SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APNs: 1026-072-06+ multiple

Applicant: County of San Bernardino,

Department of Airports

Project No: AP20170101

Staff: Terri Rahal, Planning Director, Land Use Services

Rep: Cheryl Tubbs, Lilburn Corporation

Proposal: Proposed groundwater remedial project in response

to California Regional Water Quality Control Board, Santa Ana Region Cleanup and Abatement Order

No. R8-2017-0011

USGS Quad: Prado Dam

Lat/Long: 34° 14'49.6"N 117°12'27.8"W

T, R, Section: T2S, R7W, Sections 20, 29, 30

& 31

Community Plan: N/A

LUZD: N/A Overlays: N/A

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino

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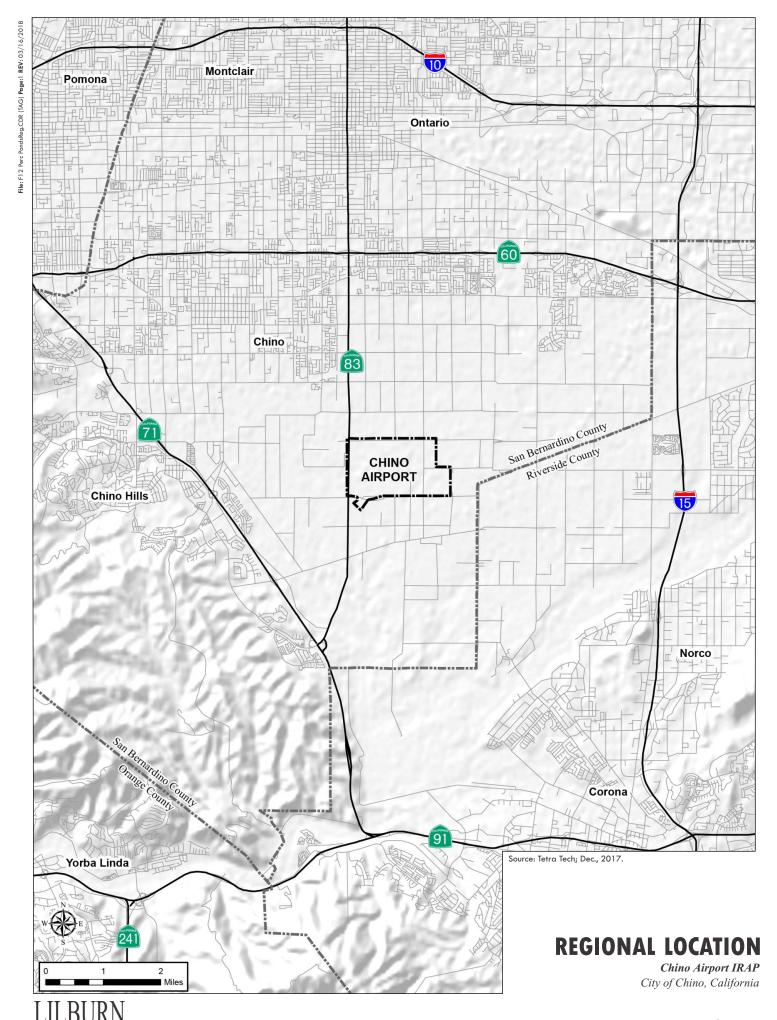
PROJECT DESCRIPTION:

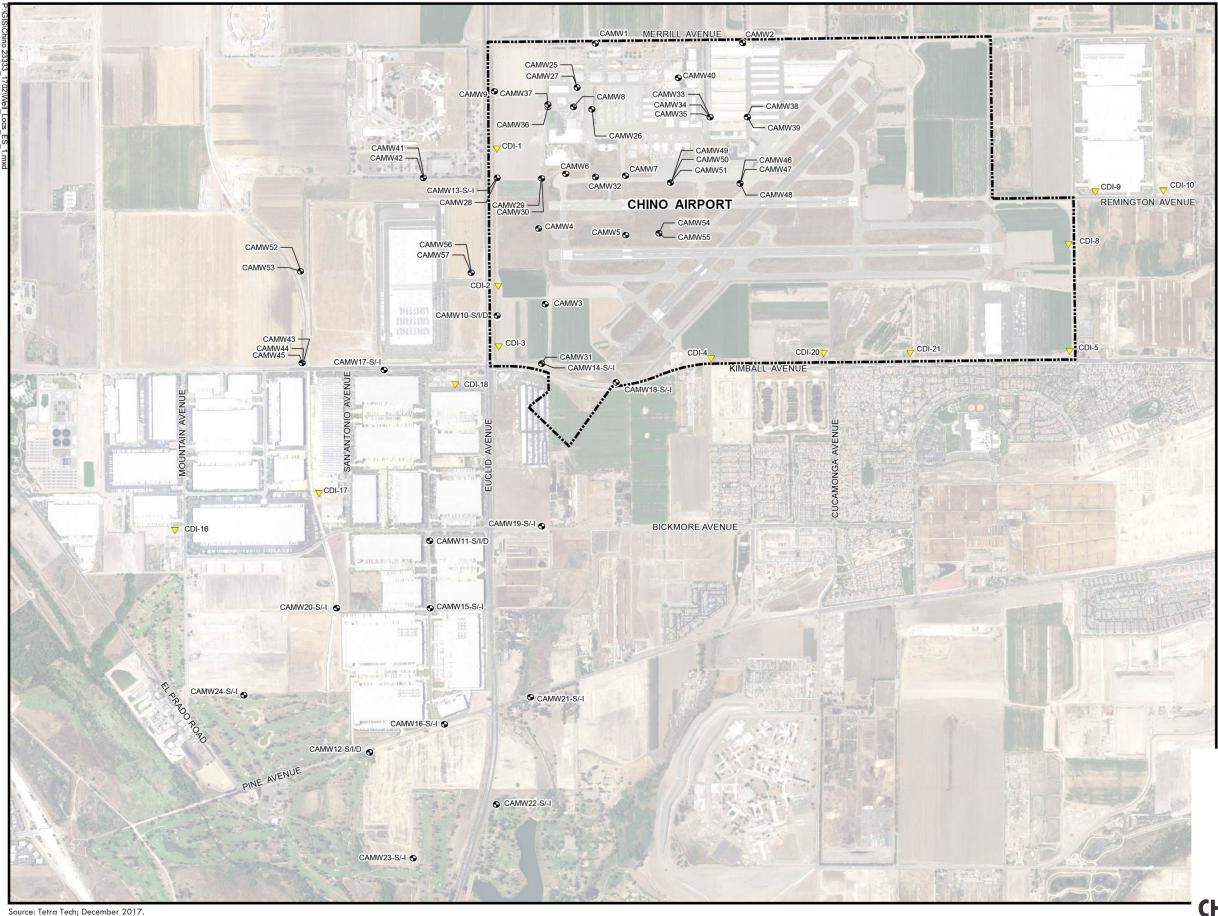
Summary

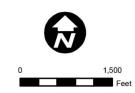
Introduction

The County is moving forward to implement a remedial action plan for groundwater contamination at and in the vicinity of the Chino Airport. The Regional Location of the Airport is shown as Figure 1. The Airport lies within the City of Chino and is bounded by Merrill Avenue to the north, Kimball Avenue to the south, Euclid Avenue to the west, and Grove Avenue to the east (see Figure 2). Between 1989 and 2016, the County completed numerous environmental investigations of 20 areas of concern (AOCs) at the Airport, including drilling and sampling over 280 soil borings, installing and sampling 75 groundwater monitoring wells, and conducting a multitude of cone penetrometer testing, pore pressure dissipation testing, depth-specific groundwater sampling, and soil gas sampling to determine impacts to groundwater.

The County's remedial action conforms to the requirements of Clean-up and Abatement Order No. R8-2017-0011 issued on January 11, 2017 by the Regional Water Quality Control Board, Santa Ana Region (RWQCB) (amending CAO R8-2016-0061). On October 31, 1990, the RWQCB issued a previous CAO to the County of San Bernardino for suspected contamination of groundwater beneath the Chino Airport. The County in response to the CAOs has undertaken numerous investigative activities, described below.







Monitoring Well

Desalter Well

Chino Airport Boundary

CHINO AIRPORT BOUNDARIES and GROUNDWATER MONITORING WELL LOCATIONS

Chino Airport IRAP
City of Chino, California
FIGURE 2



Background of Historic Investigations

Through its consultant, the County, has conducted remedial investigations and feasibility studies to identify and evaluate options to properly mitigate the groundwater contamination that has occurred from past airport operations and activities. In 2016 during the course of performing feasibility studies, Tetra Tech, Inc. conducted four focused investigations to aid in the evaluation of remedial alternatives and to support activities such as risk assessment and groundwater modeling. These investigations included groundwater sampling and analysis for general water chemistry and biological monitored natural attenuation (MNA) parameters, a survey of the Prado Reservoir lake bottom, a private production well (PPW) survey, and vapor intrusion soil gas confirmation sampling in select areas. Between 1990 and 2010, the County completed three separate removal actions that have significantly reduced the risks to human health and ecological receptors.

Through the risk evaluation process, contaminants detected in soil and soil gas during the investigations were screened out as chemicals of concern (COCs). Seven volatile organic compounds are considered COCs for groundwater: trichloroethene (TCE); 1,2,3-trichloropropane (1,2,3-TCP); *cis*-1,2- dichloroethene (*cis*-1,2-DCE); 1,2-dichloroethene (1,2-DCA); 1,1-dichloroethene; carbon tetrachloride; and 1,4-dioxane. TCE and 1,2,3-TCP were detected most frequently and at the highest concentrations.

The investigations identified two groundwater plumes that originate at the Airport. These plumes, referred to as the West Plume and the East Plume (see Figure 3), are described as follows:

- The West Plume (TCE, cis-1,2-DCE, 1,2-DCA, and 1,2,3-TCP) extends from the area around monitoring wells CAMW25 and CAMW27 to the south-southwest, terminating downgradient, about 2.2 miles from the primary source area.
- The East Plume (TCE, 1,2-DCA, and 1,2,3-TCP) extends from the area around monitoring well CAMW40 to the south/southwest approximately 0.6 miles and currently terminates within the Airport property.

Monitoring trends indicate the plumes have been adequately defined in their current state, and they are not expanding crosswise or at the downgradient leading edge (see Figure 3). However, the West Plume may be drawn down deeper by Chino Basin Desalter Authority (CDA) pumping activities in the vicinity of CDA wells CDI-1, CDI-2, and CDI-3 (refer to Figures 2 and 3), thus increasing the vertical thickness of the TCE and 1,2,3-TCP plumes The East Plume may be drawn toward CDA pumping wells CDI-4 and CDI-20, and modeling shows that without any remedial action, the East Plume may eventually be drawn into those wells and potentially to receptors off the Airport property.

Proposed Project: Remedial Action Alternative Subject to CEQA Review

Alternatives were evaluated through the feasibility study process, starting with the development of general response actions, potentially applicable technology types, and process options. Based on both detailed and comparative analyses, the remedial action described herein was identified as a response action that meets the remedial action objectives (RAOs) and National Contingency Plan (NCP) remedy selection criteria, and it has been identified as the proposed recommended remedial action (Proposed Project). The Draft Interim Remedial Action Plan, December 2017 Tetra Tech (IRAP) provides the technical analysis of the Proposed Project and is Control available review on the State Water Resources Board http://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1779807746/SL208634049.PDF. This remedial action is considered to be interim because the County proposes to move forward on an interim basis to initiate the remedial action as quickly as possible but could evaluate one or more response actions in the future. The "Project Site" for purposes of this CEQA analysis includes activities on and off of the Chino Airport property boundary and includes extraction well clusters EW-1 through EW-10 and one or possibly two, treatment sites

(see Figure 3). Potential treatment sites, as well as a possible alternative site for EW-10 are evaluated herein. Any future actions proposed that are not covered in the IRAP or addressed in this Initial Study will require additional CEQA review.

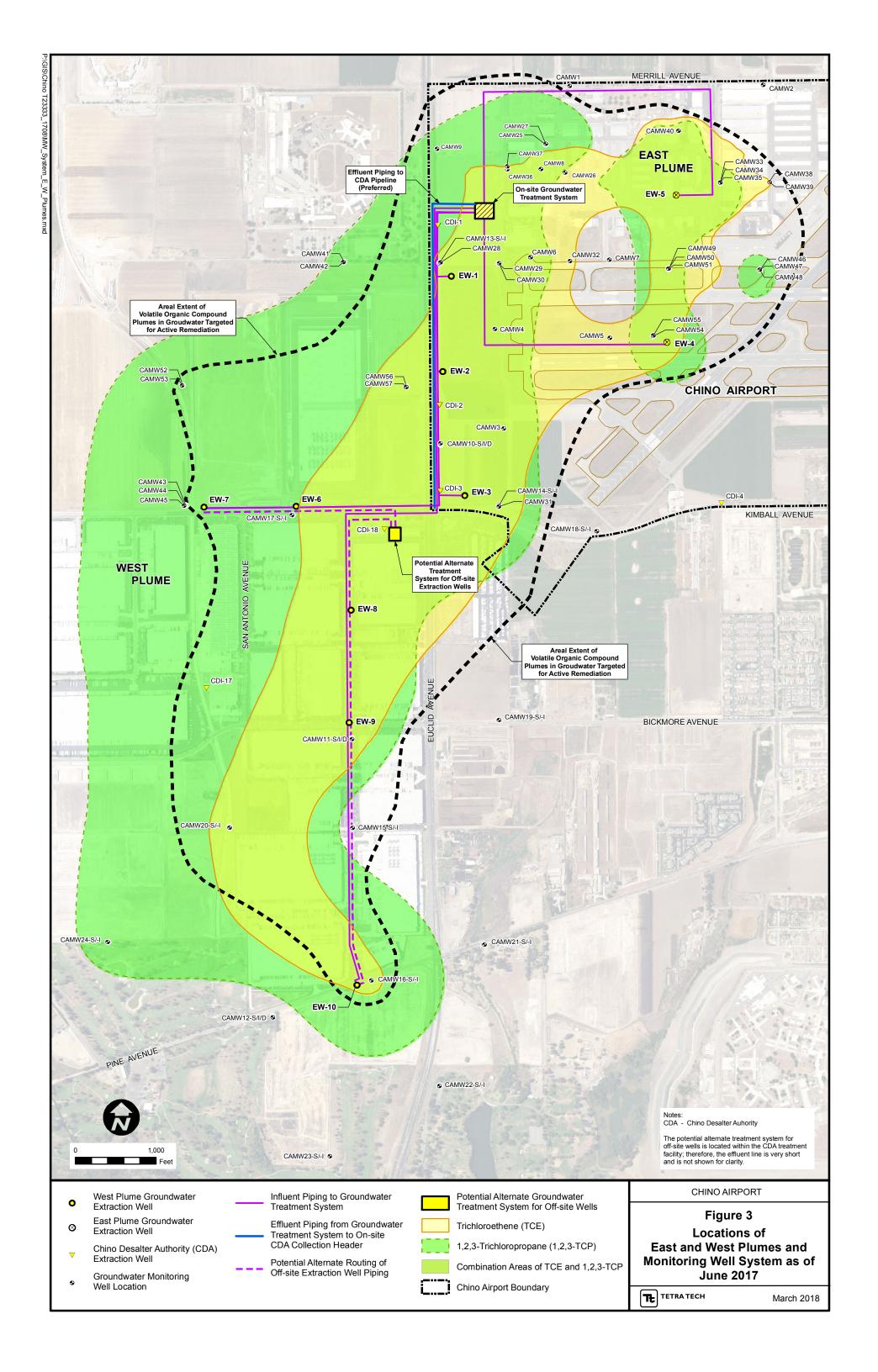
The Proposed Project consists of institutional controls, MNA, and West Plume containment and East Plume containment by groundwater extraction and *ex situ* treatment. The remedial plan was selected based on the analyses conducted in the *Final Feasibility Study* (Tetra Tech, May 2017) and according to the planned future industrial use of the portion of the Airport impacted with contamination above Preliminary Remediation Goals (PRGs). The layout of the recommended groundwater pump-and-treat system to contain both the West Plume and the East Plume is shown on Figure 3 and would include two sets of groundwater extraction wells (EWs), for a total of 10 proposed well clusters (in addition to operation of current CDA wells CDI-17 and CDI-18 in the West Plume):

- West Plume wells: three well clusters (EW-1, 2 and 3) along the western Airport boundary, two well clusters (EW-6 and 7) along Kimball Avenue to the west of the Site, two well clusters (EW-8 and 9) along Fern Avenue, and one well cluster (EW-10) along Pine Avenue for containment of the West Plume. EW-10 may be located farther south on adjacent property owned by Orange County Flood Control District (OCFCD).
- East Plume wells: one well cluster (EW 4) at the downgradient edge of the source area and one well cluster (EW-5) at the leading edge of the East Plume for containment of the East Plume

Extracted groundwater from the 10 well clusters would be treated by either one treatment system at the Airport or two treatment systems – one on and one off the Airport property – using carbon adsorption, while groundwater from CDI-18 would be treated either by a separate wellhead system or added to one of the above treatment systems. It is assumed that extracted groundwater from CDI-17 would be pumped directly to the CDA treatment plant. The treated water from the treatment system(s) would be pumped to the CDA treatment plant southwest of the Airport, a storm sewer and sanitary sewer at the Airport, the Inland Empire Utilities Agency (IEUA) municipal water recycling treatment plant, the IEUA recycled water line, or it may be reinjected into injection wells that would be installed in the northeast corner of the Site.

The anticipated diameter of the extraction wells is 6-inches. Booster pumps at the well locations would be designed at the time the Remedial Action Plan specifications are developed; it is anticipated that some type of housing or other noise-attenuating controls would be included. The piping system for delivery of the pumped groundwater to the treatment plants or existing CDA or IEUA facilities would not exceed 28,000 linear feet. The new treatment facilities would have footprints not exceeding 5,000 square-feet and would have flow capacities of 730 – 900 gallons per minute to treat water from all ten proposed extraction wells.

In addition, an extensive groundwater monitoring program is in place to monitor progress in reducing contaminant levels and controlling migration of contaminants above PRGs, the contaminant levels in sensitive areas, and the stability of the outer edges of both the West and East Plumes. If monitoring results indicate that exposure to the groundwater may pose an unacceptable risk, contingency actions would be taken. The County will evaluate new technologies as they become available to ensure the remedy remains effective and represents the best available technology for remediation of the plumes.



Institutional controls (ICs) would be implemented within the Project Site to minimize the risk of exposure to groundwater in areas of the plume. Land use covenants (LUCs) would be applied to identified parcels impacted by contamination at levels exceeding applicable PRGs. These LUCs would prevent direct on-site exposure to COCs in groundwater by prohibiting the use of untreated impacted groundwater other than as part of the proposed remedial action. The LUCs would also ensure that indoor air risk from on-site vapor intrusion does not exceed acceptable levels by preventing any residential land uses and requiring future land uses to remain industrial in the areas impacted by contamination until the time that applicable PRGs have been met. The residential land use restrictions would not apply to parcels that are not impacted by contamination, nor to areas where COC concentrations are remediated to below the applicable residential PRGs. ICs may include working with the Chino Basin Watermaster to monitor private wells within the vicinity of the plume, arranging for notification of well permit applications, aiding private parties with well design, providing wellhead treatment for Site COCs, or providing an alternate drinking water source.

Implementation of Proposed Project: Remedial Action Conceptual Design

The proposed extraction well network would include an estimated 10 new extraction well (EW) clusters (EW-1 through EW-10). Existing CDA wells CDI-17 and CDI-18 may also be used. Due to the depth of the plume, each new extraction well location would consist of up to three individual extraction wells installed in a grouped configuration to allow focused extraction from specific lithologic zones, depending on COC concentrations and aquifer characteristics. Based on groundwater modeling conducted as part of the *Final* Feasibility Study (Tetra Tech, May 2017), preliminary design extraction rates range from 50 to 150 gallons per minute (gpm) per well cluster, for a total extraction flowrate of 900 gpm. In addition, 180 gpm of groundwater would be extracted from CDA well CDI-18 that may be treated along with the water from EW wells or through a wellhead treatment system, and groundwater from CDI-17 would be treated by the CDA's treatment plant. A proposed piping layout connecting the wells to the groundwater treatment system(s) would be constructed within existing roadway rights-of-way and on private property if needed.

An alternative to piping wells to a treatment system at the Airport would be to connect all wells to a separate treatment system that would be installed adjacent to existing facilities at the CDA main groundwater treatment facility ("Chino 1 Desalter") or another nearby location, to reduce the piping and the flow to the Airport treatment plant. The preliminary treatment system design includes two dual 10,000-pound granular activated carbon (GAC) units. If groundwater from well CDI-18 is combined with groundwater from the EW wells for treatment in lieu of wellhead treatment, additional GAC vessels would be added to accommodate the additional flow. An optional air stripper (with companion off-gas GAC treatment units) may be added based on the influent makeup after system start-up.

It is currently planned to discharge the treated groundwater from the treatment plant(s) to one or more of the following, depending on availability and operational considerations of the receiving facility at the time of system start-up: 1) the CDA treatment plant influent pipeline that collects groundwater from CDA wells along the western Airport property line; 2) the Airport storm sewer; 3) the Airport sanitary sewer; 4) the IEUA water treatment plant; 5) the IEUA recycled water line; or 6) nine new injection wells that would be installed near the northeast corner of the Airport to a depth of approximately 250 feet below ground surface (bgs) to reinject the water into the subsurface. If reinjection is selected, computer flow modeling would be conducted prior to well installation to refine the well spacing, depth, and injection rates to ensure that the reinjection program does not adversely affect plume containment by the extraction system. A future CEQA analysis would be performed for the reinjection wells if selected.

LUCs would be implemented as deed restrictions and would be maintained as long as groundwater contaminant concentrations are greater than PRGs. LUCs would not be implemented for the portion of the Airport not

impacted by contamination, with the exception of untreated groundwater use restrictions, which would apply to the entire Airport property. In addition, ICs may include contingency actions if groundwater monitoring shows Airport-related COCs above PRGs may pose an unacceptable risk. The most appropriate response action(s) would be determined at that time, with appropriate agency approval prior to implementation.

The groundwater long-term monitoring (LTM) program would include sampling of up to 75 existing and nine new monitoring wells throughout the West Plume below and adjacent to the Airport, including wells to monitor ongoing MNA processes and point-of-compliance wells to verify that the plume is not expanding. Approximately 19 wells would be sampled semiannually and an additional 65 wells annually. The monitoring program would also include periodic monitoring of select PPWs within the area of the West Plume not located within the Airport property to minimize the chance for these wells to become impacted by COCs at levels that exceed PRGs. The groundwater monitoring program would be periodically reviewed to determine if changes to the sampling frequency, analyses, or well network are warranted.

It is assumed that the treatment system would operate for a minimum of 50 years. During this time, monitoring would include groundwater MNA and LTM sampling, periodic treatment process sampling, system effluent sampling, and regulatory compliance monitoring and sampling. Groundwater LTM and reporting would be conducted on a semi-annual and annual basis as previously discussed, or as required by the RWQCB. Reporting frequencies for system discharge and compliance sampling would be as required by the applicable permitting agency. Monitoring of the extraction well network effectiveness would be performed to confirm plume containment and to evaluate remediation progress. As required by the NCP, the groundwater remediation system would be evaluated every five years to determine if human health and the environment are being adequately protected by the remedy. LTM and annual inspection/reporting under LUCs would continue until cleanup goals are achieved, at which time all LUCs could be removed from the property. On completion of remediation and system shut down, no further long-term maintenance and/or monitoring of the system would be required.

Permitting and Public Participation

The groundwater extraction and treatment system would require permits from several regulatory agencies prior to system construction/installation and operation, including permits for well installation, water and/or air discharge, reinjection, and construction activities. In addition, analysis in compliance with the California Environmental Quality Act (assumed to be an Initial Study/Mitigated Negative Declaration) is necessary to evaluate the environmental impacts associated with disturbances that will result from installation of the remedial action alternative which will consist of new extraction well sites and new pipelines, and potentially an additional treatment plant site. No environmental evaluation is anticipated to be necessary for continued operation of facilities owned/operated by the Chino Desalter Authority that may be utilized as a part of the overall remediation plan. Additionally, the existing groundwater monitoring program that is already in place would not require additional environmental evaluation.

Past and ongoing public participation activities include, among other actions, engaging with the RWQCB, the Watermaster, CDA, and other stakeholders; publishing documents on a centralized website available to the public; preparing a community involvement plan (CIP) that describes all public participation activities, issuing fact sheets as appropriate; making the Draft IRAP and all other relevant documents available at the document repository for the Project and online through a public-access website; providing public notice for a total of 90 days, with an initial 60-day public comment period for the IRAP, with 2 extensions; holding a public meeting to discuss the IRAP and answer questions; accepting written and oral comments during the public comment period; preparing a Responsiveness Summary to address all comments and questions; adjusting the remedy as appropriate in response to public comments; and including the summary of responses to comments as an attachment to the Final IRAP.

Surrounding Land Uses and Setting

	Existing Land Uses and Land Use	e Zoning Districts
		Land Use Zoning District
Location	Existing Land Uses	City of Chino
Northern Portion of Project Site	Chino Airport	AD - Airport Development
North to South Pipeline Alignment (Euclid Avenue)	Vacated Youth Correctional Facility, WalMart, Industrial/Warehousing, Open Space, and Flood Control Facilities	CG – Commercial General, M2 – General Industrial, OS-1 – Open Space Recreational, AR – Airport Related, AG - Agricultural
East to West Pipeline Alignment (Kimball Avenue)	Chino Airport, Agriculture, and Industrial/Warehousing	AD - Airport Development, AR Airport Related, M2 - General Industrial, OS-R – Open Space/Recreational
Southern Portion of Project Site	Agricultural, Light Industrial/Manufacturing, Prado Basin/El Prado Golf Country Club	AGR – Agricultural, M2 - General Industrial, OS-2 – Open Space Natural
Alternate Treatment System (S/W Corner of Kimbal and Euclid Avenues)	Chino Desalter 1, Well CDI-18	M2 - General Industrial

ADDITIONAL APPROVAL REQUIRED BY OTHER PUBLIC AGENCIES

(Example: permits, financing approvals, or participation agreements.)

State: Regional Water Quality Control Board, Santa Ana Region, joint use of CEQA document

Local: None.

SUMMARY OF CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

(See Tribal Cultural Resources Section later in this document.)

EVALUATION FORMAT

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 18 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially	Less than Significant	Less than	No
Significant Impact	With Mitigation Incorporated	Significant	Impact

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

- 1. **No Impact**: No impacts are identified or anticipated and no mitigation measures are required.
- 2. **Less than Significant Impact**: No significant adverse impacts are identified or anticipated and no mitigation measures are required.
- 3. Less than Significant Impact with Mitigation Incorporated: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
- 4. **Potentially Significant Impact**: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self-monitoring or as requiring a Mitigation Monitoring and Reporting Program.

April	201	18
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				w will be potentially affected by this p indicated by the checklist on the fo				
] .	Aesthetics		Agriculture and Forestry Resources		Air Quality		
Σ		Biological Resources	X	Cultural Resources		Geology / Soils		
		Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality		
		Land Use/ Planning		Mineral Resources		Noise		
		Population / Housing		Public Services		Recreation		
]	Transportation / Traffic	X	Tribal Cultural Resources		Utilities / Service Systems		
		Mandatory Findings of Significance						
DE	ΓEF	RMINATION: (To be comple	ted b	y the Lead Agency)				
On	the	basis of this initial evaluatio	n, the	e following finding is made:				
		The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.						
	X	Although the proposed project could have a significant effect on the environment, there shall not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.						
		The proposed project MAY h REPORT is required.	ave a	a significant effect on the environment,	and	an ENVIRONMENTAL IMPACT		
		impact on the environment, I pursuant to applicable legal s	but at tanda ached	a "potentially significant impact" or "po t least one effect 1) has been adequa ords, and 2) has been addressed by mit d sheets. An ENVIRONMENTAL IMPA n to be addressed.	tely a igatio	nalyzed in an earlier document n measures based on the earlier		
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.							
S	Signature (prepared by Linda Mawby) Date 4-6-18 Date 4-6-18							
S	Signature: (Terri Rahhal, Planning Director) Land Use Services Department/Planning Division Date							
	Land Ose Services Department/Flaming Division							

		Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
I.		AESTHETICS - Will the project				
	a)	Have a substantial adverse effect on a scenic vista?				
	b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				
	c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
	d)	Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area?				
	S	SUBSTANTIATION: (Check if project is located within the	ne view-sh	ed of any Sc	enic Route	listed

in the General Plan):

Less Than Significant Impact. A scenic vista typically consists of an expansive view of an area which contains a remarkable visual resource or scenery indigenous to the area. The City of Chino General Plan includes a Community Character Element that includes policies on creating and keeping scenic views within the City. Land Use designations of Open Space for Outdoor Recreation includes areas within the City that have scenic corridors, trails and value within the City. The Proposed Project is the installation of ten extraction well clusters, approximately 28,000 feet of pipeline and a groundwater treatment system as part of an Interim Remedial Action Plan (IRAP) for chemicals of concern below and adjacent to the Chino Airport. Extraction wells EW-1 through EW-10 along with either treatment plant location will be located within zoning designations of Airport Development, Open Space Natural, and General Industrial. The alternate site for the groundwater treatment system would be an expansion at the existing CDA treatment plant on Kimball Avenue and would include additional carbon filters and/or air strippers not to exceed 25 feet in height, the maximum height of existing facilities. The treatment system site on the Chino Airport would also not exceed 25 feet in height. Extraction wells would use submersible pumps with flushmount well vaults rather than pump houses. Development activities associated with well development would temporarily disturb an approximately 1,600 square-feet area for drilling activities and equipment staging, and approximately 30 to 60 square-feet would be permanently disturbed. Installation of pipelines would impact an approximately 10 to 12-foot wide area for trenching. Surface improvements would be restored to pre-project condition following trenching of the pipelines.

The proposed site of EW-10 may be on open space property owned by Orange County Flood Control District within Prado Basin. This site was previously used as a borrow pit for the industrial developments to the north, is highly disturbed, and free of any vegetation. The installation of extraction well EW-10 on this site, would create minimal disturbance to the land.

The Proposed Project would not have a substantial adverse effect on scenic vistas and therefore a less than significant impact is identified, and no mitigation measures are required.

- b) No Impact. The proposed IRAP would occur within the existing public rights-of-ways, and on currently/previously disturbed properties. None of the locations occur on or near streets with a scenic highway designation; the nearest State designated scenic highway is California State Highway 142 located approximately 3 miles west of the Project Site. There are no trees or rock outcroppings that would be impacted by construction activities. No historical buildings are located on or near the Project Site. Therefore, no impact is identified, and no mitigation measures are required.
- c) Less Than Significant Impact. The Project Site is within the area of public road rights-of-ways, Chino Airport, industrial buildings, agricultural lands, the Chino 1 Desalter, and potentially Prado Regional Basin. Project-related construction activities are proposed on approximately 28,000 linear feet of street rights-of-ways and the installation of ten extraction wells and a groundwater treatment system. Extraction wells, EW-4 and EW-5, and the preferred treatment system site are located on the Chino Airport property. Extraction wells EW-6, EW-7, EW-8, and EW-9 along with the treatment system at the Chino Desalter 1 are located on lands with industrial uses. No significant degradation of the existing visual character of the project area are anticipated, and no mitigation measures are required.

Extraction wells, EW-1, EW-2, and EW-3 are located on agricultural lands and extraction well EW-10 would be located along Pine Avenue, or if necessary farther south within the Prado Basin. Construction of the proposed extraction wells will disturb no more than 60 square-feet at each site. The wells will have maximum height of six inches from ground surface and groundwater is anticipated to be extracted using a submersible pump in the well. The potential Prado Basin location of EW-10 is on property that was previously used as a materials borrow site, has been recently disked, and does not support vegetation.

Construction equipment may temporarily reduce the visual character of the Project area by the use of drill rigs; however, this impact would be short-term during construction. Extraction wells would disturb minimal land at each location and would not substantially degrade the existing visual character. Existing rights-of-ways would be restored to pre-existing conditions following construction, and there will be no long-term impacts to the existing visual character or quality of the Project Site. A less than significant impact is identified, and no mitigation measures are required.

d) Less Than Significant Impact. The Proposed Project is a groundwater extraction and treatment system that will include the installation of ten extraction well clusters, 28,000 linear feet of pipeline and a groundwater treatment system. In compliance with the City of Chino Municipal Code Section 15.44.030, all construction activities would occur during daylight hours, between the hours of 7 am and 8 pm. Security lighting may be used for the groundwater treatment system; security lighting currently exists at the Chino 1 Desalter. Any additional lighting required for the Proposed Project would be designed in compliance with Chino Municipal Code 20.10.090. A less than significant impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
II.	AGRICULTURE AND FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Will the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				
SL	IBSTANTIATION: (Check \square if project is located in the	Important	Farmlands O	verlay):	

a) Less than Significant Impact. Extraction wells, EW-1, EW-3, EW-6, and EW-7 are located on land designated as Prime Farmland. Extraction well EW-2 is located on land designated as Farmland of Local Potential and the EW-10 Prado Basin site is located on both Farmland of Local Potential and Farmland of Local Importance. Extraction wells EW-4, EW-5, EW-8 and EW-9 along with either site

for the treatment system are located on Urban and Built-Up Land. Construction of the proposed extraction wells would disturb approximately 30 to 60 square-feet of land at each site.

Extraction wells EW-1, EW-2, EW-3, EW-6, and EW-7, and the EW-10 Prado Basin location are on properties identified as significant farmlands on the Farmland Mapping and Monitoring Program of the California Resources Agency maps. Surface disturbance on each property including construction would be minimal and would not prevent future agricultural uses on the remainder of the properties. Extraction wells EW-4, EW-5, EW-8 and EW-9 along with the groundwater treatment system sites are located in areas that have current industrial uses and are not identified for agricultural uses or have farmland designations.

The effluent pipeline system for the Proposed Project will be located primarily in existing roadway rights-of-ways and would not have an effect on agricultural lands.

The Proposed Project would impact lands identified in the Farmland Mapping and Monitoring Program of the California Resources Agency. Impacts to the land would be minimal and would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural uses. A less than significant impact on Prime Farmland, Unique Farmland and Farmland of Statewide Importance is identified and no mitigation measures are required

- b) **No Impact.** Extraction wells EW-1, EW-2, EW-3, EW-6, EW-7, and the EW-10 Prado Basin site and the groundwater treatment system are identified as "non-enrolled land" and extraction wells EW-4, EW-5, EW-8 EW-9, and EW-10 are identified as "urban and built-up land" in the San Bernardino County Williamson Act FY 2015/2016 Sheet 2 of 2 map published by the California Department of Conservation's Division of Land Resource Protection. According to the City of Chino General Plan Figure 4.2-2 *Williamson Act Contracts*, lands enrolled within the Williamson Act are located approximately 0.30 miles east of EW-10. No land under Williamson Act Contract occurs within the Proposed Project and therefore, no impacts are identified, and no mitigation measures are required.
- No Impact. According to the City of Chino's Zoning Map, extraction wells EW-1, EW-2, EW-4 and EW-5 and the preferred treatment system site are on properties designated as Airport Development. Extraction wells EW-6, EW-7, EW-8, and EW-9 are on properties designated as General Industrial and extraction well EW-10 sites are designated as Open Space Natural. No timberland or forest land is present, and no timberland or forest land would be disturbed. Implementation of the Proposed Project would not conflict with existing zoning, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. No impacts are identified, and no mitigation measures are required.
- e) Less than Significant Impact. As discussed in II(a) and II(c/d), extraction wells EW-1, EW-2, EW-3, EW-6, EW-7, and the EW-10 Prado Basin location are located on properties identified within the Farmland Mapping and Monitoring Program of the California Resources Agency maps, and the EW-10 Prado Basin location is located on land with zoning designation of Open Space Natural. The proposed wells would disturb approximately 30 to 60 square-feet of land during construction and long-term well operation would not prevent the remaining property to be used for future agricultural purposes. The Proposed Project would not involve other changes in the existing environment that could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. A less than significant impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
III.	AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district might be relied upon to make the following determinations. Will the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?				
e)	Create objectionable odors affecting a substantial number of people?				
	SUBSTANTIATION: (Discuss conformity with the South (Coast Air	Quality Mana	gement P	lan, if

ANO Impact. The Project Site is located within the South Coast Air Basin (SCAB). The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality issues and regulations within the SCAB. The Air Quality Management Plan (AQMP) for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal air quality standards. The most recent AQMP (AQMP 2016) was adopted by the SCAQMD on March 3, 2017. The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2016 AQMP was adopted by the Southern California Association of Governments (SCAG) Regional Council on April 7, 2016.

The Proposed Project includes construction and operations of a 50-year Remedial Action Project to treat contaminated groundwater below and adjacent to the Chino Airport. All wells and treatment facility equipment will be powered by the electrical grid, will not use any petroleum products and will therefore have zero emissions; pumps, filters, and air strippers would be individually permitted by SCAQMD as necessary. Approval of the Proposed Remedial Project would not conflict with the AQMP as it is not growth-inducing. No impacts are identified nor anticipated and no mitigation measures are required.

b) **Less Than Significant Impact.** Construction work would require earthmoving, material removal, well drilling, pipe installation and other activities such as grading and paving.

The Proposed Project's construction activities were screened for emission generation using SCAQMD "Air Quality Handbook" guidelines and SCAQMD Off-Road Mobile Source Emissions Factors (2018). This table is used to generate emissions estimates for development projects. The criteria pollutants screened for included: reactive organic gases (ROG), nitrous oxides (NO_x), carbon monoxide (CO), and particulates (PM₁₀ and PM_{2.5}). Two of these, ROG and NO_x, are ozone precursors.

Construction earthwork emissions are estimated in Table 1. The following construction parameters/phases were assumed:

Typical daily equipment:

- 1 Loader
- 2 Miscellaneous Constriction Equipment
- 1 Loader/Backhoe
- 1 Mini Crane
- 1 Drill Rig
- 1 Cement and Motor Mixers
- 2 Miscellaneous Paving Equipment

Table 1
Construction Emissions
(Pounds per Day)

Source	ROG	NOx	CO	PM ₁₀	PM _{2.5}
Misc Construction Eq.	1.0	7.2	5.7	0.3	0.3
Loader	1.9	2.7	7.1	0.6	0.6
Loader/Backhoe	0.4	3.3	2.9	0.2	0.2
Cement and Motor Mixers	0.1	0.4	0.3	0.0	0.0
Mini Crane	0.8	6.3	3.2	0.3	0.3
Drill Rig	0.4	3.3	4.0	0.1	0.1
Paving Equipment	1.4	8.9	6.6	0.6	0.6
Totals (lbs/day)	6.0	33.5	29.9	2.0	2.0
SCAQMD Threshold	75	100	550	150	55
Significant	No	No	No	No	No

Source: SCAQMD Off-Road Mobile Source Emissions Factors (2018)

As shown in Table 1 construction emissions would not exceed SCAQMD thresholds. Therefore, less than significant impact is anticipated and no mitigation measures are required.

Compliance with SCAQMD Rules 402, and 403

Although the Proposed Project does not exceed SCAQMD thresholds for construction emissions, the County's Contractor would be required to comply with all applicable SCAQMD rules and regulations as the SCAB is in non-attainment status for ozone and suspended particulates (PM_{10}).

Compliance with SCAQMD Rule 402, and 403

The County's Contractor would be required to comply with Rules 402 nuisance, and 403 fugitive dust which require the implementation of Best Available Control Measures (BACMs) for each fugitive dust source, and the AQMP, which identifies Best Available Control Technologies (BACTs) for area sources and point sources. The BACMs and BACTs would include, but not be limited to the following:

- 1. The County's Contractor shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
 - (a) The County's Contractor shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly (2x daily) to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.
 - (b) The County's Contractor shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.
 - (c) The County's Contractor shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

During construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO_X and PM_{10} levels in the area. Although the Proposed Project does not exceed SCAQMD thresholds during construction, the County's Contractor would be required to implement the following conditions as required by SCAQMD:

- 2. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
- 3. The County's Contractor shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site power generation during construction.
- 4. The County's Contractor shall ensure that construction personnel are informed of ride sharing and transit opportunities.
- 5. All buildings on the Project Site shall conform to energy use guidelines in Title 24 of the California Administrative Code.
- 6. The County's operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
- 7. The operator shall comply with all existing and future California Air Resources Board (CARB) and SCAQMD regulations related to diesel-fueled trucks, which may include

among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

Operational Emissions

No operational emissions are anticipated as all wells and treatment facility components will be connected to the power grid, will not use any petroleum products and will therefore have zero emissions. No portable generators nor small quantity engines are proposed. The treatment facilities possible use of air strippers as well as other treatment plant components will need to obtain any necessary permits from the SCAQMD prior to operation. Therefore, operational emissions are anticipated to be less than significant and no mitigation measures are required.

- c) Less Than Significant Impact. The Proposed Project would generate air quality emissions above ambient conditions, but not violate any air quality standards (refer to Table 1). The groundwater remediation was not a planned land use identified in the City of Chino General Plan; however emissions generated are generally construction-related and therefore short-term. The Proposed Project is therefore not anticipated to cumulatively generate a considerable net increase of any criteria pollutant. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- d) No Impact. As shown in Table 1, impacts from potential air quality emissions during construction are not anticipated to exceed SCAQMD thresholds. Operational emissions are anticipated to be negligible as all wells and treatment facilities would connect to the existing electrical grid, would not use any petroleum products, and would therefore have zero emissions. The nearest residences to the Project Site are located approximately 0.6 miles from the Project Site. There are no other closer sensitive receptors.

Additionally, the Proposed Project's LUCs would also ensure that indoor air risk from onsite vapor intrusion does not exceed acceptable levels by preventing any residential land use at the Airport and requiring future land uses to remain industrial in the areas of the Airport that are impacted by contamination until the time that applicable PRGs have been met. The residential land use restrictions would not apply to portions of the Airport that are not impacted by contamination, nor to areas where COC concentrations are remediated to below the applicable residential PRGs. Therefore, the Proposed Project is not anticipated to impact sensitive receptors and no mitigation measures are required.

e) Less Than Significant Impact. The Proposed Project does not contain land uses typically associated with the emission of objectionable odors. Potential odor sources associated with the Proposed Project may result from construction equipment exhaust and the application of asphalt and/or concrete during construction activities. Standard construction requirements would minimize odor impacts resulting from construction activity. Any construction odor emissions generated would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction activity. The County and County Contractor would be also required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Proposed Project construction and operations would be less than significant and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
V.	BIOLOGICAL RESOURCES - Will the project:				
a)	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				\boxtimes
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?				
,	SUBSTANTIATION: (Check if project is located in contains habitat for any species Database □):				

Less Than Significant with Mitigation. The County of San Bernardino Department of Public Works, Environmental Management Division prepared a general biological assessment of the Chino Airport IRAP. A general biological field survey and burrowing owl habitat assessment were conducted on January 26, 2018 by EMD Ecological Resource Specialists, Brandy Wood and Michael Rathbun and on January 29, 2018 by Brandy Wood to assess the overall site conditions and to identify areas of potential value for biological resources. The report is included as Appendix B and is summarized herein.

Prior to the field survey, a literature review was conducted to determine the existence or potential occurrence of sensitive plant and animal species on the Project Site and project area. The literature review included an evaluation of current and historical aerial photographs of the site (ESRI 2018), as well as, regional and site-specific topographic maps (USGS 7.5-minute topo quadrangle).

The California Natural Diversity Database, Biogeographic Information and Observation System (CDFW 2018) and United States Fish and Wildlife Service Critical habitat portal and Information Planning and Conservation System (USFWS 2018) were reviewed, to determine if any special-status wildlife, plant or vegetation communities were previously recorded on-site. Other resources reviewed include the California Native Plant Society, CNPS Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2017). The Proposed Project occurs within the Prado Dam and Corona North quadrangles, California.

General Plants/Communities:

The Proposed Project lies within an industrial developed area in the City of Chino. Four of the proposed extraction wells (EW-1, EW-2, EW-3 and EW-4) are located on the Chino Airport property on non-native grasslands and sod fields. Four of the proposed extraction well locations (EW-6, EW-7, EW-8 and EW-9) are within an area of industrial development. EW-6 is located within a landscaped portion of a stormwater detention basin, planted with deer grass (*Muhlenbergia rigens*), Alkali sacaton (*Sporobolus airoides*) and western red bud (*Cercis occidentalis*). EW-7 is within an area currently under construction and mostly barren with isolated tumble mustard (*Sisymbrium altissimum*) and Mexican fan palm (*Washingtonia robusta*) seedlings. EW-8 and EW-9 are within the landscaped area of an industrial development; the landscaping consists of commercially available vegetation including jacaranda (*Jacaranda* sp.) trees and Japanese pittosporum (*Pittosporum tobira*). EW-10 will be within the Pine Avenue right-of-way, or located within a previous borrow site owned by Orange County Flood Control District Basin which is unvegetated and heavily disturbed.

With the exception of the alignments from EW-4 to the groundwater treatment system located on Airport property, EW-5 to the groundwater treatment system located on Airport property, and property adjacent to EW-10, the proposed effluent/influent pipe alignments are located within built up urban environments. The proposed influent piping alignment to EW-4, EW-5 are within non-native grasslands and sod fields.

The literature review revealed eight federally- or state-listed species potentially occurring within the Project Site. None of these listed species are anticipated to occur or be affected by the Proposed Project. The literature review revealed 44 special interest species known from Prado Dam and Corona North Quadrangles and therefore encompassing the project vicinity. Of these species, only one special status species, burrowing owl, has a potential to occur in the project area and be impacted by the Proposed Project.

Representative site photos, all 44 special interest species and their probability of occurrence, and a list of observed species are included in Appendix B.

Burrowing Owl

The burrowing owl is a California species of concern (CSC). Burrowing owls are yearlong residents of shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial and open areas (Haug et al. 1993). They may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches (Haug et al. 1993). This species requires large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. They primarily utilize modified rodent or other small mammal burrows for roosting and nesting cover. When burrows are scarce, they may use

man-made structures, such as openings beneath cement or asphalt pavement, pipes, culvert, and nest boxes (Robertson 1929). One burrow is typically selected for use as the nest; however, satellite burrows are usually found in the immediate vicinity of the nest burrow within the defended territory of the owl. Breeding occurs from March through August, with peak periods in May and July. The most important threats to this species include loss of habitat, reduced burrow availability due to rodent control, and habitat pesticides (James and Espie 1997).

Burrowing owl was observed during the field surveys in the vicinity of proposed well site EW-4, and the influent piping alignment from EW-4 to the groundwater treatment basin system located on Airport property. Additionally, suitable habitat and sign of burrowing owl exists within the project area and/or immediate vicinity at proposed well sites EW-1, EW-2, EW-3 and the EW-10 Prado Basin site. The proposed influent piping alignment to EW-5 and the EW-10 Prado Basin site are also located within suitable habitat for burrowing owl.

A burrowing owl assessment was completed at each extraction well site and potential treatment plant site. Results are summarized in Table 2 below.

Table 2
Habitat Assessment for Burrowing Owl for Extraction Wells,
Treatment Basins along with the Influent Pipeline

	Extraction Well With Influent Piping Location	Habitat	Burrowing Owl Potential
EW-1	Along Euclid Avenue	Non-native grassland	High Potential. Many ground squirrel burrows observed in the area. Burrows with white wash were observed.
EW-2	Along Euclid Avenue	Non-native grassland	High Potential. Many ground squirrel burrows observed in the area. Burrows with white were observed.
EW-3	NW intersection of Euclid and Kimball	Sod farm bioswale	Medium Potential – The site is located within a swale with few suitable burrows and foraging habitat
EW-4	Within runways of Chino Airport	Non-native grassland	High Potential. Presence was observed. The species occupies burrows in this area.
EW-5	Within Chino Airport hanger	Asphalt	Unlikely
EW-6	Along Kimball within development SWPP basin	Landscaped native grasses.	Unlikely
EW-7	Along Kimball Avenue adjacent to	Highly disturbed, non-native vegetation	Unlikely

	development construction site		
EW-8	Along Fern	Within industrial development landscaping	Unlikely
EW-9	Along Fern	Within industrial development landscaping	Unlikely
EW-10	South Side of Pine Avenue	Within street right- of-way, or Orange County Flood Control District property	Medium Potential— The site is highly disturbed from prior use as borrow pit; however, there were suitable burrows in the adjacent power line corridor.
Airport Treatment Plant Site	Along Euclid	Non-native grassland	High Potential. Many ground squirrel burrows observed in the area.
Potential Alternate Treatment Plant Site	South side of Kimball	Within industrial development	Unlikely

Potentially significant impacts have been identified and the following mitigation measures are recommended to reduce impacts to sensitive species to a less than significant level:

BIO-1: To avoid impacts to any nesting migratory birds, construction activities shall be conducted outside the bird nesting season (typically February 1 through August 31). The exact time of year when species nest can vary greatly between members of the same species in the same geographic area; external factors, such as rainfall, temperature, and water levels may influence time of nesting from year to year. If construction is scheduled during nesting season, pre-construction nest survey(s) are recommended to ensure that impacts to any nesting birds are avoided. The last survey day is to be conducted within three days prior to start of work. If the pre-construction nest surveys are negative, construction can take place during nesting season.

BIO-2: In order to avoid and/or minimize potential impacts to burrowing owl, a preconstruction burrowing owl survey is recommended prior to the start of project ground disturbing activities at well sites, EW-1, EW-2, EW-3, EW-4, and EW-10 as well as the influent pipeline alignment to EW-5 and the EW-10 Prado Basin site. The survey should be completed within thirty days prior to the start of work. If active burrowing owl burrows are found, project activities should be monitored by a qualified biologist in order to avoid and/or minimize potential impacts to the species. The monitoring biologist may implement procedures identified within the CDFW 2012 Staff Report on Burrowing Owl Mitigation to ensure protection of the burrowing owl. If the burrowing owl pre-construction surveys are negative, no further avoidance and/or minimization actions are recommended.

BIO-3: If the burrowing owl pre-construction survey is positive and the qualified biologist determines that owls and their habitat can be protected in place on or adjacent to a project site, it is recommended that buffer zones, visual screens or other measures be implemented while project activities are occurring to minimize disturbance impacts. Scobie and Faminow (2000) developed guidelines for activities around occupied burrowing owl nests recommending buffers around low, medium, and high disturbance activities, respectively (Table 3). Based on site conditions avoidance measures should be implemented at the direction of the biological monitor to ensure impacts to burrowing owl are avoided.

Table 3
Recommended Restricted Activity Dates and Setbacks
by Level of Disturbance for Burrowing Owls

by Ecver of Distarbance for Burrowing Owie						
		Level of Disturbance				
		Low	Med	High		
Nesting sites	April 1 – Aug 15	200 meter	500 meter	500 meter		
Nesting sites	Aug 16 – Oct 15	200 meter	200 meter	500 meter		
Nesting sites	Oct 16 - Mar 31	50 meter	100 meter	500 meter		

Source: (Scobie and Faminow 2000)

BIO-4: If the pre-construction survey is positive and the qualified biologist determines that project construction will directly impact an owl burrow, the biologist should draft and implement a relocation/exclusion plan following the recommendations within the CDFW 2012 Staff Report on Burrowing Owl Mitigation.

- b,c) **No Impact.** During the January 2018 biological resources surveys of the Project Site, it was determined that none of the properties within the area defined as the Project Site support riparian habitat or a sensitive natural community. Additionally, the Project Site is not identified in local plans, policies, and regulations of the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service. Development of the Project Site as proposed would not result in impacts to riparian vegetation or to a sensitive natural community because these resources do not occur on the Project Site. No federally protected wetlands as defined by Section 404 of the Clean Water Act occur on the Project Site; none are identified in the U.S. Fish and Wildlife Service National Wetlands Inventory. There are no drainage/wash resources on any of the properties and the Project Site supports no riparian habitat. No impact is identified, and no mitigation measures are recommended.
- d) No Impact. Wildlife movement includes seasonal movement along migration corridors, as well as daily movements for foraging. It may also include movement of large mammals, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians and between roosting and feeding areas for birds. The project area is predominantly urban and/or largely restricted by the urban interface. The Proposed Project would not impact wildlife movement and no mitigation measures are required.
- e) **No impact.** Most of the locations of the proposed facilities are disturbed lands, some are regularly disked for weed abatement, and no native vegetation was identified in areas of project-related disturbance. There are no trees that would be removed in order to accommodate construction. No

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conflicts with any local policies or ordinances protecting biological resources would result and no mitigation measures are required.

f) No impact. The Project Site is located in an urbanized area and entirely within the boundaries of the City of Chino. The Project Site is not located within the planning area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat plan. No impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
٧.	CULTURAL RESOURCES - Will the project				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?				
SL	IBSTANTIATION: (Check if the project is located in the overlays or cite results of cultural re			logic 🗌 Re	sources

a) Less Than Significant Impact. The City of Chino General Plan includes a review of the Historical Resources Inventory List and identifies numerous prehistoric sites in Chino, including villages and campsites, food-processing sites, middens, and metates. A list of 16 historical resources are listed in the City of Chino General Plan and include structures such as buildings, neighborhoods, churches, etc. The nearest historically significant resource to the Project Site is Victory Baptist Church and is located approximately 1.25 miles northwest of the Site.

McKenna et al. completed an archaeological records search on February 8, 2018, at the California State University, Fullerton, South Central Coastal Information Center. The research consisted of a review of previously completed cultural resources investigations within and around the Chino Airport. The research covered the airport and a buffer of one-half mile around the airport. Research resulted in the identification of a minimum of 36 reports within the airport boundaries and the surrounding buffer. Historic maps show the areas relatively unimproved until ca. 1933. Dairy-related improvements first show on maps from 1948 and the Chino Airport was shown as developed between 1947 and 1950. No National Register of Historic Places, no California Landmarks or Points of Historical Interest, or locally significant cultural resources were identified. Some individual elements within the Chino Airport have been identified and evaluated but found to be ineligible for listing. The relative level of

- sensitivity for historical resources and isolates was determined to be Low. Less than significant impacts would occur and no mitigation measures are required.
- b) Less Than Significant with Mitigation Incorporated. Construction of the extraction wells would require drilling to depths between approximately 120 feet bgs and 270 feet bgs. General Plan Policy P3 states that in the event that known resources are encountered or unknown resources are discovered during construction, the Planning Division should be notified immediately and construction should stop until an archaeologist evaluates the discovered resources and recommends appropriate action. Due to the possibility of unknown resources within the City of Chino, a potentially significant impact may occur and therefore the following mitigation measure is recommended to reduce impacts to a less than significant level.
 - CR-1: If cultural or archeological resources are unearthed during construction of the Project, the contractor shall contact a qualified archaeologist to monitor further ground disturbing activities. All findings shall be examined and the contents of soils and bedrock outcrops that may be exposed as a result of project-related activities shall be inspected.
- c) Less Than Significant with Mitigation Incorporated. According to the City of Chino General Plan, the City lies within a region which is made up of alluvial valley floors, fans and terraces and the basic soil types are young alluvial deposits. Pleistocene alluvium and Holocene alluvium deposits underlying several areas of the City have been identified as having varying potential to yield fossils of importance. Vertebrate land mammal fossils have been discovered in parts of the City, including the fossils of a mammoth, ground sloth, camel, bison, horse, and deer. The Proposed Project could be underlain by unknown paleontological resources due to the unknown distribution of resources throughout the City. Therefore, the following mitigation measures shall be implemented to reduce impacts to a less than significant level:
 - CR-2: In the event that paleontological resources are unearthed during construction, the contractor shall immediately cease construction activities and retain a qualified and trained paleontologist who shall recover and salvage all fossils according to modern paleontological techniques and oversee proper placement with appropriate repository, and provide to the County and the City a report documenting all results of these activities.
- d) Less Than Significant Impact with Mitigation Incorporated. There is no evidence that the Project Site is located within an area that is likely to contain human remains, and the discovery of human remains during earthmoving activities is not anticipated. If human remains are encountered during any earth-moving operations associated with the Proposed Project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds and the San Bernardino County Coroner is notified. In accordance with California Public Resources Code Section 5097.98, the Coroner will immediately contact the Native American Heritage Commission (NAHC) in the event remains are determined to be human and of Native American origin. Implementation of the Proposed Project is anticipated to result in less than significant impact with adherence to the California Public Resources Code. No mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VI.	GEOLOGY AND SOILS - Will the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
	ii. Strong seismic ground shaking?				
	iii. Seismic-related ground failure, including liquefaction?				
	iv. Landslides?				
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
SUBSTANTIATION: (Check if project is located in the Geologic Hazards Overlay District):					

a)

No Impact. The City of Chino is considered to be seismically active. According to the City's General Plan, no properties that make up the Project Site are located within an Alquist-Priolo Earthquake Fault Zone. The closest major fault to the Project Site is the Chino-Central Avenue Fault located on western edge of the City. The fault is one of the three major branches of faults that make up the Elsinore Fault Zone. The Chino-Central Avenue Fault is a right-lateral strike-slip fault that extends along the eastern Chino Hills range region, from Corona in Riverside County to the Los Serranos, Chino Hills area of San Bernardino County. The fault has a slip rate of approximately 1.0 millimeter/year and is estimated to have a probable magnitude between 6.0 and 7.0 Mw. The last major earthquake on the fault occurred on July 29, 2008 and was a magnitude 5.4 Mw. The epicenter was located in Chino Hills, approximately 2 miles

southwest of the Project Site. Given the Project Site's location in relation to mapped faults and fault zones, and that the Proposed Project consists of infrastructure and not habitable structures, there would be no impacts related to injury or death, and no mitigation measures are required.

- ii) **No Impact.** The Chino-Central Avenue Fault which is a part of the larger San Andres Fault and is the closest known active fault near the Project Site, is considered to be the most important fault to the hazard of seismic shaking and ground rupture. Other major regional faults such as the Sierra Madre Fault and the San Jacinto Fault are located in Southern California and also could cause potential moderate to severe seismic shaking. The Project Site is located in an area that can expect severe seismic ground shaking during the lifetime of the Proposed Project. However, construction of the Proposed Project facilities would adhere to the Uniform Building Code to ensure that potential impacts are reduced to the maximum extent possible. Additionally, and the Proposed Project does not include any habitable structures. There would be no impacts related to injury or death and no mitigation measures are required.
- iii) **No Impact.** Liquefaction is a phenomenon in which cohesion-less, saturated, fine-grained sand and silt soils loose shear strength due to ground shaking. During liquefaction, involved soils behave like a liquid or a semi-viscous substance and can cause structural distress or failure due to ground settlement, a loss of load-bearing capacity in foundation soils, and the buoyant rise of structures. Three general conditions induce liquefaction; 1) strong ground shaking for a substantial period of time, 2) presence of unconsolidated granular sediments, and 3) occurrence of water-saturated sediments within 50 feet of the ground surface.

According to the City's Draft EIR and General Plan, Chino is situated on an alluvial fan of unconsolidated, coarse- to medium grained soil. Groundwater levels in and around the City are shallow, generally in the range of 30 to 500 feet below the surface. Due to Chino's loosely compacted, silty, sandy alluvial soil and shallow groundwater liquefaction would present the most significant hazards during a moderate-to-significant earthquake. The Proposed Project does not include structures for habitable uses and therefore there would be no injury or death related to construction of the Proposed Project in a liquefaction-prone area and no mitigation measures are required.

- iv). **No impact**. Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The Project Site is relatively flat and is approximately 1.0 mile to the east of the Chino foothills. According to the City of Chino General Plan, despite the presence of faults within the City, no potential of landslides are identified within the City limits. Therefore, no impact is identified and no mitigation measures are warranted.
- b) Less than Significant Impact. The construction of the Proposed Project would create project-related dust due to the operation of machinery on-site or due to high winds. Additionally, erosion of soils could occur due to a storm event. The Proposed Project in total will disturb approximately one acre of soil, however, it is non-contiguous and all pipelines will be installed in existing street rights-of-ways. Therefore, the Proposed Project is not subject to the requirements of the State Water Resources Control Board General Permit for Discharge of Storm Water Associated with Construction Activity. Clearing, grading, and disturbances to the ground such as stockpiling or excavation shall be carried out by the contractor with implementation of Best Management Practices (BMPs). Drainage and storm water management practices will follow current on-site/off-site flow patterns

and/or utilize storm drain systems associated with each site disturbed. Less than significant impacts are identified, and no mitigation measures are required.

- c) **No Impact.** The Proposed Project is not known to be located on a geologic unit or soil that is unstable. No element of the Proposed Project would directly cause an unstable condition. No impacts are anticipated, and no mitigation measures are required.
- d) No Impact. Certain types of soil are inherently expansive, meaning they can expand and contract as the water content fluctuates within the soil. This expansion and contraction, also called "shrink-swell," can damage structures that are not appropriately engineered for this activity. According to Figure 4.6-Soil Types, in the City of Chino General Plan, the Proposed Project is underlain by three soil types, Chino Silt Loam, Chualar Clay Loam 0-2% Slopes, and Chualar Clay Loam 2-9% Slopes. Chino Silt Loam has a low shrink-swell potential and both Chualar Clay Loam types have a moderate shrink-swell potential. The Proposed Project is limited to the construction of public infrastructure and no habitable structures are proposed. Therefore, the Proposed Project would not create substantial risks to life or property and no mitigation measures are required.
- e) **No Impact.** The Proposed Project is a groundwater remediation system that does not require sewer service. No impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VII	GREENHOUSE GAS EMISSIONS - Will the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				

SUBSTANTIATION:

The County of San Bernardino has adopted a screening threshold of significance of 3,000 MTCO₂e (metric tons/year CO₂ equivalent) per year for GHG emissions (*Greenhouse Gas Emissions Development Review Processes County of San Bernardino* March 2015). Therefore, a screening threshold of 3,000 MTCO₂e per year to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the County of San Bernardino and numerous cities in the South Coast Air Basin and is consistent with the South Coast Air Quality Management District (SCAQMD) staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold").

a) Less Than Significant Impact. Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. Greenhouse gas emissions are treated differently as the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However the three gases that are currently evaluated are Carbon dioxide (CO₂) Methane (CH₄) and Nitrous oxide (N₂O). GHGs emissions were evaluated using SCAQMD's Off-Road Mobile Source Emissions Factors (2018) and California Climate Action Registry General Reporting Protocol, 2009l; Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2. Model results for GHG emissions related to the Proposed Project is shown in Table 2. A threshold of 3,000 MTCO2_E per year has been adopted by SCAQMD for determining a project's potential for significant impact to global warming for non-industrial projects (CEQA Greenhouse Gas (GHG) Significance Threshold, SCAQMD, October 2008).

As shown in Table 4, the Proposed Project's emissions would not exceed the SCAQMD's 3,000 MTCO₂e threshold of significance. No significant adverse impacts are identified or anticipated and no mitigation measures are required.

Table 4
Greenhouse Gas Construction Emissions
(Metric Tons per Year)

Source/Phase	CO ₂	CH₄	N ₂ 0	
Misc Construction Eq.	143.7	0.0	0.0	
Loader	63.7	0.0	0.0	
Loader/Backhoe	39.0	0.0	0.0	
Cement and Motor Mixers	4.2	0.0	0.0	
Mini Crane	75.3	0.0	0.0	
Drill Rig	96.4	0.0	0.0	
Paving Equipment	80.5	0.0	0.0	
Total MTCO2e		502.7		
SCAQMD Threshold		3,000		
Significant		NO		

Source: SCAQMD Off-Road Mobile Source Emissions Factors (2018) N₂O: California Climate Action Registry General Reporting Protocol, 2009l; Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2

Note: 7 month construction schedule (146 days).

b) Less Than Significant Impact. The Proposed Project is a remedial action project to pump and treat contaminated groundwater below and adjacent to the Chino Airport. No operational emissions are anticipated as all wells and treatment facility components will be connected to the power grid, would not use any petroleum products and would therefore have zero emissions. No portable generators nor small quantity engines are proposed. The treatment facilities possible use of air strippers as well as other treatment plant units would be permitted by the SCAQMD prior to operation. There are no existing GHG plans, policies, or regulations that have been adopted by CARB or SCAQMD that would apply to this type of emissions source. It is possible that CARB may develop performance standards for Project-related activities prior to construction of the Proposed Project. In this event, these performance standards would be implemented and adhered to, and there would be no conflict with any applicable plan, policy, or regulation; therefore, impacts would be less than significant, and no mitigation would be required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
VIII	HAZARDS AND HAZARDOUS MATERIALS - Will the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project result in a safety hazard for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

SUBSTANTIATION:

a) Less than Significant. Construction, operation, and maintenance of the Proposed Project would involve short-term use of petroleum-based fuels, lubricants, other small amounts of materials during construction and maintenance activities. The construction phase may include the transport of gasoline and diesel fuel to the well sites and on-site storage for the sole purpose of fueling construction equipment. All transport, handling, use and disposal of substances such as equipment petroleum products and solvents will comply with all Federal, State, and local laws regulating the management and use of hazardous materials. Under Section 121 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), remedies for clean-up of contaminated sites must be protective of human health and the environment and comply with applicable or relevant and appropriate requirement. In addition, CERCLA includes a preference for remedies that employ, as a principal element, treatment that permanently and significantly reduces the toxicity, mobility, and volume of hazardous wastes and a bias against off-site disposal of untreated wastes. The Operator of the Proposed Project's treatment system will be required to properly manage and transport any wastes associated with the treatment system, under federal Department of Transportation regulations to an off-site facility permitted to receive the waste. Therefore, potential impacts associated with the routine transport, use, or disposal of hazardous materials will be less than significant and no mitigation measures are recommended.

- b) Less than Significant Impact. Hazardous or toxic materials transported in association with construction of the Proposed Project may include items such as fuels, oils, solvents, and paints. All materials required during construction would be kept in compliance with State and local regulations. Post-construction activities would include maintenance and disposal of waste products from the treatment system. The Operator of the Proposed Project's treatment system will be required to properly manage and transport any wastes associated with the treatment system, under federal Department of Transportation regulations thereby minimizing the risk of upset or accident. Less than significant impacts are anticipated, and no mitigation measures are required.
- c) **No Impact.** The Project Site is not located within ¼ mile of a school or a proposed school. The closest school is Cal Aero Preserve Academy located approximately 1.20 miles southeast of the Chino Airport boundary. No impacts to schools would occur, and no mitigation measures are required.
- d) Less Than Significant Impact. The Proposed Project is San Bernardino County's remedial action plan to conform to the requirements of the Clean-up and Abatement Order (CAO) No. R8-2017-0011 issued on January 11, 2017 by the Regional Water Quality Control Board, Santa Ana Region. The recommended remedial alternative consists of institutional controls, monitored natural attenuation and containment of the identified East and West Plumes by groundwater extraction and treatment off-site. An extensive groundwater monitoring program would be in place to monitor progress in reducing contaminant levels and controlling migration of contaminants above PRGs, the contaminant levels in sensitive areas, and the stability of the outer edges of both the West and East Plumes. If monitoring results indicate that exposure to the groundwater may pose an unacceptable risk, contingency actions would be taken. The County would evaluate new technologies as they become available to ensure that the remedy remains effective and represents the best available technology for remediation of the plumes.

The Proposed Project elements also include Institutional Controls (ICs) that would be implemented within the Project area, including at the Airport. Land use covenants (LUCs) would be applied to portions of the Airport site impacted by contamination at levels exceeding applicable PRGs. These LUCs would prevent direct on-site exposure to COCs in groundwater by prohibiting the use of untreated impacted groundwater from the Airport other than as part of the proposed remedial action. The LUCs would also ensure that indoor air risk from on-site vapor intrusion does not exceed acceptable levels by preventing any residential land use at the Airport and requiring future land uses to remain industrial in the areas of the Airport that are impacted by contamination until the time that applicable PRGs have been met. The residential land use restrictions would not apply to portions of the Airport that are not impacted by contamination, nor to areas where COC concentrations are remediated to below the applicable residential PRGs. Within the Project Site area ICs would be employed to minimize the risk of exposure to groundwater in areas of the plume not within the Airport

and may include working with the Chino Basin Watermaster to monitor private wells within the vicinity of the plume not on the Airport, arranging for notification of well permit applications, aiding private parties with well design, providing wellhead treatment for Site COCs, or providing an alternate drinking water source. Less than significant impacts are anticipated, and no mitigation measures are required.

- e) No Impact. The Project Site is intended to provide remediation of groundwater contaminated by prior activities at the Chino Airport. The Airport is the northerly portion of the Project Site. The public infrastructure project would be a compatible use within the Chino Airport Plan. No structures would exceed 25 feet in height, and no structures would be inhabited. No impact is identified, and no mitigation measures are recommended.
- f) No Impact. The Project Site is not located in the vicinity of a private airstrip. No impacts associated with any safety hazard for people residing or working in the project area are identified, and no mitigation measures are required.
- No Impact. The Proposed Project is not anticipated to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Proposed Project does not provide for public access or parking. Operation of the facilities would not result in any impacts to the surrounding roadways. Neither the construction nor post-construction operations would conflict with implementation of the County's or the City's Emergency Plans. No impacts are identified, and no mitigation measures are required.
- h) **No Impact.** The Proposed Project is not located within a high fire hazard area nor are any wildlands nearby. The Proposed Project does not include facilities that are considered a high fire hazard, and no facilities would be inhabited. No impacts are identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
IX	HYDROLOGY AND WATER QUALITY - Will the project:				
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which will not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that will result in substantial erosion or siltation on- or offsite?				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or offsite?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?				
g)	Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h)	Place within a 100-year flood hazard area structure which would impede or redirect flood flows?				
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j)	Inundation by seiche, tsunami, or mudflow?			\boxtimes	

SUBSTANTIATION:

No Impact. The Proposed Project is a groundwater remediation plan to pump and treat contaminated groundwater within two concentrated plume areas (West Plume and East Plume) below and adjacent to the Chino Airport. The West Plume includes the chemicals of concern (COCs) being TCE, *cis*-1,2-DCE, 1,2-DCA, and 1,2,3-TCP; and the East Plume COCs are TCE, 1,2-DCA, and 1,2,3-TCP. The Proposed Project has been developed in response to a Clean-up and Abatement Order (Order No. R8-2017-0011) issued by the Regional Water Quality Control Board (RWQCB) to improve groundwater quality that currently violates standards.

Construction of the ten extraction well clusters, pipelines, and treatment plant(s) would disturb in total approximately one acre of soil, however, the one acre is non-contiguous and all pipelines will be installed in existing street rights-of-ways. The Proposed Project would therefore be exempt from the National Pollutant Discharge Elimination System (NPDES) permit requirements. The State of California is authorized to administer various aspects of the NPDES. Construction activities covered under the State's General Construction permit include removal of vegetation, grading, excavating, or any other activity that causes the disturbance of one-acre or more. The General Construction permit requires recipients to reduce or eliminate non-storm water discharges into storm water systems, and to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to: 1) identify pollutant sources that may affect the quality of discharges of storm water associated with construction activities; and 2) identify, construct and implement storm water pollution control measures to reduce pollutants in storm water discharges from the construction site during and after construction.

The RWQCB has issued an area-wide NPDES Storm Water Permit for the County of San Bernardino, the San Bernardino County Flood Control District, and the incorporated cities of San Bernardino County. The County then requires implementation of measures for a project to comply with the area-wide permit requirements. A SWPPP is based on the principles of Best Management Practices (BMPs) to control and abate pollutants. The SWPPP must include (BMPs) to prevent project-related pollutants from impacting surface waters. These would include, but are not limited to street sweeping of paved roads around the site during construction, and the use of hay bales or sand bags to control erosion during the rainy season. BMPs may also include or require:

- The Contractor shall avoid applying materials during periods of rainfall and protect freshly applied materials from runoff until dry.
- All waste to be disposed of in accordance with local, state and federal regulations. The Contractor shall contract with a local waste hauler or ensure that waste containers are emptied weekly. Waste containers cannot be washed out on-site.
- All equipment and vehicles to be serviced off-site.

Although exempt, the contractor's implementation of BMPs would ensure that construction of the Proposed Project would not result in impacts to water quality for areas of construction. No significant adverse impacts are identified, and no mitigation measures are required result.

- b) **Less Than Significant Impact.** The following remedial action objectives (RAOs) were identified in the Draft IRAP (Tetra Tech, December 2017) for impacted groundwater originating at the Site:
 - Prevent exposure of human receptors to Site COCs in groundwater by ingestion, dermal contact, and inhalation at concentrations exceeding risk-based preliminary remediation goals (PRGs).
 - Protect downgradient, off-site groundwater resources by limiting the migration of Site COCs at concentrations exceeding levels that protect beneficial uses.
 - Protect indoor air quality by monitoring and controlling the migration of Site COCs in groundwater that may result in soil gas and indoor air concentrations that exceed PRGs.
 - To the extent reasonably practicable (including technological and economic factors), over time
 restore the beneficial uses of groundwater at and downgradient of the Site impacted by site
 COCs to the extent attributable to the Site.
 - Protect downgradient, off-site surface water resources (the Prado Basin Management Zone) by limiting the migration of Site COCs in groundwater at concentrations exceeding levels that protect beneficial uses.

The recommended remedial alternative consists of institutional controls, MNA, and West Plume containment and East Plume containment by groundwater extraction and *ex situ* treatment. The layout of the recommended groundwater pump-and-treat system to contain both the West Plume and the East Plume is shown on Figure 3 and would include two sets of groundwater extraction wells, for a total of 10 proposed well clusters. Extracted groundwater from the wells would be treated by either one on-site treatment system or two treatment systems – one onsite and one offsite – using carbon adsorption, while groundwater from CDI-18 would be treated either by a separate wellhead system or added to one of the above treatment systems. It is assumed that extracted groundwater from CDI-17 would be pumped directly to the CDA treatment plant. The treated water from the treatment system(s) would be pumped to the CDA treatment plant southwest of the Site, an on-site storm sewer, an on-site sanitary sewer, the off-site Inland Empire Utilities Agency (IEUA) municipal water recycling treatment plant, the off-site IEUA recycled water ("purple") line, or it may be reinjected into injection wells that would be installed in the northeast corner of the Site.

The extraction well network would include an estimated 10 new extraction well (EW) clusters (EW-1 through EW-10), plus existing off-site CDA wells CDI-17 and CDI-18, as shown on Figure 3. Based on groundwater modeling conducted by Tetra Tech, preliminary design extraction rates range from 50 to 150 gallons per minute (gpm) per well cluster, for a total extraction flowrate of 900 gpm. In addition, 180 gpm of groundwater would be extracted from CDA well CDI-18 that may be treated along with the water from EW wells or through an off-site wellhead treatment system, and groundwater from CDI-17 would be treated by the CDA's treatment plant. The southernmost facility of the remedial alternative being evaluated is in located in the Prado Basin, just north of the Prado Reservoir which supports wetlands and groundwater recharge facilities. The construction and operation of the remediation plan would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge operations.

Figure 3 shows the piping layout that would connect the wells to the groundwater treatment system(s). An alternative to piping off-site wells to the on-site treatment system would be to connect all off-site wells to a separate treatment system that would be installed adjacent to the CDA main groundwater treatment facility or other nearby location, to reduce the piping and the flow to the on-site treatment plant. The preliminary treatment system design includes two dual 10,000-pound granular activated carbon (GAC) units. If groundwater from well CDI-18 is combined with groundwater from the EW wells for treatment in lieu of separate off-site wellhead treatment, additional GAC vessels would be added to accommodate the additional flow. An optional air stripper (with companion off-gas GAC treatment units) may be added based on the influent makeup after system start-up.

It is currently planned to discharge the treated groundwater from the treatment plant(s) to one or more of the following, depending on availability and operational considerations of the receiving facility at the time of system start-up: 1) the CDA treatment plant influent pipeline that collects groundwater from on-site CDA wells along the western Airport property line; 2) the on-site storm sewer; 3) the on-site sanitary sewer; 4) the off-site IEUA water treatment plant; 5) the IEUA recycled water ("purple") line; or 6) nine new injection wells that would be installed near the northeast corner of the property to a depth of approximately 250 feet below ground surface (bgs) to reinject the water into the subsurface. If reinjection is selected, computer flow modeling would be conducted prior to well installation to refine the well spacing, depth, and injection rates to ensure that the reinjection program does not adversely affect plume containment by the extraction system. Impacts would be less than significant, and no mitigation measures are required.

c) **No Impact.** The Remedial Action Plan facilities would be constructed within street rights-of-ways, at previously disturbed sites, and/or at locations of existing public infrastructure. There is no natural surface water exposed at the Chino Airport; however, several surface drainage creeks are located south of the Site and flow into the Prado Flood Control Basin, part of the larger Prado Basin Management Zone (PBMZ). The PBMZ is essentially a flood plain created behind the Prado Dam and is adjacent to the southern limit of the project area. The PBMZ also encompasses Prado Regional Park, the Prado Reservoir, the Prado Flood Control Basin (a created wetlands), and the Orange County Water District's wetlands ponds.

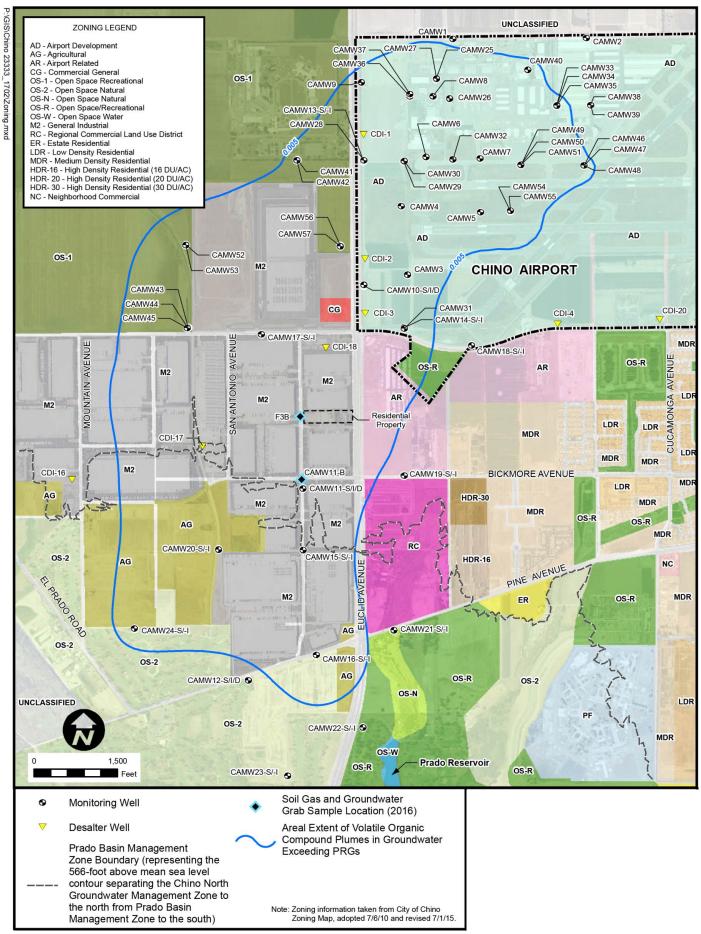
There are no drainages that would be impacted by the Proposed Project facilities. EW-10, the southernmost site is to be located in the ROW of Pine Avenue, but if necessary may be located in the Prado Basin, just north of the Prado Reservoir but just outside the PBMZ. The well location is outside of the Santa Ana River wash. No drainages, streams, or rivers would be altered by construction or operation of the facilities. There would be no impacts and no mitigation measures required

d) No Impact. The Remedial Action Plan facilities would be constructed with street rights-of-ways, at previously disturbed sites, and/or at locations of existing public infrastructure. The amount of impervious surfaces added to existing vicinity would be associated with the new extraction wells and potentially an alternative treatment plant site. The impervious footprint of each completed well would be less than 50 square-feet. The IRAP assumes the use of submersibles pumps and flushmount well vaults rather than pump houses at each of the well sites. The footprint of new treatment plant facilities would be less than 2,500 square-feet; a total of 5,000 square-feet if two are constructed. No alteration of the existing drainage pattern or substantially increase in the rate or amount of surface runoff would occur to result in on- or off-site flooding. There would be no impacts and no mitigation measures required.

- e,f) Less Than Significant Impact. Temporary impacts related to storm runoff may occur during Project construction; such impacts would be addressed via implementation of BMPs to minimize/prevent impacts to water quality, as discussed in Section IX(a) above. Following construction, all surfaces would be restored to pre-Project conditions; therefore, the Proposed Project would not create additional sources of runoff. The Project will not result in the need for the construction of new storm water drainage facilities or the expansion of existing storm water drainage facilities. A less than significant impact is identified, and no mitigation will be required.
- g,h) **No Impact.** The southernmost portion of the Project Site is within the Prado Dam Inundation Area as identified in the City's General Plan Safety Element Figure SAF-3. These areas of the City are restricted to recreation, open space, and resource management uses. The southerly pipeline alignments along Fern and Pine avenues, and the site for EW-10 would be within the inundation area but are acceptable land uses. No housing is associated with the Proposed Project and there would be no structures that would impede or redirect flood flows. No impact is identified, and no mitigation measures are recommended.
 - i) **No Impact**. The southernmost portion of the Project Site is within the Prado Dam Inundation Area as identified in the City's General Plan Safety Element Figure SAF-3. The Proposed Project would not expose people or structures to a significant risk of loss, injury or death from flooding. Although a portion of the Project Site is within the dam inundation area, there would be no full-time employees on-site and no structures associated with the Proposed Project. No impact is identified, and no mitigation measures are recommended.
 - j) Less Than Significant Impact. Seiches are standing waves generated in enclosed bodies of water in response to ground shaking. The Project Site is not located in the immediate vicinity of a known large body of water and is upstream from the Prado Dam. The potential for seiches exists but is considered minimal. More importantly, the Proposed Project facilities would most likely not receive damage from a seiche. Tsunamis are large waves generated in open bodies of water by fault displacement of major ground movement. Due to the inland location of the Project Site, tsunamis are not considered to be a risk. Dams or other water-retaining structures may fail as a result of large earthquakes, resulting in flooding and mudflow production. The Project Site is located within the Prado Dam Inundation Zone. However, dam failure is considered an extremely remote possibility as dams are designed to be much stronger than necessary to survive the largest magnitude possible earthquake without affecting the dam structure. No inhabitable structures are associated with the Proposed Project, and therefore, the risk of inundation by seiche, tsunami, or mudflow is considered low. Less than significant impacts are anticipated, and no mitigation measures are required.

		Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
Χ.		LAND USE AND PLANNING - Will the project:				
	a)	Physically divide an established community?				
	b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
	c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				
	SU	BSTANTIATION:				

- a) **No Impact.** According to the City of Chino General Plan, the Proposed Project's land use designations include agricultural, public, general industrial and open space (see Figure 4). The Proposed Project is located entirely within the incorporated City of Chino. The Proposed Project does not contain any elements that would divide a community; no impact is identified, and no mitigation measures are proposed.
- b) **No Impact.** The Proposed Project is a public works project proposed to be implemented for remediating contaminated groundwater, one of the primary sources of drinking water in the Chino Basin. Public works projects and public infrastructure are an allowed use in any land use designation as a matter of public health and safety. The Proposed Project would not conflict with the City of Chino General Plan or any other applicable land use plan, policy, or regulation. Implementation of the Proposed Project would have no impact, and no mitigation measures are proposed.
- c) **No Impact.** The Project Site is not located within the planning areas of an adopted habitat conservation plan or natural community conservation plan. No impacts would occur and no mitigation measures are required.



Source: Tetra Tech; Dec., 2017.

SURROUNDING LAND USE and ZONING MAP

Chino Airport IRAP

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact				
XI.	MINERAL RESOURCES - Will the project:								
a)	Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?								
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?								
SL	SUBSTANTIATION: (Check if project is located within the Mineral Resource Zone Overlay):								

a,b) **No Impact.** According to the City of Chino General Plan, the Project Site is located in an area identified as MRZ-3, which is defined as areas of undetermined mineral resource significance. The City of Chino General Plan, defines the area as known to contain sand and gravel deposits, although there is insufficient data to ascertain whether these mineral deposits are significant. The General Plan identifies City Goal OSC-3 to conserve sand and gravel. The Proposed Project is however located within an urbanized area of the City and very little vacant land surrounds the site other than the Prado Basin to the south. Should mining operations be approved in Prado Basin at some time in the future, the location of EW-10 could accommodate a mine operation. Therefore, no impact would occur to a known mineral resource, and no mitigation measures are recommended.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XII.	NOISE - Will the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels?				
f)	For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?				
S	SUBSTANTIATION: (Check if the project is located in the Noise severe noise levels according to the General				bject to

a) Less than Significant Impact. The Project Site is located on lands zoned General Industrial, Airport Development, and Open Space Natural. Operation of the extraction wells will primarily occur within the General Industrial or Airport Development land use designations. The groundwater treatment system will use at least two dual 10,000-pound granular activated carbon (GAC) units which will be located either on the Chino Airport, or adjacent to the existing Chino 1 Desalter, or both locations, if necessary. All noise stemming from the project facilities would be compatible with the land use designations and would comply with Table N-3 in the Noise section Element of the City of Chino General Plan, and Section 9.40.040 of the City Development Code.

Construction activities for the Proposed Project will be limited to occur between the hours of 7:00 a.m. to 8:00 p.m. Monday to Saturday. Construction noise and vibration, including maintenance, repair or demolition, occurring between the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday, except Sundays and Federal holidays, is exempt from noise standards included in the City of Chino Development Code 9.40.060. Therefore, a less than significant impact is identified, and no mitigation measures are required.

b) Less than Significant Impact. Operation and maintenance of the groundwater remediation system would not generate any vibration that would impact nearby sensitive receptors; however, use of heavy equipment during construction (e.g. drilling rigs) may generate vibration perceptible to nearby workers. No schools, hospitals, residences, or other sensitive receptors are located within ½-mile of the Project Site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Buildings in the vicinity of the constructionsite respond to vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. The nearest residential structures to the Project Site are located approximately 0.6 miles from the Project Site, and the El Prado Golf Country Club is approximately 0.5 miles from the EW-10 Prado Basin site. All structures located any closer to the Proposed Project's construction sites are industrial buildings. The threshold at which there may be a risk of architectural damage to general single-family units with plastered walls and ceilings is 0.20 Peak Particle Velocity (PPV) in/second. Primary sources of vibration during construction could be drill rigs or bulldozers. Bulldozers could produce up to 0.089 PPV at 25 feet. At a distance of 50 feet, a bulldozer would yield a PPV well below the threshold of perception and below any risk or architectural damage.

Construction equipment may result in vibration levels that are considered annoying but would not result in damage to any nearby structures. Limiting construction to the hours allowed in the City's Noise Ordinance would further reduce any impacts. Therefore, a less than significant impact is anticipated, and no mitigation measures are recommended.

- C,d) Less than Significant Impact. A temporary increase in ambient noise would occur during construction activities, due to the presence of construction crews and construction equipment. Construction noise is exempted per the City of Chino Development Code 9.40.060 as discussed in Section (a) above. The construction related noise impacts would be temporary and periodic in nature. Due to the location of the proposed facilities (on Chino Airport, in Industrial area, and near major roads and highways) these temporary impacts are not likely to change the ambient noise levels. Operation of the proposed treatment system would occur at either one or two locations both of which are designated for airport or industrial land uses. Permanent changes in the ambient environment would not be perceivable due to the existing surrounding land uses. Less than significant impacts are anticipated, and no mitigation measures are required.
 - e) Less than Significant Impact. The northerly portions of the Proposed Project are within Chino Airport Land Use Plan. All facilities are located within Airport Safety Zone 1, 2 and 3. The Proposed Project will comply with the City of Chino General Plan Noise element and with the City's Development Code for exterior noise maximums of 65 L_{dn.} The Proposed Project does not include any residential uses and is not located near any residences. Once construction is completed, employees may be at the well sites once per month for sampling/maintenance. The pipeline system would not require regular maintenance and the treatment system (s) would not require full-time employees to be on-site. Therefore, a less than significant impact would occur, and no mitigation measures are required.
 - f) **No impact.** The Project Site is not located in the vicinity of a private airstrip. No impact is identified, and no mitigation measures are recommended.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIII.	POPULATION AND HOUSING - Will the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				
SL	IBSTANTIATION:				

- a) **No Impact.** The Proposed Project is the implementation of a remedial action plan to remediate contaminated groundwater; no population-inducing activities or facilities would be related to the Proposed Project. It would not induce substantial population growth directly or indirectly and therefore no impact is identified and no mitigation measures are required.
- b,c) **No Impact.** The Proposed Project is the implementation of a remedial action plan to remediate contaminated groundwater; no population-inducing activities or facilities would be related to the Proposed Project. It would not induce substantial population growth directly or indirectly and therefore no impact is identified and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIV.	PUBLIC SERVICES				
a)	Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire Protection?			\boxtimes	
	Police Protection?			\boxtimes	
	Schools?				
	Parks?				
	Other Public Facilities?				\boxtimes
SL	IBSTANTIATION:				

a) Fire Protection

According to the City of Chino General Plan, the Chino Valley Independent Fire District (CVIFD) provides fire services to the City of Chino, the City of Chino Hills and the surrounding unincorporated areas, including Chino's Sphere of Influence (SOI). The CVIFD serves a population of about 172,922 people, covering about 80 square miles. The District operates six stations; the closest station to the Project Site is located at 7550 Kimball Avenue, approximately 0.62 miles west of the project area. Construction of the Proposed Project would be carried out in accordance with all applicable City of Chino standards to maintain vehicular access for emergency response vehicles. If required, a Traffic Control Plan would be implemented during construction to provide safe vehicle access around the immediate construction area. Operation of the Proposed Project would not require additional fire protection. A less than significant impact is identified, and no mitigation measures are proposed.

Police Protection

The Chino Police Department provides police protection services in the City of Chino and in small portions of Chino's Sphere of Influence, covering approximately 31 square miles. The Department has one main office and two satellite stations. The Department has 102 sworn officers, 51 civilian support staff, and 95 volunteers. Construction of the Proposed Project would be carried out in accordance with all applicable City of Chino standards to maintain vehicular access for emergency response vehicles. If required, a Traffic Control Plan would be implemented during construction to provide safe vehicle access around the immediate construction area. Operation of the Proposed Project would not require

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additional police protection. A less than significant impact is identified, and no mitigation measures are proposed.

Schools

The Chino Valley Unified School District (CVUSD), encompassing 88 square miles, serves the City of Chino and includes the cities of Chino, Chino Hills, part of the City of Ontario, plus unincorporated areas of San Bernardino County. The nearest school to the project area is Cal Aero Preserve Academy and is located to the southwest at 15850 Main Street. No population increase would result from construction, operation, and maintenance of the Proposed Project. No impact is identified, and no mitigation measures are proposed.

Parks

The Proposed Project does not include residential use or other land use that may generate a population that would increase the use of existing neighborhood and regional parks or other recreation facilities in the vicinity. Accordingly, implementation of the Proposed Project would not result in an increased use or substantial physical deterioration of an existing neighborhood or regional park. No impact is identified, and no mitigation measures are proposed.

Other Public Facilities

The installation and maintenance of the groundwater remediation system is not expected to result in impacts associated with any other public facilities in the area or in the City of Chino as a whole. No impact is identified, and no mitigation measures are proposed.

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	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XV.	RECREATION				
a)	Will the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?				
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				
SL	IBSTANTIATION:				

a,b) Less than Significant Impact. The Proposed Project does not include any new residential or recreational development or is anticipated to induce population growth. No direct increase of existing neighborhood and regional parks would result from the Proposed Project and no construction of new recreational facilities would be required. Therefore, no impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVI.	TRANSPORTATION/TRAFFIC – Will the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and greenways, pedestrian and bicycle paths, and mass transit.				
b)	Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?				
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

a) Less Than Significant Impact. The Proposed Project includes the installation of approximately 28,000 linear feet of pipeline in existing rights-of-ways on Euclid Avenue, Kimball Avenue, Fern Avenue, and Pine Avenue in Chino. The City of Chino General Plan designates Euclid Avenue as an "expressway" that serves regional traffic, is a designated State truck route, and is a divided high-flow arterial street with four through lanes. The right-of-way width is approximately 206 feet and is designated as a Class II or III on-street bicycle facility and borders the Euclid Avenue trail. Kimball Avenue is designated as a "secondary arterial" that serves as a City of Chino truck route that is undivided with four through lanes. The right-of-way width is approximately 88 feet, and on-street parking is allowed. Pine Avenue is designated as a "primary arterial" and serves as a City of Chino truck route with four through lanes and is designated a Class I off-street bicycle facility. The right-of-way width is 98 feet and parking is prohibited. Fern Avenue is considered to be a "local street" and serves as a City of Chino truck route with two through lanes and a minimal right-of-way width

of 60 feet. Public transit service in and around Chino is provided by five agencies: Omnitrans, Foothill Transit, Orange County Transportation Authority, Metrolink, and Amtrak. No public transit stops are located within the Project Site.

The pipeline installation may cause temporary impacts to traffic in the immediate construction area. The City's permits and the County's contracts will require that during construction, the Contractor shall be required to install traffic control detour patterns, delineators, barricades, flagging, signing, and other devices to control traffic in the area of construction work as necessary. No road closures shall be permitted or required during the construction of the facilities and a traffic control plan shall be implemented and allow for continued vehicular access. Impacts will be less than significant and no mitigation measures are required.

- b) Less than Significant Impact. Construction of the Proposed Project would not add a significant number of vehicle trips to the local circulation system. A temporary increase in local traffic is anticipated to occur during project construction due to construction vehicles, however, no changes to existing traffic would occur upon completion of construction activities. Upon completion of the construction, all roadways will be restored to preexisting conditions. The City of Chino along with the County of San Bernardino, participates in the San Bernardino Associated Governments (SANBAG), now known as the San Bernardino County Transportation Authority (SBCTA) Congestion Management Program. The Proposed Project is not anticipated to negatively impact levels of service standards, or conflict with other standards established in the SANBAG Congestion Management Pan. Less than significant impacts would occur, and no mitigation measures are required.
- c) Less than Significant Impact. The Project Site is within Chino Airport Overlay as identified in the City of Chino Zoning Map. According to both the City of Chino Land Use Element and the Chino Airport Comprehensive Land Use Plan (CACLUP), extraction wells EW-1, EW-2, EW-3, and EW-4, are located in Airport Safety Zone 1 which restricts residential and industrial development. Extraction wells EW-3, EW-5, EW-6, EW-7, EW-8, EW-9, and the groundwater treatment system are located in Airport Safety Zone 2 that restricts development that would result in more than 50 persons per assembly area or 25 persons per building being present. Extraction well EW-10 is located in Airport Safety Zone 3 that places no restrictions on residential or other uses.

The Proposed Project would not include inhabitable structures and would be compatible with the City of Chino Zoning Map. Facilities would not exceed heights of other public infrastructure in the area (e.g. Chino Desalter 1). Construction of the Proposed Project would not interfere with airport activities and therefore a less than significant impact to air traffic patterns would result and no mitigation is required.

- d) **No Impact.** Construction of the Proposed Project would temporarily alter existing street and traffic patterns. Temporary changes to traffic patterns and levels of service during the construction phase would be limited to the immediate work zone where construction activities are occurring. All changes to the traffic pattern would be coordinated in accordance with the approved Traffic Control Plan to minimize impacts to motorist, public transportation patrons, and pedestrians. No design features (e.g., sharp curves or dangerous intersection) or incompatible uses are proposed as part of the Proposed Project. No impact is identified, and no mitigation measures are proposed.
- e) **No Impact.** The Proposed Project would not hinder emergency access to the area. All construction detours or other changes to traffic patterns would allow for adequate emergency access. Following

installation of the pipeline, extraction wells, and the treatment system, all effected roadways would be repaved and resurfaced to pre-existing conditions. Therefore, no impact is identified, and no mitigation measures will be proposed.

f) Less than Significant Impact. Construction of the proposed extraction wells, pipeline and groundwater treatment system would temporarily impact access to on-street bicycle lanes on Euclid Avenue and may affect off-street bicycle lanes on Pine Avenue. Sidewalks located on Euclid Avenue, Kimball Avenue and Fern Avenue could also have potential temporary impacts during the construction of the Proposed Project. Following installation of the pipelines, all roads and sidewalks affected would be repaved and resurfaced to pre-existing conditions. Operation and maintenance of the groundwater extraction system would not impact any bicycle lanes, pedestrian facilities, bus stops, or public transit routes throughout the City. Therefore, a less than significant impact is identified, and no mitigation measures are required.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVII.	TRIBAL CULTURAL RESOURCES - Will the project:				
a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is?				
	i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or?				
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?				

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Public Resources Code section 21082.3(c) also contains provisions specific to confidentiality.

i) Less than Significant Impact. McKenna et al. has completed an archaeological records search and initiated the Native American consultation. The archaeological records search was completed by McKenna et al. on February 8, 2018, at the California State University, Fullerton, South Central Coastal Information Center. The research consisted of a review of previously completed cultural resources investigations within and around the Chino Airport. The research covered the airport and a buffer of one-half mile around the airport. Research resulted in the identification of a minimum of 36 reports within the airport boundaries and the surrounding buffer. Historic maps show the areas relatively unimproved until ca. 1933. Dairy-related improvements first show on maps from 1948 and the Chino Airport was shown as developed between 1947 and 1950. No National Register of Historic Places, no California Landmarks or Points of Historical Interest, or locally significant cultural resources were identified. Some individual elements within the Chino Airport have been identified and evaluated but found to be ineligible for listing. The relative level of sensitivity for historical resources and isolates was determined to be Low. Less than significant impacts would occur and no mitigation measures are required.

ii) Less than Significant with Mitigation Incorporated. McKenna et al. contacted the Native American Heritage Commission (NAHC) on January 31, 2018 and inquired into the presence/absence of sacred or religious Native American site in the area of the Chino Airport. The data request was for the area of T2S, R7W, Sections 19, 20, 21, 28, 29, and 30; a six square miles area associated with the City of Chino and/or the Prado Basin. The NAHC responded on February 1, 2018 by noting negative findings. The Commission has no record of any sacred or religious resources within the research area.

The Commission also provided a listing of individual Native American representatives wising to be informed of any project involving the study area. McKenna sent preliminary consultation letters to the identified individuals on February 7, 2018. In response to these letters, McKenna received concerns for the area to yield prehistoric archaeological resources as well as one request to consult with the County, as Lead Agency. The area was considered by the tribes to be highly sensitive for Native American resources. The County sent out notices of the opportunity to consult under AB 52, including to the tribe that initially submitted a request to consult; a 30-day response period has resulted in no responses from the tribes seeking consultation with the County. In the event that any potential tribal cultural resources are unearthed, implementation of Mitigation Measure CR-1 would reduce potential impacts to a less than significant level:

CR-1: If cultural or archeological resources are unearthed during construction of the Project, the contractor shall contact a qualified archaeologist to monitor further ground disturbing activities. All findings shall be examined and the contents of soils and bedrock outcrops that may be exposed as a result of project-related activities shall be inspected.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVIII.	UTILITIES AND SERVICE SYSTEMS - Will the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded, entitlements needed?				
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				
	IDOTANTIATION				

- a) No Impact. The Proposed Project is a groundwater contamination remediation project developed in response to a Clean-up and Abatement Order (Order No. R8-2017-0011) issued by the Regional Water Quality Control Board (RWQCB), Santa Ana Region. The Proposed Project will not generate wastewater and does not include the treatment of wastewater, and therefore will be consistent with the requirements of the RWQCB. No impact would occur, and no mitigation measures are required.
- b) **No Impact**. The Proposed Project is the construction and operation of a groundwater contamination remediation system to treat contaminants below and adjacent to the Chino Airport. Operation of the Project will not generate wastewater or require an increase in water demands. Groundwater to be extracted is subject to the water rights as adjudicated in Chino Basin Municipal Water District v. City of Chino, et al. San Bernardino County Superior Court Case No. RCV 51010, and the oversight of the Chino Basin Watermaster who oversees water uses in the Chino Basin. Operation of the Proposed Project will be consistent with the Chino Basin Judgment. Part of the Proposed Project includes the construction of two-10,000-pound granular activated carbon (GAC) units that will be above-ground and will be dedicated entirely to the removal of VOCs from the extracted groundwater. The remediation facilities therefore would not require or include the construction of wastewater

treatment facilities or require the expansion of existing wastewater treatment facilities. No impact is identified, and no mitigation measures are required.

- c) Less Than Significant Impact. Temporary impacts related to storm runoff may occur during Project construction; such impacts would be addressed via implementation of BMPs. Following construction, all surfaces would be restored to pre-Project conditions; therefore, the Proposed Project would not create additional sources of significant runoff. The Project will not result in the need for the construction of new storm water drainage facilities or the expansion of existing storm water drainage facilities. A less than significant impact is identified, and no mitigation will be required.
- d) **No Impact.** The Proposed Project will not generate an increase in water demands. The remediation facilities therefore would not impact water entitlements or the supply of water in the area. No impact is identified, and no mitigation measures are required.
- e) **No Impact.** The Proposed Project is the construction and operation of a groundwater contamination remediation system and will not generate wastewater or require an increase in wastewater treatment capacity. No impact is identified, and no mitigation measures are required.
- f) Less than Significant Impact. The City of Chino contracts solid waste collection, transfer, and disposal, as well as recycling services with Waste Management, Inc. (WM). Chino's solid waste is sent to the West Valley Material Recovery Facility and Transfer Station (West Valley MRF), located in Fontana. From there, the waste goes to the El Sobrante Landfill, located in Riverside County. According to CALRecyle facility summary details, the transfer station is permitted to receive up to a maximum of 7,500 tons per day, with a design capacity of 8,280 tons per day. The Proposed Project would require solid waste disposal during the construction phase only. The Contractor would be required to manifest and remove construction debris. Construction of the Project is not anticipated to generate a significant volume of solid waste and would not significantly impact capacity at the West Valley MRF or the landfill. Less than significant impacts are identified, and no mitigation measures are required.
- g) Less than Significant Impact. Construction debris would be recycled or disposed of in accordance to local and regional standards. Assembly Bill 939 (AB 939), enacted in 1989, required a 25 percent reduction in the solid waste stream by 1995 and a 50 percent decrease by 2000. The City of Chino requires all construction and demolition activities to follow provisions that are outlined in the City's Construction and Demolition Waste Recycling Guide. The intent of the Construction and Demolition Waste Recycling Guide is to comply with State Law and Local laws. Operation and maintenance of the extraction wells, pipeline and groundwater treatment system will not produce any domestic solid waste. Therefore, less than significant impacts related to solid waste are anticipated and no mitigation measures are proposed.

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XIV.	MANDATORY FINDINGS OF SIGNIFICANCE:				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?				

a) Less Than Significant Impact. Based on the analysis conducted within this Initial Study, the Proposed Project does not have the potential to significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population or drop below self-sustaining levels, or threaten to eliminate a plant or animal community.

Potential habitat does occur for burrowing owl. Burrowing owl was observed during the field surveys in the vicinity of proposed well site EW-4, and the influent pipeline alignment from EW-4 to the preferred treatment plant site on the Chino Airport property. Suitable habitat and signs of burrowing owl also exists within the vicinity of proposed well sites EW-1, EW-2, EW-3 and the EW-10 Prado Basin site. The proposed influent pipeline alignment to EW-5 and the EW-10 Prado Basin site are also located within suitable habitat for burrowing owl. Although the Project Site is within mostly disturbed areas of agricultural and industrial areas there are current active burrows and additional viable habitat located within the Project Site. Therefore, the Proposed Project could potentially result in impacts to this species. To ensure potential impacts to the burrowing owl are reduced to a less than significant level, appropriate mitigation has been incorporated into this Initial Study and the Project Mitigation Monitoring and Reporting Program.

The relative level of sensitivity for historical resources and isolates was determined to be low. However, due to the possibility of unknown resources within the City of Chino being discovered during drilling and/or excavation appropriate mitigation measures are recommended to reduce impacts to a less than significant level.

- b) Less Than Significant Impact. Based on the analysis provided herein, the Proposed Project would not have impacts that are considered individually limited, but cumulatively considerable. The Proposed Project would have no direct impact relevant to the location of planned and/or foreseeable future development projects in the area. The Proposed Project does not result in any direct significant impacts and would not add to any cumulative impacts associated with buildout of the City of Chino.
- No Impact. The incorporation of design measures, development requirements, standards, policies, and guidelines included in the City of Chino General Plan and Municipal Code would ensure that the Proposed Project would not have substantial adverse effects on human beings, either directly or indirectly on an individual or cumulative basis. No impacts are identified, and no mitigation measures are required.

GENERAL REFERENCES

California Department of Conservation. California Important Farmland Finder. Accessed January 23, 2018.

California Scenic Highway Mapping System. Accessed January 29, 2018

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City of Chino General Plan Draft EIR. January 25, 2010. Accessed on January 22, 2018.

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City of Chino Zoning Map. Accessed on January 30, 30,2018. http://www.cityofchino.org/home/showdocument?id=14940

Comprehensive Land Use Plan, Chino Airport, November 1991. Accessed on February 12, 2018. http://www.sbcounty.gov/Uploads/lus/Airports/Chino.pdf

PROJECT-SPECIFIC REFERENCES

McKenna et al., February 15, 2018, Preliminary Native American Consultation: Chino Airport, San Bernardino County, California.

San Bernardino County, Department of Public Works, Environmental Management Division, February 12, 2018, revised February 21, 2018, General Biological Resources Report.

Tetra Tech, December 2017, Draft Interim Remedial Action Plan Chino Airport, San Bernardino County, California.

Tetra Tech, May 2017, Final Feasibility Study Chino Airport, San Bernardino County, California.

MITIGATION MONITORING REPORTING PROGRAM

Project: Chino Airport Groundwater Remedial Project

Applicant: County of San Bernardino, Department of Airports

 Lead Agency:
 County of San Bernardino
 Date:
 November 2018

Mitigation Measures No. / Implementing Action	Responsible for Monitoring	Monitoring Frequency	Timing of Verification	Method of Verification	Verified Date /Initials
Biological Resources					
BIO-1: Construction activities shall be conducted outside the bird nesting season (typically February 1 through August 31). If construction is scheduled during nesting season, pre-construction nest survey(s) are recommended to ensure that impacts to any nesting birds are avoided. The last survey day is to be conducted within three days prior to start of work. If the pre-construction nest surveys are negative, construction can take place during nesting season.	Project Applicant/ Contractor, Qualified Biologist	As required by survey protocol	Three days prior to the start of construction	On-site inspections/ Report from Biologist	
BIO-2: A preconstruction burrowing owl survey is recommended prior to the start of project ground disturbing activities at well sites, EW-1, EW-2, EW-3, EW-4, and EW-10 as well as the influent pipeline alignment to EW-5 and the EW-10 Prado Basin site. The survey should be completed within thirty days prior to the start of work. If active burrowing owl burrows are found, project activities should be monitored by a qualified biologist in order to avoid and/or minimize potential impacts to the species. The monitoring biologist may implement procedures identified within the CDFW 2012 Staff Report on Burrowing Owl Mitigation to ensure protection of the burrowing owl. If the burrowing owl pre-construction surveys are negative, no further avoidance and/or minimization actions are recommended.	Project Applicant/ Contractor, and Qualified Biologist	Thirty days prior to the start of construction	Three days prior to the start of construction	On-site inspections/ Report from Biologist	
BIO-3: If the burrowing owl pre-construction survey is positive and the qualified biologist determines that owls and their habitat can be protected in place on or adjacent to a Project Site, it is recommended that buffer zones, visual screens or other measures be implemented while Project activities are occurring to minimize disturbance. Based on site conditions avoidance measures should be implemented at the direction of the biological monitor to ensure impacts to burrowing owl are avoided.	Project Applicant/ Contractor, and Qualified Biologist	Pending results of BIO-2	Three days prior to the start of construction	On-site inspections/ Report from Biologist	
BIO-4: If pre-construction survey is positive and direct	Project Applicant/	Pending	Three days prior	On-site	

Mitigation Measures No. I Implementing Action impact to an owl burrow is determined, the qualified biologist shall draft and implement a relocation/exclusion plan following the recommendations within the CDFW	Responsible for Monitoring Contractor, and Qualified Biologist	Monitoring Frequency results of BIO-2 and BIO-3	Timing of Verification to the start of construction	Method of Verification inspections/ Report from Biologist	Verified Date /Initials
2012 Staff Report on Burrowing Owl Mitigation. Cultural Resources					
Cultural Resources					
CR-1: If cultural or archaeological resources are unearthed during construction of the Project, the contractor shall contact a qualified archaeologist to monitor further ground disturbing activities.	Project Applicant/ Contractor; Archaeological monitor	Throughout ground disturbing activities	During site inspections	On-site inspections	
 All findings shall be examined and the contents of soils and bedrock outcrops that may be exposed as a result of Project-related activities shall be inspected. 					
CR-2: In the event that paleontological resources are unearthed during construction, the contractor shall immediately cease construction activities and retain a qualified and trained paleontologist who shall recover and salvage all fossils according to modern paleontological techniques and oversee proper placement with appropriate repository and provide to the County and the City a report documenting all results of these activities.	Project Applicant/ Contractor; Paleontological Monitor	Throughout ground disturbing activities	During site inspection	On-site inspections	
Tribal Cultural Resources					
TCR-1: If cultural or archaeological resources are unearthed during construction of the Project, the contractor shall contact a qualified archaeologist to monitor further ground disturbing activities. All findings shall be examined and the contents of soils and bedrock outcrops that may be exposed as a result of Project-related activities shall be inspected.	Project Applicant/ Contractor; Archeological Monitor	Throughout ground disturbing activities	During site inspections	On-site inspections	