FINAL ENVIRONMENTAL ASSESSMENT

For the Water System Improvement Project

Schurz, Mineral County, Nevada

Prepared on Behalf of the Walker River Paiute Tribe

Submitted to the Bureau of Indian Affairs

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LIST OF ACRONYMS AND ABBREVIATIONS

AQI	Air Quality Index
BIA	Bureau of Indian Affairs
CEQ	Council on Environmental Quality
CESA	Cumulative effects study area
CFR	Code of Federal Regulations
$CO2_e$	Carbon dioxide-equivalent
DOI	Department of the Interior
EA	Environmental Assessment
EDA	Economic Development Agency
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EO	Executive Order
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
HDD	Horizontal Directional Drilling
HDPE	High Density Polyethylene
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NDOT	Nevada Department of Transportation
NDWR	Nevada Department of Water Resources
NEPA	National Environmental Policy Act of 1969
NPL	National Priorities List
NOAA	National Oceanic Atmospheric Administration
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Project	Water System Improvement Project
PVC	Polyvinyl Chloride
Reservation	Walker River Paiute Reservation
RFFA	Reasonably foreseeable future action
ROW	Rights-of-Way
SWPPP	Stormwater Pollution Prevention Plan
SWReGAP	Southwest Regional Gap Analysis Project
Tribe	Walker River Paiute Tribe
US	United States
USDA	United States Department of Agriculture
US 95	US Highway 95
US 95A	US Highway 95A

USACE	US Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WOUS	Waters of the US

Executive Summary

The Walker River Paiute Tribe (Tribe) will receive funding from the United States (US) Department of the Interior (DOI) for improvement of the Walker River Paiute Reservation (Reservation) drinking water system. The Water System Improvement Project (Project) would allow the Tribe to install, operate, and maintain a new approximately 20-foot-wide, 27,570-foot-long permanent right-of-way (ROW) for a new water line and a 410,000-gallon water tank in and around the town of Schurz, Nevada on the Reservation in Mineral County, Nevada. The Project would occur across 24.8 acres in and around Schurz entirely within the Reservation, between Yerington and Walker Lake in Mineral County, Nevada (Project area). The Project would follow along existing utility and ROWs to the maximum extent feasible and within pre-disturbed areas such as existing, unpaved access roads, agricultural fields, beneath bermed and landscaped areas immediately alongside roadways, or within existing easements through residential areas. A Bureau of Indian Affairs (BIA), Nevada Department of Transportation (NDOT) and Mineral County issued encroachment permits would be required.

Environmental Consequences

Air Quality

Air quality effects are expected to be of an intermittent and temporary nature during the construction phase under the Proposed Action, and no significant air quality effects are anticipated. Under the No Action Alternative, the Project would not be constructed and the associated effects to air quality would not occur.

Geology and Soils

No significant effects to geology or soils are anticipated under the Proposed Action. Under the No Action Alternative, the Project would not be constructed and the associated effects to geology and soils would not occur.

Water Resources

Effects to water resources as a result of the Proposed Action would not be significant; furthermore, the Project would result in beneficial effects with improvement of the Tribe's drinking water system. Under the No Action Alternative, the Project would not be constructed and the associated effects, including beneficial effects, to water resources would not occur.

Threatened, and Endangered and Candidate Species

The Proposed Action is not anticipated to result in no impacts to wildlife. Under the No Action Alternative, the Project would not be constructed and the associated effects to wildlife species and potential habitat would not occur.

Cultural Resources

For the Project it is anticipated that the no historic properties or cultural resources would be affected. Under the No Action Alternative, the Project would not be constructed and the associated effects to cultural resources and historic properties would not occur.

Aesthetics

Overall, effects to aesthetics would be temporary in nature and would last only as long as the construction activities; therefore, the Proposed Action would not have any adverse effects to aesthetic

resources. Under the No Action Alternative, the Project would not be constructed and the associated effects to aesthetics would not occur.

Land Use

The Proposed Action would comply with existing land uses within the Project area and therefore would not have any significant adverse effects to existing land use. Under the No Action Alternative, the Project would not be constructed and the associated effects to land use would not occur.

Socioeconomic Resources and Environmental Justice

The Proposed Action would provide an overall positive effect on socioeconomic resources and environmental justice communities on the Reservation with the improvement of drinking water distribution from increased water pressure and increased fire flows for emergency response purposes (i.e., firefighting, etc.). Under the No Action Alternative, the Project would not be constructed and the beneficial effects from improved water pressure for public/residential use and fire flows would not occur.

Vegetation Resources

The Proposed Action would not have any significant adverse effects to vegetation resources. Under the No Action Alternative, the Project would not be constructed and the associated effects to vegetation resources would not occur.

Human Health and Safety

With minimization measures and best management practices in place, the Proposed Action is not anticipated to result in any significant adverse effects to human health and safety. Under the No Action Alternative, the Project would not be constructed and the associated effects to human health and safety would not occur; however, risks associated with negative effects on human health may occur as the community need for increased water pressure and fire flows would not be met.

Cumulative Effects

Under the Proposed Action, future maintenance and improvement projects may occur within the Project area, but such activities are anticipated to be minor and consistent with current uses within the Project area. Cumulative effects would be negligible. Overall, future maintenance and improvement projects may provide positive cumulative effects as improvements are made for the Reservation community in the vicinity of the Project area. Under the No Action Alternative, cumulative effects would not occur from the Proposed Action combined with past, present, and reasonably foreseeable future actions as the Project would not be constructed.

1. Introduction

The Walker River Paiute Tribe (Tribe), a federally recognized Tribe in Nevada, will receive funding from the United States (US) Department of the Interior (DOI) for improvement of the Walker River Paiute Reservation (Reservation) drinking water system. The Water System Improvement Project (Project) would allow the Tribe to install, operate, and maintain 27,570 feet of new water line and a 410,000-gallon water tank in and around the town of Schurz, Nevada on the Reservation in Mineral County, Nevada (**Figure 1**). The Tribe is seeking a new, approximately 20-foot-wide, 27,570-foot-long permanent right-of-way (ROW)/easement for construction, operation, and maintenance of the water line, which would be located across lands administered by the Bureau of Indian Affairs (BIA) and Indian-owned allotment lands. The ROW would be owned and operated by the Tribe and would cover approximately 24.8 acres.

The National Environmental Policy Act of 1969, as amended (NEPA), requires federal agency officials to consider environmental consequences of their proposed actions before decisions are made. The NEPA process was triggered by the BIA consideration of taking a federal action for review and approval of the ROW application, and the award of federal funding from the DOI and the Economic Development Agency (EDA) of the Department of Commerce and Indian Health Services through the United States Department of Agriculture (USDA) for construction of and maintenance of the Project.

1.1 Purpose and Need

The BIA's purpose, as a DOI agency with a NEPA compliance requirement, is to respond to the ROW application submitted by the Tribe (proponent/applicant) to construct, operate, maintain, and decommission a water pipeline over or across lands held in trust for the Tribe (and/or individual Indian-owned allotments if there are any involved). The BIA's need for this action is to fulfill its responsibility under 25 Code of Federal Regulations (CFR) Part 169 (Rights-of-Way over Indian Land) to review and approve actions on tribal trust lands. The BIA then would, deny, grant, or grant with modifications, the ROW agreements between the Tribe and applicable Indian landowners. The final ROW grant would include any restrictions or conditions imposed in consent documents between the Tribe and Indian landowners and would include language acceptable to the EDA.

1.2 Location

The Project is located entirely on the Reservation in Mineral County, Nevada, in and around the town of Schurz, Nevada (**Figure 2**). The legal description of the Project Area is Township 13 North, Range 28 East, portions of Sections 15, 22, 23, 25, 26, 27, 35, 36.

1.3 Statutory and Regulatory Authority

This Environmental Assessment (EA) complies with the Council on Environmental Quality's (CEQ) Regulations for Implementing Procedural Provisions of NEPA (40 CFR 1500–1508) and the BIA's NEPA regulations (43 CFR 46). In addition to complying with NEPA requirements, this EA follows the implementing procedures for regulations in DOI Departmental Manual 516 (Chapter 10) (DOI 2020); the BIA's Indian Affairs NEPA Guidebook (59 IAM 3-H) (BIA 2012); and other applicable laws, regulations, and Executive Orders (EO).

1.4 Agency Scoping, Tribal Consultation, and Public Input

Installation of a new water line and water tank is an action that is localized and non-controversial. Therefore, the BIA determined that public scoping was not required (43 CFR 46.305(a)(2)). Internal scoping with the BIA and external scoping with the Tribe were deemed sufficient to identify the relevant issues and to determine the range of alternatives for the Proposed Action.

2. Proposed Action and Alternatives

Two alternatives were considered for the Project: the Proposed Action and the No Action Alternative.

This EA was prepared in accordance with NEPA and CEQ regulations at 40 CFR 1500-1508. This EA is an informational document for use by the BIA and the public. It discloses the relevant information and anticipated environmental effects of the Proposed Action and No Action Alternative. This analysis was completed to determine if effects to the environment could be significant and would require completion of an Environmental Impact Statement or if a Finding of No Significant Impact (FONSI) is the appropriate outcome of the analysis for the Project to move forward.

2.1 Proposed Action

The Proposed Action would occur across 24.8 acres in Schurz, Nevada and would include the installation of 27,570 feet of new water line within an approximately 20-foot-wide ROW/easement and a new water storage tank (**Figure 2**) to increase available fire flows and improve the water pressure throughout the water system service area. The Proposed Action would also increase the capacity of the water distribution system in areas where the Tribe anticipates future development.

Much of the Project area is previously disturbed by existing roadways and utilities. All proposed disturbance associated with pipe installation would include an approximate 20-foot width along the proposed alignment. The Project would follow existing utility and road rights-of-way (ROWs) to the maximum extent feasible and within pre-disturbed areas such as existing unpaved access roads, agricultural fields, beneath bermed and landscaped areas immediately alongside roadways, or within existing easements through residential areas. A portion of the Proposed Action lies with the NDOT 95 and 95A ROW, BIA ROWs, and Mineral County ROWs. Encroachment permits would be required for the construction of water lines in these areas. Where the project occurs on lands not owned by the Tribe (i.e., individual Indian-owned allotments), 20-foot-wide easements will be obtained.

Approximately 26,870 feet of eight-inch polyvinyl chloride (PVC) pipe would be installed by open trenching methods for the Project. Open trenching is a traditional method of excavation used for the installation of pipe and consists of digging an open trench, installing the new sections of pipe, and then backfilling the trench.

Approximately 400 feet of new eight-inch high density polyethylene (HDPE) pipe would be installed under the Walker River by Horizontal Directional Drilling (HDD) using trenchless methods. This HDD method involves the use of a surface-launched drilling rig to drill a hole and advance an underground pathway along the designated installation route. The directional bore would have an entry point pit and an exit point pit. Pipe would be pulled through the drilled pathway between the

entry and exit points. This methodology minimizes overall ground disturbance but would require equipment to be set up at the entry and exit points. The entry and exit points are typically a few feet wide, resulting in some surface disturbance, but the method would not disturb the riverbed.

The jack-and-bore method would be used to install approximately 100 feet of eight-inch PVC pipe under US Highway 95 (US 95) and approximately 200 feet of eight-inch PVC pipe under US Highway 95A (US 95A). The eight-inch diameter PVC pipes will be placed inside of 24-inch steel pipes that would be installed under each highway. The jack-and-bore method is a trenchless method of installing pipe under roadways or other obstructions. It involves drilling a small diameter pilot hole from one pit to another, then enlarging the hole with a rotating cutterhead and pushing new pipe in place with the jack-and-bore machine. Utilizing the jack-and-bore method allows the Project to avoid interruptions of traffic and minimize impact to the roadways.

A new water storage water tank would be installed adjacent to the Reservation's existing water storage tank. The new water storage tank would be welded steel, holding approximately 410,000 gallons of water. The piping for the proposed tank would tie in with the piping on the existing tank. The site of the new storage tank would be graded to provide a flat surface and driveway around the tank. Drainage for the new tank site would tie into the drainage for the existing tank site. The dimensions of the new water storage tank would be 21 feet tall and 60 feet in diameter.

2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed. The Tribe would not install the new water pipe and water storage tank, thus the water pressure in the Reservation service area would not increase and there would not be additional water available for fire flows. The No Action Alternative ultimately would not meet the purpose and need of the Project.

3. Affected Environment and Environmental Consequences

The Project is located in and around Schurz entirely within the Reservation along the Walker River, between Yerington and Walker Lake in Mineral County, Nevada. The bulk of the Reservation (73 percent) is in Mineral County, with portions in Lyon County (14 percent) and Churchill County (12 percent). The Reservation land area is approximately 530 square miles. Schurz is the only town on the Reservation. This land base provides space for housing, economic development, hunting, fishing, and gathering.

The significance of the Proposed Action has been analyzed based on the CEQ's regulations for implementing NEPA context and intensity criteria (43 CFR 1508.27).

3.1 Air Quality

3.1.1 Affected Environment

The area of analysis for air quality is the Reservation (**Figure 2**). Air quality in the Project area is less restricted than other resources because ambient air, unlike land or water, is not constrained by any land-based boundaries. Any discussion related to overall air quality is applicable to the entire Project's geographic extent, with the exception of the potential specific local-scale effects where construction is expected to occur.

Air quality conditions in the Project Area are generally assigned as Good (categorized by level of health concern) based on the air quality index (AQI) due to the remote location. The Nevada Division of Environmental Protection (NDEP) operates several ambient air monitoring stations throughout the state. The nearest air monitoring station to the Project area is located in Fallon, Nevada and is approximately 35 miles north of the Project area. The AQI data for the Project area indicated that there are no air quality concerns with ozone or particulate matter identified at the air monitoring station in Fallon (NDEP 2024). The air quality in the area may be influenced by air pollution from local vehicle traffic or periodic wildfires that occur in the region.

Depending on the season and weather, visibility is limited due to changing weather. The average elevation of Schurz is approximately 4,100 feet. The closest National Oceanic Atmospheric Administration weather station with temperature and precipitation data is located in Yerington, Nevada, 19.5 miles west of Schurz, Nevada. The climate in the Project area is generally mild, with the average temperature ranging between 33°F in the winter (winter low in December is 22°F) and 80° in the summer (summer high in July is 95°F) (NOAA 2024). This area receives an average of approximately 4.75 inches of precipitation per year and experiences low to mild humidity levels throughout the year (NOAA 2024).

3.1.2 Impacts to Air Quality

3.1.2.1 Proposed Action

Under the Proposed Action, potential direct and indirect effects to air quality resulting from the Project would occur during construction activities, including temporary indirect effects associated with exhaust emissions from construction vehicles and fugitive dust particulates from construction activities. Exhaust emissions from machinery and vehicles utilized during construction would typically include particulates, hydrocarbons, sulfur oxides, nitrogen oxides, and carbon monoxide. The Proposed Action would be located in a rural area and any reductions in air quality resulting from these effects would be negligible, localized to the location of construction, and temporary. Vehicles and equipment used during the construction of the Project would be equipped with regular exhaust mufflers to minimize vehicle emissions. Construction vehicle engines would be turned off at roadside locations when not needed, to further reduce emissions.

The Project does not specifically address the reduction of greenhouse gas (GHG) emissions, as they pertain to EO 13990. The installation and construction of the water line and tank, however, are not anticipated to impact existing GHG levels. Minor increases in overall air pollutants may occur temporarily during construction due to the use and movement of equipment and vehicles. Carbon dioxide emissions resulting from construction vehicles would be a fraction of the total emissions generated by vehicular traffic already present on the existing roadways. Based on the temporary construction activities and associated equipment that would be operated to bury the pipeline within the proposed ROW, greenhouse gas emissions in the form of carbon dioxide-equivalent ($CO2_e$) from diesel engine excavators and stationary vehicles during construction are not anticipated to exceed the EPA's annual 25,000-metric ton $CO2_e$ reporting threshold.

Dust generated by excavation and earth moving activities can impact air quality. This effect would also be temporary in nature, although some transport of minor amounts of airborne pollutants to downwind nearby locations within or outside the areas of the Project construction activities could occur.

After construction is completed, there would be no increase in air emissions to the environment and the air quality would return to what it was previous to construction activities associated with Project installation.

The contractor hired to complete the Project would be required to obtain a Class II Air Quality Operating Permit for Surface Area Disturbance through the NDEP, which per Nevada Administrative Code (NAC) 445B.22037 requires fugitive dust to be controlled and requires an ongoing program to prevent particulate matter from becoming airborne.

The contractor would provide appropriate dust control measures by watering disturbed soils during construction. If local winds are in excess of 20 miles per hour, the contractor would cease trenching and soil-disturbing activities. Disturbed soils would be "crusted" with a clay/water application post-construction to reduce fugitive dust and would be reseeded in areas of new disturbance as areas previously disturbed and maintained are void of vegetation.

No significant air quality effects are anticipated. Air quality effects are expected to be of an intermittent and temporary nature during the construction phase of the Project.

3.1.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to air quality would not occur.

3.2 Geology and Soils

3.2.1 Affected Environment

The area of analysis for geology and soils is the Project area. The majority of the Project area is located within existing road ROWs, which are devoid of vegetation, leaving an open soil texture due to clearing associated with routine road maintenance. The entire Project area lies within alluvium plains deposits from the Quaternary age (Bingler 1978). The deposits are unconsolidated, unweathered to weakly weathered, poorly sorted, pebble to cobble, and muddy to sandy gravel in late Holocene to modern channels and washes or forming broad low-gradient alluvial plains (Bingler 1978).

Soils in the Project area and vicinity have been mapped by the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and are described in the Custom Soil Resource Report for Mineral County Area, Nevada (**Appendix A**). The Project area includes six soil map units (**Figure 4**). Soil map units within the Project Area are detailed in **Table 1** below.

Table 1 Soil Map Units

Map Unit Symbol	Map Unit Name	Acres	Percent of Project Area
611	Slawmaster-Walkeriver complex, 0 to 2 percent slopes	10.9	43.9
630	Schurz ashy fine sandy loam, 0 to 2 percent slopes	1.5	6.1
631	Schurz-Carwalker complex, occasionally flooded, 0 to 2 percent slopes	0.6	2.5
1210	Trocken-Bluewing association	1.8	7.1

Map Unit Symbol	Map Unit Name	Acres	Percent of Project Area
4250	Bango-Hawsley complex, 0 to 4 percent slopes	8.5	34.2
7063	Hough sand, 0 to 2 percent slopes	1.5	6.2
	Total	**24.8**	**100.0**

Source: NRCS 2024

The Slawmaster-Walkeriver complex, Schurz ashy fine sandy loam, and Schurz-Carwalker complex make up approximately 52.5 percent of the Project area and are all classified by the USDA as "farmland of statewide importance, if irrigated." The NRCS policy and procedures on prime and unique farmlands are published in the Federal Register, Vol. 43, No. 21, January 31, 1978.

None of the present soil units have a hydric soil rating. The depth to any restrictive layer is greater than 80 inches in all these soil units. In addition, the rating on depth to water table is greater than 80 inches on all soil units except Schurz-Carwalker complex, which has a depth to water table of 39 to 50 inches (NRCS 2024).

3.2.2 Impacts to Geology and Soils

3.2.2.1 Proposed Action

Under the Proposed Action, the pipeline would be buried primarily within previously disturbed areas and would not be considered a significant impact to the existing geological formation. Temporary effects during the construction phase to soils may include soil compaction. Disturbed soils would be subject to wind and water erosion and could be transported outside of the Project area, potentially resulting in loss of soils; however, this would occur at a negligible scale. Soils identified as farmland of statewide importance may be subject to mixing of subsurface and surface soils during construction of the Project, which has the potential to degrade soil quality; however, the proposed pipeline would not be constructed through actively farmed fields and the Project would not include converting active farmland to alternative uses. No significant effects to geology or soils are anticipated under the Proposed Action.

3.2.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to geology and soils would not occur.

3.3 Water Resources

3.3.1 Affected Environment

The area of analysis for water resources is the Project area. The Project is located within the Walker Lake Valley-Schurz subarea Hydrographic Area and the Walker River Basin Hydrographic Region. **Figure 5** shows water resources within the Project area**.** There are no key water resources, such as sole-source aquifers or wild and scenic rivers, within or near the Project area.

The Walker River flows through the Project area and is the primary source of surface water for irrigation use within the Reservation. The Walker River begins in the Sierra Nevada and terminates in Walker Lake, south of the Project area, which is the terminal sink of the basin. The Tribe

implements a Water Quality Control Plan, which includes proposed water quality standards, beneficial/designated uses, water quality criteria, and an antidegradation policy for Walker River.

The new water line would cross existing BIA water conveyance canals in three locations as indicated on **Figure 5**.

Based on a review of Nevada Division of Water Resources well logs and water rights, there are no wells or water rights that overlap with the Project surface disturbance (NDWR 2024a; NDWR 2024b).

The Project is in Flood Hazard Zone D, where the flood risk is undetermined (FEMA 2024). No flood hazard analysis has been conducted in this area.

Based on a review of National Wetlands Inventory (NWI)-mapped wetlands, riverine, freshwater pond, and freshwater emergent wetland features overlap with the proposed water pipeline (**Figure 6**).

3.3.2 Impacts to Water Resources

3.3.2.1 Proposed Action

Under the Proposed Action, the approximately 400 feet of eight-inch HDPE pipe under the Walker River would be installed using the trenchless HDD method, which involves the use of a surface-launched drilling rig to drill a hole and advance an underground pathway along the designated installation route. This methodology minimizes overall ground disturbance but would require equipment to be set up at the entry and exit points. The HDD entrance pit would be sited 50 feet from the edge of the Walker River to minimize effects to the river and riparian vegetation during installation. These activities would not disturb the riverbed.

The water storage tank would be installed adjacent to the Reservation's existing water storage tank. The new water storage tank would be welded steel and would hold approximately 410,000 gallons of water. The piping for the proposed tank would tie in with the piping for the existing tank. The site of the new storage tank would be graded to provide a flat surface and driveway around the tank. Drainage for the new tank site would tie into the drainage for the existing tank site.

The US Army Corps of Engineers (USACE), Sacramento District, determined that the proposed work would avoid all waters of the US (WOUS) through the use of HDD methods, avoiding wetland areas, and would not result in the discharge of dredged or fill materials within WOUS (USACE 2017). Therefore, a USACE permit under the Clean Water Act is not required for the Proposed Action. Measures would be taken to prevent construction materials and/or activities from entering any WOUS. Appropriate soil erosion and sediment controls would be implemented onsite to achieve this end. A Stormwater Pollution Prevention Plan (SWPPP) would be required for the Project and erosion control measures and best management practices would be implemented to minimize effects to water quality.

The existing canals that would be crossed in three places (**Figure 5**) are simple concrete lined trapezoidal channels that deliver water to various locations throughout the community. The canals were constructed using a mix of excavated channels and constructed earthen berms. The concrete lining is an estimated four inches thick and in generally fair to good condition. Proposed water lines would cross below the canals with sufficient vertical clearance to meet separation requirements for the protection of the new piping and the canals. All canal crossings would be constructed outside of the irrigation season to avoid the disruption of water deliveries and would be coordinated in advance

with the BIA. At each canal crossing, an approximately 10-foot section of concrete canal's lining would be saw-cut to form neat and square lines and removed. A trench for the water line would be excavated through the 10-foot section and the water line constructed. The trench would be backfilled with aggregate base material and compacted. New four-inch-thick rebar-reinforced concrete would be placed in the 10-foot section with slopes and grade lines matching existing conditions to maintain appearance and ditch flow capacity. Soils outside of the concrete area would be final graded to match existing slopes and grade lines. Disturbed soils areas would be reseeded using appropriate methods with the seed mixes for low desert vegetation.

Effects to water resources as a result of the Proposed Action would not be significant; furthermore, the Project would result in beneficial effects with improvement of the Tribe's drinking water system.

3.3.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects, including beneficial effects, to water resources would not occur.

3.4 Threatened, Endangered, and Candidate Species

3.4.1 Affected Environment

The area of analysis for threatened, endangered, and candidate species is the Project area (**Figure 3**). Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure that actions they undertake, authorize, and or fund are not likely to jeopardize threatened and endangered species or adversely modified designated critical habitat. If a proposed action may affect listed species or habitat then the agency is required to consult with the US Fish and Wildlife Service (USFWS).

A USFWS Official Species List was generated using the USFWS's Information Planning and Consulting Tool (**Appendix B**), which includes any species that are listed or proposed to be listed under the ESA, including critical habitat areas, and that may be present in or within the vicinity of the area of analysis. The USFWS identified that greater sage-grouse (*Centrocercus urophasianus*), yellow-billed cuckoo (*Coccyzus americanus*), and monarch butterfly (*Danaus plexippus*) have potential to occur within the Project area and vicinity. No designated critical habit for any of these species or others was identified as present (USFWS 2024). Under the ESA, greater sage-grouse are proposed for listing as threatened, yellow-billed cuckoo are listed as threatened, and monarch butterfly are a candidate species for listing.

The greater sage-grouse is an obligate user of sagebrush (*Artemisia* spp.), dependent on large areas of contiguous sagebrush to meet all seasonal habitat needs, including nesting, brood rearing, cover, and as much as 100 percent of their winter diet (Braun et al. 2005). The Project area is further than six miles from any known greater sage-grouse lek and more than six miles away from any greater sage-grouse habitat management area.

The yellow-billed cuckoo is federally listed as threatened and inhabits dense riparian areas, often near perennial water. This species is strongly associated with meandering riparian systems with cottonwood and willow trees (USFWS 2014). The yellow-billed cuckoo nests in trees or shrubs and is dependent on insects for its diet.

The monarch butterfly is dependent on milkweed plants (*Asclepias* sp.) to lay their eggs on, and caterpillars are dependent on this species for food when they emerge. During breeding and migration, adult monarch butterflies require a diversity of blooming nectar sources. Milkweed plants may function as the principal nectar source for monarchs in arid regions (USFWS 2020). The Project area overlaps known summer breeding range as well as spring and fall migration pathways (USFWS 2020).

USFWS indicated that no migratory birds of conservation concern are expected to occur within the Project area (USFWS 2024); however, there is potential for breeding migratory birds and raptors to nest within the area of analysis.

3.4.2 Impacts to Threatened, Endangered, and Candidate Species

3.4.2.1 Proposed Action

Under the Proposed Action, wildlife could be temporarily displaced from the Project area due to human presence and noise during construction; however, these direct effects are anticipated to be negligible, and wildlife would be expected to return to the vicinity of disturbed areas post-project activities. No indirect effects are expected. Stantec completed a Biological Desktop Assessment to determine potential impacts to federally protected threatened and endangered species of plants and animals within the Project Area (**Appendix C**). The Biological Desktop Assessment provided mitigation measures to be implemented to reduce impacts to threatened and endangered species (Stantec 2023). Monarch butterflies rely on milkweed plants (*Asclepias* sp.) that may be present within the Project area and could be damaged or removed during construction; however, given that the Project area is heavily disturbed already, it is not likely that milkweed plants are present within the proposed Project disturbance footprint. It is recommended that prior to construction, the contractor employ a qualified biologist to conduct an intuitive controlled survey for milkweed individuals and record any occurrences within the Project area. If occurrences are detected, a mitigation strategy should be developed and implemented by the Tribe and the contractor to avoid milkweed plants during Project construction in order to further minimize direct effects.

There is potential for breeding migratory birds and raptors to nest in the vicinity of the Project; however, direct effects are not anticipated as no disturbance of perching or nesting locations (i.e., cliffs, rocky outcrops, trees, power poles, etc.) would occur under the Proposed Action. Nest clearance surveys prior to surface disturbing activities should be conducted in compliance with the provisions of the Migratory Bird Treaty Act (16 US Code [USC] 701−718h) and the Bald and Golden Eagle Protection Act (as amended) (16 USC 668−668d) to further minimize potential effects to migratory birds and raptor species by identifying present nests for avoidance.

There is no critical habitat in the Project area for any of the ESA listed species, therefore no effects would occur to critical habitat. Suitable riparian habitat for yellow-billed cuckoos and other migratory birds may be present in riparian areas along the Walker River; however, effects to riparian vegetation would be avoided by HDD methods for installation of the proposed pipeline crossing the Walker River, as discussed in **Section 4.3.1**. As previously discussed, the majority of the Project would be located along pre-disturbed existing ROWs, to the maximum extent feasible, therefore minimizing additional vegetation clearing that could increase fragmentation of sensitive habitats.

Through review of the Biological Desktop Assessment and activities proposed under the Project, the Proposed Action would have no effects to ESA listed or candidate species.

3.4.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed. There would be no effects to ESA listed or candidate species or associated potentially suitable habitat.

3.5 Historic and Cultural Resources

3.5.1 Affected Environment

The area of analysis for historic and cultural resources is the Project Area. The Tribe does not release any cultural/historical data to any agency outside of the Tribe. A desktop-analysis of cultural resources and historic properties was completed directly by the Tribe's Tribal Historic Preservation Office for the Project area. There are no cultural resources documented within the Project area based on a cultural resources and historic properties review conducted in 2023 (**Appendix C**) (Scott 2023).

3.5.2 Impacts to Historic and Cultural Resources

3.5.2.1 Proposed Action

Under the Proposed Action, historic and cultural resources would be preserved in place wherever possible. Based on the results of the desktop analysis of present historic and cultural resources (Scott 2023), and the nature of the proposed Project activities, it is anticipated that the no historic properties or cultural resources would be effected within the Project area. If the scope of work changes in any way, or if artifacts or human remains are discovered, construction would stop, and the Tribe would be notified immediately. The Tribe would deploy an onsite cultural resources monitor over the duration of earth moving activities. No direct or indirect effects to historic structures are anticipated to occur, as the Project would not involve the removal or alteration of any buildings or above-ground structures located within the Project area. Any historic properties within view of construction activities may be affected visually; however, these effects would be temporary in nature and would last only as long as the construction activities and would not have a lasting effect on the viewshed from historic structures.

3.5.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to cultural resources and historic properties would not occur.

3.6 Aesthetic Resources

3.6.1 Affected Environment

The area of analysis for aesthetic resources is the Project area (**Figure 2**). The area of analysis presents a rural landscape and includes previously disturbed road and utility areas, housing, and agricultural fields. The Walker River traverses the Project area, providing scenic views.

3.6.2 Impacts to Aesthetic Resources

3.6.2.1 Proposed Action

Under the Proposed Action, direct effects to visual resources would primarily occur during the construction phase of the Project. Minimal changes to the landscape would occur during construction and would be temporary, as the proposed new water pipe would be buried underground. Some grading will be required for the new storage tank, which will be a permanent change in the landscape. Indirect

effects from construction activities would include presence of water pipe and water storage tank installation equipment in the Project area that may be viewed by residents and/or motorists passing through the Project area. The proposed new water storage tank would be visible as a new structure but would blend in with the existing characteristic landscape alongside the existing water storage tank. During construction, residents and/or motorists passing through the Project area may also experience intermittent noise from water pipe and tank installation activities; however, Project noise would cease following construction.

To mitigate visual effects of the Project, the use of existing, pre-disturbed ROWs, to the maximum extent feasible, would be utilized. Replacement of vegetation that is removed during construction in areas that have not been previously disturbed would also be considered to blend in with the existing landscape using reseeding methods with the appropriate seed mixes for low desert vegetation.

Overall, effects to aesthetics, including visual resources and noise, would be temporary in nature and would last only as long as the construction activities related to pipe installation and storage tank construction. The new water storage tank would blend in with the existing landscape of the existing water storage tank at the same location. Therefore, the Proposed Action would have no adverse effects to aesthetic resources.

3.6.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and associated effects to aesthetics would not occur.

3.7 Land Use

3.7.1 Affected Environment

The area of analysis for land use is the Project area (**Figure 2**). Existing land uses within the area of analysis include agriculture, residential use, commercial buildings, utility and road ROWs, and recreation along the Walker River. The proposed Project alignment would partially be located along an existing NDOT ROW for US 95 and US 95A that crosses through Schurz.

3.7.2 Impacts to Land Use

3.7.2.1 Proposed Action

Under the Proposed Action, local land use and zoning categorizations would not be measurably affected because the proposed alignment would be located within existing ROWs, to the maximum extent feasible, that are already designated or used for utility placement. Required encroachment permits would be secured prior to commencing Project construction. The Proposed Action would comply with existing land uses within the Project area and therefore would not have any significant adverse effects to existing land use.

3.7.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to land use would not occur.

3.8 Socioeconomic Resources and Environmental Justice

3.8.1 Affected Environment

The area of analysis for socioeconomic resources includes the Reservation (**Figure 1**). As of 2022, the Reservation has a total population of 1,084, with 81.3 percent identifying as American Indian and the majority being located at or near the Project area (USCB 2024a). The population of the Reservation has increased approximately 113 percent since 2010 (Headwaters 2024). As of 2022, the median household income on the Reservation is $34,196, with 35.5 percent of people below poverty level (Headwaters 2024). There are a total of 405 housing units on the Reservation, approximately 365 of which are occupied with approximately 40 vacant (Headwaters 2024).

There is one school on the Reservation, Schurz Elementary School, which offers kindergarten through sixth grade. In the 2022-2023 school year, the total enrollment was 69 students with an 18:1 student teacher ratio (NDOE 2024).

The Walker River Paiute Tribe Public Utilities Department is responsible for the management and operation of safe drinking water production and transmission systems. The current public safety facilities in, or proximal to, the Project include the Walker River Tribal Police Department and Schurz Volunteer Fire Department. In addition, the Walker River Paiute Tribal Health Clinic is located in Schurz, Nevada.

EO 12898 was issued in 1994 with the purpose to focus federal attention on the environmental and human health effects of federal actions on minority and low-income populations, with the goal of achieving environmental protection for all communities. In 2014 the Environmental Protection Agency (EPA) issued the Policy on Environmental Justice for Working with Federally Recognized Tribes and Indigenous Peoples. The policy is designed to better clarify and integrate environmental justice principles in a consistent manner in the EPA's work with federally recognized Tribes and indigenous peoples (EPA 2014). The EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

The area of analysis for environmental justice includes Census Block Groups 320219708001 and 320219708002 in Mineral County, Nevada (**Figure 7**). These Census Block Groups overlap Schurz, Nevada and surrounding areas of the Reservation. This area of analysis was selected because it represents the furthest extent where potential effects from the Project may occur to an environmental justice population. Based on a review of US Census Bureau and EPA data for presence of environmental justice communities, approximately 52 percent of the population within the area of analysis are considered low-income communities. Census Block Group 320219708001 was identified to have the highest percentage (54.0 percent) of low-income populations (EPA 2024) in the area of analysis. Approximately 64.5 percent of the population in the area of analysis identify as belonging to a minority population. Census Block Group 320219708001 was identified to have with the highest percentage (79.0 percent) of people who identify as belonging to a minority population (EPA 2024). It is estimated that 45.4 percent of the population within the area of analysis identify as belonging to an American Indian or Alaska Native population. Census Block Group 320219708001 was identified to have the highest percentage (78.7 percent) of people who identify as American Indian or Alaska Native (USCB 2024b).

3.8.2 Impacts to Socioeconomic Resources and Environmental Justice

3.8.2.1 Proposed Action

The Proposed Action would improve the overall quality of life to users of the water system on the Reservation by providing increased water availability to residents of the Reservation. There are low-income, minority, and indigenous environmental justice communities in the Project area. In compliance with EO 12898, the Proposed Action would not result in a disproportionate adverse effect on human health or environmental effects relative to minority, low-income, or indigenous environmental justice populations. The Proposed Action would provide an overall positive effect on socioeconomic resources and environmental justice communities on the Reservation with the improvement of drinking water distribution from increased water pressure and increased fire flows for emergency response purposes (i.e., firefighting, etc.).

3.8.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the beneficial effects from improved water pressure for public/residential use and fire flows would not occur.

3.9 Vegetation Resources

3.9.1 Affected Environment

The area of analysis for vegetation resources is the Project area (**Figure 8**). The Southwest Regional Gap Analysis Project (SWReGAP) data were used to gather vegetation information within the Project area. The seven SWReGAP mapped vegetation communities within the area of analysis are detailed in **Table 2**.

Table 2 SWReGAP Vegetation Communities in the Area of Analysis

Vegetation Community*	Area of Analysis Acres	Percent of Area of Analysis
Agriculture	6.7	27.0
Developed, Open Space - Low Intensity	1.2	4.8
Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland	0.4	1.6
Intermountain Basins Greasewood Flat	5.7	23.1
Intermountain Basins Mixed Salt Desert Scrub	9.4	37.9
Invasive Annual and Biennial Forbland	0.9	3.6
Invasive Southwest Riparian Woodland and Shrubland	0.5	2
Totals	**24.8**	**100**

Source: USGS 2005

*Developed, Medium- High Intensity makes up 0.001 acres of the Project area, and North American Arid West Emergent Marsh makes up 0.000000005 acres of the Project area. Both vegetation communities were omitted as they are only found in trace amounts within the Project area.

Agriculture

The Agriculture vegetation community makes up 27 percent of the area of analysis. This aggregated landcover type includes both pasture/hay and cultivated crops (USGS 2005).

Developed, Open Space - Low Intensity
The Developed, Open Space - Low Intensity vegetation community makes up 4.8 percent of the area of analysis. It includes areas with a mixture of some construction materials, but mostly vegetation in the form of lawn grasses (USGS 2005).

Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland
The Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland vegetation community makes up 1.6 percent of the area of analysis. This vegetation community occurs in mountain ranges of the Great Basin and along the eastern slope of the Sierra Nevada within a broad elevation range from about 4000 feet to over 7000 feet. This vegetation community is characterized by a mosaic of multiple communities that are tree-dominated with a diverse shrub component (USGS 2005).

Intermountain Basins Greasewood Flat
The Intermountain Basins Greasewood Flat vegetation community makes up 23.1 percent of the area of analysis. This vegetation community typically occurs near drainages on stream terraces and flats or around sparsely vegetated playas. This system usually occurs as a mosaic of multiple communities, with open to moderately dense shrublands dominated or co-dominated by greasewood (*Sarcobatus vermiculatus*). Sites typically have saline soils, a shallow water table, and flood intermittently (USGS 2005).

Intermountain Basins Mixed Salt Desert Scrub
The Intermountain Basins Mixed Salt Desert Scrub vegetation community makes up 37.9 percent of the area of analysis. This vegetation community includes open-canopied shrublands of typically saline basins, alluvial slopes and plains across the intermountain west. The vegetation is characterized by a typically open to moderately dense shrubland composed of one or more saltbrush (*Atriplex*) species (USGS 2005).

Invasive Annual and Biennial Forbland
The Invasive Annual and Biennial Forbland vegetation community makes up 3.6 percent of the area of analysis. These are areas that are dominated by introduced annual and/or biennial forb species such as halogeton (*Halogeton glomeratum*), kochia (*Kochia scoparia*), and Russian thistle (*Salsola*) species (USGS 2005).

Invasive Southwest Riparian Woodland and Shrubland
The Invasive Southwest Riparian Woodland and Shrubland vegetation community makes up two percent of the area of analysis. These areas are dominated by introduced riparian woody species such as *Tamarix* species and Russian olive (*Elaeagnus angustifolius*) (USGS 2005).

3.9.2 Impacts to Vegetation Resources

3.9.2.1 Proposed Action

Implementation of the Proposed Action would result in disturbance to approximately 24.8 acres of existing vegetation communities. However, the proposed disturbance would mainly occur within existing ROWs in areas that have been previously disturbed. In areas of new disturbance, the installation of the proposed water pipe under the Proposed Action would remove existing vegetation

during construction. The Proposed Action would increase the potential for establishment and spread of noxious and invasive non-native species in areas of new disturbance. Therefore, the areas of new disturbance would be reseeded with an appropriate seed mix to reestablish low desert vegetation where necessary. Reseeding would take place during the early spring or fall seasons for optimum revegetation success results. The Proposed Action would not have any significant adverse effects to vegetation resources.

3.9.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to vegetation resources would not occur.

3.10 Human Health and Safety

3.10.1 Affected Environment

The area of analysis for human health and safety is the Project area (**Figure 2**). General small-scale construction activities may occur within the area of analysis associated with community development projects, and agricultural activities in the vicinity may pose water quality risks associated with irrigation and pesticide runoff.

The EPA's Superfund program is responsible for cleaning up some of the nation's most contaminated land and responding to environmental emergencies, oil spills, and natural disasters. To protect public health and the environment, the superfund program focuses on making a visible and lasting difference in communities, ensuring that people can live and work in healthy, vibrant places. The closest superfund site is approximately 20 miles away from the Project area at the Anaconda Mine near Yerington, Nevada, which is proposed to be placed on the National Priorities List for EPA investigation of public health and environmental risks. No other hazardous conditions or risks to human health and safety were identified in the vicinity of the Project area.

3.10.2 Impacts to Human Health and Safety

3.10.2.1 Proposed Action

Under the Proposed Action, trash and refuse would be generated onsite during construction activities, which could be strewn across the Project area by wind and human activity, potentially attracting predators such as coyotes and vultures. Human waste could present public health and safety hazards. Soil or groundwater contamination could result from an accidental spill or release of hazardous materials such as oils or chemicals from construction equipment due to improper handling and/or storage of hazardous materials during construction activity, or during operations and maintenance. Leaks or spills of vehicle hydrocarbon fluids could contaminate soils or be transported by stormwater to nearby water sources (i.e., the Walker River). Construction workers may be subject to typical construction-related incidents including slips, trips, falls, wounds, and other similar injuries.

To minimize these effects, refuse and trash would be removed and disposed of in covered trash receptacles located in the Project area. Refuse and trash would be removed on a regular basis to an approved disposal facility. No open burning of construction trash would occur. Portable toilets would be used onsite and would be maintained on a regular schedule. No construction equipment oil or fuel would be drained on the ground. Oils or chemicals would be hauled to an approved site for disposal. If a fuel/oil, operating fluids, or other hazardous material spill were to occur, the regulatory agencies would be contacted as soon as possible, and actions would be taken to minimize the amount and

spread of the spill material. The SWPPP would include measures to ensure effects to water quality due to accidental releases are minimized during construction of the Project. To mitigate worker-related safety effects, construction crews and/or contract crews would comply with local, Tribal, State, and national standards regarding the installation of facilities and standard construction practices. All Occupational Safety and Health Administration standards related to the construction of the Project would be followed. All personnel involved in these activities would be required to use appropriate and recommended personal protective equipment. With these minimization measures and best management practices in place, the Proposed Action is not anticipated to result in any significant adverse effects to human health and safety.

3.10.2.2 No Action Alternative

Under the No Action Alternative, the Project would not be constructed and the associated effects to human health and safety would not occur; however, risks associated with negative effects on human health may occur as the community need for increased water pressure and fire flows would not be met.

4. Cumulative Effects

The CEQ defines cumulative effects as the effects on the environment which result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions (RFFAs), regardless of who carries out the action (Federal or non-Federal) (40 CFR Part 1508.7). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The Cumulative Effects Study Area (CESA) for the Project consists of a two-mile buffer around the Project area (**Figure 9**) as this is the geographic extent where cumulative impacts could reasonably occur as a result of the Project. The time frame for the cumulative impact analysis is up to five years in the future (2029) as this is the temporal extent where cumulative impacts could reasonably occur as a result of the Project.

Past and present actions within the CESA include the existing water pipeline and water storage tank, transportation ROWs associated with US 95 and local roads within Schurz, and ROWs associated with railroads and telephone lines (**Table 3**). The Proposed Action would improve existing water utility infrastructure within the CESA and be partially constructed within existing ROWs, and construction would not impact the operation of existing projects. Therefore, the Proposed Action is not anticipated to result in cumulative impacts to the existing environment when combined with past and present actions. Within the CESA, RFFAs include future maintenance of existing projects and local improvement/development projects, such as a new convenience store (Martinez 2024). Such activities are anticipated to be minor and consistent with current land uses. There is a potential for other new construction to be proposed by the Tribe with the development of the Proposed Action, as the area has been limited in growth due to the lack of sufficient water supply and fire flows. It is possible that additional future improvements to the existing waterlines may be proposed and constructed within Schurz and/or outside of the CESA as a result of the improved water pipeline system under the Proposed Action. However, at the time of preparation of this EA, no other construction or activities within the CESA have been formally proposed or have not been made public knowledge.

Table 3 Past and Present Actions within the CESA

ROW Holder	ROW Purpose
Nevada Department of Transportation	Alternative Highway US 95
Coe	Railroad
Nevada Bell	Telephone line
Southern Pacific	Railroad

Source: BLM 2024a, BLM 2024b

4.1 Air Quality

The Proposed Action combined with the RFFAs within the CESA are not likely to temporally overlap during construction. However, should construction of RFFAs commence concurrent with construction of the Proposed Action, cumulative impacts would include exhaust emissions from construction vehicles and fugitive dust particulates from construction activities. Overall, the cumulative impacts to air quality during construction activities would be negligible.

4.2 Geology and Soils

The soil disturbances that would occur under during construction of the Proposed Action combined with the RFFAs within the CESA are not likely to temporally overlap. However, should construction of RFFAs commence concurrent with the Proposed Action, the convenience store would include permanent soil disturbance and loss due to occupancy of the building and associated parking lot. The Proposed Action would involve approximately 24.8 acres of ground disturbance and would result in a negligible cumulative impact to geology and soils within the CESA. Standard mitigation measures generally associated with construction projects would help to minimize additional impacts to soils.

4.3 Water Resources

The Proposed Action combined with the RFFAs within the CESA are not likely to temporally overlap during construction. Should construction of RFFAs commence concurrent with construction of the Proposed Action, standard water pollution control measures (i.e., implementation of a SWPPP) would be required to be in place pursuant to state regulations to minimize water quality impacts. Therefore, potentially overlapping cumulative effects to water resources from construction activities would have a negligible cumulative impact to water resources within the CESA.

4.4 Threatened, Endangered and Candidate Species

The Proposed Action combined with the RFFAs within the CESA would have no effect on threatened, endangered, or candidate species as no species or critical habitat were identified as present in the desktop baseline assessment (**Appendix C**). As discussed in **Section 3.4.2**, potentially suitable habitat for yellow-billed cuckoo in riparian areas would not be effected as the Proposed Action would implement HDD to bore under the Walker River for Project installation to avoid such areas. The RFFAs within the CESA would be subject to a separate environmental review process pursuant to applicable state and federal regulations prior to construction, including an updated review of present threatened, endangered, and candidate species and associated critical and/or potential suitable habitat based on the location of the RFFAs.

4.5 Historic and Cultural Resources

There are no known cultural resources or historic properties present within the CESA that would be impacted the Proposed Action and RFFAs. Standard mitigation measures would help to minimize impacts to these resources if inadvertent discoveries are made. The Proposed Action and RFFAs would have no adverse cumulative impact to cultural resources or historic properties within the CESA.

4.6 Aesthetic Resources

The Proposed Action cumulative impacts would be negligible following construction, as the waterline would be buried underground, and the water tank would blend in with the existing characteristic landscape alongside the existing water storage tank. The RFFAs would be located within Schurtz, which already has existing buildings, businesses, and residences. Overall, the Proposed Action combined with the RFFAs would have negligible cumulative impacts on aesthetic resources within the CESA as the developments would be buried and/or blend with the existing characteristic landscape.

4.7 Land Use

The Proposed Action would be located mainly within existing ROWs and known RFFAs within the CESA would be similar to existing authorizations; therefore, the Proposed Action and RFFAs would comply with existing land uses. Any RFFAs for development within the CESA would be required to go through a separate environmental review and/or zoning process for permitting and construction. Overall, cumulative effects as a result of the Proposed Action combined with RFFAs within the CESA would be negligible.

4.8 Socioeconomic Resources and Environmental Justice

The Proposed Action and RFFAs would result in overall beneficial cumulative impacts to socioeconomic resources and environmental justice populations as they would lead to increased local infrastructure and community services. The Proposed Action and RFFAs would not result in disproportionate adverse cumulative effects on human health or environmental effects relative to minority, low-income, or indigenous environmental justice populations, nor would it result in negative cumulative effects to socioeconomic resources within the CESA.

4.9 Vegetation Resources

The Proposed Action and RFFAs within the CESA have the potential to impact vegetation via surface disturbance during construction and surface occupancy. Under the Proposed Action, most of the Project area would be reseeded, resulting in a minimal loss in overall vegetation. The acreage of the convenience store RFFA is currently unknown and would permanently remove vegetation; however, it is anticipated that development of the RFFA would not impact vegetation populations as a whole based on the extent of existing vegetation communities in the CESA. Additionally, any RFFAs within the CESA would be required to undergo a separate environmental review process pursuant to applicable state and federal regulations. Cumulative effects to vegetation under the Proposed Action when combined with RFFAs would be negligible within the CESA.

4.10 Human Health and Safety

The Proposed Action would implement mitigation measures and best management practices to ensure risks to human health and safety are minimized. It is expected that RFFAs in the CESA would implement similar measures in compliance with any applicable state and federal regulations for hazardous and solid waste generation and/or storage, and potential hazardous spills, during construction and operation of any development actions. Overall, cumulative effects to human health and safety would be negligible as a result of the Proposed Action combined with RFFAs.

4.11 No Action Alternative

Under the No Action Alternative, cumulative effects from past, present, and RFFAs combined with the Proposed Action would not occur as the Project would not be constructed; however, existing conditions from past and present actions would continue and effects from development of the RFFAs would have the potential to occur.

5. Consultation and Coordination

The following is a list of agencies, organizations, and individuals consulted, and a list of individuals responsible for the preparation and/or review of this EA.

5.1 List of Consultations

Table 4 lists the agencies, organizations, and individuals consulted while preparing this EA.

Table 4 List of Agencies, Organizations, and Individuals Consulted

Agency Name	Consultation
Bureau of Indian Affairs	ROW
Mineral County	ROW
Nevada Department of Transportation	ROW
United States Army Corps of Engineers	WOUS
US Department of the Interior	NEPA Compliance for funding
US Fish and Wildlife Service	Official Species Lists – Endangered Species Act

5.2 List of Preparers and Reviewers

Table 5 lists the individuals who prepared and/or reviewed this EA.

Table 5 List of Preparers and Reviewers

Name	Position	Role
Shelby Hockaday	Stantec, Senior Project Manager	Senior Review/Quality Assurance and Quality Control
Krystle Wengreen	Stantec, Senior Resource Specialist	Lead Author

Name	Position	Role
Madeleine Hamel	Stantec, Senior Resource Specialist	Water Resources
Jordan Davis	Stantec, GIS Analyst	GIS Data and Maps
Tina Davis	Stantec, Environmental Services Coordinator	Technical Editing and Formatting
John Buzzone	Stantec, Principal, Water	Senior Review

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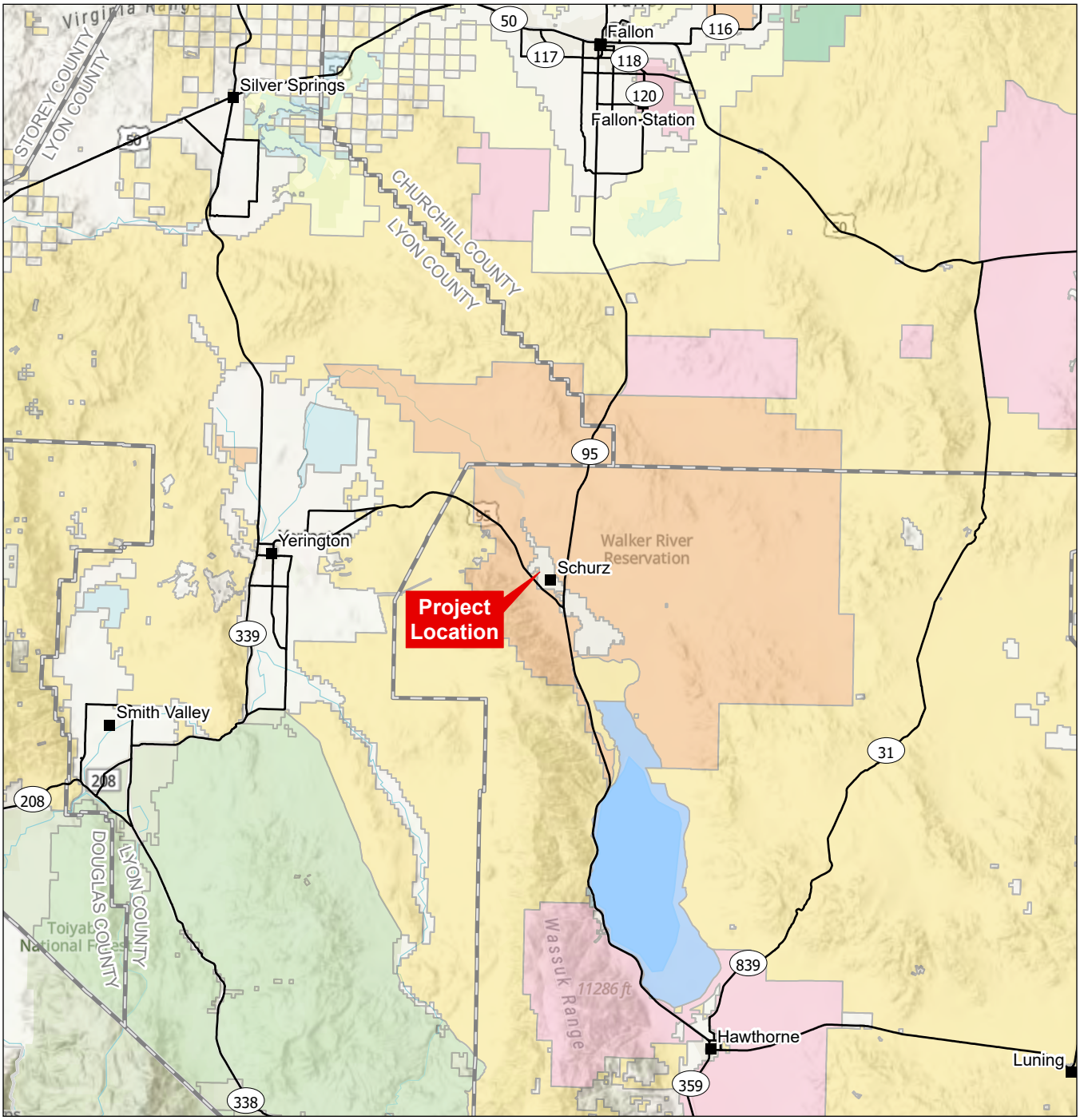
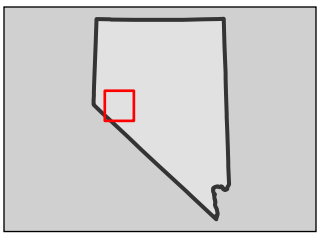
FIGURES





Legend

- Cities
- Counties

Land Ownership

- Bureau of Indian Affairs
- Bureau of Land Management
- Bureau of Reclamation
- Department of Defense
- Fish and Wildlife Service
- Forest Service
- Nevada State
- Private
- Water

0 5 10 Miles

(At original document size of 8.5x11)
1 in = 10 mi

N

Stantec

Project Location
Shurz, NV
Mineral County

Drawn by JD on 2024-06-05
TR by BT on 2024-06-05
IR by MH on 2024-06-05

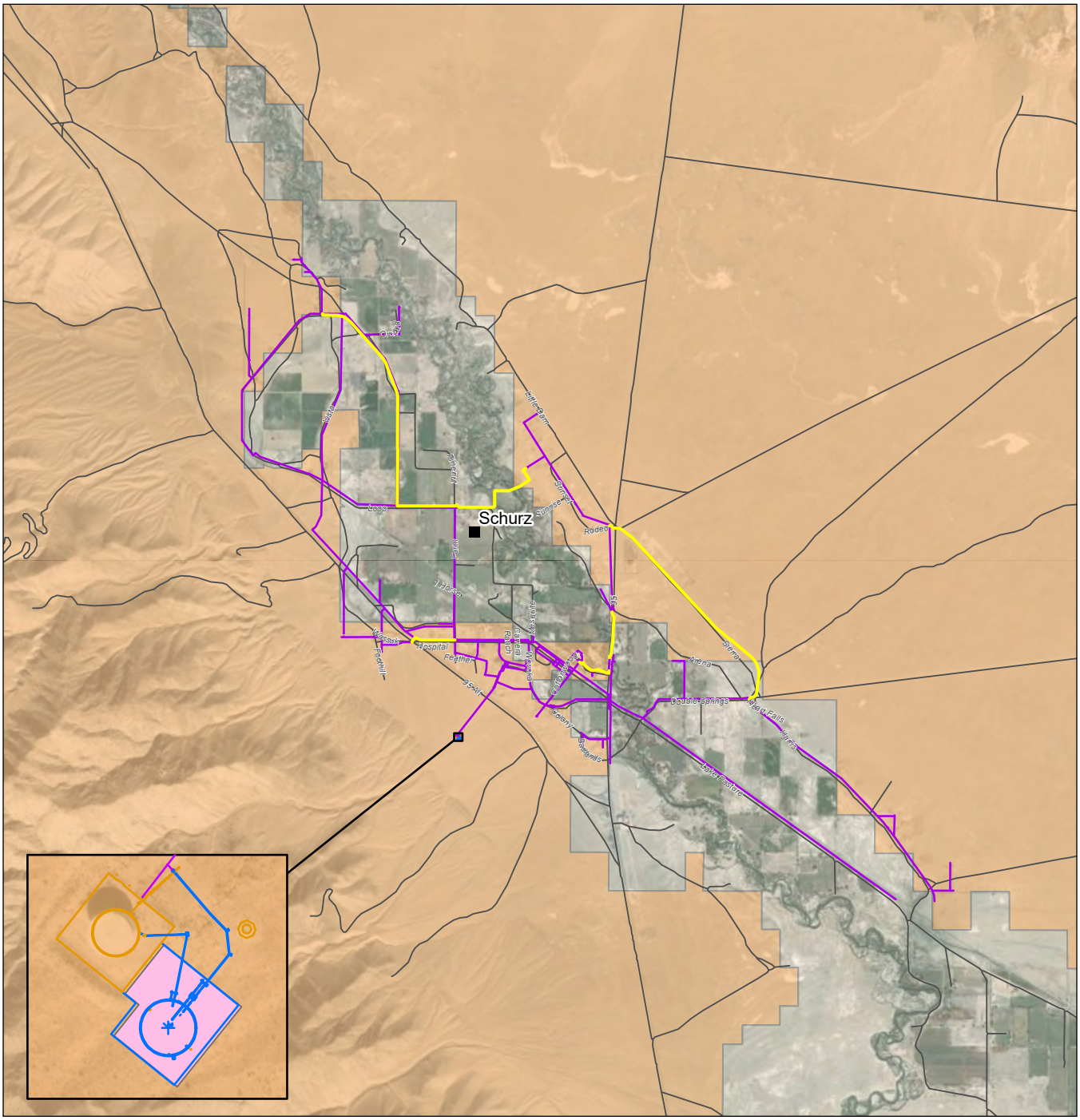
Client/Project 181301397

Walker River Paiute
Water Improvement System

Figure No.
1

Title
Project Location

V:\2037\Active\181301397\03_data\gis_cad_ArcPro\Working\template\Working.aprx Revised: 2024-06-05 By: jordavis



Legend

- Proposed 8" Pipeline
- Existing Water Utility

Tanks and Connecting Pipes

- Existing
- Proposed
- Proposed Tank Pad

Land Ownership

- Bureau of Indian Affairs
- Private

0 0.5 1 Miles

(At original document size of 8.5x11)
1 in = 1 mi

N

Stantec

Project Location
Shurz, NV
Mineral County

Drawn by JD on 2024-09-11
TR by BT on 2024-09-11
IR by MH on 2024-09-11

Client/Project 181301397

Walker River Paiute
Water Improvement System

Figure No.
2

Title
Proposed Pipeline and Tank Alignment

V:\2037\Active\181301397\03_data\gis_cad_ArcPro\Working\TemplateWorking.aprx Revised: 2024-09-11 By: jordavis

Legend

- Proposed 8" Pipeline
- Proposed Tank Pad

Geologic Unit

- Alluvial dep.; valley fill, gravel, slope wash
- Diorite and related rocks
- Granitics; quartz, granodiorite, albite granite

0 0.25 0.5 Miles

(At original document size of 8.5x11)
1 in = 1 mi

N

Stantec

Project Location
Shurz, NV
Mineral County

Drawn by JD on 2024-06-05
TR by BT on 2024-06-05
IR by MH on 2024-06-05

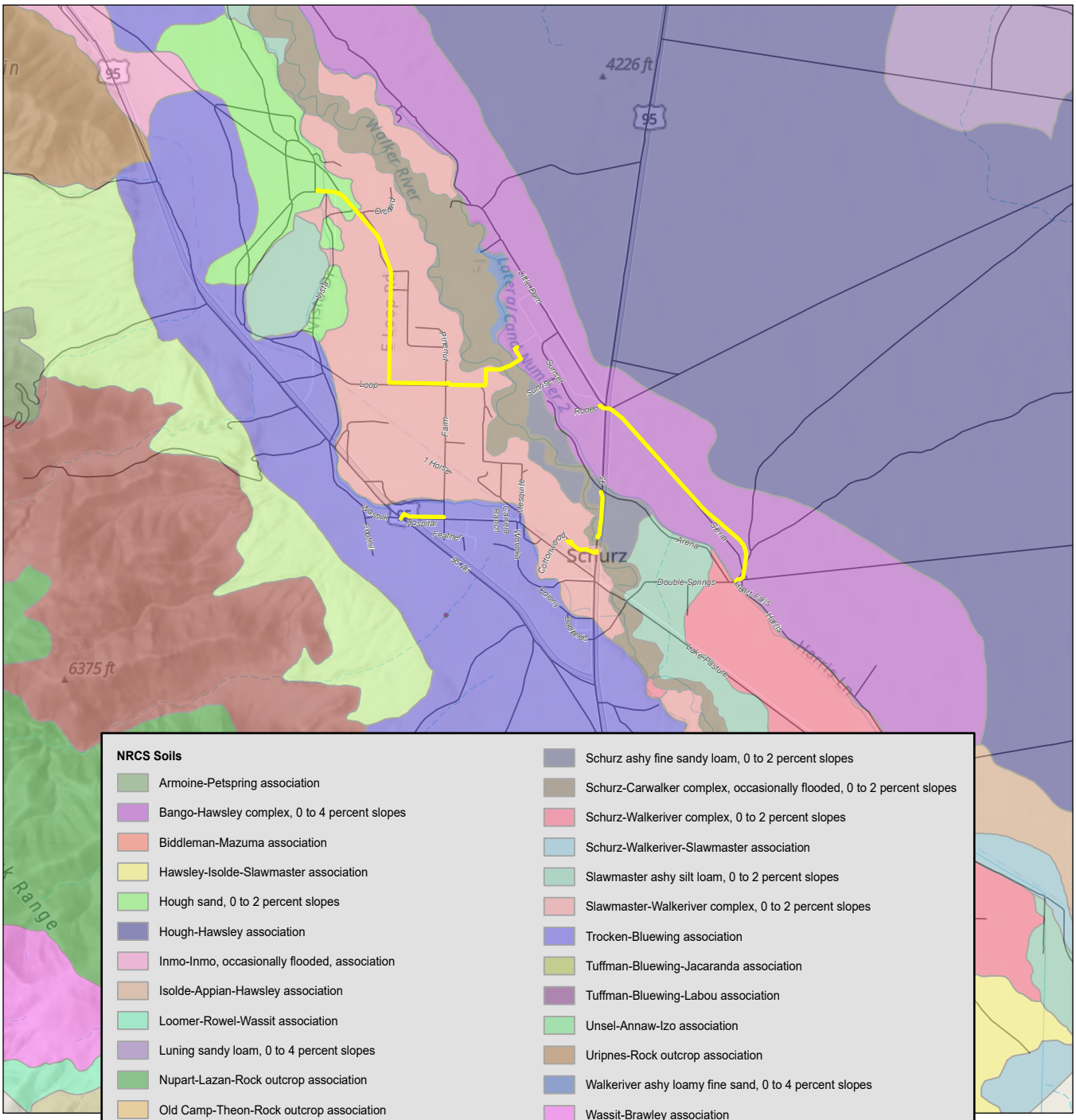
Client/Project 181301397

Walker River Paiute
Water Improvement System

Figure No.
3

Title
Geologic Units

V:\2037\Active\181301397\03_data\gis_cad_ArcPro\Working\template\Working.aprx Revised: 2024-06-05 By: jordavis



NRCS Soils

- Armoine-Petspring association
- Bango-Hawsley complex, 0 to 4 percent slopes
- Biddleman-Mazuma association
- Hawsley-Isolde-Slawmaster association
- Hough sand, 0 to 2 percent slopes
- Hough-Hawsley association
- Inmo-Inmo, occasionally flooded, association
- Isolde-Appian-Hawsley association
- Loomer-Rowel-Wassit association
- Luning sandy loam, 0 to 4 percent slopes
- Nupart-Lazan-Rock outcrop association
- Old Camp-Theon-Rock outcrop association
- Petspring-Uripnes-Beelem association
- Rednik-Gynelle association
- Schurz ashy fine sandy loam, 0 to 2 percent slopes
- Schurz-Carwalker complex, occasionally flooded, 0 to 2 percent slopes
- Schurz-Walkeriver complex, 0 to 2 percent slopes
- Schurz-Walkeriver-Slawmaster association
- Slawmaster ashy silt loam, 0 to 2 percent slopes
- Slawmaster-Walkeriver complex, 0 to 2 percent slopes
- Trocken-Bluewing association
- Tuffman-Bluewing-Jacaranda association
- Tuffman-Bluewing-Labou association
- Unsel-Annaw-Izo association
- Uripnes-Rock outcrop association
- Walkeriver ashy loamy fine sand, 0 to 4 percent slopes
- Wassit-Brawley association
- Zyzzi-Nupart association

Legend

- Proposed 8" Pipeline
- Proposed Tank Pad

0 0.5 1 Miles

(At original document size of 8.5x11)
1 in = 1 mi

N

Stantec

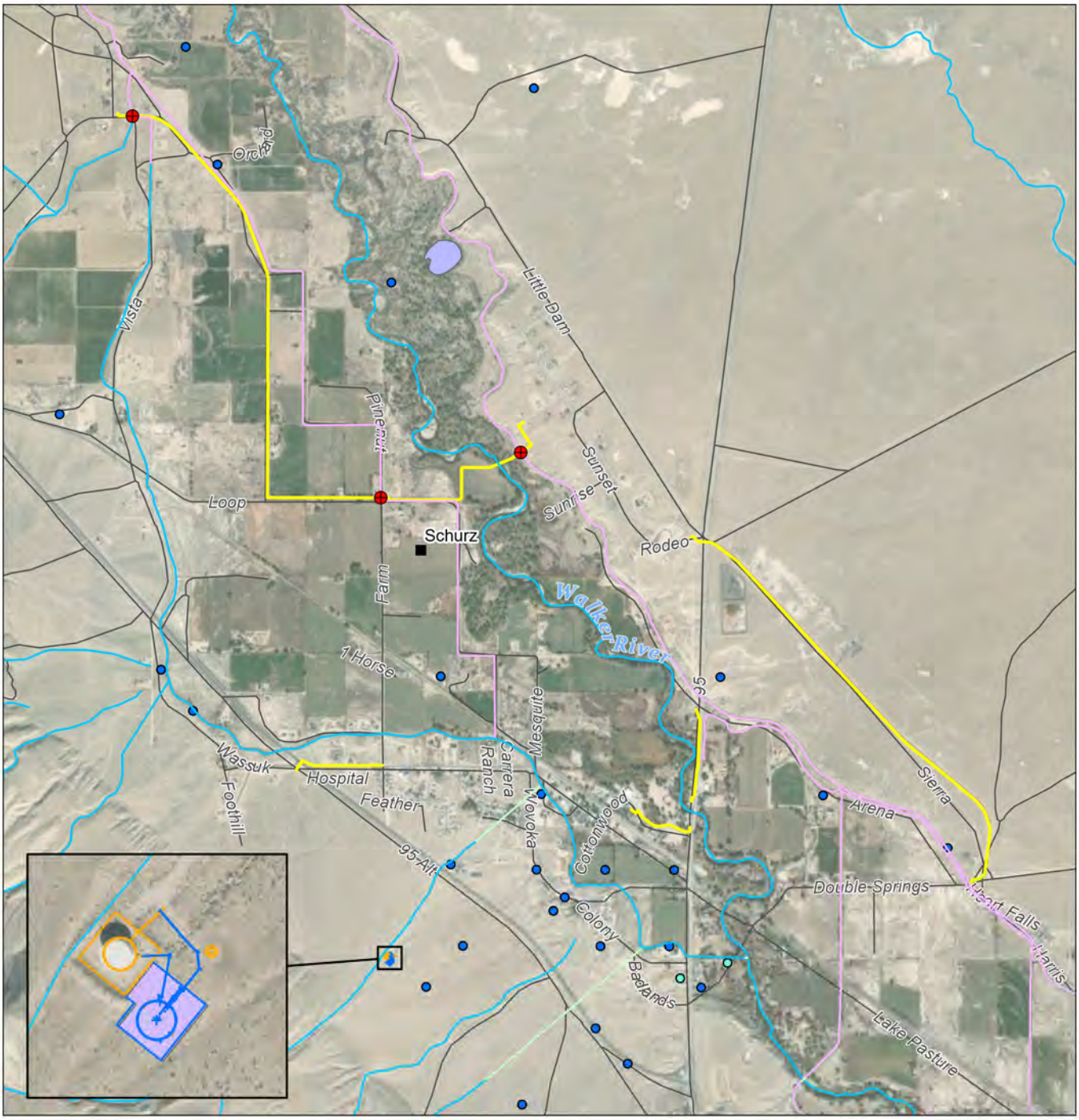
Project Location	Drawn by JD on 2024-06-05
Shurz, NV	TR by BT on 2024-06-05
Mineral County	IR by MH on 2024-06-05
Client/Project	181301397

Walker River Paiute
Water Improvement System

Figure No.
4

Title
NRCS Soils

V:\2037\Active\181301397\03_data\gis_cad_ArcProWorking\template\Working.aprx Revised: 2024-06-05 By: jordavis



Legend

- Proposed 8" Pipeline
- Proposed Tank Pad

Tanks and Connecting Pipes

- Existing
- Proposed

- NDWR PODs 2023
- NDWR Wells
- CanalDitch Crossing

NHD Streams

- Connector
- CanalDitch
- StreamRiver
- ArtificialPath

NHD Waterbody

- Swamp Marsh

0 0.25 0.5 Miles

(At original document size of 8.5x11)
1 in = .5 mi

N

Stantec

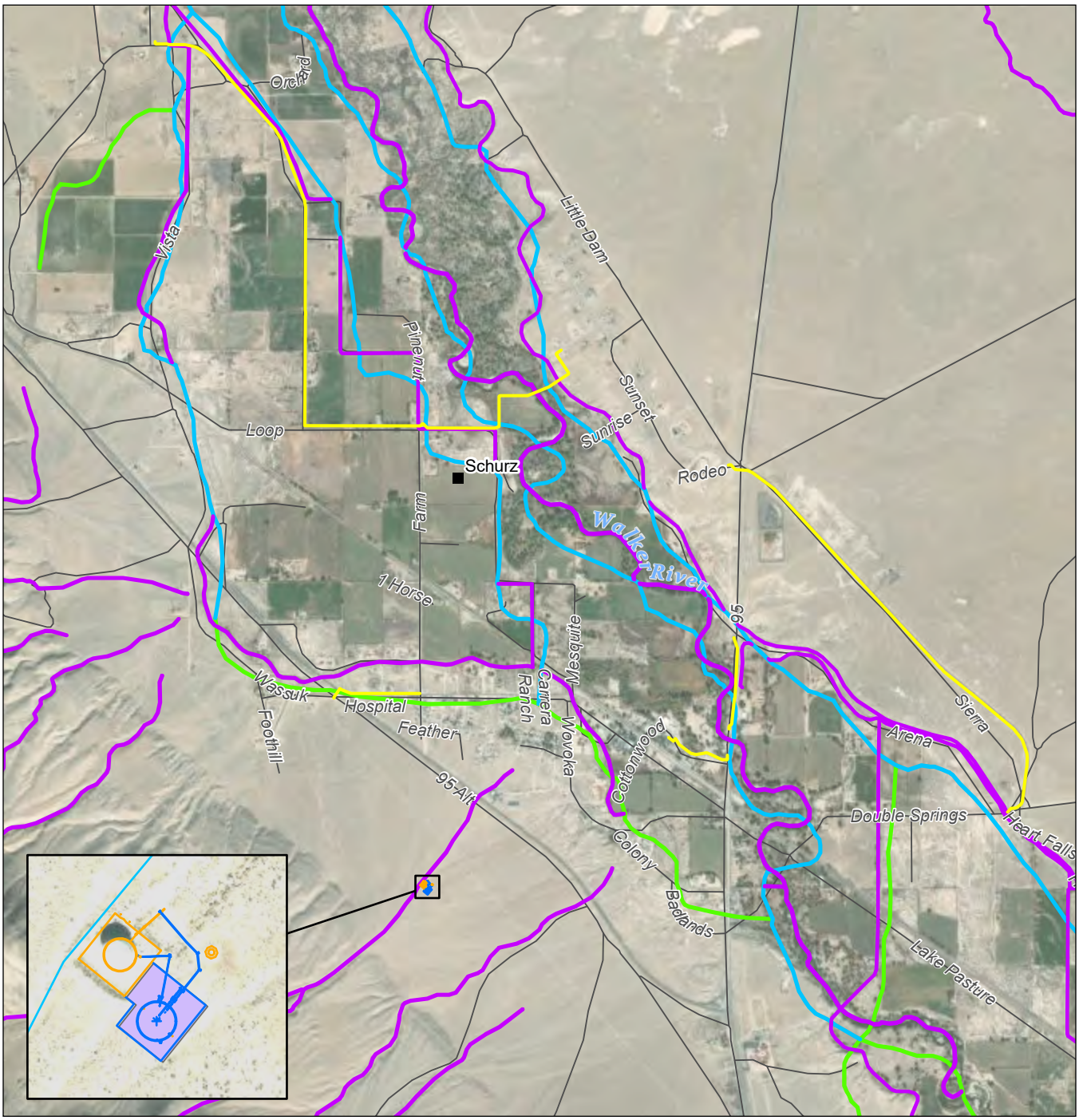
Project Location	Drawn by JD on 2024-08-28
Shurz, NV	TR by BT on 2024-08-28
Mineral County	IR by MH on 2024-08-28
Client/Project	181301397

Walker River Paiute
Water Improvement System

Figure No.
5

Title
Water Resources

V:\2037\Active\181301397\03_data\gis_cadi_ArcPro\Working\template\Working.aprx Revised: 2024-08-28 By: jbarber



Legend

- Proposed 8" Pipeline
- Proposed Tank Pad

Tanks and Connecting Pipes

- Existing
- Proposed

NWI Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

0 0.25 0.5 Miles

(At original document size of 8.5x11)
1 in = .5 mi

N

Stantec

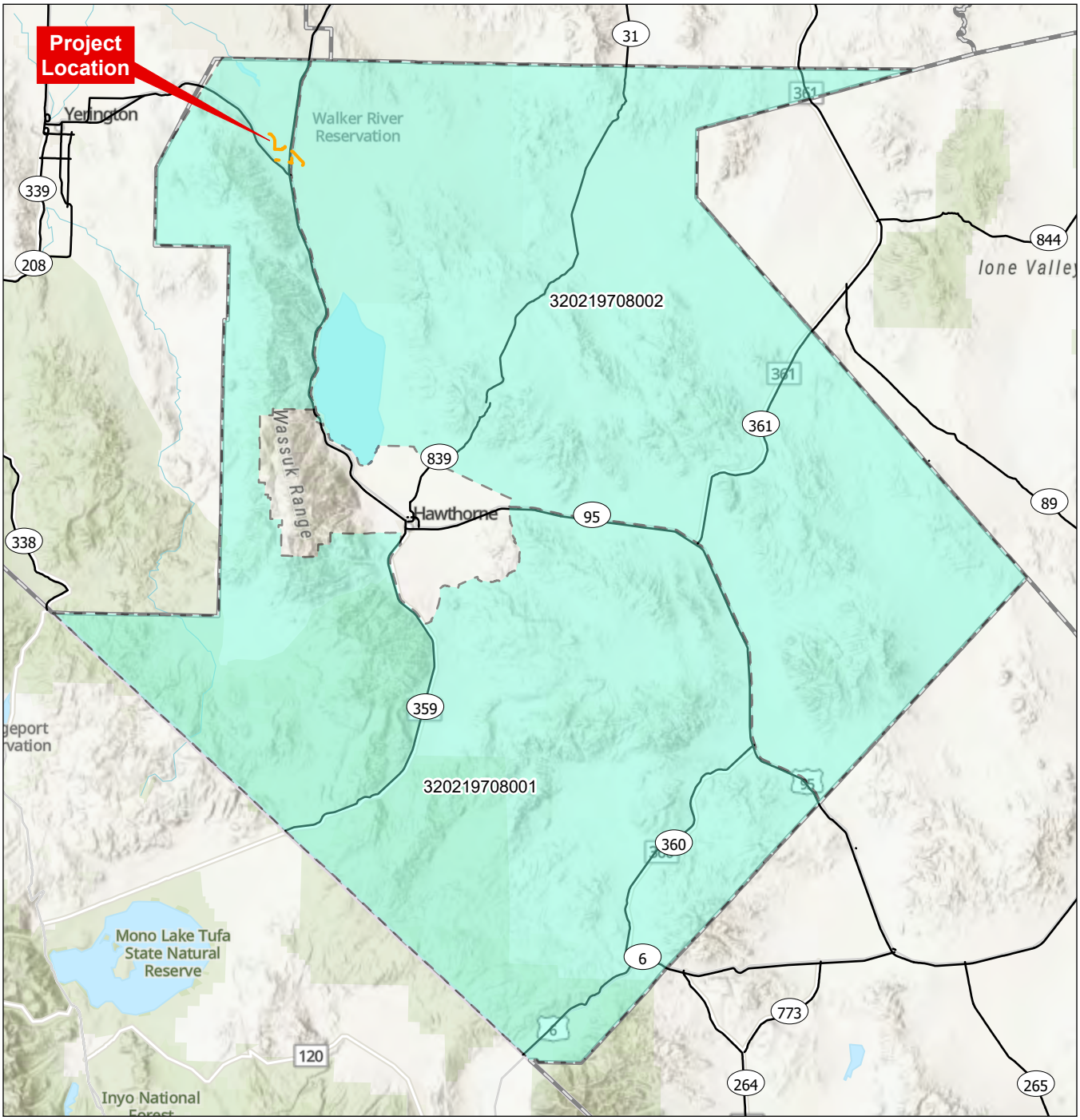
Project Location	Drawn by JD on 2024-06-05
Shurz, NV	TR by BT on 2024-06-05
Mineral County	IR by MH on 2024-06-05
Client/Project	181301397

Walker River Paiute
Water Improvement System

Figure No.
6

Title
Wetlands

V:\2037\Active\181301397\03_data\gis_cad_ArcProWorking\Template\Working.aprx Revised: 2024-06-05 By: jordavis



Legend

- Proposed 8" Pipeline
- Census Blocks

0 6.5 13 Miles

(At original document size of 8.5x11)
1 in = 12.5 mi

N

Stantec

Project Location Shurz, NV Mineral County	Drawn by JD on 2024-06-05 TR by BT on 2024-06-05 IR by MH on 2024-06-05
Client/Project	181301397

Walker River Paiute
Water Improvement System

Figure No.
7

Title
Environmental Justice Area of Analysis

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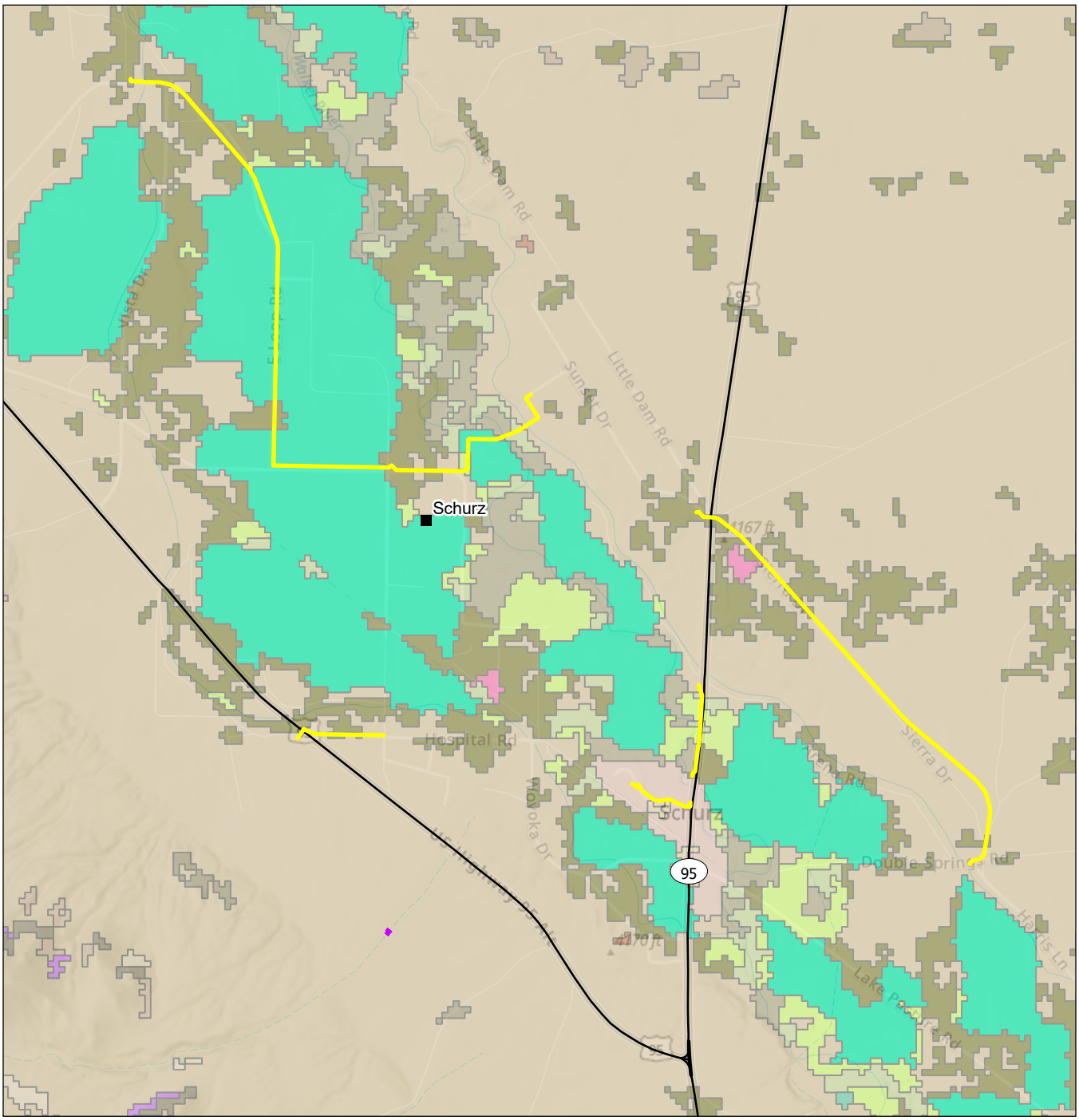

Legend

- Proposed 8" Pipeline
- Proposed Tank Pad

SWReGAP

- Agriculture
- Developed, Medium - High Intensity
- Developed, Open Space - Low Intensity
- Great Basin Foothill and Lower Montane Riparian Woodland and Shrubland
- Great Basin Pinyon-Juniper Woodland
- Great Basin Xeric Mixed Sagebrush Shrubland
- Inter-Mountain Basins Active and Stabilized Dune
- Inter-Mountain Basins Big Sagebrush Shrubland
- Inter-Mountain Basins Big Sagebrush Steppe
- Inter-Mountain Basins Cliff and Canyon
- Inter-Mountain Basins Greasewood Flat
- Inter-Mountain Basins Mixed Salt Desert Scrub
- Inter-Mountain Basins Montane Sagebrush Steppe
- Inter-Mountain Basins Playa
- Inter-Mountain Basins Semi-Desert Grassland
- Inter-Mountain Basins Semi-Desert Shrub Steppe
- Invasive Annual Grassland
- Invasive Annual and Biennial Forbland
- Invasive Southwest Riparian Woodland and Shrubland
- Mojave Mid-Elevation Mixed Desert Scrub
- North American Arid West Emergent Marsh

0 0.25 0.5 Miles

(At original document size of 8.5x11)
1 in = 1 mi

N

Stantec

Project Location
Shurz, NV
Mineral County

Drawn by JD on 2024-06-05
TR by BT on 2024-06-05
IR by MH on 2024-06-05

Client/Project 181301397

Walker River Paiute
Water Improvement System

Figure No.
8

Title
Vegetation

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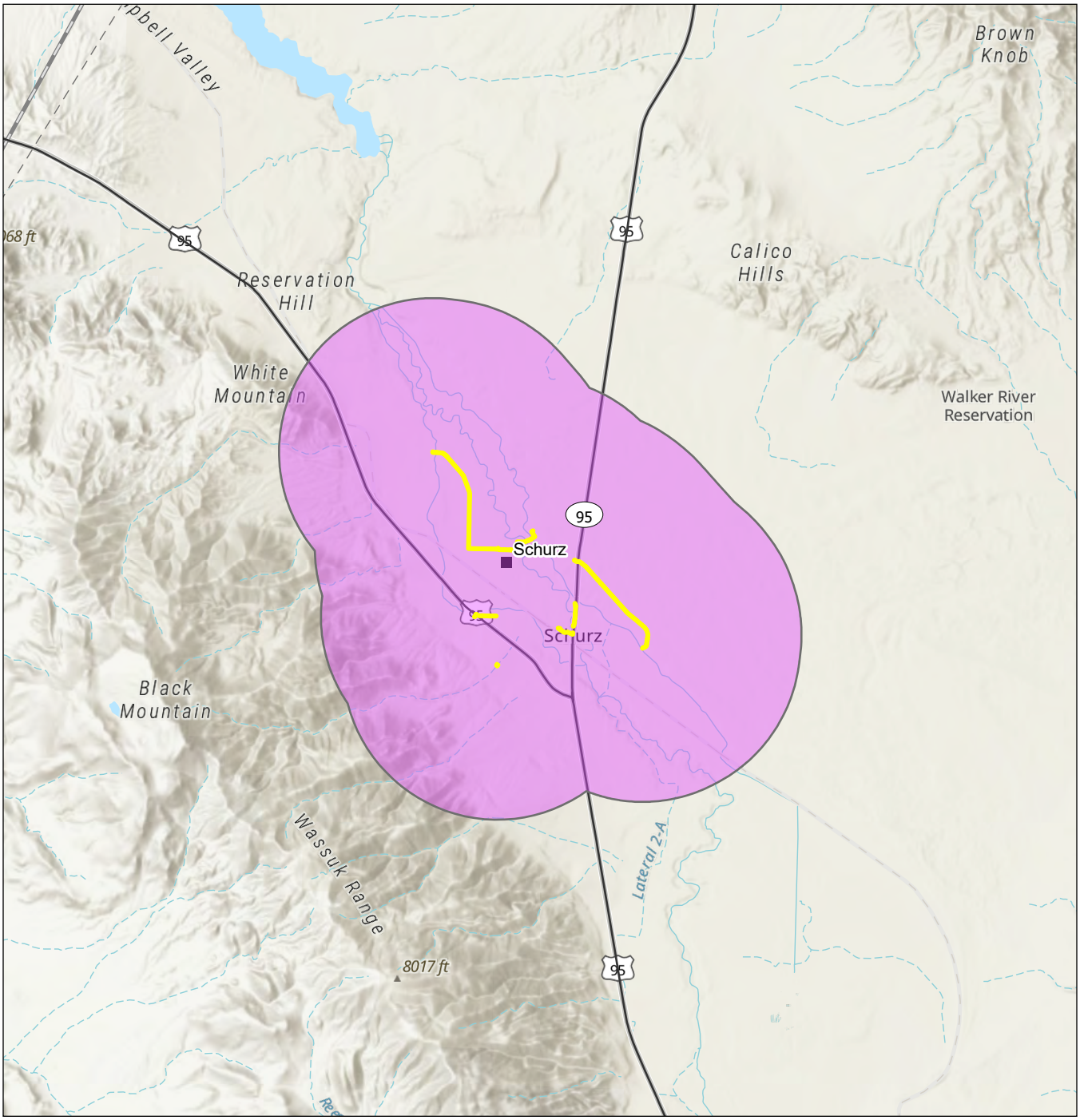

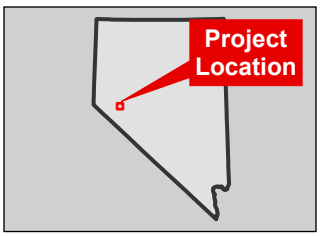

Legend

- Project Area
- CESA AOI (Project Area 2mi Buffer)
- Cities
- Counties

0 1 2 Miles

(At original document size of 8.5x11)
1 in = 2 mi

N

Stantec

Project Location	Drawn by JD on 2024-07-24
Shurz, NV	TR by BT on 2024-07-24
Mineral County	IR by MH on 2024-07-24
Client/Project	181301397

Walker River Paiute
Water Improvement System

Figure No.
9

Title
Project CESA

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