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j. *Inundation by seiche, tsunami, or mudflow? (17)*

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The City of Pasadena is not located near enough to any inland bodies of water or the Pacific Ocean to be inundated by either a seiche or tsunami. Seiche, tsunami, or mudflow have not been known to impact the site. Therefore, no adverse impact is anticipated.

13. LAND USE AND PLANNING. Would the project:

a. *Physically divide an existing community? (6, 9)*

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The Jones Reservoir is an existing municipal facility that is located in predominately residential area in east Pasadena. There are single-family residential neighborhoods located to the immediate north, east, and west of the facility. These residential neighborhoods are self-contained micro-environments that function independently of the reservoir facility. There are institutional uses to the south of the site, across East Sierra Madre Boulevard, including a church and elementary school. Further development on the existing reservoir site would not adversely impact the functionality of either the residential areas that bound the project area or the institutional uses located across East Sierra Madre Boulevard. Division of these communities would not result from construction activities on the reservoir facility since the site exists independent of these neighborhoods. Similarly, the proposed Eastside Well Collector pipelines and proposed well site improvements would not create any permanent physical barriers to pedestrian, bicycle, or vehicle access. Therefore, the proposed project would not divide an existing community and would have no related impacts.

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, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (6, 9, 26)*

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The Jones Reservoir facility is located on a parcel that is zoned "Open Space" (OS) and has a General Plan Land Use designation of "Open Space". Uses in this land use zone and designation accommodate uses such as municipal parks and recreation facilities. Hamilton Park sits atop the buried concrete reservoir. The reservoir facility is a public utility use while Hamilton Park is a public recreational facility. There are no specific plans or overlay zones that guide development in this particular area. Since the current facility is consistent with the zoning and general plan designation that governs development on the project site and installation of the disinfection facility further enhances the facility's ability to accomplish its designated operations, implementation of the project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project.

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- c. *Conflict with any applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP)? (6)*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Currently, there are no adopted Habitat Conservation or Natural Community Conservation Plans within the City of Pasadena. There are also no approved local, regional or state habitat conservation plans.

14. MINERAL RESOURCES. Would the project:

- a. *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (21)*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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No active mining operations exist in the City of Pasadena. There are two areas in Pasadena that may contain mineral resources. These two areas are Eaton Wash, which, was formerly mined for sand and gravel, and Devils Gate Reservoir, which was formerly mined for cement concrete aggregate. None of the project components are located near either the Eaton Wash or the Devils Gate Reservoir. Therefore, the proposed project would not result in the loss of a known mineral resource and would have no related impacts.

- 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? (9, 21)*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The City's 2004 General Plan Land Use Element does not identify any mineral recovery sites within the City. No active mining operations exist in the City of Pasadena and mining is not currently allowed within any of the City's designated land uses. Therefore, the proposed project would not impact a locally-important mineral resource recovery site.

15. 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? (11, 12)*

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Noise policy in the City of Pasadena is established in the City's Noise Ordinance (Chapter 9.36 of the City's Municipal Code) and in the Noise Element of the General Plan. The Noise Ordinance applies to noise on one property impacting a neighboring property. Typically, it sets limits on noise levels that can be experienced at the neighboring property. The Noise Ordinance is part of the City's Municipal Code and is enforceable throughout the City. The Noise Element of the General Plan presents limits on noise levels from transportation noise sources, vehicles on public roadways, railroads and aircraft. These limits are imposed on new developments. The new developments must incorporate measures to ensure that the limits are not exceeded. The City of Pasadena Noise Ordinance and Noise Element policies are detailed in the following paragraphs.

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Section 9.36.050 of the City's Noise Ordinance defines the limits applicable to General Noise Sources. Section 9.36.050 states that, "It is unlawful for any person to create, cause, make or continue to make or permit to be made or continued any noise our sound which exceeds the ambient noise level at the property line of any property by more than 5 decibels [dB]." Section 9.36.040(A) and 9.36.030(A) specify that ambient noise level is the measured 15 minute average (Leq) without the offending source. Section 9.36.040(B)(1) provides values that are to be added to the offending sound level depending on its characteristics (+5 dB for any steady audible tone or a repeated impulsive tone; and -5, -10, and -20 dB for noise occurring less than 15, 5, and 1 minute[s] in any daytime hour, respectively).

Section 9.36.060 defines interior noise standards applicable to multi-family residential property. The section states that it is unlawful to produce sound levels greater than 60 dBA during the daytime (7:00 a.m. to 10:00 p.m.) and 50 dBA during the nighttime (10:00 p.m. to 7:00 a.m.) inside any dwelling unit on the same property or twenty feet from the outside of the dwelling unit.

Noise standards for construction projects and equipment are specified in Section 9.36.070 and 9.36.080, and these sources are not subject to the General Noise Source Regulations. Section 9.36.080 states that it is unlawful for any person to operate construction equipment that generates noise levels in excess of 85 dBA at a distance of 100 feet. Section 9.36.070 restricts noise generating construction activities to between 7:00 a.m. to 7:00 p.m. Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturday in or within 500 feet of a residential area. Construction is prohibited on Sunday or holidays. Section 9.36.170(A) specifically exempts regulation of noise generated by construction, maintenance, and repair activities conducted by public agencies or their contractors.

The City of Pasadena General Plan Noise Element (2002) describes the major noise sources affecting the City and specifies objectives and policies to reduce noise from those sources. Figure 1 of the Noise Element presents noise levels that are considered by the City to be Clearly Acceptable, Normally Acceptable, and Conditionally acceptable for a variety of land uses.

The proposed project would generate noise from temporary construction activities and from operation of the facilities. Mestre Greve Associates (MGA) prepared a Noise Assessment (dated July 10, 2012) for the proposed project that analyzes these potential noise impacts. The project's Noise Assessment is included in Appendix D of this Initial Study and the subsections below summarize the results of this technical study.

Construction Noise – Pipeline Installation

The proposed project involves installing 23,587 linear feet of water lines primarily within City street right-of-way at an average rate of 200 linear feet of pipeline per day. The loudest activities associated with this construction would be the use of concrete saws to cut existing pavement and the use of an excavator or backhoe to remove the pavement and dig a section of trench to the required depth (typically three to four feet plus the diameter of the pipe). Excavated material will be loaded into a dump truck and removed from the site. The excavator or backhoe would also be used to place fill material over the completed pipe section prior to paving which will generate similar noise levels to the excavation.

Concrete sawing could generate noise levels that approach the maximum allowable by the City's Noise Ordinance of 85 dBA at a distance of 100 feet. This equates to a noise level of 91 dBA at a distance of 50 feet. However, this activity would only occur for a relatively small amount of time for one day adjacent to any use. The following day the saw would be located approximately 200 feet further down the road. Note that sound from equipment drops off at a rate of 6 dB per doubling of distance. Therefore, if the sawing occurs 20 feet from a land use, the next day the sawing would be about 20 dB lower at the same receptor.

The backhoe or excavator used for excavation and backfill could generate noise levels near the allowable maximum for very short periods. While the excavator or backhoe is operating it would be expected to

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generate an average (Leq) noise level in the 77 to 83 dBA range and typically around 80 dBA at a distance of 50 feet.

After excavation is completed pipe would be installed in the excavated trench and connected through welds. All pipes are loaded into the trench using an excavator or backhoe. However, the excavator or backhoe would be expected to generate noise levels much less than for excavation or backfill because less power would be required to handle the pipe than the excavated material or backfill. Average noise levels would be expected to be 5 to 10 dB lower during this activity than during excavation or backfill.

Repaving would be performed using hand tools to place the asphalt and a roller to compress the asphalt. The noise generated by the roller would be less than a typical vehicle pass.

Table 15-1 presents the worst-case average (Leq) noise levels at the uses along the roadways where the pipeline would be installed. These noise levels are based on the estimate of the loudest activities, concrete sawing, excavating, and filling, generating a Leq noise level of 80 dBA at a distance of 50 feet during the time that they are active. Further, the noise levels represent conditions when the work is occurring directly in front of the receptor. As discussed above, the pipeline installation is anticipated to occur at an average rate of 200 feet per day. Therefore, the noise levels shown in Table 15-1 would not be experienced for more than a few hours over no more than two days. Further, a considerable portion of the construction, installation, connection and testing of the pipes, would generate noise levels substantially lower than the noise levels presented in Table 15-1. Therefore, the noise levels presented in Table 15-1 would only be experienced for a portion of one to two days. As the activity moves away from one receptor, noise levels drop off rapidly.

For each road segment where pipeline construction would occur, Table 15-1 presents the land use directly adjacent to the road on both sides along with the expected worst-case average noise level during the peak activity periods both outdoors, at the nearest outdoor area, and indoors. Note that the indoor noise level assumes windows are closed and the building provides 20 dB of outdoor-to-indoor noise reduction.

Table 15-1 Worst-Case Average (Leq) Noise Levels During Pipeline Installation						
Roadway Segment	North or West of Segment			South or East of Segment		
	Use	Outdoor	Indoor	Use	Outdoor	Indoor
Walnut St						
Parkwood Av to Greenwood Av	Cmrcl	80 dBA	60 dBA	Cmrcl	85 dBA	65 dBA
Greenwood Av to Berkeley Av	Cmrcl	80 dBA	51 dBA	Cmrcl	82 dBA	62 dBA
Berkeley Av to San Marino Av	Cmrcl	77 dBA	57 dBA	Cmrcl	82 dBA	62 dBA
San Marino Av to Oak Av	Cmrcl	77 dBA	57 dBA	Cmrcl	82 dBA	62 dBA
Oak Av to Craig Av	Cmrcl	77 dBA	57 dBA	Cmrcl	82 dBA	62 dBA
Craig Av						
Walnut St to Foothill Bl	Cmrcl	89 dBA	60 dBA	Cmrcl	83 dBA	63 dBA
Foothill Bl to 100 ft N of Foothill Bl	Cmrcl	85 dBA	65 dBA	Cmrcl	84 dBA	64 dBA
100 ft N of Foothill Bl to White St	Cmrcl	81 dBA	56 dBA	Cmrcl	91 dBA	59 dBA
White St to 180 ft S of Corson St	Res	86 dBA	59 dBA	Res	85 dBA	65 dBA
180 ft S of Corson St to Corson St	Res	85 dBA	63 dBA	Res	78 dBA	58 dBA
Corson St to Maple St	Fwy	--		Fwy	--	--
Maple St to 100 ft N of Dolores St	Res	87 dBA	62 dBA	Res	78 dBA	58 dBA
100 ft N of Dolores St to Villa St	Res	86 dBA	61 dBA	Res	84 dBA	64 dBA

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Table 15-1 Worst-Case Average (Leq) Noise Levels During Pipeline Installation						
Roadway Segment	North or West of Segment			South or East of Segment		
	Use	Outdoor	Indoor	Use	Outdoor	Indoor
Villa St to Monte Vista St	Res	83 dBA	61 dBA	Res	86 dBA	66 dBA
Monte Vista St to Las Lunas St	Res	83 dBA	61 dBA	Res	86 dBA	66 dBA
Las Lunas St to Lambert Dr	Res	83 dBA	61 dBA	Res	86 dBA	66 dBA
Lambert Dr to Orange Grove Bl	Res	83 dBA	61 dBA	Res	86 dBA	66 dBA
Orange Grove Bl to Paloma St	Res	83 dBA	61 dBA	Res	86 dBA	66 dBA
Paloma St						
600 ft E of Palo Verde to Craig Av	Res	88 dBA	61 dBA	Res	78 dBA	58 dBA
Monte Vista St						
Craig Av to Oak Av	Res	88 dBA	59 dBA	Res	82 dBA	62 dBA
Oak Av to Palo Verde Av	Res	78 dBA	55 dBA	Res	88 dBA	68 dBA
Palo Verde Av						
Monte Vista St to Baldwin Aly	Res	86 dBA	63 dBA	Res	83 dBA	63 dBA
White St						
Craig Av to Lola Av	Res	81 dBA	59 dBA	Res	87 dBA	67 dBA
Lola Av to Martelo Av	Res	81 dBA	57 dBA	Res	87 dBA	67 dBA
Martelo Av to Vista Av	Res	81 dBA	57 dBA	Res	87 dBA	67 dBA
Vista Av						
White St (E) to White St (W)	Res	84 dBA	59 dBA	Cmrcl	79 dBA	59 dBA
White St						
Vista Av to Carmelo Av	Res	79 dBA	57 dBA	Cmrcl	86 dBA	66 dBA
Carmelo Av to Altadena Dr	Res	79 dBA	58 dBA	Res	90 dBA	70 dBA
Sierra Madre Bl						
Altadena Dr to Del Rey	Res	76 dBA	55 dBA	Res	79 dBA	59 dBA
Del Rey to Bella Vista	Res	76 dBA	54 dBA	Res	79 dBA	59 dBA
Bella Vista to La Tierra	Res	76 dBA	54 dBA	Res	79 dBA	59 dBA
La Tierra						
Sierra Madre Bl to San Gabriel Bl	Parking Lot	84 dBA	--	Cmrcl	81 dBA	61 dBA
San Gabriel Bl						
La Tierra to Mataro St	Cmrcl	91 dBA	65 dBA	Res	73 dBA	53 dBA
Mataro St						
San Gabriel Bl to Daisy Av	Res	88 dBA	61 dBA	Res	84 dBA	64 dBA
Daisy Av to east terminus	Res	88 dBA	61 dBA	Res	84 dBA	64 dBA
La Tierra						
Mataro St to Sunnyslope Av	Fwy	--	--	Res	82 dBA	62 dBA
Sunnyslope Av						
La Tierra St to Foothill Bl	Res	75 dBA	53 dBA	Fwy	--	--
Foothill Bl						

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Table 15-1 Worst-Case Average (Leq) Noise Levels During Pipeline Installation						
Roadway Segment	North or West of Segment			South or East of Segment		
	Use	Outdoor	Indoor	Use	Outdoor	Indoor
Sunnyslope Av to Titley Av	Park Lot/Fwy.	--	--	Cmrcl	80 dBA	60 dBA
Titley Av to Santa Paula Av	Cmrcl	84 dBA	60 dBA	Cmrcl	81 dBA	61 dBA
Santa Paula Av to Sierra Madre Villa Bl	Cmrcl	81 dBA	61 dBA	Cmrcl	79 dBA	59 dBA
Sierra Madre Villa Bl to Halstead St	Cmrcl	83 dBA	62 dBA	Res	68 dBA	48 dBA
Halstead St						
Foothill Bl to 175 ft S of Foothill	Cmrcl	84 dBA	61 dBA	Cmrcl	84 dBA	64 dBA
Titley Ave.						
Foothill Bl to south terminus	Cmrcl	84 dBA	64 dBA	Cmrcl	84 dBA	64 dBA
Sierra Madre Villa Ave						
Foothill Bl to Mataro St	Cmrcl	84 dBA	55 dBA	Cmrcl	81 dBA	61 dBA
Mataro St to La Tierra	Res	83 dBA	59 dBA	Cmrcl	81 dBA	61 dBA
La Tierra St to Estado	Res	83 dBA	59 dBA	Cmrcl	81 dBA	61 dBA
Estado St to Alameda St	Res	83 dBA	59 dBA	Cmrcl	81 dBA	61 dBA
Alameda St to Del Vina St	Res	83 dBA	59 dBA	Cmrcl	81 dBA	61 dBA
Del Vina St to Las Lunas St	Res	83 dBA	59 dBA	Cmrcl	81 dBA	61 dBA
Las Lunas St to Hermanos St	Res	86 dBA	64 dBA	Cmrcl	79 dBA	59 dBA
Hermanos St to Rosemead Bl	Res	82 dBA	60 dBA	Cmrcl	81 dBA	61 dBA
Rosemead Bl to Rida St	Library	81 dBA	53 dBA	Park	79 dBA	59 dBA
Rida St to Paloma St	Res	80 dBA	59 dBA	Park	78 dBA	58 dBA
Paloma St to Primavera St	Res	76 dBA	55 dBA	Res	87 dBA	67 dBA
Primavera St to Sierra Madre Bl	Res	76 dBA	55 dBA	Res	87 dBA	67 dBA
Sierra Madre Bl						
Sierra Madre Villa Av to Riviera Dr	Golf Course	68 dBA	--	Res	78 dBA	57 dBA
East of Riviera Dr	Res	71 dBA	51 dBA	Res	78 dBA	57 dBA
East of Riviera Dr	Res	71 dBA	51 dBA	School	69 dBA	48 dBA
East of Riviera Dr	Park	67 dBA	--	Church	69 dBA	49 dBA
Jones Reservoir Service Road						
North of Sierra Madre Bl	Park	74 dBA	--	Res	86 dBA	61 dBA

Table 15-1 shows that the peak activities would generate considerable outdoor noise levels at the nearest uses along most of the road segments where construction is proposed. The highest outdoor noise levels are projected to be 91 dBA. The average outdoor noise levels are projected to be 82 dBA. The highest indoor noise level is projected to be 66 dBA and the average indoor noise level is projected to be 59 dBA. Table 15-1 presents average (Leq) noise levels during peak activity periods and it should be noted that instantaneous peak noise levels (Lmax) from the construction could be as much as 11 dBA louder than the average noise levels.

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Noise levels less than 60 dBA would not be expected to considerably interfere with communication. Between 60 and 66 dBA communication at a distance of more than approximately 10 feet would require a raised voice but much less than maximum vocal effort. For most areas, the construction would not substantially interfere with interior communication but in areas where construction is occurring within 30 feet of a building raised voices would be required during these high activity periods.

Construction would occur within 35 feet of 28 homes along seven road segments: (1) west side of Craig Avenue from 180 feet south of Corson Street to Corson Street (3 homes); (2) east side of Craig Avenue from Villa Street to Paloma Street (10 homes); (3) south side of White Street between Craig Avenue and Lola Avenue (4 homes); (4) south side of White Street between Martello Avenue and Vista Avenue (7 homes); (5) north side of White Street between Carmelo Avenue and Altadena Drive (2 homes); and (6) west side of Sierra Madre Villa Avenue between Las Lunas Street and Hermanos Street (2 homes). Construction would occur within 35 feet of eight businesses along four road segments: (1) east side of Walnut Street between Parkwood Avenue and Greenwood Avenue (1 business); (2) east side of Craig Avenue from Walnut Street to 100 feet north of Foothill Boulevard (3 businesses); (3) west side of San Gabriel Boulevard between La Tierra and Mataro Street (1 business); (4) south side of Hallstead Street between Foothill Boulevard and 175 feet south of Foothill Boulevard (1 business); and (5) east and west side of Titley Avenue from Foothill Boulevard to the southern terminus (2 businesses).

Centralized Disinfection Facility Construction

Construction of the proposed Centralized Disinfection Facility includes excavation of a pad/containment area that would be located approximately 140 feet from the nearest residence to the east. At this distance, the worst-case average (Leq) noise levels during the excavation would be expected to be 71 dBA outdoors and 51 dBA indoors (with windows closed). During most of construction of the facility, construction levels would be much less than this, as heavy equipment would not be needed. The exception is the installation of the storage tanks, which would require the use of a crane. The crane would be expected to generate a maximum noise level at the nearest home of approximately 74 dBA outdoors, and 54 dBA indoors. However, this noise level would not occur for more than a few hours over a few days.

Construction at Well Sites

Table 15-2 presents the worst-case construction noise levels that would occur at the nearest residence to each well site. This is the worst-case average noise level that would occur during the use of heavy equipment that may be required for pad construction and would be required for installation of the surge tanks. Therefore, these noise levels would only be experienced for, at most, a few hours each day over a couple of days. During the remainder of construction at the well sites, heavy equipment would not be required and construction noise levels would not be considerable. Noise levels are not listed for Jourdan Well as it is located in the middle of a commercial district and there are no nearby residences that would be impacted by construction noise at the well site.

Table 15-2 Worst-Case Average (Leq) Noise Levels at Residences During Well Construction		
Well	Outdoor	Indoor
Twombly	68 dBA	46 dBA
Chapman	73 dBA	58 dBA
Jordan	--	--
Wadsworth	73 dBA	52 dBA
Woodbury	67 dBA	46 dBA
Monte Vista	90 dBA	63 dBA

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Table 15-2 Worst-Case Average (Leq) Noise Levels at Residences During Well Construction		
Well	Outdoor	Indoor
Craig	84 dBA	58 dBA

Table 15-2 shows that the highest noise levels are projected to be experienced at residences adjacent to the Monte Vista and Craig well sites. This is because both of these sites are located in the middle of residential areas. Higher outdoor noise levels would temporarily be experienced at the adjacent residences during construction periods, however, indoor noise levels, while considerable, would not considerably interfere with speech communication. All other outdoor residential areas are located more than 100 feet from the well sites. Moderate outdoor noise levels will occur at these homes, but indoor noise levels at these homes are not considered substantial.

Conclusion – Construction Noise

The information presented above shows that outdoor noise levels during pipeline construction would be substantial in many areas where the construction occurs close to outdoor areas. This is also true of the construction at the Monte Vista and Craig Well sites. However, indoor noise levels would not considerably interfere with communication in the homes. Further, these high noise levels are temporary as they will only be expected to occur for a few hours each day for a few days at most. Construction of the Centralized Disinfectant Facility would result in moderately high outdoor noise levels during operation of heavy equipment, but indoor noise levels are not projected to interfere with communication.

As discussed above, Section 9.36.170(A) specifically exempts construction activities conducted by public agencies or their contractors from the City's Noise Ordinance standards, as deemed necessary by the City to serve the best interests of the public and to protect the public health, safety and welfare. However, Mitigation Measures NOI-1 and NOI-2 require construction of the project to be limited to the hours allowed by Section 9.36.070 of the Municipal Code (7:00 a.m. and 7:00 p.m. Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturday and at no time on Sundays or Holidays); and require that all equipment used comply with Section 9.36.080 of the Municipal Code which limits the noise generated by the equipment to a level of 85 dBA at a distance of 100 feet. With these restrictions, as required by Mitigation Measures NOI-1 and NOI-2, project construction would not result in a significant noise impact.

Mitigation Measure NOI-1: All noise generating construction activities shall be restricted to the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays and at no time on Sundays and holidays.

Mitigation Measure NOI-2: All equipment used by the project shall comply with City of Pasadena Municipal Code Section 9.36.080 and shall not generate a noise level in excess of 85 dBA at a distance of 100 feet.

Operational (Long-Term) Noise

The Eastside Well Collector component of the project would not result in significant operational long-term noise impacts. The project does not result in any new sources of noise at the wells. There would be no considerable increase in pumping operations from the wells as the amount of water pumped from the wells is limited by groundwater pumping rights.

There is no equipment included in the Centralized Disinfection Facility that would generate considerable levels of noise. Small pumps would be used to inject the disinfection agents into the water and for the water

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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sampling. However, these pumps do not generate appreciable noise levels. At the nearest residence the noise generated by these pumps would be less than noise generated by traffic on Sierra Madre Boulevard. Periodic delivery of disinfectant agents to the disinfection facility would generate infrequent short-term noise events. Delivery of disinfectant agents to the Centralized Disinfection Facility would occur a maximum of four times in a month during daytime hours. The truck would generate noise as it approached and departed the site. However, the noise generated by the delivery truck would be no louder at the nearest residence than a truck passing the residence on Sierra Madre Boulevard. A pump would operate to transfer the disinfection agents from the truck to the tanks. However, this pump is not expected to generate considerable levels of noise compared to the noise generated by traffic on Sierra Madre Boulevard.

None of the components associated with operation of the project are expected to generate noise levels greater than existing ambient levels. Therefore, the operation of the project would not generate noise levels more than 5 dBA above ambient levels in violation of the City of Pasadena Noise Ordinance limits on General Noise Sources. Therefore, the operation of the project would not result in a significant long-term noise impact.

- b. *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (11, 12)*

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There are no vibration standards established by the City of Pasadena. Regardless, the proposed project would neither generate, nor expose people to excessive groundborne vibrations or groundborne noise levels. Operation of the proposed water facilities would not generate perceptible vibrations. Construction of the project may temporarily generate a limited amount of vibration. However, the project does not include pile driving or large scale demolition or grading, which are the construction activities typically associated with vibration impacts. Given the type of construction and the proposed hours of construction (daytime only), vibration impacts are considered less than significant.

- c. *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (11, 12)*

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See the discussion of "Operational (Long-Term) Noise" above in Section 15(a). Operation of the project would cause minor and less than significant noise impacts from operations at the proposed Centralized Disinfection facility. None of the components associated with operation of the project are expected to generate noise levels greater than existing ambient levels.

- d. *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (12)*

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See Section 15(a) above. Construction of the proposed project would cause a temporary increase in ambient noise levels. Section 15(a) describes that outdoor noise levels during pipeline construction would be substantial in many areas where the construction occurs close to outdoor areas. This is also true of the construction at the Monte Vista and Craig Well sites. However, indoor noise levels would not considerably interfere with communication in the homes. Further, these high noise levels are temporary and are only expected to occur for a few hours each day for a few days at most. Construction of the Centralized

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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Disinfectant Facility would result in moderately high outdoor noise levels during operation of heavy equipment, but indoor noise levels are not projected to interfere with communication. Mitigation Measures NOI-1 and NOI-2 are included to reduce construction noise impacts to a less than significant level.

- 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, would the project expose people residing or working in the project area to excessive noise levels?*

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There are no airports or airport land-use plans in the City of Pasadena. The closest airport is the Bob Hope Airport (formerly the Burbank-Glendale-Pasadena Airport), which is located more than 10 miles from Pasadena in the City of Burbank. Therefore, the proposed project would not expose people to excessive airport related noise and would have no associated impacts.

- f. *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

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There are no private-use airports or airstrips within or near the City of Pasadena.

16. **POPULATION AND HOUSING.** Would 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)? (7)*

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The proposed Eastside Well Collector and Centralized Disinfection Facility Project would not induce growth in the area because the purpose of the project is to provide operational flexibility and to treat existing supplies of water. The installation of a new disinfection facility, new water pipelines, and improvements at the seven eastside wells would not induce growth as these improvements are meant to improve their operations within the pumping limitations previously established by existing groundwater pumping rights. With the installation of the proposed treatment system, pipeline installations and well improvements, there will be no expansion of water supply that could induce growth; rather, there will just be improvements to existing water supply and treatment operations.

- b. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

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The Jones Reservoir is an existing facility in a developed area of the City. Installation of the water disinfection equipment will only slightly expand the footprint of the facility with there being no expansion of the holding capacity of the reservoir itself. No structures outside the confines of the project site are proposed for demolition. Therefore, undertaking of project activities would not displace substantial numbers of existing housing that would trigger the replacement of these units elsewhere in the City.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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c. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Jones Reservoir facility is currently located in a residential area of the City, but there are no residential structures that will be affected by the construction activities. There are no structures that are proposed for demolition. Since no structures will be demolished at the reservoir site and no residential structures are affected by the project activities, no people would be displaced thus this project would not require the construction of replacement housing elsewhere.

17. PUBLIC SERVICES. 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:

a. *Fire Protection?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The proposed Eastside Well Collector and Centralized Disinfection Facility Project would not alter or expand the operations and, therefore, would not require additional fire protection to service the site.

The proposed project would require the use of chemicals that require the review of the project by the Pasadena Fire Department. Specifically, the use of ammonium hydroxide and sodium hypochlorite are regulated under the California Fire Code (Chapters 27, 31, and 40) and ammonium hydroxide is regulated under CCR Title 19, Division 2, Chapter 4.5, California Accidental Release Program.

As outlined in response 11 (a and b) above, PWP would be required to operate the proposed facility in accordance with the following standard programs that govern the use of hazardous materials:

- Hazardous Materials Business Plan
- Injury and Illness Prevention Plan (IIPP)
- Emergency Action Plan
- Hazard Communication Plan.
- California Accidental Release Prevention (CalARP) program.

The CalARP Risk Management Plan is required to be submitted to the City of Pasadena Fire Department for review and compliance, and hazardous materials may not be stored or utilized onsite until the Department approves the CalARP Risk Management Plan.

Upon review of the project it has been determined that the project would not require an increase in staffing. There would be no alteration to acceptable service ratios or response times or other performance objectives than are currently experienced on the project site as it exists currently. Therefore there would be no adverse physical or service impacts associated with the implementation of this project in regards to fire protection.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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b. *Libraries?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Installation of the water disinfection treatment facilities on the existing site of the Jones Reservoir facility, along with the installation of new pipelines and eastside water well improvements, would not alter or expand the operations of the facilities and therefore would not require additional libraries to be provided on the project site or in the vicinity. Therefore there would be no impacts associated with the implementation of this project in regards to libraries.

c. *Parks?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Installation of the proposed water disinfection facilities on the Jones Reservoir/Hamilton Park site would not impact park facilities. The Jones Reservoir is a buried facility that is located beneath Hamilton Park; however, the proposed disinfection facilities and associated pipeline would be located in a secure portion of the site that is not open to the public and is not used for park or recreation purposes. Thus, the installation of the proposed equipment would not affect or change any of the operations at the park either during construction or during their operations.

Similarly, the proposed project would not increase the demand for parks. The proposed project is an improvement of the City's water system and does not involve development of residential uses that would increase the population of the City. Furthermore, the project does not involve expansion of available water supplies or other improvements that would promote growth. Rather, the proposed project is intended to improve the City's water reliability and disinfection process to serve the City's existing and projected water demand. Therefore, the proposed Eastside Well Collector and Centralized Disinfection Facility Project would have no adverse impact on parks.

d. *Police Protection?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Jones Reservoir is an existing facility, and as such is already being served by the local police department. The proposed project is the enhancement of the existing facility with new water disinfection equipment. Since the proposal does not include the expansion or major alteration of site activities the proposal would not trigger adverse impacts that would require the hiring of additional law enforcement officers. The expansion of water delivery and treatment activities would have no impact on law enforcement in the project vicinity.

e. *Schools?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The installation of the water disinfection facilities at the Jones reservoir, installation of new pipelines, and improvements to existing wells, will have no impact on the area schools. The Jones Reservoir facility is an existing municipal facility. The installation of on-site water treatment equipment would not result in the need for additional school facilities.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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f. *Other public facilities?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The proposed water infrastructure project would have no other impact on public facilities or services.

18. RECREATION.

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The installation of new water disinfection equipment at the Jones Reservoir site would not increase the use of the existing neighborhood or regional parks or other recreational facilities. The proposed project is an improvement of the City's water system and does not involve the development of residential uses that would increase the demand for recreation facilities by increasing the population of the City. Furthermore, the project does not involve expansion of available water supplies or other improvements that would promote growth. Rather, the proposed project is intended to improve the City's water reliability and disinfection process to serve the City's existing and projected water demand. Therefore, the proposed project would not increase the use of existing parks or other recreational facilities and would cause no related physical deterioration of such facilities.

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?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The Jones Reservoir is a buried facility that is situated beneath Hamilton Park. The proposed project does not include recreational facilities and would not require construction or expansion of Hamilton Park recreational facilities that might have an adverse physical effect on the environment. The proposed project is the installation of a water disinfection facility and appurtenant equipment as well as the replacement of existing pipelines and improvements to existing water wells. There will be no need for additional recreation facilities and the existing recreational facilities at Hamilton park will be unaffected by the project.

19. TRANSPORTATION/TRAFFIC. Would 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 freeways, pedestrian and bicycle paths, and mass transit? (10, 14)*

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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The only vehicle trips that would be generated by operation of the proposed project would be for occasional maintenance of the proposed disinfection facility and improved well sites and deliveries to the proposed disinfection facility. Currently, PWP operations staff visits the sites to maintain and monitor existing water infrastructure. The only expected additional trips that would result from the project would be for delivery of

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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materials to refill the proposed ammonium hydroxide and sodium hypochlorite tanks at the Jones Reservoir site. In the peak flow rate scenario, the sodium hypochlorite tank would require refilling about every 13 days and the ammonium hydroxide tank would require refilling about every 25 days. This nominal amount of vehicle trips would have no impact on the traffic load and capacity of the street system. Furthermore, the majority of trips associated with the maintenance and operation of the proposed water facilities are expected to occur during off-peak traffic hours. Therefore, operation of the proposed project would have no impacts related to the performance of the circulation system.

Construction of the proposed project, however, has the potential to temporarily cause significant impacts on the performance of the circulation system. The Eastside Well Collector project involves installing 23,587 linear feet (4.47 miles) of pipeline, nearly all of which would be installed within existing City street right-of-way. As shown in Table 1, 17 City streets would be affected by this proposed construction.

Construction methods would use open-cut trenching techniques. Construction is expected to progress at the rate of 100 to 300 feet per day, depending on the conditions, with an average estimated rate of 200 feet per day. The work zone (maximum construction area at any given time) would be between 300 to 400 feet long, which includes the temporary storage of materials used at the active work zone. Work areas would extend approximately ten feet on either side of the pipeline alignment, for an average construction zone width of 25-30 feet. Localized construction-period impacts could include the temporary loss of on-street parking, lane and sidewalk closures, left-turn restrictions and driveway access restrictions. Upon completing each section, the backfill of the trenches would allow motorized and non-motorized traffic to operate in pre-construction condition.

Table 1 identifies the facilities in each involved roadway segment that would be affected by the proposed construction (e.g., travel lanes, sidewalks, bike lanes, etc). Construction is anticipated to result in temporary lane closures in certain segments of 10 streets – Walnut Street, Craig Avenue, Altadena Street, La Tierra, San Gabriel Boulevard, Sunnyslope Avenue, Foothill Boulevard, Halstead Street, Sierra Madre Villa Avenue, and Sierra Madre Boulevard. In addition, the proposed construction is anticipated to temporarily impact the sidewalk along certain segments of Paloma Street and White Street and the Class III bike route along certain segments of Sierra Madre Boulevard. To minimize the impacts of the proposed construction on the circulation system, Mitigation Measure TRAF-1 requires that a Construction Staging and Traffic Management Plan be prepared. In addition, Mitigation Measures TRAF-2 through TRAF-7 require alternative routes for impacted pedestrians and cyclists; advanced noticing to surrounding homes and businesses; coordination with transit agencies and emergency providers; and restoration of affected streets to pre-construction conditions. With the incorporation of these measures, the temporary traffic impacts that would occur during construction are less than significant.

Mitigation Measure TRAF-1: A Construction Staging and Traffic Management Plan shall be prepared for each construction site and submitted to the Pasadena Department of Public Works and Pasadena Department of Transportation for review and approval prior to the start of construction work. This plan shall include such elements as the location of lane closures, restrictions on hours or times of the year during which lane closures or other work would be allowed, the location of access to each off-street construction site, the designation of haul routes for construction-related trucks, requirements for protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, warning signs, temporary turn restrictions), identification of local traffic detours (where necessary and where reasonable alternate routes exist), measures to address restrictions on access to abutting properties, provisions to maintain emergency access through construction work areas, and designation of staging and parking areas for workers and equipment.

Mitigation Measure TRAF-2: During project construction, alternative pedestrian and bicycle access routes shall be provided where existing sidewalks, crosswalks, or bike lanes would be affected. All changes shall be reviewed and approved by the Department of Transportation.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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Mitigation Measure TRAF-3: Prior to the commencement of construction activities, advance notice shall be provided to any affected residents, businesses, and property owners in the vicinity of each construction site, and shall identify alternative means of access where existing property access would be reduced.

Mitigation Measure TRAF-4: The Pasadena Water & Power Department shall coordinate with emergency service providers (police, fire, ambulance, and paramedic services) to provide advance notice of any planned lane closures, construction hours, or changes to local access and to identify alternative routes where appropriate.

Mitigation Measure TRAF-5: The Pasadena Water & Power Department shall coordinate with public transit providers (Metro, Pasadena ARTS, Foothill Transit, and Montebello Bus Service) to provide advance notice of lane closures, construction hours and, where necessary, identify sites for temporary bus stops within a reasonable walking distance of any displaced bus stops.

Mitigation Measure TRAF-6: Upon completion of construction and testing at the Eastside Wells and collector pipes, streets, sidewalks, driveways and public transit stops shall be completely restored to pre-construction conditions.

Mitigation Measure TRAF-7: The project shall comply with all Building, Fire and Safety Codes and plans shall be subject to review and approval by the Public Works and the Transportation Departments, and the Building and Planning Divisions, and the Fire Department.

- 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? (10)*

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The Eastside Well Collector and Centralized Disinfection Facility Project would not individually or cumulatively exceed level of service standards established by the County Congestion Management agency for designated roads or highways. As discussed in Section 19(a) the proposed disinfection facility would generate only a nominal amount of vehicle trips. The Los Angeles County Congestion Management Program (CMP) does not require traffic impact analyses for projects that contribute less than 50 trips to CMP arterial monitoring intersections during either the AM or PM weekday peak hours. Therefore, the proposed project would have no impact related to the CMP.

- 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?*

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There are no airports within the project vicinity and the proposed water treatment facility would have no impact on air traffic patterns.

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d. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (10, 14)*

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The project has the potential to temporarily increase hazards due to a design feature during installation of the proposed Eastside Well Collector pipelines. As described in Section 19(a) above and detailed in Table 1, the proposed project involves installing pipelines beneath 17 City streets, which would include placing construction vehicles/equipment and workers adjacent to travel lanes, temporary lane closures, temporary access drives/detours, temporary lane reconfiguration/shifts, and other street modifications during construction. To ensure the temporary modifications of the circulation system would not cause significant traffic hazards, Mitigation Measure TRAF-1 requires that a Construction Staging and Traffic Management Plan be prepared that identifies the necessary traffic controls (such as barricades, cones, flagmen, lights, warning beacons, warning signs, and temporary turn restrictions). Once construction is completed, all involved roadways would be restored to pre-construction conditions as required by Mitigation Measure TRAF-6. With the incorporation of these measures, the proposed project would not cause significant impacts related to an increase in hazards due to a design feature or incompatible use.

e. *Result in inadequate emergency access?*

☐☒☐☐

In the long term, the proposed project would not place any barriers or obstructions on any roadways and would not affect emergency access. During construction, however, installation of the proposed Eastside Well Collector pipeline would affect 17 City streets, which could impact emergency access. As described above in Sections 19(a) and 19(d) and detailed in Table 1, the proposed project involves installing pipelines beneath 17 City streets, which would include placing construction vehicles/equipment and workers adjacent to travel lanes, temporary lane closures, temporary access drives/detours, temporary lane reconfiguration/shifts, and other street modifications during construction. The work zone (maximum construction area at any given time) would be between 300 to 400 feet long, which includes the temporary storage of materials used at the active work zone. Localized construction-period impacts could include the temporary loss of on-street parking, lane and sidewalk closures, left-turn restrictions and driveway access restrictions. Upon completing each section, the backfill of the trenches would allow motorized and non-motorized traffic to operate in pre-construction condition.

Since construction of the pipeline would occur in stages, approximately 300 to 400 feet of the alignment would be affected at any one time. A potentially adverse safety impact to motorists and non-motorists associated with open trench construction along each street segment could occur, such as accidentally entering the trench itself or having to maneuver through temporarily-narrowed travel lanes. To ensure adequate emergency access is provided during construction, Mitigation Measure TRAF-1 requires the project's Construction Staging and Traffic Management Plan to maintain emergency access to the satisfaction of the City's Department of Public Works and Department of Transportation. In addition, Mitigation Measure TRAF-4 requires PWP to coordinate with emergency service providers and Mitigation Measure TRAF-7 requires the project to comply with Building, Fire, and Safety Codes. With the incorporation of these measures, the proposed project would not result in significant impacts related to safety or inadequate emergency access.

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f. Result in inadequate parking capacity? (10, 14)

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The Jones Reservoir currently has parking available for service personnel on the access road and in paved areas that border the reservoir on the south, east, and west. Parking is also available to the north in the parking lot for Hamilton Park that takes access from Cartwright Street. The portion of the site where the new water disinfection facilities would be constructed would not result in any loss of designated parking spaces or areas used for access. The area is not striped and is not improved as a dedicated parking area. Additionally, installation of the new water disinfection facilities would not increase the number of employees needed to operate the facility so there would not be a need for additional parking spaces. Therefore, the proposed Centralized Disinfection Facility would not result in inadequate parking capacity.

During construction of the Eastside Well Collector pipeline, street parking would temporarily be affected. As detailed in Table 1, the proposed pipeline installation would temporarily disrupt street parking on 13 streets: Walnut Street, Craig Avenue, Paloma Street, Monte Vista Street, Palo Verde Avenue, White Street, Vista Avenue, Altadena Drive, Sierra Madre Boulevard, San Gabriel Boulevard, Mataro Street, La Tierra, and Sierra Madre Villa Avenue. However, the length of street to be disrupted at one period of time would be limited. The maximum work zone would be between 300 to 400 feet long, which includes the temporary storage of materials used at the active work zone. If all 300-400 feet of roadway being disrupted was available for street parking, the project could result in the temporary loss of 15-20 parallel parking spaces or 30-40 spaces if parking on both sides of the street were affected. Since construction is expected to progress at 200 feet per day, a particular on-street parking space would only be affected for a period of several days. Given the limited number of parking spaces that would be disrupted at any one time, the short-term nature of the parking disruption, and the fact that all affected parking would be public street parking, the proposed project would not result in a significant parking impact.

g. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (10, 14)

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Installation of water disinfection facilities at the existing Jones Reservoir facility as well as the installation of pipelines and new well equipment would not conflict with adopted policies, plans or programs supporting alternative transportation. The project is intended to improve water supply and would have no impact on transportation.

20. UTILITIES AND SERVICE SYSTEMS. Would the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

☐☐☒☐

The proposed project would not generate any wastewater that would be discharged into the sewer system other than a minor waste stream from the analyzers for the chloramination system. By agreement PWP is required to coordinate with the Sanitation Districts of Los Angeles County (Sanitation District) to ensure the project's waste stream could be accommodated by the District's wastewater treatment facilities. However, no discharge permit from the Sanitation Districts is anticipated based on PWP's recent coordination with them on a similar disinfection project where the waste stream generated by the analyzers was so minimal

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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that the connection to the sewer was exempt from a Sanitation District permit. Therefore, the proposed project would have no significant impacts related to wastewater treatment requirements.

- 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?*

☐ ☐ ☐ ☒

The project includes construction of equipment for a drinking water disinfection facility at an existing reservoir site as well as the installation of new water pipelines and improvements to seven water well locations. The project would not require additional water treatment or expansion of existing water treatment facilities.

- 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?*

☐ ☐ ☐ ☒

The project would not require the construction of new storm water drainage facilities or the expansion of existing facilities. The project is located in a developed urban area where storm drainage is provided by existing streets, storm drains, flood control channels, and catch basins. As discussed in Section 12, the project would involve only minor changes in the site's drainage patterns and does not involve altering any drainage courses or flood control facilities.

- d. *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

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The amount of water that would be withdrawn from the Raymond Basin is coordinated through the Raymond Basin Watermaster. No new water supplies or expansion of existing water supplies would be required to serve the project. The proposed project would maintain the pumping of the City's annual groundwater allotment. No impact would occur. See also subsection 12(b).

- 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?*

☐ ☐ ☐ ☒

The proposed project consists of a water disinfection facility, the installation of new water pipelines, and proposed improvements to existing water wells. The project would not increase the demand for wastewater service. Therefore, the project would not result in insufficient wastewater service, and would cause no related impacts.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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- f. *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

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The project is located in a developed urban area and within the City's refuse collection area. The project would not result in the need for a new or in substantial alteration to the existing system of solid waste collection and disposal. Therefore, the project would cause no impacts under this topic.

- g. *Comply with federal, state, and local statutes and regulations related to solid waste?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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In 1992, the City adopted the "Source Reduction and Recycling Element" to comply with the California Integrated Waste Management Act. This Act requires that jurisdictions maintain a 50% or better diversion rate for solid waste. The City implements this requirement through Section 8.61 of the Pasadena Municipal Code, which establishes the City's "Solid Waste Collection Franchise System." As described in Section 8.61.175, each franchisee is responsible for meeting the minimum recycling diversion rate of 50% on both a monthly basis and annual basis. The proposed project is required to comply with the applicable solid waste franchise's recycling system and, thus, will meet Pasadena's and California's solid waste diversion regulations. In addition, the project complies with the City's Construction and Demolition Ordinance (PMC Section 8.62) and design requirements for refuse storage areas (PMC Section 17.64.240). Therefore, the project would not cause any significant impacts from conflicting with statutes or regulations related to solid waste.

21. EARLIER ANALYSIS.

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. See CEQA Guidelines Section 15063(c)(3)(D).

- a) Earlier Analysis Used. No program EIR, tiering, or other process can be used for analysis of the project's environmental effects.
- b) Impacts Adequately Addressed. Not applicable.
- c) Mitigation Measures. Not applicable.

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22. 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?*

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As discussed in Sections 3 and 5 of this document, the proposed project would not have substantial impacts to aesthetics or air quality. Also, as discussed in Section 6 of this document, the proposed project would not have substantial impacts to special status species, stream habitat, and wildlife dispersal and migration. Furthermore, the proposed project would not significantly affect the local, regional, or national populations or ranges of any plant or animal species. Also, as discussed in Section 7 of this document, the proposed project would not have substantial impacts on historical, archaeological, or paleontological resources and, thus, would not eliminate any important examples of California history or prehistory. As discussed in Sections 12 and 14 of this document, the proposed project would not have substantial impacts to water quality or mineral resources. Therefore, the project will not substantially degrade the quality of the land, air, water, minerals, flora, fauna, and objects of historic or aesthetic significance.

- 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 project?)*

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The proposed project would not cause impacts that are cumulatively considerable. The project has the potential to contribute to cumulative air quality, hydrology, water quality, noise, public services, traffic, and utility impacts. However, the project's contribution to these cumulative conditions is not considerable. Therefore, the proposed project does not have a Mandatory Finding of Significance due to cumulative impacts.

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

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As discussed in Sections 5, 12, and 19 of this document, the proposed project would not expose persons to the hazards of air pollution, flooding, or transportation hazards. Section 9 of this document explains that although the proposed facility would be exposed to typical southern California earthquake hazards, modern engineering practices would ensure that geologic and seismic conditions would not directly cause substantial adverse effects on humans. In addition, as discussed in Sections 3 Aesthetics, 13 Land Use and Planning, 15 Noise, 16 Population and Housing, 17 Public Services, 18 Recreation, 19 Transportation/Traffic, and 20 Utilities and Service Systems the project would not indirectly cause substantial adverse effects on humans. Therefore, the proposed project would not have a Mandatory Finding of Significance due to environmental effects that could cause substantial adverse effects on humans. Several mitigation measures are required that will reduce the temporary short term impacts related to Noise and Traffic and Transportation:

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Noise:

Mitigation Measure N-1: All noise generating construction activities shall be restricted to the hours between 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays and at no time on Sundays and holidays.

Mitigation Measure N-2: All equipment used by the project shall comply with City of Pasadena Municipal Code Section 9.36.080 and shall not generate a noise level in excess of 85 dBA at a distance of 100 feet.

Traffic and Transportation:

Mitigation Measure TRAF-1: A Construction Staging and Traffic Management Plan shall be prepared for each construction site and submitted to the Pasadena Department of Public Works and Pasadena Department of Transportation for review and approval prior to the start of construction work. This plan shall include such elements as the location of lane closures, restrictions on hours or times of the year during which lane closures or other work would be allowed, the location of access to each off-street construction site, the designation of haul routes for construction-related trucks, requirements for protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, warning signs, temporary turn restrictions), identification of local traffic detours (where necessary and where reasonable alternate routes exist), measures to address restrictions on access to abutting properties, provisions to maintain emergency access through construction work areas, and designation of staging and parking areas for workers and equipment.

Mitigation Measure TRAF-2: During project construction, alternative pedestrian and bicycle access routes shall be provided where existing sidewalks, crosswalks, or bike lanes would be affected. All changes shall be reviewed and approved by the Department of Transportation.

Mitigation Measure TRAF-3: Prior to the commencement of construction activities, advance notice shall be provided to any affected residents, businesses, and property owners in the vicinity of each construction site, and shall identify alternative means of access where existing property access would be reduced.

Mitigation Measure TRAF-4: The Pasadena Water & Power Department shall coordinate with emergency service providers (police, fire, ambulance, and paramedic services) to provide advance notice of any planned lane closures, construction hours, or changes to local access and to identify alternative routes where appropriate.

Mitigation Measure TRAF-5: The Pasadena Water & Power Department shall coordinate with public transit providers (Metro, Pasadena ARTS, Foothill Transit, and Montebello Bus Service) to provide advance notice of lane closures, construction hours and, where necessary, identify sites for temporary bus stops within a reasonable walking distance of any displaced bus stops.

Mitigation Measure TRAF-6: Upon completion of construction and testing at the Eastside Wells and collector pipes, streets, sidewalks, driveways and public transit stops shall be completely restored to pre-construction conditions.

Mitigation Measure TRAF-7: The project shall comply with all Building, Fire and Safety Codes and plans shall be subject to review and approval by the Public Works and the Transportation Departments, and the Building and Planning Divisions, and the Fire Department.

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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As described in Section 11 (Hazards and Hazardous Materials) of this document, PWP will be taking appropriate precautions in the design and procedural operations to protect sensitive receptors and limit the exposure of the disinfection chemicals due to an accidental release. The proposed disinfection system incorporates various design features and operating procedures to ensure the safe storage and handling of potentially hazardous materials. The system will also require compliance with the California Accidental Release Prevention program, and operate in accordance with numerous procedural and emergency plans (Hazardous Materials Business Plan, Injury and Illness Prevention Plan, Emergency Action Plan, Hazard Communication Plan). Therefore, the proposed project would not have a Mandatory Finding of Significance due to environmental effects that could cause substantial adverse effects on humans.

INITIAL STUDY REFERENCE DOCUMENTS

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| # | Document |
| 1 | Alquist-Priolo Earthquake Fault Zoning Act, California Public Resources Code, revised January 1, 1994 official Mt. Wilson, Los Angeles and Pasadena quadrant maps were released March 25, 1999. |
| 2 | CEQA Air Quality Handbook, South Coast Air Quality Management District, revised 1993 |
| 3 | East Pasadena Specific Plan Overlay District, City of Pasadena Planning and Development Department, codified 2001 |
| 4 | Energy Element of the General Plan, City of Pasadena, adopted 1983 |
| 5 | Fair Oaks/Orange Grove Specific Plan Overlay District, City of Pasadena Planning and Development Department codified 2002 |
| 6 | Final Environmental Impact Report (FEIR) Land Use and Mobility Elements of the General Plan, Zoning Code Revisions, and Central District Specific Plan, City of Pasadena, certified 2004 |
| 7 | 2008-2014 Housing Element of the General Plan, City of Pasadena. |
| 8 | Inclusionary Housing Ordinance Pasadena Municipal Code Chapter 17.71 Ordinance #6868 |
| 9 | Land Use Element of the General Plan, City of Pasadena, adopted 2004 |
| 10 | Mobility Element of the General Plan, City of Pasadena, adopted 2004 |
| 11 | Noise Element of the General Plan, City of Pasadena, adopted 2002 |
| 12 | Noise Protection Ordinance Pasadena Municipal Code Chapter 9.36 Ordinances # 5118, 6132, 6227, 6594, and 6854 |
| 13 | North Lake Specific Plan Overlay District, City of Pasadena Planning and Development Department, Codified 1997 |
| 14 | Pasadena Municipal Code, as amended |
| 15 | Recommendations On Siting New Sensitive Land Uses, California Air Resources Board, May 2005 |
| 16 | Regional Comprehensive Plan and Guide, Southern California Association of Governments, 2008 |
| 17 | Safety Element of the General Plan, City of Pasadena, adopted 2002 |
| 18 | Scenic Highways Element of the General Plan, City of Pasadena, adopted 1975 |
| 19 | Seismic Hazard Maps, California Department of Conservation, official Mt. Wilson, Los Angeles and Pasadena quadrant maps were released March 25, 1999. The preliminary map for Condor Peak was released in 2002. |
| 20 | South Fair Oaks Specific Plan Overlay District Planning and Development, codified 1998 |
| 21 | State of California "Aggregate Resource in the Los Angeles Metropolitan Area" by David J. Beeby, Russell V. Miller, Robert L. Hill, and Robert E. Grunwald, Miscellaneous map no. .010, copyright 1999, California Department of Conservation, Division of Mines and Geology |
| 22 | Storm Water and Urban Runoff Control Regulations Pasadena Municipal Code Chapter 8.70 Ordinance #6837 |
| 23 | Transportation Impact Review Current Practice and Guidelines, City of Pasadena, August, 2005 |
| 24 | Tree Protection Ordinance Pasadena Municipal Code Chapter 8.52 Ordinance # 6896 |
| 25 | West Gateway Specific Plan Overlay District, City of Pasadena Planning and Development Department codified 2001 |
| 26 | Zoning Code, Chapter 17 of the Pasadena Municipal Code |

ERRATA SHEET

Initial Study

Eastside Well Collector and Centralized Disinfection Facility Project

The City of Pasadena, as a lead agency pursuant to the California Environmental Quality Act (CEQA), circulated an Initial Study and proposed Mitigated Negative Declaration (IS/MND) for the Eastside Well Collector and Centralized Disinfection Facility Project for public review on August 6, 2012. Since this date, the City has revised this IS/MND as shown below in strikethrough-underline format.

Item 10 on p. 8 has been revised as follows:

10. Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement):

The proposed project is anticipated to require the following discretionary approvals:

- City of Pasadena: Selection of a contractor for the pipeline installation;
- City of Pasadena: Selection of a contractor for the disinfection facility construction;
- City of Pasadena Public Works Department: Encroachment permit for work within City street right-of-way;
- City of Pasadena Fire Department: California Accidental Release Prevention (CalARP) Risk Management Plan review and approval;
- California Department of Public Health (DPH): Amendment to PWP's public water system permit;
- California Department of Water Resources, Division of Safety of Dams (DSOD): Approval of alterations to Jones Reservoir; ~~and~~
- Caltrans: Encroachment permit for crossing of I-210 Foothill Freeway right-of-way; and
- Metropolitan Water District of Southern California (Metropolitan): Potential need for approval for crossing Metropolitan pipeline right-of-way.

Part 12(b) on p. 45-46 has been revised as follows:

- b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would 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 would not support existing land uses or planned uses for which permits have been granted)? (6)*

☐☐☐☒

PWP provides water service to the City of Pasadena and a limited number of customers in adjacent unincorporated areas. The City's 2010 Urban Water Management Plan¹ describes PWP's water demand as follows:

Currently, water demands are approximately 30,000 [acre feet per year] AFY, which is about 22% lower than in 2007. This significant reduction in demand is due to mandatory restrictions in water use that PWP implemented in response to a multi-year drought that began in 2008 and ended in 2010, as well as a severe economic recession during this same time. It is estimated that if these two events did not occur, current water demands would be approximately 38,000 AFY.

PWP's water sources include:

- Groundwater: PWP obtains approximately 40% of its annual water supply from groundwater in the Raymond Basin. PWP has an adjudicated right to withdraw 12,807 AFY from the Raymond Basin, with additional withdrawal rights provided on a year-to-year basis based on spreading surface water diversions in the Arroyo Seco and Eaton Canyon. In the 2005-2010 period, the combination of groundwater rights and pumping credits from surface runoff spreading has averaged approximately 14,000 AFY². On July 1, 2009, the Raymond Basin Watermaster reduced allowable extractions to all agencies with decreed rights in the Pasadena Subarea of the Raymond Basin (including PWP). Each fiscal year (July 1 to June 30) the Watermaster reduces allowable extractions in increments of 6% so by the 5th fiscal year total reduction of 30% will be achieved.
- Local Surface Water: PWP diverts surface water from the Arroyo Seco and Eaton Canyon to spreading basins that recharge the Raymond Basin. Hence, the additional pumping rights from the Basin noted above.
- Imported Water: PWP meets the balance of its customer's water demand (approximately 60% annually) with imported water from the Metropolitan Water District of Southern California (MWD), ~~managed by the state Department of Water Resources (DWR).~~ The MWD's water sources are the Colorado River Aqueduct and the State Water Project (SWP), which is managed by the state Department of Water Resources (DWR). Total annual MWD supplies, including its storage and transfer programs, range from a high of about ~~3.3~~ 3.8 million acre feet (MAF) to a low of ~~1.9~~ 2.4 MAF acre feet, depending on the year and the scenario (e.g., normal year vs. multiple dry year).

This project is intended to collect and treat groundwater in the Pasadena Subarea of the Raymond Basin, which would be extracted by the City of Pasadena for drinking water use. The proposed project would not increase PWP's ability to withdraw water from the aquifer, since no new wells are proposed.³ Regardless, with or without the proposed project, the amount of groundwater withdrawn from the Raymond Basin is dictated by Raymond Basin Watermaster and PWP would not be allowed to exceed the pumping allocations prescribed by the Watermaster. Therefore, no adverse impacts are anticipated.

¹ Pasadena, City of. *Urban Water Management Plan*. 2010.

² Ibid.

³ The proposed project would redirect water from the seven involved wells to Jones Reservoir, rather than serving the water directly to customers.