

**SUBSEQUENT NEGATIVE DECLARATION
(SCH No. 2007021032)**

**for
No Name Substation to Firehouse Switchyard 69-kilovolt
Transmission Line and Development of The City Well No. 16
Project**

Prepared for:

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July 2021

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1.0 INTRODUCTION

This Subsequent ND has been prepared as part of the previous *No Name Substation to Firehouse Switchyard 69-kilovolt Transmission Line Environmental Assessment (Department of Energy EA-1577) and Negative Declaration (State Clearinghouse No. 2007021032)* ("EA/ND") for the No Name Substation to Firehouse Switchyard 69-kilovolt Transmission Line and Development of The City Well No. 16 Project ("Proposed Action") to address changes in the Proposed Action and the related environmental effects of those changes.

The referenced environmental document was prepared to comply with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The Department of Energy (DOE) completed an environmental assessment (EA) and published a Finding of No Significant Impact (FONSI) in April 2007 and the City of Needles adopted a Negative Declaration (ND) on May 8, 2007 for the Proposed Action evaluated in the EA/ND.

1.1 PRIOR PROPOSED ACTION

The EA/ND evaluated the Proposed Action under consideration by the Western Area Power Administration's (WAPA) proposed 69-kilovolt transmission line and associated facilities from the existing No Name Substation, in Mohave County, AZ to a new switchyard ("Firehouse Switchyard") in Needles, CA. The purpose of the Proposed Action was to meet Needles' load demand for electrical power. Under the Proposed Action considered in the EA/ND, WAPA would fund and own the transmission line and Firehouse Switchyard facility; the Aha Macav Power Services utility would construct, operate, and maintain the electrical facilities; the US Department of Interior Bureau of Indian Affairs, Fort Mojave Indian Tribe (FMIT), and the California State Lands Commission (CSLC) would grant right-of-way easements; and the City of Needles would provide and transfer property to WAPA for the Firehouse Switchyard.

The location of the proposed Firehouse Switchyard evaluated as part of the Proposed Action considered in the EA/ND was a 2.5-acre property in the vicinity of the Needles Lagoon, east of Highway 95, and a site previously disturbed with a former bowling alley. The switchyard was to be located within an approximately 160-foot by 200-foot fenced area which the City describes as being within Assessor's Parcel Numbers 0660-081-23 and -32; the Firehouse Switchyard has been constructed on 0660-081-23 and parcel -32 is currently vacant. This parcel is currently owned by the City of Needles.

The Proposed Action evaluated in 2007 consisted of the following major elements:

- Acquire ROW easements in the amount of 20.97 acres from FMIT and 3.15 acres from CSLC, and 0.74 acre of ROW transfer from the City of Needles;
- Build a new 0.50-mile long by 20-foot wide access road;
- Build a new 3.95-mile long single-circuit 69-kV transmission line including 38 tangent monopole structures and 4 self-supporting structures;
- Construct a new control building and communications facility at No Name Substation on the FMIT Reservation;

- Construct a new "Firehouse" Switchyard, in Needles, California, including electrical, communications, safety, and security facilities. Some of these facilities may be built within the switchyard perimeter, in phases, at a later date; and
- Install communications facilities at Topock Substation.

The EA/ND was prepared to address construction-level and operational impacts of the Proposed Action considered by WAPA's transmission line and switchyard, including development of public infrastructure within the boundaries of APNs 0660-081-23 and -32. The EA/ND determined after consideration that the following resource areas did not need further evaluation: geology, paleontology, soils, noise, health and safety, hazardous material, solid waste, air quality, mineral resources, and transportation/traffic. Resource areas evaluated in detail included: land use/ownership, visual resources, biological resources, water resources, cultural resources, and socioeconomics (environmental justice).

All potentially significant impacts identified in the EA/ND were subject to the Resources Protection Measures identified in the EA/ND which upon implementation would mitigate impacts to below a level of significance.

1.2 SUMMARY OF THE CHANGES TO THE PROPOSED ACTION

Groundwater is the sole source of the Needles water supply. Approximately 781 million gallons per year is pumped from four (4) wells. The wells are approximately 100 feet deep and are located in the lower part of the City. The City's water distribution system consists of 66 miles of lines varying in diameter from 2-inch to 16-inch. Lines are constructed of ductile iron, asbestos cement, steel and plastic pipe. Water storage capacity for the Needles water supply is provided by four storage tanks serving two pressure zones. There are two 1.5 million gallon tanks next to the Rodeo Grounds, and one 1.5 million gallon tank and one 100,000 gallon tank at the southern terminus of Parkway Street.

Water quality drinking water standards are established both by the State Water Resource Control Board (SWRCB) and by the United States Environmental Protection Agency (EPA) in compliance with the Safe Water Drinking Act. Since adoption of the EA/ND, the City of Needles has experienced declining groundwater quality in most of its domestic water wells. Currently three of the four permitted wells within the City's water system have contaminants exceeding Maximum Contaminant Levels (MCLs) set by the State of California for drinking water. Through engineering studies, the City has determined that parcel -32 would be the most feasible location for siting a new water well to be known as Well No. 16 (see Appendix A – Figure 1). Well No. 16 and a 16-inch pipeline would connect the well to the City's existing water distribution system utilizing existing rights-of-ways for utilities maintained by the City ("Revised Proposed Action"; see Appendix A – Figure 2).

Although a groundwater well was not specifically contemplated in the components of the Proposed Action in 2007; it can be considered a supporting element in that the facilities described in the Proposed Action considered in the EA/ND require access to water. The existing substation has cooling fans which when the transformers are overloaded or extreme summer heat waves occur, water must be sprayed on them to cool them down. Currently hoses are run from nearby private properties that have water service. The new well will provide an adequate and proximate water supply to the substation to support critical electrical infrastructure in extreme heat conditions. As such, it can be considered as an extension of the Proposed Action considered in the EA/ND. Because this site previously has been the subject of a 2007 CEQA

environmental analysis (EA/ND) for the Proposed Action and because the water well is supporting public infrastructure, the City has prepared this Subsequent ND for purposes of complying with CEQA for construction and operation of the well.

To assist in providing funding for the Revised Proposed Action, the City has applied for a loan/grant through the California Department of Water Resources (DWR) for design and construction of the well and this document will also serve as part of the loan/grant application package.

1.3 USE OF SUBSEQUENT NEGATIVE DECLARATION

When a Proposed Action is changed or there are changes in environmental setting, a determination must be made by the Lead Agency as to whether an Addendum or Subsequent environmental document is prepared. CEQA Guidelines Sections 15162 and 15164 sets forth criteria to assess which environmental document is appropriate. The criteria for determining whether an Addendum or Subsequent environmental document is appropriate; if met, then an Addendum is the appropriate document:

- No new significant impacts will result from the project or from new mitigation measures.
- No substantial increase in the severity of environmental impact will occur.
- No new feasible alternatives or mitigation measures that would reduce impacts previously found not to be feasible have, in fact, been found to be feasible.

Based upon the analysis provided in Section 3.0 of this document, the modifications of the Proposed Action as analyzed in the EA/ND by development of a groundwater well adjacent to the existing Firehouse Switchyard (Revised Proposed Action) will not result in new significant impacts or substantially increase the severity of impacts, and there are no previously infeasible alternatives that are now feasible. None of the other factors set forth in Section 15162(a)(3) are present. Therefore, a Subsequent ND is appropriate, and this document has been prepared to address the environmental effects that may be associated with the Revised Proposed Action.

Components of the Revised Proposed Action, specifically the pipeline connection to the existing utilities, may qualify as exempt under Class 1, Existing Facilities, as described in Section 15301 of the CEQA Guidelines. CEQA Guidelines Section 15301 states Class 1 exemptions consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. As the pipeline would connect to the existing utilities in the rights-of-ways maintained by the City, this portion of the Revised Proposed Action may be exempt from environmental review under CEQA.

Furthermore, as discussed above, currently three of the four permitted wells within the City's water system have contaminants exceeding the State's MCLs. Should the fourth well fail, the Revised Proposed Action would be exempt under Section 15269, Emergency Projects, as it would meet the following conditions of emergency projects:

"(b) Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or

welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.

(c) Specific actions necessary to prevent or mitigate an emergency. This does not include long term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term, but this exclusion does not apply (i) if the anticipated period of time to conduct an environmental review of such a long-term project would create a risk to public health, safety or welfare, or (ii) if activities (such as fire or catastrophic risk mitigation or modifications to improve facility integrity) are proposed for existing facilities in response to an emergency at a similar existing facility.”¹

The City is proceeding with this Subsequent ND and the Revised Proposed Action to avoid an emergency response that would qualify as exempt from the requirements of CEQA.

1.4 SUMMARY

This Subsequent ND addresses the environmental effects associated only with refinements/enhancements to the Proposed Action that have occurred since adoption of the EA/ND. The analysis of potential environmental impacts associated with the Revised Proposed Action in this Subsequent ND remain consistent with those made in the EA/ND. No new significant impacts would result, and no substantial increase in severity of impacts would result from the Revised Proposed Action than those previously identified in the EA/ND.

2.0 REVISED PROPOSED ACTION DESCRIPTION

Well No. 16 is anticipated to be developed based on a preliminary well design of an 18-inch inside diameter well casing. The depth of the well will be dependent upon test drilling results and be determined during preliminary design. The well would be equipped with a submersible pump for groundwater extraction. Facilities would also include a 320 square-foot pump station house (or steel shade structure) approximately 10 feet in height to be placed near the developed well on a concrete pad. Groundwater produced from the well would be distributed into the City’s existing water system from the pump to a new 16-inch pipeline constructed within the Project Site (Assessor’s Parcel Number 0660-081-32) and connecting to a 16” distribution line in the right-of-way of Needles Highway. Should any treatment be required to meet drinking water standards after the well is equipped and test pumped, the City would provide an on-site package treatment plant within the existing footprint evaluated herein that would tie into the existing electrical grid. The construction schedule, for purposes of estimated air quality emissions is a maximum of three months.

According to the Technical Specifications prepared for Well No. 16 dated June 2, 2021, groundwater levels in the area are approximately 21-25 feet below ground surface (bgs). Representative Well Driller’s lithologic logs of the area are presented in Appendix A of the Technical Specifications report (on-file with the City of Needles).

¹ California Environmental Quality Act (CEQA), Guidelines, Section 15269, Emergency Projects.

2.1 LOCATION AND SETTING

The Project Site is described as Assessor's Parcel Number 0660-081-32. According to the San Bernardino County Assessor's Property Information Center (accessed May 20, 2021, the property has been owned by the City of Needles since at least 2008. The Project Site is located just west of the Colorado River and just east of the intersection of State Route 66 and River Road.

The site is currently vacant and surrounded by public infrastructure, commercial and light industrial uses, and vacant land. Adjacent to the west is the Firehouse Switchyard. Photographs of the Project Site taken in May 2021 are included in Appendix B. The Project Site is zoned Commercial Residential Resort (CRR) and is designated in the General Plan as Resort Commercial. The Needles City Code provides that utility facilities are allowed in all zones with a Special Use Permit (Needles City Code §96.01, p. 456).

Access to the site is from McShans Lane, a dirt road that runs easterly from River Road. The Project Site slopes slightly toward the Colorado River with elevations ranging from 492 feet above mean sea level (amsl) in the northwest corner to 487 feet msl along the eastern property line. Sparse vegetation was found in May 2021 along the perimeter and ruderal vegetation on-site. The Project Site is currently being used as a storage yard for the electrical substation. The site is heavily disturbed and maintained (see Appendix B photographs).

3.0 ENVIRONMENTAL ANALYSIS

As explained in Section 1.0, this comparative analysis has been undertaken pursuant to the provisions of CEQA Sections 15162 and 15164 to provide the City with the factual basis for determining whether any changes in the project, any changes in circumstances, or any new information since the EA/ND was adopted require additional environmental review or preparation of a Subsequent MND or EIR to the EA/ND previously prepared.

As described in Section 2.0, Revised Proposed Action, minor modifications to the Proposed Action's components are being considered since preparation of the EA/ND. Because of this, analysis of those modifications and any changes they may have on the impacts identified in the EA/ND is provided in this Subsequent ND.

As stated in the EA/ND, the Proposed Action would improve the City of Needles' current electrical sustainability needs and may provide for future sources of power and potential community infrastructure improvements. The proposed Well No. 16 is therefore consistent with the intended use of the EA/ND. The environmental analysis provided in the EA/ND remains current and applicable to the Proposed Action with the addition of Well No. 16 as documented under each environmental topic evaluated in the EA/ND as documented below.

The EA/ND determined after consideration that the following resource areas did not need further evaluation: geology, paleontology, soils, noise, health and safety, hazardous material, solid waste, air quality, mineral resources, and transportation/traffic. Resource areas evaluated in detail included: land use/ownership, visual resources, biological resources, water resources, cultural resources, and socioeconomic (environmental justice). The April 2007 Finding of No Significant Impact and determination that no Environmental Impact Statement was required is summarized below to document environmental findings and the Resource Protection Measures identified in Appendix A of the EA/ND, would continue to be applicable to the Revised Proposed Action.

3.1 LAND USE/OWNERSHIP

The EA/ND identified land uses could be affected primarily by causing interferences to agricultural uses from the Proposed Action. The findings required the Applicant to fairly compensate landowners for land acquisition and for crop damages and soil compaction that may result from the Proposed Action. Impacts to land uses and agricultural practices would be reduced by siting structures in previously-disturbed areas or in areas where agricultural practices are already limited (e.g., along existing roads, etc.) to the extent feasible. The Revised Proposed Action would result in the location of a domestic water well on land that is currently owned by the City of Needles, vacant, and highly disturbed. There are no agricultural land uses on or in the vicinity of the Project Site. The Revised Proposed Action would therefore not cause a significant impact to land use, nor increase the severity of impacts previously identified in the EA/ND and no mitigation measures are required.

3.2 VISUAL RESOURCES

The EA/ND identified impacts associated with the entire length of the transmission line which would parallel an existing line for much of the total length, as well as all associated facilities (e.g., monopole structures, Firehouse Switchyard). Given the presence of transmission line and the topography of the region, the Proposed Action would not dominate any unique or scenic viewshed. There were no known visual resource plans or policies, with which the Proposed Action would conflict. Despite the proposed addition of a domestic water well adjacent to the switchyard location and timing of construction activities, the overall nature and intensity of construction would not be substantially different than under the Proposed Action. All construction activities would occur within the Project Site (including identified staging areas), as was also evaluated in the EA/ND. Well No. 16 would be underground however the well facilities would include a 320 square-foot pump station house/shade structure approximately 10 feet in height. The facilities would not exceed the height or overall size of the adjacent Firehouse Switchyard. The proposed construction and operation of Well No. 16 would therefore not result in additional impacts to aesthetic resources beyond those identified in the EA/ND. The Resource Protection Measure requiring restoration as identified in the EA/ND remains applicable to the Revised Proposed Action. No new mitigation measures are required. Therefore, the Revised Proposed Action would not create additional significant direct, indirect, or cumulative impacts to visual resources, nor increase the severity of impacts previously identified in the EA/ND. The Resource Protection Measures provided in the EA/ND are still valid.

Resource Protection Measure: The ROW, temporary construction areas, and staging areas would be restored as-close-as possible to the preconstruction condition (original contour, revegetation with species native to the areas, and natural drainage patterns) in accordance with the appropriate land-owner's/manager's standards, and as required by the appropriate permitting /leasing authority.

3.3 BIOLOGICAL RESOURCES

The biological resources analyses conducted for the EA/ND was based on a survey conducted August 17, 2006. The entire property owned by the City of Needles was surveyed as well as a 200-foot buffer. The report stated that no mammals or reptiles were observed during the August 17, 2006 survey. The Firehouse Switchyard site did not contain quality habitat for wildlife. During construction, wildlife could be temporarily impacted by habitat alteration and temporary displacement; however, the EA/ND concluded that the Proposed Action would not result in loss

of habitat or individuals resulting in the listing of any species. Additionally, surveys were conducted for sensitive species identified in USFWS lists as well as a list of Arizona and California special status species that may occur in the area. It was determined in the EA/ND and the USFWS concurred that the Proposed Action may affect but was not likely to adversely affect the southwestern willow flycatcher, the California condor, and the bald eagle. No Federally designated or proposed critical habitat was found to occur within the project area for any species in 2006.

In May 2021, the proposed Well No. 16 location was surveyed by Jennings Environmental LLC. The Biological Resources Assessment (BRA) is included herein as Appendix C. The assessment was designed to address potential effects of the Revised Proposed Action to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) or the California Native Plant Society (CNPS).

A summary of the 2021 BRA follows. An analysis of the likelihood for the occurrence of all California Natural Diversity Data Base (CNDDDB) sensitive species documented in the *Needles*, *Needles SW*, *Needles NW* and *Needles NE* quads took into account species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions. According to the databases, no sensitive habitat, including USFWS designated critical habitat, occurs within or adjacent to the Project Site.

The habitat on-site consists of bare ground with sparse vegetation along the perimeter and ruderal vegetation. The site is heavily disturbed and maintained. Several birds were seen or heard during the survey. Species observed or otherwise detected on or in the vicinity of the Project Site during the surveys included; mourning dove (*Zenaida macroura*), brown-headed cowbird (*Molothrus ater*), and common raven (*Corvus corax*).

Desert Tortoise

No suitable habitat for desert tortoise exists within the Project Site or surrounding area. There are no documented desert tortoise occurrences within the Project Site and the nearest occurrence is 0.5 miles southwest of the Project Site, on the south side of Interstate 40. There is also no suitable habitat on-site or within in the immediate surrounding area and this species are not expected to occur within the project area. Additionally, the Project Site is outside of the Designated Critical for this species. Therefore, no potential direct or indirect impacts to desert tortoise can be identified, and presence/absence surveys for this species are not warranted or recommended.

Burrowing owl (BUOW)

Based on the May 2021 field survey, the site does not contain suitable habitat for this species. The property is continually maintained and is mostly gravel road base. No burrowing owls were observed during the site visit. No burrows of any kind were located within the property site. No portion of the Project Site showed any evidence of past or present BUOW activity. No feathers, whitewash, or castings were found and no suitable burrow surrogate species are present on-site. No suitable habitat exists on-site; therefore, no focused surveys are required.

Nesting Birds

The Project Site and immediate surrounding area does contain habitat suitable for nesting birds.

Although no suitable habitat was found during the May 2021 survey, nesting bird surveys should be conducted prior to any construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally March 15th to September 15th), and conducting a worker awareness training. Therefore, the Revised Proposed Action would not create additional significant direct, indirect, or cumulative impacts to biological resources, nor increase the severity of impacts previously identified in the EA/ND. The Resource Protection Measures provided in the EA/ND are still valid.

Resource Protection Measures: The following from the EA/ND are still applicable to the Revised Proposed Action and would reduce any potentially significant impacts to biological resources to less than significant.

Pre-construction surveys would be conducted for listed, proposed, candidate or other sensitive species during the appropriate season within one year of construction. If any Federally listed, proposed or candidate species are found, reinitiate consultation, if needed, with the USFWS.

Pre-construction surveys would be conducted to identify all invasive non-native species.

Crews will wash equipment before bringing it on the construction site, and prior to leaving the site to prevent the spread of noxious and invasive species.

To avoid the displacement of sensitive bird species, no construction activity would occur in the Colorado River 100-year floodplain during the nesting period.

To reduce the risk of bird collisions and electrocutions, Western would ensure the transmission lines are marked at the Colorado River crossing and the Needles Lagoon using the best available technology.

Design of the transmission line includes techniques and safeguards to minimize the possibility of accidental electrocution of raptors.

3.4 WATER RESOURCES

Maintenance and operation activities for the new switchyard and transmission line facilities were determined to not have an expected adverse impact on water resources in the EA/ND. The small increase in impermeable surface area resulting from construction activities could increase sediment in runoff reaching surface water features. However, erosion potential was not expected to be higher than under the existing land use.

Impacts to water resources from the Proposed Action as evaluated in the EA/ND were expected to be minimal. Temporary disturbances would be restored to original contours. No changes would occur to the drainage patterns, and no modifications to floodplains or flow patterns would result. Findings were that water quality would not be adversely affected and that the Proposed Action would comply with resource protection measures, including proper fuel handling and storage, and appropriate spill contingencies. Therefore, it was determined that no significant direct, indirect, or cumulative impacts to water resources would result from the Proposed Action.

The Well No. 16 location is approximately 840 feet east of and approximately five feet in elevation higher than the Colorado River, a Waters of the U.S. under jurisdiction of the U.S. Army Corps of Engineers. There is the possibility with any construction activity of spilling fuel, hydraulic fluid, or

other regulated materials that could reach surface water resources. The likelihood of such an event would be minimized by requiring the Contractor to comply with all regulated materials handling requirements of the federal, State, and local laws as well as the Resource Protection Measures provided in the EA/ND. Additionally, Water Department operations follow regulations regarding the handling of hazardous materials. The Revised Proposed Action would be designed and implemented to avoid surface water resources. Therefore, the Revised Proposed Action would not create additional significant impacts to water resources, nor increase the severity of impacts previously identified in the EA/ND. The Resource Protection Measures provided in the EA/ND are still valid and no additional mitigation measures are required.

Resource Protection Measures: Excavated and construction materials would not be stockpiled or deposited near or on wash banks or other water course perimeters where they can be washed away by high water or storm runoff, or can encroach, in any way, upon the watercourse. As a part of best management practices for the NPDES permit, erosion and sediment controls at the perimeter of the Project Site and locations adjacent to the Colorado River and Needles Lagoon would be installed prior to any ground disturbance.

Because this Proposed Action would result in 1 or more acres of ground disturbance and as part of Section 402 of the Clean Water Act, a NPDES construction general permit would be required. A Stormwater Pollution Prevention Plan would be prepared prior to the submittal of the Notice of Intent. The Notice of Intent and the Notice of Termination would be submitted to the Environmental Protection Agency and the California Water Quality Control Board.

No work, vehicles, or disturbance would occur within the Needles Lagoon area or within the banks of the Colorado River or other drainages.

Groundwater

The information that follows is from the *Culinary Water & Sanitary Sewer Capital Facilities Master Plan, November 25, 2019*. The City of Needles receives culinary water from its own wells. The City has drilled a number of deep wells located along the Colorado River. Over the years many of the wells have been abandoned due to collapsing and other conditions. In 2019, the City had functioning wells located in an area known as the Well Field and one at the water treatment plant site. The Well Field is located on the southeast corner of Bush Street and K Street. Some of the wells functioning at the time, as well as several others had previously been abandoned for various reasons.

Well Field: Although all of the wells were drilled to approximately the same elevation, they do not appear to be receiving water from the same aquifer. In recent years, the City has been forced to cease use of two of three functioning wells due to high iron and manganese levels in the water. A summary of these three wells functioning in 2019 is provided below:

- Well No. 10 was abandoned after it collapsed. The well had high concentrations of iron and manganese.
- Well No. 8 is operational however 2 to 4 hours is required to flush sand from inside the well. As a result, it is only retained by the City as an emergency backup. The City intended to abandon it once a new water source was determined. This well yields approximately 550 gpm.

- Well No. 15 is still in operation and is the primary source of water provided to the City. It was reinforced with grout to help keep it from collapsing. This well yields approximately 2,300 gpm.

Water Treatment Plant: Well No. 11 is located at the City's water treatment plant. The well was not in use in 2019 because of high concentration of iron and manganese. This well has had a history of collapsing in spite of having been grouted.

It is not feasible for the City to treat the water because the treatment plant requires so much water for backwashing that the rest of the water system cannot operate properly while the treatment plant is in operation.

Golf Course: Well No. 12 was originally connected to the low zone of the City with a yield of approximately 2,100 gpm. The well is on a golf course and produces water high in iron and manganese. During the summertime, the demands of the golf course meant difficulty keeping reservoirs filled. As a result, Well No. 12 was taken off the City's system and is now only used as irrigation for the golf course.

Well No. 15 is still in operation and is the primary source of water provided to the City. It was reinforced with grout to help keep it from collapsing. This well yields approximately 2,300 gpm.

City Wells

Well	Yield (gpm)	Pump (HP)
Well No. 15 (Primary)	2,300 [Test]	250
Well No. 12 (Irr. Golf Course)	2,100 [Test]	300
Well No. 11 (WTP, High)	1,700 [Test]	300
Well No. 10 (Abandoned)	-	-
Well No. 8 (High)	550 [Test]	75

Annual Water Usage

Annual water usage data for the system was provided by the City for the year 2000 to 2015. Water use had fluctuated little over the prior five year period. Below is a summary of the annual usage from 2010 to 2015 as well as the average for those 5 years.

Annual Recorded Water Usage

Year	Annual Culinary Usage (Million Gal./Year)	Annual Culinary Usage (Ac-Ft/Year)
2010	583.534	1,791.45
2011	572.888	1,758.77
2012	556.421	1,708.21
2013	647.590	1,988.10
2014	600.971	1,844.98
2015	608.316	1,826.51
Average	594.953	1,826.51

Projected Water Requirements

Historical water use records were used along with the projected population to project the residential and commercial water demands throughout the planning period. Peak water use was also determined by looking at monthly water use percentages and typical design factors.

Residential Demands

A value of 0.45 gpm was used for the average daily flow of each residential connection. This value was originally established in the Development Impact Fee Calculation and Nexus Report for the City of Needles, California (DIF Report). Based on the City's utility billing statistics, it was determined that this value was generally consistent with the current usage rates and has been maintained as the baseline for this study.

In 2019, it was projected that the City would have approximately 2,200 new residential connections to the water system at buildout. At 0.45 gpm, these 2,200 new connections were projected to require an additional 1,425,600 gallons per day at buildout.

Commercial Demands

A value of 1.27 gpm/acre was used for the average daily flow of each commercial connection. This value was also established by the DIF. This value was also determined to be generally consistent with the current usage rates and has been maintained as the baseline for this study as well.

According to the Master Plan, the City can expect 460 acres of new commercial property to be developed between 2019 and buildout. At 1.27 gpm/acre, the development would require an additional 841,000 gallons per day at buildout. Below is a summary of the additional demand that would need to be met between 2019 and buildout.

Table 6-1
Additional Culinary Water Demand at Buildout

Type of Connection	Additional Culinary Demand (gpd)	Additional Culinary Demand (Ac-Ft/Year)
Residential	1,426,000	1,598
Commercial	841,000	942
Total	2,267,000	2,540

Supply Analysis

The City's well supply was anticipated in 2019 to be sufficient to supply the system with the average day demand in a peak month. It was not anticipated that the wells would need to be sized for the peak hourly demand because water storage was sufficient to supplement capacities of the wells in the system.

The Master Plan anticipated that Well # 15 would remain in production until the year 2045. However, it was recommended that the City drill a new well prior to 2045 to serve as a backup to Well #15 and provide redundancy to the system so that the City's other problematic well would be abandoned.

Future Needed Well Supply

Year	Average Daily Demand (gpd)	Average Daily Demand (gpm)	Well Supply (gpm)	Surplus (gpm)
2020	1,628,000	1,130	2,300	1,170
2025	1,883,000	1,310	2,300	990
2030	2,177,000	1,510	2,300	790
2035	2,518,000	1,750	2,300	550
2040	2,912,000	2,020	2,300	280
2045	3,368,000	2,340	2,700	360
2050 (buildout)	3,895,000	2,700	2,700	0

City records show that in Calendar Year (CY) 2020, the three operational wells (#11, #12, and #15) produced a total of 1,977.85 acre-feet (AF). Less than 10,000 gallons was produced from Well #8. Total metered water use during the same period was 1,597.21 AF. Water production from each well during the CY is shown below. The highest producing well, Well #15 has been reinforced with grout to help keep it from collapsing. This Well yields approximately 2,300 gpm.

Well # 8	0.03 AF
Well # 11	20.20 AF
Well #12	479.50 AF
Well #15	1,498.03 AF
TOTAL	1,977.85 (AF)

The City needs redundancy in the system, particularly with respect to the well supply. The Master Plan recommended that the City drill a new well capable of producing a minimum of 1,500 gpm to provide backup for the 2019 system demands. By the year 2030, it was projected that the demands would exceed the 1,500 gpm capacity of a new backup well. Before the year 2045, the system demands will exceed the capacity of Well #15 and having a third well will allow the system to maintain redundancy.

Consistent with the 2019 Water Master Plan and to meet the additional demands placed on the water system by three wells being taken out of production in 2020, the construction of Well #16 at present time is justified. The well will replace groundwater that was previously produced to meet the City's demands. The expected production rate for Well #16 is 2,500 gpm. No additional groundwater would be produced over what was projected in the Master Plan. Therefore, the Revised Proposed Action would not create additional significant impacts to groundwater resources, nor increase the severity of impacts previously identified in the EA/ND.

3.5 CULTURAL RESOURCES (INCLUDES TRIBAL CULTURAL RESOURCES)

A Class III pedestrian archaeological survey and architectural history survey were completed in 2006 to identify archaeological and historic sites within the project area. Findings from the 2006 surveys indicate that no cultural or historic properties are present. The EA/ND documented that the Proposed Action would have no adverse effect on historic properties. The California and Arizona SHPOs concurred with Western's determination on December 14, 2006, and January 4, 2007, respectively. Therefore, it was determined that no significant direct, indirect or cumulative impacts to cultural resources would occur as a result of the Proposed Action. The EA/ND included a Resource Protection Measure that would require crews shall stop work immediately at that location and take all reasonable steps to secure the preservation of those resources.

An updated Cultural Resources Investigation Search was conducted in May 2021; findings are summarized herein; the report is provided as Appendix D. The report was prepared by McKenna et al. and completed as a supplement to the Environmental Assessment (EA) completed for the 69 kV transmission line in the City of Needles (U.S. Department of the Interior 2007). The study was limited to the completion of an updated archaeological records search and Native American Heritage Commission consultation, as documented in the report. No field survey was conducted as part of the study. At the time of this investigation, the area of Well No. 16 direct impacts was confirmed to be vacant and part of an existing substation facility.

The 2021 research resulted in the identification of a minimum of fourteen cultural resources investigations. Of these, nine involved linear surveys and one involved an archaeological testing program. The Luhnow study of 2006 involved the studies for the 69 kV transmission line and reported no resources. In 2021, a minimum of seventeen cultural resources were identified within one mile of the project area.

The current level of research has confirmed the project area to be moderately impacted by the development of the Firehouse Switchyard but the Project Site is currently considered vacant land. Nearby resources have been dominated by the presence of historic refuse scatters and/or structural improvements.

Overall, the research completed at the CSUF-SCCIC resulted in a determination that the project area is more likely to yield evidence of historic archaeological resources; has a low potential for the presence of prehistoric archaeological resources; and exhibits a moderate to high potential for the presence of deeply buried paleontological resources.

McKenna et al. contacted the Native American Heritage Commission, Sacramento, California, to inquire into the current status of the Sacred Land Files and reported Native American resources in the area of Needles. The results were negative – no resources were identified in the NAHC files. McKenna et al. also sent letters to the local Native American community contacts previously identified for the nearby property and, upon receipt of the updates NAHC listings, sent letters identifying the Well No. 16 property to the listed entities. On June 8, 2021 H. Jill McCormick, Historic Preservation Officer of the Quechan Indian Tribe responded that the tribe has no comments on the project.

The data presented in McKenna's report represent the results of an updated archaeological records search and Native American consultation, as requested by the City of Needles. The project area was surveyed in 2006 (and reported in 2007) with negative findings. Nearby resources have been dominated by the presence of historic refuse scatters and/or structural improvements. At least three of the recorded resources yielded evidence of prehistoric

archaeological resources. Although disturbed, there is always a potential for the presence of additional cultural resources in buried contexts and/or visible on the surface as a result of post-2006 disturbances.

Therefore, the Revised Proposed Action would not create additional significant impacts to cultural or tribal resources, nor increase the severity of impacts previously identified in the EA/ND. The Resource Protection Measure (as minimally refined to meet current standards and specific to Revised Proposed Action) provided in the EA/ND are still valid and no additional mitigation measures are required.

Resource Protection Measure: If cultural resources are encountered during work activities, the crews shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources. The City Project Manager or their representative shall contact the Western Archaeologist or the appropriate tribal representative immediately to arrange for proper treatment of those resources. The City shall notify local Native American Tribal representatives prior to site disturbance to allow for monitoring during construction.

3.6 SOCIOECONOMICS RESOURCES

Considering the short duration and intermittent construction cycle for the Proposed Action, it was determined to not result in the degradation or over-commitment of existing goods and services to an extent that would limit the sustainability of existing communities, induce growth, cause reductions in employment or income, displace existing housing, disrupt or divide the physical arrangement of communities, or cause a decrease in local or regional employment. The EA/ND determined that the Proposed Action would not result in direct, indirect or cumulative significant impacts to socioeconomic resources.

The Project Site for Well No. 16 is in a primarily undeveloped portion of the City. Surrounding land uses include vacant land and commercial uses. Existing City Water Department employees would be responsible for operation and maintenance of the well; no new employees would be required. Therefore, the Revised Proposed Action would not create additional significant direct, indirect, or cumulative impacts to socioeconomic resources, nor increase the severity of impacts previously identified in the EA/ND.

3.7 OTHER 2021 REQUIRED TOPICS TO BE ADDRESSED UNDER CEQA

CEQA Sections 15162 and 15164 provide that the Lead Agency determine whether any changes in the project, any changes in circumstances, or any new information since the prior environmental document was adopted would require any additional environmental review in order to determine if an Addendum or Subsequent document is the appropriate CEQA document. Since 2007 when the EA/ND was adopted, several amendments to CEQA have been codified. The environmental resource areas presented below are required to be evaluated under current (2021) CEQA Guidelines and have therefore been included in this Subsequent ND.

3.7.1 Agriculture and Forestry Resources

The Project Site for construction and operation of Well No. 16 is not located within an area designated for agriculture; there are no agricultural land use designation in the Needles General Plan. The Project Site is not identified in the California Department of Conservation's Farmland Mapping and Monitoring Program. Therefore, no Prime Farmland, Unique Farmland, or Farmland

of Statewide Importance would be impacted. There is no active farming or Williamson Act Contracts in the vicinity of the Project Site.

The Project Site has a current Zoning of Commercial Residential Resort and land use designation of Commercial Resort. According to the General Plan Land Use Map, there are no forest lands in the City or the vicinity of the Project Site. The Revised Proposed Action would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned for Timberland Production. No impacts would occur to agriculture or to forestry resources and no new resource protection measures are required for the proposed well.

3.7.2 Air Quality

The construction and operation of a domestic water well and booster pump would not conflict with or obstruct implementation of the air quality plan requirements imposed by the Mojave Desert Air Quality Management District (MDAQMD), which lies in the San Bernardino County portion of the Mojave Desert Air Basin (MDAB). This portion of the basin has been designated as a ‘non-attainment’ area with respect to violating National Air Quality Standards for particulate matter classified as equal to, or smaller than, 10 microns in diameter (PM₁₀). Although the proposed project would not exceed the District’s threshold for particulate matter, the City will implement regulatory provisions of Rule 403.2 (Fugitive Dust Control for the Mojave Desert Planning Area), which requires a number of operating conditions to reduce fugitive dust generation to the lowest extent possible. Excavation of the well would be performed by reverse motor drilling, which creates minimal dust. Impacts would be less than significant.

The project includes a diesel-powered emergency generator to supply backup power to the pump if the primary source is temporarily out of operation. The City will submit the final engine design specifications for the diesel emergency generator to the MDAQMD. The MDAQMD will determine the need for an Internal Combustion Engine (IEC) permit. Air quality emissions were calculated using Off-Road Mobile Source Emission Factors; South Coast Air Quality Management District (SCAQMD) 2021, as shown in Appendix E. MDAQMD accepts SCAQMD worst case methodology. Less than significant impact is anticipated.

The proposed pump would not generate any objectionable odors during normal operations. In cases of emergency in which the primary power source is not functional, the City may operate an on-site emergency generator to ensure the pump remains operational until the primary power source is restored. Emissions from the generator could potentially create objectionable odors for future residential developments. These impacts are not considered significant since the generator would be housed in an enclosure and would only be used for short periods of time during emergency situations.

The following was provided in the EA/ND and applies to the current project for City implementation:

Resource Protection Measures

- AMPS (*Aha Macav Power Services*) would limit fugitive dust (particulate matter) by complying with Mojave Desert Air Quality Management District ordinances. Site preparation and construction methods would be used to 1) minimize land disturbance, 2) suppress dust on travel paths which are not paved through wetting, use of watering trucks, chemical dust suppressants, or other reasonable precautions to prevent dust entering ambient air, 3) cover trucks when hauling soil, 4) minimize soil track-out by

washing or cleaning truck wheels before leaving construction site, 5) stabilize the surface of soil piles, and 6) create wind breaks.

- AMPS would restore the site to the pre-construction conditions by 1) re-vegetate any disturbed land not used, 2) remove unused material, and 3) remove soil piles via covered trucks.

3.7.3 Energy

The potential impacts of the Revised Proposed Action related to Energy, an environmental resource area to be evaluated under CEQA since 2018, would relate to any potential increase in the use of natural gas, electricity, or transportation fuel for well operations. The purpose of the proposed Well No. 16 is to replace the production requirements that have decreased due to three of the City's four permitted wells being out of service due to high levels of contaminants. Well No. 16 is not expected to exceed the previous production levels or energy use consumed when all four wells were in service.

3.7.4 Public Services

The proposed construction and operation of Well No. 16 would not include any housing or the need for additional City employees. Existing City Water Department employees would be responsible for operation and maintenance of the well. Therefore, impacts would be less than significant and no mitigation measures are required.

3.7.5 Recreation

The EA/ND did not identify any temporary or permanent impacts to recreational resources at or near the Firehouse Switchyard. The proposed construction and operation of Well No. 16 would not include any housing or the need for additional City employees and therefore no increased impact to existing recreational resources. As such, impacts would be less than significant and no mitigation measures are required.

3.7.6 Utilities and Service Systems

The construction and operation of Well No. 16 is intended to replace a portion of the City's existing water supply system due to three of four domestic wells being out of production. There would be an enhancement of the City's existing operation of the public utility. The proposed construction and operation of Well No. 16 would not include any housing or the need for additional City employees and therefore, no other infrastructure would change under the Revised Proposed Action, impacts would be less than significant and no mitigation measures are required.

3.7.7 Vehicle Miles Travelled

The potential impacts of the Revised Proposed Action related to Vehicles Miles Traveled (VMT), an environmental resource area to be evaluated under CEQA since 2020, would relate to an increase in traffic trip generation directly related to the construction and operation of Well No. 16. The City's water system covers an area of approximately 5 ½ square-miles and includes four permitted wells, three of which are out of production. VMT relates to the operation and maintenance of the water system. As the Revised Proposed Action would replace existing wells that are out of operation there would be significantly less than 50 peak hour trips generated. Therefore, further traffic analysis is not necessary for the Proposed Project. The Revised

Proposed Action does not conflict with an applicable plan, ordinance, or policy establishing measure of effectiveness for the performance of the circulation system. No impacts are identified or are anticipated, and no mitigation measures are required.

3.7.8 Wildfire

The potential impacts of the Revised Proposed Action related to Wildfire, an environmental resource area to be evaluated under CEQA since 2018, would occur if the Revised Proposed Action exacerbate wildfire risks, thereby exposing project occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire or if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. According to the current City of Needles General Plan, Page VI-33, there are no known extreme fire hazards with the City. However natural fire hazard risk is present due to the dry climate and vegetation surrounding the City. Therefore, no impacts would occur and no mitigation measures are required.

The EA/ND includes a resource protection measure requiring that a safety program be in place that complies with all federal, State, and local safety standards and requirements, including OSHA policies and procedures for fire protection. This measure which is also a construction industry and a water industry standard and not necessary as mitigation will continue to apply to the construction and operation of Well No. 16. No impacts are identified or are anticipated, and no additional mitigation measures are required.

3.8 CONCLUSIONS

Based on the information provided above, the proposed revisions to the Approved Proposed Action would not result in new impacts or a measurable increase in environmental impacts over what was previously analyzed in the EA/ND. Although the specific location and timing of some impacts have changed, no new significant impacts have been identified, nor is the severity of newly identified impacts substantially greater than the conclusions of the EA/ND. All other Resource Protection Measures from the EA/ND apply as applicable to the construction and operation of Well No. 16. No new mitigation measures are required.

Based upon the evidence included in the above analysis, the Revised Proposed Action as described in Section 2.0 would not result in a substantial change in the conclusions and analysis included in the EA/ND.

REFERENCES

A Preliminary Cultural Resources Investigation for the Proposed City of Needles Well No. 16, in the City of Needles San Bernardino Co, California, June 2021, McKenna et al.

Biological Resources Assessment for the Needles Well Project City of Needles, California, May 2021, Jennings Environmental, LLC

Culinary Water & Sanitary Sewer Capital Facilities Master Plan, Final Draft November 25, 2019, Epic Engineering

San Bernardino County Assessor's Property Information Center (accessed May 20, 2021)

Technical Specifications Muri Shaver Electric Substation Site Well \$16, June 1, 2021, Matrix New World