which resulted in injuries. Most of these accidents were attributed to the driver failing to give full time and attention to the conditions. Since the road safety audit, there have been an additional 23 accidents on Cottonwood Cove Road. These 80 accidents account for reportable accidents that resulted in property damage. It is likely that additional accidents have occurred that were not reported.

Based on the results of the road safety audit, FHWA recommended that the NPS consider correcting the superelevation at the curves, as they do not meet design standards. Superelevation is the tilt of the roadway at a curve that allows the driver to drive at a safe speed without skidding or tipping. During design development, the planning team decided to straighten the curves in Cottonwood Cove Road to enable drivers to maintain a constant speed of 45 mph for the approximately 5.1 miles between the entrance station and the ranger station. Further, the design standard for this road requires 3-foot-wide shoulders. This led to widening the road during final design, as the current shoulders are only 1-foot-wide.

Drainage along the length of the road is also insufficient, leading to sedimentation on the road that must be cleared by park maintenance staff after flood events. This is a recurring effort that will be reduced greatly by the improved drainage proposed by the preferred alternative.

## **Vegetation Impacts**

**Concern Statement:** The NPS should develop a revegetation plan with success criteria for habitat restoration. The plan should describe desired conditions such as native annual and perennial species composition, cover, density, and abundance. Monitoring revegetated areas and maintaining them to avoid colonization of invasive species should not be limited to the two years noted in the EA. Further, the plan should include annual monitoring for invasive species within desert tortoise habitat.

**Response:** Lake Mead NRA developed a Weed Management Plan in 2010 specific to the park. This plan allows Lake Mead NRA to use both weed-led and site-led priorities on weed control. The weed-led protocols help the park survey for weed species using early detection rapid response techniques, and the site-led protocols help the limited park staff focus on high-priority sites (e.g., springs, endangered species habitat, vector sites). In addition to the Weed Management Plan, a revegetation plan will be developed specifically for this project at Cottonwood Cove. This information was added to the mitigation measures (see the errata, attachment C).

## Wildlife Impacts

**Concern Statement:** Commenters are concerned about the amount of habitat loss and disturbance. The preferred alternative will result in 7.8 and 23.9 acres of Mohave desert tortoise and banded Gila monster habitat permanently and temporarily affected, respectively. The project will also have an impact on migratory birds by removal of potential habitat and possible disturbance from the 9-month construction period.

**Response:** Habitats in the project area are of diminished quality given that they are along a previously developed road. Vehicles regularly drop off the pavement, trampling vegetation, and compacting soils. Additionally, vehicle noise is part of the soundscape in this area. Chapter 3 of the EA discusses the lower quality of the habitat. Mitigation measures will protect federal and state-listed species, as well as migratory birds, during construction. Although there will be some habitat loss from implementing the preferred alternative, conditions following construction will be similar to existing conditions and the wider road will greatly reduce the potential for impacts on the habitat adjacent to the road.

**Concern Statement:** Improved access for motor vehicles on Cottonwood Cove Road, and thus increased speeds, could increase the potential for wildlife strikes. The NPS should consider reducing the speed limit below 45 mph to protect wildlife from vehicle strikes. The improvements could also result in an increase in litter left by visitors.

**Response:** Park staff are unaware of any wildlife strikes on Cottonwood Cove Road. Because conditions on the road will change with a steady speed limit of 45 mph for the approximate 5.1 miles between the entrance station and the ranger station, the NPS will install signs to warn drivers of potential wildlife crossing (see page 22 of the EA). If wildlife strikes become an issue following the improvements to Cottonwood Cove Road, the NPS will re-evaluate the conditions and implement measures to reduce impacts (e.g., lower the speed limit, improve signs). This information was added to the mitigation measures (see the errata, attachment C).

Litter is not currently an issue on or along Cottonwood Cove Road. The litter present is historic and associated with the washes; it is not from current visitors on the road. The NPS does not anticipate that the Cottonwood Cove Road improvements will increase litter in this area of the park.

**Concern Statement:** NEPA analyses typically include the details of Section 7 consultation. Commenters suggest that the preferred alternative be implemented with sensitivity to Mojave desert tortoise and its designated critical habitat. Mitigation measures should be implemented, including compensation for any tortoise habitat that is destroyed or degraded.

**Response:** Since the release of the EA, the NPS has completed consultation with the USFWS. Both the NPS and BLM have PBOs for Mojave desert tortoise, and the USFWS has concluded that the proposed action is within the scope of the PBOs and is therefore not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat. Included in the consultation are mitigation measures required by the USFWS that will be followed by the NPS, FHWA, and all contractors working on the project. These mitigation measures, as well as details on Section 7 consultation, are included in the Finding of No Significant Impact (FONSI) for the Cottonwood Cove Road Improvement Project.

## Special-status Species Impacts

**Concern Statement:** Cottonwood Cove Road fragments the Eastern Mojave and Colorado Desert recovery units of the Mojave desert tortoise, which represent two of the five recovery units. All five recovery units must meet recovery criteria before the Mojave desert tortoise can be delisted. For this reason, the impacts from continued use of Cottonwood Cove Road should be analyzed in the EA.

**Response:** As noted on page 32 of the EA, Cottonwood Cove Road was in place when the Mojave desert tortoise critical habitat was designated, and the effects of this habitat fragmentation are acknowledged in the desert tortoise recovery plan. Additionally, recent surveys by the NPS and the US Geological Survey have concluded that the habitat in this area of the park is fairly poor based on the plant species composition, and the densities of desert tortoises in this area are very low. This information was added to the affected environment (see the errata, attachment C).

The Cottonwood Cove Road Improvements project does not include actions that would increase the fragmentation effect of the road, such as widening the road by adding additional lanes and intentionally increasing capacity. Once construction is complete, the road will continue to be used by visitors and park staff. The potential impacts on desert tortoise from use of the road following construction with a constant speed of 45 mph are discussed on page 36 of the EA; however, because the project will not increase fragmentation, no additional analysis was added.

**Concern Statement:** Scientific literature has demonstrated that road use impacts desert tortoises in five ways: 1) wildlife mortality from collisions with vehicles; 2) hindrance/barrier to movement, reducing access to resources and mates; 3) degradation of habitat quality; 4) habitat loss due to the presence of the road and disturbance to the adjacent environment; and 5) dividing animal populations into smaller and more vulnerable fractions. Commenters suggested that each of these impacts should be analyzed in the EA and that the determination that the preferred alternative *may affect but is not likely to adversely affect* the Mojave desert tortoise should be re-evaluated.

**Response:** Habitat loss from the proposed project is thoroughly discussed in the EA on pages 35 through 37, noting temporary disturbance of 23.9 acres and permanent loss of 6.8 acres (including 4.1 acres of designated critical habitat). Similarly, page 36 of the EA discusses potential mortality from vehicle strikes following construction. Although the constant speed of 45 mph for the first 5.1 miles could increase the potential for drivers to miss a tortoise on the road, the straightened curves provide better visibility through the designated tortoise critical habitat. There is a low potential for visitors to encounter tortoises in this area due to lower quality habitat and low tortoise densities; however, the NPS will install signs warning drivers of potential wildlife crossings. In both the affected environment (pages 32 and 33) and impacts section (pages 35 through 37), the EA discusses the fragmentation caused by Cottonwood Cove Road and the degraded quality of the habitat within the project area, which is adjacent to the road. This project will not further divide tortoise populations.

Consultation with the USFWS is complete, with the USFWS issuing a biological opinion (BO) stating that the proposed action is within the scope of the PBOs and is not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat. The conclusion in the EA was updated to reflect the conclusion of the USFWS (see the errata, attachment C).

**Concern Statement:** Commenters provided several mitigation measure suggestions to further protect tortoises from injury or mortality from vehicles and provide means of connecting the habitat on either side of Cottonwood Cove Road:

1. Prohibit puddling of water during soil dampening for fugitive dust control to avoid attracting ravens (tortoise predators).
2. Schedule ground-disturbing activities to occur outside the tortoise active season (generally spring and fall but also any time of the year following precipitation events).
3. Design and maintain the culvert to allow tortoises to safely access the habitat on either side of the road.
4. Modify the riprap design and/or placement at the outflow of the culvert to prevent scouring and allow tortoise access.
5. Fit low-water crossings within tortoise habitat with culverts to tortoise connectivity.
6. Fence the tortoise habitat along Cottonwood Cove Road with tortoise exclusion fencing.
7. To mitigate for the loss of vegetation within tortoise habitat following construction but before the disturbed areas are fully recovered, revegetate other portions of tortoise critical habitat at a ratio of 5:1.

**Response:** The NPS considered the mitigation measures suggested by commenters.

1. Most dust control measures follow Clark County standards. Monitoring for any puddling of water during dust abatement can be done by the construction monitor during construction activities; therefore, this measure was added to the project's mitigation measures. See the errata (attachment C) for this change.
2. Construction will be scheduled outside of tortoise active season; this was added to the mitigation measures. See the errata (attachment C) for this change.
3. The existing culvert will remain in place and will be extended, as stated on page 13 of the EA. This culvert is located in a deep channel where tortoises are not expected to occur. For this reason, the team did not consider tortoise access during design and do not recommend changes to the design of the culvert.
4. The purpose of the riprap is to prevent scouring. As noted above, tortoises are not expected to use the culvert due to its location in a deep channel; therefore, no changes in the design or placement of the riprap will be made.
5. Culverts in the low water crossings would likely fill with debris due to the locations of the low water crossings. To provide connectivity access for the tortoises, fencing would have to be installed. The team discussed the potential for installing permanent tortoise exclusion fencing at the beginning of this project and determined that with the low density of tortoises and with no record of mortality on the road, the cost of installing the fencing is not reasonable. Further, since the existing conditions do not include culverts at the low water crossings, the proposed improvements will not reduce the connectivity conditions for tortoises.
6. As noted above, fencing — temporary or permanent — will not be installed as part of this project. Additionally, the USFWS did not include fencing as required mitigation in the BO. However, in the absence of fencing, the project will have a full-time tortoise monitor that will survey the construction site daily and monitor tortoise activities throughout construction activities.
7. Restoration/mitigation at a 5:1 ratio is also not required by the USFWS in the BO. The area that will be restored was deemed adequate by the USFWS, and the project will not adversely modify designated critical habitat.

## Historic District Impacts

**Concern Statement:** Commenters disagree with the conclusions in the EA that the proposed project will not change the character of the historic areas and prefer an alternative with the smallest possible developed footprint.

**Response:** The addition of the features such as the block wall and sidewalks will introduce additional modern changes to the Cottonwood Cove Developed Area Historic District. As noted on pages 45 and 46 of the EA, and as determined by an NPS historical landscape architect, the integrity of the historic district will remain intact, as the project will be conducted following the Secretary of the Interior Guidelines for Rehabilitation.

On June 30, 2023, the park sent updated consultation packages to the Nevada State Historic Preservation Office (SHPO) and 18 Tribal Nations, which included a description of the area of potential effect, the results of the supplementary December 2022 archeological survey, and the rationale for the determination of no adverse effect on historic properties. Nevada SHPO responded with a letter dated July 27, 2023, providing concurrence on the determination of no effect. The park received responses from two tribes. On July 5, 2023, the Fort Yuma Quechan Indian Tribe provided concurrence with the NPS determination of no adverse effect, and on July 19, 2023, the Yavapai-Prescott Indian Tribe acknowledged receipt of the consultation package and stated that the tribe would contact the park if necessary.

## Climate Change Impacts

**Concern Statement:** The improvements to Cottonwood Cove Road are noted as important to provide continued access to Lake Mohave as the water levels at Lake Mead are dropping due to climate change. However, the additional development and ultimately the increased access for larger vehicles are adding incremental impacts to climate change.

**Response:** Development and use of additional or larger, less fuel-efficient vehicles will have an incremental impact on climate change. However, the NPS is tasked with providing Lake Mead NRA visitors with abundant opportunities for land- and water-based recreational pursuits, and the means to access recreational areas of the park must be safe. Further, the areas being developed (monument and marina parking) are currently impacted by visitors driving on unpaved surfaces. Paving these areas will help to prevent further impacts from sprawl into the surrounding habitat.

## Cumulative Impacts

**Concern Statement:** The EA should include an analysis of cumulative impacts for each alternative for each resource topic analyzed.

**Response:** The EA presents past, current, and reasonably foreseeable projects that could contribute to cumulative impacts for the resources analyzed (pages 26 and 27). The impacts from these projects are included in the affected environment sections for each resource topic, and the impacts of the no-action alternative and preferred alternative are analyzed in concert with these actions for each resource topic.



## Attachment C: Errata

This errata contains corrections and minor revisions to the Cottonwood Cove Road Improvements Project Environmental Assessment (EA). Page numbers and section/sentence locations referenced in this errata pertain to the EA published for public review in May 2023. The edits and corrections in this errata do not result in any substantial modification being incorporated into the selected action, and it has been determined that the revisions do not require additional environmental analysis. The errata, when combined with the EA, comprises the only amendments deemed necessary for completing compliance and documentation for the project.

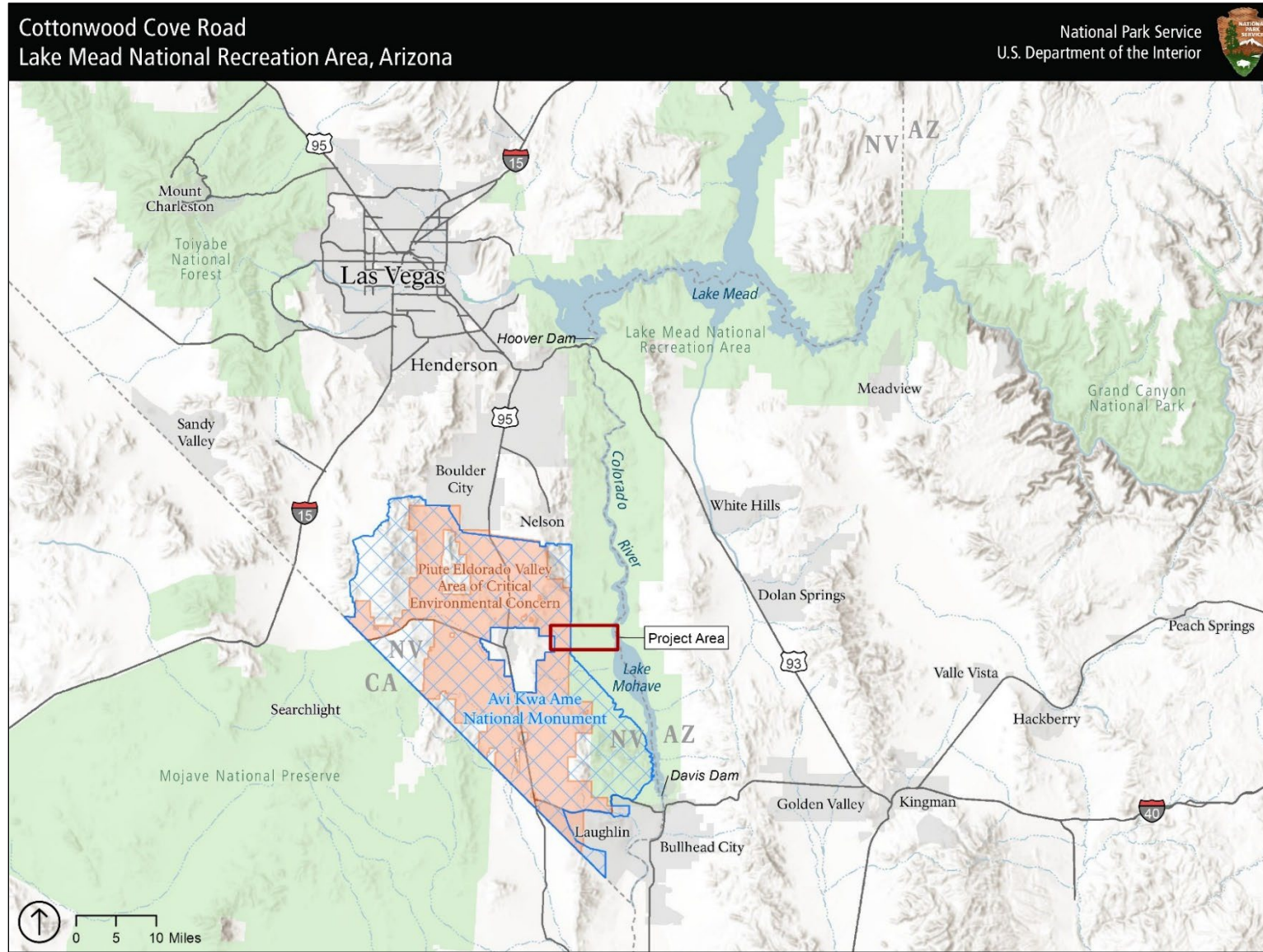
Original text from the EA is included to provide context and to allow for comparison to the text changes. Additions to the text are underlined and deleted text is shown in ~~strikeout~~.

### Page 1 – Chapter 1, Background, second paragraph

The remaining section of the road travels through a portion of the Piute-Eldorado Valley Area of Critical Environmental Concern (ACEC) Avi Kwa Ame National Monument, which is managed by the Bureau of Land Management (BLM); ~~the portion of road within BLM lands is considered a county road and is maintained by Clark County~~ (figure 2).

Page 2 – Chapter 2, Figure 1

Note: This figure replaces figure 1 in the EA and includes the preliminary boundary for the Avi Kwa Ame National Monument.



**Pages 18 to 22 – Chapter 2, Resource Protection Measures, Table 1**

Note: The table below only includes resource protection measures that were edited or added. Please see attachment A for the full list of resource protection measures.

Topic	Resource Protection Measure	Authority	Responsible Party
General	<p>A traffic management plan would be prepared specifically for this project. Cottonwood Cove Road would continue to remain open during construction, so visitors could still access the marina, campgrounds, motel, and other facilities. One-lane temporary signal operation and/or use of flagger operations may be required for the duration of the project with an allowance for 15- to 30-minute delays during construction.</p> <p><u>To the extent feasible, construction-related trips of workers and equipment, including trucks, would be reduced, traffic interference would be minimized, traffic flow would be maintained, and routing truck traffic near sensitive land uses would be avoided.</u></p>	<p>NPS <i>Management Policies 2006</i>, Section 8.2.5</p>	FHWA
General	<p>Fugitive dust plumes would be reduced to the extent possible using water sprayed on the soil during earth-disturbing activities. Water used during road construction would be pumped from Lake Mohave, stored in a tank on the boat ramp or other location close to the water’s edge, and hauled by truck. <u>To the extent possible, puddling of water during soil dampening would be avoided, as this could attract desert tortoise predators.</u></p> <p>Other measures could include maintaining the existing vegetation to the extent possible, limiting speed limits on unpaved roads, and limiting demolition work in high-wind conditions. The FHWA, on behalf of Lake Mead NRA, would coordinate with the Clark County Division of Air Quality to obtain a Dust Control Permit detailing the dust control activities and requirements.</p>	<p>Clean Air Act Nevada Revised Statute 445B.500 NPS <i>Management Policies 2006</i>, Section 4.7.1</p>	FHWA

Topic	Resource Protection Measure	Authority	Responsible Party
<u>General</u>	<p><u>To limit construction emissions of nitrogen oxides and volatile organic compounds, the following will occur to the extent possible:</u></p> <ul style="list-style-type: none"> <li>- <u>Construction-related trips of workers and equipment, including trucks, would be reduced.</u></li> <li>- <u>Unnecessary idling from heavy equipment would be restricted.</u></li> <li>- <u>Engine tampering to increase horsepower, except when meeting manufacturer’s recommendations, would be prohibited.</u></li> <li>- <u>Cleaner equipment with the best available emissions control technologies would be used.</u></li> <li>- <u>A construction schedule that minimizes cumulative impacts from other planned projects in the region would be identified, if feasible, through coordination with appropriate air quality agencies.</u></li> <li>- <u>An inventory of all equipment prior to construction would be prepared and the suitability of add-on emission controls for each piece of equipment before groundbreaking would be identified.</u></li> </ul>	<p><u>Clean Air Act</u> <u>Nevada Administrative Code 445B.305</u></p>	<p><u>FHWA</u></p>
<u>General</u>	<p><u>Diesel engines, motors, and equipment staging areas would not be located adjacent to Cottonwood Cove facilities, including the campgrounds, RV park, resort, and marina.</u></p>	<p><u>Clean Air Act</u> <u>Nevada Administrative Code 445B.305</u></p>	<p><u>FHWA</u></p>
Vegetation	<p>Desert <u>topsoil</u> will be <u>collected and</u> stored as near its original location as possible to minimize vegetation impacts and potential compaction and erosion of bare soils. Replacement of the desert <u>topsoil</u> will include spreading, scarification, mulching, and seeding and/or planting species native to the immediate area. As necessary, desert <u>topsoil</u> replacement techniques will be used to re-establish desert crust surface and minimize impacts from invasive plant species.</p>	<p><i>NPS Management Policies 2006, Section 4.8.2.4</i></p>	<p>FHWA</p>
Vegetation	<p>Construction equipment would be pressure-washed and inspected before each entry into the park and the <u>Piute-Eldorado Valley ACEC</u> <u>Avi Kwa Ame National Monument</u>. Sterilized construction materials (e.g., topsoil, hay bales) would be used to minimize introduction or spread of unwanted plant species.</p>	<p>Executive Order 13751, “Safeguarding the Nation from the Impacts of Invasive Species”</p>	<p>FHWA</p>

Topic	Resource Protection Measure	Authority	Responsible Party
Vegetation	<p><u>In addition to following Lake Mead NRA’s Weed Management Plan, a revegetation plan specific to this project would be developed for implementation.</u> Following construction, disturbed areas adjacent to the road would be restored to natural conditions to the extent possible. Revegetation work would use desert <u>topsoil</u> conserved along the corridor and native species from genetic stocks originating in Lake Mead NRA and <u>Piute-Eldorado Valley ACEC</u> <u>Avi Kwa Ame National Monument</u>. Revegetation efforts would also attempt the reconstruction of the natural spacing, abundance, and diversity of native plant species.</p>	Executive Order 13751, “Safeguarding the Nation from the Impacts of Invasive Species”	FHWA
Special-status species – Mojave desert tortoise	<p><u>Ground-disturbing construction activities would be scheduled outside of the active seasons for tortoises (generally spring and fall but also any time of the year following precipitation events) to the extent possible.</u></p>	ESA	FHWA
Special-status species – Mojave desert tortoise	<p>An authorized desert tortoise biologist or environmental monitor will be on-site during construction activities to ensure that construction activities will not harm desert tortoises. <u>The monitor will survey the site on each day that work is being performed.</u> Potential authorized biologists will complete the qualifications form (US Fish and Wildlife Service [USFWS] 2009) and submit it to the USFWS for review and approval as appropriate. The authorized biologist will be responsible for approving monitors or other personnel that may assist the biologist.</p>	ESA	FHWA
Special-status species – Mojave desert tortoise, Banded Gila monster	<p>Before surface-disturbing activities <u>and on a daily basis</u>, an authorized biologist will survey the area to ensure that no live tortoises, active tortoise burrows, or Gila monsters are present. If a tortoise is found on the project site, all work will cease until the authorized biologist can take appropriate action to prevent harm to the tortoise. This includes relocating the tortoises outside the project area and excavating the burrows according to USFWS-approved protocols. If signs of Gila monster are identified within the project area, mitigation measures to avoid impacts on the Gila monster will be employed, including restricting construction to periods of inactivity (typically November through March) to the extent possible, relocating any Gila monsters found within the project area to other suitable habitat, and limiting vehicle use to existing or designated routes.</p>	ESA Nevada Revised Statute 503.584 - 503.589	FHWA/NPS

Topic	Resource Protection Measure	Authority	Responsible Party
Special-status species – Mojave desert tortoise	To avoid introducing non-native species into the area, all construction equipment would be pressure-washed and inspected before use in Lake Mead NRA and the <del>Piute Eldorado Valley</del> ACEC <u>Avi Kwa Ame National Monument</u> . No imported topsoil or hay bales would be used on the project site.	ESA	FHWA
<u>Special-status species – Mojave desert tortoise</u>	<u>All tortoises observed or handled as part of this project would be reported to the USFWS in accordance with the biological opinion.</u>	ESA	FHWA/NPS
Special-status species – Mojave desert tortoise, Banded Gila monster	Signs would be added to warn drivers that they are approaching an area where they could encounter wildlife, especially desert tortoise. <u>If wildlife strikes become an issue following the improvements to Cottonwood Cove Road, the NPS would re-evaluate the conditions and implement measures to reduce impacts (e.g., lower the speed limit, improve signs).</u>	ESA Nevada Revised Statute 503.584 - 503.589	FHWA/NPS

**Page 27 – Chapter 3, Scenario for Cumulative Impact Analysis, Table 2**

Note: The table below only includes the row that required an edit. Please see the EA for the full list of past, ongoing, and potential future actions and trends that were considered in the cumulative impacts analysis.

Project/ Trend	Description	Resources Affected
Piute Eldorado Valley ACEC Management Plan*	The Piute Eldorado Valley ACEC was designated in 1998 to protect the federally threatened Mojave desert tortoise. BLM has developed a management plan for the Piute Eldorado Valley ACEC. Through the recommended activities of the management plan, BLM aims to develop and monitor conservation actions that would preserve the species and maintain and restore habitat, including implementing Mojave desert tortoise recovery tactics, addressing ecological trends affecting the ecoregion, trying to offset these impacts where possible, and implementing conservation actions for the areas.	Vegetation Special-status species Migratory birds

\* The Avi Kwa Ame National Monument was established in March 2023. It incorporates nearly 507,000 acres around Searchlight, including the Piute Eldorado Valley ACEC and a portion of Lake Mead NRA. The Piute Eldorado Valley ACEC Management Plan was finalized in June 2022, is the most current policy document for BLM-managed land, and covers the portion of the Avi Kwa Ame National Monument in the project area.

**Page 28 – Chapter 3, Vegetation, Affected Environment, second paragraph**

Creosote bush shrubland is the dominant habitat within Lake Mead NRA, covering nearly half of the land within Lake Mead NRA (Salas 2016). It is also the dominant habitat within the ~~Piute Eldorado Valley ACEC~~ Avi Kwa Ame National Monument, comprising approximately 66% of the ACEC (BLM 2022) and specifically within the BLM-managed portion of the project area. This vegetation community consists of a sparse to intermittent shrub layer with a sparse to open herbaceous layer and trees are sparse if present. The characteristic species of creosote bush shrubland habitat is creosote bush (*Larrea tridentata*). Other common species in this habitat type include white bursage (*Ambrosia dumosa*), and brittlebush (*Encelia farinosa*) (Salas 2016).

**Pages 31 to 32 – Chapter 3, Vegetation, Conclusion, second paragraph**

The proposed action would require the removal of soils and vegetation to complete construction activities to rehabilitate and realign Cottonwood Cove Road within the project area. Creosote bush shrubland, semi-desert wash woodland/scrub, and semi-desert scrub shrublands vegetation within an area of approximately 7.8 acres would be permanently lost and an additional 23.9 acres would be susceptible to temporary impacts from soil and vegetation removal and disturbance, trampling, and soil compaction during construction activities. Following construction, the disturbed areas would be revegetated with soils and plants salvaged during construction. Additionally, the removed existing roadbed within the areas that would be realigned would be restored (a total of approximately 1.0 acre), resulting in a net permanent impact of approximately 6.8 acres. The proposed action would have an impact on individual plants but would not have population-level effects. When considering the amount of vegetation that would be impacted and the area that would be restored, the proposed action would affect a small amount of vegetation compared to the amount of vegetation communities available within the park and the ~~Piute Eldorado Valley ACEC~~ Avi Kwa Ame National Monument. The proposed action would not contribute significantly to the future trends on vegetation on NPS or BLM lands.

### **Page 32 – Chapter 3, Special-status Species, Affected Environment, last three paragraphs**

This species occurs throughout Lake Mead NRA in Mojave desert scrub habitats away from the shoreline areas. Tortoise populations in the park are generally low density, with scattered high-density areas. The developed areas of the park are in marginal habitat with low tortoise densities (NPS 2014). The Piute Eldorado Valley ACEC was designated to protect the Mojave desert tortoise and its habitat and has one of the largest areas of high-density desert tortoise habitat known in Nevada (BLM 2022). The Avi Kwa Ame National Monument, which encompasses the entirety of the Piute Eldorado Valley ACEC, was designated to preserve natural and cultural resources, recognizing desert tortoises as just one of those resources (BLM 2023).

Most habitat for the Mojave population of the desert tortoise within Lake Mead NRA south of Hoover Dam is protected by wilderness or critical habitat designations. Critical habitat for the Mojave population of the desert tortoise was designated in 1994. The USFWS identified biological and physical features that are essential to the desert tortoise's conservation, including sufficient space to support viable populations within each recovery unit and to provide for movement, dispersal, and gene flow; sufficient quality and quantity of forage species and the proper soil conditions to provide for the growth of these species; suitable substrates for burrowing, nesting, and overwintering; burrows, caliche caves, and other shelter sites; sufficient vegetation for shelter from temperature extremes and predators; and habitat protected from disturbance and human-caused mortality. All of the project area within the Piute Eldorado Valley ACEC Avi Kwa Ame National Monument occurs within the designated critical habitat, and the portion of the project area within the park from the western boundary to approximately the ranger station is also within the critical habitat. In these areas, Cottonwood Cove in its existing footprint was present when the critical habitat was designated. Thus, the critical habitat was designated with the existing habitat fragmentation, the effects of which are acknowledged in the desert tortoise recovery plan.

Desert tortoise presence/absence surveys were conducted in June 2020 along the length of the road corridor, including the two sections of the corridor that would be realigned under the proposed action. Results of the survey included one Condition Class 4 burrow (a burrow that is in good condition and could be used by a desert tortoise) that showed no obvious signs of tortoise use. There was also a depression area along the corridor, which could have been created by a tortoise, but there were no other observable tortoise signs within the vicinity. Additionally, recent surveys conducted by the NPS and the US Geological Survey have concluded that the habitat in this area of the park is fairly poor due to dying vegetation from prolonged drought conditions at the park, and the densities of desert tortoises in this area are very low.

### **Page 33 – Chapter 3, Special-status Species, Environmental Trends and Planned Actions, second paragraph**

Desert tortoise populations have been declining throughout their range due to urban development, disease, off-road vehicle disturbance, construction activities, mining, and livestock grazing. Habitat fragmentation from urbanization is a continuing problem. Gila monsters face similar threats, as well as illegal collection (NatureServe 2022b). The park and the Piute Eldorado Valley ACEC Avi Kwa Ame National Monument provide large areas of protected, continuous habitat for these two species. Within the project area, they are currently at risk of injury or death from traffic on Cottonwood Cove Road and potential harassment by visitors.



**Page 34 – Chapter 3, Special-status Species, Impacts Assessment, fourth paragraph**

The NPS initiated consultation for this project with the USFWS on September 29, 2020 through a request to append the Cottonwood Cove Road improvements project to its PBO, and the USFWS issued a BO on November 18, 2020. The NPS reinitiated consultation with the USFWS on February 7, 2023 to update project impacts and include critical habitat impacts that may occur on NPS and BLM lands. ~~Consultation with the USFWS is ongoing.~~ On May 23, 2023, the USFWS issued a BO approving the request to append the project to the existing NPS and BLM PBOs, stating that the proposed action is within the scope of the NPS and BLM PBOs and is therefore not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat.

**Page 36 – Chapter 3, Special-status Species, Impacts of the Proposed Action/Preferred Alternative, fourth paragraph**

~~Pursuant to section 7 of the ESA, the proposed action may affect but is not likely to adversely affect the Mojave desert tortoise.~~ Consultation under Section 7 of the ESA with the USFWS is complete. As noted, the USFWS concluded that the proposed action is not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat. The proposed action has the potential to adversely affect Mojave desert tortoises through temporary and permanent habitat loss, injury or direct mortality, and harassment. Permanent habitat loss would amount to approximately 6.8 acres, and 4.1 acres of this would be within designated critical habitat for the Mojave desert tortoise; however, the habitat loss would be limited to areas immediately adjacent to the road, which is lower-quality habitat.

**Page 37 – Chapter 3, Special-status Species, Conclusion, second and third paragraphs**

The proposed action would involve construction activities that could result in impacts on Mojave desert tortoises and banded Gila monsters, including loss of habitat, vegetation removal, the potential for harm from the use of heavy equipment in the project area, increased predation, and harassment. Construction activities would be localized and temporary and would occur along a previously disturbed and developed road corridor; however, the project would result in the loss of 6.8 acres of Mojave desert tortoise and banded Gila monster habitat, including a loss of 4.1 acres of desert tortoise critical habitat. Resource protection measures would be taken to ensure that impacts on these species are avoided/minimized as much as possible. ~~The proposed action may affect but is not likely to adversely affect the federally threatened Mojave desert tortoise.~~ is not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify designated critical habitat for the Mohave desert tortoise.

The proposed action would have an impact on Mojave desert tortoise and banded Gila monster habitat — including a portion of desert tortoise critical habitat — but the impacts would be limited to the lower-quality habitat adjacent to the existing road. When considering the special-status species habitat that would be permanently lost, the proposed action would affect a small amount of habitat compared to the amount of higher quality available within the park and the ~~Piute Eldorado Valley ACEC~~ Avi Kwa Ame National Monument. The proposed action would not contribute significantly to the future trends on Mojave desert tortoise and banded Gila monster on NPS or BLM lands.

**Page 40 – Chapter 3, Migratory Birds, Conclusion, second paragraph**

The proposed action could have short- and long-term impacts on migratory birds, including noise disturbance and removal of potential habitat. Injury of migratory birds and their nests would be avoided through vegetation removal restrictions (when possible) and avoidance of any active nests identified

before and during construction activities. With the implementation of mitigation measures and BMPs, the potential for impacts would be low. Additionally, the habitat adjacent to Cottonwood Cove Road is lower quality — it has been disturbed by the road itself as well as by additional disturbance from continual vehicular traffic. The proposed action could have an impact on individuals but would not have population-level effects, particularly with the implementation of mitigation measures and BMPs. When considering the amount of potential migratory bird habitat that would be impacted and the area that would be restored, the proposed action would affect a small amount of habitat compared to the amount of higher-quality habitat available within the park and the Piute-Eldorado Valley ACEC Avi Kwa Ame National Monument. The proposed action would not contribute significantly to the future trends on migratory birds on NPS or BLM lands.

#### **Pages 47 and 48 – Chapter 4, Agency Consultation**

**Nevada State Historic Preservation Office.** As required by Section 106 of the NHPA, the park initiated consultation with the Nevada SHPO beginning on September 8, 2020. The park provided an assessment of effects, with a determination of no adverse effect on historic properties and the Cottonwood Cove Developed Area Historic District. Concurrence from the Nevada SHPO was not granted, and additional information was requested from Nevada SHPO at that time. The NPS has maintained a no adverse effect determination, as proposed work would not significantly alter or remove character-defining elements of the Cottonwood Cove Developed Area Historic District. ~~Further consultation with the Nevada SHPO regarding the additional cultural resources survey conducted in December 2022 and potential impacts on the historic district is ongoing. If SHPO comments require mitigation for adverse effects, the EA will be revised and republished for another 30-day comment period.~~ On June 30, 2023, the park sent an updated consultation package to the Nevada SHPO, which included a description of the area of potential effect, the results of the supplementary December 2022 archeological survey, and the rationale for the determination of no adverse effect on historic properties. Nevada SHPO responded with a letter dated July 27, 2023, providing concurrence on the determination of no effect.

**Tribes.** The NPS sent a letter initiating consultation to 18 Tribal Nations on March 3, 2022. The letters described the project, the results of the cultural resources survey, and NPS's determination of no adverse effect. The letters inquired about interest in additional consultation and participation in the project. The Hopi Tribe concurred with the determination of effect on March 15, 2022, and the Ak-Chin Indian Community responded on April 28, 2022, stating that it had no comments. The Cultural Manager for the Moapa Band of Paiutes responded on March 15, 2022, stating they had no questions or comments, but the Moapa Tribal Historic Preservation Officer replied via email on March 31, 2022, requesting additional information related to the project and requested a site visit. No other responses have been received from tribal groups. The park provided the information requested and completed a site visit in September 2022. The Moapa THPO requested an archeological survey that encompassed a wider buffer on either side of Cottonwood Cove Road. The park conducted the survey in December 2022 in accordance with the Moapa THPO's preferences. ~~Consultation with the appropriate Tribal Nations for the 2022 cultural resources survey is currently underway.~~ On June 30, 2023, the park sent an updated consultation package to the 18 Tribal Nations, which included a description of the area of potential effect, the results of the supplementary December 2022 archeological survey, and the rationale for the determination of no adverse effect on historic properties. The park received responses from two tribes. On July 5, 2023, the Fort Yuma Quechan Indian Tribe provided concurrence with the NPS determination of no adverse effect, and on July 19, 2023, the Yavapai-Prescott Indian Tribe acknowledged receipt of the consultation package and stated that the tribe would contact the park if necessary.

**US Fish and Wildlife Service.** As required by Section 7 of the ESA, the NPS consulted with the USFWS regarding the potential effects of the proposed action/preferred alternative on federally listed species. The NPS initiated consultation for this project with the USFWS on September 29, 2020 through a request to append the Cottonwood Cove Road improvements project to its PBO, and the USFWS issued a BO on November 18, 2020. The NPS updated its request to append to its PBO to update project impacts and include critical habitat impacts that occur on NPS and BLM lands. ~~Consultation with the USFWS is ongoing;~~ The updated consultation package was submitted on February 7, 2023. ~~If the USFWS comments indicate that the impacts from the Cottonwood Cove project are unable to be appended to the NPS and BLM BPOs or if consultation results in a change to the effects determination for desert tortoise, the EA will be revised and republished for another 30-day comment period.~~ On May 23, 2023, the USFWS issued a BO stating that the proposed action is within the scope of the NPS and BLM PBOs and is therefore not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify critical habitat.

## **Page 50 – References**

### Bureau of Land Management (BLM)

- 2023      Avi Kwa Ame National Monument Frequently Asked Questions. Las Vegas Field Office. Available online: <https://www.blm.gov/sites/default/files/docs/2023-04/Frequently%20Asked%20Questions%204-23.pdf>. Accessed June 8, 2023.

## Attachment D: Determination of Non-Impairment

### The Prohibition on Impairment of Park Resources and Values

NPS *Management Policies 2006*, section 1.4.4, explains the prohibition on impairment of park resources and values: “While Congress has given the Service management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the 1916 Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them. The impairment of park resources and values may not be allowed by the Service unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment.”

### What is Impairment?

NPS *Management Policies 2006*, Section 1.4.5, “What Constitutes Impairment of Park Resources and Values,” and Section 1.4.6, “What Constitutes Park Resources and Values,” explain impairment.

“Impairment is an impact that, in the professional judgment of the responsible NPS manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values.” Section 1.4.5 of NPS *Management Policies 2006* states: “An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified as a goal in the park’s general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. An impact that may but would not necessarily lead to impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.” Per section 1.4.6 of NPS *Management Policies 2006*, park resources and values at risk for being impaired include:

- “the park’s scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural

landscapes; ethnographic resources; historic and prehistoric sites, structure, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.”

## **Impairment Determination for the Selected Alternative**

This determination on impairment has been prepared for the NPS selected alternative described in the finding of no significant impact for the Cottonwood Cove Road Improvements Project. An impairment determination is made for all resource impact topics analyzed for the selected alternative — vegetation, special status species, migratory birds, and cultural landscapes and historic structures. Impacts on these resources will be reduced to the extent possible through resource protection measures.

***Vegetation*** – The selected alternative will affect approximately 31.7 acres of vegetation through removal of soils and vegetation, grading, and potential trampling and compaction. Approximately 6.8 acres will be permanently lost due to the relocation of the road and construction of the new parking area. Following construction, the remaining 24.9 acres will be revegetated, monitored for two years, and treated for nonnative invasive species, as necessary. The disturbed areas will take years to recover; however, the disturbance will be restricted to areas adjacent to the existing Cottonwood Cove Road, which is of diminished quality from the existing roadway and vehicle disturbance. Because the impacts to vegetation are confined to the area adjacent to existing development and the disturbed areas will be replanted and monitored for success, the selected alternative will not result in impairment.

***Special Status Species*** – The NPS obtained a preliminary list of eight federally listed, candidate, and proposed wildlife species that may occur in the project area, and designated critical habitat that exists in the project area for three of those species. The NPS also identified an additional 11 plant and wildlife species protected in Nevada. Of these species, Mojave desert tortoise and banded Gila monster were carried through for full analysis. Construction and operation impacts on both species will be reduced through mitigation measures mandated through the biological opinion for Mojave desert tortoise, most notably an on-site biological monitor during construction activities. The permanent loss of 6.8 acres of vegetation represents a small loss of potential habitat for Mojave desert tortoise and banded Gila monster, including a permanent loss of 4.1 acres of designated desert tortoise critical habitat. As noted for vegetation, the lost habitat is of diminished quality due to its location along an existing road, and all disturbed areas will be revegetated and monitored for success. The US Fish and Wildlife Service concluded that the selected action is not likely to jeopardize the continued existence of the Mojave desert tortoise or adversely modify designated critical habitat for the Mohave desert tortoise. Overall, the selected alternative will have short- and long-term adverse impacts on Mojave desert tortoise and banded Gila monster but will not cause impairment to these species.

***Migratory Birds*** – Some migratory birds may use the habitat adjacent to the existing Cottonwood Cove Road and will be adversely affected by construction activities and habitat loss. Employing the resource

protection measures presented in attachment A will reduce impacts on migratory birds. The overall impact on migratory birds from implementing the selected alternative will not result in impairment.

***Cultural Landscapes and Historic Structures*** – The selected alternative will not alter the characteristics of the Cottonwood Cove Developed Area Historic District that qualify the property for inclusion in the National Register of Historic Places; therefore, the changes will result in no adverse effects. The selected alternative will not impair cultural resources.

## **Summary**

The adverse effects and environmental impacts anticipated as a result of implementing the selected alternative on resources or values whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park, or to opportunities for enjoyment of the park, or identified as significant in the park, general management plan, or other relevant NPS planning documents will not rise to levels that will constitute impairment of park values and resources in Lake Mead National Recreation Area.