

# RECLAMATION

*Managing Water in the West*

## City of Henderson R-10/R-10A Water Tank Site

Finding of No Significant Impact and Final Environmental Assessment  
LC-14-21

Lower Colorado Region, Boulder City, Nevada



U.S. Department of the Interior  
Bureau of Reclamation  
Lower Colorado Region  
Boulder City, Nevada

July, 2015

## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

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

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## List of Acronyms and Abbreviations

Acronym or abbreviation	Term
APE	Area of Potential Effect
BLM	Bureau of Land Management
BO	Biological Opinion
CEQ Regulations	Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA
City	City of Henderson
CO	carbon monoxide
Contract	Right of Use Contract Number 04-07-30-L0821
DOI	Department of the Interior
Dust Control Permit	Clark County Department of Air Quality Dust Control Permit for Construction Activities
EA	Environmental Assessment
EIS	Final Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FCR	Field Contact Representative
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
NAAQS	National Ambient Air Quality Standards
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
PM <sub>2.5</sub>	particulates less than 2.5 microns
PM <sub>10</sub>	particulates less than 10 microns
Project	Access road and Site
Re-evaluation	Re-evaluation of the Final EIS and ROD Boulder City/US 93 Corridor Study (1-11 Boulder City Bypass)
Reclamation	Bureau of Reclamation
ROD	Record of Decision
ROU	Right-of-Use
ROW	Right-of-Way
SNWA	Southern Nevada Water Authority
Service	U. S. Fish and Wildlife Service
SHPO	State Historic Preservation Office
Site	9.34 acre water tank site
SO <sub>2</sub>	sulfur dioxide

<b>Acronym or abbreviation</b>	<b>Term</b>
APE	Area of Potential Effect
TCP	Traditional Cultural Property
Trail	River Mountain Loop Trail
Water Tank	Water Reservoir
U.S.	United States of America
USACE	U.S. Army Corps of Engineers
UNLV	University of Nevada Las Vegas

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# Finding of No Significant Impact

(FONSI)

LC-14-21

for

**Final Environmental Assessment (EA) for City of Henderson R-10/R-10A Water Tank Site**

**Boulder City, Nevada**

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

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

Prepared: Faye Stroier Date: July 9, 2015  
Natural Resource Specialist

Recommended: [Signature] Date: July 9, 2015  
Manager, Environmental Compliance Group

Approved: [Signature] Date: 7/9/15  
Chief, Resources Management Office

## Background

Reclamation is proposing to issue Right of Use (ROU) contract Number 04-07-30-L0821 (Contract) to the City of Henderson (City) for a water reservoir (tank) site (Site) and access road on Reclamation land located at: SE<sup>1</sup>/<sub>4</sub> section 35, Township 22 South, Range 63 East, MDM, Clark County, Nevada and the N<sup>1</sup>/<sub>2</sub> section 2, Township 23 South, Range 63 East, MDM, Clark County, Nevada, in the River Mountains near Railroad Pass. The Final EA for the Proposed Action is attached to and incorporated by reference into this FONSI.

Reclamation issued the original ROU contract, which has expired, to the City in 1986. The original contract granted the City an easement for the 9.34 acre water tank site and an access road connecting to U.S. Highway 93/95. The access road is needed because the current access from U.S. Highway 93/95 will not be possible when the highway is re-aligned as part of the Boulder City Bypass.

In 2005 the Federal Highway Administration (FHWA) completed the “Final Environmental Impact Statement (EIS) and Record of Decision (ROD) for the Boulder City/U.S. 93 Corridor Study” for improvements to U.S. Highway 93 between the end of Interstate 515 on U.S. Highway 93/95 in Henderson to a point on U.S. Highway 93 approximately 4.7 miles east of downtown Boulder City. These improvements are now known as the Boulder City Bypass. Reclamation was a cooperating agency on this EIS and issued a ROD for the granting of a letter of consent to the FHWA for the appropriation and inclusion of a 200-foot easement on Reclamation managed land adjacent to U.S Highway 93/95 in a Highway Easement Deed to the Nevada Department of Transportation (NDOT). The City has obtained approval from NDOT for placement of the access road within the 200-foot easement. Reclamation, as the underlying landowner within the 200 foot easement, has coordinated with NDOT on the issuance of a ROU to the City for the access road.

In 2014, FHWA and NDOT completed the *Re-evaluation of the Final EIS and ROD Boulder City/US 93 Corridor Study (1-11 Boulder City Bypass)* (Re-evaluation) to determine if the EIS would need to be supplemented because of recent research that identified the potential for naturally occurring asbestos (NOA) in the vicinity of the Boulder City Bypass. It was determined that a supplement was not needed because of mitigation measures designed to prevent adverse impacts.

Since analysis of the area where the proposed access road is located is included in the EIS, and the access road is needed because of the location of the Boulder City Bypass, the EA is tiered to and incorporates by reference the EIS and Re-evaluation.

## Alternatives Considered

A No Action Alternative and the Proposed Action were considered. Under the No Action Alternative, the City would need to find another location to locate the water tank. It is likely that any suitable location would be on Reclamation or Bureau of Land Management land because of the need to place the water tank at the correct elevation and proximity to its service area. The City would need to apply for a ROU in the proposed new location. The City would need to construct new water tanks and associated infrastructure at the location requiring new disturbance.



## **The Proposed Action**

Under the Proposed Action Alternative Reclamation will issue a perpetual ROU Contract to the City for the use of 11.5 acres of Reclamation land for the Site and the access road, collectively referred to as the Project. The City will be responsible for all construction, operations, and maintenance of the Project. All activities will follow the Plan of Development submitted to Reclamation by the City.

A new 12-foot wide gravel access road will be constructed that will extend about 6,000 linear feet from the intersection of East Paradise Hills Drive and Old Vegas Trail to the Site. The access road will be constructed by NDOT as part of the Boulder City Bypass construction. The City will construct a second water tank (R-10A) and other site improvements at the Site. A pump station building will be constructed at the Site at future date that has not yet been determined.

## **Environmental Commitments**

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

### **Recreation**

The access road would cross the River Mountain Loop Trail near the Site. The City will use appropriate traffic control during construction to ensure the safety of trail users in that location. Since gravel on trails can create hazards for trail users, the City will take measures to minimize the spillage of gravel from the access road on to the River Mountain Loop Trail during and after construction.

### **Soils**

Upon completion of construction, appropriate stabilization and rehabilitation measures will be completed in conformance with the requirements of Reclamation, the State of Nevada Division of Environmental Protection (NDEP) and Clark County Department of Air Quality.

Topsoil removed for construction activities will be replaced in areas not intended for permanent access. All excavated material will remain within the ROU area. It is not anticipated that excess material will remain. If any excess material does remain after construction, it will be stored at the Site.

### **Surface and groundwater quality and quantity**

The City will obtain coverage under and comply with the National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit (NVR100000) in order to discharge stormwater during construction of the R10A tank and other Site improvements. In addition, the City may obtain coverage under NPDES DeMinimus General Permit NVG201000 to allow for discharges to Waters of the U.S. related to construction, maintenance, and testing (quantity, duration and capacity) of a public water system up to 1500 gallons per minute. Both permits are administered by NDEP.

## **Air Quality**

The access road construction by NDOT will implement all mitigation measures for NOA identified for the Boulder City Bypass project. This includes a Clark County Department of Air Quality Dust Control Permit for Construction Activities (Dust Control Permit).

The City will obtain a Dust Control Permit and follow all requirements of the permit.

## **Biological Resources**

Vegetation removal will occur outside of the migratory bird nesting season, generally occurring from March 1st to August 1st. If vegetation removal cannot occur outside of the nesting season, the area will be surveyed by a qualified (as determined by Reclamation) biologist for migratory birds and nesting activity. If nesting activity is observed, appropriate avoidance buffers will be exercised until the young have fledged.

The following conservation measures from the Biological Opinion (BO) will be followed to minimize potential adverse effects to desert tortoise from the Proposed Action.

1. Desert tortoise education program – A desert tortoise education program shall be presented to all personnel on site during construction activities by an agency or authorized desert tortoise biologist. The U.S. Fish and Wildlife Service (Service), Reclamation, and appropriate state agencies shall approve the program. At a minimum, the program shall cover desert-specific Leave-No-Trace guidelines, the distribution of desert tortoises, general behavior and ecology of this species, sensitivity to human activities, threats including introduction of exotic plants and animals, legal protection, penalties for violation of State and Federal laws, reporting requirements, and project measures in the BO. Further information on the BO is provided in Section 3.3.2.2.2. All field workers shall be instructed that activities must be confined to locations within the approved areas and their obligation to walk around and check underneath vehicles and equipment before moving them (or be cleared by an authorized desert tortoise biologist). In addition, the program shall include fire prevention measures to be implemented by employees during project activities. The program shall instruct participants to report all observations of desert tortoise and their sign during construction activities to the Field Contact Representative (FCR) and authorized desert tortoise biologist.

2. Field Contact Representative – Reclamation shall ensure a FCR (also called a Compliance Inspection Contractor) is generally designated for each contiguous stretch of construction activity for linear projects or isolated work areas for non-linear projects. The FCR will serve as an agent of Reclamation and the Service to ensure that all instances of non-compliance or incidental take are reported. Reclamation has discretion over approval of potential FCRs; however, those who also may be acting as authorized desert tortoise biologists must also be approved by the Service. All FCRs will report directly to Reclamation and the Service. The FCR, authorized desert tortoise biologist, and monitors shall have a copy of all stipulations when work is being conducted on the site and will be responsible for overseeing compliance with terms and conditions of the ROW grant, including those for listed species. Reclamation shall ensure the FCR and

authorized desert tortoise biologists have authority to halt any activity that is in violation of the stipulations. The FCR shall be on site year-round during all project activities. Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of the FCR.

3. Authorized desert tortoise biologist – All authorized desert tortoise biologists (and monitors) are agents of Reclamation and the Service and shall report directly to Reclamation and the proponent concurrently regarding all compliance issues and take of desert tortoises; this includes all draft and final reports of non-compliance or take. The initial draft report shall be provided to Reclamation and the Service within 24 hours of the observation of take or non-compliance.

An authorized desert tortoise biologist will be assigned to each piece/group of large equipment engaged in activities that may result in take of desert tortoise (e.g., clearing, blasting, grading, lowering in pipe, hydrostatic testing, backfilling, recontouring, and reclamation activities) and other work areas that pose a risk to tortoises. Reclamation may use their discretion to require a monitor (on-site or on-call) instead of an authorized desert tortoise biologist to monitor equipment that is low risk to tortoises, within tortoise proof fenced areas cleared of tortoise, or during the inactive season.

An authorized desert tortoise biologist will serve as a mentor to train desert tortoise monitors and will approve monitors if required. An authorized desert tortoise biologist is responsible for errors committed by desert tortoise monitors.

An authorized desert tortoise biologist shall record each observation of desert tortoise handled in the tortoise monitoring reports. Information will include the following: location recorded with the use of a global positioning system, date and time of observation, whether the desert tortoise was handled, general health and whether it voided its bladder, location desert tortoise was moved from and location moved to, unique physical characteristics of each tortoise, and effectiveness and compliance with the desert tortoise protection measures. This information will be provided directly to Reclamation and the Service.

4. Desert tortoise monitor – Desert tortoise monitors assist an authorized desert tortoise biologist during surveys and serve as apprentices to acquire experience. Desert tortoise monitors ensure proper implementation of protective measures, and record and report desert tortoises and sign observations in accordance with BO Term and Condition 2. They will report incidents of non-compliance to the authorized desert tortoise biologist or FCR. No monitors shall be on the project site unless supervised by an authorized desert tortoise biologist or approved by the Reclamation.

If a desert tortoise is immediately in harm's way (e.g., certain to immediately be crushed by equipment), desert tortoise monitors may move the desert tortoise then place it in a designated safe area until an authorized desert tortoise biologist assumes care of the animal.

Desert tortoise monitors may not conduct field or clearance surveys or other specialized duties of an authorized desert tortoise biologist unless directly supervised by an authorized desert tortoise biologist or approved to do so by the Service; "directly

supervised” means an authorized desert tortoise biologist has direct sight and voice contact with the desert tortoise monitor (i.e., within approximately 200 feet of each other).

Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of desert tortoise monitors who will assist an authorized desert tortoise biologist.

5. Vehicle travel – Project personnel shall exercise vigilance when commuting to the project area to minimize risk for inadvertent injury or mortality of all wildlife species encountered on paved and unpaved roads leading to and from the project site. Speed limits will be clearly marked, and all workers will be made aware of these limits. On-site, personnel shall carpool to the greatest extent possible.

During the desert tortoise less-active season (generally November through February), vehicle speed on project-related access roads and in the work area will not exceed 25 mph. All vehicles and construction equipment will be tightly grouped. During the more active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, vehicle speed on project-related access roads and in the work area will not exceed 15 mph. All vehicles and construction equipment will operate in groups of no more than three vehicles. An authorized desert tortoise biologist and desert tortoise monitor will escort or clear ahead of vehicles and equipment for ROW travel. The escort will be on foot and clear the area of tortoises in front of each traveling construction equipment group (see desert tortoise clearance). The escort will use a recreational vehicle with ground visibility such as a Utility Terrain Vehicle; however, at least one authorized desert tortoise biologist and one desert tortoise monitor must ride together and survey both sides of the vehicle. The speed/pace will be determined by an authorized desert tortoise biologist and shall be slow enough to ensure adequate inspection.

New access and spur road locations will be sited to avoid potentially active tortoise burrows to the maximum extent practicable.

6. Unauthorized access – Reclamation shall ensure that unauthorized personnel, including the public and off-duty project personnel, do not travel on project-related temporary access roads, to the greatest extent practicable.

During the more-active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, project- and non-project-related activities on all access roads that intersect the ROW will be monitored and logged. During construction, the ROW will be fenced at public roads that intersect the ROU. Signs will say that access on the ROW is strictly prohibited except by authorized personnel and that violators will be prosecuted.

7. Desert tortoise clearance – Prior to surface-disturbing activities, authorized desert tortoise biologists potentially assisted by desert tortoise monitors, shall conduct a clearance survey to locate and remove all desert tortoises from harm’s way including areas to be disturbed using techniques that provide full coverage of all areas (Service, 2009). During the more-active season, clearance surveys will be conducted either the day

prior to, or the day of, any surface-disturbing activity. During the less-active season, clearance surveys will be conducted within 7 days prior to any surface-disturbing activity. No surface-disturbing activities shall begin until two consecutive surveys yield no individuals.

An authorized biologist shall excavate all burrows that have characteristics of potentially containing desert tortoises in the area to be disturbed with the goal of locating and removing all desert tortoises and desert tortoise eggs. During clearance surveys, all handling of desert tortoises and their eggs and excavation of burrows shall be conducted solely by an authorized desert tortoise biologist in accordance with the most current Service-approved guidance (currently Service, 2009). If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action. Unoccupied burrows shall be collapsed or blocked to prevent desert tortoise entry. Outside construction work areas, all potential desert tortoise burrows and pallets within 50 feet of the edge of the construction work area shall be flagged. If the burrow is occupied by a desert tortoise during the less-active season, the tortoise shall be temporarily penned (see Conservation Measure 10). No stakes or flagging shall be placed on the berm or in the opening of a desert tortoise burrow. Desert tortoise burrows shall not be marked in a manner that facilitates poaching. Avoidance flagging shall be designed to be easily distinguished from access route or other flagging, and shall be designed in consultation with experienced construction personnel and authorized biologists. All flagging shall be removed following construction activities.

An authorized desert tortoise biologist will inspect areas to be backfilled immediately prior to backfilling.

8. Desert tortoise in harm's way – Any project-related activity that may endanger a desert tortoise shall cease if a desert tortoise is found on the project site. Project activities may resume after an authorized desert tortoise biologist or desert tortoise monitor removes the desert tortoise from danger or after the desert tortoise has moved to a safe area on its own.

During the more-active season and if temperatures are above 60 but below 95° F for more than 7 consecutive days, at least one monitor shall be assigned to observe spoil piles prior to excavation and covering.

9. Handling of desert tortoises – Desert tortoises shall only be moved by an authorized desert tortoise biologist or desert tortoise monitor solely for the purpose of moving the tortoises out of harm's way. During construction, operation, and maintenance, an authorized desert tortoise biologist shall pen, capture, handle, and relocate desert tortoises from harm's way as appropriate and in accordance with the most current Service approved guidance. No tortoise shall be handled by more than one person. Each tortoise handled will be given a unique number, photographed, and the biologist will record all relevant data on the Desert Tortoise Handling and Take Report (Attachment A to the BO) to be provided to Reclamation and the Service in accordance with the project reporting requirements.

Desert tortoises that occur aboveground and need to be moved from harm's way shall be placed in the shade of a shrub, 150 to 1,640 feet from the point of encounter. In situations where desert tortoises must be moved more than 1,640 feet (500 meters), translocation procedures may be required. Translocation would likely result in a level of effect to the desert tortoise that would require the appended procedures.

If desert tortoises need to be moved at a time of day when ambient temperatures could harm them (less than 40°F or greater than 95°F), they shall be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes shall be discarded after one use and never hold more than one tortoise. If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action.

Desert tortoises located in the project area sheltering in a burrow during the less active season may be temporarily penned in accordance with Conservation Measure 10 at the discretion of an authorized desert tortoise biologist. Desert tortoises should not be penned in areas of moderate to heavy public use; rather they should be moved from harm's way in accordance with the most current Service-approved guidance (Service, 2009).

Desert tortoises shall be handled in accordance with the Desert Tortoise Field Manual (Service, 2009). Equipment or materials that contact desert tortoises (including shirts and pants) shall be sterilized, disposed of, or changed before contacting another tortoise to prevent the spread of disease. All tortoises shall be handled using disposable surgical gloves and the gloves shall be disposed of after handling each tortoise. An authorized desert tortoise biologist shall document each tortoise handling by completing the Desert Tortoise Handling and Take Report.

10. Penning – Penning shall be accomplished by installing a circular fence, approximately 20 feet in diameter to enclose and surround the tortoise burrow. The pen should be constructed with 1-inch horizontal by 2-inch vertical, galvanized welded wire. Steel T-posts or rebar should be placed every 5 to 6 feet to support the pen material. Pen material will extend 18 to 24 inches aboveground. The bottom of the enclosure will be buried 6 to 12 inches or bent towards the burrow, have soil mounded along the base, and other measures implemented to ensure zero ground clearance. Care shall be taken to minimize visibility of the pen by the public. An authorized desert tortoise biologist or desert tortoise monitor shall check the pen at a frequency to ensure that the desert tortoise is secure and not stressed. No desert tortoise shall be penned for more than 48 hours without written approval by the Service. Because this is a new technique, all instances of penning or issues associated with penning shall be reported to the Service within 3 days.

11. Temporary tortoise-proof fencing – All construction areas, including open pipeline trenches, hydrostatic testing locations, and tie-in work shall be fenced with temporary tortoise-proof fencing (e.g., silt fencing) or inspected by an authorized desert tortoise biologist periodically throughout and at the end of the day and immediately the next morning. Reclamation and the Service will determine the appropriate length of open trench that will be allowed on the project.

Fencing will be designed in a manner that reduces the potential for desert tortoises and hatchlings to access the construction areas. Thus, the lower 6 to 12 inches of fencing will be folded outward (i.e., away from the construction area and towards the direction a tortoise would approach the work area), and covered with sufficient amount of soil, rocks, and staking to maintain zero ground clearance and secure the bottom section of material. An authorized desert tortoise biologist will check the integrity of the fencing every 2 hours and ensure that there are no breaches in the fencing and no desert tortoises pacing the fence. After the fencing is erected and secure, the inside will be cleared by an authorized desert tortoise biologist. The fencing must remain closed during any construction activities.

12. Permanent tortoise-proof fencing – The limits of construction will be clearly marked or flagged prior to development. All major construction activities and staging areas will be located within exclusion fencing to prevent desert tortoise movement into an active construction zone. Tortoise-proof fencing shall be installed around the boundary of permanent aboveground facilities that require regular monitoring and maintenance and other areas as directed by Reclamation or Service. Temporary desert tortoise fencing will be installed along the proposed new access road where U.S. Highway 93/95 does not create a barrier to tortoise movement. Fence specifications will be consistent with those approved by the Service (Service 2009). Tortoise guards shall be placed at all road access points where desert tortoise-proof fencing is interrupted and a gate is not adequate. Gates shall provide minimal ground clearance and deter ingress by desert tortoises. Permanent tortoise-proof fencing along the project area shall be appropriately constructed, monitored, and maintained. Fencing shall be inspected in accordance with the table below (Tortoise Fencing Requirements) and reports prepared in accordance with BO Term and Condition 2.b. unless modified by the Service. Monitoring and maintenance shall include regular removal of trash and sediment accumulation and restoration of zero ground clearance between the ground and the bottom of the fence, including re-covering the bent portion of the fence if not buried.

13. Dust control – Water applied for dust control shall not be allowed to pool outside desert-tortoise fenced areas, as this can attract desert tortoises. Similarly, leaks on water trucks and water tanks will be repaired to prevent pooling water. An authorized desert tortoise biologist will be assigned to patrol each area being watered immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises if conditions favor tortoise activity.

14. Litter control – A litter control program shall be implemented to reduce the attractiveness of the area to opportunistic predators such as desert kit foxes, coyotes, and common ravens. Trash and food items will be disposed of properly in predator-proof containers with predator-proof lids. Trash containers will be emptied and construction waste will be removed daily from the project area and disposed of in an approved landfill.

### Tortoise Fencing Requirements

Condition	Minimum Requirements
First week following installation; tortoises active	Inspect fence perimeter, tortoise guards, and gates twice per day, timed to occur when tortoises may be pacing the fenceline.
First week following fence installation; tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises active	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per month.
Following major storm event, tortoises active	Inspect fence perimeter, tortoise guards, and gates within 48 hours.
Following major storm event, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates within 72 hours.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises active	Repair within 48 hours of breach occurrence.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises inactive	Repair within 1 week of breach occurrence.

15. Minimizing new disturbance – Cross-country travel outside designated areas shall be prohibited. All equipment, vehicles, and construction materials shall be restricted to the designated areas and new disturbance will be restricted to the minimum necessary to complete the task (e.g., such as construction of one-lane access roads with passing turnouts every mile rather than a wider two-lane road). All work area boundaries shall be conspicuously staked, flagged, or otherwise marked to minimize surface disturbance activities.

16. To minimize destruction of desert tortoise habitat, such as soil compaction, erosion, or crushed vegetation due to construction and maintenance activities:  
All equipment, vehicles, and construction materials will remain within designated areas. Staging areas will be located in previously disturbed areas whenever possible.

Desert soil, rocks, and plants will be salvaged during construction to restore any temporarily disturbed areas. Disturbed sites will be scarified and recontoured; desert soil and large rocks will be replaced. Revegetation of disturbed areas will be initiated immediately following construction activities.

Prior to the onset of construction activities, the City will pay remuneration fees for compensation of 6.0 acres of desert tortoise habitat loss.

To prevent the spread of noxious and invasive weeds, equipment used for this project must be thoroughly cleaned prior to entering the project site. The cleaning process will ensure that all dirt and debris that may harbor noxious or invasive weeds seeds are removed and disposed of at an appropriate facility. Reclamation’s *Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species: 2012 Edition* should be referenced for



inspection and cleaning activities. The manual can be found at: <http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>

In order to insure compliance with Nevada Administrative Code 503.080, 503.090 and 503.093, the listed actions are required following an encounter with a banded Gila monster during construction activities.

- Any encounters during the project construction must be reported immediately to the Nevada Department of Wildlife (NDOW) at telephone number (702) 486-5127.
- Live Gila monsters found in harm's way on the construction site will be captured and detained in a cool, shaded environment (<85°F) by the project biologist trained in handling venomous reptiles until a NDOW biologist can arrive for documentation purposes. A clean 5-gallon plastic bucket with a secure ventilated lid, an 18" x 18" x 4" plastic sweater box with a secure vented lid, or a tape sealed cardboard box of similar dimension may be used for safe containment. Written information identifying mapped capture location, date, time, circumstances, and habitat description will also be provided to NDOW.
- Injuries to Gila monsters may occur during excavation, road grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation of appropriate treatment. Rehabilitation or euthanasia expenses will not be covered by NDOW. However, NDOW will be immediately notified during normal business hours. If an animal is killed or found dead, the carcass will immediately be frozen and transferred to NDOW with a complete written description of the situation, circumstances, habitat, and mapped location.
- Should NDOW assistance be delayed, biological personnel on site may be requested to remove and release the Gila monster out of harm's way. Should NDOW not be immediately available to respond for photo-documentation, a 35mm camera will be used to take good quality photographs of the Gila monster in situ at the location of live encounter or dead salvage. The pictures, preferably on slide film, will be provided to NDOW and will include: encounter location (landscape overview with Gila monster in clear view); a clear overhead shot of the entire body with a ruler for scale (Gila monster should fill the camera's field of view); an overhead close-up photo of head only.

Any cactus or yucca plants found within areas to be disturbed will be treated in accordance with Nevada Revised Statutes 527.010 and NDOT and/or Reclamation requirements.

### **Cultural Resources**

In the event of an unanticipated discovery, all operations in the area of the discovery will cease and a Reclamation archaeologist contacted at 702-293-8130. "Discovery" means the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits, human remains, or places reported to be associated with Native American religious beliefs and practices.

### **Noise**

The City of Henderson noise ordinance will be observed.

## **Visual**

The tanks and the pump house will be painted a color that blends with the surrounding landscape.

## **Environmental Impacts and Findings**

Implementation of the Proposed Action will not result in significant impacts to any of the resources evaluated in the EA. The reasons for this determination are summarized by resource below. References to the location of the supporting information in the EA are given in parenthesis.

### **Recreation**

The River Mountain Loop Trail will be considered in the design for the access road to assure there are no adverse impacts. The City does not intend to close this portion of the Trail during construction; they would use appropriate traffic control to ensure the safety of the Trail users. No other impacts to recreation resources are expected (EA, page 36).

### **Indian Trust Assets**

There would be no impact to ITAs as none are located in the project area (EA, page 36).

### **Surface and groundwater quality and quantity**

There are no major watercourses or drainages intersected by the proposed project; however, the general topography of the area would tend to allow sheet flow to cross the project area from the northeast to the highway in the southwest. The mitigation measures described in Section 2 for surface and groundwater quality and quantity are expected to prevent adverse impacts from stormwater runoff (EA, page 37).

### **Floodplains and Wetlands**

There are no floodplains or wetlands located in the vicinity of the Project, therefore there would be no impact to these resources (EA, page 37).

### **Noise and Traffic**

The noise analysis for the access road tiered to the FWHA EIS and ROD which concluded that construction activities would add to the existing noise in the immediate Project area and that the activities will be temporary and expected to occur within normal daytime working hours. Noise would also be generated from the City's construction of the remainder of the access road and at the Site. Intermittent increases in noise from construction traffic accessing the Site are expected. This traffic would occur during daytime hours and expected to be of short duration. The majority of construction activities associated with the Site would not be in close proximity to residential areas, so the noise impact is expected to be minimal. Impacts to the existing flow of traffic in this area are also expected to be minimal as the City would use appropriate travel control methods (EA, page 37).

## **Human Health**

The Proposed Action would have beneficial human health impacts as it will aid the City in providing a safe source of drinking water to residents (EA, page 37).

## **Environmental Justice**

No disproportionately high and adverse human health or environmental effects on minority and low-income populations were identified. Minority populations in the two Census Tracts did not exceed 50 percent, so did not meet the thresholds identified for Environmental Justice analysis. The poverty levels in the Census Tracts were either below or only slightly higher than those for Nevada and Clark County. No high and adverse human health or environmental effects which could have an impact on low-income populations were identified from the proposed action (EA, page 37).

## **Socio-economic**

The Proposed Action would have a beneficial socio-economic impact to the residents of Henderson. It would allow the City to continue providing a safe, reliable source of water to residents in an efficient manner (EA, page 38).

## **Air Quality/Greenhouse Gases/Climate Change**

This air quality analysis tiered to the FWHA EIS, ROD and Re-evaluation. The FWHA EIS and ROD concluded that the construction of the Boulder City Bypass would not create new violations of the NAAQS and would not increase the severity of existing violations due to the mitigation measures in place for construction activities. The Re-evaluation documented that the new information on NOA in the Boulder City Bypass project area did not require a supplement to the EIS because the existing project mitigation measures as well as additional measures put in place for NOA would prevent a significant impact.

Construction activities associated with the Site improvements and access road outside of the Boulder City Bypass ROW were not included in the FWHA EIS, ROD or Re-evaluation but the mitigation measures that would be in place for these activities are expected to prevent violations of NAAQS. No NOA was detected in the portion of the access road outside of NDOT's ROW or at the Site. The City's total estimated fuel use of 10,320 gallons from would be the equivalent of 91.7 metric tons of carbon. This is equivalent to the annual GHG emissions from 19.3 passenger cars. These emissions would be intermittent and are not expected to have a quantifiable impact on regional greenhouse gas emissions. The Proposed Action is not expected to create cumulative impacts because of the mitigation measures included in the Proposed Action and the other projects (EA, page 40).

## **Biological Resources**

The project will result in loss of 6.0 acres of potential habitat for tortoise and other wildlife species. A chain link fence with tortoise exclusion fencing will surround the location of the tanks and facilities. The fencing will not preclude birds from utilizing the site but no suitable habitat is anticipated to remain within the fenced area. Birds and other common wildlife in the

area are considered numerous and any impacts are not anticipated to impact the species as a whole.

Reclamation initiated formal consultation for a *may affect, likely to adversely affect* determination for the Mojave population of the desert tortoise on January 2, 2015. The Service responded to Reclamation's determination with a Biological Opinion (BO) on June 22, 2015. The BO can be found in Appendix C to the Final EA. Impacts to desert tortoise as result of the Proposed Action will be avoided and minimized through measures outlined in the BO (File No. 84320-2015-F-0166). These measures are included under the Environmental Commitment section of this FONSI.

Indirect impacts to wildlife could also occur as a result of lighting, construction noise, and vibration in the immediate vicinity of the proposed project area during construction. These impacts will be short-term in nature and are minimal. Cumulative impacts to wildlife are possible but harassment, displacement, and habitat loss from this proposed project when added to the ongoing and future impacts to wildlife species occurring in the area was not found to be significant (EA, page 42).

### **Cultural Resources**

The Proposed Action would not have adverse impacts to cultural resources. Impacts to the Squatters Camp archaeological site resulting from the access road are subject to the mitigation and data recovery taking place as a result of the Boulder City Bypass. No additional mitigation needs have been identified.

There would be no impacts to cultural resources from construction activities at the Site, as no artifacts or features have been found within the boundaries of the Site. There would be no cumulative impacts to cultural resources from construction activities at the Site, as no impacts were identified from the Proposed Action.

There would be no impacts to Traditional Cultural Properties or Sacred Sites at the Site or access road location as none are known to occur in the area (EA, page 44).

### **Visual Resources**

The Proposed Action alternative would result in the addition of visual elements to the landscape. They would be contained within the existing site and designed to blend in with the existing tank and surrounding landscape. These additional structures are expected to create only a minor change in the existing view of the Site because the tank, and the second tank which was previously located at the Site, has been a feature on the landscape for many years. Adverse visual cumulative impacts from the Proposed Action are not anticipated because the minor changes to the existing view of the Site will not have a great influence on the overall appearance of the area (EA, page 44).

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# **City of Henderson R10-10A Water Tank Site**

**Final Environmental Assessment  
LC-14-21**

**Prepared by:  
United States Department of the Interior  
Bureau of Reclamation  
Lower Colorado Region  
Boulder City, Nevada**

**July, 2015**

## **1.0 Introduction and Purpose and Need**

This Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA. The purpose of this EA is to evaluate the potential impacts of the Proposed Action on the physical and human environment and determine if there would be significant impacts requiring the preparation of an Environmental Impact Statement (EIS).

### **1.1 Background for the Purpose and Need**

The Bureau of Reclamation (Reclamation) is proposing to issue Right of Use (ROU) contract Number 04-07-30-L0821 (Contract) to the City of Henderson (City) for a water reservoir (tank) site (Site) and access road on Reclamation land located at: SE¼ section 35, Township 22 South, Range 63 East, MDM, Clark County, Nevada and the N½ section 2, Township 23 South, Range 63 East, MDM, Clark County, Nevada, in the River Mountains near Railroad Pass.

Reclamation land in the River Mountains was withdrawn from the public domain for the Robert B. Griffith water project which was constructed to supply water to Las Vegas, North Las Vegas, Henderson, Boulder City, and Nellis Air Force Base. This water project is now part of the Southern Nevada water system. Other water related facilities on Reclamation land in the River Mountains are water distribution lines and the River Mountains Water Treatment Facility, operated by Southern Nevada Water Authority (SNWA).

Reclamation issued the original ROU contract, which has expired, to the City in 1986. The original contract granted the City an easement for the 9.34 acre water tank site and an access road connecting to U.S. Highway 93/95. The City constructed two water tanks at the Site. One of the tanks was removed in 2004 when it was no longer useful because of its size, design, and condition.

The existing water tank, known as the R-10 Reservoir, is an above-ground cylindrical tank which stores 3 million gallons of treated water for delivery to the residents of the southeastern portion of the City via the City's water pipeline system. In a water system of this type, above-ground water tanks are generally located on hills or high ground to provide water pressure. Typically, water is pumped with the use of a pump station to a water tank that is located at a higher elevation above sea level than the area it serves. The water pressure created by the higher elevation forces the water to move downward from the force of gravity from the water tank and through the water delivery system. Within the City, these water service areas of similar elevations are known as "Pressure Zones". Water tanks are strategically located at specific elevations in order to create enough water pressure to supply residences and businesses within the Pressure Zone. The water tank at the Site serves the "2500 Pressure Zone". When full, the elevation of the water in the tank is 2500 feet above sea level. Along with elevation, it is also important to locate the water tank close to the area it serves.

Under the Contract, the City proposes to maintain the existing water tank, construct a second water tank and associated facilities, and construct a pumping station. An access road, a portion



of which would cross Reclamation land, would be constructed from near the Paradise Hills neighborhood. The water tank and access road (red line) are shown on Figure 1.



**Figure 1- Water Tank Site and Access Road**

## **1.2 Purpose and Need**

The purpose of the Proposed Action is to respond to the City of Henderson’s application for re-issuance of the Contract. It is Reclamation’s responsibility under the Act of Congress of June 17, 1902 (32 Stat. 388), the Act of Congress approved August 4, 1939 (53 Stat. 1187), Section 10, and 43 CFR Part 429 to respond to a request for a ROU on Reclamation lands.

Issuance of the Contract is needed because the Site is at an ideal location and elevation above sea level to provide water to the 2500 Pressure Zone. The existing water tank has been located at the Site for approximately 29 years and is integrated into the City’s overall water system. Use of the Site for a water tank is compatible with the purposes of the land Reclamation manages as part of the Robert B. Griffith water project. Issuance of the Contract provides a public benefit by contributing to the efficient storage and delivery of water to residents of the City.

The addition of a second tank increases the reliability of the system. The existing tank is in need of immediate maintenance in order to assure reliable water deliveries in the 2500 Pressure Zone.

The second tank would allow one tank to be drained for maintenance while not interrupting delivery of water and provides for a back-up water tank in the event of an emergency. It also would allow the City to store more water to accommodate expansion of the system. The installation of a pump station at the Site in the future would allow the City to pump water from the Site to another water tank in another Pressure Zone.

The access road is needed because the current access from U.S. Highway 93/95 will not be possible when the highway is re-aligned as part of the Boulder City Bypass (NDOT, 2015). Section 1.3 contains additional information on the Boulder City Bypass.

### **1.3 Previous NEPA Documents and Actions**

In 2005 the Federal Highway Administration (FHWA) completed the “Final EIS and Record of Decision (ROD) for the Boulder City/U.S. 93 Corridor Study” for improvements to U.S. Highway 93 between the end of Interstate 515 on U.S. Highway 93/95 in Henderson to a point on U.S. Highway 93 approximately 4.7 miles east of downtown Boulder City. These improvements are now known as the Boulder City Bypass. Reclamation was a cooperating agency on this EIS and issued a ROD for the granting of a letter of consent to the FHWA for the appropriation and inclusion of a 200-foot easement on Reclamation managed land adjacent to U.S Highway 93/95 in a Highway Easement Deed to the Nevada Department of Transportation (NDOT). The City has obtained approval from NDOT for placement of the access road within the 200-foot easement. Reclamation, as the underlying landowner within the 200 foot easement, has coordinated with NDOT on the issuance of a ROU to the City for the access road.

In 2014, FHWA and NDOT completed the *Re-evaluation of the Final EIS and ROD Boulder City/US 93 Corridor Study (1-11 Boulder City Bypass)* (Re-evaluation) to determine if the EIS would need to be supplemented because of recent research that identified the potential for naturally occurring asbestos (NOA) in the vicinity of the Boulder City Bypass (See Section 3.2.1.) It was determined that a supplement was not needed because of mitigation measures designed to prevent adverse impacts (FHWA, 2014).

The CEQ regulations for implementation of NEPA encourage both tiering and incorporation by reference. Tiering refers to following up on analysis contained in a broader EIS with an EIS or EA with a narrower scope, incorporating by reference the general discussions and concentrating solely on the issues specific to the narrower scope EIS or EA. An EA tiered to a broad EIS need only analyze the changes to, or details of, the original proposal not previously analyzed to determine if any of the changes or details result in potentially significant impacts (40 CFR 1502.20). Since analysis of the area where the proposed access road is located is included in the EIS, and the access road is needed because of the location of the Boulder City Bypass, this EA is tiered to and incorporates by reference the EIS and Re-evaluation.

### **1.4 Related Laws, Policies, and Planning Documents**

This EA complies with all applicable environmental, natural resource, and cultural resource statutes, regulations, and guidelines. These additional statutes, regulations, and guidelines may require permits, approvals, consultations with outside agencies, or implementation of mitigation measures.

The following federal, state, and local statutes and regulations are relevant to the proposed project.

- National Environmental Policy Act of 1969
- Endangered Species Act of 1973 (P.L. 93-205)
- National Historic Preservation Act of 1966, as amended
- Archaeological Resources Protection Act of 1979
- Native American Graves Protection and Repatriation Act of 1990
- Safe Drinking Water Act (42 USC 300f)
- Migratory Bird Treaty Act (16 U.S.C. 703-711)
- Bald and Golden Eagle Protection Acts (16 U.S.C. 668-668d)
- Clean Air Act of 1970 and amendments of 1977 and 1990
- Clean Water Act of 1970 and National Pollution Discharge Elimination System, as amended
- Noise Control Act of 1972
- Occupational Health and Safety Act of 1970 as amended
- Executive Order (EO) 11514: Protection and Enhancement of Environmental Quality
- EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13423: Strengthening Federal Environmental, Energy, and Transportation Management
- EO 13007 - Indian Sacred Sites (1996)
- EO 13186- Protection of Migratory Birds (2001)
- Secretarial Order 3226: Evaluating Climate Change Impacts in Management Planning
- Secretarial Order 3175: Departmental Responsibilities for Indian Trust Resources
- Chapter 445B of Nevada Administrative Code- State of Nevada's air pollution regulations
- Clark County Air Quality Regulations

## 2.0 Description of Alternatives

### 2.1 No Action Alternative

Under the No Action alternative, the Contract would not be re-issued. The City would need to find another location within the 2500 Pressure Zone to locate the water tank. The existing location has been determined to be the best location for the Site, therefore any other location may not be as efficient. It is likely that any suitable location would be on Reclamation or Bureau of Land Management (BLM) land because of the need to place the water tank at the correct elevation and proximity to the 2500 Pressure Zone. The City would need to apply for a ROU in the proposed new location. The City would need to construct new water tanks and associated infrastructure at the location requiring new disturbance.

### 2.2 Proposed Action Alternative

Under the Proposed Action Alternative Reclamation would issue a perpetual ROU Contract to the City for the use of 11.5 acres of Reclamation land for the Site and the access road, collectively referred to as the Project. The City would be responsible for all construction, operations, and maintenance of the Project. All activities would follow the Plan of Development submitted to Reclamation by the City. The following is a summary of construction activities.

#### Access Road to Site

A new 12-foot wide gravel access road would be constructed that will extend about 6,000 linear feet from the intersection of East Paradise Hills Drive and Old Vegas Trail to the Site. The area of this would be approximately 2.16 acres. This access road route was previously disturbed by the installation of a waterline operated by SNWA and an existing primitive road leading to the Site. The portion of the access road parallel to U.S. Highway 93/95 within the Boulder City Bypass right-of-way (ROW) (approximately 5,030 linear feet) would be constructed by NDOT as part of the construction activities associated with the Boulder City Bypass. The portion of the access road that is outside of the Boulder City Bypass ROW (approximately 970 feet) would be constructed by the City along the route of the existing primitive road.

#### Installation of R-10A Water Tank and other Site improvements

The R-10A tank and other Site improvements would be constructed by the City. The area of the Site is 9.34 acres. A smaller portion of this area is currently fenced with chain-link fencing with a locking gate that limits access to authorized personnel. The boundary of the fence would be expanded to include the new R-10A tank and the future pumping station. A portion of the area where the R-10A tank would be installed is located on fill which is previously disturbed from the water tank that was removed in 2004. The ground would be excavated to depths ranging from 10 to 16 feet below the existing grade surface for a concrete slab/foundation. An underground water line would be installed between the two tanks to allow water to be transferred between the two tanks.

The R-10A tank would be an above ground cylindrical tank with the same dimensions and water storage capacity as the R-10 tank: approximately 132 feet in diameter and approximately 30 feet high with a storage capacity of 3 million gallons. The appurtenances on the R-10 tank are powered by roof-mounted solar panels. Similar roof-mounted solar panels would be installed on

the R-10A tank. Both tanks would be painted with a color that blends with the natural surroundings. The area around the tanks would be paved. A preliminary drawing of the R-10A tank location and other improvements is shown in Figure 2.

After the R-10A tank is constructed the R-10 tank would be rehabilitated by painting, rehabilitation of structural steel components, and minor reconfiguration to existing site piping.

The pump station building would be constructed at a future date which has not yet been determined. Designs for this building have not been developed but it will likely be masonry construction. It would be approximately 65 feet long by 35 feet wide by 15 feet tall and would house pumps along with instrumentation and other equipment associated with the operation of the pump. The actual building size may be smaller than this depending on the size of the pumps housed in the building. Its color would be compatible with the color of the tanks and the surrounding landscape.

#### General Project Information

The City would be responsible for obtaining all Federal, State, and local required permits prior to the start of the Project. All aspects of the Project would comply with the Municipal Code of the City of Henderson and the Code of Clark County.

The City has obtained concurrence for the Project from all organizations who also hold Rights of Use from Reclamation within the Project area. This concurrence verifies that the Project will not conflict with the purposes of the other Rights of Use.

The City Planning Commission has approved a conditional use permit and the design review for the Project. Information on this approval can be found in Section 4.1.

All construction, with the exception of the pump station, is planned to occur during a single year between June 2015 and June 2016. The City would perform maintenance at the Site and on all facilities as needed.

All construction activities are expected to occur during daytime hours. If nighttime work is necessary, all City ordinances would be followed and appropriate measures would be taken to minimize impacts from lighting associated with construction activities.

The facilities would be designed and constructed in accordance with the *City of Henderson Utility Guidelines*, latest edition, the *Uniform Design and Construction Standards for Potable Water Systems*, and the *Uniform Standard Drawings and Specifications for Public Works Construction, Offsite Improvements, Clark County Area*.

Table one shows the types of equipment and anticipated fuel use for the construction of the access road and tank. Equipment that would be used during operation and maintenance includes boom truck, lifts, safety equipment, power washers, utility trucks, and other specialty equipment.

**Table 1- Equipment and Fuel Use**

<b>Equipment Type</b>	<b>Hours in Operation</b>	<b>Gallons per Hour</b>	<b>Estimated Fuel Use (Gallons)</b>
<b>Crane</b>	480	6	2880
<b>Backhoe</b>	480	6	2880
<b>Paving machine</b>	80	6	480
<b>Mechanical compactor</b>	80	6	480
<b>Water truck</b>	240	6	1440
<b>Material delivery truck</b>	360	6	2160
<b>Total estimated fuel use</b>			10,320

### 2.2.1 Mitigation Measures

The City has incorporated the following measures into the Proposed Action to reduce or eliminate impacts to resources:

#### Recreation

- The access road would cross the River Mountain Loop Trail near the Site. The City would use appropriate traffic control during construction to ensure the safety of trail users in that location. Since gravel on trails can create hazards for trail users, the City would take measures to minimize the spillage of gravel from the access road on to the River Mountain Loop Trail during and after construction.

#### Soils

- Upon completion of construction, appropriate stabilization and rehabilitation measures will be completed in conformance with the requirements of Reclamation, the State of Nevada Division of Environmental Protection (NDEP) and Clark County Department of Air Quality.
- Topsoil removed for construction activities would be replaced in areas not intended for permanent access. All excavated material would remain within the ROU area. It is not anticipated that excess material will remain. If any excess material does remain after construction, it would be stored at the Site



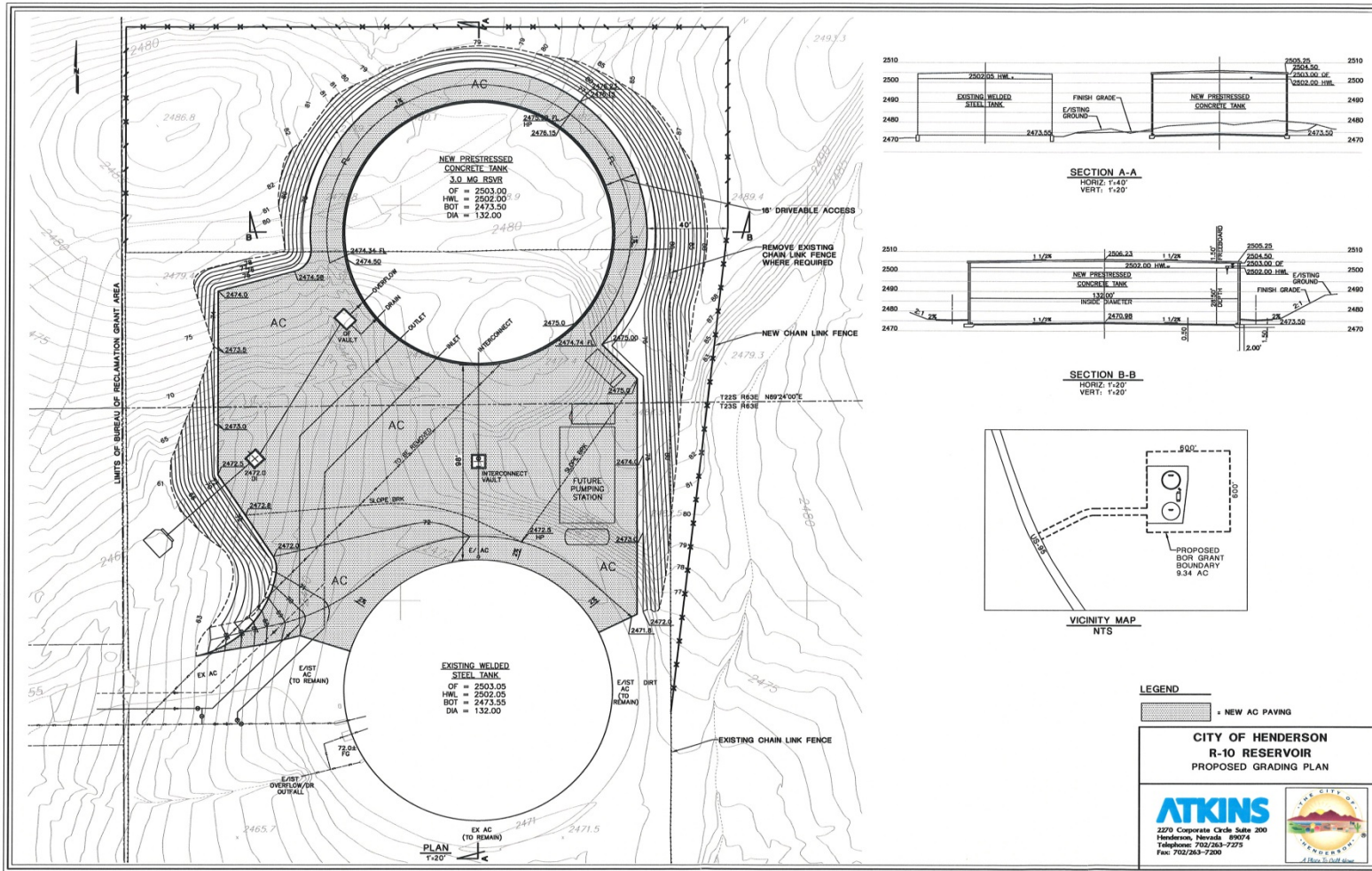


Figure 2- Preliminary layout of R10A tank and other Site improvements

### **Surface and groundwater quality and quantity**

- The City would obtain coverage under and comply with the National Pollutant Discharge Elimination System (NPDES) Stormwater General Permit (NVR100000) in order to discharge stormwater during construction of the R10A tank and other Site improvements. In addition, the City may obtain coverage under NPDES DeMinimus General Permit NVG201000 to allow for discharges to Waters of the U.S. related to construction, maintenance, and testing (quantity, duration and capacity) of a public water system up to 1500 gallons per minute. Both permits are administered by NDEP.

### **Air Quality**

- The access road construction by NDOT will implement all mitigation measures for NOA identified for the Boulder City Bypass project. This includes a Clark County Department of Air Quality Dust Control Permit for Construction Activities (Dust Control Permit).
- The City would obtain a Dust Control Permit and follow all requirements of the permit.

### **Biological Resources**

- Vegetation removal will occur outside of the migratory bird nesting season, generally occurring from March 1st to August 1st. If vegetation removal cannot occur outside of the nesting season, the area will be surveyed by a qualified (as determined by Reclamation) biologist for migratory birds and nesting activity. If nesting activity is observed, appropriate avoidance buffers will be exercised until the young have fledged.
- The following conservation measures from the Biological Opinion (BO) would be implemented to minimize potential adverse effects to desert tortoise from the Proposed Action. The BO can be found in Appendix C to this EA. (See Section 3.3.2. for more information on these measures).

1. Desert tortoise education program – A desert tortoise education program shall be presented to all personnel on site during construction activities by an agency or authorized desert tortoise biologist. The U.S. Fish and Wildlife Service (Service), Reclamation, and appropriate state agencies shall approve the program. At a minimum, the program shall cover desert-specific Leave-No-Trace guidelines, the distribution of desert tortoises, general behavior and ecology of this species, sensitivity to human activities, threats including introduction of exotic plants and animals, legal protection, penalties for violation of State and Federal laws, reporting requirements, and project measures in the BO. Further information on the BO is provided in Section 3.3.2.2. All field workers shall be instructed that activities must be confined to locations within the approved areas and their obligation to walk around and check underneath vehicles and equipment before moving them (or be cleared by an authorized desert tortoise biologist). In addition, the program shall include fire prevention measures to be implemented by employees during project activities. The program shall instruct participants to report all observations of desert tortoise and their sign during construction activities to the Field Contact Representative (FCR) and authorized desert tortoise biologist.



2. Field Contact Representative – Reclamation shall ensure a FCR (also called a Compliance Inspection Contractor) is generally designated for each contiguous stretch of construction activity for linear projects or isolated work areas for non-linear projects. The FCR will serve as an agent of Reclamation and the Service to ensure that all instances of non-compliance or incidental take are reported. Reclamation has discretion over approval of potential FCRs; however, those who also may be acting as authorized desert tortoise biologists must also be approved by the Service. All FCRs will report directly to Reclamation and the Service. The FCR, authorized desert tortoise biologist, and monitors shall have a copy of all stipulations when work is being conducted on the site and will be responsible for overseeing compliance with terms and conditions of the ROW grant, including those for listed species. Reclamation shall ensure the FCR and authorized desert tortoise biologists have authority to halt any activity that is in violation of the stipulations. The FCR shall be on site year-round during all project activities. Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of the FCR.

3. Authorized desert tortoise biologist – All authorized desert tortoise biologists (and monitors) are agents of Reclamation and the Service and shall report directly to Reclamation and the proponent concurrently regarding all compliance issues and take of desert tortoises; this includes all draft and final reports of non-compliance or take. The initial draft report shall be provided to Reclamation and the Service within 24 hours of the observation of take or non-compliance.

An authorized desert tortoise biologist will be assigned to each piece/group of large equipment engaged in activities that may result in take of desert tortoise (e.g., clearing, blasting, grading, lowering in pipe, hydrostatic testing, backfilling, recontouring, and reclamation activities) and other work areas that pose a risk to tortoises. Reclamation may use their discretion to require a monitor (on-site or on-call) instead of an authorized desert tortoise biologist to monitor equipment that is low risk to tortoises, within tortoise proof fenced areas cleared of tortoise, or during the inactive season.

An authorized desert tortoise biologist will serve as a mentor to train desert tortoise monitors and will approve monitors if required. An authorized desert tortoise biologist is responsible for errors committed by desert tortoise monitors.

An authorized desert tortoise biologist shall record each observation of desert tortoise handled in the tortoise monitoring reports. Information will include the following: location recorded with the use of a global positioning system, date and time of observation, whether the desert tortoise was handled, general health and whether it voided its bladder, location desert tortoise was moved from and location moved to, unique physical characteristics of each tortoise, and effectiveness and compliance with the desert tortoise protection measures. This information will be provided directly to Reclamation and the Service.

4. Desert tortoise monitor – Desert tortoise monitors assist an authorized desert tortoise biologist during surveys and serve as apprentices to acquire experience. Desert tortoise monitors ensure proper implementation of protective measures, and record and report desert tortoises and sign observations in accordance with BO Term and Condition

2. They will report incidents of non-compliance to the authorized desert tortoise biologist or FCR. No monitors shall be on the project site unless supervised by an authorized desert tortoise biologist or approved by the Reclamation.

If a desert tortoise is immediately in harm's way (e.g., certain to immediately be crushed by equipment), desert tortoise monitors may move the desert tortoise then place it in a designated safe area until an authorized desert tortoise biologist assumes care of the animal.

Desert tortoise monitors may not conduct field or clearance surveys or other specialized duties of an authorized desert tortoise biologist unless directly supervised by an authorized desert tortoise biologist or approved to do so by the Service; "directly supervised" means an authorized desert tortoise biologist has direct sight and voice contact with the desert tortoise monitor (i.e., within approximately 200 feet of each other).

Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of desert tortoise monitors who would assist an authorized desert tortoise biologist.

5. Vehicle travel – Project personnel shall exercise vigilance when commuting to the project area to minimize risk for inadvertent injury or mortality of all wildlife species encountered on paved and unpaved roads leading to and from the project site. Speed limits will be clearly marked, and all workers will be made aware of these limits. On-site, personnel shall carpool to the greatest extent possible.

During the desert tortoise less-active season (generally November through February), vehicle speed on project-related access roads and in the work area will not exceed 25 mph. All vehicles and construction equipment will be tightly grouped. During the more active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, vehicle speed on project-related access roads and in the work area will not exceed 15 mph. All vehicles and construction equipment will operate in groups of no more than three vehicles. An authorized desert tortoise biologist and desert tortoise monitor will escort or clear ahead of vehicles and equipment for ROW travel. The escort will be on foot and clear the area of tortoises in front of each traveling construction equipment group (see desert tortoise clearance). The escort will use a recreational vehicle with ground visibility such as a Utility Terrain Vehicle; however, at least one authorized desert tortoise biologist and one desert tortoise monitor must ride together and survey both sides of the vehicle. The speed/pace will be determined by an authorized desert tortoise biologist and shall be slow enough to ensure adequate inspection.

New access and spur road locations will be sited to avoid potentially active tortoise burrows to the maximum extent practicable.

6. Unauthorized access – Reclamation shall ensure that unauthorized personnel, including the public and off-duty project personnel, do not travel on project-related temporary access roads, to the greatest extent practicable.

During the more-active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, project- and non-project-related activities on all access roads that intersect the ROW will be monitored and logged. During construction, the ROW will be fenced at public roads that intersect the ROW. Signs will say that access on the ROW is strictly prohibited except by authorized personnel and that violators will be prosecuted.

7. Desert tortoise clearance – Prior to surface-disturbing activities, authorized desert tortoise biologists potentially assisted by desert tortoise monitors, shall conduct a clearance survey to locate and remove all desert tortoises from harm's way including areas to be disturbed using techniques that provide full coverage of all areas (Service, 2009). During the more-active season, clearance surveys will be conducted either the day prior to, or the day of, any surface-disturbing activity. During the less-active season, clearance surveys will be conducted within 7 days prior to any surface-disturbing activity. No surface-disturbing activities shall begin until two consecutive surveys yield no individuals.

An authorized biologist shall excavate all burrows that have characteristics of potentially containing desert tortoises in the area to be disturbed with the goal of locating and removing all desert tortoises and desert tortoise eggs. During clearance surveys, all handling of desert tortoises and their eggs and excavation of burrows shall be conducted solely by an authorized desert tortoise biologist in accordance with the most current Service-approved guidance (currently Service, 2009). If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action. Unoccupied burrows shall be collapsed or blocked to prevent desert tortoise entry. Outside construction work areas, all potential desert tortoise burrows and pallets within 50 feet of the edge of the construction work area shall be flagged. If the burrow is occupied by a desert tortoise during the less-active season, the tortoise shall be temporarily penned (see Conservation Measure 10). No stakes or flagging shall be placed on the berm or in the opening of a desert tortoise burrow. Desert tortoise burrows shall not be marked in a manner that facilitates poaching. Avoidance flagging shall be designed to be easily distinguished from access route or other flagging, and shall be designed in consultation with experienced construction personnel and authorized biologists. All flagging shall be removed following construction activities.

An authorized desert tortoise biologist will inspect areas to be backfilled immediately prior to backfilling.

8. Desert tortoise in harm's way – Any project-related activity that may endanger a desert tortoise shall cease if a desert tortoise is found on the project site. Project activities may resume after an authorized desert tortoise biologist or desert tortoise monitor removes the desert tortoise from danger or after the desert tortoise has moved to a safe area on its own.

During the more-active season and if temperatures are above 60 but below 95° F for more than 7 consecutive days, at least one monitor shall be assigned to observe spoil piles prior to excavation and covering.

9. Handling of desert tortoises – Desert tortoises shall only be moved by an authorized desert tortoise biologist or desert tortoise monitor solely for the purpose of moving the tortoises out of harm’s way. During construction, operation, and maintenance, an authorized desert tortoise biologist shall pen, capture, handle, and relocate desert tortoises from harm’s way as appropriate and in accordance with the most current Service approved guidance. No tortoise shall be handled by more than one person. Each tortoise handled will be given a unique number, photographed, and the biologist will record all relevant data on the Desert Tortoise Handling and Take Report (Attachment A to the BO) to be provided to Reclamation and the Service in accordance with the project reporting requirements.

Desert tortoises that occur aboveground and need to be moved from harm’s way shall be placed in the shade of a shrub, 150 to 1,640 feet from the point of encounter. In situations where desert tortoises must be moved more than 1,640 feet (500 meters), translocation procedures may be required. Translocation would likely result in a level of effect to the desert tortoise that would require the appended procedures.

If desert tortoises need to be moved at a time of day when ambient temperatures could harm them (less than 40°F or greater than 95°F), they shall be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes shall be discarded after one use and never hold more than one tortoise. If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action.

Desert tortoises located in the project area sheltering in a burrow during the less active season may be temporarily penned in accordance with Conservation Measure 10 at the discretion of an authorized desert tortoise biologist. Desert tortoises should not be penned in areas of moderate to heavy public use; rather they should be moved from harm’s way in accordance with the most current Service-approved guidance (Service, 2009).

Desert tortoises shall be handled in accordance with the Desert Tortoise Field Manual (Service, 2009). Equipment or materials that contact desert tortoises (including shirts and pants) shall be sterilized, disposed of, or changed before contacting another tortoise to prevent the spread of disease. All tortoises shall be handled using disposable surgical gloves and the gloves shall be disposed of after handling each tortoise. An authorized desert tortoise biologist shall document each tortoise handling by completing the Desert Tortoise Handling and Take Report.

10. Penning – Penning shall be accomplished by installing a circular fence, approximately 20 feet in diameter to enclose and surround the tortoise burrow. The pen should be constructed with 1-inch horizontal by 2-inch vertical, galvanized welded wire.

Steel T-posts or rebar should be placed every 5 to 6 feet to support the pen material. Pen material will extend 18 to 24 inches aboveground. The bottom of the enclosure will be buried 6 to 12 inches or bent towards the burrow, have soil mounded along the base, and other measures implemented to ensure zero ground clearance. Care shall be taken to minimize visibility of the pen by the public. An authorized desert tortoise biologist or desert tortoise monitor shall check the pen at a frequency to ensure that the desert tortoise is secure and not stressed. No desert tortoise shall be penned for more than 48 hours without written approval by the Service. Because this is a new technique, all instances of penning or issues associated with penning shall be reported to the Service within 3 days.

11. Temporary tortoise-proof fencing – All construction areas, including open pipeline trenches, hydrostatic testing locations, and tie-in work shall be fenced with temporary tortoise-proof fencing (e.g., silt fencing) or inspected by an authorized desert tortoise biologist periodically throughout and at the end of the day and immediately the next morning. Reclamation and the Service will determine the appropriate length of open trench that will be allowed on the project.

Fencing will be designed in a manner that reduces the potential for desert tortoises and hatchlings to access the construction areas. Thus, the lower 6 to 12 inches of fencing will be folded outward (i.e., away from the construction area and towards the direction a tortoise would approach the work area), and covered with sufficient amount of soil, rocks, and staking to maintain zero ground clearance and secure the bottom section of material. An authorized desert tortoise biologist will check the integrity of the fencing every 2 hours and ensure that there are no breaches in the fencing and no desert tortoises pacing the fence. After the fencing is erected and secure, the inside will be cleared by an authorized desert tortoise biologist. The fencing must remain closed during any construction activities.

12. Permanent tortoise-proof fencing – The limits of construction will be clearly marked or flagged prior to development. All major construction activities and staging areas will be located within exclusion fencing to prevent desert tortoise movement into an active construction zone. Tortoise-proof fencing shall be installed around the boundary of permanent aboveground facilities that require regular monitoring and maintenance and other areas as directed by Reclamation or Service. Temporary desert tortoise fencing will be installed along the proposed new access road where U.S. Highway 93/95 does not create a barrier to tortoise movement. Fence specifications will be consistent with those approved by the Service (Service 2009). Tortoise guards shall be placed at all road access points where desert tortoise-proof fencing is interrupted and a gate is not adequate. Gates shall provide minimal ground clearance and deter ingress by desert tortoises. Permanent tortoise-proof fencing along the project area shall be appropriately constructed, monitored, and maintained. Fencing shall be inspected in accordance with Table 2 below and reports prepared in accordance with BO Term and Condition 2.b. unless modified by the Service. Monitoring and maintenance shall include regular removal of trash and sediment accumulation and restoration of zero ground clearance between the ground and the bottom of the fence, including re-covering the bent portion of the fence if not buried.

**Table 2- Tortoise Fencing Requirements**

<b>Condition</b>	<b>Minimum Requirements</b>
First week following installation; tortoises active	Inspect fence perimeter, tortoise guards, and gates twice per day, timed to occur when tortoises may be pacing the fenceline.
First week following fence installation; tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises active	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per month.
Following major storm event, tortoises active	Inspect fence perimeter, tortoise guards, and gates within 48 hours.
Following major storm event, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates within 72 hours.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises active	Repair within 48 hours of breach occurrence.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises inactive	Repair within 1 week of breach occurrence.

13. Dust control – Water applied for dust control shall not be allowed to pool outside desert-tortoise fenced areas, as this can attract desert tortoises. Similarly, leaks on water trucks and water tanks will be repaired to prevent pooling water. An authorized desert tortoise biologist will be assigned to patrol each area being watered immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises if conditions favor tortoise activity.

14. Litter control – A litter control program shall be implemented to reduce the attractiveness of the area to opportunistic predators such as desert kit foxes, coyotes, and common ravens. Trash and food items will be disposed of properly in predator-proof containers with predator-proof lids. Trash containers will be emptied and construction waste will be removed daily from the project area and disposed of in an approved landfill.

15. Minimizing new disturbance – Cross-country travel outside designated areas shall be prohibited. All equipment, vehicles, and construction materials shall be restricted to the designated areas and new disturbance will be restricted to the minimum necessary to complete the task (e.g., such as construction of one-lane access roads with passing turnouts every mile rather than a wider two-lane road). All work area boundaries shall be conspicuously staked, flagged, or otherwise marked to minimize surface disturbance activities.

16. To minimize destruction of desert tortoise habitat, such as soil compaction, erosion, or crushed vegetation due to construction and maintenance activities:  
All equipment, vehicles, and construction materials will remain within designated areas. Staging areas will be located in previously disturbed areas whenever possible.

Desert soil, rocks, and plants will be salvaged during construction to restore any temporarily disturbed areas. Disturbed sites will be scarified and recontoured; desert soil and large rocks will be replaced. Revegetation of disturbed areas will be initiated immediately following construction activities.

Prior to the onset of construction activities, the City will pay remuneration fees for compensation of 6.0 acres of desert tortoise habitat loss.

- To prevent the spread of noxious and invasive weeds, equipment used for this project must be thoroughly cleaned prior to entering the project site. The cleaning process will ensure that all dirt and debris that may harbor noxious or invasive weeds seeds are removed and disposed of at an appropriate facility. Reclamation's *Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species: 2012 Edition* should be referenced for inspection and cleaning activities. The manual can be found at: <http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>
- In order to insure compliance with Nevada Administrative Code 503.080, 503.090 and 503.093, the listed actions are required following an encounter with a banded Gila monster during construction activities.
  - Any encounters during the project construction must be reported immediately to the NDOW) at telephone number (702) 486-5127.
  - Live Gila monsters found in harm's way on the construction site will be captured and detained in a cool, shaded environment (<85°F) by the project biologist trained in handling venomous reptiles until a NDOW biologist can arrive for documentation purposes. A clean 5-gallon plastic bucket with a secure ventilated lid, an 18" x 18" x 4" plastic sweater box with a secure vented lid, or a tape sealed cardboard box of similar dimension may be used for safe containment. Written information identifying mapped capture location, date, time, circumstances, and habitat description will also be provided to NDOW.
  - Injuries to Gila monsters may occur during excavation, road grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation of appropriate treatment. Rehabilitation or euthanasia expenses will not be covered by NDOW. However, NDOW will be immediately notified during normal business hours. If an animal is killed or found dead, the carcass will immediately be frozen and transferred to NDOW with a complete written description of the situation, circumstances, habitat, and mapped location.
  - Should NDOW assistance be delayed, biological personnel on site may be requested to remove and release the Gila monster out of harm's way. Should NDOW not be immediately available to respond for photo-documentation, a 35mm camera will be used to take good quality photographs of the Gila monster in situ at the location of live encounter or dead salvage. The pictures, preferably on slide film, will be provided to NDOW and will include: encounter location (landscape overview with Gila monster in clear view); a clear overhead shot of the entire body with a ruler for

scale (Gila monster should fill the camera's field of view); an overhead close-up photo of head only.

- Any cactus or yucca plants found within areas to be disturbed would be treated in accordance with Nevada Revised Statutes 527.010 and NDOT and/or Reclamation requirements.

### **Cultural Resources**

- In the event of an unanticipated discovery, all operations in the area of the discovery will cease and a Reclamation archaeologist contacted at 702-293-8130. "Discovery" means the encounter of any previously unidentified or incorrectly identified cultural resource including, but not limited to, archaeological deposits, human remains, or places reported to be associated with Native American religious beliefs and practices.

### **Noise**

- The City of Henderson noise ordinance will be observed.

### **Visual**

- The tanks and the pump house would be painted a color that blends with the surrounding landscape.

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

As discussed in Section 1.1 and 1.2, the Site has been part of the City's water distribution system since 1986. The Site is located in an ideal location and elevation to supply water to the 2500 Pressure Zone. Because of the location and elevation needed, any alternative sites would likely be on Reclamation or BLM land; requiring new authorization and disturbance. Therefore no other alternatives for the location of the Site were considered.



### **3.0 Affected Environment and Environmental Consequences**

This section includes information for each resource potentially affected by the Proposed Action and a discussion of environmental consequences of the Proposed Action and No Action alternatives.

The analysis of the Proposed Action will include direct, indirect, and cumulative effects. The CEQ Regulations define direct effects as those which are caused by the action and occur at the same time and place and indirect effects as those which are caused by the action and occur later in time or farther removed in distance.

Cumulative impacts are defined as impacts to the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes the action. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time (40 CFR 1508.7).

The cumulative effects analysis will address the cumulative impacts of the Proposed Action in combination with other projects or management activities. Section 3.1 identifies past, present, and reasonably foreseeable activities that are either located in the vicinity of the Site or have been identified as having the potential for cumulative impacts when considered in addition to the impacts of the Proposed Action. These actions will be addressed as appropriate in Section 3.3. Since the activities would not necessarily impact all resource areas, the cumulative impacts section for each resource will begin with a summary of the activities having potential for cumulative impacts.

The analysis area for all impacts was the access road and the Site and the immediate vicinity.

#### **3.1 Past, Present, and Reasonably Foreseeable Future Projects**

- A portion of the River Mountains Loop Trail has been constructed adjacent to the Site. This multi-use trail is managed by the City in the vicinity of the Site.
- A number of relatively smaller-scale projects have been constructed within the vicinity of the Site, including flood control channels and detention basins and underground utilities such as water and telephone lines.
- In March 2014, First Solar Development LLC submitted an application to Reclamation to construct the Magic Way Solar Facility on approximately 575 acres of Reclamation land in the River Mountains. Although First Solar Development LLC has had initial discussions with the City of Henderson, SNWA, and adjacent landowners on the project, the project is currently on hold and the NEPA process has not been initiated.
- The Site is adjacent to U.S. Highway 93/95, a four lane divided highway with a speed limit of 65 miles per hour. U.S. Highway 93/95 is major corridor which is designated as Interstate 515 through much of Henderson and Las Vegas. The Interstate 515 designation

ends just west of the Site, where U.S. Highway 93/95 continues as the primary route to Boulder City. The Boulder City Bypass Project is anticipated to begin construction in 2015 and is described under Section 1.3.

- The Site is located within a utility corridor with existing transmission lines. Two new transmission lines, Southern Nevada Intertie Transmission Project and Transwest Express Transmission Project, would cross U.S. Highway 93/95 near the Site. A third proposed new transmission line, Eastern Nevada Transmission Project, would end at the River Mountains Water Treatment Plant, located north of the Site.
- River Mountains Solar, LLC has been granted a ROU from Reclamation to install a solar photovoltaic electric generation facility on Reclamation-administered lands in Clark County, Nevada. The solar facility will be contained entirely within SNWA's River Mountain Water Treatment Facility.

### **3.2 Resources Considered but not Discussed Further**

The following resources were considered and are not addressed further in this EA either because there would be minimal or no impacts from the Proposed Action:

- **Recreation-** The Site is located in close proximity to the River Mountain Loop Trail (Trail), a multi-use recreational trail which is managed by the City in that location. The Trail will be considered in the design for the access road to assure there are no adverse impacts. The City does not intend to close this portion of the Trail during construction; they would use appropriate traffic control to ensure the safety of the Trail users. No other impacts to recreation resources are expected.
- **Indian Trust Assets (ITA)** - ITAs are defined as “legal interests in property held in trust by the United States for Indian tribes or individuals” (Reclamation, 1993). ITAs are those properties, interests, or assets of a Federally recognized Indian tribe or individual Indian over which the Federal government also has an interest, either through administration or direct control. Examples of ITAs include lands, minerals, timber, hunting rights, fishing rights, water rights, in-stream flows, and other treaty rights. All Federal bureaus and agencies are responsible for protecting ITAs from adverse impacts resulting from their programs and activities. There would be no impact to ITAs as none are located in the project area.
- **Surface and groundwater quality and quantity-** There are no major watercourses or drainages intersected by the proposed project; however, the general topography of the area would tend to allow sheet flow to cross the project area from the northeast to the highway in the southwest. In addition, there is a stormwater retention channel situated adjacent to the proposed new access road along the residential development on East Paradise Hills Drive. The mitigation measures described in Section 2 for surface and groundwater quality and quantity are expected to prevent adverse impacts from stormwater runoff.

- **Floodplains and Wetlands-** There are no floodplains or wetlands located in the vicinity of the Site, therefore there would be no impact to these resources.
  
- **Noise and Traffic-** The information on noise tiers to the FWHA EIS, ROD and Re-evaluation. The primary existing noise impact in the immediate project area is U.S. Highway 93/95. In a noise study done for the FWHA EIS, the maximum noise levels measured in the vicinity of the Site were approximately 80 to 83 dBA, which is a measure of sound pressure as compared to a reference sound pressure. This dBAs are typical of urban daytime noise. The FWHA EIS and ROD concluded that the construction of the Boulder City Bypass would add to the existing noise environment in the immediate project area. It was determined that construction activities would generate noise levels ranging from 88 to 92 dBA at a distance of 50 feet. These activities will be temporary and expected to occur within normal daytime working hours. These conclusions would apply to construction of the access road within NDOT's ROW.

Noise would also be generated from the City's construction of the remainder of the access road and at the Site. The western end of the access road would be located on an existing gravel road next to East Paradise Hills Drive, which is adjacent to a residential area. Intermittent increases in noise from construction traffic accessing the Site are expected. This traffic would occur during daytime hours and expected to be of short duration. The majority of construction activities associated with the Site would not be in close proximity to residential areas, so the noise impact is expected to be minimal. Impacts to the existing flow of traffic in this area are also expected to be minimal as the City would use appropriate travel control methods.

- **Human Health-** The Proposed Action would have beneficial human health impacts as it will aid the City in providing a safe source of drinking water to residents. Analysis of NOA included in Section 3.3.1.
  
- **Environmental Justice-** Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to determine whether their programs, policies, and activities have disproportionately high and adverse human health or environmental effects on minority and low-income populations.

In accordance with CEQ guidance, minority populations should be identified if the minority population in the project area "exceeds 50 percent" or if the percentage of minority population in the project area is meaningfully greater than the "minority population percentage in the general population or other appropriate unit of analysis" (CEQ 1997). Communities should be identified as "low income" based on the annual statistical poverty thresholds from the U.S. Census Bureau (CEQ, 1997).

No high and adverse human health or environmental effects were identified from the proposed action, but data on minority populations and poverty in the Project area was reviewed to assure compliance with the EO. U.S. Department of the Census data on minority populations and poverty for the two Census Tracts where the Site and access road would be located was compared to the same data for the state of Nevada and Clark County (U.S. Census, 2015). Minority populations in the two Census Tracts did not

exceed 50 percent, so did not meet the thresholds identified for Environmental Justice analysis. The percent of individuals below poverty levels in the Census Tracts were compared to those for Nevada and Clark County. The poverty levels in the Census Tracts were either below or only slightly higher than those for Nevada and Clark County. This information confirmed that the Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations.

- **Socio-economic-** The Proposed Action would have a beneficial socio-economic impact to the residents of Henderson. It would allow the City to continue providing a safe, reliable source of water to residents in an efficient manner.

### **3.3 Resources Discussed Further**

The following resources are discussed further in this EA:

- Air Quality/Greenhouse Gases/Climate Change
- Biological Resources
- Cultural Resources/Traditional Cultural Properties/Sacred Sites
- Visual Resources

#### **3.3.1 Air Quality/Greenhouse Gases/Climate Change**

##### **3.3.1.1 Affected Environment**

###### National Ambient Air Quality Standards

The Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards (NAAQS) for the following common air pollutants: ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), particulates less than less than 2.5 microns and less than 10 microns (PM<sub>2.5</sub>, PM<sub>10</sub>), and lead (Pb). They have developed primary and secondary NAAQS for these air pollutants to protect human health and prevent environmental and property damage.

Areas of the country that are currently in violation of NAAQS are classified as non-attainment areas; new sources to be located in or near these areas are typically subject to more stringent air permitting requirements than similar sources in attainment areas. The Department of Air Quality implements and enforces the air pollution program in Clark County. Hydrographic areas are used to define air quality regions in Clark County. Air quality is regulated according to compliance in each hydrographic basin.

Clark County is in attainment or unclassifiable for the NAAQS PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, Pb, and O<sub>3</sub>. The Project is located in the Las Vegas hydrographic basin (Basin 212). This basin is one of the hydrographic basins in Clark County that are in O<sub>3</sub> maintenance for the 1997 O<sub>3</sub> NAAQS of 80 ppb. The Las Vegas hydrographic basin is in maintenance for CO and in serious nonattainment for PM<sub>10</sub> (Clark County, 2015). Hydrographic basins are referred to as “in maintenance” when they have achieved attainment but are subject to a Redesignation/Maintenance plan to demonstrate that attainment is being maintained.

### Naturally Occurring Asbestos

Recent geologic research published by the University of Nevada Las Vegas (UNLV) has identified the potential for NOA minerals in mountain ranges and associated alluvium (sediments which have eroded from the mountains) in the Boulder City, Southeast Henderson, and Colorado River Black Canyon areas (Buck et.al, 2013). These minerals occur in rocks and soils as a result of natural geologic processes and are found in many states west of the Rocky Mountains (Clark County, 2015).

Natural weathering and human activities may disturb NOA-bearing rock or soil and release mineral fibers in the air, which poses a potential risk for exposure by inhalation (NDOT, 2015). The potential health effect of the NOA detected by UNLV is not known and will be the subject of future study (Clark County, 2015).

As part of the FHWA and NDOT re-evaluation of their EIS and ROD; rocks, sediments, and air along the entire Boulder City Bypass Phase I and Phase II corridor were sampled for NOA. This sampling confirmed that NOA is present within the Boulder City Bypass Corridor, but concentrations are generally low (NDOT, 2015). Sixteen surface and subsurface samples were collected and one air monitoring station established between Foothills Drive and the current access to the Site. No NOA was detected in 15 of the surface and subsurface samples. In one of the samples, NOA was detected at a low level; less than 0.25 percent of the total sample. This sample was collected on the opposite side of U.S. Highway 93/95 from the proposed access road.

The reference point of 0.25 percent is used because material that contains 0.25 percent or greater is defined as a “Restricted Material” by the California Air Resources Board, which regulates the NOA mitigation measures in California where NOA is found at many project sites. A Restricted Material may not be used in California for surfacing applications, and there are requirements for covering or wetting surfacing materials if the NOA content is greater than 0.25 percent. The Boulder City Bypass project has adopted this standard for surfacing applications (NDOT, 2015).

Air monitoring is still underway. There are not enough data available at this time to provide reliable risk assessments of potential long-term ambient air concentrations (FHWA, 2014).

Some of the samples analyzed for the re-evaluation contained NOA at levels higher than 0.25 percent of the total sample. These samples were taken east of Railroad Pass outside of the Project area. In order to have consistent measures to ensure worker and public safety during construction activities, FHWA and NDOT have identified mitigation measures for NOA which will apply to the entire Boulder City Bypass project. These mitigation measures were modeled after the Environmental Protection Agencies’ guidance for working with NOA, the Occupational Safety and Health Administration’s asbestos standard for construction, California’s NOA regulations for construction, and best-management practices employed at other asbestos sites across the country (NDOT, 2015).

The City sampled for NOA at the Site and the portion of the access road outside of NDOT’s construction responsibility. No NOA was detected.

### Greenhouse Gases/Climate Change

A solid body of scientific evidence supports the theory that rising global Greenhouse Gas (GHG) emissions are significantly affecting the Earth’s climate (IPCC, 2014). The primary GHGs are

carbon dioxide, methane, nitrogen dioxide, and fluorinated gases. Human induced emissions such as the burning of certain types of fuels are one means of release of GHGs in the atmosphere.

### **3.3.1.2 Environmental Consequences**

#### **3.3.1.2.1 No Action Alternative**

No impacts to air quality/greenhouse gases/climate change from construction of the access road or construction at the Site would occur under the No Action alternative.

#### **3.3.1.2.2 Proposed Action Alternative**

This analysis tiers to the FWHA EIS, ROD and Re-evaluation. The FWHA EIS and ROD concluded that the construction of the Boulder City Bypass would not create new violations of the NAAQS and would not increase the severity of existing violations due to the mitigation measures in place for construction activities. The Re-evaluation documented that the new information on NOA in the Boulder City Bypass project area did not require a supplement to the EIS because the existing project mitigation measures as well as additional measures put in place for NOA would prevent a significant impact. This determination also applies to construction of the access road, as it will be constructed by NDOT within the ROW for the Boulder City Bypass. Graveling of the access road would minimize future air quality impacts from airborne dust. Also, NOA was not detected in the surface and subsurface samples which were collected from the area where the access road would be constructed.

Construction activities associated with the Site improvements and access road outside of the Boulder City Bypass ROW were not included in the FWHA EIS, ROD or Re-evaluation but the mitigation measures that would be in place for these activities are expected to prevent violations of NAAQS. No NOA was detected in the portion of the access road outside of NDOT's ROW or at the Site. Due to these results and the small size of the project area, the mitigation measures required by the Dust Control Permit were found to be sufficient to prevent air borne dust. Vehicles or other equipment would emit GHGs during the City's construction activities. The City's total estimated fuel use of 10,320 gallons from Table 1 would be the equivalent of 91.7 metric tons of carbon. This is equivalent to the annual GHG emissions from 19.3 passenger cars (EPA, 2015). These emissions would be intermittent and are not expected to have a quantifiable impact on regional greenhouse gas emissions. In accordance with the draft CEQ guidance on Consideration of GHGs and the Effects of Climate Change in NEPA Reviews (CEQ, 2014), no further analysis of GHGs was determined necessary at this time.

#### **3.3.1.2.3 Cumulative Impacts**

The projects from Section 3.1 which were considered for cumulative impacts are the construction of the Boulder City Bypass and construction of new transmission lines because of their proximity to the Site. All of these projects would include mitigation measures to minimize impacts to air quality and prevent violations of air quality standards. The Proposed Action is not expected to create cumulative impacts because of the mitigation measures included in the Proposed Action and the other projects.

## 3.3.2 Biological Resources

### 3.3.2.1 Affected Environment

Habitat within the project area consists primarily of sparse Mojave desert scrub dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). The creosote-white bursage desert scrub typically occurs on well-drained sandy flats and bajadas (slopes at the base of the mountains) throughout most of the Mojave Desert from 150 to 1,500 meters elevation in Nevada. Many heat-tolerant reptile species are dependent on this habitat, including the Mohave desert tortoise. About 80% of this type of habitat in Nevada occurs in Clark County and is in relatively good condition. However, increased development, invasive weeds, wildfire, and dispersed recreational activities threaten the quality of the habitat.

The location of the Project and surrounding area have experienced high levels of habitat degradation as a result of U.S. Highway 93/95, housing developments, recreation activities, or other human caused disturbances. The project area also includes areas disturbed by previous construction, including the R-10 water tank, paved access road, the City's waterline to the tank, overhead power transmission facilities, the River Mountains Loop Trail, an existing SNWA waterline, and underground fiber optic facilities. A portion of the area was previously occupied with another water tank that has since been demolished (City, 2014).

Although the project area has experienced high levels of habitat disturbance, it is adjacent to intact habitat in the River Mountains. Nesting opportunities for a number of raptor species, including burrowing owl, and other birds protected under the Migratory Bird Treaty Act may be present in the vicinity of the proposed project area. Migratory birds and other wildlife including desert bighorn sheep use the area for foraging, cover, and occasionally to cross the highway.

The project area occurs within the Eastern Mojave Recovery Unit for desert tortoise as defined in the Revised Recovery Plan for the Mojave Population of the Desert Tortoise (Service, 2011). Habitat occupied by desert tortoises in this recovery unit is typically creosote bush scrub of flats, valley bottoms, alluvial fans, and bajadas. Occasionally, desert tortoises are also found in blackbush scrub or rocky slopes. No designed critical habitat occurs within the Project area or adjacent to the project area.

On September 10, 2014, Knight and Leavitt Associates' authorized desert tortoise biologists performed a presence/absence survey for tortoise within the action area per Service protocols. No desert tortoises or sign (i.e., burrows, scat, tracks, or carcasses) were observed within the proposed construction area. Following Service protocols, additional surveys were performed at distances of 200, 400, and 600 meters from the proposed project limits. These buffer transects were performed only on the northeast side of the project area, because U.S. Highway 93/95 acts as a barrier to tortoise movement to the southwest. During the additional buffer surveys, two live desert tortoises and two burrow complexes were observed. At the 200 meter range, one juvenile tortoise was observed in the shade of a creosote shrub. The 400 meter survey revealed an adult tortoise inside an earth burrow and a burrow complex with three openings in a caliche (desert sediments naturally cemented with calcium carbonate) deposit. The burrow complex was rated condition class 4, meaning it was in good condition and could possibly support a desert tortoise. The second burrow complex was observed at the 600 meter range. This complex consisted of two caliche burrows that were rated condition class 2, as good condition with definite desert

tortoise presence but no evidence of recent use (Knight and Leavitt Associates, 2014). A full desert tortoise presence/absence report with site photographs and additional figures along with the BO will be included in an appendix to the Final EA.

### **3.3.2.2 Environmental Consequences**

#### **3.3.2.2.1 No Action Alternative**

No impacts are anticipated to wildlife or Federally listed species as a result of the No Action alternative. The access road and site expansion would not occur and habitat would not be disturbed.

#### **3.3.2.2.2 Proposed Action Alternative**

The area for the Proposed Action includes a total of 11.5 acres of habitat disturbance including 5.5 acres that have been previously disturbed and 6.0 acres of new habitat disturbance. The project will result in loss of 6.0 acres of potential habitat for tortoise and other wildlife species. A chain link fence with tortoise exclusion fencing will surround the location of the tanks and facilities. The fencing will not preclude birds from utilizing the site but no suitable habitat is anticipated to remain within the fenced area. Birds and other common wildlife in the area are considered numerous and any impacts are not anticipated to impact the species as a whole.

In addition to loss of habitat, wildlife can be impacted from construction activities on the project site. Wildlife may be displaced or even killed if not avoided during construction activities. The greatest potential threats to desert tortoises resulting from the Proposed Action are associated with vehicle travel on access roads and in work areas. Tortoises could be killed or injured or their nests with eggs could be destroyed if not located before activities commence, or not avoided by vehicles and equipment. Project vehicles or equipment that travel outside of designated areas may crush desert tortoises aboveground or in their burrows or damage habitat outside the project area. Tortoises could wander into work areas or take refuge underneath project vehicles and equipment, and be killed or injured when the vehicle/equipment is moved. Project vehicles may strike and kill or injure desert tortoises on access roads. Long-term maintenance activities include monthly access to the site for testing of the water level and instrumentation. Wildlife could be temporarily displaced, injured or killed from vehicles traveling to and from the site.

Reclamation initiated formal consultation for a *may affect, likely to adversely affect* determination for the Mojave population of the desert tortoise on January 2, 2015. The Service responded to Reclamation's determination with a Biological Opinion (BO) on June 22, 2015. The BO and other consultation information can be found in Appendix C to this EA. Impacts to desert tortoise as result of the Proposed Action will be avoided and minimized through measures outlined in the BO (File No. 84320-2015-F-0166). These measures are included in Section 2.2.1 of this EA.

Indirect impacts to wildlife could also occur as a result of construction noise and vibration in the immediate vicinity of the proposed project area during construction. These impacts will be short-term in nature and are minimal compared to the historic and ongoing displacement from the highway and nearby housing developments.



### 3.3.2.2.3 Cumulative Impacts

All of the projects from Section 3.1 were considered for cumulative impacts because of their construction activities or development resulting in increased human activity. Construction results in habitat loss and risk of harm or mortality of individuals, if not avoided, as a result of vehicular travel related to construction, operation, and maintenance. Increased development results in more human activity which can lead to increased predators. All of the projects listed in Section 3.1 include project specific mitigation measures to avoid or minimize impacts to wildlife including sensitive species because they occur on Federal land. Harassment, displacement, and habitat loss from this proposed project when added to the ongoing and future impacts to wildlife species occurring in the area are not significant. These projects are within previously disturbed habitat or adjacent to similar existing structures. Co-locating projects and use of corridors is encouraged in desert tortoise habitat.

## 3.3.3 Cultural Resources/Traditional Cultural Properties/Sacred Sites

### 3.2.3.1 Affected Environment

The National Historic Preservation Act (NHPA) Section 106 (36 CFR §800) requires that Federal agencies consider and evaluate the effect that Federal projects may have on historic properties under their jurisdiction. A Traditional Cultural Property (TCP) is a property or place that is eligible for the National Register of Historic Places (NRHP) because of its association with the cultural practices or beliefs of a living community that are: 1) rooted in that community's history and 2) important in maintaining the continuing cultural identity of the community. EO 13007 "Indian Sacred Sites" requires that Federal agencies with legal or administrative responsibility for management of Federal lands, "to the extent practicable permitted by law, and not clearly inconsistent with essential agency functions, to: (1) accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners; and (2) avoid adversely affecting the physical integrity of such sacred sites".

A cultural resources file and records search (Class I survey) and a field survey (Class III survey) of the Project was conducted in August 2014 by Atkins, an environmental consulting firm. The Class I survey involved the examination of previously recorded cultural resources sites and surveys that were conducted within one mile sections adjacent to the Project. This involved an examination of the Nevada Cultural Resources Inventory System Database, review of 1:24,000 topographic quadrangle and historic maps, and a review of cultural resources reports archived in Reclamation's Regional Office in Boulder City. The Class III survey, which included the entire area of the Proposed Action (referred to as the APE), was conducted on August 14, 2014. The methodology and results of the survey are described in the report titled: *Final Cultural Resources Assessment R10A Reservoir Project Henderson, NV* (Pentney 2014/Atkins Project No. 100038635).

The field survey did not identify previously unrecorded cultural resources. However, the APE is located within the boundary of a previously recorded historic site named the Squatters Camp (26CK1169). The site is divided into east and west camps. The east camp, where the APE is located has been subject to multiple mitigation efforts for previously constructed utilities such as power transmission lines, water and gas pipelines, and a track extension for the Nevada Southern

Railway. The most recent mitigation work for the site was conducted for the Boulder City Bypass Project in accordance the Section 3.A. of the Boulder City/U.S. 93 Corridor Highway Project Programmatic Agreement (FHWA, 2003).

The access road will cross a portion of a concentration of domestic type artifacts associated with the Squatters Camp, named Locus 14. This portion of Locus 14 has a low artifact density and it has been previously been mitigated. There are no further testing, data recovery, or protection concerns for this locus. A small portion of the R10A water tank is located within the southeastern boundary of the Squatters Camp. There are no artifacts or features associated with the site in this portion of the APE.

On January 23, 2015 Reclamation consulted with the Nevada SHPO under a finding of No Adverse Effect for the direct effect of the undertaking to the Squatters Camp. The SHPO concurred, but requested additional information from Reclamation about indirect effects to several historic engineering resources within the viewshed of the APE. This includes the Hoover Basic Transmission Line (26CK6251/S329), and the Boulder City Branch of the Union Pacific Railroad (26CK5414/S330). The Nevada SHPO provided assistance to Reclamation to further define, map, and assess indirect effects from the undertaking. Reclamation made a finding of No Adverse Effect for the indirect effect of the undertaking. Additional information and documentation regarding this consultation can be found in Section 4.0 and Appendix B.

There are no known TCPs or Sacred Sites at the Site or access road location.

### **3.3.3.2 Environmental Consequences**

#### **3.3.3.2.1 No Action Alternative**

No impacts to cultural resources/traditional cultural properties/sacred sites from construction of the access road or construction at the Site would occur under the No Action Alternative. Mitigation and data recovery resulting from other projects affecting the Squatters Camp archeological site would continue.

#### **3.3.3.2.2 Proposed Action Alternative**

The Proposed Action would not have adverse impacts to cultural resources. Impacts to the Squatters Camp resulting from the access road are subject to the mitigation and data recovery taking place as a result of the Boulder City Bypass. No additional mitigation needs have been identified.

There would be no impacts to cultural resources from construction activities at the Site, as no artifacts or features have been found within the boundaries of the Site.

There would be no impacts to TCPs or Sacred Sites at the Site or access road location as none are known to occur in the area.

### **3.3.3.2.3 Cumulative Impacts**

The Squatters Camp archaeological site has been previously impacted from power transmission lines, water and gas pipelines, and development projects. Impacts will also occur from the Boulder City Bypass. All of these impacts have or will be mitigated in accordance with NHPA Section 106 so adverse cumulative impacts to the Squatters Camp archaeological site are not anticipated.

There would be no cumulative impacts to cultural resources from construction activities at the Site, as no impacts were identified from the proposed action.

## **3.3.4 Visual Resources**

### **3.3.4.1 Affected Environment**

The Site is located in an open desert environment at the foot of the west slope of the River Mountains approximately 4,000 feet north of Railroad Pass and 100 feet east of U.S Highway 93/95 in Clark County, Nevada. The Site is currently visible from U.S. Highway 93/95 and from portions of southeast Henderson and has been a feature on the landscape since its construction in 1986. The natural terrain and vegetation at the base of the River Mountains dominates the landscape immediately east and north of the Site. This area has a relatively undeveloped appearance compared to the neighborhoods and businesses located to the west, although both roads and transmission lines are visible. The area to the west and south of the Site has been visually influenced by residential developments, transmission lines, U.S. Highway 93/95, a railroad, quarry operation, and other developments.

### **3.3.4.2 Environmental Consequences**

#### **3.3.4.2.1 No Action Alternative**

No impacts to visual resources from construction of the access road or construction at the Site would occur under the No Action Alternative.

#### **3.3.4.2.2 Proposed Action Alternative**

The Proposed Action alternative would result in the addition of visual elements to the landscape. They would be contained within the existing site and designed to blend in with the existing tank and surrounding landscape. These additional structures are expected to create only a minor change in the existing view of the Site because the tank, and the second tank which was previously located at the Site, has been a feature on the landscape for many years.

### **3.2.4.2.2 Cumulative Impacts**

All of the projects from Section 3.1 were considered for cumulative impacts. The area in which the Site is located is expected to remain relatively undeveloped but will continue to be influenced by existing and future visual impacts. The re-alignment of U.S. Highway 93/95 will change the view in the area slightly. The re-aligned highway will be at a lower grade than it is currently, making the Site less visible from the highway. The addition of two proposed new transmission

lines, Transwest Express Transmission Project and Southern Nevada Intertie Transmission Project, would add additional visual elements. The proposed River Mountains Solar and Magic Way Solar facilities would be located some distance north of the Project and are not expected to add to the visual impact of the area surrounding the Site. Adverse visual cumulative impacts from the Proposed Action are not anticipated because the minor changes to the existing view of the Site will not have a great influence on the overall appearance of the area.

## **4.0 Coordination and Consultation**

### **4.1 Agencies Consulted**

Appropriate staff from NDOT were contacted to discuss access road construction activities within NDOT's ROW.

The Nevada Division of State Lands sent Nevada Clearinghouse Notice E2015-147 to an extensive list of Nevada agencies. The Nevada State Clearinghouse provides a single point of contact for NEPA proposals statewide. The Nevada State Clearinghouse ensures that pertinent State agencies and other local governments are notified about the projects and then provides their comments back to the federal agencies to help facilitate the consultation process. The notice is included in Appendix A.

The City Planning Commission held a public hearing on the Conditional Use Permit and Design Review for the Project on October 16, 2014. No members of the public asked to speak about the permits. The Planning Commission unanimously voted to approve the permits. The minutes from this meeting can be found in Appendix A.

### **4.2 National Historic Preservation Act Consultation**

On January 23, 2015 Reclamation consulted with the Nevada SHPO under a finding of No Adverse Effect for the direct effect of the undertaking to the Squatters Camp. The SHPO concurred, but requested additional information from Reclamation about indirect effects to several historic engineering resources within the viewshed of the APE. This includes the Hoover Basic Transmission Line (26CK6251/S329), and the Boulder City Branch of the Union Pacific Railroad (26CK5414/S330). Reclamation and Nevada SHPO staff participated in numerous telephone conversation and e-mail exchanges in which the Nevada SHPO provided assistance to Reclamation to further define, map, and assess indirect effects from the undertaking. Reclamation made a finding of No Adverse Effect for the indirect effect of the undertaking.

On March 11 and 13, 2015 Reclamation emailed the requested documentation to the SHPO with a No Adverse Effect finding from the indirect effects. In accordance with 36 CFR 800.4(i), when the SHPO has entered the NHPA Section 106 process, and does not object within 30 days of receipt of an adequately documented finding, the agency official's responsibilities under NHPA Section 106 are fulfilled. However, due to a miscommunication Reclamation was not aware the SHPO did not accept the e-mail transmittal of the documentation as a formal submission. Reclamation considered the lack of response by the SHPO within 30 days as concurrence with the finding of effect for the undertaking. The SHPO consultation letter and indirect effect submittal are included in Appendix B.

### **4.3 Endangered Species Consultation**

Reclamation initiated formal Section 7 consultation with the Service on January 2, 2015 for a *may affect, likely to adversely affect* determination for the Mojave population of the desert tortoise. A Biological Assessment (BA) was prepared for the Project and submitted to the Service. The Service responded with a BO on June 22, 2015 on the determination. Reclamation

is responsible for ensuring implementation of minimization measures and terms and conditions listed in the BO (File No. 84320-2015-F-0166). The Consultation initiation memorandum and BO can be found in Appendix C.

#### **4.4 Scoping/Public Involvement**

Notification of the initiation of a 30 day public comment period on the Draft EA was sent to a distribution list which includes Federal, State, and County contacts; non-governmental organizations; and other interested parties. The Draft EA was posted on Reclamation's internet site at: <http://www.usbr.gov/lc/region/g2000/envdocs.html>. A news release regarding the availability of Draft EA was sent to newspapers and other media and posted on Reclamation's website at <http://www.usbr.gov/newsroom/newsreleases>.

A notice of the availability of the FONSI and Final EA will be sent to the distribution list described above and to any entities who commented on the Draft EA. The FONSI and Final EA will be posted on Reclamation's internet site at: <http://www.usbr.gov/lc/region/g2000/envdocs.html>. A news release regarding the availability of the FONSI and Final EA will be sent to the newspapers and other media who received the press release on the Draft EA. The news release will also be posted on Reclamation's website at <http://www.usbr.gov/newsroom/newsreleases>.

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## 5.0 References

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## **6.0 List of Preparers**

Faye Streier

Natural Resource Specialist-National Environmental Policy Act Coordinator  
Bureau of Reclamation, Lower Colorado Regional Office

Jessica Stegmeier

General Biologist-Ecological Restoration Group  
Bureau of Reclamation, LCR MSCP

James Kangas

Archaeologist  
Bureau of Reclamation, Lower Colorado Regional Office

## 7.0 Draft EA Comments and Responses

Six comment letters or e-mails were received on the Draft EA. The individual comment letters and e-mails are included in this section. Each letter or e-mail is followed by responses to the substantive comments contained in the letter or e-mail. The following organizations and individuals commented on the draft EA:

1. Skip Canfield- State Land Use Planning Agency, Nevada Division of State Lands
2. Dave Marlow- Nevada Division of State Lands
3. Peter D. Barton- Nevada Division of Museums and History
4. Jim Balderson, Nevada Division of Environmental Protection, Bureau of Water Pollution Control
5. Jim Balderson, Nevada Division of Environmental Protection, Bureau of Safe Drinking Water
6. Julie Ernstein, Nevada State Historic Preservation Office



Kangas, James <jkangas@usbr.gov>

**Fwd: State Agency Comments E2015-147 City of Henderson Water Tank Project**

1 message

**Streier, Faye** <fstreier@usbr.gov>  
To: James Kangas <JKangas@usbr.gov>

Mon, Jun 8, 2015 at 2:54 PM

----- Forwarded message -----

From: **Skip Canfield** <scanfield@lands.nv.gov>  
Date: Tue, May 26, 2015 at 11:15 AM  
Subject: State Agency Comments E2015-147 City of Henderson Water Tank Project  
To: "fstreier@usbr.gov" <fstreier@usbr.gov>  
Cc: Skip Canfield <scanfield@lands.nv.gov>

The Nevada State Clearinghouse received the attached comments and the comments below regarding this proposal;

<http://clearinghouse.nv.gov/public/Notice/2015/E2015-147.pdf>

Skip Canfield

**Nevada State Clearinghouse**  
**State Land Use Planning Agency**

*Nevada Division of State Lands*  
*Department of Conservation and Natural Resources*  
901 South Stewart Street, Suite 5003  
Carson City, NV 89701  
775-684-2723  
<http://clearinghouse.nv.gov>  
[www.lands.nv.gov](http://www.lands.nv.gov)

As part of the City of Henderson Water Tank Project, please consider the cumulative visual impacts from development activities (temporary and permanent).

The Mitigation Measures section does not include any discussion on lighting.

There is an inadequate statement on page 24 about construction lighting. Construction lighting should follow Dark Sky lighting practices.

**Utilize appropriate lighting:**

- Utilize consistent lighting mitigation measures that follow "Dark Sky" lighting practices.
- Effective lighting should have screens that do not allow the bulb to shine up or out. All proposed lighting shall be located to avoid light pollution onto any adjacent lands as viewed from a distance. All lighting fixtures shall be hooded and shielded, face downward, located within soffits and directed on to the pertinent site only, and away from adjacent parcels or areas.
- A lighting plan should be submitted indicating the types of lighting and fixtures, the locations of fixtures, lumens of lighting, and the areas illuminated by the lighting plan.
- Any required FAA lighting should be consolidated and minimized wherever possible.

The Mitigation Measures section includes a short, one-sentence statement, please consider the following suggestions as part of the proposed action:

-

**Utilize building materials, colors and site placement that are compatible with the natural environment:**

- Utilize consistent mitigation measures that address logical placement of improvements and use of appropriate screening and structure colors. Existing utility corridors, roads and areas of disturbed land should be utilized wherever possible. Proliferation of new roads should be avoided.
- For example, the use of compatible paint colors on structures reduces the visual impacts of the built environment. Using screening, careful site placement, and cognitive use of earth-tone colors/materials that match the environment improve the user experience for others who might have different values than what is fostered by built environment activities.
- Federal agencies should require these mitigation measures as conditions of approval for all permanent and temporary applications.

Thank you.

6/8/2015

DEPARTMENT OF THE INTERIOR Mail - Fwd: State Agency Comments E2015-147 City of Henderson Water Tank Project

Skip Canfield





State Land Use Planning Agency

--

Faye Streier  
National Environmental Policy Act Coordinator  
Bureau of Reclamation, Lower Colorado Region  
P.O. Box 61470  
Boulder City, NV 89006  
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**4 attachments**

-  **E2015-147 MUSEUMS (City of Henderson Water Tank Project).pdf**  
211K
-  **E2015-147 NDEP (City of Henderson Water Tank Project).pdf**  
52K
-  **E2015-147 NDEP2 (City of Henderson Water Tank Project).pdf**  
48K
-  **E2015-147 SLO (City of Henderson Water Tank Project).pdf**  
140K

## **Skip Canfield- State Land Use Planning Agency, Nevada Division of State Lands**

**Comment 1:** As part of the City of Henderson Water Tank Project, please consider the cumulative visual impacts from development activities (temporary and permanent).

**Response:** Thank you for your comments. Cumulative visual impacts are addressed in Section 3.2.4.2.2. The potential for short term visual impacts from construction equipment was considered. Equipment such as a crane, backhoe, paving machine, and delivery trucks will be present at the Project area on an intermittent, short term basis. These potential impacts were not addressed in the EA because they would be short term and not measurably different from existing visual impacts from traffic on U.S. Highway 93. No other temporary visual impacts were identified.

**Comment 2:** The mitigation measures section does not include any discussion on lighting. There is an inadequate statement on page 24 about construction lighting. Construction lighting should follow Dark Sky lighting practices.

**Response:** To clarify requirements for lighting, the following sentence has been added to the Proposed Action on page 23 of the EA. "All construction activities are expected to occur during daytime hours. If nighttime work is necessary, all City ordinances would be followed and appropriate measures would be taken to minimize impacts from lighting associated with construction activities". Any night-time construction would be short-term and would include mitigation for lighting impacts. Lighting from night-time construction is not expected to impact wildlife so the reference to indirect impacts to wildlife has been removed from Section 3.3.2.2.2.

Information on the approval of a Conditional Use Permit and Design Review for the Project has been added to Section 4.1 and Appendix A to clarify that the City Planning Commission has determined, through a public hearing, that the Project "...is compatible with adjacent uses in terms of scale, site design, and operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts)". The City will comply with all requirements of the Henderson Municipal Code in construction and operation of the Project.

**Comment 3:** The Mitigation Measures section includes a short, one-sentence statement, please consider the following suggestions as part of the proposed action: Utilize building materials, colors, and site placement that are compatible with the natural environment....

**Response:** The water tanks and future pump station will be painted with compatible colors that blend into the natural environment as described in Section 2.2, Proposed Action. This is a requirement of the Conditional Use Permit and Building Design Review included in Appendix A.

## Skip Canfield

---

**From:** Dave Marlow  
**Sent:** Wednesday, April 29, 2015 10:14 AM  
**To:** Skip Canfield; Peter Barton  
**Cc:** Elyse Randles  
**Subject:** RE: Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)  
**Attachments:** 6642.pdf

Skip

I am concerned about this proposal as it may affect a contract NDSL has with the BOR for the extension of the Southern Nevada Railroad. The State's Contract with the BOR is #8-07-30-L0473. This is a 25 year contract, expiring in 2024 with the option to renew. This contract allows for the construction of a looped railroad grade, tracks, and other railroad and drainage infrastructure. The project proposal will affect the proposed alignment granted by the BOR and which is not addressed by this NEPA document. Of interest is that the State has already paid tortoise mitigation fees (\$69,300 on 1/7/1998) for the 158 acres under this contract. BOR did reserve the right to grant other uses so long as those uses do not impact or affect the State's use. I have attached a copy of our Contract with the BOR for reference.

Areas of concern that may be affected by the State's construction of this railroad loop are access to the site, water lines to and from the tank, and any other infrastructure. These may require relocation to accommodate the State's use.

I believe Peter Barton at Museums & History will want to add his comments. I have forwarded this notification to him for his response.

Dave

=====  
Dave Marlow  
Deputy Administrator  
Nevada Division of State Lands  
775-684-2724  
775-684-2721 (FAX)  
[dmarlow@lands.nv.gov](mailto:dmarlow@lands.nv.gov)

No one can make you feel inferior without your permission.

**From:** scanfield@lands.nv.gov [mailto:scanfield@lands.nv.gov]  
**Sent:** Wednesday, April 29, 2015 9:35 AM  
**To:** Alan Jenne; clytle@lincolnnv.com; Brad Hardenbrook; James Morefield; cohn1@nv.doe.gov; Mark Freese; Sandy Quilici; Tod.oppenborn@nellis.af.mil; zip.upham@navy.mil; Dave Marlow; Shimi.Mathew@nellis.af.mil; craig.mortimore@wildnevada.org; njboland.nev@gmail.com; Jennifer Crandell; 99abw.ccy@nellis.af.mil; whenderson@nvleague.org; dstapleton@nvnaco.org; ddavis@unr.edu; munteanj@unr.edu; jprice@unr.edu; Karen Beckley; Rebecca Palmer; Mark Harris; ed.rybold@navy.mil; Sherry Rupert; Denesa Johnston; Jennifer Scanland; dmouat@dri.edu; Alisanne Maffei; bthompson@dot.state.nv.us; Richard Ewell; Bette Hartnett; mison@dot.state.nv.us; Warren Turkett; Michael Visher; Jim R. Balderson; jvanhavel@dot.state.nv.us; Lindsey Lesmeister; Steve Foree; Mark Enders; John C. Tull; John Christopherson; Richard M. Perry; Kevin J. Hill; endacottsteve@charte r.net; jered.mcdonald@lcb.state.nv.us; Cynthia Turiczek; Moira Kolada; rwarnold@hotmail.com; lkryder@co.nye.nv.us; Julie Erstein; Claudia Vecchio; bob@intermountainrange.com; CAnderson@washoecounty.us; JEnglish@washoecounty.us;

tmueller@dot.state.nv.us; Valerie King; Adele M. Basham; Skip Canfield; jolson@landercountynv.org; Tina Mudd; Kacey KC; Tim Rubald; janehfreeman@fs.fed.us; brian.hunsaker@us.army.mil; JSouba@cl.fallon.nv.us; robert.turner.3@us.af.mil; Robert.rule@navy.mil; Alysa.Keller@lcb.state.nv.us; Cayenne Engel; larry.m.cruz.civ@mail.mil; Elizabeth A. Kingsland; charles.r.king104.civ@mail.mil; Matt Maples; Richard Martin; Elyse Randles; Tracy Kipke; Jennifer Newmark; Edmund Quaglieri; Kristin Szabo; mstewart@lcb.state.nv.us; sscholley@lcb.state.nv.us; Adam Roney; rharvey@forestry.nv.gov; brenda@cwsd.org  
**Subject:** Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)



**NEVADA STATE CLEARINGHOUSE**  
Department of Conservation and Natural Resources, Division of State Lands  
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246  
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 04/29/2015

U. S. Bureau of Reclamation

**Nevada State Clearinghouse Notice E2015-147**  
**Project: City of Henderson Water Tank Project**

Follow the link below to find information concerning the above-mentioned project for your review and comment.

[E2015-147 - http://clearinghouse.nv.gov/public/Notice/2015/E2015-147.pdf](http://clearinghouse.nv.gov/public/Notice/2015/E2015-147.pdf)

- **Please evaluate this project's effects on your agency's plans and programs and any other issues that you are aware of that might be pertinent to applicable laws and regulations.**
- **Please reply directly from this e-mail and attach your comments.**
- **Please submit your comments no later than Friday May 22nd, 2015.**
- 

[Clearinghouse project archive](#)

Questions? Skip Canfield, Program Manager, (775) 684-2723 or [nevadaclearinghouse@lands.nv.gov](mailto:nevadaclearinghouse@lands.nv.gov)

No comment on this project  Proposal supported as written



**Dave Marlow- Nevada Division of State Lands**

**Comment # 1:** I am concerned about this proposal as it may affect a contract NDSL has with the BOR for the extension of the Southern Nevada Railroad.

**Response:** Thank you for your comments. We have addressed your comments in our reply to Peter Barton. Concurrence from all organizations that hold rights of use within the Project area has now been received. We have added that information to Section 2.2.

## Skip Canfield

---

**From:** Peter Barton  
**Sent:** Monday, May 11, 2015 10:37 AM  
**To:** Dave Marlow; Skip Canfield  
**Subject:** RE: Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)

Dave, Skip,

Good morning and apologies for a tardy response. It took longer than I'd expected to connect with Greg Corbin and review this matter with him and the staff at the Boulder City Railroad Museum. I'm actually glad this issue surfaced as it provides the opportunity to confirm that in fact the plans developed by the railroad museum for the addition of a loop track, conceived nearly 20 years ago, have changed. Dramatically.

As NDOT developed their plans for the Boulder City Bypass, the railroad museum saw an opportunity to reconnect the tracks, severed at the at-grade crossing at Railroad Pass soon after Union Pacific abandoned service on that line, also a couple of decades ago. Working with NDOT and their team we were able to include a railroad overpass at Railroad Pass as part of NDOT Phase 1 for the Boulder City Bypass project. That work is slated to begin in the next two weeks and will be completed by 2017. Once the overpass is completed and the tracks restored, the museum will be able to expand operations, consistent with optimal long term plans for enhanced public programming for the museum. As a result, the loop track concept is being abandoned and the agreement with BOR may be vacated.

While I expect it is doubtful that the BOR would entertain refunding the \$69K fee paid in 1998 as part of the desert tortoise mitigation/relocation, I'd suggest we at least make the request. It certainly would be in our best interest to inquire about a refund.

Please do keep me apprised of how this goes, and don't hesitate to reach out if you have any questions or concerns we should be aware of.

Thank you.

Regards,

**Peter D. Barton**  
Administrator, Nevada Division of Museums & History  
Paul Laxalt State Building  
401 N. Carson Street  
Carson City, NV 89701  
(775) 687-0626 (v)  
(775) 721-8918 (c)  
(775) 687-6159 (f)  
pbarton@nevadaculture.org

*Our Vision  
Recognized as the most trusted stewards and engaging storytellers of Nevada's heritage.*



---

**From:** Dave Marlow  
**Sent:** Wednesday, April 29, 2015 10:14 AM

**Peter D. Barton- Nevada Division of Museums and History**

**Comment # 1:** As NDOT developed their plans for the Boulder City Bypass, the railroad museum saw an opportunity to reconnect the tracks, severed at the at-grade crossing at Railroad Pass soon after Union Pacific abandoned service on that line, also a couple of decades ago. Working with NDOT and their team we were able to include a railroad overpass at Railroad Pass as part of NDOT Phase 1 for the Boulder City Bypass project. That work is slated to begin in the next two weeks and will be completed by 2017. Once the overpass is completed and the tracks restored, the museum will be able to expand operations, consistent with optimal long term plans for enhanced public programming for the museum. As a result, the loop track concept is being abandoned and the agreement with BOR may be vacated.

**Response:** Thank you for this information. Since the ROU for the railroad loop is no longer needed, Reclamation is currently working with your agency on the cancellation of the ROU.

**Comment #2:** While I expect it is doubtful that the BOR would entertain refunding the \$69K fee paid in 1998 as part of the desert tortoise mitigation/relocation, I'd suggest we at least make the request. It certainly would be in our best interest to inquire about a refund.

**Response:** The fee for tortoise mitigation was paid to the Clark County Desert Tortoise Habitat Conservation Fund, which is no longer in operation. We are researching your question, and will contact you directly with the results.

DATE: April 29, 2015  
TO: Nevada State Clearinghouse, DCNR  
FROM: Nevada Division of Environmental Protection, Bureau of Water Pollution Control  
SUBJECT: State Clearinghouse Comments for E2015-147 (City of Henderson Water Tank Project)

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The Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control (BWPC) has received the aforementioned State Clearinghouse item and offers the following comments:

The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following:

- Stormwater Industrial General Permit
- De Minimis Discharge General Permit
- Pesticide General Permit
- Drainage Well General Permit
- Temporary Permit for Discharges to Groundwater's of the State
- Working in Waters Permit
- Wastewater Discharge Permits
- Underground Injection Control Permits
- Onsite Sewage Disposal System Permits
- Holding Tank Permits

Please note that discharge permits must be issued from this Division before construction of any treatment works (Nevada Revised Statute 445A.585).

For more information on BWPC Permitting, please visit our website at:

<http://ndep.nv.gov/bwpc/index.htm>.

Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to:

- |                                   |   |
|-----------------------------------|---|
| • Dam Safety Permits              | - Division of Water Resources           |
| • Well Permits                    | - Division of Water Resources           |
| • 401 Water Quality Certification | - NDEP                                  |
| • 404 Permits                     | - U.S. Army Corps of Engineers          |
| • Air Permits                     | - NDEP                                  |
| • Health Permits                  | - Local Health or State Health Division |
| • Local Permits                   | - Local Government                      |

Thank you for the information and the opportunity to comment.

**Jim Balderson, Nevada Division of Environmental Protection, Bureau of Water Pollution Control**

**Comment #1:** The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following.... Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to...

**Response:** Thank you for your comments and the list of permits that may be needed for the Project. The City is responsible for obtaining all Federal, State, and local required permits prior to the start of the Project. They have reviewed your list and will apply for and obtain any that are applicable.

**E2015-147 (City of Henderson Water Tank Project)**

**AGENCY COMMENTS:** Plans and specifications for the proposed water storage tank will need to be submitted to the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW) for review and approval prior to construction. Questions or comments should be directed to Jim Balderson at 775-887-9517 or [jbalderson@ndep.nv.gov](mailto:jbalderson@ndep.nv.gov).

**Signature:** Jim Balderson P.E.

A handwritten signature in blue ink that reads "Jim Balderson". The signature is written in a cursive style and is positioned above a light blue horizontal line.

**Date:** 05/05/2015

**Jim Balderson, Nevada Division of Environmental Protection, Bureau of Safe Drinking Water**

**Comment #1:** Plans and specifications for the proposed water storage tank will need to be submitted to the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW) for review and approval prior to construction. Questions or comments should be directed to Jim Balderson at 775-687-9517 or [jbalderson@ndep.nv.gov](mailto:jbalderson@ndep.nv.gov) .

**Response:** Thank you for this information. The City is aware of this requirement and will submit plans and specifications at the appropriate time.



## Skip Canfield

---

**From:** Julie Ernstein  
**Sent:** Friday, May 22, 2015 5:24 PM  
**To:** Skip Canfield  
**Subject:** RE: Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)

Dear Skip,

I have read the Bureau of Reclamation's *City of Henderson R-10/R-10A Water Tank Site: Draft Environmental Assessment* (LC-14-21) with care and have a couple of comments to offer as relates to the Section 106 consultation associated with the undertaking. Section 3.2.3.2 (Affected Environment) of the broader "Cultural Resources/Traditional Cultural Properties/Sacred Sites" discussion notes the following:

*On January 31, 2015 Reclamation consulted with the Nevada SHPO under a finding of No Adverse Effect for the direct effect of the undertaking to the Squatters Camp. The SHPO concurred, but requested additional information from Reclamation about indirect effects to several historic engineering resources within the viewshed of the APE. This includes the Hoover Basic Transmission Line (26CK6251/S329), and the Boulder City Branch of the Union Pacific Railroad (26CK5414/S330). On March 13, 2015 Reclamation emailed the requested documentation to the SHPO with a No Adverse Effect finding from the indirect effects. The SHPO has not responded. In accordance with 36 CFR 800.4(i), if the SHPO has entered the NHPA Section 106 process and does not object within 30 days of receipt of an adequately documented finding, the agency official's responsibilities under NHPA Section 106 are fulfilled (p.26).*

I would like to take this opportunity to clarify several points regarding the S. 106 consultation for SHPO undertaking 2015-3557 #19978:

1. SHPO does not concur separately on the adequacy of agency-defined direct vs. indirect APEs for an undertaking. Instead, we may comment that we understand the direct effects but that an agency does not appear to have considered possible indirect effects or defined an indirect APE for its proposed undertaking. Such was the case with the initial submission received from Reclamation.
2. Our staff had a number of telephone conversations in which we defined what an indirect APE is and assisted Reclamation in its understanding of indirect effects and how to define and map an indirect APE. None of these exchanges is reflected in the above-cited summary.
3. Additionally, SHPO staff from multiple program areas (e.g., the architectural historian with Review & Compliance as well as NVCRIS staff) engaged in a series of email exchanges with Bureau of Reclamation archaeologist Jim Kangas spanning the period 2/27/15 through Jim's last e-mail to us on 3/13/15. Those e-mails addressed a range of topics, including federal agency definition of an indirect APE and possible indirect effects for the undertaking, maps, and photographs. There were numerous exchanges via e-mail, the last of which dated to 3/13/15. Our staff understood these exchanges to be assisting the federal agency in assembling the missing parts of its submission which would then be reassembled and resubmitted as a whole with a request for SHPO concurrence on agency determinations. As our office does not accept electronic submissions, our staff did not understand the 3/13/15 e-mail from Reclamation--which only contained a Historic Resources Information Form (HRIF), so was simply the latest in a series of piecemeal updates--as constituting the final missing piece of information. Nor did that e-mail contain any sort of summary statement from Reclamation suggesting that this comprised their last missing piece of information and that they awaited SHPO concurrence on the determination of effect for the undertaking.

While it appears that there was a miscommunication of expectations on both SHPO and Reclamation staffs' parts, we are confident that a reassembled whole would have resolved any concerns regarding project effects to resources within the indirect APE and that the SHPO would have concurred with a Reclamation determination of No Adverse Effect for



the undertaking. At present, the administrative record for this undertaking is not what we typically like to see (e.g., formal submissions accompanied by transmittal letters to which we reply formally). While that is unfortunate, we are not contesting Reclamation's claim that we have failed to respond to what we never construed as a formal revised submission. Instead, I offer these comments to clarify SHPO's policy that all submissions are to be sent hard copy via U.S. mail and accompanied by an agency transmittal letter. I will be certain that no future misunderstanding of this type occurs on our end of the consultation process.

Thank you for the opportunity to comment on this important document. Should you have any questions regarding these comments, please do not hesitate to contact me directly.

Best,

Julie

Julie H. Ernstein, Ph.D., RPA  
Deputy SHPO  
State Historic Preservation Office  
901 S. Stewart St., Suite 5004  
Carson City, NV 89701  
jernstein@shpo.nv.gov  
tel: 775.684.3437  
fax: 775.684.3442

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**From:** scanfield@lands.nv.gov [mailto:scanfield@lands.nv.gov]

**Sent:** Wednesday, April 29, 2015 9:35 AM

**To:** Alan Jenne; clytle@lincoln.nv.com; Brad Hardenbrook; James Morefield; cohnk@nv.doe.gov; Mark Freese; Sandy Quilici; Tod.oppobom@nellis.af.mil; zip.upham@navy.mil; Dave Marlow; Shimi.Mathew@nellis.af.mil; craig.mortimore@wildnevada.org; njoboland.nev@gmail.com; Jennifer Crandell; 99abw.ccy@nellis.af.mil; whenderson@nvleague.org; dstapleton@nvnaco.org; ddavis@unr.edu; munteanj@unr.edu; jprice@unr.edu; Karen Beckley; Rebecca Palmer; Mark Harris; ed.rybold@navy.mil; Sherry Rupert; Denesa Johnston; Jennifer Scanland; dmouat@dri.edu; Alisanne Maffei; bthompson@dot.state.nv.us; Richard Ewell; Bette Hartnett; mison@dot.state.nv.us; Warren Turkett; Michael Visher; Jim R. Balderson; jvanhavel@dot.state.nv.us; Lindsey Lesmeister; Steve Foree; Mark Enders; John C. Tull; John Christopherson; Richard M. Perry; Kevin J. Hill; endacottsteve@charter.net; jered.mcdonald@lcb.state.nv.us; Cynthia Turiczek; Moira Kolada; rwarnold@hotmail.com; lkryder@co.nye.nv.us; Julie Ernstein; Claudia Vecchio; bob@intermountainrange.com; CAnderson@washoecounty.us; JEnglish@washoecounty.us; tmueller@dot.state.nv.us; Valerie King; Adele M. Basham; Skip Canfield; jolson@landercountynv.org; Tina Mudd; Kacey KC; Tim Rubald; janehfreeman@fs.fed.us; brian.hunsaker@us.army.mil; JSouba@ci.fallon.nv.us; robert.turner.3@us.af.mil; Robert.rule@navy.mil; Alysa.Keller@lcb.state.nv.us; Cayenne Engel; larry.m.cruz.civ@mail.mil; Elizabeth A. Kingsland; charles.r.king104.civ@mail.mil; Matt Maples; Richard Martin; Elyse Randles; Tracy Kipke; Jennifer Newmark; Edmund Quaglieri; Kristin Szabo; mstewart@lcb.state.nv.us; sscholley@lcb.state.nv.us; Adam Roney; rharvey@forestry.nv.gov; brenda@cwdsd.org

**Subject:** Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)



**NEVADA STATE CLEARINGHOUSE**

Department of Conservation and Natural Resources, Division of State Lands  
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246  
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 04/29/2015

U.S. Bureau of Reclamation

# **Appendix A- Agency Coordination**





Streier, Faye <fstreier@usbr.gov>

# Nevada State Clearinghouse Notice E2015-147 (City of Henderson Water Tank Project)

**Skip Canfield**

<scanfield@lands.nv.gov>

To: "fstreier@usbr.gov" <fstreier@usbr.gov>

Wed, Apr 29, 2015 at 9:37

AM



**NEVADA STATE CLEARINGHOUSE**

Department of Conservation and Natural Resources, Division of State Lands  
901 S. Stewart St., Ste. 5003, Carson City, Nevada 89701-5246  
(775) 684-2723 Fax (775) 684-2721

TRANSMISSION DATE: 04/29/2015

U.S. Bureau of Reclamation

**Nevada State Clearinghouse Notice E2015-147**

**Project: City of Henderson Water Tank Project**

Follow the link below to find information concerning the above-mentioned project for your review and comment.

E2015-147 - <http://clearinghouse.nv.gov/public/Notice/2015/E2015-147.pdf>

- **Please evaluate this project's effects on your agency's plans and programs and any other issues that you are aware of that might be pertinent to applicable laws and regulations.**
  
- **Please reply directly from this e-mail and attach your comments.**
  
- **Please submit your comments no later than Friday May 22nd, 2015.**

[Clearinghouse project archive](#)

Questions? Skip Canfield, Program Manager, (775) 684-2723 or [nevadaclearinghouse@lands.nv.gov](mailto:nevadaclearinghouse@lands.nv.gov)

No comment on this project  Proposal supported as written

AGENCY COMMENTS:

Signature:

Date:

---

Requested By:

Distribution:

- 99ABW Nellis
- Division of Emergency Management
- Intermountain Range
- Adam Roney - Public Utilities Commission
- Adele M. Basham - NDEP
- Alan Jenne - Department of Wildlife, Elko
- Alisanne Maffei - Department of Administration
- Alysa Keller - Legislative Counsel Bureau
- Bette Hartnett - State Energy Office
- Bill Thompson - Department of Transportation, Aviation
- Bob Roper - Nevada Division of Forestry
- Bob Turner - Nellis AFB
- Brenda Hunt - CWSD
- Cayenne Engel - Nevada Division of Forestry
- Chris Anderson - Washoe County Health Department
- Chuck King - Hawthorne Army Depot
- Claudia Vecchio - Nevada Commission on Tourism
- Cory Lytle - Lincoln County
- Craig Mortimore - Wild Nevada
- Cynthia Turiczek - Public Utilities Commission

D. Bradford Hardenbrook - Department of Wildlife, Las Vegas

Dagny Stapleton - NACO

Dave Marlow -

David David - UNR Bureau of Mines

David Mouat - Desert Research Institute

Denesa Johnston - Fire Marshal

Ed Rybold - NAS Fallon

Eddy Quagliari - Division of Water Resources

Elizabeth A. Harrison - Tahoe Resource Team - Division of State Lands

Elyse Randles - State Land Office

J Crandell - Colorado River Commission of Nevada

James D. Morefield - Natural Heritage Program

Jane Freeman - US Forest Service

Jason Van Havel - NDOT

Jennifer Newmark - NDOW - Wildlife Diversity

Jennifer Scanland - Division of State Parks

Jered McDonald - Legislative Counsel Bureau

Jim Balderson - NDEP

Jim English - Washoe County

Jim Olson - Lander County

Jim Souba - City of Fallon Public Works

John Christopherson - Nevada Division of Forestry

John Muntean - UNR Bureau of Mines

John Tull - NDOW

Jon Price - UNR Bureau of Mines

Julie Ernstein - State Historic Preservation Office

Kacey KC - Sagebrush Ecosystem Technical Team

Karen Beckley - State Health Division

Kevin Hill - Nevada State Energy Office

Kristin Szabo - Nevada Natural Heritage Program

Larry Cruz - Hawthorne Army Depot

Levi Kryder - Nye County

Linda Cohn - National Nuclear Security Administration

Lindsey Lesmeister - NDOW

Major Brian Hunsaker - Nevada National Guard

Mark Enders - NDOW

Mark Freese - Department of Wildlife  
Mark Harris, PE - Public Utilities Commission  
Matt Maples - NDOW  
Michael J. Stewart - Legislative Counsel Bureau  
Michael Visser - Division of Minerals  
Mitch Ison - NDOT  
Moir Kolada - NDOW  
Nancy Boland - Esmeralda County  
Rebecca Palmer - State Historic Preservation Office  
Rich Harvey - Division of Forestry  
Rich Perry - Nevada Division of Minerals  
Richard Arnold - Nevada Indian Commission  
Rick Martin - Division of Emergency Management  
Robert Rule - NAS Fallon  
Sandy Quilici - Department of Conservation & Natural Resources  
Sherry Rupert - Indian Commission  
Shimi Mathew - Nellis AFB  
Skip Canfield - State Land Use Planning Agency  
Stephen Foree - NDOW  
Steve Endacott - City of Fallon  
Susan Scholley - Legislative Counsel Bureau  
Terry Rubald - Nevada Department of Taxation, Local Government, Centrally Assessed Property  
Tim Rubald - Conservation Districts  
Timothy Mueller - Department of Transportation  
Tina Mudd - Dept of Agriculture  
Tod Oppenborn - Nellis Air Force Base  
Tracy Kipke - NDOW  
Valerie King - NDEP  
Warren Turkett - Colorado River Commission of Nevada  
Wes Henderson - Nevada League of Cities  
Zip Upham - NAS Fallon



13.	<p style="text-align: center;"><a href="#">PUBLIC HEARING</a></p> <p>A) CUP-14-500421    <b>CONDITIONAL USE PERMIT</b>                  B) DRA-14-500387    <b>DESIGN REVIEW</b>                                                   <b>COH R-10A RESERVOIR</b></p> <p style="text-align: center;">APPLICANT: City of Henderson</p>	<p><b>FINAL</b></p> <p><b>FINAL</b></p>
-----	---	---

- A) Major Utility (Potable Water Reservoir); and
- B) [Design of a three-million-gallon Potable Water Reservoir; on a portion of 320 acres generally located 1,000 feet northeast of U.S. Highway 95 and 4,000 feet north of Railroad Pass Casino, in the River Mountain Planning Area.](#)

Scott Majewski, Principal Planner, read a summary of the proposed item and stated staff recommends approval.

Heidi Duchsheimer, 2270 Corporate Circle, representing the applicant, concurred with staff's recommendation.

Chairman Campbell opened the public hearing at 6:37 p.m., asking if there was anyone present wishing to speak for or against this item.

There being no one wishing to speak, the public hearing was closed immediately.

CUP-14-500421

(Motion) Commissioner Stewart introduced a motion recommending final approval, subject to findings of fact and conditions.

**FINDINGS OF FACT**

- A. The proposed use complies with all applicable provisions of the Development Code.
- B. The proposed use is compatible with adjacent uses in terms of scale, site design, and operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts).
- C. Any significant adverse impacts resulting from this use will be mitigated or offset to the maximum practical extent.
- D. The proposed use will not cause substantial diminution in value of other property in the neighborhood in which it is to be located.
- E. Public safety, transportation, and utility facilities and services will be available to serve the subject property, while maintaining sufficient levels of service for existing development.
- F. Adequate assurances of continuing maintenance have been provided.
- G. Any significant adverse impacts on the natural environment will be mitigated to the maximum practical extent.

**PUBLIC WORKS DEPARTMENT CONDITION**

- 1. The acceptance or approval of this item does not authorize or entitle the applicant to construct the project referred to in such application or to

receive further development approvals, grading permits or building permits, nor does it infer approval for final lot configuration, geometry, or roadway layout.

#### COMMUNITY DEVELOPMENT DEPARTMENT CONDITIONS

2. Approval of this application requires the applicant to comply with all Code requirements not specifically listed as a condition of approval but required by Title 19 of the Henderson Municipal Code, compliance with all plans and exhibits presented and amended as part of the final approval, and compliance with all additional items required to fulfill conditions of approval.
3. This conditional use permit for a water reservoir shall lapse one year from the effective date of approval unless the use is established, commenced or extended in accordance with Section 19.6.6.A. of the Development Code.

The vote favoring final approval was: Those voting aye: Belingheri, Campbell, Fellows, Mansfield, and Stewart. Those voting Nay: None. Those absent: Bochanis and Howell. Those abstaining: None. Chairman Campbell declared the motion carried.

DRA-14-500387

(Motion) Commissioner Stewart introduced a motion recommending final approval, subject to conditions.

#### PUBLIC WORKS DEPARTMENT CONDITION

1. The acceptance or approval of this item does not authorize or entitle the applicant to construct the project referred to in such application or to receive further development approvals, grading permits or building permits, nor does it infer approval for final lot configuration, geometry, or roadway layout.

#### DEPARTMENT OF UTILITY SERVICES CONDITIONS

2. Civil improvement plans shall comply with the requirements of the Uniform Design and Construction Standards for Water Distribution Systems and the Design and Construction Standards for Wastewater Collection Systems.
3. Applicant must submit revised civil plans to show additional reservoir.

#### COMMUNITY DEVELOPMENT DEPARTMENT CONDITIONS

4. The applicant shall submit to the Community Development Department an electronic copy of the site plan with building footprints, driveways, parking, fire hydrants, Fire Department connections, and unit numbers in the latest AutoCAD release prior to issuance of building permits.
5. All aboveground public and private-owned utility equipment shall be

screened by a cabinet, landscaping or decorative wall.

6. Approval of this application requires the applicant to comply with all Code requirements not specifically listed as a condition of approval but required by Title 19 of the Henderson Municipal Code, compliance with all plans and exhibits presented and amended as part of the final approval, and compliance with all additional items required to fulfill conditions of approval.
7. Prior to issuance of a building permit, applicant shall obtain approval of a materials and debris containment plan from the Building Official. Upon issuance of the building permit, the developer shall use and maintain throughout construction of the project a materials and debris enclosure in accordance with the approved plan.
8. Approval of this design review for a water reservoir tank shall comply with CUP-14-500421.
9. All grading and construction/staging activity must remain completely on-site, or will require the approval of any and all affected adjacent property owner(s).
10. Water tank reservoir shall be painted to match existing water reservoir.

The vote favoring final approval was: Those voting aye: Belingheri, Campbell, Fellows, Mansfield, and Stewart. Those voting Nay: None. Those absent: Bochanis and Howell. Those abstaining: None. Chairman Campbell declared the motion carried.

# **Appendix B- State Historic Preservation Officer Consultation**



# United States Department of the Interior

BUREAU OF RECLAMATION  
Lower Colorado Regional Office  
P.O. Box 61470  
Boulder City, NV 89006-1470

IN REPLY REFER TO:

LC-2631  
ENV-3.00

**JAN 23 2015**

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Rebecca L. Palmer  
Nevada State Historic Preservation Officer  
Nevada State Historic Preservation Office  
901 South Stewart Street, Suite 5004  
Carson City, NV 89701-4258

Subject: Consultation under Section 106 of the National Historic Preservation Act on a Finding of No Adverse Effect for the City of Henderson R10A Water Tank, Pump House, and Access Road Installation Project in Clark County, Nevada

Dear Ms. Palmer:

Please find the enclosed report titled: *Cultural Resource Assessment R10A Reservoir Project, Henderson, Nevada* (November 2014). The report was prepared by Atkins Global under contract with the City of Henderson. Reclamation requested that the city conduct a cultural resource assessment for the issuance of a permit to install a concrete municipal water storage tank, a pumping facility, and gravel access road on Reclamation land. The project area is located at Township 22 South, Range 64 East, Sections 34 and 35, and Township 23 South, Range 64 East, Section 2 (USGS Boulder City Quad).

The City of Henderson is constructing the new tank to improve the management of the municipal water supply. The new tank will have a capacity of 3 million gallons. It will be constructed on existing fill next to an existing 3 million gallon tank. The new tank would be partially installed over the foot print of a former tank that was removed in the 1970s. The dimensions of the new tank are 35 feet high by 135 feet in diameter. In preparation for the installation of the tank the ground will be excavated to depths ranging from 10 to 16 feet below the existing grade surface for a concrete slab/foundation. The construction of a pumping station is also planned. It will be located between the two water tanks. The pump appurtenances will be housed in a building that measures 65 feet long by 35 feet wide.

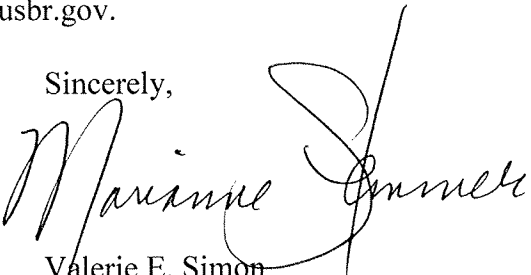
The tank facility is accessed by a 650 foot long gravel road that turns east off US Highway 95. Due to the construction of US Highway 95 Boulder City By-Pass, the road will no longer be accessible from the highway and a new access road is needed for the facility. The new road will be accessed from a side street called Foothills Drive, parallel the northbound lanes of US Highway 95, and then turn east to the facility. The project area of potential effect (APE) for the tank installation is 9.3 acres. The construction corridor for the new access road will be 6000 feet long by 25 feet wide and will have an APE of 3.4 acres (Figure 1 enclosed).

A cultural resources records search of the Nevada Cultural Resources Information System (NVCRIS) Database was conducted by Atkins Global on August 11, 2014, to identify any cultural resources within or near the project site. The records search included review of NVCRIS 1:24,000 Topographic quadrangle maps, compiling a list of previously submitted reports pertaining to the project site and a surrounding 1-mile buffer, and a review of historical maps of the area. Atkins archaeologists also reviewed reports in Reclamation's archives at the Regional Office in Boulder City. A Class III cultural resources pedestrian survey was conducted on August 14, 2014. All areas of the APE were surveyed with transects spaced no greater than 15-meters apart.

The new R10A access road right-of-way goes through a portion of a known historic era archaeological site known as the Squatters Camp (26CK1169) (Figure 2 enclosed). Site 26CK1169 is eligible for listing on the National Register of Historic Places under Criteria "A" and "D". The site has been subject to multiple mitigation efforts for previously constructed utilities (power transmission lines, water and gas pipelines and development projects (Nevada State College, the Boulder City Branch Railroad Loop). The most recent mitigation work for the site was conducted for the US Highway 95 Boulder City By-Pass Project in accordance Section 3.A. of the Boulder City By-Pass Programmatic Agreement (2003). The construction of the access road is in/adjacent to Locus 14 of the site. During the survey some artifacts associated with Locus 14 were observed in the route of the access road. The main part of the locus is to the east and out of the route. Locus 14 was subject to a Phase III data recovery excavation as part of the resolution of adverse effects to the site.

As a connected action to the construction of the Boulder City By-Pass Project the effect to 26CK1169 resulting from the construction of the tank facility access road is subsumed in the mitigation and data recovery completed for the Boulder City By-Pass Project. A small portion of the R10A water tank APE is located within the southeastern boundary of 26CK1169. There are no artifacts or features belonging to the site in this portion of the APE. Therefore, Reclamation is consulting under a finding of No Adverse Effect for the construction of the water tank and pumping facility.

Should you have questions concerning this submission, please contact Mr. James Kangas, Archaeologist, at 702-293-8392 or [jkangas@usbr.gov](mailto:jkangas@usbr.gov).

Sincerely,  
  
For Valerie E. Simon  
Chief, Resources Management Office

Enclosures-3

Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.

On January 23, 2015 Reclamation initiated a consultation regarding our finding of no adverse effect for direct effects resulting from the City of Henderson R10A Water Tank and Pump House Installation (Undertaking). To new facilities, a water tank (35 feet high by 135 feet diameter) and a pump building (65 feet long by 35 feet wide) are will be constructed on an existing earthen pad next to an existing tank on the foot print of a former tank that was removed in the 1980s. The new tank will be located north of the existing tank. The new pump house will be located between the tanks on the east side of the pad. The new facilities will be painted a color to match surrounding environment (tan and brown). On February 27, 2015 Reclamation received a request from your office for an assessment of potential indirect effects from the Undertaking. Reclamation has compiled the information below in response with your request.

**Description of the Project Area of Indirect Effect**

The project area of indirect potential effect (IDAPE) lies at the foot of the west slope of the River Mountains approximately 4,000 feet north of Railroad Pass in Clark County, Nevada. Railroad Pass is a gap through a topographic constriction formed by the southern extent of the River Mountains and the northern extent of the McCullough Mountains. The IDAPE is a 1149.6 acre area roughly bound by the topography of the River Mountains to the east where elevations range between 2450 and 3789 feet (summit of River Mountain Peak); Railroad Pass near the southern terminus (2,300 feet elevation); the northern extent of the McCullough Mountains near the southwestern terminus (2,200 feet elevation); to the west at the intersection of the US Highway 95 (US 95) and Nevada State Drive intersection (2,200 feet elevation); and to the north at the River Mountain Loop Trailhead at the end of Equestrian Drive (2,200 feet elevation). The IDAPE includes portions of Township 22 South, Range 63 East, Sections 26, 27, and 28 (Henderson, NV Quad), and Township 22 South, Range 63 East, Sections 3 and Township 23 South, Range 63 East, Sections 3 and 2 (Boulder City, NV Quad) (see Figure 1).

**Method and Result of Identification of Historic Properties in the IDAPE**

The method used to determine the IDAPE was based on an examination of topographic maps and aerial photos. Elevations between 2,200 and 2,300 feet were established as the threshold where the elevation combined with sight distance influence the visibility of the exiting tank. Within this area changes in elevation, aspect, and topography further influence the visibility of the IDAPE. The natural terrain and vegetation of the bajada at the base of the River Mountains dominates the visual landscape of the eastern and northern sides of the indirect APE. The visual landscape of the west and southern sides of the IDAPE are characteristic by suburban development, commerce, quarry operations, transportation, and energy development projects. Field visits were made to further establish extent of the IDAPE using the existing tank as a focal point to judge visibility. Photographs were taken at the southern, southwestern, western, and northern extent of the IDAPE (see Figures 2 and 3). Due to the close proximity of the IDAPE to the River Mountains the visibility of eastern IDAPE is restricted topography and it was not photographed.

A file and record search indicates that nine cultural resource sites are located in the indirect APE. These are summarized in the table below.

Site/Resource Number	Site/Resource Name	NRHP Eligibility	Comments
26CK1169	Squatters Camp	NRHP Eligible-Criteria "A" and "D"	The direct APE is within a small area of the site, and

Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.

			a larger part of the site is in the IDAPE.
26CK5155	Prehistoric Lithic Scatter	Not Eligible	
26CK5161	Historic Glass Scatter	Not Eligible	
26CK5162H	Historic Debris Scatter	Not Eligible	
26CK5259	Historic Dump	Not Eligible	
26CK5260	Hemenway Wash Road	Not Eligible	Remains of a gravel surface road
26CK5411	Prehistoric Lithic Scatter	Not Eligible	
26CK5414/S330	Boulder City Branch Railroad	NRHP Eligible-Criterion "A"	SHPO concurrence on determination of eligibility made on 12/3/1996
26CK6251/S329	Hoover-Basic South Electric Transmission Line	NRHP Eligible-Criterion "A"	Renamed the Mead-Amagosa Line. The majority of the transmission line in the IDAPE is non-contributing.

**Finding of Indirect Effect for the Undertaking**

Sites 26CK1169, 26CK5155, 26CK5161, 26CK5162H, 26CK5259, 26CK5411, and 26CK5260 are previously identified archaeological sites in the IDAPE. Reclamation files indicate that 26CK5155, 26CK5161, 26CK5162H, 26CK5259, 26CK5411, and 26CK5260 are not NRHP eligible properties. None of these sites have elements of integrity that would cause them to be affected by the undertaking.

Site 26CK1169 is NRHP eligible under Criteria "A" and "D". Criterion "A" for its association with the building of Hoover Dam and World War II war efforts, and Criterion "D" for its ability to produce archaeological evidence of site use, settlement patterns, and standards of living. The majority of 26CK1169 is in the IDAPE and a small portion of the site is in the direct APE. Reclamation has considered the undertaking's potential to produce indirect adverse effects to the ability of the site to convey association and meet Criterion "A" and yield information important to history (Criterion "D") and finds that the indirect effects of the undertaking will not be adverse.

Architectural resources 26CK5414/S330 (Boulder City Branch Railroad) and 26CK6251/S329 (Hoover-Basic electric transmission line) are engineered structures. Structure 26CK5414/S330 has been determined to be NRHP eligible under Criterion "A" due to its association with the construction of Hoover Dam and Boulder City, NV. The new tank will be installed approximately ¼ to ½ mile to the northeast of the track and will be visible from there. The railroad crosses US 95, then goes south through Railroad Pass to a depot in Boulder City, NV. The segment of the track between Boulder City and US95 is currently used by a tourist train. This segment is out of the IDAPE because the tank is not visible from this direction. Reclamation has considered the undertaking's potential to produce indirect adverse effects



Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.

to the elements of integrity that allow 26CK5414/S330 to convey association with the construction of Hoover Dam and Boulder City and finds that the indirect effects of the undertaking will not be adverse.

Structure 26CK6261/329 is an electrical transmission line that runs between Hoover Dam to the Basic Magnesium Plant in Henderson, NV. The electrical transmission line has both a contributing segment that is approximately 3/4 mile long and a 2.8 mile long segment that is non-contributing in the IDAPE. The contributing segment is NRHP eligible under Criterion "A" for its association with Hoover Dam and the World War II operation of the Basic Magnesium Plant. Reclamation has considered the undertaking's potential to produce indirect adverse effects to the contributing segment of 26CK6251/S329 in the IDAPE that convey association with Hoover Dam and the World War II operation of the Basic Magnesium Plant and finds that the indirect effects of the undertaking will not be adverse.

In summary, Reclamation is consulting on our overall finding that indirect effects from the undertaking will not be adverse to 26CK1169, 26CK6251/S329 and 26CK5414/S330.

Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.

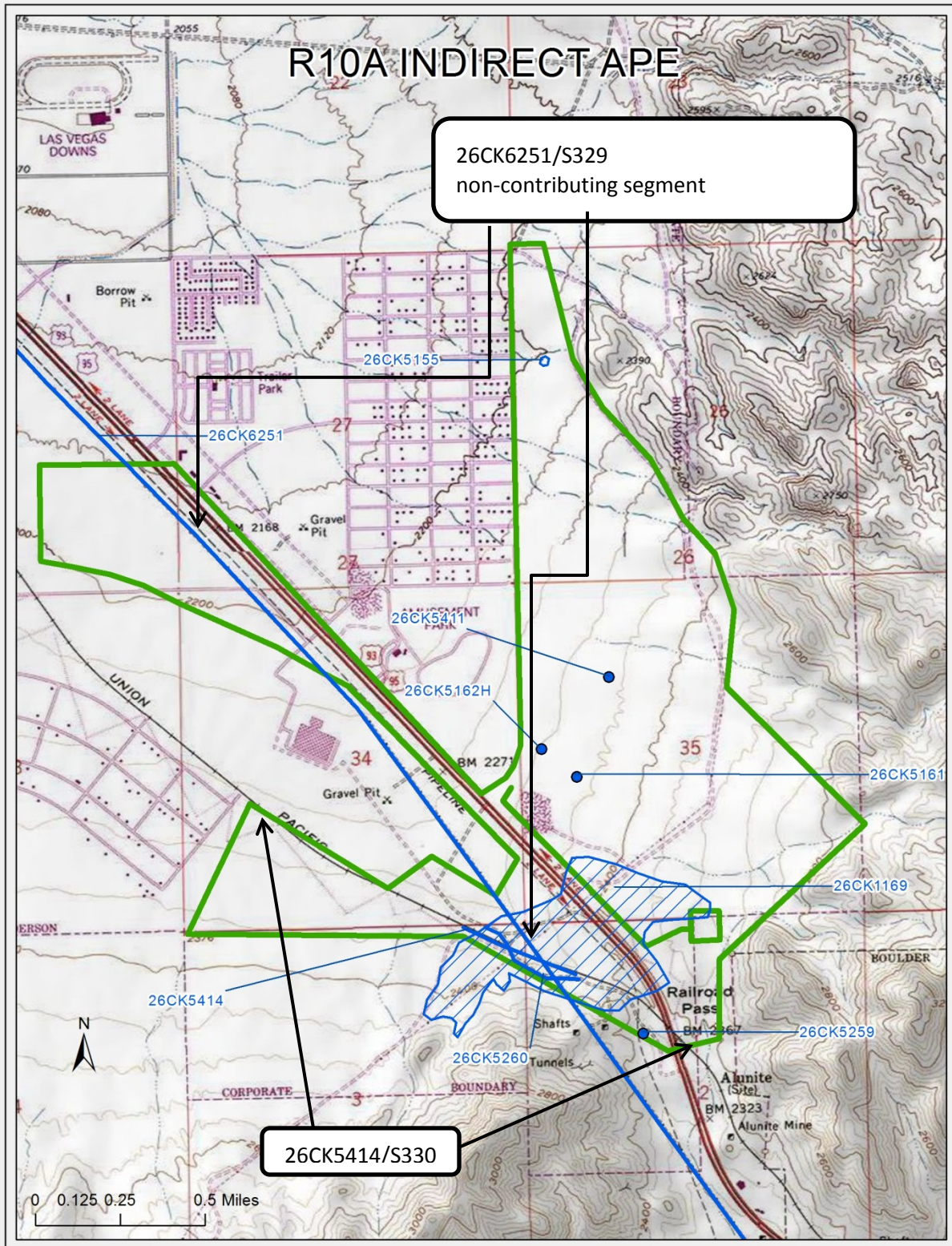


Figure 1. USGS rendition of the Henderson and Boulder City NW quads showing the location of cultural resources and engineered structures in the Indirect APE.



Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.

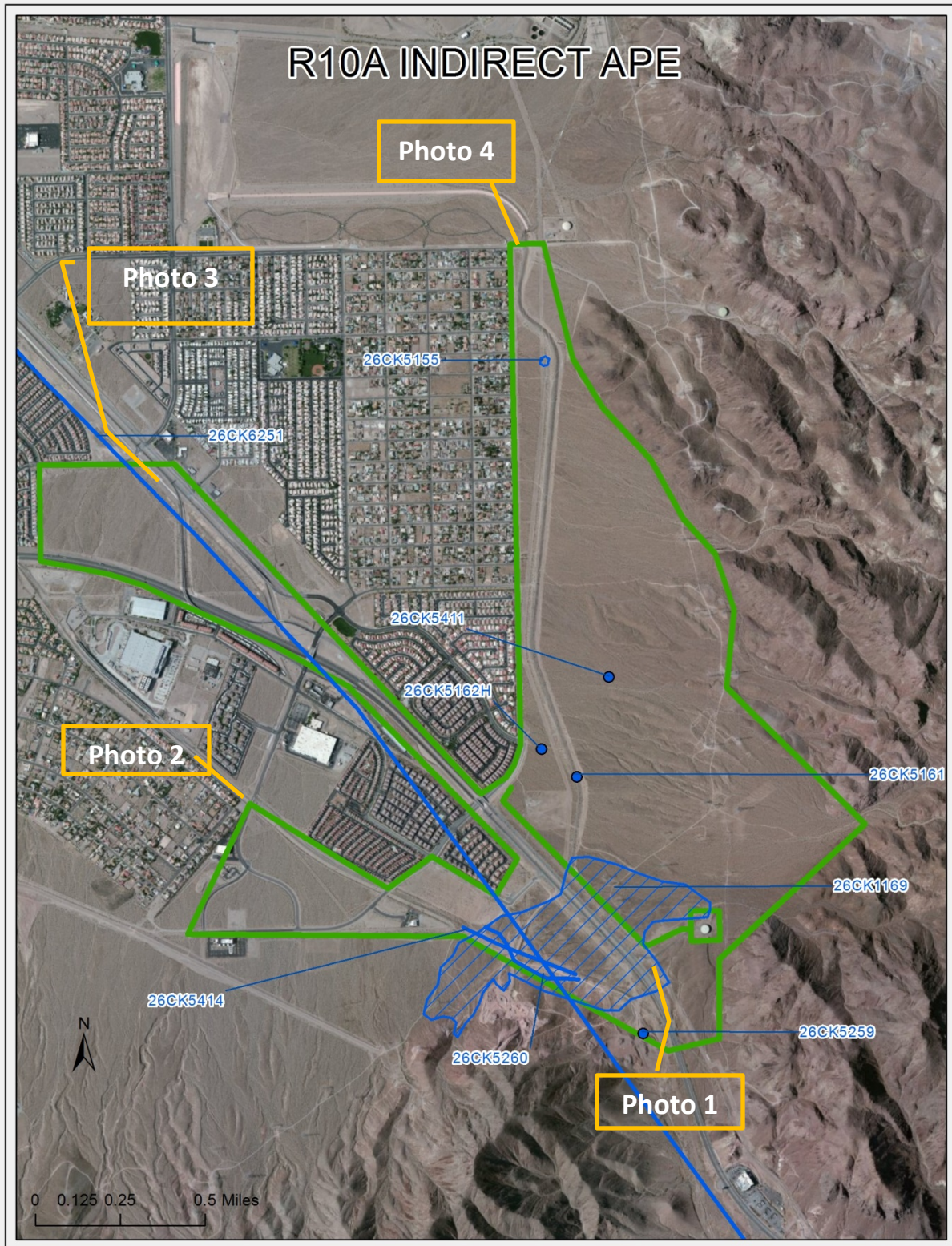


Figure 2. Aerial photograph showing the location of cultural resources in the Indirect APE and the photographs taken in Figure 3.



Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.



Figure 3, Photo 1. View to the north of the existing water tank at R10A direct APE from southern extent of the indirect APE. Photo was taken north of Railroad Pass along US Highway 95. See Figures 1 and 2 for the photo point location.



Figure 3, Photo 2. View to the east of the existing water tank at R10A direct APE from the southwest extent of the indirect APE. Photo was taken at the intersection of Compassion Street and end of East Paradise Hills Dr. See Figures 1 and 2 for the photo point location.



Assessment of Indirect Effects to 26CK1169, and 26CK6251/S329 and 26CK5414/S330 in the City of Henderson R10A Tank Project Area.



Figure 3, Photo 3. View to the west of the existing water tank at R10A direct APE from the western extent of the indirect APE. Photo was taken at the intersection of Nevada State Dr. and the US Highway 95 frontage road. See Figures 1 and 2 for the photo point location.



Figure 3, Photo 4. View to the south of the existing water tank at R10A direct APE from the northern extent of the indirect APE. Photo was taken at the trial head for the River Mountain Loop Trail at the end of Equestrian Dr. See Figures 1 and 2 for the photo point location.

# **Appendix C- Biological Opinion**



# United States Department of the Interior

BUREAU OF RECLAMATION  
Lower Colorado Regional Office  
P.O. Box 61470  
Boulder City, NV 89006-1470

IN REPLY REFER TO:

LC-2621  
ENV-7.00

DEC 22 2014

## MEMORANDUM

To: State Supervisor, U.S. Fish and Wildlife Service, Nevada Fish and Wildlife Office  
1340 Financial Blvd., Ste. 234, Reno, NV 89502

From: Valerie E. Simon *For [Signature]*  
Chief, Resources Management Office

Subject: Request to Initiate Formal Consultation for the City of Henderson R-10/R-10A  
Reservoir Site (Consultation Tracking No. 08ENVVD00-2014-SLI-0375)

The Bureau of Reclamation is processing a right-of-way for the City of Henderson to expand the R-10/R10A Reservoir site on Reclamation managed lands located in Clark County, Nevada. This letter contains the Biological Assessment addressing the potential impacts from construction, operation, and maintenance of the project on federally listed species in the area.

With this submission, we are requesting initiation of Formal Consultation under Section 7(a) of the Endangered Species Act of 1973, as amended. Reclamation has determined the impacts from the project will result in a *may affect, likely to adversely affect* determination for the Mojave population of the desert tortoise (*Gopherus agassizii*). No other listed species will be impacted by the project and no designated critical habitat occurs in the action area.

If you have questions, please contact Mrs. Jessica Stegmeier, Natural Resource Specialist, at 702-293-8258 or [jstegmeier@usbr.gov](mailto:jstegmeier@usbr.gov).

Attachment

cc: Wildlife Biologist, U.S. Fish and Wildlife Service, Southern Nevada Field Office,  
4701 N. Torrey Pines Dr., Las Vegas, NV 89130  
Attn: Mr. Michael Burroughs ([michael\\_burroughs@fws.gov](mailto:michael_burroughs@fws.gov))  
(via email only)



# United States Department of the Interior



**FISH AND WILDLIFE SERVICE**  
Southern Nevada Fish and Wildlife Office  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130  
Ph: (702) 515-5230 ~ Fax: (702) 515-5231

June 22, 2015  
File No. 84320-2015-F-0166

## Memorandum

**To:** Chief, Resources Management Office, Bureau of Reclamation, Lower Colorado Regional Office, Boulder City, Nevada

**From:** Field Supervisor, Southern Nevada Fish and Wildlife Office, Las Vegas, Nevada


**Subject:** Biological Opinion for the City of Henderson R-10/R-10A Reservoir Site Right-of-Way, Clark County, Nevada

This memorandum transmits the Fish and Wildlife Service's (Service) biological opinion based on our review of the subject project and possible adverse effects on the Mojave desert tortoise (*Gopherus agassizii*), a species listed as threatened under the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*). No critical habitat will be affected by the proposed action.

The attached biological opinion was prepared in response to your request for formal consultation dated December 22, 2014, and in accordance with the Act and 50 CFR § 402 of our interagency regulations governing section 7 of the Act. This biological opinion is based on information provided in your letter and attachments received on January 2, 2015; emails and discussions between the Bureau of Reclamation and the Service; and our files. A complete project file is available in the Service's Southern Nevada Fish and Wildlife Office in Las Vegas.

If we can be of further assistance regarding this consultation, please contact Jeri Krueger in the Reno Fish and Wildlife Office at (775) 861-6300. Please reference the above file number in future correspondence concerning this consultation.

Sincerely,

  
Michael J. Senh

Attachment

cc:  
Supervisory Biologist - Habitat, Nevada Department of Wildlife, Las Vegas, Nevada

MR. DEPARTMENT OF THE INTERIOR RECEIVED		
REPLY DTD	6/26/15	
DATE	INITIALS	CASE
6/24/15	ASPM	2000
6/24/15	MM	2600
6/26/15	FS	2620
CLASSIFICATION		
PROJECT	FC007-0615	
CONTRACT		
FORM NO.		
REV.		



## ATTACHMENT

# BIOLOGICAL OPINION

### A. CONSULTATION HISTORY

On January 2, 2015, the Fish and Wildlife Service (Service) received a request from the Bureau of Reclamation (Reclamation) for formal consultation on anticipated adverse effects to the Mojave desert tortoise (*Gopherus agassizii*) from a proposed issuance of a right-of-way (ROW) to the City of Henderson (City) to expand the R-10/R-10A Reservoir site on Reclamation managed lands located in Clark County, Nevada.

We initiated formal consultation for the proposed project on January 2, 2015.

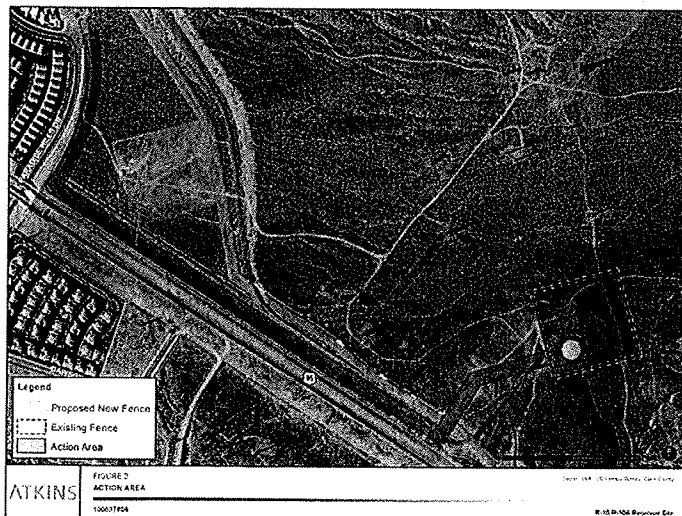
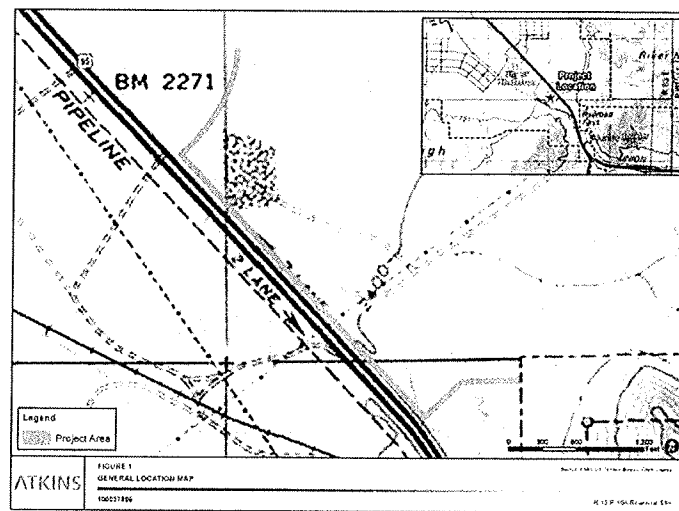
### B. DESCRIPTION OF THE PROPOSED ACTION

The City is planning additional improvements at the R-10 Reservoir site, including construction of a second three million-gallon reservoir (R-10A) to allow for rehabilitation of the existing three million-gallon tank, provide increased storage capacity in the 2500 Pressure Zone, and provide for a future water pumping station. The project will include site grading, site piping, access road, potable water reservoir, reservoir appurtenances, pumping station building, surge tank, trihalomethane mitigation, cathodic protection, instrumentation, controls, and roof mounted solar panels to operate limited instrumentation, site lighting, and mixing prior to availability of permanent power (City 2014).

The R-10/R-10A tank site is located east of US-93/95, approximately 4,000 feet north of the Railroad Pass Casino on lands administered by Reclamation within Clark County, Nevada. The proposed action occurs on the Nevada, Boulder City Northwest topographic quadrangle in Township 22 south, Range 63 east, Sections 34 and 35, and Township 23 south, Range 63 east, Section 02 (Figure 1). The proposed access road will proceed from the existing intersection of East Paradise Hills Drive and Old Vegas Trail, southwest along East Paradise Hills Drive to the Nevada Department of Transportation (NDOT) ROW for US-93/95 where the City holds an occupancy permit for an existing pipeline, then continue southeast within the US-93/95 ROW to the location where the existing City pipeline turns northeast crossing over the River Mountain Trail and finally connecting with the existing reservoir (Figure 2).

The City has submitted a ROW application to Reclamation for improvements to the potable water storage and transmission system situated about 0.75 mile southeast of the City. Improvements will include: (1) modifications to the existing City R-10 reservoir that connects to

a City 18-inch water line, (2) construction of a second three million gallon reservoir (R-10A), (3) expansion of the existing tank site to accommodate the new reservoir, and (4) installation of a new 12-foot wide access road that will extend about 6,000 linear feet from the intersection of East Paradise Hills Drive and Old Vegas Trail to the reservoir site (City 2014). Construction is planned to occur during a single year between June 2015 and June 2016. The facilities are expected to be in use or operation in perpetuity following construction. Operations and maintenance activities will involve accessing the site about once per month to check levels on the tanks and instrumentation located within the fenced and gated facility.



A total of 11.5 acres is being requested by the City for this project in the ROW application. Based on aerial photos and site visits, about sixty percent (or 5.5 acres) of the proposed ROW has been previously disturbed by the existing facility. The remaining 6.0 acres of new disturbance includes area for the proposed 12-foot wide access road, a 50-foot buffer surrounding the new road to accommodate construction activities, and the new tank site. In order to include areas potentially affected indirectly by the project, the action area includes the area anticipated for new disturbance, the existing tank site and immediate surrounding area, and an approximate 100-foot wide buffer area extending from the proposed access road.

The proposed action sequence of events is planned as follows:

- a) Obtain permits and order materials.
- b) "Call-Before-You-Dig" and identify all existing underground utilities prior to excavation.
- c) Perform site clearance surveys for desert tortoise and/or other identified resources.
- d) On-site tortoise monitor, as necessary depending on time of year, until the new perimeter fence and gate are installed with desert tortoise exclusion fencing.
- e) Perform site grading and access road grading activities; prepare site for new tank foundation.
- f) Construct onsite piping and tank foundation.
- g) Construct water tank and appurtenances; perform hydrostatic testing and disinfection.
- h) Complete site improvements, including fencing, paving, power, instrumentation, and lighting.
- i) Replace plant material and soils removed during construction in accordance with Federal requirements.

Equipment used during construction will include backhoes, cranes, mechanical compactor, paving machine, water trucks, and material delivery trucks. The minimum equipment necessary to complete the project will be utilized during construction. Staging and laydown areas will be clearly marked onsite and limited to areas with barriers, such as exclusion fencing, to desert tortoise movement. Access to the site is provided by existing paved roads. Once the facilities are constructed, they will be operated and maintained in perpetuity, in accordance with the best management practices of the City.

### **Proposed Measures to Minimize the Potential Effects of the Action**

Reclamation proposes to minimize potential adverse effects to desert tortoise from the proposed action by implementing the following conservation measures.

1. Desert tortoise education program – A desert tortoise education program shall be presented to all personnel on site during construction activities by an agency or authorized desert tortoise biologist. The Service, Reclamation, and appropriate state agencies shall approve the program. At a minimum, the program shall cover desert-specific Leave-No-Trace guidelines, the distribution of desert tortoises, general behavior and ecology of this species, sensitivity to human activities, threats including introduction of exotic plants and animals, legal protection, penalties for violation of State and Federal

laws, reporting requirements, and project measures in this biological opinion. All field workers shall be instructed that activities must be confined to locations within the approved areas and their obligation to walk around and check underneath vehicles and equipment before moving them (or be cleared by an authorized desert tortoise biologist). In addition, the program shall include fire prevention measures to be implemented by employees during project activities. The program shall instruct participants to report all observations of desert tortoise and their sign during construction activities to the Field Contact Representative (FCR) and authorized desert tortoise biologist.

2. Field Contact Representative – Reclamation shall ensure a FCR (also called a Compliance Inspection Contractor) is generally designated for each contiguous stretch of construction activity for linear projects or isolated work areas for non-linear projects. The FCR will serve as an agent of Reclamation and the Service to ensure that all instances of non-compliance or incidental take are reported. Reclamation has discretion over approval of potential FCRs; however, those who also may be acting as authorized desert tortoise biologists must also be approved by the Service. All FCRs will report directly to Reclamation and the Service.

The FCR, authorized desert tortoise biologist, and monitors shall have a copy of all stipulations when work is being conducted on the site and will be responsible for overseeing compliance with terms and conditions of the ROW grant, including those for listed species. Reclamation shall ensure the FCR and authorized desert tortoise biologists have authority to halt any activity that is in violation of the stipulations. The FCR shall be on site year-round during all project activities.

Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of the FCR.

3. Authorized desert tortoise biologist – All authorized desert tortoise biologists (and monitors) are agents of Reclamation and the Service and shall report directly to Reclamation and the proponent concurrently regarding all compliance issues and take of desert tortoises; this includes all draft and final reports of non-compliance or take. The initial draft report shall be provided to Reclamation and the Service within 24 hours of the observation of take or non-compliance.

An authorized desert tortoise biologist will be assigned to each piece/group of large equipment engaged in activities that may result in take of desert tortoise (e.g., clearing, blasting, grading, lowering in pipe, hydrostatic testing, backfilling, recontouring, and reclamation activities) and other work areas that pose a risk to tortoises. Reclamation may use their discretion to require a monitor (on-site or on-call) instead of an authorized desert tortoise biologist to monitor equipment that is low risk to tortoises, within tortoise proof fenced areas cleared of tortoise, or during the inactive season.

An authorized desert tortoise biologist will serve as a mentor to train desert tortoise monitors and will approve monitors if required. An authorized desert tortoise biologist is responsible for errors committed by desert tortoise monitors.

An authorized desert tortoise biologist shall record each observation of desert tortoise handled in the tortoise monitoring reports. Information will include the following: location (GPS), date and time of observation, whether the desert tortoise was handled, general health and whether it voided its bladder, location desert tortoise was moved from and location moved to, unique physical characteristics of each tortoise, and effectiveness and compliance with the desert tortoise protection measures. This information will be provided directly to Reclamation and the Service.

4. Desert tortoise monitor – Desert tortoise monitors assist an authorized desert tortoise biologist during surveys and serve as apprentices to acquire experience. Desert tortoise monitors ensure proper implementation of protective measures, and record and report desert tortoises and sign observations in accordance with Term and Condition 2. They will report incidents of non-compliance to the authorized desert tortoise biologist or FCR. No monitors shall be on the project site unless supervised by an authorized desert tortoise biologist or approved by the Reclamation.

If a desert tortoise is immediately in harm's way (e.g., certain to immediately be crushed by equipment), desert tortoise monitors may move the desert tortoise then place it in a designated safe area until an authorized desert tortoise biologist assumes care of the animal.

Desert tortoise monitors may not conduct field or clearance surveys or other specialized duties of an authorized desert tortoise biologist unless directly supervised by an authorized desert tortoise biologist or approved to do so by the Service; "directly supervised" means an authorized desert tortoise biologist has direct sight and voice contact with the desert tortoise monitor (i.e., within approximately 200 ft of each other).

Within 3 days of employment or assignment, the project proponent and Reclamation shall provide the Service with the names of desert tortoise monitors who would assist an authorized desert tortoise biologist.

5. Vehicle travel – Project personnel shall exercise vigilance when commuting to the project area to minimize risk for inadvertent injury or mortality of all wildlife species encountered on paved and unpaved roads leading to and from the project site. Speed limits will be clearly marked, and all workers will be made aware of these limits. On-site, personnel shall carpool to the greatest extent possible.

During the desert tortoise less-active season (generally November through February), vehicle speed on project-related access roads and in the work area will not exceed 25 mph. All vehicles and construction equipment will be tightly grouped. During the more active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, vehicle speed on project-related access roads and in the work area will not exceed 15 mph. All vehicles and construction equipment will operate in groups of no more than three vehicles. An authorized desert tortoise biologist and desert tortoise monitor will escort or clear ahead of vehicles and

equipment for ROW travel. The escort will be on foot and clear the area of tortoises in front of each traveling construction equipment group (see desert tortoise clearance). The escort will use a recreational vehicle with ground visibility (e.g., UTV); however, at least one authorized desert tortoise biologist and one desert tortoise monitor must ride together and survey both sides of the vehicle. The speed/pace will be determined by an authorized desert tortoise biologist and shall be slow enough to ensure adequate inspection.

New access and spur road locations will be sited to avoid potentially active tortoise burrows to the maximum extent practicable.

6. Unauthorized access – Reclamation shall ensure that unauthorized personnel, including the public and off-duty project personnel, do not travel on project-related temporary access roads, to the greatest extent practicable.

During the more-active season (generally March through October), and if temperatures are above 60 but below 95° F for more than 7 consecutive days, project- and non-project-related activities on all access roads that intersect the ROW will be monitored and logged. During construction, the ROW will be fenced at public roads that intersect the ROW. Signs will say that access on the ROW is strictly prohibited except by authorized personnel and that violators will be prosecuted.

7. Desert tortoise clearance – Prior to surface-disturbing activities, authorized desert tortoise biologists potentially assisted by desert tortoise monitors, shall conduct a clearance survey to locate and remove all desert tortoises from harm's way including areas to be disturbed using techniques that provide full coverage of all areas (Service 2009). During the more-active season, clearance surveys will be conducted either the day prior to, or the day of, any surface-disturbing activity. During the less-active season, clearance surveys will be conducted within 7 days prior to any surface-disturbing activity. No surface-disturbing activities shall begin until two consecutive surveys yield no individuals.

An authorized biologist shall excavate all burrows that have characteristics of potentially containing desert tortoises in the area to be disturbed with the goal of locating and removing all desert tortoises and desert tortoise eggs. During clearance surveys, all handling of desert tortoises and their eggs and excavation of burrows shall be conducted solely by an authorized desert tortoise biologist in accordance with the most current Service-approved guidance (currently Service 2009). If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action.

Unoccupied burrows shall be collapsed or blocked to prevent desert tortoise entry.

Outside construction work areas, all potential desert tortoise burrows and pallets within 50 ft of the edge of the construction work area shall be flagged. If the burrow is occupied by a desert tortoise during the less-active season, the tortoise shall be temporarily penned (see Conservation Measure 10). No stakes or flagging shall be placed on the berm or in the opening of a desert tortoise burrow. Desert tortoise burrows shall not be marked in a manner that facilitates poaching. Avoidance flagging shall be designed to be easily distinguished from access route or other flagging, and shall be designed in consultation

with experienced construction personnel and authorized biologists. All flagging shall be removed following construction activities.

An authorized desert tortoise biologist will inspect areas to be backfilled immediately prior to backfilling.

8. Desert tortoise in harm's way – Any project-related activity that may endanger a desert tortoise shall cease if a desert tortoise is found on the project site. Project activities may resume after an authorized desert tortoise biologist or desert tortoise monitor removes the desert tortoise from danger or after the desert tortoise has moved to a safe area on its own.

During the more-active season and if temperatures are above 60 but below 95° F for more than 7 consecutive days, at least 1 monitor shall be assigned to observe spoil piles prior to excavation and covering.

9. Handling of desert tortoises – Desert tortoises shall only be moved by an authorized desert tortoise biologist or desert tortoise monitor solely for the purpose of moving the tortoises out of harm's way. During construction, operation, and maintenance, an authorized desert tortoise biologist shall pen, capture, handle, and relocate desert tortoises from harm's way as appropriate and in accordance with the most current Service approved guidance. No tortoise shall be handled by more than one person. Each tortoise handled will be given a unique number, photographed, and the biologist will record all relevant data on the Desert Tortoise Handling and Take Report (Attachment A) to be provided to Reclamation and the Service in accordance with the project reporting requirements.

Desert tortoises that occur aboveground and need to be moved from harm's way shall be placed in the shade of a shrub, 150 to 1,640 ft from the point of encounter. In situations where desert tortoises must be moved more than 1,640 ft (500 m), translocation procedures may be required. Translocation would likely result in a level of effect to the desert tortoise that would require the appended procedures.

If desert tortoises need to be moved at a time of day when ambient temperatures could harm them (less than 40°F or greater than 95°F), they shall be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes shall be discarded after one use and never hold more than one tortoise. If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action.

Desert tortoises located in the project area sheltering in a burrow during the less active season may be temporarily penned in accordance with Conservation Measure 10 at the discretion of an authorized desert tortoise biologist. Desert tortoises should not be penned in areas of moderate to heavy public use; rather they should be moved from

harm's way in accordance with the most current Service-approved guidance (currently Service 2009).

Desert tortoises shall be handled in accordance with the Desert Tortoise Field Manual (Service 2009). Equipment or materials that contact desert tortoises (including shirts and pants) shall be sterilized, disposed of, or changed before contacting another tortoise to prevent the spread of disease. All tortoises shall be handled using disposable surgical gloves and the gloves shall be disposed of after handling each tortoise. An authorized desert tortoise biologist shall document each tortoise handling by completing the Desert Tortoise Handling and Take Report.

10. Penning – Penning shall be accomplished by installing a circular fence, approximately 20 ft in diameter to enclose and surround the tortoise burrow. The pen should be constructed with 1-inch horizontal by 2-inch vertical, galvanized welded wire. Steel T-posts or rebar should be placed every 5 to 6 ft to support the pen material. Pen material will extend 18 to 24 inches aboveground. The bottom of the enclosure will be buried 6 to 12 inches or bent towards the burrow, have soil mounded along the base, and other measures implemented to ensure zero ground clearance. Care shall be taken to minimize visibility of the pen by the public. An authorized desert tortoise biologist or desert tortoise monitor shall check the pen at a frequency to ensure that the desert tortoise is secure and not stressed. No desert tortoise shall be penned for more than 48 hours without written approval by the Service. Because this is a new technique, all instances of penning or issues associated with penning shall be reported to the Service within 3 days.
11. Temporary tortoise-proof fencing – All construction areas, including open pipeline trenches, hydrostatic testing locations, and tie-in work shall be fenced with temporary tortoise-proof fencing (e.g., silt fencing) or inspected by an authorized desert tortoise biologist periodically throughout and at the end of the day and immediately the next morning. Reclamation and the Service will determine the appropriate length of open trench that will be allowed on the project.

Fencing will be designed in a manner that reduces the potential for desert tortoises and hatchlings to access the construction areas. Thus, the lower 6 to 12 inches of fencing will be folded outward (i.e., away from the construction area and towards the direction a tortoise would approach the work area), and covered with sufficient amount of soil, rocks, and staking to maintain zero ground clearance and secure the bottom section of material. An authorized desert tortoise biologist will check the integrity of the fencing every 2 hours and ensure that there are no breaches in the fencing and no desert tortoises pacing the fence. After the fencing is erected and secure, the inside will be cleared by an authorized desert tortoise biologist. The fencing must remain closed during any construction activities.

12. Permanent tortoise-proof fencing – The limits of construction will be clearly marked or flagged prior to development. All major construction activities and staging areas will be located within exclusion fencing to prevent desert tortoise movement into an active construction zone. Tortoise-proof fencing shall be installed around the boundary of



permanent aboveground facilities that require regular monitoring and maintenance and other areas as directed by Reclamation or Service. Temporary desert tortoise fencing will be installed along the proposed new access road where US-93/95 does not create a barrier to tortoise movement. Fence specifications will be consistent with those approved by the Service (Service 2009). Tortoise guards shall be placed at all road access points where desert tortoise-proof fencing is interrupted and a gate is not adequate. Gates shall provide minimal ground clearance and deter ingress by desert tortoises. Permanent tortoise-proof fencing along the project area shall be appropriately constructed, monitored, and maintained. Fencing shall be inspected in accordance with the table below and reports prepared in accordance with Term and Condition 2.b. unless modified by the Service. Monitoring and maintenance shall include regular removal of trash and sediment accumulation and restoration of zero ground clearance between the ground and the bottom of the fence, including re-covering the bent portion of the fence if not buried.

Condition	Minimum Requirements
First week following installation; tortoises active	Inspect fence perimeter, tortoise guards, and gates twice per day, timed to occur when tortoises may be pacing the fenceline.
First week following fence installation; tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises active	Inspect fence perimeter, tortoise guards, and gates once per day.
Beginning the second week following fence construction, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates once per month.
Following major storm event, tortoises active	Inspect fence perimeter, tortoise guards, and gates within 48 hours.
Following major storm event, tortoises inactive	Inspect fence perimeter, tortoise guards, and gates within 72 hours.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises active	Repair within 48 hours of breach occurrence.
Breach in fence observed, tortoise guard or gate requires maintenance, tortoises inactive	Repair within 1 week of breach occurrence.

13. Dust control – Water applied for dust control shall not be allowed to pool outside desert-tortoise fenced areas, as this can attract desert tortoises. Similarly, leaks on water trucks and water tanks will be repaired to prevent pooling water. An authorized desert tortoise biologist will be assigned to patrol each area being watered immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises if conditions favor tortoise activity.
  
14. Litter control – A litter control program shall be implemented to reduce the attractiveness of the area to opportunistic predators such as desert kit foxes, coyotes, and common ravens. Trash and food items will be disposed of properly in predator-proof containers with predator-proof lids. Trash containers will be emptied and construction waste will be removed daily from the project area and disposed of in an approved landfill.

15. Minimizing new disturbance – Cross-country travel outside designated areas shall be prohibited. All equipment, vehicles, and construction materials shall be restricted to the designated areas and new disturbance will be restricted to the minimum necessary to complete the task (e.g., such as construction of one-lane access roads with passing turnouts every mile rather than a wider two-lane road). All work area boundaries shall be conspicuously staked, flagged, or otherwise marked to minimize surface disturbance activities.
16. To minimize destruction of desert tortoise habitat, such as soil compaction, erosion, or crushed vegetation, due to construction and maintenance activities:

All equipment, vehicles, and construction materials will remain within designated areas. Staging areas will be located in previously disturbed areas whenever possible.

Desert soil, rocks, and plants will be salvaged during construction to restore any temporarily disturbed areas. Disturbed sites will be scarified and recontoured; desert soil and large rocks will be replaced. Revegetation of disturbed areas will be initiated immediately following construction activities.

Prior to the onset of construction activities, the City will pay remuneration fees for compensation of 6.0 acres of desert tortoise habitat loss.

### **C. ANALYTICAL FRAMEWORK FOR THE SERVICE’S DETERMINATIONS**

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species.

“Jeopardize the continued existence of” means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR § 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed Federal action, and any cumulative effects, on the range-wide survival and recovery of the desert tortoise. It relies on four components: (1) the Status of the Species, which describes the range-wide condition of the desert tortoise, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the desert tortoise in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the desert tortoise; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the desert tortoise; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities in the action area on the desert tortoise.

## **D. STATUS OF THE SPECIES RANGE-WIDE**

The range-wide status of the desert tortoise consists of information on its listing history, species account, recovery plan, recovery units, distribution, reproduction, and numbers. Because of the length of the document, the current range-wide status of the species and its critical habitat is provided on the Service's website at:

[http://www.fws.gov/nevada/desert\\_tortoise/documents/misc/status-desert-tortoise.pdf](http://www.fws.gov/nevada/desert_tortoise/documents/misc/status-desert-tortoise.pdf).

If unavailable on this web site, contact the Southern Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230, and provide File No. 84320-2014-F-0117 along with the date of February 10, 2014.

## **E. ENVIRONMENTAL BASELINE**

The action area is defined as all areas to be affected directly or indirectly by the Federal action including interrelated and interdependent actions, and not merely the immediate area involved in the action (50 CFR § 402.02). Subsequent analyses of the environmental baseline, effects of the action, cumulative effects, and levels of incidental take are based upon the action area as determined by the Service.

The action area for this project is defined as the 11.5-acre area requested in the right-of-way application, including the new tank site, the new access road, the 50-foot buffer surrounding the new road, the existing tank site and immediate surrounding area, and 1,640 feet (500 meters) surrounding the project limits to the east of the highway where displaced tortoises may be released or where tortoises may travel from and occur in work areas.

Habitat within the action area consists primarily of sparse Mojave desert scrub dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). The creosote-white bursage desert scrub typically occurs on well-drained sandy flats and bajadas throughout most of the Mojave Desert from 150 to 1,500 meters elevation in Nevada. The project site has also been altered by the existing tank site and access road. The proposed location of the new access road within the NDOT ROW for US-93/95 also showed signs of continued use by off-highway vehicles and has been previously disturbed for installation of underground utilities.

The terrain within the action area and immediate surrounding area is nearly level to gently sloping northeast to southwest. Elevation ranges from approximately 2,479 feet mean sea level (msl) at the existing tank location to 2,317 feet msl along the westernmost portion of the proposed new access road.

There are no major watercourses or drainages intersected by the proposed project; however, the general topography of the area would tend to allow sheet flow to cross the action area from the northeast to the highway in the southwest. In addition, there is a stormwater retention channel situated adjacent to the proposed new access road along the residential development on East Paradise Hills Drive.

According to the 2014 Natural Resources Conservation Service Web Soil Survey (<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>), there are three soil types within the action area: Caliza-Pittman-Arizo complex, 0 to 8 percent slopes; Arizo very gravelly fine sandy loam, 2 to 8 percent slopes; and gravel pits (in NDOT acquisition area). The soil is well drained to excessively drained and is not considered hydric.

On September 10, 2014, authorized desert tortoise biologists with Knight and Leavitt Associates performed a presence/absence survey for desert tortoise within the action area following Service protocols (2009). No desert tortoises or sign (i.e., burrows, scat, tracks, or carcasses) were observed within the proposed construction area. Additional surveys were performed at distances of 200, 400, and 600 meters from the proposed project limits. These buffer transects were performed only on the northeast side of the project, because US-93/95 acts as a barrier to tortoise movement to the southwest of the project site.

During the additional buffer surveys, two live desert tortoises and two burrow complexes were observed (Figure 3 in the BA). At the 200 meter range, one juvenile tortoise was observed in the shade of a creosote shrub. The 400 meter survey revealed an adult tortoise inside an earth burrow and a burrow complex with three openings in a caliche deposit. The burrow complex was rated condition class 4, meaning it was in good condition and could possibly support a desert tortoise. The second burrow complex was observed at the 600 meter range. This complex consisted of two caliche burrows that were rated condition class 2, as good condition with definite desert tortoise presence but no evidence of recent use (Knight and Leavitt Associates 2014). No designated critical habitat occurs in the project area.

## **F. EFFECTS OF THE PROPOSED ACTION ON THE LISTED SPECIES**

The greatest potential threats to desert tortoises resulting from the proposed action are associated with vehicle travel on access roads and in work areas. Tortoises could be killed or injured or their nests with eggs could be destroyed if not located before activities commence, or not avoided by vehicles and equipment. Project vehicles or equipment that stray from designated areas may crush desert tortoises aboveground or in their burrows or damage habitat outside the project area. Tortoises could wander into work areas or take refuge underneath project vehicles and equipment, and be killed or injured when the vehicle/equipment is moved. Project vehicles may strike and kill or injure desert tortoises on access roads. Measures proposed by Reclamation as part of the proposed action should minimize these effects, which include: 1) providing a Field Contact Representative, authorized desert tortoise biologist, and monitors to oversee construction activities, 2) providing a desert tortoise education program to all construction personnel, 3) imposing and enforcing speed limits, 4) preventing unauthorized access to the project site, 5) temporarily fencing public roads that intersect the right-of-way during construction, 6) installing permanent tortoise-proof fencing, tortoise guards, and gates with minimal ground clearance around the boundary of aboveground facilities, 7) preventing the attraction of tortoises to the project site from pooling of water for dust control, 8) prohibiting cross-country travel outside designated areas and using previously disturbed areas where possible, and 9) conducting a tortoise clearance survey to remove all tortoises in harm's way.

Surveys conducted within the project site did not detect tortoises or tortoise sign. However, tortoises were detected in adjacent habitat, and tortoises may wander into the project site during construction activities. Tortoises that may wander in to the project site would be captured and relocated outside of the work area. Desert tortoises that are physically moved out of project areas to prevent mortality or injury could be inadvertently harmed if not handled properly. Urine and large amounts of urates may be voided during handling and may represent a severe water loss, particularly to juveniles (Luckenbach 1982). Overheating can occur if tortoises are not placed in the shade when ambient temperatures equal or exceed temperature maximums for the species (Service 2009). Measures proposed by Reclamation as part of the proposed action to provide authorized desert tortoise biologists to handle tortoises and conduct clearance surveys should minimize these effects.

Project activities may result in trash and litter accumulating on the site, which attracts predators such as the common raven, kit fox, and coyote (BLM 1990, Boarman and Berry 1995). Some forms of trash may be ingested by tortoises or they may become entangled resulting in their injury or death. Measures proposed by Reclamation to provide desert tortoise awareness training and control litter should minimize potential effects from subsidized tortoise predators.

Project vehicles that may stray from designated areas may damage habitat outside the project area and may result in soil compaction, erosion, or crushed vegetation. Measures proposed by Reclamation to restrict construction equipment, vehicles, and materials within designated areas, locate staging areas in previously disturbed areas whenever possible, and restore any temporarily disturbed areas should minimize these effects.

The project will result in the loss of 6.0 acres of disturbed, low quality desert tortoise habitat. The effect of the net loss of this habitat will be extremely low compared with the amount of suitable habitat available beyond the project limits. In addition, Reclamation proposes to collect remuneration fees from the City to compensate for the residual effect of the loss of habitat.

## **G. CUMULATIVE EFFECTS**

Cumulative effects are those effects of future non-Federal (State, tribal, local government, or private) activities that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they would likely require separate consultation pursuant to section 7 of the Act. No future, non-Federal activities are reasonably certain to occur in the action area.

## **H. CONCLUSION**

After reviewing the current status of the desert tortoise and its critical habitat, the environmental baseline for the action area, the effects of the proposed project, and the cumulative effects, it is the Service's biological opinion that the project, as proposed and analyzed, is not likely to jeopardize the continued existence of the threatened Mojave desert tortoise.

The Service's conclusion of no jeopardy is based on the following:

1. The habitat in the project area has been previously disturbed and is of low quality, and no desert tortoises or tortoise sign were observed in the project area.
2. Measures have been proposed by Reclamation to further minimize any effects of the proposed action to the desert tortoise.
3. The proposed project would not result in tortoise mortality, or other take of desert tortoise that would significantly affect the range-wide number, distribution, or reproduction of the species; desert tortoises that are taken by non-lethal means as a result of the project are anticipated to remain in the wild with no long-term effects.

## **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act, as amended, prohibits take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering (50 CFR § 17.3). "Harass" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR § 17.3). Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or applicant. Under the terms of sections 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the Terms and Conditions of this Incidental Take Statement.

The measures described below are nondiscretionary, and must be implemented by Reclamation so that they become binding conditions of any project, contract, grant, or permit issued by Reclamation, as appropriate, in order for the exemption in section 7(o)(2) to apply.

Reclamation has a continuing duty to regulate the activity that is covered by this Incidental Take Statement. If Reclamation fails to adhere to the Terms and Conditions of the Incidental Take Statement through enforceable terms that are added to permits or grant documents, and/or fails to retain oversight to ensure compliance with these Terms and Conditions, the protective coverage of section 7(o)(2) may lapse.

### **A. AMOUNT OR EXTENT OF TAKE ANTICIPATED**

Based on the scope of the proposed action, the desert tortoise survey data, analysis of impacts provided above, measures proposed by Reclamation, and the anticipated project duration, the Service anticipates that the following take could occur as a result of the proposed action:

1. All desert tortoises in harm's way during project activities may be taken by capture. We estimate up to 2 desert tortoises will be captured and relocated. If the number of tortoises encountered and moved exceeds our estimate, Reclamation shall notify the Service to evaluate the risk of injury and mortality to tortoises and determine if any additional measures are appropriate. We anticipate desert tortoises moved from harm's way will remain in their home range with no long-term effects.
2. No desert tortoises are anticipated to be killed or injured as a direct or indirect result of project activities.
3. No desert tortoises will be taken in the form of indirect mortality through predation by ravens or other subsidized predators drawn to the project area. This determination is based on no net increase in potential resources for ravens above baseline levels.
4. No desert tortoise nests are anticipated to be disturbed as a result of project activities.

## **B. EFFECT OF TAKE**

In the accompanying biological opinion, the Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the desert tortoise.

## **C. REASONABLE AND PRUDENT MEASURES WITH TERMS AND CONDITIONS**

The Service believes that the following Reasonable and Prudent Measures (RPMs) are necessary and appropriate to minimize take of desert tortoise. In order to be exempt from the prohibitions of section 9 of the Act, Reclamation must ensure full compliance with the Terms and Conditions provided below, which implement the RPMs.

In addition to the proposed measures to minimize take provided in the *Description of the Proposed Action* section, Reclamation shall implement the RPMs and Terms and Conditions stated below. These RPMs and implementing Terms and Conditions either clarify the proposed measures in the *Description of the Proposed Action* or include reporting requirements that assure adequate action agency oversight of any incidental take [50 CFR §402.14(i)(1)(iv) and (i)(3)].

**RPM 1:**        *Reclamation shall ensure implementation of measures to minimize loss or long-term degradation of desert tortoise habitat.*

### **Term and Condition:**

1.    *Loss of habitat* – Reclamation shall collect remuneration fees to offset residual impacts to desert tortoises from project-related loss of 6.0 acres of desert tortoise habitat.

Remuneration fees will be used for management actions expected to promote recovery of the desert tortoise over time, including management and recovery of desert tortoise in Nevada. Actions may involve habitat acquisition, population or

habitat enhancement, increasing knowledge of the species' biological requirements, reducing loss of individual animals, documenting the species status and trend, and preserving distinct population attributes. Fees will be used to fund the highest priority recovery actions for desert tortoises in Nevada.

The current base rate is \$843 per acre of disturbance, as indexed for inflation, effective March 1, 2015. The next adjustment will become effective March 1, 2016. The fee rate will be indexed for inflation based on the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) on January 31st of each year, becoming effective March 1st. Fees assessed or collected for projects covered under this biological opinion will be adjusted based on the current CPI-U for the year they are collected. Information on the CPI-U can be found on the internet at: <http://www.bls.gov/cpi/news.htm>. Please contact Michael Burroughs at the Southern Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230 for instructions on submittal of the remuneration fees.

**RPM 2:** *Reclamation shall ensure implementation of measures to ensure compliance with the RPMs, Terms and Conditions, reporting requirements, and reinitiation requirements contained in this biological opinion.*

#### **Terms and Conditions:**

- 2.a. *Project completion* – Reclamation shall ensure that a report documenting desert tortoise encounters, incidental take (including capture and relocation), and effectiveness and compliance with the desert tortoise protection measures is prepared and submitted to the Service's Southern Nevada Fish and Wildlife Office in Las Vegas within 60 days of completion of construction of the project.
- 2.b. *Fence inspection* – Quarterly reports (January-March, April-June, July-September, and October –December) for monitoring and repair of tortoise-proof fencing as specified in Minimization Measure 12 in the *Description of the Proposed Action*, shall be submitted to the Service's Southern Nevada Fish and Wildlife Office in Las Vegas. Reports are due within the first 30 days following each quarter (e.g., the report for quarter January-March is due April 30).

#### **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

We do not offer any conservation recommendations at this time.



## REINITIATION REQUIREMENT

This concludes formal consultation on the actions outlined in your request received January 2, 2015. As required by 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over an action has been retained (or is authorized by law) and if: (1) The amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

## LITERATURE CITED

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- BLM (Bureau of Land Management). 1990. Draft Raven Management Plan for the California Desert Conservation Area. Prepared by Bureau of Land Management, California Desert District, Riverside, California. April 1990.
- City of Henderson. 2014. Revised Plan of Development. R-10/R-10A Reservoir Site. September.
- Knight and Leavitt Associates. 2014. Desert tortoise presence absence survey results. September 11.
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- Service (Fish and Wildlife Service). 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California. Available on the internet at: [http://www.fws.gov/ventura/speciesinfo/protocols\\_guidelines/](http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/)

**ATTACHMENT A. DESERT TORTOISE HANDLING AND TAKE REPORT**

If a desert tortoise is killed or injured, immediately contact the U.S. Fish and Wildlife Service and Reclamation, by phone at the numbers below and complete Section 1 of the form. Completed forms should be submitted to the Fish and Wildlife Service and Reclamation:

U.S. Fish and Wildlife Service  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130  
702-515-5230

U.S. Bureau of Reclamation  
Lower Colorado Regional Office  
P.O. Box 61470  
Boulder City, Nevada 89006-1470  
702-293-8258

Project Name:	Report Date:
Fish and Wildlife Service File No.- 84320-	
Authorized Desert Tortoise Biologist: _____ Employed by: _____	
<b>Section 1: Complete all information below if a desert tortoise is injured or killed in addition to initial contact described above.</b>	
If tortoise was injured <input type="checkbox"/> killed <input type="checkbox"/> (check appropriate box):	
Date and time found: _____	
Found by: _____	
GPS location (NAD 83): easting: _____ northing: _____	
No. of photos taken: _____	
Disposition: _____ _____ _____	
Attach report with photos that describe in detail, the circumstances and potential cause of injury or mortality. For injuries include name of veterinarian and detailed assessment of injuries.	

**Section 2: Complete all information below for each desert tortoise handled.**

All instances of desert tortoise handling must be reported in this section and be included in the quarterly, annual, and final project reports.

Desert tortoise number: \_\_\_\_\_

Date and time found: \_\_\_\_\_ Sex of tortoise: \_\_\_\_\_

Air temperature when found: \_\_\_\_\_ Air temperature when released: \_\_\_\_\_

Tortoise activity when found: \_\_\_\_\_

Handled by: \_\_\_\_\_ Approx. carapace length \_\_\_\_\_

GPS location (NAD 83) found: easting: \_\_\_\_\_ northing: \_\_\_\_\_

GPS location released: easting: \_\_\_\_\_ northing: \_\_\_\_\_

Approximate distance moved: \_\_\_\_\_

Did tortoise void bladder; if so state approximate volume and actions taken:

\_\_\_\_\_  
\_\_\_\_\_

Post handling or movement monitoring and observations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **Procedure for Making Payments into the National Fish and Wildlife Foundation Account Mojave Desert Tortoise Sub-account**

There are currently (June 2015) two sub-accounts: one for the Mojave desert tortoise and the other is for the Moapa dace. Each sub-account has its own form. The filename for the Mojave desert tortoise sub-account form is "NFWF Deposit Form June 2015.pdf" and can be found in: T:\ESStaff\Administrative\Coop Agreements. Information in this document pertains to desert tortoise section 7 fees.

The Mojave desert sub-account applies towards non-BLM actions that are associated with a Biological Opinion and habitat disturbance fees proposed by the Federal agency. Payment of fees for BLM actions are made directly to BLM- not into this sub-account.

The following steps should be followed by Service staff preparing Biological Opinions that involve fees.

1. Use the template language below in the Biological Opinion. Attach the form entitled, *Southern Nevada Mitigation and Conservation Account, Mojave Desert Tortoise Sub-account Deposit Document* to the Biological Opinion. The Applicant or Project Proponent shall complete the relevant information on the form. Additional instructions are provided at the beginning of the form.
2. The Applicant or Project Proponent shall send the form to our office in accordance with the language provided below.
3. The staff assigned for the Biological Opinion will coordinate review/approval by the Field Supervisor.
4. Once approved, responsible staff will scan the form and email it to NFWF contacts identified below. The Applicant and Federal agency will be notified that the form has been approved and instructed to coordinate with NFWF on submitting payment as described below.

### **Language to Include in Biological Opinions that Involve Fees to be paid into NFWF Account**

The Applicant/Project Proponent shall pay remuneration fees to offset residual impacts to desert tortoises from project- related disturbance to desert tortoise habitat. Remuneration fees will be used for management actions expected to promote recovery of the desert tortoise over time, including management and recovery of desert tortoise in Nevada. Actions may involve habitat acquisition, population or habitat enhancement, increasing knowledge of the species' biological requirements, reducing loss of individual animals, documenting the species status and trend, and preserving distinct population attributes. Fees will be used to fund the highest priority recovery actions for desert tortoises in Nevada.

The current base rate is \$XXX per acre of disturbance, as indexed for inflation, effective March 1, 2015. The next adjustment will become effective March 1, 2015. The fee rate will be indexed for inflation based on the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) on January 31st of each year, becoming effective March 1st. Fees assessed or collected for projects covered under this biological opinion will be adjusted based on the

current CPI-U for the year they are collected. Information on the CPI-U can be found on the internet at: <http://stats.bls.gov/news.release/cpi.nws.htm>.

The Applicant/Project Proponent shall complete the attached form and submit it to the Service's Southern Nevada Fish and Wildlife office, by one of the methods below.

Email: Contact the Service at (702) 515-5230 for appropriate email address. The Service point of contact is typically identified in the Biological Opinion.

Postal Mail: Field Supervisor  
Southern Nevada Fish and Wildlife Office  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130

FAX: (702) 515-5231

Once received and approved by the Service, the Applicant will be notified. Following notification, the Applicant will coordinate actual payment with NFWF through:

Shawn Marchand (Shawn.Marchand@NFWF.ORG) and/or  
Anne Butterfield (Anne.Butterfield@NFWF.ORG).

**SOUTHERN NEVADA MITIGATION AND CONSERVATION ACCOUNT  
MOJAVE DESERT TORTOISE SUB-ACCOUNT DEPOSIT DOCUMENT**

*The applicable Action Agency is responsible for completing this form and submitting it to USFWS for review and approval. The USFWS Agency Representative for the Mojave Desert Tortoise Sub-Account is responsible for submitting the approved deposit document to NFWF when a project proponent is prepared to deposit funds with NFWF. The deposits identified in the deposit document will be made by the project proponent to NFWF directly.*

**Project Name:** \_\_\_\_\_

**Biological Opinion Number and Date:** \_\_\_\_\_

**Project Phase:** *(if applicable)* \_\_\_\_\_

**Project Location:** *(i.e. County)* \_\_\_\_\_

**Land Ownership of Project Site:** *(if publicly owned, identify the applicable government entity)*  
\_\_\_\_\_

**Project Proponent:** \_\_\_\_\_

**Action Agency (check if applicable) and Decision Documents:** *(identify by name, date, and identification #)*

**Federal Highway Administration**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**National Park Service**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**Western Area Power Administration**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**U.S. Army Corps of Engineers**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**U.S. Bureau of Reclamation**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

\_\_\_\_\_

**Nellis Air Force Base**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**U.S. Bureau of Indian Affairs**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**Other (Specify)**  
 Decision Document Attached  
Project Identification or Tracking #: \_\_\_\_\_

**Monies Required for Deposit:**      \$ \_\_\_\_\_

**Deposit Document:**

Prepared and Submitted to USFWS by Action Agency

**Name:** \_\_\_\_\_  
**Title:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_  
**Email:** \_\_\_\_\_  
**Signed:** \_\_\_\_\_  
**Date:** \_\_\_\_\_

Approved and Submitted to NFWF by USFWS

**Name:** Michael J. Senn  
**Title:** Field Supervisor  
**Phone:** (702) 515-5230  
**Email:** Michael\_Senn@fws.gov  
**Signed:** \_\_\_\_\_  
**Date:** \_\_\_\_\_