

**LOS ANGELES DEPARTMENT OF WATER AND POWER  
Owens Lake Dust Mitigation Program – Phase 9/10 Project  
Addendum No. 1 to the  
2015 Final Environmental Impact Report**

**February 2016**

**1.0 INTRODUCTION**

This Addendum has been prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines in order to address changes in the Owens Lake Dust Mitigation Program Phase 9/10 Project (Phase 9/10 Project or Project) since approval of the project and its associated Environmental Impact Report (EIR) on June 2, 2015. The City of Los Angeles Department of Water and Power (LADWP) is approving the use of an additional gravel source (from the Panamint Valley) that was not described in the EIR. Gravel will be used for construction of over 3 square miles of Gravel Cover included in the Project. This Addendum also serves to clarify that the anticipated construction work schedule will be up to six days per week and the total volume of gravel transported to the lake each day would be up to approximately 3,500 tons.

As described in the EIR, the Phase 9/10 Project requires a total of approximately 1,000,000 tons of gravel for the installation of Gravel Cover Dust Control Areas (DCAs), Transition Area, and road surfaces. The EIR identified two sources for this gravel, the F.W. Aggregate mine in Dolomite and the LADWP Shale Borrow Pit in Keeler. The Construction Contractor for the Project has specified that gravel sources may also include the Panamint Valley Limestone Quarry (Panamint Mine) located southeast of the Project site in unincorporated Inyo County. With the addition of the Panamint Mine as a gravel source, the Phase 9/10 Project differs marginally from the Project evaluated in the EIR and therefore, in an abundance of caution, LADWP has prepared this Addendum in accordance with Section 15164 of the CEQA Guidelines.

The addition of the Panamint Mine gravel source and the change to the construction work schedule result in only minor changes to the Phase 9/10 Project described in the EIR; none of the changes will result in new or substantially more severe environmental effects such that major revisions to the EIR are required. Further, there are no changes in circumstances or new information that would otherwise warrant any subsequent environmental review under Public Resources Code section 21166 or CEQA Guidelines section 15162. LADWP staff have therefore determined that the EIR and its Mitigation Monitoring and Reporting Program (MMRP) adequately address the potential environmental impacts of the Phase 9/10 Project, and no further environmental review is necessary.

## **1.1 BACKGROUND AND PURPOSE OF THE ADDENDUM**

LADWP is currently implementing the Owens Lake Dust Mitigation Program (OLDMP) on Owens Lake in order to reduce emissions of particulate matter less than 10 microns in diameter (PM<sub>10</sub>). LADWP constructs and operates dust control measures (DCMs) on the lake in compliance with Agreements with the Great Basin Unified Air Pollution Control District (GBUAPCD) under the authority of California Health & Safety Code Sec. 42316, legal settlement agreements with GBUAPCD, lease agreements for use of state lands (administered by the California State Lands Commission (CSLC)), and other regulatory approvals.

The Phase 9/10 Project is an expansion of the OLDMP proposed in order to meet the requirements of a 2014 Stipulated Judgment with GBUAPCD (Superior Court of the State of California Case No. 34-2013-800001451-CU-WM-GDS). The 2014 Stipulated Judgment resolves disputes between LADWP and GBUAPCD regarding the 2011 Supplemental Control Requirements Determination (SCRD), 2012 SCRD, 2013 SCRD and 2014 SCRD.

The Phase 9/10 Project EIR (State Clearinghouse No. 2014071057) was prepared under the direction of LADWP in accordance with the requirements of CEQA and the CEQA Guidelines. A Draft EIR for the Phase 9/10 Project was prepared and distributed for public review on February 11, 2015 (LADWP, 2015a). Analysis of the impacts of the Phase 9/10 Project as originally proposed is presented in the Draft EIR. Significant impacts of the originally proposed Project that could not be mitigated to less than significant levels were identified for cultural resources. All other impacts were found to be beneficial, less than significant or less than significant with mitigation. Several alternatives to the proposed Phase 9/10 Project were defined with a focus on avoidance of significant impacts to cultural resources and on alternative methods and combinations of best available control measures (BACM). Based on the analysis presented in the Draft EIR, the Avoidance Alternative was identified as the environmentally superior alternative.

The Avoidance Alternative for the Phase 9/10 Project encompasses approximately 3.1 square miles of DCAs and 1.8 square miles of Transition Area for a total Project area of approximately 4.9 square miles. To comply with the 2011 and 2012 SCRDS, dust mitigation (Gravel Cover, Managed Vegetation, and Shallow Flooding) will be constructed on 17 new DCAs. To conserve water use for the OLDMP, the Project also includes the transition of existing Shallow Flood DCA T18S (1.8 square miles) to approximately 0.8 square miles of Gravel Cover and 1.0 square mile of Shallow Flooding.

On June 2, 2015, the LADWP Board of Water and Power Commissioners adopted the Phase 9/10 Project Avoidance Alternative, certified the Final EIR (LADWP, 2015b), and adopted the MMRP for the Project.

## **1.2 Addendum No. 1**

This Addendum No. 1 to the 2015 Owens Lake Dust Mitigation Program – Phase 9/10 Project Final EIR serves as the CEQA compliance document for modification of the Phase 9/10 Project to expand the range of gravel sources for construction of Gravel Cover. The Addendum also serves to clarify that the anticipated construction work schedule would be up to six days per week and the total volume of gravel transported to the lake each day would be up to approximately 3,500 tons.

LADWP has determined that the gravel sources currently under consideration by the Construction Contractor differ from the list of gravel sources evaluated in the Final EIR such that, in accordance with Section 15164 of the State CEQA Guidelines, minor modifications and clarifications to the EIR warrant preparation of an Addendum to the EIR. The environmental analyses presented in this Addendum demonstrate that the impacts and mitigation measures identified in the Phase 9/10 Project EIR remain substantively unchanged by the modification of the project description to expand the range of gravel sources and to clarify the anticipated construction work schedule. This supports the finding that the proposed modification does not raise any new issues and does not result in new or substantially more severe significant impacts.

### **1.2.1 Objective of Proposed Modification to the Project Description**

The Final EIR for the Phase 9/10 Project described two mines local to Owens Lake as sources of gravel for the Gravel Cover DCAs included in the Project: the F.W. Aggregate Dolomite mine and the LADWP Shale Borrow Pit. The objective of the modified project description is to expand the range of potential gravel sources used during construction of Gravel Cover areas included in the Phase 9/10 Project. Once gravel is delivered to the lake, construction and operation of the Gravel Cover will be as described in Draft EIR Section 3.1.3.

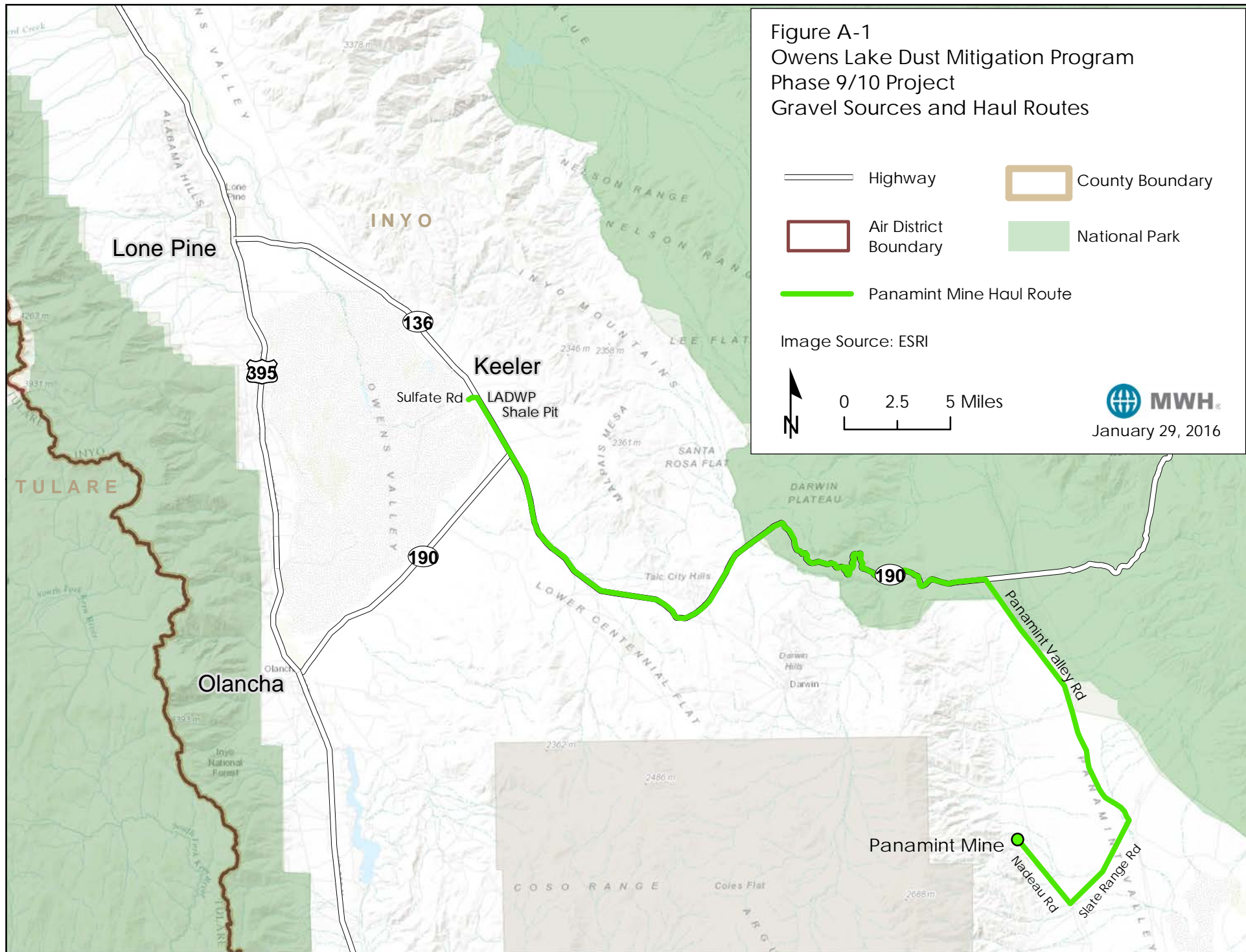
The anticipated construction period was described in Draft EIR Section 4.2.5.2 as 18 months, with work occurring five days per week. The schedule is now assumed to be 18 months, with work occurring up to six days per week (for a total of up to approximately 468 workdays).

### **1.2.2 Location of Gravel Sources**

The 110 square-mile Owens Lake is located in Inyo County, California, approximately 5 miles south of the community of Lone Pine and approximately 61 miles south of the city of Bishop. As depicted on **Figure A-1**, gravel for construction of the Phase 9/10 Project is anticipated to be obtained from one or more of the following sources:

- LADWP Shale Borrow Pit – access off State Route (SR) 136 less than 1 mile east of Owens Lake
- F.W. Aggregate Dolomite mine – access off SR 136 less than 1 mile east of Owens Lake

Figure A-1  
Owens Lake Dust Mitigation Program  
Phase 9/10 Project  
Gravel Sources and Haul Routes



- Panamint Valley Limestone Quarry – access off Panamint Valley Road via SR 190 and SR 136 (59 miles one-way from the LADWP Sulfate facility)

One or more of these sources may be used for the Phase 9/10 Project. The Construction Contractor would determine gravel sources necessary for the Project, based on schedule, availability of suitable material, and cost. The source furthest from the lake is the Panamint Mine; the one-way mileage from this gravel source to the LADWP Sulfate Facility is approximately 59 miles. The distance from the Panamint Mine to the furthest Gravel Cover DCA is approximately 70 miles.

### 1.2.3 Gravel Hauling Assumptions

The following construction assumptions apply to installation of Gravel Cover for the Phase 9/10 Project Avoidance Alternative:

<b>Assumptions Regarding Gravel Delivery</b>	
<b>EIR</b>	<b>Changes Provided in Addendum with Gravel from Panamint Mine</b>
1,000,000 tons of gravel would be installed.	<i>No change</i>
25 tons of gravel would be hauled per truck, based on maximum weight of 80,000 pounds for trucks on State Highways.	<i>No change</i>
Gravel installation period of approximately 18 months.	Gravel installation period of approximately 11 to 18 months
Project construction would occur 5 days per week, 12 hours per day.	Project construction would occur <b>6 days</b> per week; gravel hauling would occur up to 10 hours per day.
Up to 2,700 tons of gravel per day would be transported to the Gravel Cover DCAs.	Up to <b>3,500 tons</b> of gravel would be transported to the lake per day.
Maximum gravel delivery haul distance of 12 miles one way.	Maximum gravel delivery haul distance of <b>59 miles</b> one way to the Sulfate Facility; up to <b>70 miles</b> to the furthest Gravel Cover DCA.
Approximately 100 daily round-trip haul truck trips would travel to the lake each day during the gravel delivery period; approximately 10 round-trip truck trips per hour.	Up to <b>140</b> daily round-trip gravel haul truck trips would travel to the lake per day; approximately 14 round-trip truck trips per hour.

## 2.0 LEGAL STANDARDS

An initial study is generally prepared by a lead agency to determine whether a project may have a significant effect on the environment. An environmental impact report (“EIR”) must be prepared if there is substantial evidence that a project may have a significant effect on the environment. Once an EIR for a particular project has been

certified, that EIR is conclusively presumed valid unless a lawsuit to challenge the EIR is timely filed. (Pub. Res. Code, § 21167.2.) This presumption precludes reopening the prior CEQA process even if the EIR is later discovered to have been inaccurate or misleading in the description of a significant effect or the severity of its consequences. (*Laurel Heights Improvement Ass’n v. Regents of Univ. of California* (“*Laurel Heights II*”) (1993) 6 Cal.4th 1112, 1130.)

Once an EIR has been certified for a project, no subsequent EIR is required unless, “on the basis of substantial evidence in the light of the whole record,” the agency determines one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR . . . due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete . . . shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR . . .;
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(CEQA Guidelines, §§ 15162(a)(1)-(3); see also Pub. Res. Code, § 21166.)

If a subsequent EIR is not required, the lead agency may document its decision and supporting evidence in an addendum to the EIR. (CEQA Guidelines, §§ 15164(a), (e); *Santa Teresa Citizens Action Group v. City of San Jose* (2003) 114 Cal.App.4th 689, 702-803.) The addendum and lead agency’s findings should include a “brief explanation of

the decision not to prepare a subsequent EIR,” and the explanation “must be supported by substantial evidence.” (CEQA Guidelines, § 15164(e).) “An addendum need not be circulated for public review,” but must be considered by the lead agency prior to making a decision on the project. (*Id.*, § 15164(c)-(d).)

### **3.0 IMPACTS ANALYSIS**

As described in the July 2014 Initial Study for the Project, impacts to agricultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, population and housing, public services, and recreation were found to be less than significant. Impacts to transportation and traffic were found to be less than significant with the incorporation of mitigation measures. Aesthetics, air quality and greenhouse gases, biological resources, cultural resources, and land use and planning were carried forward for more detailed analysis in the Draft EIR. Impacts to aesthetics and land use and planning were found to be less than significant with adoption of the Avoidance Alternative. Impacts of the Avoidance Alternative to air quality and greenhouse gases, biological resources, and cultural resources were found to be less than significant with the incorporation of mitigation measures.

The following summarizes the impact assessment presented in the 2015 Final EIR for the Phase 9/10 Project and presents an evaluation of the impacts related to modification of the project description to expand the range of potential gravel sources, clarify the construction schedule of six days per week, and clarify the daily tonnage of gravel being delivered.

#### **3.1 Aesthetics**

**Final EIR Impact Summary.** Construction activities for the Project include site preparation (excavation, soil conditioning, and land leveling), preparation of gravel stockpile areas, raised roadway and irrigation pipeline installation, installation of electrical and mechanical equipment related to the irrigation systems, installation of the geotextile and gravel or concrete mat layer, and planting activities. Throughout the construction period, additional vehicles including gravel haul trucks from the mines would be present on the lakebed. Views of the Project site during construction would include over 100 vehicles – including dozers, scrapers, flatbed trucks, backhoes, water trucks, fuel trucks, gravel haul trucks, and light duty trucks. The level of construction activity required for the Phase 9/10 Project would alter views of the Project site. However, within the context of the construction and maintenance activity ongoing on the lakebed, the impact of ground disturbance associated with installation of Project facilities would be temporary and less than significant on the visual character of the Project site.

Operation of the Project would create views of saturated soils and standing water that would visually blend with existing areas of Shallow Flooding. New areas of Managed Vegetation would increase the diversity and density of the vegetation on the lake, an aesthetic improvement.

The proposed new Gravel Cover areas would not substantially alter the elevation of the affected DCAs. Gravel from local sources would be within the range of existing lake bed color. Since the same gravel sources would be used as the raw materials for the concrete blocks, the concrete block mat would not substantially differ in color from existing Gravel Cover areas. Therefore, installation of Gravel Cover and/or Concrete Block Mat would alter, but would not substantially degrade the visual character of the site. The Final EIR found that the aesthetic impact of Gravel Cover proposed under the Phase 9/10 Project would be less than significant.

**Impact Assessment with Modifications to Project Description.** Use of an alternative gravel source would not affect the number or appearance of gravel haul trucks or other construction equipment used for the Project. Additional truck trips related to the alternative gravel sources would be consistent with existing use of area roadways.

As with sources local to Owens Lake, the alternative gravel source would provide gravel with a range of colors. Per the terms of the 1998 MOA between LADWP and GBUAPCD, gravel used for dust mitigation on Owens Lake shall be comparable in coloration to the lake bed soils. Consistent with this requirement, gravel would be used that is complementary in color with the underlying lake bed and surrounding landscape to the maximum extent feasible. LADWP has reviewed the color of the gravel from the Panamint Mine and has found the gravel to be consistent with existing Gravel Cover areas on the lake. The gravel from the Panamint Mine has met the requirements for color and size detailed in the Gravel Cover construction specifications (Subarticle 1.07 of Section F02314).

Therefore, impacts on visual resources would be less than significant with modification of the Project description to expand the list of potential gravel sources. Clarification of the construction schedule (six workdays per week) and volume of gravel transported to the lake per day (3,500 tons per day) would not affect the aesthetics of the Project site during construction over that described in Final EIR.

### **3.2 AGRICULTURAL AND FOREST RESOURCES**

**Final EIR Impact Summary.** There are no agricultural or forest resources, or designated agricultural land uses, located on Owens Lake. Active ranches are located near the lakebed – Horseshoe Livestock to the south and Islands and Delta Livestock, Lubkin Adjunct Livestock, and Mount Whitney Ranch north and west of the lake. The presence of livestock on the lake is limited to stray animals from adjacent leases. However, since the Project does not include new permanent fences, alter water distribution to the ranches or include haul routes across ranch properties, there would be no impact on agricultural operations from construction and operation of the Phase 9/10 Project. Therefore, the Final EIR found that there would be no impact on agricultural resources from implementation of the Project.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, to clarify the



construction schedule, and to increase the daily tonnage of gravel delivered during the construction period would have no impact on agricultural or forest resources, as none are present on the Project site.

### **3.3 AIR QUALITY**

**Final EIR Impact Summary.** Since the Phase 9/10 Project would be implemented in compliance with the 2008 State Implementation Plan (SIP) as modified by the relevant Amendments, GBUAPCD Orders and Judgments, the Project would be consistent with the applicable air quality plan and impacts on the air quality plan would be less than significant.

Construction activities would result in emissions of criteria pollutants. With the exception of PM<sub>10</sub>, however, these emissions would not result in a net increase of any nonattainment pollutant for the Project region. Therefore, with the exception of PM<sub>10</sub>, air pollutant emissions during construction would be less than significant. However, to reduce tail pipe emissions from construction and maintenance vehicles and equipment to the maximum extent feasible, mitigation measures were identified and would be implemented.

Construction activities would generate some PM<sub>10</sub> emissions due to surface disturbance, creation of berms, travel of vehicles and construction equipment on unpaved surfaces, and material handling of gravel for those areas that would use gravel installation for dust control. Mitigation has been proposed to reduce fugitive dust generation during construction to the extent feasible. Because the Project is intended to comply with the requirements of the SIP to implement DCMs at Owens Lake, the Project would result in an overall benefit to the air quality of the area.

Operational emissions would be associated with inspection and maintenance activities, and with periodic berm building and upkeep, upkeep on roads and turnouts, re-seeding of managed vegetation areas, and replacement of gravel in those areas where Gravel Cover is installed. Maximum daily emissions associated with these operational activities would be much lower than during construction, as they would require a small subset of the equipment, vehicles, and workers required to complete initial construction.

The increase in construction emissions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation with the implementation of mitigation. The Project is located in an uninhabited area and, therefore, does not expose any sensitive receptors to substantial pollutant concentrations. The Project also would not result in any objectionable odors that would affect a substantial number of people

**Impact Assessment with Modifications to Project Description.** In addition to the two local gravel sources identified in the Final EIR, LADWP proposes to expand the list of potential gravel sources to include the Panamint Mine. Based on LADWP review, the gravel from the Panamint Mine meets the requirements detailed in the construction

specifications (Subarticle 1.07 of Section F02314) and is comparable in coloration to the lake bed soils. Therefore, the Construction Contractor would make the final decision regarding which source or sources would be used. One or more sources may be used during the course of the construction period. Therefore, as a worst-case assessment, air pollutant emissions from truck trips associated with gravel from the Panamint Mine (the furthest source) were considered.

The Panamint Mine is approximately 59 miles from LADWP's Sulfate facility in Keeler and approximately 70 miles from the most distant Gravel Cover DCA. **Table A-1** summarizes revised air pollutant emissions from gravel haul trucks, based on a conservative mileage estimate of 70 miles from the mine to the project site. **Table A-2** revises Table 4.2-5 from the Draft EIR to include the additional gravel haul emissions under the worst-case assessment of all gravel obtained from the Panamint Mine, clarification of the project schedule as up to six days per week, and an increase in the volume of gravel delivered to the lake per day (up to 3,500 tons per day). Modification of the Project description to include the Panamint Mine as a gravel source could increase pollutant emissions in the Great Basin Valleys air basin. In addition, increasing the daily tonnage of gravel delivered during the construction period will increase the daily number of truck trips for gravel delivery, thereby resulting in additional peak-day air pollutant emissions.

Other than  $PM_{10}$ , Project emissions would not result in a net increase of any pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard. Therefore, with the modifications to the project description, air pollutant emissions during construction would remain less than significant. As discussed in the EIR, the Owens Lake area is classified as a serious nonattainment for  $PM_{10}$ . The dominant source of  $PM_{10}$  emissions, however, would be construction on the Project site itself, and those emissions will not change. Tailpipe emissions of  $PM_{10}$  from the gravel haul trucks and emissions from paved roadways are not a significant source of  $PM_{10}$  emissions. Consequently, modifications to the project description will result in a less than substantial increase in  $PM_{10}$  emissions during the construction phase. However, the Project as a whole will still result in an overall benefit to the air quality of the air basin by reducing  $PM_{10}$  emissions on Owens Lake and the Project will remain consistent with the SIP. The project as modified will not conflict with or obstruct implementation of the applicable air quality plan and the increase in construction emissions would not violate any air quality standard or contribute substantially to an existing or projected air quality violation in this basin with the implementation of mitigation as described in the Final EIR. Therefore, the impacts of modifying the project description to expand the list of potential gravel sources, to clarify the construction schedule, and to increase the daily tonnage of gravel delivered during the construction period, would remain less than significant as to air quality.

Table A-1  
Construction Truck Trip Emissions  
Owens Lake Dust Control Measures - Phase 9/10

Construction Phase	Vehicle Class	No. of Trucks per day	VMT (mi/vehicle day)	CO	NO <sub>x</sub>	ROG	SO <sub>x</sub>	PM10	PM2.5	CO2	CH4	N2O
				(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)	(lbs/mi)
All												
Delivery Trucks - Gravel	Heavy Duty Truck, Diesel	140	140	0.007046	0.01887374	0.00161	0.00003952	0.00094448	0.0007844	4.21063031	0.00007508	0.00179
Delivery Trucks - All Activities	Heavy Duty Truck, Diesel	1	80	0.007046	0.01887374	0.00161	0.00003952	0.00094448	0.0007844	4.21063031	0.00007508	0.00179
Fuel and Water Trucks - All Activities	Heavy Duty Truck, Diesel	7	20	0.007046	0.01887374	0.00161	0.00003952	0.00094448	0.0007844	4.21063031	0.00007508	0.00179
Light Duty Trucks - All Activities	Passenger Vehicle	20	20	0.005758	0.00055658	0.00063	0.00001071	0.00009392	6.131E-05	1.10677664	0.00005623	0.00005

Emission Factors from EMFAC Year 2016

Emissions, lbs/day												
CO	NO <sub>x</sub>	ROG	SO <sub>x</sub>	PM10	PM2.5	Paved Road Fugitive Dust PM10	Paved Road Fugitive Dust PM2.5	Unpaved Road Fugitive dust PM10	Unpaved Road Fugitive dust PM2.5	CO2	CH4	N2O
138.10	369.93	31.56	0.77	18.51	15.37	342.91	72.01	846.07	84.61	82528	1.47	35.14
0.56	1.51	0.13	0.00	0.08	0.06	1.40	0.29	6.04	0.60	337	0.01	0.14
0.99	2.64	0.23	0.01	0.13	0.11	0.61	0.13	141.01	14.10	589	0.01	0.25
2.30	0.22	0.25	0.00	0.04	0.02	0.01	0.00	142.95	14.30	443	0.02	0.02
141.96	374.30	32.17	0.79	18.76	15.57	344.94	72.44	1136.08	113.61	83897	1.51	35.56

Total Emissions, tons													
Days	CO	NOx	ROG	SOx	PM10	PM2.5	Paved Road Fugitive Dust PM10	Paved Road Fugitive Dust PM2.5	Unpaved Road Fugitive Dust PM10	Unpaved Road Fugitive Dust PM2.5	CO2	CH4	N2O
286	19.75	52.90	4.51349	1.11E-01	2.64719	2.19860	49.03675	10.29772	120.98848	12.09885	11802	0.21043	5.02544
468	0.13	0.35	0.03015	7.40E-04	0.01768	0.01468	0.32752	0.06878	1.41415	0.14142	79	0.00141	0.03357
468	0.23	0.62	0.05276	1.29E-03	0.03094	0.02570	0.14329	0.03009	32.99686	3.29969	138	0.00246	0.05874
468	0.54	0.05	0.05921	1.00E-03	0.00879	0.00574	0.00230	0.00048	33.45065	3.34506	104	0.00526	0.00495
	20.65	53.92	4.66	0.11	2.70	2.24	49.51	10.40	188.85	18.89	10996.93	0.20	4.65

#### Paved Road Fugitive Dust

EPA's AP-42, Section 13.2.1, November 2006

$$E = k(sL/2)^{0.65} \times (W/3)^{1.5} - C$$

For LDT assume 2 tons/vehicle, HDT assume 20 tons/vehicle

Assume silt loading for 10,000 ADT roadways = 0.03 g/m<sup>3</sup>

Assume k = 0.016 PM10

Emission Factors

PM10, LDT

9.81231E-05

PM10, HDT

0.017495628

#### Unpaved Road Fugitive Dust

EPA's AP-42, Section 13.2.2

Industrial Roads

$$E = k(s/12)^a \times (W/3)^b$$

For LDT assume 2 tons/vehicle, HDT assume 20 tons/vehicle

k = 1.5 for PM10, 0.15 for PM2.5

s = 8.5, a = 0.9, b = 0.45

Assume 61% control efficiency for watering 3x daily

Emission Factors

PM10, LDT

0.357378738

PM10, HDT

1.007230136

PM2.5, LDT

0.035737874

PM2.5, HDT

0.100723014

**Table A-2  
Estimated Maximum Daily Construction Emissions**

<b>Source</b>	<b>ROG lbs/day</b>	<b>CO lbs/day</b>	<b>NO<sub>x</sub> lbs/day</b>	<b>SO<sub>x</sub> lbs/day</b>	<b>PM<sub>10</sub> lbs/day</b>	<b>PM<sub>2.5</sub> lbs/day</b>
Offroad Equipment	233.33	5542.50	689.94	1.40	110.12	98.01
Worker Trips	5.69	51.82	5.01	0.10	1.73	0.74
Construction Trucks	32.17	141.96	374.30	0.79	1,499.77	201.62
Fugitive Dust					1,560	327.6
<b>Total</b>	<b>271</b>	<b>5,736</b>	<b>1,069</b>	<b>2</b>	<b>3,172</b>	<b>628</b>

### **3.4 BIOLOGICAL RESOURCES**

**Final EIR Impact Summary.** Special status bird species, including Snowy Plover, are known for the Project area and could be adversely impacted during Project construction and maintenance activities, including by construction lighting. Active bird nests of other species could be disturbed by Project construction activity, including by construction lighting. The Project would increase the species diversity in Managed Vegetation DCAs – a beneficial impact. Based on the impact assessment presented in the Final EIR, LADWP determined that the Project would maintain and enhance existing habitat values. With incorporation of mitigation measures, the Final EIR found that impacts on biological resources would be less than significant.

**Impact Assessment with Modifications to Project Description.** Impacts to biological resources from the Project are related to ground disturbance and noise generation during construction activities on the lake. Modification of the Project description to expand the list of potential gravel sources, and to clarify the construction schedule and gravel tonnage delivered per day, would not alter the area disturbed on Owens Lake, modify the extent of Gravel Cover installed on the lake, or otherwise affect the beneficial effects on biological resources of the proposed areas of Managed Vegetation and Shallow Flooding. With expansion of potential gravel sources, clarification of the construction schedule, and an increase in the daily tonnage of gravel delivered during the construction period, impacts to biological resources would be less than significant as mitigated, the same as described in the Final EIR.

### **3.5 CULTURAL RESOURCES**

**Final EIR Impact Summary.** Since previously recorded historic and prehistoric archaeological sites are known for Owens Lake, extensive surveys and cultural resources investigations were conducted for the Phase 9/10 Project areas. Based on these evaluations, it was determined that Project construction could dislodge, relocate, crush, and otherwise cause substantial adverse changes to unique cultural resources recommended as eligible under the CRHR. Additionally, it was determined that the potential exists for presently unidentified significant historic era structures and buildings,

and significant archaeological resources, to be disturbed during Project construction. The Project has the potential to directly destroy unevaluated, but potentially unique, paleontological resources or sites. The Project has the potential to disturb unanticipated human remains, if any are present in the Project areas. As described in the Final EIR, these impacts would be significant with implementation of feasible mitigation measures. Therefore, the Avoidance Alternative was identified and adopted to avoid direct impacts to known cultural resources. With adoption of the Avoidance Alternative and implementation of mitigation measures, the Final EIR found that impacts on cultural resources would be less than significant.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, clarify the construction schedule, and increase the daily tonnage of gravel delivered, would not result in any increase in the area of disturbance on the area of Owens Lake for construction of the Project. Once on the lake, gravel haul trucks would travel on Main Line Road and other internal roadways as envisioned in the EIR; stockpiling and installation of gravel would also be as described in the Final EIR. Impacts on cultural resources with modification of the Project description to expand the list of potential gravel sources, to clarify the construction schedule, and to increase the daily tonnage of gravel delivered during the construction period, would be less than significant, as described in the Final EIR for the Avoidance Alternative.

### 3.6 GEOLOGY AND SOILS

**Final EIR Impact Summary.** The Project site is located in a seismically active area. However, since habitable structures would not be built as part of the Project, people would not be exposed to adverse effects involving seismic hazards. Damage to Project facilities (irrigation lines, drainlines, turnouts, roadways, geotextile membranes or gravel layers) would be repaired as necessary; impacts would therefore be less than significant.

Earthwork required for construction has the potential to temporarily increase soil erosion from the disturbed areas. However, since construction methods would include best management practices (BMPs) identified in a Stormwater Pollution Prevention Plan (SWPPP) completed in compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), wind and water erosion of soils during construction would be minimized. The impact would be less than significant.

The intent of installing Gravel Cover, Shallow Flood, Managed Vegetation, and potentially other dust control measures on the lakebed is to stabilize soils in an effort to reduce soil erosion via wind. Therefore, the Final EIR found that the Project would have a beneficial impact by reducing soil erosion.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, clarify the construction schedule, and increase the daily tonnage of gravel delivered during the construction period, would not alter the area of Owens Lake disturbed for Project construction. These

modifications would not change existing seismic hazards or the potential for soil erosion on Owens Lake. Once installed, gravel from any source would stabilize lakebed soils, a beneficial impact. With modification of the project description to expand the list of potential gravel sources, clarify the construction schedule, and increase the daily tonnage of gravel delivered during the construction period, impacts on geology and soils would be less than significant and as described in the Final EIR.

### 3.7 GREENHOUSE GAS EMISSIONS

**Final EIR Impact Summary.** Emissions of greenhouse gases (GHG) generated during Project construction were estimated at 382 metric tons per year of CO<sub>2</sub>-equivalent emissions. Although the GBUAPCD does not have established GHG thresholds of significance, the Project would generate emissions below thresholds established by other agencies (South Coast Air Quality Management District (SCAQMD) and California Air Resources Board (CARB)).

Operational GHG emissions would be associated with inspection and maintenance activities, and with periodic berm building and upkeep, upkeep on roads and turnouts, re-seeding of managed vegetation areas, and replacement of gravel in those areas where Gravel Cover is installed as BACM. It is assumed that an additional four workers (in addition to the existing maintenance personnel headquartered in LADWP's Keeler office) would be required for continual inspection and maintenance activities. For the purpose of estimating annual GHG emissions from operational activities, it is assumed that annual maintenance would be approximately equal to two percent of the estimated level of construction activity for the proposed Gravel Cover. Since the total emissions associated with operations and amortized construction emissions would remain below the thresholds proposed by the SCAQMD and CARB, the Final EIR found that impacts to climate change would be less than significant.

**Impact Assessment with Modifications to Project Description.** If the Panamint Mine gravel source is used during Project construction, additional air pollutant emissions, including GHGs, would be emitted due to the increase in overall vehicle miles traveled for gravel hauling. Based on the additional emission estimates summarized in **Tables A-1** and **A-2**, the estimated GHG emissions from Project construction are revised as summarized in **Table A-3** (revision of Table 4.2-6 of the Draft EIR). Since the total emissions associated with operations and amortized construction emissions would remain below the thresholds proposed by the SCAQMD (10,000 metric tons CO<sub>2</sub>-equivalent emissions per year for industrial projects) and CARB (7,000 metric tons of CO<sub>2</sub>-equivalent emissions per year for operational emissions - excluding transportation), impacts to climate change would be less than significant with modification of the Project description to include an additional gravel source, clarification of the construction schedule as six days per week, and increase in the volume of gravel anticipated to be delivered per day.<sup>1</sup>

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<sup>1</sup> The amortization period specified in the DEIR was adopted from the SCAQMD interim thresholds for greenhouse gases for industrial projects construction impacts (adopted December 5, 2008). (DEIR, p. 4.2-

**Table A-3  
Estimated Annual GHG Emissions from Construction**

<b>Source</b>	<b>CO<sub>2</sub></b> (metric tons)	<b>CH<sub>4</sub></b> (metric tons)	<b>N<sub>2</sub>O</b> (metric tons)
Offroad Equipment	5,476	0.79	4.60
Worker Trips	2,115	0.11	0.10
Construction Trucks	10,997	0.20	4.65
<b>Total</b>	<b>18,588</b>	<b>1.10</b>	<b>9.35</b>
<b>Global Warming Potential</b>	<b>1</b>	<b>21</b>	<b>310</b>
<b>CO<sub>2</sub>-Equivalent Emissions</b>	<b>18,588</b>	<b>23</b>	<b>2,899</b>
<b>Total CO<sub>2</sub>-Equivalent Construction-related Emissions</b>	<b>19,602 metric tons</b>		
<b>Amortized Construction-related Emissions</b>	<b>653 metric tons</b>		

LADWP has reviewed the recent Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife* (November 30, 2015, Case No. 217763), (“*CBD v CDFG*”) as it relates to the evaluation of the impact associated with a project’s GHG emissions, and notes that the ruling does not mandate any particular methodology for analyzing GHG emissions, and does not apply to the Phase 9/10 Project EIR’s GHG emissions analysis because the EIR does not compare the project emissions to the Business as Usual (BAU) scenario. Because the GBUAPD does not have established greenhouse gas thresholds of significance, the EIR used the thresholds defined by SCAQMD and the statewide air resources agency, CARB. The Court in *CBD v CDFG* specifically stated that a lead agency may rely on “existing numerical thresholds of significance for greenhouse gas emissions.” (*Id.*, at 27.) Thus, the EIR looked to SCAQMD’s numeric threshold of 10,000 metric tons of CO<sub>2</sub> equivalent emissions per year (which includes construction emissions amortized over 30 years and added to operational GHG emissions), as well as CARB’s threshold of 7,000 metric tons per year for operational emissions. (DEIR, p. 4.2-16.)

Further, because the Phase 9/10 Project EIR has already been approved, the determination of how to evaluate greenhouse gases and climate change is governed by the law on supplemental or subsequent EIRs (Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15163). Greenhouse gases and climate change are not required to be analyzed under those standards unless the analysis constitutes “new information of substantial importance, which was not known and could not have been known at the time” the previous Supplemental EIR was approved (CEQA Guidelines Section 15162(a)(3)). Consistent with the statutory language, the courts have repeatedly held that new information that “was known” or “could have been known with the exercise of reasonable diligence” at the time of the EIR certification does not trigger the supplemental EIR standard. (*Citizens for Responsible Equitable Environmental*

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16.) Amortization over 30 years is conservative since the project life for Gravel Cover BACM is estimated at 50 years.

*Development v. City of San Diego* (2011) 196 Cal.App.4th 515, 532 (“*CREED II*”); *Concerned Dublin Citizens v. City of Dublin* (2013) 214 Cal.App.4th 1301 [court held that potential effects of GHGs were known and could have been addressed in conjunction with the approval of the EIR in 2002]; *A Local and Regional Monitor v. City of Los Angeles* (1993) 12 Cal.App.4th 1773, 1800–1803 (“*ALARM*”).)

Under CEQA standards, the Court’s opinion in *CBD v. CDFG* is not new information that requires analysis in a supplemental EIR or negative declaration. No subsequent environmental review of the project’s impacts on this issue is required under CEQA (CEQA Guidelines Section 15162 (a)).

### **3.8 HAZARDS AND HAZARDOUS MATERIALS**

**Final EIR Impact Summary.** LADWP would employ standard operating procedures for the routine transport, use, storage, handling, and disposal of hazardous materials related to the construction and operation of the DCMs. LADWP also prepares an annual update on the transport, use, storage, handling, and disposal of hazardous materials. Therefore, with adherence to the standard operations procedures for hazardous materials use, impacts related to release or accidental exposure to humans or the environment would be less than significant.

Water would be used during Project construction for dust control but water would not be used in volumes sufficient to cause standing water. During Project operation, water would be used to irrigate areas of Managed Vegetation and for Shallow Flood. Since the Projects would not increase water commitments, the overall area of standing water on the lakebed would not significantly increase. Creation of mosquito habitat by the creation of standing water would be managed as under existing conditions, impacts related to vectors would be less than significant.

There are no schools within ¼ mile of the Project area, and hazardous materials use would be limited to fuels for construction vehicles. Since these materials would be properly handled, the impact on the schools from hazardous materials would be less than significant.

There are no known hazardous materials sites on Owens Lake on the Cortese List. Therefore, the Project would have no impact related to hazardous waste sites.

The Project does not propose new tall structures and the Project area is not located sufficiently near either a private airstrip or public airport to pose a safety risk. Therefore, there would be no Project-related impacts on airport safety.

Internal Owens Lake roadways are not part of an emergency evacuation plan route and therefore construction and operation activities on the lake would have no impact on a designated emergency route. Gravel transport necessary for the Project would require gravel trucks to cross SR 136 (from the F.W. Aggregate or the LADWP Shale pit) (**Figure 3**) which would be coordinated with Caltrans. However, since Owens Lake is not



designated as an emergency staging area, the Project would have a less than significant impact on emergency access and evacuation plans.

The Project area is not typically subject to wildland fires and the Project site has only limited areas of vegetation. Permanent habitable structures do not exist and none are proposed for the Project site. The new areas of Gravel Cover would not alter the existing low risk of fire and areas of Shallow Flood would reduce the risk. Managed Vegetation areas would be irrigated. Therefore, the Project would have a less than significant impact related to wildland fires.

Overall, the Final EIR found that impacts related to hazardous materials would be less than significant.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources would increase the volume of fuel used for Project construction. However, with adherence to standard operations procedures for hazardous materials use, impacts related to release or accidental exposure to humans or the environment would be less than significant. Impacts related to hazards other than fuel use would be as described in the Final EIR. A six-day-per-week construction schedule and an increase in the volume of gravel delivered per day would not result in impacts related to hazards beyond those described in the Final EIR.

### 3.9 HYDROLOGY AND WATER QUALITY

**Final EIR Impact Summary.** With implementation of the required SWPPP, potential increases of sediment load in stormwater would not adversely affect surface water. The existing DCAs are operated under Board Order No. R6V-2006- 0036, Revised Waste Discharge Requirements (WDRs) for the Southern Zones Dust Mitigation Project. Implementation and operation of the Phase 9/10 Project would be done in conformance with the existing permit. Therefore, the impact on water quality during Project construction and operation would be less than significant.

The Project site is within a designated flood hazard area. However, the Project does not include habitable structures, and storm flows would continue toward the brine pool as under existing conditions. Due to the distance from the ocean and other bodies of water and the low relief of Owens Lake, the Project would have no impacts related to inundation by seiche, tsunami, or mudflow. Overall, the Final EIR found that the Project is water conserving and would not impact groundwater, a beneficial impact.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources would have no impact on the source of water for the Project, potential impacts on stormwater quality during construction, or flood hazards present at the Project site. Gravel from alternative sources would meet LADWP specifications and would not significantly increase the toxicity of the brine pool. Discharges associated with the Project would continue to be in compliance with applicable WDRs. Therefore, impacts related to water quality with expansion of the

list of potential gravel sources, clarification of the construction schedule, and an increase in the volume of gravel delivered per day would be less than significant.

### **3.10 LAND USE AND PLANNING**

**Final EIR Impact Summary.** Reductions in dust emissions under the Project would improve public health and safety, a public trust benefit. Water conservation, recreational amenities, and habitat enhancements achieved under the Project are also public trust benefits. Therefore, based on LADWP's analysis, the impact of the Phase 9/10 Project on land use and planning related to CSLC's policies would be less than significant. BLM is in the process of reviewing cultural resources on federally-owned Project land. Impacts to archaeological resources on federal lands may conflict with federal land use policies related to cultural resources. With adoption of the Avoidance Alternative, impacts on federal land use policies would be less than significant.

**Impact Assessment with Modifications to Project Description.** Modification of the project description to expand the list of potential gravel sources, and clarification of the construction schedule and volume of gravel delivered per day, would have no impact on CSLC or BLM policies beyond those described in the Final EIR. Impacts on land use and planning would be less than significant.

### **3.11 MINERAL RESOURCES**

**Final EIR Impact Summary.** The U.S. Borax lease on Owens Lake occupies the central portion of the lake, extending to the west. None of the Phase 9 DCAs overlap or are immediately adjacent to the lease, or to active mining operations. Active mining operations are located immediately northwest of Phase 10 DCA T10-3-L1. Implementation of dust control at T10-3-L1 would make approximately 149 acres of the approximately 16,000-acre lease unavailable for mining operations. Since this represents less than 1 percent of the total lease area and since active mining operations are not located within T10-3-L1, the impact on the U.S. Borax lease area would be less than significant.

The proposed Project would include the use of gravel, a locally-important mineral resource, but would not result in a substantial loss of availability of the resource. Since mineral resources would still be available, impacts on mining operations adjacent to Owens Lake would be less than significant.

**Impact Assessment with Modifications to Project Description.** Installation of Gravel Cover would require the use of mineral resources. With modification of the project description to expand the list of potential gravel sources, the volume of gravel would not be changed, only the source. The addition of the Panamint Mine as a gravel source would have no impact on the existing U.S. Borax lease on Owens Lake; the boundary issue with T10-3-L1 would be as described in the Final EIR. The impact on mineral resources from expansion of the list of potential gravel sources, and clarification of the construction schedule and volume of gravel delivered per day, would therefore be less than significant.

### 3.12 NOISE

**Final EIR Impact Summary.** During construction of the Project, noise would be generated from dozers, flatbed trucks, water trucks, and dump trucks at the DCAs and along the gravel truck haul routes. Noise would be noticeable to on-lake workers and potentially persons visiting the lake for recreation. The minimum distance of 1,000 feet between residents and the Project areas is generally considered sufficient distance to reduce noise generated from construction activities. Construction activity would not occur during 10:00 p.m. to 6:00 a.m. when there is greater potential for noise disturbance to residences. Therefore, given the distance from the Project site and the haul routes to sensitive residential receptors, the Final EIR found that the Project would not cause noise levels to exceed established thresholds and noise impacts would be less than significant.

**Impact Assessment with Modifications to Project Description.** Noise impacts related to construction equipment on the lake would be the same regardless of gravel source. Modification of the Project description to expand the list of potential gravel sources would increase truck trips on State highways; the noise impact would be similar to existing traffic on these designated travel routes. The impact on noise from modification of the Project description to expand the list of potential gravel sources, and clarify the construction schedule and volume of gravel delivered per day, would therefore be less than significant.

### 3.13 POPULATION AND HOUSING

**Final EIR Impact Summary.** Since the Project does not include construction of homes or businesses, it would not directly impact population growth in the Owens Lake area. However, construction of the Project would require workers to be in the area from 2015 to 2021. These workers may be LADWP staff or a mix of LADWP staff and contractors. Additional workers would be required after the initial construction to develop and maintain areas of Managed Vegetation. The Final EIR found that the number of workers over the construction period would have a less than significant impact on population growth.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources would have no impact on construction of homes or business, or population growth in the Owens Lake area. As described in the Final EIR, the number of workers over the construction period would have a less than significant impact on population growth. Modification of the Project description to clarify the construction schedule and volume of gravel delivered per day would have no impact on population or housing.

### 3.14 PUBLIC SERVICES

**Final EIR Impact Summary.** The Project area has only limited areas of vegetation and therefore limited fuel for fires; habitable structures do not exist and none are proposed for

the Project site. The new areas of Gravel Cover would not alter the existing low risk of fire and areas of Shallow Flooding would reduce the risk. Managed Vegetation areas would be irrigated. Therefore, the Project would have a less than significant impact related to provision of fire suppression services.

Habitable structures are not present on the Project site and none are proposed as part of the Project. The limited number of construction workers required to implement the Project would not generate substantial population growth or create the need for new or expanded public services. Therefore, the Final EIR found that there would be no Project-related impacts on police protection, schools, parks, or other public facilities.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, and to clarify the construction schedule and volume of gravel delivered per day, would have no impact on population growth, or new or expanded public services (police protection, schools, parks, or other public facilities). Project impacts on fire suppression services would be less than significant, regardless of gravel source.

### **3.15 RECREATION**

**Final EIR Impact Summary.** Habitable structures are not present on the Project site and none are proposed as part of the Project. The number of construction workers required to implement the Project would not generate substantial population growth or create the need for new or expanded parks. Therefore, the Project would have no impact on neighborhood or regional parks or other recreation facilities.

The Project would not generate population growth that would require the construction or expansion of recreational facilities. Limited public access opportunities (e.g., boardwalks, trails, access berms and visitor overlooks) included in the Project would enhance the recreational amenities of Owens Lake, a beneficial impact.

The Owens lakebed is openly accessible to the public for recreation. However, during construction and maintenance, access may be temporarily limited if determined by LADWP to be necessary for public and/or worker safety. After construction is complete, public access would be increased (expansion of on-lake roadway system) and recreational opportunities would be enhanced. Therefore, the Final EIR found that impacts on recreation during Project construction and maintenance would be less than significant.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, and to clarify the construction schedule and volume of gravel delivered per day, would not alter the recreational amenities proposed as part of the Project or further impact public access to the lake during construction and operation of the Project. As shown on **Figure A-1**, a portion of the haul route to the Panamint Mine travels through Death Valley National Park. As noted by Park rules and regulations, commercial trucking is permitted on

California Highway 190 through the park (NPS, 2016). Therefore, impacts on recreation would be less than significant, as described in the Final EIR.

### 3.16 TRANSPORTATION AND TRAFFIC

**Final EIR Impact Summary.** Construction of the Phase 9/10 Project would increase traffic for the transport of gravel, delivery of seed and plant material, delivery of pipelines and other infrastructure. Additionally, local roadways would be used for the movement of construction equipment and personnel to the lake. Construction equipment would be mobilized to the staging areas and then would remain on the lake; plant material and infrastructure deliveries would be limited. Therefore, the primary impact on local roadways would be for gravel transport.

The analysis presented in the Final EIR concluded that construction of the Project would require approximately 200 truck crossings of SR 136 per day during installation of Gravel Cover. Since SR 136 and SR 190 operate well below capacity and at LOS A, the addition of approximately 20 trucks on SR 136 or SR 190 per hour would not substantially degrade the level of service on these roadways and Project-related impacts on traffic would be less than significant. However, since these crossings are not signalized and would be on-going for approximately 1.5 to 2 years, impacts related to traffic hazards would be potentially significant. Additionally, degradation of the road surface on SR 136 at these crossing could result from traffic related to construction. With implementation of mitigation measures (Traffic Work Safety Plan and repair of roadway damage at the SR 136 crossings), impacts would be reduced to a less than significant level.

**Impact Assessment with Modifications to Project Description.** Of the gravel sources that may be used for the Phase 9/10 Project, the furthest from Owens Lake is the Panamint Mine, approximately 59 miles from LADWP's Sulfate Facility and approximately 70 miles from the furthest Gravel Cover DCA. Based on a worst-case assessment that all gravel is obtained from the this source, and an assumed six-day-per-week work schedule, the Project would generate up to 140 one way gravel haul truck trips per day.

Peak Hour and Annual Average Daily Traffic Volumes along the Potential Haul Routes. Existing peak hour and annual average daily traffic (AADT) volumes for the roadways along the potential gravel haul routes are summarized in **Table A-4**. The highway capacity as determined by the Highway Capacity Manual 2000 for a two-lane highway is 1,600 passenger cars per hour (pc/h) for each direction of travel; the capacity of a two lane-highway is 3,200 pc/h for both directions of travel combined.

**Table A-4  
Existing Peak Hour and Average Annual Daily Traffic Volumes**

<b>Roadway</b>	<b>Intersection</b>	<b>Existing Peak Hour Traffic Volume (vehicles per hour)</b>	<b>Existing AADT (vehicles per day)</b>
SR 136	Junction US 395	100	540
	Junction SR 190	90	430
SR 190	Olancho, Junction with US 395	50	240
	Junction SR 136 Northwest	120	540

Source: Caltrans, 2013a

Existing Levels of Service Along the Haul Routes. Level of Service (LOS) is a qualitative measure describing operational conditions within traffic stream, or their perception by motorists and/or passengers which is calculated based on a number of design and operating criteria, such as lane width, roadside obstacles, trucks and busses, curvature, grades, etc. (Transportation Research Board, 2000). LOS A reflects free-flow conditions; at LOS E a road is operating at capacity and is congested. Typically, LOS C or LOS D represents acceptable flow conditions. Existing LOS for potentially affect State Highways are summarized in **Table A-5**. Potentially affected roadway segments operate from LOS A through LOS B.

Project Impact for on Roadways Local to Owens Lake. Caltrans guidelines for traffic impact studies were reviewed (Caltrans, 2002a). For roadways operating at LOS A and B, Caltrans recommends consideration of a Traffic Impact Study when more than 100 peak hour trips are assigned to a State Highway facility (Caltrans, 2002a). If gravel is obtained from the Panamint Mine, the Phase 9/10 Project could impact the State highways as listed in **Table A-5**. Since all potentially affected State Highway segments currently operated at LOS B or better, and since Project-related trips would consist of up to 14 trucks per hour, the Project would not substantially degrade the LOS of these roadways and a more detailed Traffic Impact Study is not warranted. Further, Caltrans has reviewed the proposed gravel sources and haul routes and on December 31, 2015 issued an encroachment permit to LADWP for the use of state highways that identifies the use of both CA-190 and CA-136. Thus, Caltrans has authorized LADWP to transport gravel from the Panamint Mine via the route identified by LADWP herein.

The addition of Project-related truck trips during construction would add to the traffic on the affected segments. However, the impacts are temporary and at most would consist of approximately 14 trucks per hour. Compared to passenger cars, heavy trucks have an additional traffic impact, which varies by vehicle type, proportion of trucks in the traffic stream, flow rates and terrain. However, impacts to area roadways would be temporary (limited to approximately 11 to 18 months), and a mix of sources may be used which

would further reduce traffic impacts on any one roadway segment. Therefore, the impact of expanding the list of potential gravel sources, expanding the construction schedule to six days per week and increasing the volume of gravel transported per day, would be less than significant.

**Table A-5**  
**Existing Level of Service for Potentially Affected State Highways**

Potential Gravel Haul Route	Roadways	Existing LOS for Affected Segments
Panamint Mine	SR 136	<ul style="list-style-type: none"> <li>• <b>A</b> Sulfate Road to SR 190</li> </ul>
	SR 190	<ul style="list-style-type: none"> <li>• <b>A</b> SR 136 junction to west boundary of Death Valley National Park</li> <li>• <b>B</b> West boundary of Death Valley National Park to Borax Mill Road east end</li> </ul>

Sources: Caltrans, 2013b, 2014

### 3.17 UTILITIES AND SERVICE SYSTEMS

**Final EIR Impact Summary.** Habitable structures are not present on the Project sites and none are proposed. The limited number of construction workers required to implement and maintain the DCAs would not generate substantial population growth or create the need for new or expanded water or wastewater service facilities. Therefore, the impact of construction and operation of the Project on water and wastewater facilities would be less than significant.

The existing DCAs do not connect to any off-site storm drain facilities. Project DCAs would be surrounded by raised roadways. Since stormflows would continue to drain in the direction of brine pool, as under existing conditions, the Final EIR found that impacts on stormwater facilities would be less than significant.

**Impact Assessment with Modifications to Project Description.** Modification of the Project description to expand the list of potential gravel sources, and clarify the construction schedule and volume of gravel delivered per day, would have no impact on water, wastewater, stormdrain or other utility services. Impacts on utilities and service systems would be as described in the Final EIR.

### 4.0 MITIGATION MONITORING AND REPORTING PROGRAM

No modifications to the MMRP are proposed as part of Addendum No. 1 to the Owens Lake Dust Mitigation Program – Phase 9/10 Project Final EIR. The MMRP was adopted by the LADWP Board of Water and Power Commissioners on June 2, 2015.

## **5.0 DETERMINATION THAT AN ADDENDUM IS APPROPRIATE FOR THIS PROJECT**

CEQA Guidelines §15164(a) allows a lead agency to prepare an Addendum to a Final EIR if all of the following conditions outlined in CEQA Guidelines §15162 (in *italics* below) are met.

- *Substantial changes with respect to the circumstances under which the project is undertaken do not require major revisions to the previous Final EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.*

Since adoption of the 2015 Final EIR for the Phase 9/10 Project, an additional source of gravel has been identified, the construction schedule has been modified to six days per week, and the estimated volume of gravel delivered per day has been increased. Based on the environmental assessment presented in this Addendum, new significant environmental effects would not result from this modification of the Project description. There would be no substantial increase in the severity of previously identified significant effects with modification of the Project description.

- *No new information becomes available which shows new significant effects, significant effects substantially more severe than previously discussed, or additional or modified mitigation measures.*

There would be no new significant effects or substantial increase in the severity of previously identified significant effects with modification of the Project description to expand the list of gravel sources, clarify the construction schedule as six days per week and revise the estimated volume of gravel delivered per day. No new or revised mitigation measures would be required to reduce the environmental impacts of the Project. The MMRP adopted for the Owens Lake Dust Mitigation Program – Phase 9/10 Project would be implemented.

- *Only minor technical changes or additions are necessary to make the Final EIR under consideration adequate under CEQA.*

Expansion of the list of potential gravel sources, clarification of the construction schedule as six days per week and revision of the estimated volume of gravel delivered per day are the only additions necessary to make the Phase 9/10 Project Final EIR adequate under CEQA.

- *The changes to the Final EIR made by the Addendum do not raise important new issues about the significant effects on the environment.*

Changes to the Final EIR described in this Addendum are an expanded list of potential gravel sources, clarification of the construction schedule as six days per week and revision of the estimated volume of gravel delivered per day. No new areas of Owens Lake would be disturbed by these modifications to the Project Description and installation and operation of BACM on the lake would be as described in the Final EIR. Therefore, this Addendum to the 2015 Phase 9/10



Final EIR does not raise important new issues about the significance effects on the environment.

Based on review of the 2015 Phase 9/10 Project Final EIR and the environmental assessment presented in this Addendum, LADWP has determined not to prepare a subsequent EIR or negative declaration for this Project. LADWP has determined that no new significant environmental effects would result from modification of the Project description. There would be no substantial increase in the severity of previously identified significant effects with modification of the project description to expand the list of potential gravel sources, clarify the construction schedule as six days per week and revise the estimated volume of gravel delivered per day. Therefore, LADWP has determined that an addendum is the appropriate CEQA document for the modification of the Owens Lake Dust Mitigation Program – Phase 9/10 Project to expand the list of gravel sources, clarify the construction schedule as six days per week and revise the estimated volume of gravel delivered per day.

## **6.0 REFERENCES**

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