Appendix A

Notice of Preparation and Initial Environmental Study

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

NOTICE OF PUBLIC MEETING

Date: July 16, 2014

To: Agencies, Organizations, and Interested Parties

Subject: Notice of Preparation of an Environmental Impact Report and Notice of Public Meeting for the Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects

The City of Los Angeles Department of Water and Power (LADWP) is conducting environmental review of the proposed 2011 Supplemental Control Requirements Determination (SCRD) and 2012 SCRD projects of the Owens Lake Dust Mitigation Program (OLDMP) on Owens Lake in order to comply with regulatory orders for the control of emissions of particulate matter from the lakebed. 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), and other regulatory approvals.

While LADWP has prepared a Remedial Action Plan (RAP) for the 2011 SCRD project and is reviewing design concepts for the 2012 SCRD project, the City has filed, (1) an action in the Los Angeles County Superior Court under Health and Safety Code Section 42316, subdivision (b), and the Code of Civil Procedure Section 1094.5, challenging the decision of the California Air Resources Board (CARB) sustaining the 2011 SCRD and the GBUAPCD's authority to issue the 2011 SCRD under Health and Safety Code section 42316, subdivision (a), and (2) an appeal with CARB concerning the 2012 SCRD pursuant to those same statues. Therefore, LADWP is conducting environmental review of the *tentative* 2011 SCRD and 2012 SCRD projects, but is concurrently continuing to pursue legal relief from the requirement to construct the projects. The environmental documents being prepared for the project should not be interpreted as an acknowledgement of or admission regarding the propriety of the 2011 or 2012 SCRDs.

111 N. Hope Street, Los Angeles, California 90012-2607 *Mailing address:* Box 51111, Los Angeles, CA 90051-5700
Telephone: (213) 367-4211 www.LADWP.com

Under the 2011 SCRD project, best available control measures (BACM) would be installed on 13 parcels (Duck Pond-L1, C2-L1, T10-1-L1, T17-2-L1, T21-L2, T21-L1, T32-1-L1, T35-2-L1, T37-1-L1, T37-2-L1, T37-2-L2, T37-2-L3, and T37-2-L4) totaling 1,828 acres of Owens Lake. BACM would include Gravel Cover, Shallow Flooding, and Managed Vegetation. Additionally, the project would include transition of 1,156 acres of existing Shallow Flooding in dust control area (DCA) T18S to approximately 906 acres of Gravel Cover and 250 acres of Shallow Flooding. Under the 2012 SCRD project, Brine Shallow Flooding and Gravel Cover would be installed in four additional DCAs (Duck Pond-L2, T10-3-L1, T21-L3 and T21-L4), totally 485 acres.

As the Lead Agency under the California Environmental Quality Act (CEQA), LADWP has determined that an Environmental Impact Report (EIR) will be prepared for the Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures projects.

Project Location: The 110 square-mile Owens Lakebed 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. Owens Lakebed is bounded by State Route (SR) 136 to the north and east, SR 190 to the south, and U.S. Highway (U.S.) 395 to the west. Project areas are located as noted on the enclosed figure.

Potential Environmental Effects: Potential environmental impacts that may occur as a result of the proposed project include impacts to Aesthetics, Air Quality, Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Land Use and Water Supplies. An analysis of these potential environmental impacts and other potential impacts that could be mitigated to a less-than-significant level is provided in an Initial Study Checklist, which is attached or can be reviewed at the following website: www.ladwp.com/envnotices. Copies of the document are also available for review at:

- LADWP office in Bishop - 300 Mandich Street, Bishop, California 93514
- Lone Pine Library - 127 Bush Street, Lone Pine, California 93545
- Bishop Library - 210 Academy Avenue, Bishop, California 93514
- Inyo County Library - Big Pine Branch, 500 South Main Street, Big Pine, California, 93513
- Inyo County Library - Independence Branch, 168 North Edwards Street, Independence, California 93526
- Cerro Coso Community College Library - 3000 College Heights Blvd., Ridgecrest, California 93555-9571

Notice of Public Meeting:

A public meeting will be held to discuss the scope and content of the environmental information to be included in the EIR. Agency representatives and members of the public interested in the project are welcome to attend. The meeting will be:

July 29, 2014
4:00 – 5:00 p.m.
LADWP Sulfate Facility
Training/Conference Room
111 Sulfate Road
Keeler, California 93530
[1 mile south of Keeler, west side of State Highway 136]

Public Review Period: LADWP invites the views of your agency regarding the scope and content of the environmental information to be included in the EIR, relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR when considering your permit or other discretionary approval your agency may issue for the proposed project.

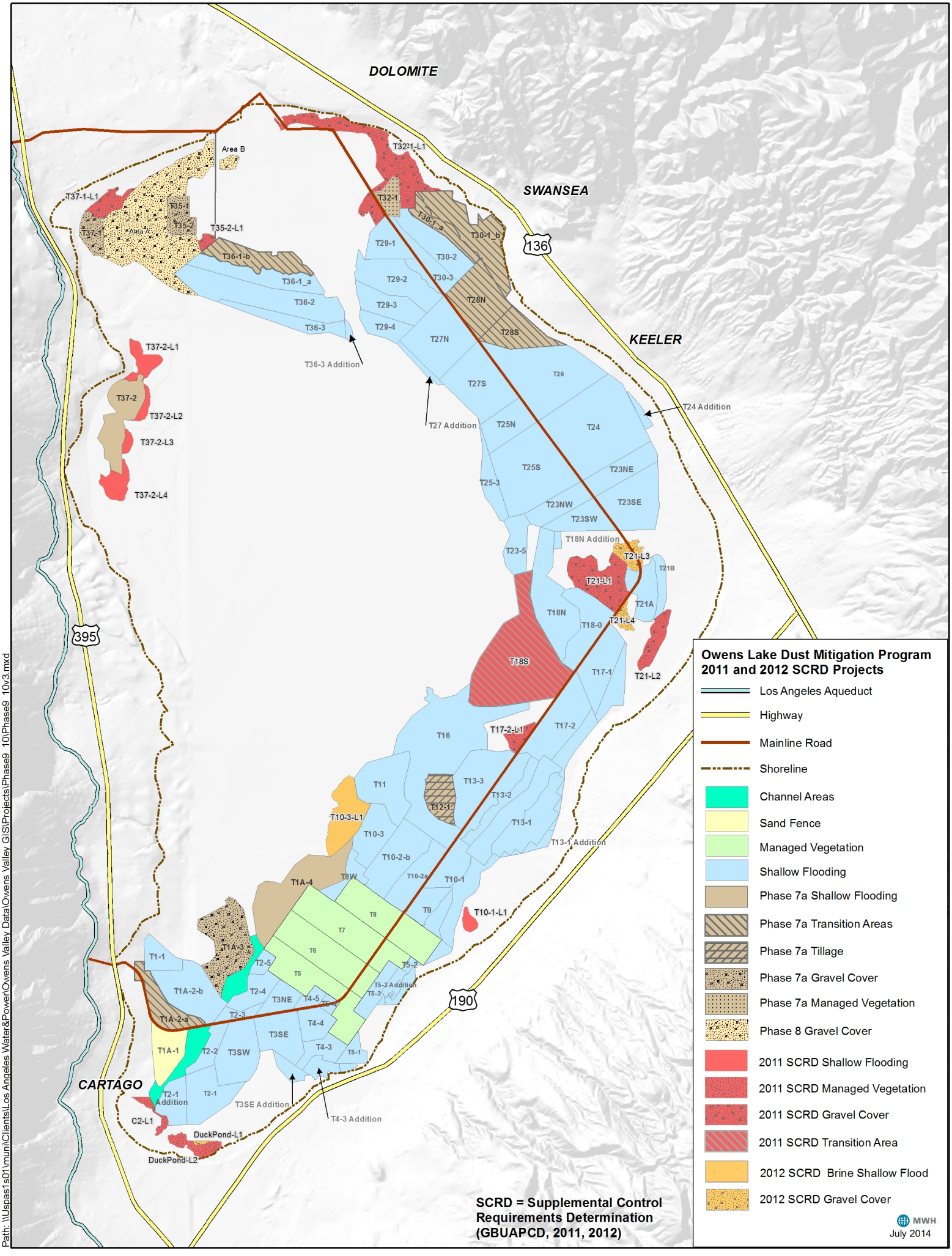
Due to the time limits mandated by State Law, your response must be received by 5:00 p.m. August 18, 2014. Please indicate a contact person in your response and submit your response via mail, fax, or electronic mail to:

Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, California 90012
Attention: Mr. David Porter
David.Porter2@LADWP.com
Fax (213) 367-4710

If you require additional information, please contact Mr. David Porter at (213) 367-0706.

Sincerely,

Charles C. Holloway
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power


DOLOMITE
SWANSEA
KEELER
CARTAGO
136
395
190
Area B
Area A
T37-1-L1
T37-1
T35-1
T35-2
T35-2-L1
T36-1-b
T36-1_a
T36-2
T36-3
T36-3 Addition
T32-1-L1
T32-1
T30-1_a
T30-1_b
T29-1
T30-2
T29-2
T30-3
T29-3
T28N
T29-4
T28S
T27N
T27S
T27 Addition
T26
T24 Addition
T25N
T24
T25S
T23NE
T25-3
T23NW
T23SE
T23SW
T18N Addition
T23-5
T21-L3
T21B
T21-L1
T21A
T18N
T21-L4
T18-0
T18S
T17-1
T21-L2
T17-2-L1
T17-2
T16
T11
T13-3
T13-2
T12-1
T13-1
T13-1 Addition
T10-3-L1
T10-3
T10-2-b
T10-2a
T10-1
T1A-4
T8W
T9
T10-1-L1
T8
T7
T6
T5
T5-2
T5-3 Addition
T5-3
T1A-3
T2-5
T1-1
T1A-2-b
T2-4
T3NE
T4-5
T5-4
T1A-2-a
T2-3
T4-4
T3SE
T1A-1
T2-2
T3SW
T4-3
T5-1
T2-1 Addition
T2-1
T3SE Addition
T4-3 Addition
C2-L1
DuckPond-L1
DuckPond-L2
T37-2-L1
T37-2
T37-2-L2
T37-2-L3
T37-2-L4
Owens Lake Dust Mitigation Program
2011 and 2012 SCRD Projects
Los Angeles Aqueduct
Highway
Mainline Road
Shoreline
Channel Areas
Sand Fence
Managed Vegetation
Shallow Flooding
Phase 7a Shallow Flooding
Phase 7a Transition Areas
Phase 7a Tillage
Phase 7a Gravel Cover
Phase 7a Managed Vegetation
Phase 8 Gravel Cover
2011 SCRD Shallow Flooding
2011 SCRD Managed Vegetation
2011 SCRD Gravel Cover
2011 SCRD Transition Area
2012 SCRD Brine Shallow Flood
2012 SCRD Gravel Cover
SCRD = Supplemental Control Requirements Determination (GBUAPCD, 2011, 2012)
MWH
July 2014
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Initial Study

for the

Owens Lake
2011 SCRD and 2012 SCRD
Dust Control Measures Projects

Los Angeles Department of Water and Power

Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, CA 90012

July 2014

CEQA Initial Study

Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects

July 2014

General Manager
Marcie Edwards

Director of Water Operations
Martin L. Adams

Manager of Owens Lake Regulatory Affairs and Long-Term Planning
Milad Taghavi

Director of Environmental Affairs
Mark J. Sedlacek

Manager of Environmental Planning and Assessment
Charles C. Holloway

Prepared by:

Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Technical Assistance Provided by:

MWH Americas, Inc.
300 North Lake Avenue, Suite 400
Pasadena, California 91101

Los Angeles Department of Water and Power

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Section 1
Project and Agency Information

1.1 PROJECT TITLE AND LEAD AGENCY

Project Title:	Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects
Lead Agency Name:	Los Angeles Department of Water & Power
Lead Agency Address:	111 North Hope Street, Room 1044 Los Angeles, California 90012
Contact Person:	Mr. Charles Holloway
Contact Phone Number:	(213) 367-0285
Project Sponsor:	Same as Lead Agency

1.2 PROJECT BACKGROUND AND OBJECTIVES

1.2.1 Background

The City of Los Angeles Department of Water and Power (LADWP) is currently implementing the Owens Lake Dust Mitigation Program (OLDMP) on Owens Lake in order to reduce particulate matter (PM_{10}) emissions. LADWP constructs and operates dust control measures (DCMs) on the lake in compliance with Orders from 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.

LADWP has prepared a Remedial Action Plan (RAP; LADWP, 2013a) to address the 2011 Supplemental Control Requirements Determination (SCRD) dust control areas identified by GBUAPCD (GBUAPCD, 2011). The SCRD requirement and procedure are set forth in District Governing Board Order 080128-01 (January 28, 2008) contained in the 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (2008 SIP; GBUAPCD, 2008a).

While LADWP has prepared the RAP, the City has filed, (1) an action in the Los Angeles County Superior Court under Health and Safety Code Section 42316, subdivision (b), and the Code of Civil Procedure Section 1094.5, challenging the decision of the California Air Resources Board (CARB) sustaining the 2011 SCRD and the GBUAPCD's authority to issue the 2011 SCRD under Health and Safety Code section 42316, subdivision (a), and (2) an appeal with CARB concerning the 2012 SCRD pursuant to those same statues. Therefore, LADWP is conducting environmental review of the *tentative* 2011 SCRD and 2012 SCRD projects, but is concurrently continuing to pursue legal relief from the requirement to construct the projects as

presently contemplated. This Initial Study should not be interpreted as an acknowledgement of or admission regarding the propriety of the 2011 or 2012 SCRDs.

The 2011 SCRD project would be implemented on 13 new dust control areas (DCAs) totaling 2.86 square miles of Owens Lake. Best available control measures (BACM) proposed to be installed are: 2.072 square miles of Gravel Cover, 0.237 square miles of Managed Vegetation and 0.547 square miles of Shallow Flood. To conserve water use for the OLDMP, the project also includes the proposed transition of existing Shallow Flood DCA T18S (1.81 square miles) to approximately 1.42 square miles of Gravel Cover and 0.39 square miles of Shallow Flood.

LADWP is also developing design concepts for the 2012 SCRD dust control areas identified by GBUAPCD (GBUAPCD, 2012). The 2012 SCRD is based on data for the period of July 1, 2010 through June 30, 2011 and includes four DCAs totaling 0.76 square miles of Owens Lake. BACM in these areas would include Brine Shallow Flood and Gravel Cover.

LADWP has prepared this Initial Study (IS) to address the impacts of construction and operation of the Owens Lake 2011 SCRD and 2012 SCRD DCM projects. The IS has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., and the State CEQA Guidelines, Title 14 California Code of Regulations (CCR) Section 15000 et seq. The IS serves to identify the site-specific impacts, evaluate their potential significance, and determine the appropriate document needed to comply with CEQA. For this project, LADWP has determined, based on the information reviewed and contained herein, that the proposed projects could potentially have a significant environmental impact. Based on this IS, an Environmental Impact Report (EIR) is the appropriate CEQA document for evaluating the potential environmental impacts of the Owens Lake 2011 SCRD and 2012 SCRD projects. After environmental review, if the 2011 SCRD and 2012 SCRD projects are adopted, the projects may be constructed at the same time, constructed separately, or one or both of the projects may not be implemented pending further legal decisions.

1.2.2 Project Objectives

The objective of the 2011 SCRD and 2012 SCRD projects is to implement dust control measures on Owens Lake to reduce emissions in accordance with applicable laws without increasing water commitments while, to the extent feasible, maintaining existing habitat values, maintaining aesthetics values, providing safe limited public access, preserving cultural resources, and utilizing existing infrastructure.

1.2.2.1 Previous Environmental Documentation

To analyze the environmental effects of the Owens Valley PM_{10} 2008 SIP (GBUAPCD, 2008a), the GBUAPCD prepared and certified a Final Subsequent Environmental Impact Report (2008 SIP FSEIR) (GBUAPCD, 2008b) on February 1, 2008 and authorized the implementation of 15.1 square miles of DCMs within the Owens Lake Planning Area. Since publication of the 2008 SIP FSEIR, LADWP has certified environmental documents for the Owens Lake Revised Moat and Row DCMs (LADWP, 2009a), the Phase 8 DCMs (LADWP, 2010c), and the Phase 7a DCMs (LADWP, 2013b). The Phase 8 project has been constructed; construction of the Phase 7a project is ongoing as of 2014. Implementation of the 2011 SCRD and 2012 SCRD projects

would expand the area of Owens Lake with dust control. Portions of the 2011 SCRD project area (portions of T21-L2, T10-1-L1, T32-1-L1, and T37-1-L1) and a portion of the 2012 SCRD project area (portion of T21-L4) were part of the 1.9-square mile study area considered in the 2008 SIP FSEIR. However, implementation of a dust control project on the majority of the 2011 SCRD and 2012 SCRD project areas was not previously reviewed under CEQA.

1.3 PROJECT LOCATION AND ENVIRONMENTAL SETTING

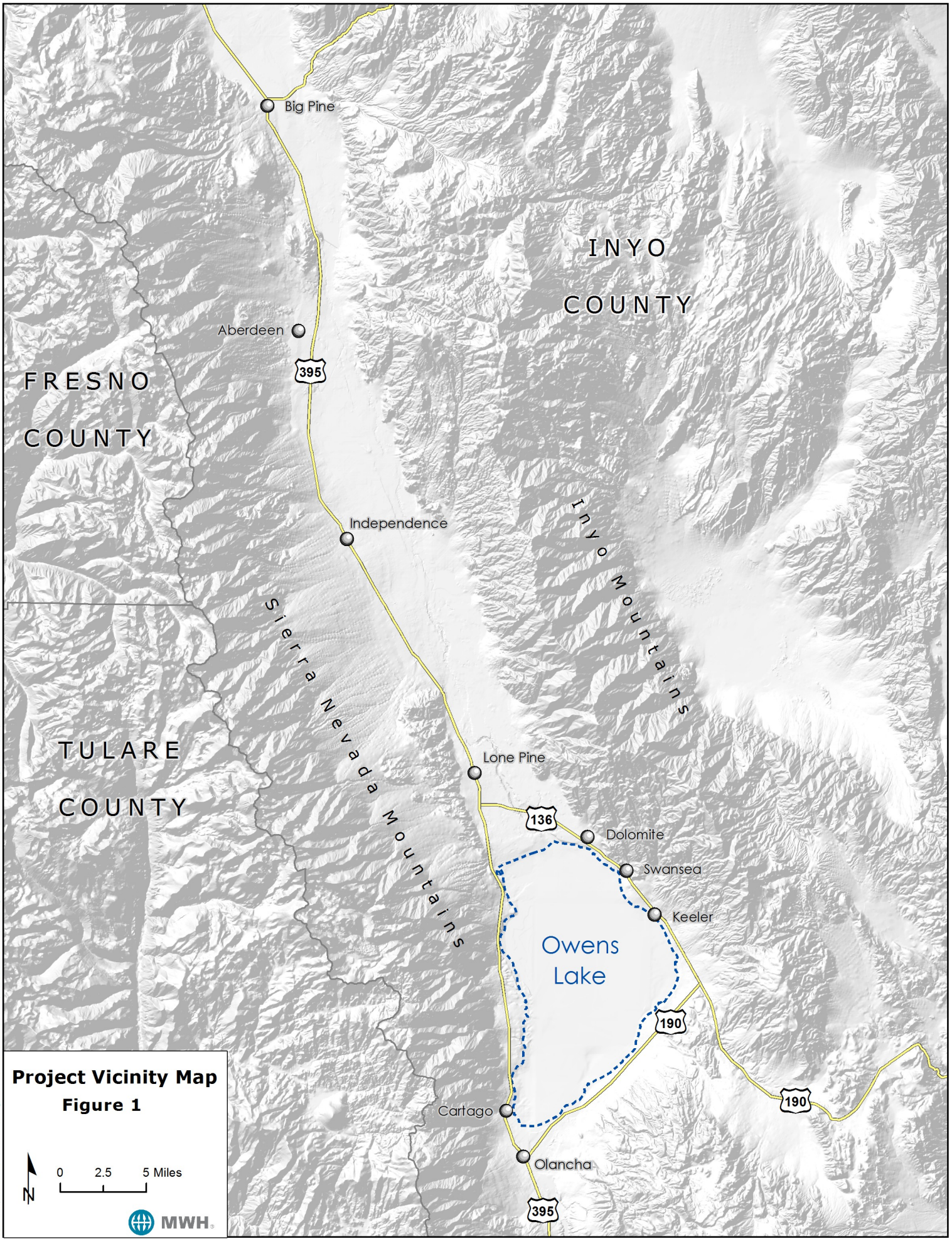
The Owens Valley is bounded by the eastern Sierra Nevada to the west and the Inyo Mountains to the east, with the Coso Range rising to the south. The 110 square-mile dry Owens Lake is located in Inyo County, California, approximately 5 miles south of the community of Lone Pine and approximately 61 miles south of the city of Bishop (**Figure 1**). Other nearby communities include Dolomite to the northeast, Boulder Creek to the northwest, Keeler to the east, and Cartago and Olancha to the south. Owens Lake is bounded by State Route (SR) 136 to the north and east, SR 190 to the south, and U.S. Highway (U.S.) 395 to the west. The 2011 SCRD and 2012 SCRD project areas are located as noted in **Table 1** and **Figure 2**.

Owens Lake is characterized by vast areas of unvegetated desert playa, limited areas of vegetation, mining operations, the brine pool (which fluctuates in size) and the existing system of dust control (bermed areas of shallow flooding, managed vegetation and gravel, and the internal roadway network). The 2011 SCRD and 2012 SCRD project areas are primarily unvegetated barren playa; the T18 transition area is an existing bermed area with shallow flooding.

Table 1
Locations of 2011 SCRD and 2012 SCRD Dust Control Areas

DCA	Size (acres)	USGS 7.5 Min Quadrangle	Distance to Nearest Community (miles)
2011 SCRD			
Duck Pond-L1	101	Olancha and Vermillion Canyon	1.3 miles to Olancha
C2-L1	50	Olancha	0.3 miles to Cartago
T10-1-L1	41	Vermillion Canyon	6.2 miles to Cartago
T17-2-L1	76	Owens Lake	5.8 miles to Keeler
T21-L2	138	Keeler	3.8 miles to Keeler
T21-L1	368	Owens Lake and Keeler	3.0 miles to Keeler
T37-2-L4	120	Bartlett	5.4 miles to Boulder Creek, 8.0 miles to Lone Pine
T37-2-L3	31	Bartlett	4.9 miles to Boulder Creek, 7.6 miles to Lone Pine
T37-2-L2	42	Bartlett	4.4 miles to Boulder Creek, 7.0 miles to Lone Pine
T37-2-L1	116	Bartlett	3.7 miles to Boulder Creek, 6.3 miles to Lone Pine
T35-2-L1	30	Dolomite	3.59 miles to Dolomite
T37-1-L1	113	Lone Pine	1.5 miles to Boulder Creek, 4.0 miles to Lone Pine
T32-1-L1	600	Dolomite	0.68 miles to Dolomite
2012 SCRD			
Duck Pond-L2	10	Olancha and Vermillion Canyon	1.3 miles to Olancha
T10-3-L1	315	Owens Lake and Vermillion Canyon	5.1 miles to Cartago
T21-L3	104	Owens Lake and Keeler	2.8 miles to Keeler
T21-L4	56	Owens Lake and Keeler	3.7 miles to Keeler

DCA – dust control area; USGS – United States Geological Survey


Big Pine
INYO
COUNTY
Aberdeen
395
FRESNO
COUNTY
Independence
Inyo Mountains
Sierra Nevada Mountains
TULARE
COUNTY
Lone Pine
136
Dolomite
Swansea
Keeler
Owens
Lake
190
190
Cartago
Olancha
395
Project Vicinity Map
Figure 1
0
2.5
5 Miles
N
MWH
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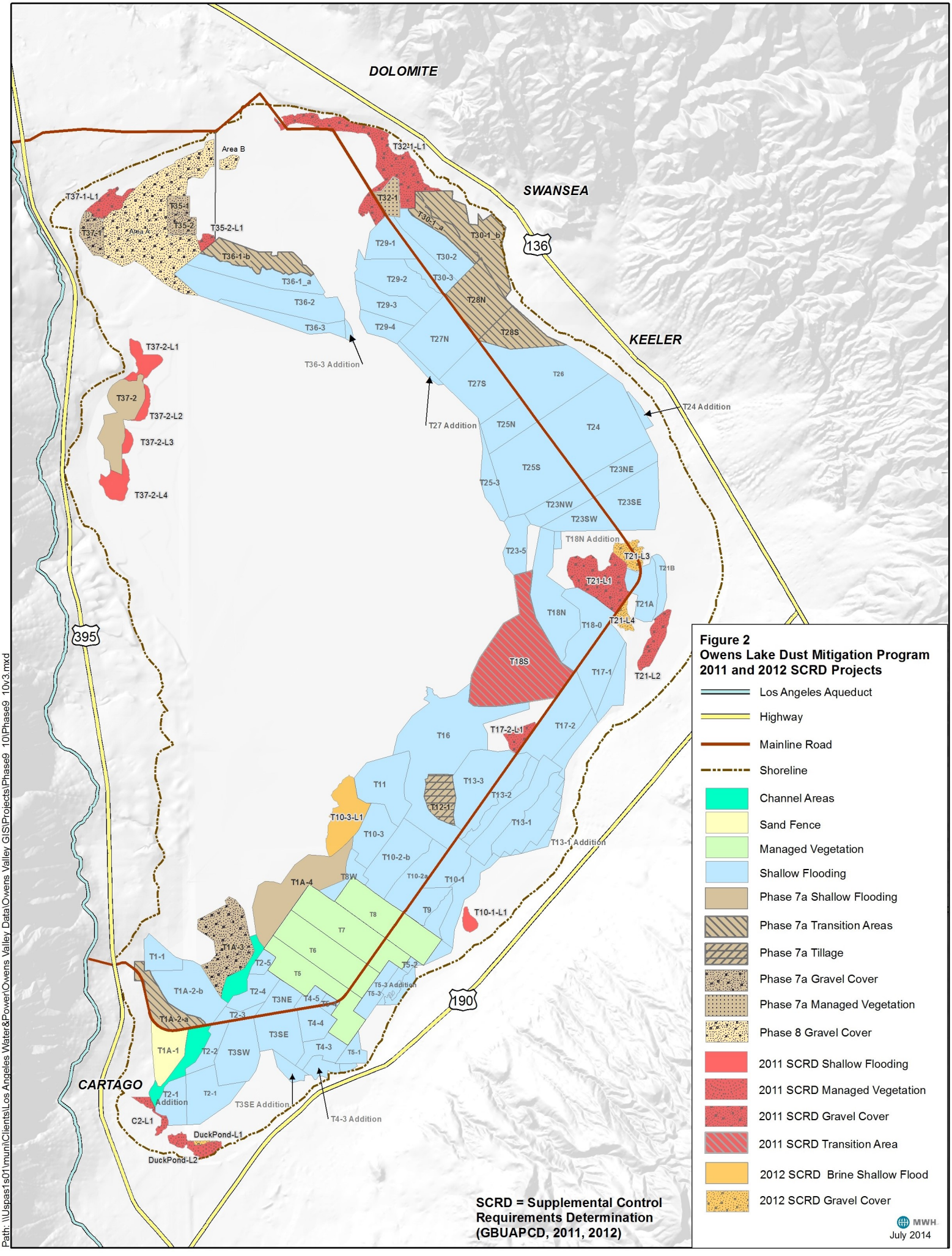

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1.4 PROJECT DESCRIPTION

The 2011 SCRD project consists of a total of 1,828 acres of new DCAs and 1,156 acres of transitioned dust control for a total area of 2,984 acres. The 2.86 square miles of new DCMs would be implemented on 13 separate DCAs. The 2012 SCRD project consists of four new DCAs totaling 485 acres. **Table 2** notes the area of each DCA as well as the estimated total area of construction disturbance, with an assumed 25 ft buffer around each new DCA, and the type of BACM proposed. Installation of BACM would require land leveling, berm creation, gravel application, seeding and planting, installation of surface and/or subsurface irrigation pipelines as well as excavation for pond creation.

Water demand related to implementation of BACM on the new DCAs would be balanced with water conservation measures at an existing DCA, T18S. The T18S DCA was previously disturbed for the installation of Shallow Flood in an earlier phase of the OLDMP. Construction in this area would occur within the existing berm surrounding the DCA.

Table 2
2011 SCRD and 2012 SCRD Best Available Control Measures

DCA	Area (square miles)	Area (acres)	Total Estimated Area of Construction Disturbance (acres)	BACM
2011 SCRD				
Duck Pond-L1	0.16	101	109	Managed Vegetation
C2-L1	0.08	50	57	Managed Vegetation
T10-1-L1	0.06	41	44	Shallow Flood
T17-2-L1	0.12	76	81	Gravel Cover
T21-L2	0.22	138	146	Gravel Cover
T21-L1	0.58	368	379	Gravel Cover
T37-2-L4	0.19	120	127	Shallow Flood
T37-2-L3	0.05	31	34	Shallow Flood
T37-2-L2	0.06	42	47	Shallow Flood
T37-2-L1	0.18	116	124	Shallow Flood
T35-2-L1	0.05	30	33	Gravel Cover
T37-1-L1	0.18	113	120	Gravel Cover
T32-1-L1	0.94	600	632	Gravel Cover
2011 SCRD Totals	**2.86**	**1,828**	**1,934**	

DCA	Area (square miles)	Area (acres)	Total Estimated Area of Construction Disturbance (acres)	BACM
2012 SCRD				
Duck Pond-L2	0.02	10	12	Gravel Cover
T10-3-L1	0.49	315	326	Brine Shallow Flood
T21-L3	0.16	104	109	Gravel Cover
T21-L4	0.09	56	59	Gravel Cover
2012 SCRD Totals	**0.76**	**485**	**506**	

DCA – dust control area
BACM – best available control measure

1.4.1 Shallow Flood

1.4.1.1 Shallow Flood Description

This DCM consists of releasing fresh and/or recycled water into a DCA and allowing it to spread, wet the surface, and thereby suppress windborne dust during the dust season (October 1st to June 30th). In order to meet the 99 percent dust control efficiency standard, generally 75 percent of the surface must be wet or have saturated soil. The coverage requirement for the 99 percent dust control areas can be reduced progressively during the spring shoulder season (May 16th to June 30th); 70 percent areal wetness cover from May 16th to May 31st; 65 percent areal wetness cover from June 1st to June 15th; and 60 percent areal wetness cover from June 15th through June 30th. The fall shoulder season is October 1st to October 15th; full levels of dust control are not required until October 16th. The performance requirements for Shallow Flood BACM are set forth in detail in the 2008 SIP (GBUAPCD, 2008a).

Areas of Shallow Flood would have water applied through sprinklers along lateral pipes served by submains (4- to 24-inch diameter buried pipelines) from the main line. Applied water would flow down–slope and pond. The area would be maintained such that applied water spreads out, ponding or saturating at least 75 percent of the land surface. Shallow Flood would result in shallow-ponds (1 to 6 inches deep), deeper ponds (1 to 2 feet deep), saturated soil surfaces and unsaturated areas. Submain pipes supplying water to the DCAs would be high density polyethylene (HDPE). The network includes a modified whipline array (either buried or above grade HDPE), spaced approximately 80 feet apart. The whipline array includes sprinkler heads spaced approximately 60 to 80 feet apart. Laterals up to 4,000 feet in length would have risers with drains at the end. Lateral valves would be placed at each intersection with the mainline. Flush lines would be incorporated for lateral and whipline drainage. The flush system would enable: water recycling to another DCA, emptying of the piping system to prevent damage from freezing, and sediment removal. Small pump stations (two variable speed 50 HP pumps) may be

located at the lowest point to drain the system. Based on individual soil conditions in each DCA, portions of the irrigation system may be installed above ground.

Shallow Flood in T18S would be similar to the existing Shallow Flood DCAs on the lake. Depending on topography and water level fluctuations, Shallow Flood may include ponded water as well as islands. The up-gradient edges of ponds are typically relatively shallow, with some areas adjacent to down-slope containment berms being a few feet deep. The specific design for Shallow Flood in T18S is currently ongoing with a focus on maintaining existing habitat value for Owens Lake wildlife.

Brine Shallow Flood. The GBUAPCD Governing Board approved Brine Shallow Flood as BACM in Board Order 130916-01 (September 16, 2013). The Order notes that the Air Pollution Control Officer will develop a Brine Shallow Flood BACM compliance methodology with input from LADWP.

When applied to the lakebed, Brine concentrates into a stable crust that would be expected to prevent dust emissions. A Brine method for dust control would include extraction of natural salts from the lakebed, production of brine by dissolving these minerals in water, and pumping of the solution (liquor) to DCAs that have been prepared for application. An initial 5-month investigation of this method is proposed to include application of 1.1 feet of brine to achieve a 1.5-inch-thick crust. Additional brine may be applied subsequently to maintain crust thickness. Site preparation will include site leveling and berming of 30 to 40 acre flat areas. To prevent seepage of the brine, the soils beneath and the berms around the application site would be sealed. Sealing would be accomplished in clay-dominated soils by disturbing and mixing the surface soils when wet. Perimeter seals would be created by vertically trenching into layers of clay and vigorous mixing.

Turnout Facilities. Water to the Shallow Flood DCAs would be distributed via area turnouts. Turnouts consist of above grade piping, pressure reducing valves (PRV), control valves (CV), magnetic flow meters (or flow elements, FE), isolation valves, combination air-vacuum release valves (CARV), pressure indicating transmitters (PIT), filtering system control valve filters, electric equipment, and monitoring and automatic control instrumentation. The turnouts are typically constructed on raised earthen pads adjacent to the DCAs. The turnouts include mechanical equipment and electrical equipment on concrete pads. New turnouts or expansions to existing turnouts may be required for expansion of the DCMs. The turnouts would be connected to the zonal mainline that is a continuous loop connecting to the Los Angeles Aqueduct (LAA) at the north and south ends of the OLDMP area.

Water enters a Shallow Flood area through PRVs, located at the turnouts. The turnouts distribute freshwater to the DCAs via area Shallow Flooding submains. The PRVs at the turnouts function to lower the zonal mainline pressure to the submain operating pressure for the shallow flood submains. The PRVs at the laterals function to control and further lower the Shallow Flooding submain pressure to the lateral operating maximum pressure.

The PRVs at the turnouts are hydraulically controlled valves. These valves operate by using pilot water (supplied by the freshwater from the submains) to control the valves. The freshwater from the submains contains large quantities of sediments. To prevent the PRVs from clogging, the

pilot water is diverted through a separate pilot water filtration system. Tailwater and drainwater pump stations collect and recirculate flow within a given Shallow Flood area to optimize water use within the irrigated zone and minimize loss of water offsite.

1.4.1.2 Shallow Flood Construction

Shallow Flood construction activities would include:

- Installation of new turnouts, as applicable
- Land leveling
- Installation of berms
- Pipe and electrical cable excavation
- Placement of irrigation pipes and sprinklers

To the maximum extent feasible, earthwork in each area would be balanced onsite. As suitable, onsite material would be used to build berms and turnout earthen pads. Excess soil from one DCA may be relocated to other areas of the lake for reuse. In some cases, suitable material may be disked and spread to reduce moisture content before placement. Sand bedding, base course and riprap would be imported to the DCAs. It is anticipated that this material would be obtained from local gravel production operations such as the LADWP State Route 136 Shale borrow pit (LADWP Shale borrow pit) and the Federal White Aggregate (F.W. Aggregate) Dolomite mine. Final gravel source selection would be made by the Construction Contractor.

Land leveling would be performed based on existing topography to achieve 75 percent surface cover of water and in consideration of excavation of suitable material for berm and turnout pad construction. Grading of Shallow Flood areas would be required for construction of perimeter berms and maintenance roads. Based on soil conditions in individual DCAs, the irrigation system may be installed above ground, which would reduce required earthwork. It is anticipated that berm heights would vary from 3 to 5 feet or less and the turnout earthen pads may range up to 5 to 8 feet in height to protect facilities from localized flooding. Over excavation would be done underneath proposed earthen berm alignments to remove any unsuitable material. Geotextile would then be placed directly on the existing surface to create a firm base. The earthen berm would be constructed over the geotextile fabric (HDPE, minimum of 40 mils thick). Earthen berm side slopes would have a 3:1 slope and be armored with a 4-inch thick layer of up to 2-inch-diameter gravel.

1.4.2 Managed Vegetation

1.4.2.1 Managed Vegetation Description

Vegetation on the playa reduces sand motion and soil erosion. Aboveground cover acts as a wind break, lowering the velocity at the playa surface. Under the 2011 SCRD RAP, Managed Vegetation is proposed for up to 101 acres of Duck Pond-L1 and up to 50 acres of C2-L1. Managed Vegetation DCAs may include areas that are shrub dominated and other areas that are predominantly meadow.

Saltgrass (*Distichlis spicata*) has been cultivated and maintained as a vegetation dust control measure on existing DCAs T5 through T8, located in the southeastern portion of the lake. Additional acreage of Managed Vegetation in a farm-like monoculture is not proposed. A revised plant species list for Owens Lake BACM was developed in 2010 and has been approved by GBUAPCD. The plant species on this list meet the locally-adapted native criterion specified by the 2008 SIP. In addition to saltgrass, 39 species have been proposed to increase the habitat diversity of the Managed Vegetation areas and increase the diversity and amount of seed produced on the playa for use in future projects. The final species mix would depend on the availability of planting material, and suitability of species to soil and hydrologic conditions. The initial cover may be achieved by fast-growing species, but after some time, the stand would probably change and diversify, partly from planted material, and partly from volunteer plants established from windblown seed.

Seed would be obtained from commercial sources, and additional seed of most species would be collected. Typically, seeds would be collected from locally adapted native seed sources on and adjacent to Owens Lake. Seed of some herbaceous species may be multiplied by planting in managed areas and then harvested. Once collected and cleaned, seed would be tested for germination, dried and stored. Before planting, some seed may require special treatment to break dormancy. If the full complement of desired species is not available initially, the area may be over-seeded or interplanted with additional species in the future. While seeding is preferred, some species may also be transplanted to accelerate establishment of vegetative cover. The finished habitat would consist of a variety of plants native to the Owens Lake area.

The goal would be to establish a compliant vegetative cover as quickly as possible. Vegetative cover is assessed each fall, and compliance is determined by comparing cover levels with criteria contained in the revised BACM definition. These new criteria allow for more variability in soil conditions and plant growth while requiring an overall average vegetation cover of 37 percent.

1.4.2.2 Managed Vegetation Construction

Irrigation systems would be installed and may include sprinklers, bubblers or drip irrigation. For areas with sprinklers or bubblers, irrigation piping would be buried to avoid damage from traffic, animals, temperature fluctuations, and UV radiation. Laterals (HDPE) would convey flow to an array of either buried or above-grade HDPE whiplines spaced approximately every 45 feet. Sprinkler heads or bubblers would be located approximately every 45 feet along each whipline. For Duck Pond L-1, a new water supply pipeline would be required to connect the DCA to existing supply pipelines in T2. Similar to Shallow Flood, a flush system would be installed as part of the Managed Vegetation piping.

Some irrigation systems (i.e., drip irrigation) require filtration of water; filters would be located at the turnout or in the field. Liquid fertilizer would periodically be blended into irrigation water at relatively low rates that have been shown to accelerate growth and increase salinity tolerance (and therefore plant growth and survival) of several native species studied on Owens Lake. Fertilization is anticipated to be required twice per year. No new permanent fertilizer stations are proposed. Concrete pads (with containment for the injection point) may be constructed in Duck Pond-L1 and/or C2-L1 for use by portable fertilizer delivery tanks. Periodic fertilizer delivery would be by flatbed or pickup truck.

Broad, raised ridges would be formed to provide a drained area within which plants can grow. Without this feature, saline shallow groundwater can easily invade the root zone, especially during and after storms, and kill plants. The ridges would be laid out such that they gently traverse topographic contours, allowing surface water to drain slowly downhill (but avoid water erosion that might result from steeper gradients) along the direction of the broad ridges. Closed depressions that would otherwise prevent surface drainage would be opened by grading. If necessary, fertilizer to promote early growth may be applied and incorporated into the soil. The amounts of fertilizer applied to native plant stands are typically low relative to what is used for agricultural production, but the ability of plants to tolerate drought and salinity, and to rapidly expand to protect the soil, is greatly enhanced with fertilization.

Initial reclamation (reduction of salt concentration in the surface soil by irrigation) would be completed before planting. This may require several irrigation events over approximately 45 days. Once monitored soil salinity levels have declined to acceptable levels, the land would be allowed to dry sufficiently until it can again bear equipment traffic. Temporary above grade pipelines on existing berms would be used to convey brine from reclamation to existing high salinity ponds.

Seeding would be done with a range drill seeder (wheeled seed bin that tows behind a tractor) or similar implement capable of seeding a diverse mix of seeds of varied sizes and shapes. Seed is dispensed from the bottom of the box and shallowly planted by discs that also break up surface soil, providing good seed-soil contact needed for germination and emergence. Other methods may include a pull type broadcast seeder with cultipacker or hand seeder (belly grinder).

1.4.3 Gravel Cover

1.4.3.1 Gravel Cover Description

Gravel Cover BACM includes a 2-inch-thick layer of coarse gravel to reduce PM_{10} emissions by: (a) preventing the formation of efflorescent evaporite salt crusts at the surface, because the large pore spaces between the gravel particles disrupt the capillary movement of saline water to the surface where it can evaporate and deposit salts; and (b) creating a surface that has a high threshold wind velocity so that direct movement of the large gravel particles is prevented and the finer particles of the underlying lakebed soils are protected.

The term “gravel” includes clasts from both fluvial and alluvial sources and crushed stone. The gravel would be screened to greater than ½-inch in diameter, 2-inch diameter maximum. Gravel application is estimated at approximately:

- T17-2-L1– 30,700 tons distributed over 76 acres
- T21-L2 – 55,800 tons distributed over 138 acres
- T21-L1 – 148,500 tons distributed over 368 acres
- T35-2-L1 – 12,200 tons distributed over 30 acres
- T37-1-L1 – 45,500 tons distributed over 113 acres
- T32-1-L1– 242,000 tons distributed over 600 acres

- T18S – 365,400 tons distributed over 906 acres
- 2012 SCRD DCAs – up to an additional 4,000 tons

Additional gravel would be used for berms and slope stabilization. A total of approximately 995,000 tons of gravel would be used for Gravel Cover DCAs and road surfaces.

Gravel Sources. It is anticipated that gravel would be obtained from local gravel production operations such as the F.W. Aggregate Dolomite mine or the LADWP Shale borrow pit. The LADWP Shale borrow pit is located just west of the Keeler Fan gravel site – a site previously considered as a gravel source and referenced in the Memorandum of Agreement between LADWP and the GBUAPCD (1998 MOA). The LADWP Shale borrow pit is located east of SR 136, approximately 1.5 miles southeast of Keeler, and less than 2 miles from the lakebed. The LADWP Shale borrow pit is located on public lands managed by the U.S. Bureau of Land Management (BLM) and operated per the requirements of the Surface Mining and Reclamation Act (SMARA). Shale is a fine-grained sedimentary rock consisting of compacted and hardened clay, silt or mud. The LADWP Shale borrow pit is currently permitted for 40 acres of development.

The F.W. Aggregate Dolomite mine is a privately owned commercial aggregate facility located in Dolomite, California, approximately 0.75 miles southeast of Swansea. The access point for the mine is directly off SR 136, between Swansea and Keeler. The Dolomite mine is situated on both privately owned lands and public lands managed by the BLM. Three subareas of the mine (Durability, North Pole, and Translucent) total approximately 480 acres and are able to produce up to 50 million tons; the site is permitted up to the year 2057 (T. Lopes, pers. comm., June 25, 2010). Rock at the F.W. Aggregate site is obtained from a dolomitic limestone source (mountain face), which is blasted and crushed to supply primarily white decorative rock. The existing 0.14 square miles of Gravel Cover on Corridor 1 (which separates Phase 8 Areas A and B) and the 2.03 square mile Phase 8 area are covered with limestone from the Dolomite mine.

Gravel Effectiveness. The effectiveness of Gravel Cover is summarized from the 2008 SIP (GBUAPCD, 2008a). According to GBUAPCD, gravel blankets (also known as Gravel Cover) are effective at controlling dust emissions on essentially any type of soil surface. A gravel layer forms a non-erodible surface when the size of the gravel is large enough that the wind cannot move the surface. If the gravel surface does not move, it protects finer particles from being emitted from the surface. Gravel and rock coverings have been used successfully to prevent wind erosion from mine tailings in Arizona (Chow and Ono, 1992). In 2013, GBUAPCD approved a Reduced Thickness Gravel BACM – 2 inches of gravel with geotextile fabric underlay (GBUAPCD, 2013).

Permeable Geotextile Fabric. Gravel Cover would be placed over a nonwoven geotextile fabric (anticipated to be approximately 2.3 millimeter [90 mils] thick to prevent gravel from settling into lakebed sediments and thereby losing effectiveness in controlling dust emissions). Geotextile membranes are artificial fabrics that have a variety of uses including: filtration/drainage, ground stabilization, structural waterproofing, land containment, as well as weed and root control. For this use, the permanent geotextile would be permeable to allow draining. Nonwoven geotextiles are pervious sheets of polyester or polypropylene composed of

fibers held together by needle punching, spun bonding, thermal bonding or resin bonding. The geotextile is chemically inert and generally not affected by acids and alkalis that may be present in the soils. Geotextiles to be used for the project are non-hazardous articles as defined by the Federal Hazard Communication Standard CFR 1910.1299. Per GBUAPCD (2013), geotextile fabric would be Class I woven or nonwoven geotextile fabric meeting the minimum specifications set forth in the National Standard Materials Specification "Material Specification 592—Geotextile" (National Engineering Handbook, Chapter 3, Part 642), or equivalent (USDA, 2005).

Access Roadways for Gravel Areas. Gravel Cover DCAs would have raised roadbeds for vehicle access and for wind protection to limit sand inundation of the gravel. The roadbeds would be earthen, approximately 3 feet high, 16 feet wide and armored with gravel. Vehicle bypass pads (turnoff or turnaround pads) (approximately 20 feet by 40 feet in area) would facilitate vehicle travel in two directions. Geotextile fabric may be placed directly on the existing surface to create a firm base. The earthen raised roadway would be constructed over the geotextile fabric. Earthen side slopes facing water or adjacent to potential runoff flows would be armored with rip rap. Earthen slopes not directly in contact with water and travel surfaces would be covered with road base. Installation of access roadways would include earthwork inside of the boundary of the DCAs; suitable earth material would be scraped, used to construct the raised roadway, and then the area would be smoothed to an even slope. An approximately 4-inch thick layer of base course (crushed rock less than 1 inch) from a local gravel source would then be placed on the travel surface. Gravel Cover for the access roadways shall be consistent with the type, size, and color of the Gravel Cover placed on the adjoining lakebed areas.

Drainage of Gravel Areas. Culverts would be constructed through the raised roadbeds at low points within the Gravel Cover areas to allow drainage for collected water.

1.4.3.2 Gravel Cover Construction

Gravel Cover installation includes:

- Development of gravel stockpile area
- Installation of access roadways
- Gravel conveyance
- Geotextile and Gravel installation

Gravel Stockpile. Gravel stockpile areas, covered with aggregate, would be developed within the boundaries of each Gravel Cover DCA to prepare the sites for gravel deliveries. Dump trucks would deposit gravel and a dozer would be used to pile the aggregate. Assuming 25 tons per truck, approximately 2,500 tons per day would be transported to the Gravel Cover DCAs. Gravel transport would continue throughout the construction period concurrent with geotextile fabric and gravel installation. From the stockpile locations, low ground pressure (LGP) vehicles would be used for travel directly on the playa.

Gravel Conveyance. If gravel is obtained from the LADWP Shale borrow pit, trucks would cross SR 136 to Sulfate Road to Main Line Road and then to the Gravel Cover DCAs (**Figure 3**).

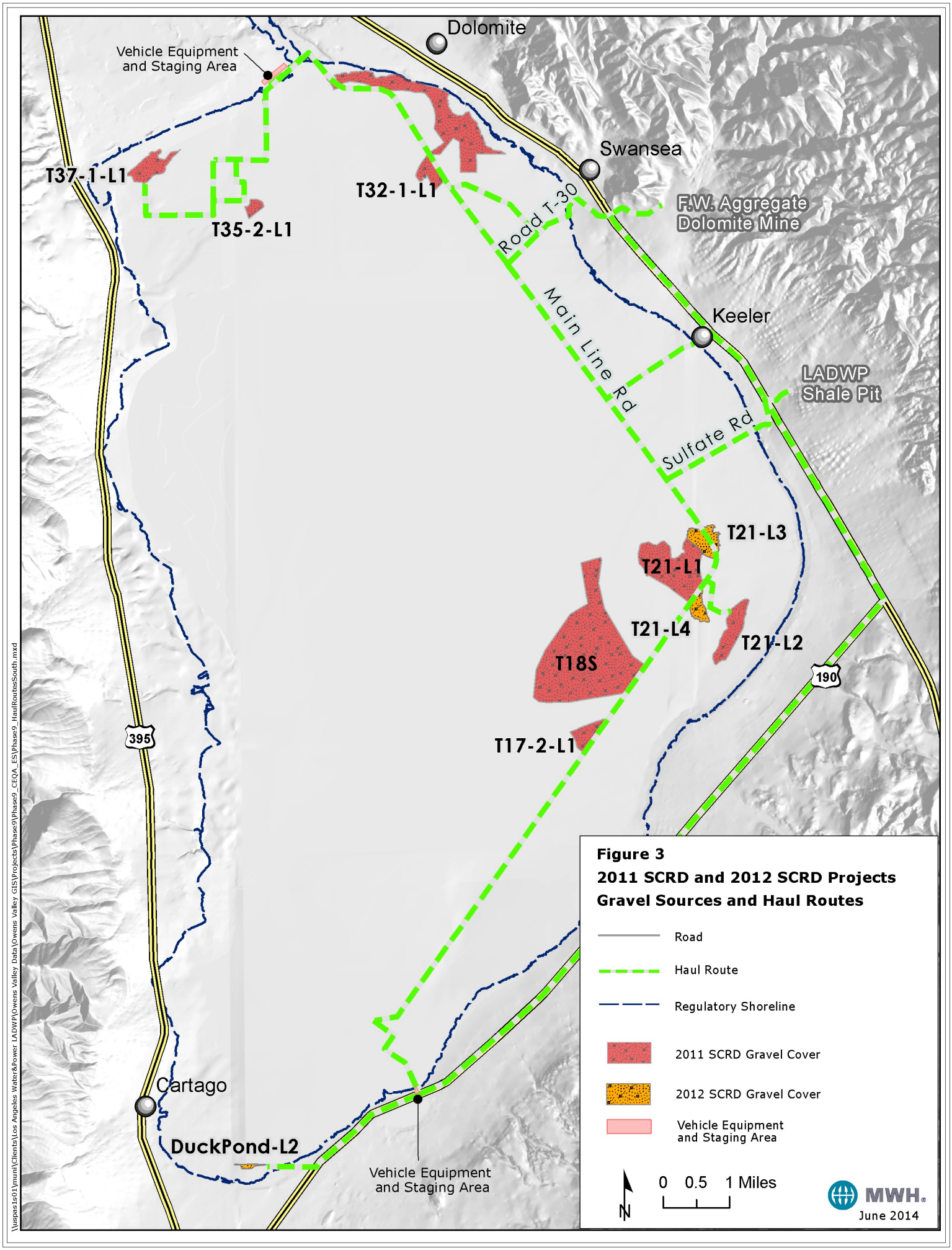
If gravel is obtained from F.W. Aggregate Dolomite mine, trucks would cross SR 136 to the T30 road to Main Line Road and then to the Gravel Cover DCAs. Gravel source(s) would be determined by the Construction Contractor. Stockpile areas would be covered with aggregate to prepare the sites for gravel deliveries during the initial months of construction. Dump trucks would deposit gravel and a dozer would be used to pile the aggregate. Gravel transport would continue throughout the construction period concurrent with geotextile fabric and gravel installation. From the stockpile location, low ground pressure (LGP) vehicles would be used for travel directly on the playa. Depending on site conditions, conveyors may be used internally within individual DCAs or to move gravel from the stockpiles.

Geotextile Installation. Before installation of the geotextile membrane, land leveling may be required in areas where obstructions would damage the fabric. A pipe or I-beam dragged behind a tractor, box drag, scraper, or similar process would be used to remove localized high and low spots and prepare the surface; there would be no import or export of soils related to this site preparation. Fabric would be delivered to the site on spools carried by flatbed trucks. Small areas of fabric would be rolled out and staked to secure them before gravel installation.

The two vehicle and equipment staging areas previously used (for Phases 7 and 8) would be used for the 2011 SCRD and 2012 SCRD projects (**Figure 3**). These previously disturbed sites are located near the intersection of Main Line Road and Corridor 1 at the north end of the lake (20 acre site) and at the southern end of the lake adjacent to Dirty Socks Access Road (2.7 acre site). In addition to office trailers and equipment and vehicle storage, these areas would have fueling stations for gas and diesel. Fuel trucks would be used to refuel construction equipment (including the LGP gravel trucks) and the long haul gravel trucks; no vehicle fuels or oils would be stored in the gravel stockpile areas. Additionally, refueling may occur at the existing LADWP Sulfate facility. Once the geotextile is staked, dozers and ground crews would spread gravel to the required 2-inch thickness.

The onsite construction workforce would consist of equipment operators, truck drivers, laborers, supervisory personnel, support personnel, and construction management personnel.

Concrete Block Mat. Concrete block mats may be used alternatively in areas designated for Gravel Cover. To form the mat, individual concrete blocks are tied together with a high strength polypropylene geogrid or cable systems. The concrete block mat currently under review consists of 5000 PSI concrete blocks (6.5 inches x 6.5 inches x 2.25 inches) with 1.5-inch spacing between the blocks to give the mat flexibility and to allow contouring to the land. The bottom layer is permeable non-woven fabric. With a minimum of 80 percent of the area covered directly by the concrete block, along with 100 percent coverage by the underlying fabric, a high efficiency for dust control is expected. The concrete block mat can be fabricated on or near the site of use, rolled, and installed in widths up to 16 feet. Since the mat is flexible, little or no ground leveling or clearing would be required in un-vegetated playa areas. Once installed, it is possible to walk and drive on the mat.


Dolomite
Vehicle Equipment and Staging Area
Swansea
T37-1-L1
T32-1-L1
T35-2-L1
Road T-30
F.W. Aggregate Dolomite Mine
Main Line Rd
Keeler
LADWP Shale Pit
Sulfate Rd
T21-L3
T21-L1
T21-L4
T21-L2
T18S
190
395
T17-2-L1
Cartago
DuckPond-L2
Vehicle Equipment and Staging Area
Figure 3
2011 SCRD and 2012 SCRD Projects
Gravel Sources and Haul Routes
Road
Haul Route
Regulatory Shoreline
2011 SCRD Gravel Cover
2012 SCRD Gravel Cover
Vehicle Equipment and Staging Area
0 0.5 1 Miles
N
MWH
June 2014
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1.4.4 Alternative Dust Control Methods

Alternative dust control methods not currently approved as BACM include engineered roughness and Tillage. These methods will be described and analyzed as alternatives in EIR. GBUAPCD approval of the method(s) as BACM would be required prior to implementation on Owens Lake.

1.4.4.1 Engineered Roughness

Engineered Roughness Elements are defined as the physical roughening of the land surface, usually to prevent wind and water erosion. It aims to alter air flow and trap moving particles. Increasing the surface roughness reduces the wind velocity at the surface, so that windblown soil particles like sand are trapped. From an aerodynamic perspective, the soil type and method of roughness generation is immaterial as long as the requisite roughness is achieved.

1.4.4.2 Tillage

Tillage, a type of engineered surface roughening, is commonly used to control wind erosion in agricultural and arid regions around the world. It works by roughening the soil surface, rendering it more resistant to wind erosion. Surface roughness reduces the wind velocity so that windblown soil particles like sand are trapped. The maintenance of natural soil aggregation (clods) through appropriate tillage methods also helps to form a stable surface resistant to wind erosion by binding together fine-grained soil particles that might be prone to wind transport.

Tillage was previously applied on the playa of Owens Lake for temporary dust control in some Shallow Flood construction areas (T21-B, T18, T17-1_a, T17-2_a, T16, T10-2_b, and T10-3) between October 1, 2009 and April 1, 2010. This Tillage reduced the frequency and intensity of observed emissions. Tillage has also been implemented in T12-1 since January 2012; T12-1 is an area with relatively heavy (rich in clay and silt) soils.

Tillage may be accomplished using conventionally agricultural implements such as plows and disks, but also by other means such as excavators. Wet soils at Owens Lake have been tilled with low-ground-pressure bulldozers, as well as excavators working on mats. Drier soils can be tilled with a wider variety of tools and tractors. Tractors pulling plows or harrows would roughen the surface creating serpentine swaths of tilled ridges (to provide greater control for all wind directions, and to avoid a gridded, regimented appearance) with spacing between swaths allowing for irrigation installation and maintenance, access to monitoring equipment, and re-entry for re-tillage. Tillage swath directions would generally be perpendicular to the prevailing wind. Earthwork in each area will be balanced onsite.

Over time, the surface roughness achieved by Tillage would begin to be altered by weathering and dust control efficiency may decline. The amount of fine material (sand and smaller particles) on the surface may change due to 1) disaggregation of soil, 2) crusting and re-aggregation of fine material, 3) deposition of transported fine material, and 4) erosion and export of material. When monitoring indicates that these processes have reduced the dust control efficiency achieved by Tillage, the area would normally be re-tilled. The goal of re-tilling would be to restore erosion-resistant levels of roughness and aggregation.

Tillage can be augmented with irrigation. After initial tilling, areas can be irrigated to increase soil moisture and dust control efficiency. Irrigation piping (submains and whiplines, flush lines connected to flush mains) can be buried with sprinkler risers positioned throughout the DCA or a temporary above ground sprinkler system, or other portable means to provide irrigation, may be used when necessary to rewet the soil.

Irrigation may also be needed for temporary dust control or to reconsolidate soils prior to re-tilling. If irrigation is needed, it can occur through sub-irrigation, portable sprinklers and supply lines, or through existing irrigation infrastructure.

1.4.5 Transition Area T18S

New Shallow Flood and Managed Vegetation in the 502 acres of Duck Pond L-1, C2-L1, T10-1-L1 and T37-2 would require on the order of 1,570 acre-feet per year (afy) of water. The Board of Water and Power Commissioners Resolution 010063 (Owens Lake Water Use Policy) sets the maximum water use for the OLDMP at 95,000 afy. To provide water for the 2011 SCRD project, T18S would be transitioned from Shallow Flood to a mix of Gravel Cover and Shallow Flood. The predicted water use related to the 2011 SCRD and 2012 SCRD projects will be discussed in the EIR.

1.4.6 Construction Dust Control Plan

A Dust Control Plan would be developed and implemented during construction of facilities. The plan would specifically address measures to be taken when removing T18S from service since this DCA may not be in full compliance during construction. The following best management practices (BMPs) would be implemented to minimize dust generation during construction:

- Use of water trucks to spray roadway travel surfaces on existing and temporary roads used for construction
- Installation of temporary sand fences strategically placed within the DCA being constructed
- Placement of a gravel surface on interim staging areas within the DCA used by the contractor
- Termination of work activities during high wind events

Sand fences may be temporarily installed during construction in order to limit the movement of sand from construction zones to adjacent areas of the lakebed. Sand fences were previously used during construction for Phase 7 of the OLDMP. The sand fence would be black fabric with 50 percent porosity that is UV stabilized (Model SF-50 from U.S. Fence, or equivalent) and supported by steel T-posts (8 feet in height and driven into the ground to a depth of 4 feet, resulting in 4 feet of height for exposed post). Since the fence would not exceed 60 inches in height, wire or monofilament line across the top would not be necessary to reduce perching by predators (corvids).

Temporary sand fencing would be maintained and then removed at the completion of construction activities. Sand fences that deteriorate and could potentially create litter on the lakebed would be repaired or removed.

1.4.7 Other Features for DCAS

1.4.7.1 Drainage System

Drainage systems would be installed beneath Managed Vegetation fields and/or on the margins of Shallow Flood areas. New drainage laterals to be installed would be perforated plastic pipes (heavy duty corrugated polyethylene) in covered trenches placed 5 to 9 feet below the ground surface. The drainage system would control soil saturation to:

- maintain drained root zone under irrigated vegetation
- maintain drained pipe zone (prevent pipe floatation)
- capture water along the DCA perimeters to reduce seepage off-site

Drainage return flows can be recirculated into Managed Vegetation and Shallow Flood areas. The existing drainwater system functions in this manner. A drainwater mainline (brineline) runs parallel to the water supply mainline throughout the dust mitigation area from T2 to T25. The drainwater mainline collects and delivers recirculated water to the Managed Vegetation and Shallow Flood areas. Management of drainwater would ultimately depend on salt management needs for dust control, since drainwater tends to be saltier than water from the Los Angeles Aqueduct. Improvements (pipelines, submain pump stations) to the brine management may be required.

1.4.7.2 Power Supply and Controls

Power for pumps for water conveyance to and from DCAs is supplied by an existing underground 3-phase, 4.8 KV grid. The 4.8 KV grid would be connected to new turnouts, if any, with directed buried cables. The turnouts have their own distribution system for power and controls. Transformers at the turnouts convert the power to lower voltages to supply various equipment, lighting, and control instrumentation. The 3-phase, 480 volt alternating current (VAC) is typically used for pump stations. Directed buried cables would be used to supply power from the turnouts to the pump stations. New high voltage cable may be installed to power pumps.

1.4.8 Overall Construction Sequence

Construction activities would include:

- Earthwork, berm construction and water distribution systems for Managed Vegetation Areas
- Planting and seeding in Managed Vegetation Areas
- Earthwork, berm construction and water distribution systems for Shallow Flood Areas
- Turnout and pump station construction, as necessary
- Gravel Cover installation

1.4.9 Operations and Maintenance

1.4.9.1 Gravel Cover

Once the Gravel Cover has been applied to the playa, limited maintenance would be required to preserve the gravel blanket. The gravel would be visually monitored for sand and dust accumulation, evidence of washouts, or inundation. If any of these conditions are observed over a substantial area, additional gravel would be transported to the playa. It is assumed that no maintenance would be needed in the initial years of operation. Subsequently, small areas may require replenishment and later, larger areas may require replacement. It is anticipated that the total volume of gravel may be replaced, at most, once every 50 years.

1.4.9.2 Shallow Flood

Surface saturation in Shallow Flood areas would continue to be monitored via satellite images (as is currently the practice). Maintenance activities would occur as needed throughout the year. However, when feasible, extended facility maintenance (repair of pumps, berms, laterals, and submains) would be completed during the non-dust control season when dust storms generally do not occur (July to September). Inflows, outflows and water quality in Shallow Flood areas would also be monitored. Drains and valves would be inspected periodically and maintained as necessary.

1.4.9.3 Berms and Roadways

Berms and roadways would be continually maintained to prevent erosion and washout, and to maintain safe driving conditions. Maintenance activity would include minor earthwork and gravel replenishment.

1.4.9.4 Managed Vegetation

Vegetation would be monitored in the field to determine reclamation progress (declines in soil salinity), soil moisture, irrigation system function (including leak identification and repair), germination success, transplant mortality, and plant vigor. Once established, soil fertility and plant tissue would be monitored at least annually, and vegetative cover would be assessed with satellite imagery. At present, imagery is ground-truthed with specialized, near-surface digital images of vegetative cover. Operations activities would include maintenance of irrigation systems and replanting/reseeding as necessary.

After initial seeding, areas with limited growth would be assessed for drainage limitations. Drainage would be improved by constructing surface, French, or subsurface drains; or the area may be replanted. The site would continue to be managed to achieve dust compliance standards as swiftly as possible.

1.5 APPLICABLE PLANS AND POLICIES

The majority of the project sites are located on CSLC-administered lands within Inyo County. Inyo County designates the land use of the lakebed as SFL (State and Federal Lands). The zoning overlay is OS-40 (Open Space, 40-acre lot minimum). Portions of the Duck Pond area and T32 are located on land owned and administered by the BLM. Portions of the Duck Pond area, C2 and T32 are under private ownership.

1.6 PROJECT APPROVALS

If constructed, the 2011 SCRD and 2012 SCRD projects would install, operate and maintain approved DCMs in areas identified by GBUAPCD. If the projects are adopted by LADWP, permits and approvals from other agencies are anticipated to include:

- A right-of-way agreement from BLM for construction and operation of dust control on federal land.
- A lease amendment for use of state lands from the CSLC prior to project construction.
- A land use agreement from the private land owners for portions of Duck Pond, C2 and T32.
- Consistent with the previous DCMs installed on Owens Lake, a Lakebed Alteration Agreement per Section 1602 of the Fish and Game Code would be sought from the California Department of Fish and Wildlife (CDFW).
- LADWP would submit a request for an amendment to existing Clean Water Act Section 404 permit SPL-2008-00582-BAH from the U.S. Army Corps of Engineers for Phase 7 to include construction, operations, and maintenance associated with the 2011 SCRD and 2012 SCRD projects.
- LADWP would submit a request for an amendment to the existing Clean Water Act Section 401 Water Quality Certification from the Lahontan Regional Water Quality Control Board to include construction, operations, and maintenance associated with the 2011 SCRD and 2012 SCRD projects.
- Construction would be completed in compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES NO. CAS000002). Per the General Permit, a Storm Water Pollution Prevention Plan (SWPPP) incorporating best management practices (BMPs) for erosion control would be developed and implemented during project construction.
- Discharge of water to the Lake for dust control is currently permitted by the Lahontan Regional Board through Waste Discharge Requirements (WDR) for the Southern Zones Dust Control Project (Board Order No. R6V-2006-0036). The Regional Board determined that implementation of the Phase 7a project does not warrant a revision or amendment to the existing WDR (J. Zimmerman, P.G., Regional Board, pers. comm.,

2011). It is anticipated that implementation and operation of the 2011 SCRD and 2012 SCRD projects would also be done in conformance with the existing Board Order.

- Use of the SR 136 right-of-way for gravel transport would require approval from Bureau of Land Management (BLM) and an encroachment permit from Caltrans. Caltrans encroachment permits would also be obtained for access roadways, Dirty Socks Road and other roadways as relevant. The permits would address access, maintenance, legal sized load restrictions and traffic control (i.e., Traffic Work Safety Plan).

- A permit or non-objection letter from Inyo County for the maintenance of the Highway 395/access road would be sought.

- Relevant archaeological investigation and/or excavation permits would be obtained from the CSLC.

- Additionally, installation of fuel tank(s) at the construction staging areas to serve the haul trucks would require compliance with:

  1) Permit to Operate (1316-00-06) – An air quality permit from GBUAPCD related to vapor recovery.

  2) Certified Unified Program Agency (CUPA) Facility Permit – A hazardous material/waste permit and associated contingency and business plan from the Inyo County Department of Environmental Health Services.

  3) Spill Prevention Control and Countermeasure (SPCC) Plan – For aboveground oil tanks of 1,320 gallons or more, and for fuel trucks when fuel would be left in the truck overnight. The Plan is filed with the Inyo County Department of Environmental Health Services.

Section 2
Environmental Analysis

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☒ Greenhouse Gas Emissions	☐ Population and Housing
☐ Agricultural Resources	☐ Hazards and Hazardous Materials	☐ Public Services
☒ Air Quality	☐ Hydrology and Water Quality	☐ Recreation
☒ Biological Resources	☒ Land Use and Planning	☐ Transportation and Traffic
☒ Cultural Resources	☐ Mineral Resources	☒ Utilities and Service Systems
☐ Geology and Soils	☐ Noise	☒ Mandatory Findings of Significance

2.2 AGENCY DETERMINATION

On the basis of this initial evaluation:

☐ I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature: Charles C. Holloway Title: Manager of Environmental Assessment

Printed Name: Charles C Holloway Date: 7/9/14

2.3 ENVIRONMENTAL CHECKLIST

2.3.1 Aesthetics

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion: The Owens Valley is straddled by the eastern Sierra Nevada to the west and the Inyo Mountains to the east, with the Coso Range rising to the south. The valley floor is interspersed with small, rural communities (e.g., Cartago, Olancha, Keeler and Dolomite) surrounded by dry, desert environment with minimal vegetation. Under existing conditions, views of Owens Lake are characterized by pockets of desert vegetation, limited vegetated areas related to seeps and springs and the Delta, vast areas of desert playa, mining operations, the brine pool (which fluctuates in size) and the existing system of dust control – bermed areas periodically filled with water, areas of managed vegetation and the internal roadway network (**Figure 4**).

a) and c) **Potentially Significant Impact.** Under the 2011 SCRD and 2012 SCRD projects, areas of the lake that are currently primarily barren playa would be altered by installation of DCMs. Additionally, existing Shallow Flood DCA T18S would be transitioned to be approximately 80 percent Gravel Cover, 20 percent Shallow Flood. The RAP for the 2011 SCRD project describes the BACM proposed for each new DCA. However, a RAP for the 2012 SCRD project is in development, and additional dust control methods are under review. Therefore, the impacts of the 2011 SCRD and 2012 SCRD projects on scenic vistas and the visual character of the lake will be described in the EIR.

b) **Less than Significant Impact.** Scenic roadways are designated by BLM, Inyo National Forest, Caltrans, and the Federal Highway Administration. State Highway 395 is an officially designated State Scenic Highway from Independence to north of Tinemaha Reservoir (postmiles 76.5 to 96.9) (Caltrans, 2008). State Highway 395 is eligible for designation in the portions north and south of that segment (Caltrans, 2008). The project site is just east of State Highway 395 in the eligible, but not designated, portion of the roadway. There are no trees, major landform features or rock outcroppings within the project areas and none would be disturbed by project implementation. Implementation of the projects would alter the views of

approximately 5.4 square miles of the lakebed. Installation of BACM in the DCAs that are adjacent to SR 395 would alter the look of these parcels but would not change the dramatic backdrop or natural feel of the overall landscape. The impact on views from a portion of roadway eligible for designation as a scenic roadway, SR 395, is therefore less than significant.

d) **Less Than Significant Impact.** The proposed project does not include permanent installation of new sources of lighting. Construction activities would occur primarily in daylight hours; some limited use of lighting may be necessary in the early morning or evening hours (especially in winter). Use of portable lights during construction, if any, would be localized; large-scale activities such as grading would not occur at night. Since the proposed lighting would be of limited duration and confined to the specific area of construction, impacts on light and glare that could affect day or nighttime views of the project area would be less than significant. Protection of biological resources related to the potential use of limited lighting will be described in the EIR.

Figure 4
Owens Lake Aerial View

2.3.2 Agricultural and Forest Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion:

a) **No Impact.** The Farmland Mapping and Monitoring Program (FMMP) does not include Inyo County; therefore the proposed project would have no impact on conversion of FMMP designated Farmland (California Department of Conservation, 2006).

b) **No Impact.** Existing zoning by Inyo County is OS-40 (Open Space, 40-acre lot minimum) with a land use designation of SFL (State and Federal Lands) (Inyo County, 2011). Since Inyo County does not offer a Williamson Act program (California Department of Conservation, 2008), the proposed project would have no impact on agricultural zoning or Williamson Act contracts.

c) and d) **No Impact.** The project site is not zoned as forested land and the proposed project would not result in conversion of forest land to non-forest use. Public Resources Code Section 12220 (g) defines "Forest land" as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Since no trees exist on the project site, removal of native trees is not proposed. Therefore, the proposed project would have no impact on forest lands.

e) **No Impact.** 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 2011 SCRD and 2012 SCRD projects.

2.3.3 Air Quality

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion:

The southern Owens Valley is located within the jurisdiction of the GBUAPCD. The valley has been designated by the State and EPA as a non-attainment area for the state and federal 24-hour average PM_{10} standards. With the exception of PM_{10}, air quality is considered excellent and the area has been designated as attainment or unclassified for all other ambient air quality standards. The major sources of criteria pollutants, other than wind-blown dust, are woodstoves, fireplaces, vehicle tailpipe emissions, fugitive dust from travel on unpaved roads, prescribed burning, and gravel mining.

a), b), c) **Potentially Significant Impact.** The GBUAPCD's relevant air quality plan for the project area is the Final 2008 Owens Valley PM_{10} Planning Area Demonstration of Attainment SIP (GBUAPCD, 2008a). The focus of this planning document is implementation of DCMs at Owens Lake.

The 2011 SCRD and 2012 SCRD projects are an expansion of the OLDMP described in the 2008 SIP. Therefore project consistency with the applicable air quality plan has not been described in previous environmental documents. The consistency of the 2011 SCRD and 2012 SCRD projects with the applicable air quality plan will be described in the EIR.

Emissions during project construction would result from the operation of the equipment including: dozers, scrapers, dump trucks, flatbed trucks, fuel trucks, backhoes or tractors, water trucks, light duty trucks, and workers personal vehicles. Air pollutant emissions estimates for construction of the projects and their potential cumulative effects have not been specifically described in other environmental documents. Air pollutant emission estimates will be quantified and described in the EIR.

d) **Less Than Significant Impact.** Sensitive receptors include schools, day-care facilities, nursing homes, and residences. The closest sensitive receptors to the project areas are residences in Keeler, Dolomite, Olancha and Cartago (see **Table 1**). The closest sensitive receptors to the gravel haul routes are approximately 0.7 miles from the Dolomite Quarry haul route, and approximately 0.8 miles from the LADWP Shale pit haul route.

Construction of the proposed project would include operation of mechanical equipment. However, given the distance of residential sensitive receptors to the project sites, the impact from gas and diesel fumes associated with motor vehicles and heavy equipment engines on sensitive receptors would be less than significant. Implementation of the proposed project would decrease the exposure of residents to PM_{10} emissions from the Owens Lake in the long term, a beneficial impact.

e) **Less Than Significant Impact.** Project construction and operation would result in minor localized odors associated with fuel use for equipment and vehicles. These odors are common, not normally considered offensive, and would not be experienced by any residences since none are located on or immediately adjacent to the project sites. Odor impacts to potential recreation visitors at the sites during construction activities would be temporary and less than significant.

2.3.4 Biological Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Discussion: Prior to implementation of the Dust Control Project, Owens Lake consisted of a large expanse of barren playa, a remnant hypersaline brine pool, and scattered springs and seeps along its shoreline. Implementation of DCMs has resulted in an increase in the use of Owens Lake by wildlife species because water and vegetation resources are now present on much of the former barren playa. Shallow Flooding has attracted birds, primarily gulls, avocets, stilts and plovers (LADWP, 2010b).

a), b), c), d) **Potentially Significant Impact.** Based on California Natural Diversity Data Base (CNDDB) listings for the Vermillion Canyon, Owens Lake, Keeler, Lone Pine, Dolomite, Bartlett, and Olancha USGS quadrangles, and LADWP knowledge of the areas, sensitive plant and animal species and sensitive natural communities have the potential to occur on or near the project areas. Additionally, a breeding population of Snowy Plover occurs on Owens Lake and the lake is an important site along the Pacific Flyway for migratory waterbirds. Per the terms of previous mitigation measures, LADWP is required to maintain a baseline of at least 272 Snowy Plovers as determined during dedicated annual surveys (GBUAPCD, 2003)

and a minimum of 523 acres of Shallow Flood habitat for Snowy Plovers in consultation with CDFW (GBUAPCD, 2008b). This habitat is described as a mix of exposed sandy or gravelly substrate suitable for nesting in close proximity to standing water equal to or less than 12 inches in depth; the 523-acre area has been designated along the east side of the lake.

The impacts of the 2011 SCRD and 2012 SCRD projects on sensitive species and natural communities will be described in the EIR.

e) **Less Than Significant Impact.** No tree ordinances apply to the project area and no trees are present on the project site. The Inyo County General Plan Goals and Policies document (2001) includes two goals for biological resources issues: Maintain and enhance biological diversity and healthy ecosystems throughout the County, and provide a balanced approach to resource protection and recreation use of the natural environment (Goals BIO-1 and BIO-2). Since the project site would remain as open space and would continue to provide habitat for Snowy Plovers and other species, the project would not conflict with these goals. The impact on local policies or ordinances protecting biological resources would be less than significant. Additional description of biological resources of the 2011 SCRD and 2012 SCRD parcels will be provided in the EIR.

f) **Less Than Significant Impact.** The project site is not within a Significant Natural Area (SNA) as determined by CDFW. LADWP is currently preparing a Habitat Conservation Plan (HCP) for LADWP-owned lands in Inyo and Mono Counties; this plan is not yet finalized but would not cover the 2011 SCRD and 2012 SCRD portions of Owens Lake since they are primarily property of the CSLC. However, in compliance with mitigation measure Biology-14 of the 2008 SIP FSEIR (GBUAPCD, 2008b), LADWP prepared the Owens Lake Habitat Management Plan (OLHMP) for the Owens Lake Dust Mitigation Project (LADWP, 2010b). The OLHMP serves as a guide for compatibility between construction, maintenance, and operational needs of the Dust Mitigation Project, and the needs of resident and migratory wildlife resources utilizing the Owens Lake Dust Control Area. The overall goal of the OLHMP is to avoid direct and cumulative impacts to native wildlife communities that may result from the Dust Control Program. The 2011 SCRD and 2012 SCRD projects would be implemented by LADWP in a manner consistent with the LADWP OLHMP; the impact on adopted habitat plans is therefore less than significant.

Additionally, LADWP is currently working collaboratively with a wide range of stakeholders to develop a Master Project for Owens Lakebed. The Master Project will identify goals and objectives to enhance the Owens Lakebed with a focus on dust mitigation, habitat and wildlife, water efficiency methods, and potential renewable energy development. Although the Master Project is not an approved habitat conservation plan, the consistency of the proposed project with the Master Project will be described in the EIR.

2.3.5 Cultural Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

Discussion: Prehistoric and historic cultural resources have been previously identified on Owens Lake. Additionally, the lake area is mapped as Quaternary lake and sand deposits, edged by Quaternary alluvium (Mathews and Burnett, 1965, Streitz and Stinson, 1974). The older Pleistocene and late Holocene portion of each geological unit is considered to have moderate sensitivity for paleontological resources.

Field survey for observable cultural resources on the 2011 SCRD and 2012 SCRD parcels was completed in 2013. Documentation of results from the field survey and subsequent evaluation of resources is ongoing.

a), b), c), d) **Potentially Significant Impact.** Construction of 2011 SCRD and 2012 SCRD project facilities would include earthwork in areas that have not been previously disturbed for construction of DCMs. Disturbance to cultural resources potentially present in project areas from construction is a potentially significant impact. The existing setting for cultural resources, results of record searches and pedestrian surveys, results of ongoing evaluations of known resources, and the significance of potential impacts to cultural resources will be described in the EIR.

2.3.6 Geology and Soils

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion:

The project area is on Owens dry lakebed, just south of Lone Pine in the Owens Valley. The Owens Valley of eastern California is a deep north-south trending basin, lying between the Sierra Nevada to the west and the White-Inyo Mountains to the east. The Owens Valley was formed as a fault block basin with the valley floor dropped down relative to the mountain blocks on either side.

The Owens Valley is the westernmost basin in a geologic province known as the Basin and Range, a region of fault-bounded, closed basins separated by parallel mountain ranges stretching from central Utah to the Sierra Nevada and encompassing all of the state of Nevada. Geological formations in the project areas are of Cenozoic age, chiefly Quaternary.

The soils in Owens Valley contain mostly Quaternary alluvial fan, basin-fill, and lacustrine deposits. On alluvial fans, the soils are mostly Xeric and Typic Torrifluvents, Xeric and Typic

Torriorthents, and Xeric and Typic Haplargids. All soils on alluvial fans are well drained (Miles and Goudy, 1997).

a)-i) and a)-ii) **Less Than Significant Impact.** The west side of the Basin is bounded by a north-south trending fault zone along the east side of the Sierra Nevada known as the Sierra Nevada Frontal Fault (Stone et. al., 2000). The east margin of the Basin is delineated by the Inyo Mountains Fault, which is a belt of west-side-down normal faults along the Inyo Mountains (Hollett et. al., 1991; Neponset, 1999). Roughly in the middle between the Inyo Mountains Fault and Owens Valley Fault is the Owens River Fault (Neponset and Aquila, 1997). To the south, a number of unnamed fault segments were mapped in front of the Coso Range (Stinson, 1977; Hollett et. al., 1991).

The project DCAs are located on USGS quadrangles which include designated Alquist-Priolo Special Studies Zones. Surface rupture on local faults is also possible outside of the currently mapped active traces of these range-front faults. However, since habitable structures would not be built as part of the proposed project, people would not be exposed to adverse effects involving seismic ground shaking. 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.

a)-iii) **Less Than Significant Impact.** The project does not expose people to potential substantial adverse effects involving strong seismic-related ground failure, including liquefaction. Shallow groundwater does occur on the lake and the 2011 SCRD project includes new areas of Shallow Flood. However, since habitable structures would not be built as part of the proposed project, people would not be exposed to adverse effects involving seismic-related ground failure. 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.

a)-iv) **Less Than Significant Impact.** The project site is located well away from the mountain front, and would not be subject to impacts from landslides. Additionally, since habitable structures would not be built as part of the proposed project, people would not be exposed to adverse effects involving landslides. 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.

b) **Less Than Significant Impact.** Construction activities for the 2011 SCRD and 2012 SCRD projects 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 layer, and planting activities. Earthwork required for construction has the potential to temporarily increase soil erosion from the disturbed areas. However, since construction methods would include BMPs identified in a 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 is 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 2011 SCRD and 2012 SCRD projects would have a beneficial impact during project operation by reducing soil erosion.

c) **Less Than Significant Impact.** New structures included in the 2011 SCRD and 2012 SCRD projects (irrigation lines, drainlines, turnouts, roadways, geotextile membranes, etc.) may be located on lakebed soils that are considered unstable. Prior to final design of new facilities, geotechnical investigations would be conducted and fill soils, armoring, and potentially other design features would be used where warranted. Since no habitable structures would be built as part of the proposed project, the impact would be less than significant.

d) **No Impact.** Habitable structures would not be built as part of the proposed project. Therefore, there would be no project-related impacts from expansive soils.

e) **No Impact.** Sanitation facilities are not present or proposed for the project site. Therefore, there would be no impact on soils related to wastewater disposal.

2.3.7 Greenhouse Gas Emissions

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

Discussion: LADWP has instituted numerous programs for reducing GHG emissions, such as providing rebates to encourage use of energy efficient equipment, retrofitting City-owned facilities for increased energy efficiency, promoting the installation of solar and renewable power, and reducing GHG from vehicles by pursuing electric fleet vehicles.

a), b) **Potentially Significant Impact.** Greenhouse gases include, but are not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Project-related emissions of greenhouse gases would include air pollutants generated from construction vehicles during the temporary construction activities. Operations-related air pollutant emissions would result from maintenance activities (vehicle emissions). Otherwise, operation of the project has no air pollutant emissions; the project reduces the emissions of dust from the lakebed.

Since the air pollutant emissions related to construction and operation of the 2011 SCRD and 2012 SCRD projects have not yet been quantified, greenhouse gas emissions and the consistency of the project with planning documents focused on the reduction of greenhouse gas emissions will be described in the EIR.

2.3.8 Hazards and Hazardous Materials

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

Discussion: Aside from fuels, hazardous materials are not currently used or stored on the project site. Fertilizer is stored on the lakebed in a contained area at existing Managed Vegetation DCA T5. Fertilizer is used as necessary for the existing T5 – T8 Managed Vegetation DCAs, and is planned for use in future Managed Vegetation DCAs.

a) and b) **Less Than Significant Impact.** Construction of the proposed project would require the routine transport, use, and storage of limited quantities of gasoline and diesel fuel, and potentially degreasers and solvents for construction vehicle maintenance. The existing LADWP Sulfate Facility is located off Sulfate Road west of SR 136, on the east side of the lake. This facility includes a vehicle wash station, refueling station, and fuel tanks as well as areas for vehicle maintenance. Additionally, the two vehicle and equipment staging areas previously used (for Phases 7 and 8) would be used for the 2011 SCRD and 2012 SCRD projects. These previously disturbed sites are located near the intersection of Main Line Road

and Corridor 1 at the north end of the lake (20 acre site) and at the southern end of the lake adjacent to Dirty Socks Access Road (2.7 acre site). In addition to office trailers and equipment and vehicle storage, these areas would have fueling stations for gas and diesel. Fuel trucks would be used to refuel construction equipment (including the low ground pressure gravel trucks) and the long haul gravel trucks; no vehicle fuels or oils would be stored in the gravel stockpile areas. No new permanent fertilizer stations are proposed. Concrete pads (with containment for the injection point) may be constructed in Duck Pond-L1 and/or C2-L1 for use by portable fertilizer delivery tanks. Periodic fertilizer delivery would be by flatbed or pickup truck. Other chemical use is not anticipated.

LADWP would employ standard operating procedures for the routine transport, use, storage, handling, and disposal of hazardous materials related to the 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 2011 SCRD and 2012 SCRD 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. LADWP has an annual contract with the Inyo County Agricultural Department which manages the Owens Valley Mosquito Abatement Program. The Agricultural Commissioner would be notified of the changes in the Shallow Flood DCAs prior to project operation. Since these mosquito abatement practices would continue and since the 2011 SCRD and 2012 SCRD projects would not substantially increase the area of mosquito habitat, the impact related to vectors would be less than significant.

c) **Less Than Significant Impact.** There are no schools within ¼ mile of the 2011 SCRD and 2012 SCRD projects area. The closest school is located in Lone Pine (over 4 miles north of Owens Lake). Additionally, hazardous materials use would be limited to fuels for construction vehicles. Since these materials would be properly handled (as described above), the impact on the schools from hazardous materials would be less than significant.

d) **No Impact.** Section 65962.5 of the California Government Code requires the California Environmental Protection Agency (CalEPA) to update a list of known hazardous materials sites, which is also called the "Cortese List." The sites on the Cortese List are designated by the State Water Resources Control Board, the Integrated Waste Management Board, and the Department of Toxic Substances Control.

Based on a search of hazardous waste and substances sites listed in the Department of Toxic Substances Control (DTSC) "EnviroStor" database; a search of leaking underground storage tank (LUST) sites listed in the State Water Resources Control Board (SWRCB) "GeoTracker" database; and a search of solid waste disposal sites identified by the SWRCB

with waste constituents above hazardous waste levels outside the waste management unit, there were no sites listed on or adjacent to the project site. Therefore, the project would have no impact related to hazardous waste sites.

e) and f) **No Impact.** Seven public access airports and six private airstrips are located throughout Inyo County (Inyo County, 2001). The Lone Pine Airport is closest to the project site; it is located approximately 3.6 miles to the north. However, 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.

g) **Less Than Significant Impact.** 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 2011 SCRD and 2012 SCRD projects 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.

h) **Less Than Significant Impact.** 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. Since 2006, fire protection services have been provided by the California Department of Forestry (CDF) and Owens Lake is included in their State Responsibility Area (SRA). 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.

2.3.9 Hydrology and Water Quality

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there 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)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Discussion: The floor of the Owens Valley ranges in elevation from a low of approximately 3,550 feet above mean sea level (MSL) on the Owens dry lakebed to the south to approximately 4,100 feet above MSL near Bishop to the north. The bed of Owens Lake is relatively flat with only 50 feet of topographic relief from an elevation of 3,600 ft MSL to the lowest portion of the lakebed. The lakebed can be divided into two main areas: the brine pool (below an elevation of 3,553.53 ft MSL) and the playa (the area between the brine pool and the shoreline at 3,600 ft MSL). A shoreline of 3,600 ft MSL is used for analysis, but does not reflect the actual Owens

Lake shoreline absent LADWP water gathering activities. The playa generally consists of lacustrine and alluvial sediments ranging in size from fine gravels to clays and containing a high salt content. The brine pool is the remnant portion of the historic Owens Lake and contains a high accumulation of mineral salts. The brine pool is generally wet during part of the year, depending on the amount of precipitation and runoff from the surrounding mountains.

Surface runoff occurs from creeks and small intermountain watersheds emanating from precipitation on the Sierra Nevada and adjacent foothills. Some surface flows from the major creeks are captured by the LAA and exported to the City of Los Angeles. Runoff not intercepted by the LAA flows toward Owens Lake. Under normal conditions, these creek beds and washes are dry; however, surface flow may occur during periods of extremely high runoff or flash floods. As part of the Lower Owens River Project (LORP), minimum Owens River flows are released from the LORP pump station (approximately 6 to 9 cfs on an annual average basis; minimum releases at any time are approximately 3 cfs) for discharge to the Owens River Delta and, depending on conditions, to an area of the lake known as the brine pool transition area. In addition, portions of the LORP seasonal habitat flows (up to approximately 200 cfs ramped up and down over approximately 14 days) are bypassed at the pump station and released towards the Owens River Delta.

Groundwater occurs in multiple aquifers beneath the lakebed surface. A discontinuous surficial aquifer is present on portions of the Owens Lake playa and delta area (MWH, 2011a). Since 1992, GBUAPCD monitored an extensive network of shallow piezometers in the lakebed with depths of 4, 10 and 30 ft. This monitoring activity has recently been transferred to the LADWP. Groundwater level monitoring data indicate groundwater occurs at depths ranging from less than 2, to 15 feet below ground surface (ft bgs) (GBUAPCD, 2009). Shallow groundwater generally flows toward the brine pool, where it becomes an evaporative sink. A deeper aquifer system consists of up to five permeable zones (aquifers) at depths ranging from 65 to more than 1,500 ft bgs (MWH, 2011b). Monitoring data suggest that the water levels in these deep aquifers range from over 100 feet around the margins of the lake to a pressure of more than 60 ft above ground surface on the lakebed (MWH, 2011b).

On August 4, 2009, the LADWP Board of Water and Power Commissioners, which manages all water resources and facilities for the City of Los Angeles, passed a resolution requiring LADWP to implement water conservation measures on Owens Lake to reduce LAA diversions for existing and future Owens Lake dust control projects to below 95,000 afy. The 2010 Urban Water Management Plan does not allocate any further water for Owens Lake mitigation. Thus, any additional water needed for dust control on Owens Lake above and beyond the allocated 95,000 afy needs to be offset from some other source besides the LAA. The 2011 SCRD project would transition existing dust control in T18S from Shallow Flood to a mix of Gravel Cover and Shallow Flood in order to make available some or all of the necessary water supply for new dust controls in other areas. The impact on water supplies will be discussed in the EIR.

a) and f) **Less than Significant Impact.** Beneficial uses and water quality objectives are specified in the Water Quality Control Plan for the Lahontan Region (Basin Plan) prepared by the Lahontan Regional Water Quality Control Board (Regional Board, 2005). Relevant to

the project site, beneficial uses are designated for Owens Lake and Owens Lake wetlands (**Table 3**).

Table 3
Beneficial Uses of Owens Lake
(Regional Board, 2005)

Surface water	MUN	ARG	GWR	REC-1	REC-2	COMM	WARM	COLD	SAL	WILD	WQE	FLD
Owens Lake				X	X	X	X	X	X	X		
Owens Lake Wetlands	X	X	X	X	X		X	X		X	X	X

MUN – municipal and domestic supply; AGR – agricultural supply; GWR – groundwater recharge, REC-1 – water contact recreation; REC-2 – noncontact water recreation; COMM – commercial and sportfishing; WARM – warm freshwater habitat; COLD – cold freshwater habitat, SAL – inland saline water habitat; WILD – wildlife habitat, WQE – water quality enhancement; FLD - flood peak attenuation/flood water storage.
Source: Regional Board, 2005.

Waterbody-specific numeric objectives for the protection of these beneficial uses are not defined in the Basin Plan for Owens Lake. However, narrative and numeric water quality standards applicable to all surface waters (including wetlands) in the region are specified for: ammonia, coliform bacteria, biostimulatory substances, chemical constituents, total residual chlorine, color, dissolved oxygen, floating materials, oil and grease, non-degradation of aquatic communities and populations, pesticides, pH, radioactivity, sediment, settleable materials, suspended materials, taste and odor, temperature, toxicity, and turbidity.

Water associated with operation of the proposed project would be from the LAA or Lower Owens River. The quality of these sources would not violate applicable narrative or numeric water quality standards. The existing DCAs are operated under Board Order No. R6V-2006-0036, Revised Waste Discharge Requirements (WDRs) for the Southern Zones dust control project. Monitoring is conducted and reported semi-annually; the existing dust control project is in compliance with the adopted WDRs. The Regional Board has determined that implementation of the Phase 7a project does not warrant a revision or amendment to the existing WDR (J. Zimmerman, P.G., Regional Board, pers. comm., 2011). It is therefore assumed that implementation and operation of the 2011 SCRD and 2012 SCRD projects would be done in conformance with the existing permit.

Water Quality Impacts During Construction. During project construction, disturbance to surface soils would result from land leveling, raised roadway construction, irrigation system installation, and preparation of gravel stockpile locations. Because site disturbance would exceed 1 acre during construction, stormwater would be managed in accordance with BMPs identified in a SWPPP completed in compliance with the NPDES General Permit for Storm Water. As summarized in **Table 4**, the specific BMPs to be implemented are anticipated to be similar to those used during construction of the Phase 7 dust control measures.

With implementation of the required SWPPP, potential increases of sediment load in stormwater would not adversely affect surface water. Therefore, the impact on water quality during project construction would be less than significant.

Table 4
Summary of Anticipated Construction Stormwater BMPs

Best Management Practices for the Protection of Stormwater Quality During Construction
Housekeeping Measures • Conduct an inventory of products used or expected to be used • Cover and/or berm loose stockpiled construction materials • Store chemicals in watertight containers
Employee Training • Brief staff on the importance of preventing stormwater pollution • Have staff review SWPPP • Conduct refresher training during the wet season • Document training
Erosion and Sediment Controls • Provide effective cover for inactive areas – cover, berm, or direct runoff to suitable basins • Establish and maintain effective perimeter control • Stabilize construction entrances and exits to control sediment – inspect ingress and egress points daily, and maintain as necessary • Control dust during earthwork • Place sandbags or other barriers to direct stormwater flow to suitable basins
Spill Prevention and Control • Inspect construction equipment for leaking • Use drip pans until equipment can be repaired • Cleanup spills Immediately – remove adsorbent promptly • Notify the proper entities in the event of a spill
Concrete Truck Washing Waste • Provide containment for capture of wash water • Maintain containment area
Hazardous Waters Management and Disposal • Store hazardous wastes in covered, labeled containers with secondary containment for liquid hazardous wastes • Store wastes separately to promote recycling and to prevent undesirable chemical reactions
Materials Handling and Storage • Establish a designated area for hazardous materials • Berm, cover, and/or contain the storage area as necessary to prevent materials from leaking or spilling • Store the minimum volume of hazardous materials necessary for the work
Vehicle and Equipment Maintenance, Repair, and Storage • Inspect vehicles and equipment regularly • Conduct maintenance as necessary • Designate areas for storage – where fluids can be captured and disposed of properly

Best Management Practices for the Protection of Stormwater Quality During Construction
Scheduling • Avoid work during storm events • Stabilize work areas prior to predicted storm events

Water Quality Impacts from Chemical Use. Construction of the proposed project would require the routine transport, use, and storage of limited quantities of gasoline and diesel fuel, and potentially degreasers and solvents for construction vehicle maintenance. The existing LADWP Sulfate Facility is located off Sulfate Road west of SR 136 on the east side of the lake. This facility includes a vehicle wash station, refueling station, and fuel tanks as well as areas for vehicle maintenance. Additionally, the two vehicle and equipment staging areas previously used (for Phases 7 and 8) would be used for the 2011 SCRD and 2012 SCRD projects. These previously-disturbed sites are located near the intersection of Main Line Road and Corridor 1 at the north end of the lake (20 acre site) and at the southern end of the lake adjacent to Dirty Socks Access Road (2.7 acre site). In addition to office trailers and equipment and vehicle storage, these areas would have fueling stations for gas and diesel. Fuel trucks would be used to refuel construction equipment (including the low ground pressure gravel trucks) and the long haul gravel trucks; no vehicle fuels or oils would be stored in the gravel stockpile areas. Additional permanent fertilizer storage for the proposed Managed Vegetation areas is not proposed under the 2011 SCRD and 2012 SCRD projects. Concrete pads (with containment) may be constructed in Duck Pond-L1 and/or C2-L1 for use by portable fertilizer delivery tanks. Periodic fertilizer delivery would be by flatbed or pickup truck. Other chemical use is not anticipated.

During construction, implementation of the BMPs related to handling of hazardous materials would be implemented to limit the potential for accidental release of fuels and degreasers or solvents to stormwater. During operation of the 2011 SCRD and 2012 SCRD projects, LADWP would employ standard operating procedures (SOPs) for the routine transport, use, storage, handling, and disposal of hazardous materials related to operation of the DCMs. These SOPs include:

- Routine inspection and maintenance of fertilizer storage facilities and secondary containment
- Specification of how fuel and fertilizer are transported within the lakebed
- Designation of acceptable refueling locations; designation of equipment parking, storage, and maintenance areas at Keeler Yard; routine inspection and maintenance of vehicles and equipment
- Adherence to the Keeler Yard Spill Prevention and Response Plan
- Employee training

LADWP also prepares an annual update on the transport, use, storage, handling, and disposal of hazardous materials. Therefore, with adherence to the SOPs for hazardous materials use,

impacts related to release or accidental exposure to humans or the environment, including impacts on water quality, would be less than significant.

Water Quality Impacts from Geotextile Use. The geotextile proposed for use under Gravel Cover and roadway areas would be permeable to allow draining. Nonwoven geotextiles are pervious sheets of polyester or polypropylene composed of fibers held together by needle punching, spun bonding, thermal bonding or resin bonding. The geotextile is chemically inert and generally not affected by acids and alkalis that may be present in the soils. The geotextile fabric to be used for the 2011 SCRD and 2012 SCRD projects would be non-hazardous as defined by the Federal Hazard Communication Standard CFR 1910.1299. Because the geotextile would be permeable, chemically inert and non-hazardous, it would not contribute contaminants to stormwater or underlying soils. The impact on water quality and soils from use of the geotextile would therefore be less than significant.

Water Quality Impacts from Gravel Use. Gravel sources were previously evaluated as part of GBUAPCD's Final EIR for the Owens Valley PM_{10} Planning Area Demonstration of Attainment State Implementation Plan (July 1997). The composition and structure of the rock from each gravel source (which included the Keeler Fan and the Dolomite site) were considered to be such that the gravel produced would not deteriorate during the life of the project. Leachate from the gravel was not predicted by GBUAPCD to significantly increase the concentration of metals in the brine pool. Because leachate from the gravel would not significantly increase the toxicity of the brine pool and discharges associated with the project would continue to be in compliance with applicable WDRs, impacts related to water quality would be less than significant.

b) **Less than Significant Impact.** Construction of the project, and maintenance activities including gravel replenishment, would require the use of water trucks to control fugitive dust. Water trucks would be filled from existing J stands off the Main Line pipeline; the water source is the LAA and therefore originally Owens Valley surface or groundwater. Otherwise, construction and operation of the 2011 SCRD and 2012 SCRD DCMs would not require the use of groundwater. Since the geotextile to be used for the Gravel Cover areas is permeable, the project would not substantially alter groundwater recharge at the site.

Construction of new areas of Shallow Flood may result in localized changes to shallow groundwater flow patterns. As part of the Owens Lake Groundwater Evaluation Project (OLGEP), MWH conducted an analysis of the effects of DCMs on the hydrologic regime of the Owens Lake (MWH, 2011b). MWH reviewed historical groundwater level data from GPUAPCD shallow piezometers and other deeper monitoring wells before and after implementation of DCMs. A review of hydrographs suggests that DCMs influence groundwater levels only immediately adjacent to the DCMs, and only in the very shallow piezometers on the lakebed. Comparison of water levels in shallow and deep monitoring wells generally indicates a consistent upward groundwater gradient, which implies that groundwater is flowing toward the ground surface, where it is ultimately consumed by evaporation.

The effect of DCMs on groundwater appears to be limited to thin sand layers on the surface of the lake, because DCMs have no apparent effect on deeper aquifer zones. The presence of strong upward vertical gradients and relatively impermeable lakebed clays prohibits water from DCMs migrating downward into deeper aquifers. A review of groundwater level measurements before and after construction of DCMs suggests that water from DCMs is not affecting flow directions or the amount of groundwater in storage in deeper aquifers. This is consistent with the fact that the DCMs are underlain by a large thickness of relatively impermeable clays which effectively isolate them from the deeper groundwater system (MWH, 2011b). For these reasons, impacts on groundwater would be less than significant.

c), d), and e) **Less than Significant Impact.** Construction of new DCMs would result in localized changes to drainage patterns in the vicinity of the 2011 SCRD and 2012 SCRD DCAs. Construction of the raised berms / access roadways around the DCAs would alter the existing stormwater drainage pattern in the immediate area of each affected DCA. Berm heights would vary from 3 to 5 ft or less above existing ground surface. Stormwater intercepted by the roadways would be routed toward existing channels through culverts to minimize changes to downstream flow patterns. Similar to existing DCM design, stormwater would continue to flow around the containing berms toward the brine pool. Experience with this design has shown that modifications in the drainage pattern resulting from the project would not result in substantial erosion or siltation, flooding, or add a substantial source of polluted runoff. Because the drainage pattern from the project sites flows in the same direction as existing conditions and eventually to the brine pool, the impact on drainage pattern and stormwater drainage would be less than significant.

g) and i) **No Impact.** A 100-year floodplain has been delineated on the Owens River and most of Owens Lake below the shoreline (Federal Emergency Management Agency [FEMA], 1986). Therefore, most of the 2011 SCRD and 2012 SCRD DCAs are located within the mapped 100-year floodplain. However, no habitable structures are proposed as part of the project. The redirection of flood flows would not risk habitable structures since none are present on the lake. No levees or dams are present on the project sites and no off-site levees or dams would be modified as part of project implementation. The project would have no impact on housing or structures in a 100-year flood hazard area.

h) **Less than Significant Impact**. Raised roadways would protect the 2011 SCRD and 2012 SCRD DCAs from inundation and washout and, as under existing conditions, stormwater would flow towards the brine pool. New raised roadways would be constructed around new DCAs. Since flows would continue, as under existing conditions, to flow to the brine pool, the impacts on redirection of flood flows would be less than significant.

j) **Less than Significant Impact.** Due to the distance to the ocean, tsunami is not relevant for the proposed project. Depending on volume conditions, localized seiche of the brine pool is possible but would not expose people or structures to loss, injury or death. Due to the low relief of the Owens Lake area, mudflows are not likely, and would not impact habitable structures since none are present. Since earthquake-induced damage to irrigation lines, drainlines, turnouts, roadways, geotextile membranes or gravel layers could be readily repaired by re-installing of the facilities, the impact is less than significant.

2.3.10 Land Use and Planning

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

Discussion: The majority of the 2011 SCRD and 2012 SCRD DCAs are located on CSLC-administered lands within Inyo County. The Inyo County General Plan designates the land use of the project area as SFL (State and Federal Lands). The zoning overlay is OS-40 (Open Space, 40-acre lot minimum) (Inyo County, 2011). The closest communities to the project areas are located outside the Owens lakebed (**Table 1**). No permanent habitable structures are located on or immediately adjacent to the project site, and none are planned as part of the proposed project.

As a condition of its lease with CSLC, LADWP allows public access to Owens Lake and members of the public are able to birdwatch, hike, hunt, and utilize the roads constructed by LADWP to access areas of the lakebed that would be inaccessible without them (LADWP, 2010b).

a) **No Impact.** The proposed project is located in an area zoned for open space and with a General Plan designation of SFL (Inyo County, 2011). The Inyo County Land Use and Conservation/Open Space elements designate the lake as NR – Natural Resources (Diagram 1) (Inyo County, 2002). The closest communities to the project areas are located outside the Owens lakebed (**Table 1**). No habitable structures are located on or immediately adjacent to the project site, and none are planned as part of the proposed project. Therefore, there would be no project-related impacts on established communities.

b) **Potentially Significant Impact.** The majority of the project sites are located on CSLC-administered lands within Inyo County. Portions of the Duck Pond area and T32-1-L1 are located on land owned and administered by the BLM. Portions of the Duck Pond area, C2-L1 and T32-1-L1 are under private ownership. Use of the project areas for dust control is considered relevant to CSLC, Inyo County, and BLM planning.

California State Lands Commission. The majority of the project area is located on land owned and operated in trust for the people of the State of California by the CSLC. Public Resources Code sections 6301 and 6216 authorize CSLC authority and responsibility as trustee of the State's Public Trust lands. A lease from CSLC would be required in order to

install DCMs on the 2011 SCRD and 2012 SCRD DCAs. In granting the lease, CSLC would consider the Public Trust Doctrine. The consistency of the project with CSLC land use policies, including the Public Trust Doctrine, will be described in the EIR.

Inyo County General Plan. The Land Use Element of the Inyo County General Plan (2001) includes Policy LU-5.6 State and Federal Lands Designation. This designation applies to those State- and Federally-owned parks, forests, recreation, and/or management areas that have adopted management plans. The Conservation/Open Space Element of the Inyo County General Plan (2001) includes Policy REC-1.2 Recreational Opportunities on Federal, State, and LADWP Lands: Encourage the continued management of existing recreational areas and open space, and appropriate expansion of new recreational opportunities on federal, state, and LADWP lands.

Bureau of Land Management. Some of the project areas (portions of the Duck Pond area and T32-1-L1) are located on land owned and administered by the BLM. A right-of-way agreement with BLM would be required in order to install DCMs on the federal portion of these parcels. BLM review would include consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act and consultation with the U.S. Fish and Wildlife Service for potential impacts to federally listed plant and wildlife species.

c) **Less than Significant Impact.** Please see Section 2.3.4 Biological Resources, item f.

2.3.11 Mineral Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Discussion: Mineral resources are defined as naturally occurring materials in the earth that can be utilized for commercial purposes (Inyo County, 2001). The Owens Lake Planning Area contains known mineral resources of statewide or regional importance. U.S. Borax (parent company Rio Tinto Mining) mines evaporite minerals from approximately 16,000 acres of leased land on the west side of the lake. Minerals mined include trona (hydrated sodium bicarbonate carbonate), burkeite (silicate) and halite (sodium chloride). Because minerals are mined from the surface, the facility is sensitive to surface water changes on the lake.

Other important mineral resources surrounding the Owens Lake area include gravel deposits associated with alluvial fans and sand deposits associated with the Owens River and local dunes.

Inyo County is the Lead Agency for the processing of surfacing mining reclamation plan applications on private lands; Inyo County's Road Department, City of Los Angeles, and California Department of Transportation borrow pits; and surface mining on federally administered lands. All surface mining operations that disturb greater than 1 acre or move more than 1,000 cubic yards are required to have an approved reclamation plan before the start of mining activity. Reclamation plans are required by the Surface Mining and Reclamation Act (SMARA) to assure that:

- Adverse environmental effects are prevented or minimized and mined lands are reclaimed to a useable condition readily adaptable for alternate land uses.
- Production and conservation of minerals are encouraged, while considering recreation, watershed, wildlife, aesthetic, range and forage values.
- Residual hazards to public health and safety are eliminated.

LADWP's shale pit has an approved Reclamation Plan on file with the County and reviewed by BLM (2005-03/LADWP).

a) and b) **Less Than Significant Impact.** The U.S. Borax lease on Owens Lake occupies the central portion of the lake, extending to the west. None of the 2011 SCRD DCAs overlap or are immediately adjacent to the lease, or to active mining operations. Active mining operations are located immediately northwest of 2012 SCRD DCA T10-3-L1.

Implementation of dust control at T10-3-L1 will 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. Prior to construction of the 2012 SCRD project, LADWP would obtain a lease from the CSLC for use of state lands. As part of this process, CSLC will transfer portions of the mineral lease area to dust control area. An amendment to the U.S. Borax lease will delete the approved DCA from the mineral lease legal description. Construction in this DCA would be coordinated with U.S. Borax.

Additionally, implementation of a Brine method DCM could include extraction of salts from the U.S. Borax lease. Since project activities for this DCM would be done in collaboration with U.S. Borax, the impact on active mining operations on Owens Lake would be less than significant.

Implementation of the project includes use of local mineral resources. Approximately 995,000 tons of gravel would be applied to new DCAs. Gravel would likely be obtained from local gravel production operations such as the LADWP shale pit and the F.W. Aggregate Dolomite mine (**Figure 3**). Ample aggregate is available from these sources for the project. Three subareas of the Dolomite mine (Durability, North Pole, and Translucent) total approximately 480 acres and are able to produce up to 50 million tons (T. Lopez, pers. comm., June 25, 2010). The LADWP shale pit (State Mine ID Number 91-14-0130) is currently permitted for 40 acres of development (approximately 200,000 – 400,000 tons of shale), with potential for expansion. The proposed project would include the use of locally-important mineral resources, 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.

2.3.12 Noise

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion: Owens Lake is located in a remote area of the upper Mojave Desert where the main sources of noise are the mining operations on the lakebed, construction and maintenance activities related to the DCMs, and roadway noise along U.S. 395, SR 190, and SR 136. Sensitive noise receptors in the Owens Lake area include residents in the communities of Boulder Creek, Lone Pine, Dolomite, Keeler, Olancha and Cartago.

Per the Public Safety Element of the Inyo County General Plan (2001), the normally acceptable noise level for residential properties ranges up to 60 Ldn and conditionally acceptable noise level ranges up to 70 Ldn. The term "Ldn" refers to the average sound exposure over a 24-hour period. Ldn values are calculated from hourly Leq values, with the Leq values for the nighttime period (10:00 p.m. to 7:00 a.m.) increased by 10 dB to reflect their greater disturbance potential.

a) and d) **Less Than Significant Impact.** The closest noise receptor to the project areas are in Cartago, over 1,200 feet northwest of C2-L1, in Dolomite, 0.7 miles northeast of T32-1-L1 and in Boulder Creek, approximately 1.5 miles northwest of T37-1-L1. Along the gravel haul route from the mines, aside from LADWP's Sulfate Facility, the closest noise receptors would be the residents approximately 0.7 miles from the Dolomite Quarry haul route, and approximately 0.8 miles from the LADWP Shale pit haul route. The closest school is in Lone Pine, over 4 miles north of Owens Lake.

During construction of the 2011 SCRD and 2012 SCRD projects, 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. For example, construction equipment emitting 90 dBA at 50 feet would attenuate to 64 dBA at 1,000 feet (Canter, 1977). Additionally, 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 project would not cause noise levels to exceed established thresholds and noise impacts would be less than significant.

Potential noise impacts on biological resources related to project construction and operation will be described in the EIR.

b) **Less Than Significant Impact.** Equipment used for project construction may create minor groundborne vibration or groundborne noise. Since the closest buildings are over 1,000 feet away, impacts related to temporary groundborne vibration or noise would be less than significant.

c) **Less Than Significant Impact**. Noise generated during project operation would include equipment noise related to periodic maintenance activities necessary for proper operation of pumps, pipelines, roadways, and other infrastructure as well as for replenishment of gravel. As maintenance operations are on-going at the lake, operations-related noise would be similar to existing conditions. Since fewer trucks would be required, the noise impact would be less than that for project construction. Due to the distance to the nearest receptors, noise impacts from project operation would be less than significant.

e) and f) **No Impact.** Seven public access airports and six private airstrips are located throughout Inyo County (Inyo County, 2001). The Lone Pine Airport is the closest public access airport to the project site; it is located approximately 3.6 miles north of the lakebed. Therefore, the project is not located sufficiently near either a private airstrip or public airport to expose people residing or working in the area to experience excessive noise levels. There would be no project-related impacts on noise near an airport/airstrip.

2.3.13 Population and Housing

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion:

a) **Less Than Significant Impact.** 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 number of workers over the construction period would have a less than significant impact on population growth.

b) and c) **No Impact.** No habitable structures are located on or immediately adjacent to the project areas, and none are planned as part of the proposed project. Therefore, there would be no impacts on housing from implementation of the 2011 SCRD and 2012 SCRD projects.

2.3.14 Public Services

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would 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:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion:

a)-i **Less Than Significant Impact**. 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.

a)-ii – v) **No Impact.** 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, there would be no project-related impacts on police protection, schools, parks, or other public facilities.

2.3.15 Recreation

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Discussion:

a) **No Impact.** 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.

b) **Less Than Significant Impact.** 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) may be included as part of the project. As available, additional information on these amenities will be presented in the EIR. Incorporation of these public access elements would enhance the recreational amenities of Owens Lake.

The Owens lakebed is openly accessible to the public for recreation. However, during construction and maintenance of the 2011 SCRD and 2012 SCRD projects, access may be temporarily limited if determined by LADWP to be necessary for public and/or worker safety. If approved by CSLC, signs may be posted indicating restricted construction or maintenance areas. After construction is complete, public access would be increased (expansion of on-lake roadway system) and recreational opportunities would be enhanced. Therefore, impacts on recreation during project construction and maintenance would be less than significant.

2.3.16 Transportation and Traffic

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion: Major roadways around Owens Lake include U.S. 395, SR 136, and SR 190. Roads located on the lakebed relevant to the project include Sulfate Road, T-30 Road, and Main Line Road.

U.S. 395 – U.S. 395 is the main north-south transportation route through Inyo County and the Owens Valley. The majority of U.S. 395 adjacent to the lake is a four-lane divided highway.

SR 136 – SR 136 is a two-lane northwest/southeast highway connecting U.S. 395 to the north and SR 190 to the south. SR 136 has 12-foot-wide lanes with unimproved gravel shoulders in each direction in the vicinity of Owens Lake.

SR 190 – SR 190 is a two-lane southwest/northeast highway connecting U.S. 395 to the west and SR 136 to the east. SR 190 has 12-foot-wide lanes with unimproved gravel shoulders in each direction in the vicinity of Owens Lake.

Additionally, as part of implementation of the DCMs, an internal network of roadways has been constructed on Owens Lake. The Main Line Road roughly bisects existing dust control areas in the south and along the east side of the lake; the roadway crosses the Owens River in the north. From the LADWP Shale Pit, gravel trucks would cross SR 136 and connect to Sulfate Road, or travel north on SR 136 to the T-30 Road, or travel to the south on SR 136 and SR 190 to the southern DCAs. From the Dolomite mine, gravel trucks would cross SR 136 and connect to the T-30 Road, or travel to the south on SR 136 and SR 190. From SR 190, trucks would access the lake from the Dirty Socks Access Road to the southern vehicle and equipment staging area.

a) and b) **Less Than Significant Impact.** 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. 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. Based on 2011 traffic counts reported by Caltrans, U.S. 395, SR 136, and SR 190 all operate well below capacity at LOS A (Caltrans, 2011).

Construction would increase traffic on these roadways for the transport of gravel, delivery of seed and plant material, delivery of pipelines and other infrastructure, and related to the movement of construction equipment and personnel during the construction period. 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.

During mobilization for the project, vehicles required for construction (dozers, flatbed trucks, water trucks) may be transported to the site via U.S. 395, SR 136, and/or SR 190. It is anticipated that vehicles would be transported to the site once, remain on-site for the construction period, and then be demobilized. Based on the limited number of vehicles to be mobilized and the existing excellent LOS on these roadways, project-related impacts on U.S. 395 would be temporary and less than significant.

However, project-related traffic would travel on SR 190 and SR 136 throughout the Gravel Cover construction period. In 2011, average annual daily traffic (AADT - total traffic volume for the year divided by 365 days) for SR 136 ranged between 540 vehicles at the junction of U.S. 395 and approximately 430 vehicles at the junction with SR 190, well below the 1,600 pc/hr capacity for each direction of travel. The SR 136 truck AADTs were 13 (at the junction with U.S. 395) and 11 (at the junction with SR 190). The AADT on SR 190 at SR 136 was 520 vehicles in 2011, with truck AADTs of 53 (Caltrans, 2011).

Gravel haul trips would be on-going for the 1.5 to 2 year period. Approximately 100 daily round trips would be required to haul gravel from the mines on the east side of the lake to the stockpile locations. At approximately 200 one-way trips per day and a 10 hour work day, approximately one truck would cross SR 136 every 3 minutes. Gravel trucks would add to the average daily traffic volumes on SR 136 and SR 190 and would cross SR 136

approximately 200 times per day. The peak hour traffic volume on SR 136 (at SR 190) was 90 vehicles in 2012; the peak hour volume on SR 190 (at SR 136) was 110 vehicles in 2012 (Caltrans, 2012). 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.

c) **No Impact.** The project areas are not located sufficiently near either a private airstrip or public airport, nor does the project contain features that would alter air traffic patterns. The Lone Pine Airport is located approximately 3.6 miles north of the lake. No impacts on air safety would occur.

d) **Less Than Significant Impact with Mitigation Incorporated.** The 2011 SCRD and 2012 SCRD projects do not include construction or modification of off-lake roadways. New internal roadways would be created surrounding new DCAs. The expansion of the on-lake roadway system would not create new roadway hazards for the public.

However, construction of the project is estimated to require approximately 200 truck crossings of SR 136 per day during installation of Gravel Cover. Since these crossings are not signalized and would be on-going for approximately 1.5 to 2 years, impacts related to traffic hazards are 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 Trans-1 and Trans-2 (Traffic Work Safety Plan and repair of roadway damage at the SR 136 crossings), impacts would be reduced to a less than significant level.

e) **Less Than Significant Impact.** Owens Lake is currently accessible to emergency vehicles via SR 136/Sulfate Road, SR 190/Dirty Socks access road, and U.S. 395/North and South Main Line access roads. Construction of the proposed project would increase the volume of trucks travelling on these roadways but would not alter the access points. The impact of the addition of approximately 20 truck trips per hour would be less than significant on emergency access.

f) **No Impact.** The project does not include housing, employment, or roadway improvements relevant to alternative transportation measures. Therefore, there would be no project-related impacts on alternative transportation.

Mitigation Measures to Reduce Impacts on Transportation and Traffic

Trans-1. LADWP shall develop and implement a Traffic Work Safety Plan to be approved by Caltrans for the construction phase of the 2011 SCRD and 2012 SCRD projects. The Plan shall address the use of warning lights, signs, traffic cones, signals, flag persons and/or comparable measures as needed to maintain safe travel of haul trucks on SR 136 and SR 190 during construction.

Trans-2. LADWP shall repair damage to SR 136 and SR 190 where project related truck traffic would travel on these roadways. Prior to the start of construction activity, existing conditions on SR 136 and SR 190 shall be documented. After construction is complete, physical damage documented on the portions of SR 136 and SR 190 used for construction of the 2011 SCRD and

2012 SCRD projects shall be repaired. In addition, LADWP shall have its contractor install corrugated steel plates to reduce the possibility of trucks tracking dirt onto the highways. Any debris tracked onto the highways shall be removed in a timely manner.

With implementation of the above mitigation measures, project-related impacts on transportation and traffic would be less than significant.

2.3.17 Utilities and Service Systems

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statues and regulations related to solid waste?	☐	☐	☒	☐

Discussion:

a), b) and e) **Less Than Significant Impact.** Habitable structures are not present on the project sites and none are proposed as part of the projects. The limited number of construction workers required to implement the dust control would not generate substantial population growth or create the need for new or expanded water or wastewater service facilities. Wastewater generated at portable toilets or pumped from the septic system at the Sulfate Facility is treated by the Lone Pine Community Services District in compliance with the requirements of the Lahontan Regional Water Quality Control Board. The impact on water and wastewater facilities is less than significant.

c) **Less Than Significant Impact.** The existing 2011 SCRD and 2012 SCRD areas do not have storm drain infrastructure or connect to any off-site storm drain facilities. The DCAs will be surrounded by raised roadways. Since stormflows will continue to drain in the direction of brine pool, as under existing conditions, impacts on stormwater facilities would be less than significant.

d) **Potentially Significant Impact.** As of April 2011, LADWP has installed and is operating 41.5 square miles of DCMs on Owens Lake playa which use water from, or that would have

been input to, the LAA. In 2010, LADWP prepared a water supply assessment for the Phase 8 project that determined that there is insufficient surplus water supply available for LADWP to continue to implement Shallow Flood as a DCM on Owens Lake (LADWP, 2010a). Since this determination is relevant to any additional water commitment in excess of 95,000 afy, it is also applicable to the 2011 SCRD and 2012 SCRD projects. Additionally, in January 2014 the Governor declared a drought state of emergency for California. Therefore, water use for new areas of Shallow Flood and Managed Vegetation would be offset by transition of an existing area of Shallow Flood (T18S) to be less water intensive. However, since the design of T18S is not complete, and since the design will in part be dependent on maintenance of habitat, the overall water use of the new dust projects is not known. Therefore, increased water commitments by the 2011 SCRD and 2012 SCRD projects are a potentially significant impact on water supplies that will be discussed in the EIR.

f) and g) **Less Than Significant Impact.** Installation of Shallow Flood, Managed Vegetation, Gravel Cover and potentially other dust control methods in the project areas would not generate substantial volumes of solid waste. The limited volumes of solid waste generated by construction workers would be disposed at a permitted landfill in compliance with applicable regulations. The Lone Pine Landfill serves the Owens Lake Planning Area and has a remaining site life of over approximately 50 years (GBUAPCD, 2008b). Therefore, impacts related to solid waste disposal would be less than significant.

2.3.18 Mandatory Findings of Significance

	Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☒
c)	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, effects of other current projects, and the effects of probable future projects.)?	☒	☐	☐	☐
d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

Discussion:

a) **Potentially Significant Impact.** The impacts of the 2011 SCRD and 2012 SCRD projects on sensitive species and natural communities are currently being assessed. Impacts to biological resources will be described in the EIR.

Construction of new facilities would include earthwork in areas that have not been previously disturbed for construction of DCMs. Disturbance to cultural resources potentially present in project areas from construction activities is a potentially significant impact. The existing setting for cultural resources, results of record searches and pedestrian surveys, results of ongoing evaluations of known resources, and the significance of potential impacts to cultural resources will be described in the EIR.

b) **No Impact**. This goal of the project is to be part of the long-term solution for dust control on Owens Lake. There are no short-term goals related to the project that would be disadvantageous to this long-term goal.

c) **Potentially Significant Impact.** Cumulatively with other DCMs on the lake, the project would be beneficial for air quality. However, other cumulative impacts of the proposed project with other related projects will be described in the EIR. Based on LADWP's water supply assessment for the Phase 8 project, there may be insufficient surplus water available for LADWP to continue to implement Shallow Flood as a DCM on Owens Lake (LADWP, 2010a). Therefore, the proposed project and the related projects may have potentially significant cumulative water supply impacts.

d) **Potentially Significant Impact.** This goal of the project is to be part of the long-term solution for dust control on Owens Lake – a beneficial impact on human beings. Temporary impacts on air quality including emission of GHGs would occur during project construction. Therefore, environmental effects of the proposed project related to air pollutant emissions will be described in the EIR. The impact on water supplies related to the project will also be discussed in the EIR.

Section 3
References, Abbreviations and Report Preparation

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3.2 ACRONYMS AND ABBREVIATIONS

AADT	average annual daily traffic
AFY	acre-feet per year
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BACM	Best Available Control Measure
Bgs	below ground surface
BLM	(United States) Bureau of Land Management
BMPs	best management practices
BNHM	Berkeley Natural History Museum
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	Climate Action Team
CARV	Combination air-vacuum release valves
CCR	California Code of Regulations
CCRI	Climate Change Research Initiative
CDF	California Department of Forestry
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulation
CNDDB	California Natural Diversity Database
CRHR	California Register of Historic Resources
CSLC	California State Lands Commission
CUPA	Certified Unified Program Agency
CV	control valve
DCA	dust control area
DCM	dust control measure
DTSC	Department of Toxic Substances Control
DWR	(California) Department of Water Resources
EIC	Eastern Information Center (at University of California at Riverside)

EIR	Environmental Impact Report
EPA	(United States) Environmental Protection Agency
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FE	flow elements
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FSEIR	Final Subsequent Environmental Impact Report
GBUAPCD	Great Basin Unified Air Pollution Control District
GCDIS	Global Change Data and Information System
GCRIO	Global Change Research Information Office
GHG	greenhouse gas
GLO	(United States) General Land Office
GSA	Geological Society of America
HCP	Habitat Conservation Plan
HDPE	High density polyethylene
Hp	Horsepower
ICWD	Inyo County Water Department
IS	Initial Study
LAA	Los Angeles Aqueduct
LADWP	(City of) Los Angeles Department of Water and Power
LGP	low ground pressure
LOS	Level of Service
LUST	leaking underground storage tank
mm	millimeters
MND	Mitigated Negative Declaration
MOA	Memorandum of Agreement
MSHA	Mine Safety and Health Administration
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAST	National Assessment Syntheses Team
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
OLDMP	Owens Lake Dust Mitigation Program
OLGEP	Owens Lake Groundwater Evaluation Project
OLHMP	Owens Lake Habitat Management Plan
OSHA	Occupational Safety and Health Administration
pc/h	passenger cars per hour
PIT	pressure indicating transmitters
PM	particulate matter
PM10	particulate matter 10 microns or less in diameter
PRV	Pressure reducing valve
SCRD	Supplemental Control Requirements Determination
SFL	State and Federal Lands
SIP	State Implementation Plan
SLC	State Lands Commission
SMARA	Surface Mining and Reclamation Act
SNA	Significant Natural Areas
SPCC	Spill Prevention Control and Countermeasure
SR	State Route
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USCCSP	United States Climate Change Science Program
USEPA	United States Environmental Protection Agency
USGCRP	United States Global Change Research Program
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VAC	volt alternating current

3.3 PREPARERS OF THE INITIAL STUDY

Prepared by:

Los Angeles Department of Water and Power
Environmental Services
111 North Hope Street, Room 1044
Los Angeles, California 90012

EIR Project Management
Mark Sedlacek, Director of Environmental Affairs
Charles C. Holloway, Manager of Environmental Planning and Assessment
David Porter, Environmental Project Manager

Project Design
Milad Taghavi, PE, MSCE, MBA, Manager of Owens Lake Regulatory Affairs and Long-Term Planning
Nelson O. Mejia, P.E., Engineering Project Manager

Biological Resources
Jeff Nordin, Watershed Resources Specialist
Lori Dermody, Watershed Resources Specialist

Owens Lake Operations
Raymond Ramirez, Environmental Specialist

TECHNICAL ASSISTANCE PROVIDED BY:

MWH Americas, Inc.
300 North Lake Avenue, Suite 400
Pasadena, California 91101

Sarah Garber, PMP, CPP, Project Manager
Dr. Janet Fahey, P.E., Technical Reviewer
David Ringel, P.E., Hydrology
Jackie Silber, GISP, GIS

Appendix B

Comments Received on the Notice of Preparation

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

July 25, 2014

Mr. David Porter
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Sent by U.S. Mail
No. of Pages: 5

RE: SCH#2014071057 CEQA Notice of Preparation (NOP)n; draft Environmental Impact Report (DEIR) for the **"Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects;"** located in the 110 square mile Owens Lakebed, approximately five miles south of the Community of Lone Pine; southern Inyo County, California

Dear Mr. Porter

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document.

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b).. In the 1985 Appellate Court decision (170 Cal App 3rd 604), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). The proposed project may result in significant impacts on the cultural resources in the area. For this reason, the NAHC strongly urges the Los Angeles Department of Water & Power (LADWP) to work closely with local Paiute and Shoshone tribes of Inyo County to learn of

possible adverse impact of the project on those resources, to understand possible recommendations for 'avoidance' of all or segments of the project, and to work with tribes in fashioning a 'mitigation and monitoring plan' if that is considered appropriate as a result of the Department's consultation with tribes.

If there is federal jurisdiction of this project due to funding or regulatory provisions; then the following may apply: Part of the project area is owned by the U.S. Bureau of Land Management subject to he National Environmental Policy Act (NEPA 42 U.S.C 4321-43351) and Section 106 of the National Historic Preservation Act (16 U.S.C 470 *et seq.*) and 36 CFR Part 800.14(b) require consultation with culturally affiliated Native American tribes to determine if the proposed project may have an adverse impact on cultural resources

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Inyo County, California
July 25, 2014

Big Pine Paiute Tribe of the Owens Valley
Genevieve Jones, Chairperson
P. O. Box 700 — Owens Valley Paiute
Big Pine , CA 93513
G.Jones@BigPinePaiute.org
(760) 938-2003
(976) 938-2942 Fax

Lone Pine Paiute-Shoshone Reservation
Tribal Administrator
P.O. Box 747 — Paiute
Lone Pine , CA 93545 — Shoshone
lorjoseph@lppsr.org
(760) 876-1034
(760) 876-8302 Fax

Bishop Paiute Tribe
Dale Chad Delgado, Chairperson
50 Tu Su Lane — Paiute - Shoshone
Bishop , CA 93514
(760) 873-3584
(760) 873-4143 Fax

Timbisha Shoshone Tribe THPO
Barbara Durham, Tribal Historic Preservation
P.O. Box 206 — Western Shoshone
Death Valley , CA 92328
dvdurbarbara@netscape.
(760) 786-2376 Fax

Fort Independence Community of Paiute
Israel Naylor, Chairperson
P.O. Box 67 — Paiute
Independence CA 93526
Israel@fortindependence.
(760) 878-5160
(760) 878-2311 FAX

Big Pine Band of Owens Valley THPO
Bill Helmer, Tribal Historic Preservation Officer
P.O. Box 700 — Paiute
Big Pine , CA 93513
b.helmer@bigpinepaiute.org
(760) 938-2003
(760) 938-2942 Fax
(760) 937-3331 Cell

Timbisha Shoshone Tribe
George Gholoson, Chairperson
121 W. Line Street — Western Shoshone
Bishop , CA 93514
george@timbisha.com
(760) 872-3614
(760) 873-9004 - FAX

Bishop Paiute Tribe
Raymond Andrews, THPO
50 Tu Su Lane — Paiute - Shoshone
Bishop , CA 93514
gwest@ovcdc.com
(760) 920-0357 Cell
(760) 873-8435 ext 250
(760) 873-4143 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed SCH#2014071057; cEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Owens Lake SCRD and 2012 SCRD Dust Control Measures Projects; located in the Owens Lakebed of 110-square miles, five miles south of the community of Lone Pine; Inyo County, California

Native American Contacts
Inyo County, California
July 25, 2014

Lone Pine Paiute Shoshone Reservation
Mary Wuester, Chairwoman
P.O. Box 747 Paiute
Lone Pine , CA 93545 Shoshone
(760) 876-1034
(760) 876-8302 Fax

Lone Pine Paiute Shoshone Reservation
Kathy Bancroft, Cultural Resources Officer
P.O. Box 747 Paiute
Lone Pine , CA 93545 Shoshone
kathybncrft@yahoo.com
(406) 570-5289
(760) 876-8302 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed SCH#2014071057; cEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Owens Lake SCRD and 2012 SCRD Dust Control Measures Projects; located in the Owens Lakebed of 110-square miles, five miles south of the community of Lone Pine;

DEPARTMENT OF TRANSPORTATION
DISTRICT 9
500 SOUTH MAIN STREET
BISHOP, CA 93514
PHONE (760) 872-0785
FAX (760) 872-0754
TTY 711
www.dot.ca.gov

Serious drought.
Help save water!

August 1, 2014

Mr. David Porter
Los Angeles Dept. of Water and Power (LADWP)
111 North Hope Street, Room 1044
Los Angeles, CA 90012

File: CA
NOP DEIR
SCH#: 2014071057

Owens Lake Supplemental Control Requirements Determination (SCRD) – Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR)

Dear Mr. Porter:

Thank you for giving the California Department of Transportation (Caltrans) District 9 the opportunity to comment during the NOP phase for tentative SCRD projects. We have the following comments:

- It appears that no new State highway access points would be proposed. We concur with the Trans-1 and 2 mitigation measures, which includes a Traffic Work Safety Plan, and addresses repair of any highway damage and debris tracking.

- A permit will be required for transport of any overweight loads on State highways.

- For further interaction on these items, Mark Reistetter of our Encroachment Permit office may be contacted at (760) 872-0674 or Mark.Reistetter@dot.ca.gov.

Caltrans values our cooperative working relationship with the LADWP regarding project impacts upon State transportation facilities in the Owens Valley. I may be contacted at (760) 872-0785, with any questions.

Sincerely,

Gayle J. Rosander

GAYLE J. ROSANDER
IGR/CEQA Coordinator

c: State Clearinghouse
Mark Reistetter, Caltrans

Theodore D. Schade
Air Pollution Control Officer

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537
Tel: 760-872-8211 E-mail: tschade@gbuapcd.org

August 1, 2014

Mr. David Porter
Los Angeles Dept. of Water & Power
111 North Hope Street, Room 1044
Los Angeles, California 90012-2607

Subject: Notice of Preparation – Owens Lake 2011 SCRD and 2012 SCRD Dust Control Projects

Dear Mr. Porter:

Thank you for the opportunity to review the Notice of Preparation (NOP) for the Los Angeles Department of Water and Power's (LADWP's) upcoming 2011 and 2012 Supplemental Control Requirement Determination (SCRD) dust control projects to be implemented on the dried bed of Owens Lake. The Great Basin Unified Air Pollution Control District (Great Basin) appreciates LADWP's efforts on this and all previous Owens Lake dust control projects. LADWP seems to have done a very good job describing the proposed projects and summarizing the potential for environmental impacts. Great Basin only has a few comments and requests for the draft EIR.

Land Ownerships – A detailed land ownership map and discussion in the EIR will be helpful. The EIR should discuss the amount of federal, state and private property involved in the project. This is particularly important as it relates to a proposed project alternative suggestion below.

Project Completion Deadlines –LADWP is under mandatory deadlines to complete the 2011 SCRD EIR and implement dust controls. The EIR is required to be certified by December 12, 2015 and the project is required to be complete at various dates between May 20, 2016 and December 20, 2016. (See LADWP's 2011 SCRD Remedial Action Plan.) This is only 5 to 12 months after the EIR certification deadline. LADWP should discuss these deadlines and acknowledge that the deadlines for the 2012 SCRD are currently pending.

Project Approvals – *T18S Transition Area* – The EIR should acknowledge that any Owens Lake Dust Control Area (DCA) that is transitioned from one approved Best Available Control Measure (BACM) to another BACM must comply with the transition provisions in Great Basin Order 080128-01, Paragraph 12 and Attachment D. The Order requires the submittal of a transition area application consisting of eight items. This application must be approved by Great

Basin's Air Pollution Control Officer (APCO) prior to any transition activities. LADWP should acknowledge and discuss this requirement in "Project Approvals" section of the EIR. It is not mentioned in the NOP.

Brine Shallow Flood – On page 1-9, the NOP discusses the upcoming Brine Shallow Flood investigation proposed by LADWP. The location of the investigation (T11) and the fact that the investigation is subject to additional CEQA analysis should be disclosed and discussed.

Great Basin appreciates and supports that LADWP is seeking to utilize Brine Shallow Flooding to control dust emissions as allowed in Board Order 130916-01. Due to the reduced evaporation rate of high salinity water, implementation of Brine Shallow Flooding is expected to significantly reduce the water-use of a DCA as compared to traditional Shallow Flooding. However, Brine Shallow Flooding areas must maintain a wetness cover of 75 percent as required with traditional Shallow Flooding. Drying out of an area covered with brine to create a stable salt crust is not part of Brine Shallow Flooding BACM and is not an approved BACM at this time. Great Basin encourages LADWP to test the creation of a stable salt crust through the evaporation of brine as a potential new dust control method.

Concrete Block Mat – Great Basin recommends that LADWP pursue a formal determination that Concrete Block Mat is functionally equivalent to the Reduced Thickness Gravel BACM and is therefore considered by Great Basin to be a BACM. Great Basin staff supports such a determination.

Alternative Dust Controls – Great Basin concurs with LADWP's approach of analyzing the environmental impacts of current candidate alternative dust controls. However, it is important to analyze the long-term impacts of both Engineered Roughness Elements (EREs) and Tillage. Great Basin expects EREs to control dust "as long as the requisite roughness is achieved" and maintained (Page 1-17). ERE maintenance is a critical component of this candidate BACM and should be discussed and analyzed.

With regard to the Tillage candidate BACM, if LADWP intends to consider the use of Tillage for the 2011/2012 SCRD projects, the EIR must include a discussion and analysis of mandatory irrigation of tilled areas. Because of the inevitable temporary nature of tilled surfaces, any Tillage BACM approval by Great Basin will require that tilled areas have infrastructure in place and available water to allow expeditious wetting of any failing tilled areas so that they can be reconsolidated and retilled. Great Basin would expect that the irrigation infrastructure would be similar to that described in the Shallow Flood discussion (Section 1.4.1). Failure to include wetting infrastructure in the project description and impact analysis may require additional subsequent CEQA analysis and could prevent LADWP from deploying Tillage and meeting dust control deadlines.

Construction Dust Control Plan – Temporary tilling should be included in the list of Best Management Practices implemented to minimize dust during construction. Tilling as a temporary dust control has been used successfully by LADWP as a temporary dust control measure during previous Owens Lake construction activities.

Water Use – The EIR should include a discussion of the actual water used on Owens Lake for dust control. LADWP repeatedly states that BACM transitions are required because the LADWP Board has set a maximum water use at Owens Lake of 95,000 acre-feet per year. However, LADWP has never used anywhere near this amount of water and transition projects are not needed to keep water use below this amount. LADWP should simply state its desire to minimize water used at Owens Lake and take advantage of the transition provisions in Great Basin's 2008 State Implementation Plan.

Project Alternative – It appears that there are only about 100 acres of federal land within the 2,313-acre DCA area. Great Basin suggests that LADWP consider and analyze a project alternative that removes federal lands from the project area. The analysis would need to include air quality modeling that shows the standards could be met without controls on the federal lands. However, if federal lands could be avoided, it could significantly expedite project approvals and ensure that LADWP meets its mandatory completion deadlines. Great Basin is willing to work with LADWP on this analysis.

Great Basin looks forward to reviewing the Draft EIR for the 2011/2012 SCRD projects. Please contact me if you have any questions or need additional information.

Sincerely,

Theodore D. Schade, P.E.
Air Pollution Control Officer

Cc: Richard Harasick, LADWP
Milad Taghavi, LADWP
Charles C. Holloway, LADWP

1407241 – 2011-2012 SCRD Notice of Preparation Comments

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

August 6, 2014

CASLC_2006_1024_001

Mr. David Porter
Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, California 90012

RE: Office of Historic Preservation Comments on Notice of Preparation of an Environmental Impact Report for the Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measure Projects (July 2014)

Dear Mr. Porter;

Thank you for the opportunity to review and comment on the Notice of Preparation and Initial Study for the Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects. As you prepare the environmental documentation for these projects, I recommend that consideration be given to the following:

- The identification and evaluation efforts of the cultural resources present in the Owens Lake area will be best accomplished in consultation with various Tribal Historic Preservation Officers, tribal members, and other individuals of the area that may have special knowledge and expertise regarding those resources.

- All identified cultural resources should be evaluated using all four (1-4) criteria of the California Register of Historic Resources. I would also recommend that the cultural resources be evaluated using the four National Register of Historic Places criteria (A-D) as this project will have a federal component (BLM lands).

- Not only should the archaeological sites be considered for individual eligibility, but the sites should also be evaluated in the context as possible contributors to an archaeological district, Traditional Cultural Property, and potential cultural landscape. Again, this is best done in consultation with the tribes of the area.

- Avoidance of impacts to the cultural resources should always be the first consideration when selecting a preferred alternative and mitigation. Action that would result in damage or destruction of an eligible archeological site is a substantial adverse change to a historical resource. This includes data recovery which destroys the site and is considered by the SHPO as a last resort mitigation. Substantial adverse change to a historical resource is a mandatory finding of significant impact (Appendix G).

- Where adverse change is unavoidable I would urge the Lead Agency to consider the potential for compensatory mitigation.

Thank you for considering historic resources during your project planning. If you have any questions, please contact Dr. Susan Stratton of my staff at susan.stratton@parks.ca.gov or 916.445.7024.

Sincerely,

Carol Roland-Nawi, Ph.D.

Carol Roland-Nawi, PhD
State Historic Preservation Officer

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Bishop Field Office
351 Pacu Lane Suite 100
Bishop, California 93514
www.blm.gov/ca/bishop

August 7, 2014

8100 (CA-170.54) P/N

David Porter
Environmental Planning and Assessment
Los Angeles Department of Water and Power
111 N. Hope St
Los Angeles, CA 90012

Dear Mr. Porter:

This letter formalizes comments provided by the Bureau of Land Management (BLM) Bishop Field Office at your July 29, 2014 scoping meeting regarding the proposed dust mitigation project (formerly Phase 9 and 10) currently being developed to meet the 2011 and 2012 Supplemental Control Requirements Determination for the Owens Lake in Inyo County, California. Thank you for inviting our participation in the process and for considering our views.

Because the proposed project is required by order of the Great Basin Unified Air Pollution Control District (District) working under the auspices of the Environmental Protection Agency (EPA), and because the District has stated that the proposed project will require the use of public land administered by the Bishop Field Office to achieve the necessary dust mitigation, the BLM recognizes a clear federal nexus for this project and strongly believes that the EPA is the appropriate lead federal agency for this proposed undertaking. As a result, we will be requesting that the EPA coordinate with the Bishop Field Office to develop a formal agreement that outlines the roles and responsibilities of each participating federal agency related to this project.

As stated by BLM staff at the meeting, the use of public land for this proposed project would require the issuance of a Right-of-Way (ROW) from the Bureau for the proposed use. For this reason, the proposed action is subject to land use plan conformance and other requirements under the Federal Land Policy and Management Act (FLPMA) and to environmental review requirements under the National Environmental Policy Act (NEPA). In addition, because of the clear federal nexus for this project and the proposed use of public land, the action is also subject to federal regulations and requirements related to the protection of cultural resources pursuant to Section 106 of the National Historic Preservation Act (NHPA). While the Bureau's FLPMA and NEPA compliance requirements may be limited to consideration of the ROW and the project footprint on public land, NHPA compliance requirements extend over the entire project footprint

regardless of jurisdiction (see 36 CFR 800.16 (d) and 36 CFR 800.41(b)(1)). Therefore, we expect that both the EPA and the BLM will be heavily involved in the preparation and review of the environmental compliance documents required for the proposed project and both agencies must be afforded ample time to fully participate in the environmental review process.

Even potentially more time consuming will be the mitigation of adverse effects to historic properties that may result from this undertaking. The mitigation process is codified in regulation and must include consultations with the affected Native American tribes, the California Office of Historic Preservation, and the Advisory Council on Historic Preservation. Consultations with this many interested parties will require substantial time and planning. The mitigation of adverse effects also requires the development of a formal Memorandum of Agreement among the agencies and any invited tribes that choose to participate. The development of such an agreement document can, under the best of circumstances, take several months or more. It is also important to note that under the NHPA, federal agencies cannot delegate their tribal consultation responsibilities to state or local agencies. As a result, we anticipate that both the EPA and the BLM will be involved in government to government consultation with the tribes concerning this project. Finally, a BLM decision regarding any ROW for the project cannot be signed until this entire process is satisfactorily completed.

The BLM is aware of the expedited timeline for this project and the potential for the Department of Water and Power (DWP) to face severe penalties for non-compliance with those deadlines. We recommend that you engage the District in a dialog about potential delays related to the complexity of the NHPA compliance requirements for this project early in the process so that the DWP is not penalized for actions that are beyond your control.

In closing, the Bishop Field Office requests that we be fully involved in the development of the range of alternatives for the proposed project. It is our desire that a full range of dust mitigation measures and project alternatives be explored and that a robust environmental review for the proposed project be completed. We are optimistic that recent testing of alternative dust mitigation measures may result in additional Best Available Control Measures (BACMs) being approved for use by the District. We are also optimistic that the application of a wider range of BACMs could help minimize adverse project related resource impacts, especially those to cultural resources. We look forward to being fully engaged in the environmental review for the proposed project based on our responsibilities related to management and conservation of public land resources, our relationships with the vested tribes, and our subject matter expertise concerning the FLPMA, NEPA and NHPA.

Sincerely,

Steve Nelson
Bishop Field Manager

cc: Theodore Schade, Control Officer, Great Basin Unified Air Pollution Control District

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

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Contact FAX: **(916) 574-1885**

August 15, 2014

File Ref: SCH # 2014071057

Mr. David Porter
City of Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, CA 90012

Subject: Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the Owens Dry Lake 2011 Supplemental Control Requirements Determination (SCRD) and 2012 SCRD Dust Control Measures Projects, Inyo County

Dear Mr. Porter:

The California State Lands Commission (CSLC) staff has reviewed the subject NOP for an EIR for the Owens Dry Lake 2011 SCRD and 2012 SCRD Dust Control Measures Project (Project), which is being prepared by the Los Angeles Department of Water and Power (LADWP) as the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.). CSLC staff has prepared these comments as a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project involves work on sovereign lands and would require a CSLC lease amendment, the CSLC will act as a responsible agency. CSLC staff requests that LADWP consult with us on preparation of the draft EIR as required by CEQA section 21153, subdivision (a), and the State CEQA Guidelines section 15086, subdivisions (a)(1) and (a)(2).

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat

preservation, and open space. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

The proposed Project appears to involve portions of the historic bed of Owens Lake, which is State sovereign land under the jurisdiction of the CSLC; therefore, LADWP is required to submit an application for CSLC consideration of an amendment to Lease No. PRC 8079.9. Please contact Drew Simpkin, Public Land Management Specialist (see contact information below) for more information.

Project Description

As described in the NOP, the 2011 SCRD Project would be implemented on 13 new dust control areas (DCAs) totaling 2.86 square miles of Owens Lake. Best available control measures (BACM) proposed to be installed are:

- 2.072 square miles of Gravel Cover,
- 0.237 square miles of Managed Vegetation, and
- 0.547 square miles of Shallow Flood.

The 2011 SCRD Project also includes the proposed transition of existing Shallow Flood on DCA T18S (1.81 square miles) to approximately 1.42 square miles of Gravel Cover and 0.39 square miles of Shallow Flood.

LADWP is still developing design concepts for the 2012 SCRD Project, which would include four DCAs totaling 0.76 square miles of Owens Lake. BACM in these areas would include Brine Shallow Flood and Gravel Cover.

Environmental Review

CSLC staff continues to be concerned that dust control projects are being implemented in a piecemeal fashion. The earlier "Master Plan" process and now the "Master Project" planning process reflect efforts to implement planning in the broader context of the Owens Lake bed so that environmental impacts are addressed comprehensively. CSLC staff strongly encourages LADWP to include this proposed Project into the Master Project.

CSLC staff requests that the following potential impacts be analyzed in the EIR.

Project Description

1. Subsequent Review: Although they may be unknown at this time, if there is the potential for the use of certain types of equipment or the construction of particular improvements, details of equipment/improvements should be analyzed in the EIR.

For example, under the description of Gravel Conveyance (Section 1.4.3.2, page 1-15), the Initial Study (IS) included with the NOP notes that "Depending on site conditions, conveyors may be used internally within individual DCAs or to move gravel from the stockpiles." Under Section 1.4.7.1 Drainage System (page 1-19), the IS states that "Improvements (pipelines, submain pump stations) to the brine management may be required." In these instances, staff requests that details be provided and the potential impacts thoroughly addressed in the EIR as part of the Project to avoid the need for additional CEQA review.

Aesthetics

2. Gravel: The installation of about 3.5 square miles of additional gravel cover compared with the approximately 1.7 square miles proposed for managed vegetation and shallow flood has the potential to alter the scenic qualities of the Owens Lake bed and surrounding vistas depending on factors such as the gravel's color, areal extent, and shape (e.g., square or straight-line boundaries compared with softer-edged boundaries).

3. Concrete mats: Use of the concrete block mats described on p. 1-15 of the IS have not been used on a large scale on the lake bed to CSLC staff's knowledge and may have even greater impacts on aesthetic values. Use of these mats should be thoroughly analyzed. Please also clarify whether these mats have been approved as a BACM by the Great Basin Unified Air Pollution Control District.

Biological Resources

4. Sensitive Species: As identified in the IS, per the California Natural Diversity Database, special-status plant and bird species occur in the Project area. There are also several seeps and springs on the Lake that support sensitive species and habitats. In developing the EIR's analysis of impacts to Biological Resources, LADWP should further consult with staffs of the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) to (1) determine the Project's potential effects on these species and any additional species the agencies may identify, and (2) if necessary, aid in identifying feasible mitigation. Staff recommends early consultation with these agencies to minimize the impacts of the Project on sensitive species.

5. Habitat Values: As stated above, CSLC staff remains concerned that dust control projects on the lakebed are being proposed in a piecemeal fashion rather than in the context of the Master Project. The Master Project is the product of years of collaboration with many agencies and interested stakeholders, and is designed to address preservation/maintenance of important values in a comprehensive way. With LADWP's continued efforts to reduce water use, the preservation of habitat values on the lakebed have become a focal issue, and has resulted in the development of a habitat suitability model (HSM) that can be a valuable tool for measuring whether habitat values can be maintained. Importantly, however, the

HSM was developed as a lake-wide strategy and its value or appropriateness for use on a project-by-project basis has not been evaluated or agreed to. While it is not clear from the NOP whether LADWP intends to apply the HSM to the Project or any of the analyses in the EIR (e.g., for the transition of DCA T18S), CSLC staff cautions against widespread reliance on the HSM outside the context of the Master Project effort without further discussion and consultation with CSLC and CDFW staffs.

6. Contaminants: Because reuse of water on the lakebed may lead to contaminant loading in the water used to create or enhance habitat, the EIR should discuss the potential for the collection and recirculation of tailwater and drainwater in shallow flood areas to concentrate contaminants or toxic chemicals, and discuss any related potential impacts to wildlife.

7. Construction Noise: The IS also notes that the EIR will examine the impacts that construction noise and truck traffic (including gravel hauling), in particular, will have on wildlife, including snowy plover and migratory birds. If impacts are found to be significant, mitigation measures could include species-specific work windows as defined by CDFW and USFWS. Again, early consultation with these agencies can aid not only in developing mitigation measures, but also in designing the Project to minimize the need for separate mitigation.

Cultural Resources

8. CSLC staff is participating in the Cultural Resources Advisory Task Force for Phase 7b. CSLC staff recommends that consultation with Native American Tribes that are culturally affiliated with the Owens Lake area be consulted early in the EIR process in a similar fashion.

9. The IS states that Section 106 consultation with the State Historic Preservation Officer will occur because of federal involvement with the Project (p. IS-2-26). CSLC staff requests to be kept advised of this consultation and copied on related correspondence because archaeological sites may be adjacent to State property and cross property boundaries.

10. CSLC and LADWP staffs have discussed the ongoing cultural resources evaluations for the Project and the need to obtain a permit from the CSLC for such work. CSLC staff will continue to work with LADWP staff for the appropriate permit.

Climate Change

11. Greenhouse Gases (GHG): A GHG emissions analysis consistent with the California Global Warming Solutions Act (AB 32) and required by section 15064.4 of the State CEQA Guidelines should be included in the EIR. This analysis should not only quantify the GHGs that will be emitted as a result of the Project's construction activities, as the IS mentions, but also identify a threshold for significance for GHG

emissions, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce or minimize those impacts. Because GHG emissions will also result from future maintenance of the DCAs (e.g., trucking in replacement gravel), this quantification should also include a discussion on emissions expected from maintenance. These estimates should be informed by the expected frequency of maintenance activity and the expected overall life of the Project. The analysis in the EIR should also evaluate the possibility of cumulative impacts of GHG emissions (e.g., with other phases of the Owens Lake Dust Mitigation Program, proposed projects in the developing Owens Lake Master Project, and Lakebed mining activities).

Geology and Soils

12. Please address the potentially significant long-term effects of the large-scale application of geotextile fabric and gravel on the underlying soil. See comments on Hydrology and Water Quality, below, for related concerns.

Hydrology and Water Quality

13. The Project's proposed use of about 3.5 square miles of gravel cover by itself and in combination with past and proposed future gravel cover projects should be thoroughly analyzed. CSLC staff requests that the Lahontan Regional Water Quality Control Board be consulted on the potential impacts from gravel and the geotextile fabric. The completed Phase 8 gravel cover project covering about 2 square miles should be evaluated to provide more certainty about these potential effects. Under the "Water Quality Impacts from Gravel Use" heading (page 2-23), the IS states "leachate from the gravel would not significantly increase the toxicity of the brine pool and discharges associated with the project would continue to be in compliance with applicable WDRs [waste discharge requirements], impacts related to water quality would be less than significant" but does not provide factual evidence to support this conclusion. LADWP should ensure that the EIR provides adequate information and analysis that clearly demonstrates how this determination was reached.

14. The IS refers to the Keeler Fan gravel site (Gravel Sources, p. 1-13) that was referenced in the Memorandum of Agreement between LADWP and the GBUAPCD (1998 MOA). The 1998 MOA states that gravel used for DCMs "shall have resistance to leaching and erosion. It shall be no more toxic than the gravel analyzed by the District from the Keeler fan site." CSLC staff requests that the EIR evaluate the potentially significant effects of the gravel leaching contaminants into groundwater or abutting shallow flood areas and the potential impacts on public health, wildlife, and habitat. The EIR should address both the impacts to groundwater quality and any change to the rate of groundwater recharge. The discussion should also provide the specifications for the permeable geotextile fabric to be used under the gravel cover and evaluate the effects of the fabric's permeability related to the above concerns.

15. The EIR should include an evaluation of potential impacts to the existing drainage patterns, both surface and subsurface, and analyze the potential impacts to mining activities on the Lakebed from any changes in drainage patterns.

16. The impacts from the potential use of the concrete block mats described on p. 1-15 of the IS should also be thoroughly analyzed as they may be different than gravel cover.

Land Use and Planning

17. Public Trust: The IS states that "[t]he consistency of the project with CSLC land use policies, including the Public Trust Doctrine, will be described in the EIR." Although the EIR may discuss the Public Trust Doctrine, the EIR should not discuss whether the Project is consistent with the Public Trust Doctrine. Only the CSLC itself, on a case-by-case basis, may make this determination.

    Although CSLC staff approved the use of gravel for about 2 square miles of gravel in Phase 8, and for large areas in Phase 7a, as LADWP acknowledged in the lease agreement with CSLC for the Phase 8 gravel cover, there is no assurance that future use of gravel cover will be allowed (Tenth Amendment of Lease No. PRC 8079.9, section 2(k)). It is the CSLC's position, as stated in several prior approvals and in correspondence with LADWP, that placement of gravel cover does not protect or promote the Public Trust uses and values of Owens Lake. The 2011/2012 SCRDs will be subject to further evaluation by the CSLC taking into account all relevant factors, including other components of the Project that may enhance Public Trust uses and values.

Mineral Resources

18. The IS states that a portion of the area leased to U.S. Borax would be made unavailable by implementation of the Project (p. 2-28). Please note that a lease amendment to eliminate that area of the lease would need to be negotiated prior to such activities.

19. Please provide additional information on the brine method dust control measure mentioned on p. 2-28 using salts extracted from the U.S. Borax lease. The analysis should discuss how this would be accomplished and whether additional infrastructure would be needed.

Recreation

20. Access and Recreation: The Owens Lake Master Project includes a recreation component, but is still in development; no specific areas have yet been confirmed as most suitable for enhanced recreational or education opportunities. Regardless, because public access and recreation on State lands are key concerns of the Public

Trust, CSLC staff requests that the EIR consider the most current Master Project recreation work group concepts in the Recreation discussion of the Project EIR to avoid conflicts between the Master Project and the Project.

21. The IS on p. 2-33 states that some limited public access opportunities such as boardwalks, trails, and overlooks *may* be constructed as part of the Project. The IS also states that recreational opportunities would be enhanced in the long term by the expansion of the on-lake roadway system; however, the installation of about 3.5 square miles of gravel cover would likely reduce the recreational potential on those areas. Please evaluate this potential impact and ensure that any proposed recreational features such as boardwalks, trails, and overlooks are part of the project description; they should be evaluated from both the Recreation and Cultural Resources perspectives since increased access to sites could result in artifact collecting or vandalism.

Transportation and Traffic

22. The EIR should evaluate the potentially significant impact caused by gravel hauling and other construction traffic. According to information in the IS, gravel haul trips would be on-going for up to 2 years, and approximately 100 daily round trips would be required to haul gravel from the mines on the east side of the lake to the stockpile locations. Based on this information, approximately one truck would cross SR 136 every 3 minutes (page 2-35). Although under proposed mitigation measure Trans-1 LADWP would develop and implement a Traffic Work Safety Plan, CSLC staff requests that the EIR also address how the gravel hauling tracks would affect posted speed limits in the area, which could be of concern to the local population over the Project construction period.

Mandatory Findings of Significance

23. Cumulative Impacts: In addition to the potentially significant impacts described in the IS, the EIR should address the potentially significant cumulative impacts of the Project in conjunction with other projects in the area including, but not limited to, past and future dust control projects, solar projects, etc.

Additional Review

24. Adequate Mitigation: To avoid the improper deferral of mitigation, mitigation measures should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (State CEQA Guidelines § 15126.4(b)). Of particular concern to CSLC staff is that LADWP coordinate with CSLC and CDFW to develop a robust, comprehensive plan to address remedial actions and/or adaptive management that may need to be implemented should the proposed mitigation measures not be successful.

Thank you for the opportunity to comment on the NOP for the Project. As a trustee and responsible agency, the CSLC requests that you consult with us on this Project and keep us advised of changes to the Project description and all other important developments. Please send additional information on the Project to the CSLC staff listed below as the draft EIR is being prepared.

Please contact Drew Simpkin, Public Land Management Specialist, at (916) 574-2275 or by email at drew.simpkin@slc.ca.gov, for information concerning our leasing requirements. For questions concerning the environmental review, please contact Cynthia Herzog, Senior Environmental Scientist, at (916) 574-1310 or by e-mail at cynthia.herzog@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
Drew Simpkin, CSLC
Cynthia Herzog, CSLC
Pamela Griggs, CSLC

State of California - Natural Resources Agency
DEPARTMENT OF FISH & WILDLIFE
http://www.dfg.ca.gov
Inland Deserts Region (IDR)
407 West Line Street
Bishop, CA 93514
(760) 872-1171
(760) 872-1284 FAX

EDWARD G. BROWN, JR., Governor
Charlton H. Bonham, Director

August 18, 2014

Mr. David Porter
Los Angeles Department of Water and Power
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Via mail and facsimile (213) 367-4710

Notice of Preparation of an EIR for the Owens Lake 2011 SCRD and 2012 SCRD Dust Control Measures Projects (State Clearinghouse Number: 2014071057)

Dear Mr. Porter:

The California Department of Fish and Wildlife, hereinafter referred to as CDFW, has reviewed the Notice of Preparation (NOP) of the Environmental Impact Report (EIR) for the Owens Lake 2011 Supplemental Control Requirements Determination (SCRD) and 2012 SCRD Dust Control Measures Projects (State Clearinghouse Number: 2014071057), hereinafter referred to as the "Project". The City of Los Angeles Department of Water and Power (LADWP) is conducting environmental review of the proposed 2011 SCRD and 2012 SCRD projects of the Owens Lake Dust Mitigation Program on Owens Lake. The CDFW appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources.

CDFW is a Trustee Agency pursuant to the California Environmental Quality Act (CEQA). A Trustee Agency has jurisdiction over certain resources held in trust for the people of California. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (CEQA Guidelines, Section 15386). As the trustee agency for fish and wildlife resources, CDFW provides requisite biological expertise to review and comment upon CEQA documents, and makes recommendations regarding those resources held in trust for the people of California.

CDFW may also assume the role of Responsible Agency. A Responsible Agency is an agency other than the lead agency that has a legal responsibility for carrying out or approving a project. A Responsible Agency actively participates in the Lead Agency's CEQA process, reviews the Lead Agency's CEQA document and uses that document when making a decision on the project. The Responsible Agency must rely on the Lead Agency's environmental document to prepare and issue its own findings regarding the project (CEQA Guidelines, Sections 15096 and 15381). CDFW most often becomes a responsible agency when a Fish and Game Code Section 1600 *et seq.* Lake or Streambed Alteration Agreement or a 2081(b) California Endangered Species Act Incidental Take Permit is needed for a project. CDFW relies on the environmental document prepared by the Lead Agency to make a finding and decide whether or not to issue the permit or agreement. It is important that the Lead Agency's EIR considers CDFW's responsible agency requirements. For example, CEQA requires CDFW to include additional feasible alternatives or feasible mitigation measures within its powers that

would substantially lessen or avoid any significant effect the project would have on the environment (CEQA Guidelines, section 15096 (g) (2). In rare cases, CDFW as Responsible Agency may be required to assume the role of the Lead Agency under certain conditions (CEQA Guidelines, section 15052).

Pursuant to California Fish and Game Code section 711.4, CDFW collects a filing fee for all projects subject to CEQA. These filing fees are collected to defray the costs of managing and protecting fish and wildlife resources including, but not limited to, consulting with public agencies, reviewing environmental documents, recommending mitigation measures, and developing monitoring programs. Project applicants need not pay a filing fee in cases where a project will have no effect on fish and wildlife, as determined by CDFW, or where their project is statutorily or categorically exempt from CEQA.

The proposed 2011 SCRD project is to install best available control measures (BACM) to control PM_{10} dust emissions on 13 parcels (Duck Pond-L1, C2-L1, T10-1-L1, T17-2-L1, T21-L1, T21-L2, T32-1-L1, T35-2-L1, T37-1-L1, T37-2-L1, T37-2-L2, T37-2-L3, and T37-2-L4) totaling 1,828 acres of Owens Lake. BACM would include Gravel Cover, Shallow Flooding, and Managed Vegetation. Additionally, the project would include transition of 1,156 acres of existing shallow flood in dust control area (DCA) T18S to approximately 906 acres of Gravel Cover and 250 acres of Shallow Flooding. The proposed 2012 SCRD project is to install best available control measures (BACM) to control PM_{10} dust emissions on 4 additional DCAs (Duck Pond-L2, T10-3-L1, T21-L3, and T21-L4) totaling 485 acres. BACM would include Brine Shallow Flooding and Gravel Cover.

To enable Department staff to adequately review and comment on the proposed project, we recommend the following information be included in the EIR, as applicable:

1. A complete assessment of the flora and fauna within and adjacent to the project area should be conducted, with particular emphasis upon identifying special status species including rare, threatened, and endangered species. This assessment should also address locally unique species, rare natural communities, and wetlands. The assessment area should be large enough to encompass areas potentially subject to both direct and indirect project affects.

    a. The EIR should include survey methods, dates, and results; and should list all plant and animal species detected within the project study area. Special emphasis should be directed toward describing the status of rare, threatened, and endangered species in all areas potentially affected by the project. All necessary biological surveys should be conducted in advance of EIR circulation, and should not be deferred until after project approval.

    b. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, § 15380).

    c. Species of Special Concern (SSC) status applies to animals generally not listed under the federal Endangered Species Act or the California Endangered Species Act, but which nonetheless are declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. SSCs should be considered during the environmental review process.

d. A detailed vegetation map should be prepared, preferably overlaid on an aerial photograph. The map should be of sufficient resolution to depict the locations of the project site's major vegetation communities, and view project impacts relative to each community type. The vegetation classification system used to name the polygons should be described.

e. A complete assessment of rare, threatened, and endangered invertebrate, fish, wildlife, reptile, and amphibian species should be presented in the EIR. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service.

f. CDFW's California Natural Diversity Data Base (CNDDB) should be searched to obtain current information on previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. In order to provide an adequate assessment of special-status species potentially occurring within the project vicinity, the search area for CNDDB occurrences should include all U.S.G.S 7.5-minute topographic quadrangles with project activities, and all adjoining 7.5-minute topographic quadrangles. The EIR should discuss how and when the CNDDB search was conducted, including the names of each quadrangle queried.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, should be included.

a. The EIR should present clear thresholds of significance to be used by the Lead Agency in its determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect.

b. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

c. Impacts associated with initial project implementation as well as long-term operation and maintenance of a project should be addressed in the EIR.

d. In evaluating the significance of the environmental effect of a project, the Lead Agency should consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project. Expected impacts should be quantified (e.g., acres, linear feet, number of individuals taken, volume or rate of water extracted, etc. to the extent feasible).

e. Project impacts should be analyzed relative to their effects on off-site habitats. Specifically, this may include public lands, open space, downstream aquatic habitats, areas of groundwater depletion, or any other natural habitat that could be affected by the project.

f. Impacts to and maintenance of wildlife corridor/movement areas and other key seasonal use areas should be fully evaluated and provided.

g. A discussion of impacts associated with increased lighting, noise, human activity, changes in drainage patterns, changes in water volume, velocity, quantity, and quality, soil erosion, and/or sedimentation in streams and water courses on or near the project site, with mitigation measures proposed to alleviate such impacts should be included. Special considerations applicable to linear projects include ground disturbance that may facilitate infestations by exotic and invasive species over a great distance.

h. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts to similar plant communities and wildlife habitats.

3. A range of project alternatives should be analyzed to ensure that the full spectrum of alternatives to the proposed project are fully considered and evaluated. Alternatives which avoid or otherwise minimize impacts to sensitive biological resources should be identified.

   a. If the project will result in any impacts described under the Mandatory Findings of Significance (CEQA Guidelines, § 15065) the impacts must be analyzed in depth in the EIR, and the Lead Agency is required to make detailed findings on the feasibility of alternatives or mitigation measures to substantially lessen or avoid the significant effects on the environment. When mitigation measures or project changes are found to be feasible, the project should be changed to substantially lessen or avoid the significant effects.

4. Mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats should be thoroughly discussed. Mitigation measures should first emphasize avoidance and reduction of project impacts. For unavoidable impacts, the feasibility of on-site habitat restoration or enhancement should be discussed. If on-site mitigation is not feasible, off-site mitigation through habitat creation, enhancement, acquisition and preservation in perpetuity should be addressed.

   a. CDFW generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

   b. Areas reserved as mitigation for project impacts should be legally protected from future direct and indirect impacts. Potential issues to be considered include limitation of access, conservation easements, monitoring and management programs, water pollution, and fire.

c. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and/or seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for long-term conservation of the mitigation site.

5. Take of species of plants or animals listed as endangered or threatened under the California Endangered Species Act (CESA) is unlawful unless authorized by CDFW. However, a CESA 2081(b) Incidental Take Permit may authorize incidental take during project construction or over the life of the project. The EIR must state whether the project would result in any amount of incidental take[1] of any CESA-listed species. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit.

   CDFW's issuance of a CESA Permit for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. CDFW as a responsible agency under CEQA will consider the Lead Agency's Negative Declaration or Environmental Impact Report for the project. CDFW may require additional mitigation measures for the issuance of a CESA Permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA Permit.

   To expedite the CESA permitting process, CDFW recommends that the EIR addresses the following CESA Permit requirements:

   a. The impacts of the authorized take are minimized and fully mitigated;
   b. The measures required to minimize and fully mitigate the impacts of the authorized take and: (1) are roughly proportional in extent to the impact of the taking on the species; (2) maintain the applicant's objectives to the greatest extent possible, and (3) are capable of successful implementation;
   c. Adequate funding is provided to implement the required minimization and mitigation measures and to monitor compliance with and the effectiveness of the measures; and
   d. Issuance of the permit will not jeopardize the continued existence of a State-listed species.

6. CDFW has responsibility for wetland and riparian habitats. It is the policy of CDFW to strongly discourage development in wetlands or conversion of wetlands to

[1] Even a single individual.

uplands. We oppose any development or conversion which would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. The EIR should demonstrate that the project will not result in a net loss of wetland habitat values or acreage.

a. If the project site has the potential to support aquatic, riparian, or wetland habitat, a jurisdictional delineation of lakes, streams, and associated riparian habitats potentially affected by the project should be provided for agency and public review. This report should include a jurisdictional delineation that includes wetlands identification pursuant to the U. S. Fish and Wildlife Service wetland definition[2] as adopted by CDFW[3]. Please note that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers. The jurisdictional delineation should also include mapping of ephemeral, intermittent, and perennial stream courses potentially impacted by the project. In addition to federally protected wetlands, CDFW considers impacts to wetlands (as defined by CDFW) potentially significant.

b. The project may require a Lake or Streambed Alteration Agreement, pursuant to Section 1600 *et seq.* of the Fish and Game Code, with the applicant prior to the applicant's commencement of any activity that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake, or use material from a streambed. CDFW's issuance of a Lake or Streambed Alteration Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a responsible agency. CDFW as a responsible agency under CEQA may consider the local jurisdiction's (lead agency) Negative Declaration or Environmental Impact Report for the project. To minimize additional requirements by CDFW pursuant to Section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement.

In addition to the information above, CDFW has identified the following environmental issues that need to be explored in the EIR:

The EIR should include specific data regarding current water use in comparison to predicted water use for each DCA and throughout the project area. Figures should clearly indicate how the data relates to the referenced LADWP maximum water use of 95,000 afy per

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[2] Cowardin, Lewis M., et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

[3] California Fish and Game Commission Policies: Wetlands Resources Policy; Wetland Definition, Mitigation Strategies, and Habitat Value Assessment Strategy; Amended 1994

its Owens Lake Water Use Policy. The EIR should also present the specific data and results which determined the Mandatory Finding of Significance that, "Based on LADWP's water supply assessment for the Phase 8 project, there may be insufficient surplus water available for LADWP to continue to implement Shallow Flood as a DCM on Owens Lake."

In order to determine and calculate the specific impacts and appropriate mitigation for fish and wildlife resources and habitats associated with implementation of the project, including for BACM in all cells (e.g. Shallow Flood, Managed Vegetation, Gravel Cover and Brine Shallow Flood), which may also be necessary for subsequent permitting by CDFW, pertinent information for each DCA should include the specific current conditions and biological resources in each cell in the project, the history of the proposed transition cells and any regulatory documents that pertain to them, and specific details on how impacts will be mitigated for each DCM. The EIR should consider and evaluate consistency with all previous concerns and permitting for the numerous projects and Lake Alteration Agreements involved with the multiple phases of dust control on Owens Lake (e.g. Phase 5, Phase 7, Phase 8, and Phase 7a). For example, DCA cell T18S was previously designated for Shallow Flood and has observed significant use by Snowy Plover, American Avocets, and California Gulls, with other waterbirds and waterfowl also being documented in previous year's monitoring reports. Transitioning over 75% of this cell to Gravel Cover may significantly impact bird use for this cell and possibly Owens Lake. Objectives for the cell should include, at minimum, maintaining baseline use by all birds, including waterbirds and waterfowl, and not just "maintaining existing habitat value"; e.g. the EIR should document the specific habitat locations serving to mitigate this conversion in both acreage and value. CDFW's policy of no net loss of wetland habitat will require this type of specific detail to evaluate potential concerns from project implementation in both the EIR and subsequent review for any associated permits for the project.

As mentioned above, the NOP makes reference to maintaining existing habitat value for Owens Lake wildlife in Shallow Flood cell T18S. If this reference indicates utilizing the Habitat Suitability Model (HSM) as incorporated for previous Phase 8 and Phase 7a projects, the EIR should exhaustively provide a full description of the model approach developed to date, including evaluating biological impacts to all project cells. Also, specifically, current and predicted post-project HSM parameter values for each cell are necessary, including water depth, salinity, seasonal water availability, % vegetated, % island area, vegetation structure, % dry area, microtopographic relief, vegetation richness, and vegetated topographic diversity. This data could then be used to calculate current and predicted post-project habitat value acres for each of the six target guilds; diving waterbirds, breeding waterfowl, migrating waterfowl, breeding shorebird, migrating shorebird, and meadow. Habitat value acres for each guild could then be used to quantify both the impacts and benefits of the project to all DCAs. Habitat value acreage should also be calculated for any proposed alternatives. The HSM approach also requires that an evaluation process to determine how well projected habitat value acres match post implantation habitat value acres, and also how well the habitat suitability models continue to relate to habitat use by each guild on Owens Lake. This evaluation would require monitoring of parameter values, habitat use by bird guilds and plant composition for the meadow guild. This evaluation should be developed collaboratively with LADWP, State Lands and CDFW.

The EIR should also clarify the redirection by LADWP from working with a wide range of stakeholders to develop a Master Plan to its own Master Project, including providing a realistic time frame for completing its "Master Project". Although we remain hopeful the Owens Lake Master plan process can be completed to implement a lake-wide mitigation approach in the near future, the EIR for this project should clearly disclose and identify mitigation areas in similar form and function of all impacted wetland cells in perpetuity. LADWP should propose a minimum 1:1

mitigation to impact ratio for these wetland mitigation areas, including maintaining both wetland habitat acres and habitat value for the cells. Specific designs and data, including site plans (e.g. blueprints) for the proposed cells should also be included in the EIR. Additionally, cumulative impacts should be addressed for all project implementation to date and not rely on some future Master Plan which has been delayed significantly from previously expected completion dates.

CDFW also has significant concerns regarding the apparent fragmentary application of the HSM to this and other dust control projects on Owens Lake. Clearly, the Master Planning approach which helped develop the HSM was intended to include a lake wide plan for both long-term water conservation and wildlife habitat improvement, with intent to identify a transition approach for numerous DCAs in concert with maintaining concurrent available habitat for wildlife. The planning process would also have developed a rigorous monitoring and adaptive management approach to numerous habitat concerns for the lake and not solely rely on "habitat value acres" as a success measure. This would have provided the opportunity to ensure long-term maintenance and preservation of wildlife habitat while LADWP continued to reduce water use on the lake for dust control. Absent of this approach, apparent piece-meal use of the HSM for water reduction on the lake may not be consistent with either the intent of CEQA or subsequent permitting by CDFW. CDFW supports further consultation in this regard and recommends including other agencies and entities to develop on a cooperative approach to these concerns.

The EIR should provide an evaluation of potential impacts to all special status species which have been documented on Owens Lake to date (re: consider CDFW's Phase 7a comments to include the following to those species already identified: American white pelican (*Pelecanus erythrorhynchos*), long-eared owl (*Asio otus*), black swift (*Cypseloides niger*), Vaux's swift (*Chaetura vauxi*), Le Conte's thrasher (*Toxostoma lecontei*); the bank swallow (*Riparia riparia*) is a state threatened species and the willow flycatcher (*Empidonax trailii,*all subspecies) is a state endangered species; and the American Peregrine Falcon (*Falco peregrinus anatum*) is a fully protected species.

The NOP identifies that the project may utilize LADWP's shale pit as a gravel source, which is currently permitted for 40 acres of development and has the potential for expansion. A complete analysis of potential direct and indirect impacts on the state Threatened Mohave ground squirrel (MGS) and other species potentially impacted at either the proposed borrow pits and transportation routes should be conducted.

The NOP states Concrete Block Mats may be used "alternatively" in areas designed for Gravel Cover. A detailed description of the proposed concrete block design should be provided, along with thorough analysis of the designs potential impact to all wildlife utilizing the Owens Lake. Detailed analysis of potential wildlife impacts should include but not be limited to increased temperature exposure, avoidance, and stranding as related with the "1.5-inch spacing between blocks to give the mat flexibility." The design characteristics and associated impacts from Concrete Block Mats vs. current observations for Gravel Cover should be clearly vetted in the EIR.

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Ms. Lacey Greene, Environmental Scientist, at (760) 872-1128 or by electronic mail at Lacey.Greene@wildlife.ca.gov.

Sincerely,

for Kimberly Nicol
Regional Manager

cc: CDFW
CHRON
Bishop

State Clearinghouse
Sacramento

Theodore D. Schade
Air Pollution Control Officer

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537
Tel: 760-872-8211 E-mail: tschade@gbuapcd.org

September 5, 2014

Mr. Steve Nelson
Field Manager
Bishop Field Office
U.S. Bureau of Reclamation
351 Pacu Lane, Suite 100
Bishop, California 93514

Mr. Richard Harasick
Director of Water Operations
Los Angeles Dept. of Water & Power
111 North Hope Street
Los Angeles, California 90012-2607

Subject: Owens Lake – 2011 and 2012 Supplemental Control Requirement Determinations – CEQA Scoping – Response to Letter from the U.S. Bureau of Land Management

Dear Messrs. Nelson and Harasick:

The Great Basin Unified Air Pollution Control District (District) has reviewed the August 7, 2014 letter from the Bureau of Land Management (BLM), signed by Mr. Steve Nelson, Bishop Field Office Manager, regarding the implementation of the Los Angeles Department of Water and Power's (LADWP's) Owens Lake Phase 9/10 dust control project (Project). The District understands that complete implementation of the Project will require issuance of a Right-of-Way (ROW) from BLM for accessing and completing dust control measures on certain federal parcels within the Project site, although the project is not critically dependent on the federal lands and more than 95 percent of Project activities can be completed without issuance of the ROW.

The BLM letter asserts that issuance of the ROW will trigger review and compliance under the National Environmental Policy Act (NEPA), Federal Land Policy and Management Act (FLPMA), and, due to the "clear federal nexus for this project," the National Historic Preservation Act (NHPA). BLM "strongly believes" that the U.S. Environmental Protection Agency (EPA) is the appropriate federal agency to lead these review processes, and indicates

that both EPA and BLM "will be heavily involved in the preparation and review of the environmental compliance documents."

BLM is correct to state that certain NEPA, FLPMA and NHPA review may be required for full Project implementation. However, the District believes that the proper scope of federal involvement is limited to the direct and indirect effects of work *within the BLM ROW*—not the entire Project. Moreover, the District does not believe that LADWP is required to put its own environmental review process on hold while the federal government completes its review, nor that such delay is warranted or even permissible under the terms of the orders requiring implementation of the Project. Finally, the District believes that BLM, not EPA, is the appropriate federal agency to complete the NEPA/NHPA review process.

Below, each of the above points is discussed in more detail.

A. BLM is *not* required to conduct NHPA Section 106 consultation with respect to the entire Phase 9/10 Project site.

BLM's letter states, "While the Bureau's FLPMA and NEPA compliance requirements may be limited to consideration of the ROW and the project footprint on public land, *NHPA compliance requirements extend over the entire project footprint regardless of jurisdiction*)." Aug. 7, 2014 letter at 2 (citing 36 C.F.R. § 800.16(d) and 36 C.F.R. § 800.41(b)(1); emphasis added). BLM's assertion that NHPA "compliance" may be required over the entire Project site does not appear to be correct.

- 36 C.F.R. § 800.16(d) defines "area of potential effects" for a project subject to NHPA jurisdiction. This means "means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking."
    - By definition, the area of potential effects is dependent upon the "scale and nature" of an *undertaking*. "Undertaking" is defined as "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and *those requiring a Federal permit, license or approval*." 36 C.F.R. § 800.16(y), emphasis added.
    - In this case, the activity requiring a federal permit, license or approval is the small portion of the Project that is to occur within the BLM ROW. Of the approximately 2,317 acres in the Phase 9/10 project area, between 90 and 115 acres, or less than 5 percent, will take place on BLM ROW. In addition, no portion of the federal lands are essential for completion of the project on the non-federal lands. The text of the regulation does not provide a basis to extend the meaning of "undertaking" to refer to the entire Project, where the federal component is both small relative to the overall geographic scope of the Project and non-essential to completion of other Project components.

- 36 C.F.R. § 800.4**1**(b)(1) does not exist; we believe this was intended to be a reference to 36 C.F.R. § 800.4(b)(1) instead. This section describes the "level of effort" a federal agency official should make to identify historic properties in the NHPA Section 106 consultation process:
    - "The agency official shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. The agency official shall take into account past planning, research and studies, *the magnitude and nature of the undertaking and the degree of Federal involvement*, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the area of potential effects. …"
    - Because this definition both refers back to the "area of potential effects" and expressly provides that the agency should consider the "degree of federal involvement," the District believes this should be read to limit the agency's scope to consideration of the effects of the Project within BLM's geographical and regulatory jurisdiction—not beyond it.

- BLM appears to concede that NEPA and FLPMA review jurisdiction are limited to the area under BLM's control. We agree.
    - Although federal agencies, under NEPA, should review direct, indirect, and cumulative effects of their decisions, "a Federal agency has no duty to consider cumulative effects where the agency 'has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions.'" *Sierra Club v. Kenna*, 2013 U.S. Dist. LEXIS 4743, *28 (E.D. Cal. Jan. 11, 2013), quoting *Dep't of Transportation v. Public Citizen*, 541 U.S. 752, 770 (2004).
    - In *Sierra Club. v. Kenna*, the District Court considered an analogous situation in which BLM approval was required for a ROW to access a wind energy project. The NEPA review for the project considered only the effects of granting the ROW and not the effects of the wind energy project itself. Of importance, while the ROW was the preferred access to the project, the applicant had proposed and the CEQA lead agency (Kern County) had considered an alternative access route that would be located entirely on private land. The court concluded that BLM's decision not to include the wind project in its review was not arbitrary or capricious, finding that the wind project did not depend on BLM's approval for its existence; because BLM had "no authority to influence the project," it was not necessary to include that project within the scope of its review. U.S. Dist. LEXIS at *33. The District believes the current situation is analogous, particularly to the extent that LADWP could comply with the order by implementing air pollution control measures only on state lands and avoiding BLM lands.

- A separate question is whether BLM has *discretion* to consider a broader set of impacts than those within its immediate geographic scope or control. The answer is likely yes; although it is not clear where the extent of this discretion ends, the District does not

believe that BLM could be required to strictly limit its review to effects of the Project within its own permitting jurisdiction. However, this does not mean that BLM has authority to direct the review/approval process outside its federal jurisdiction, as discussed below.

B. LADWP is not required to put its CEQA process on hold pending NEPA/NHPA review.

The BLM letter implies, although it does not expressly state, that LADWP must wait for all federal review processes to be completed before the EIR can be finalized and the Project can be approved (e.g., "we expect that both the EPA and the BLM will be heavily involved in the preparation and review of the environmental compliance documents required for the proposed project and both agencies must be afforded ample time to fully participate in the environmental review process," which "will require substantial time and planning"). To the extent that BLM is arguing for the CEQA process to be suspended while it complies with NEPA/NHPA for the ROW component, the District does not believe this is appropriate.

- Both NEPA and NHPA expressly place compliance obligations on *federal agencies*. Neither statute places any burden on state and/or local agencies to ensure such compliance. *See, e.g., Preservation Coalition of Erie County v. Fed. Transit Admin.*, 356 F.3d 444, 455-456 (2d Cir. 2004) (citing multiple cases holding that NHPA imposes no duties upon state officials and that only federal, not state agencies, can be liable for violations of NHPA).

- CEQA does not require that NEPA review must be completed prior to or even concurrent with CEQA review, especially where the federal permitting component is a minor and non-essential part of the overall CEQA project. Even where state and federal components are more closely linked than in the present scenario, CEQA merely encourages cooperation and preparation of joint documents. *See* CEQA Guidelines, 14 Cal. Code Regs. § 15220 et seq. While cooperation and joint documents are certainly preferred, LADWP cannot use the federal agency involvement as an excuse to delay CEQA compliance and implementation of that portion of the air pollution controls to be located on state and private (non-federal) lands.

- The District assumes that LADWP's EIR for the Project will fully analyze all of the direct, indirect, and cumulative environmental impacts of the Project, including those that may occur on federal land. If these CEQA requirements are met, neither CEQA, NEPA nor NHPA provides a basis to delay certification of the EIR or approval of the Project pending completion of the federal review process. *See, e.g., Clover Valley Found. v. City of Rocklin*, 197 Cal. App. 4th 200, 213–16 (2011) (upholding City's certification of EIR where NHPA consultation process by U.S. Army Corps of Engineers would be completed after CEQA process and in which certain mitigation measures required submittal of reports to Corps prior to project work affecting resources subject to federal jurisdiction).

C. EPA is not the appropriate federal agency to complete NEPA/NHPA review.

BLM asserts in its letter that "EPA is the appropriate lead federal agency for this proposed undertaking," based on the proposition that the Project would be completed by order of the District "under the auspices of" EPA. This assertion is incorrect.

- Under NEPA, the lead agency should be the federal agency with primary responsibility for complying with NEPA on a given proposed action. 40 C.F.R. § 1508.16; 40 C.F.R. § 1501.5(c).
    - If there is disagreement among multiple federal agencies regarding which agency should assume lead agency status, "the following factors (which are listed in order of descending importance) shall determine lead agency designation:
        (1) Magnitude of agency's involvement.
        (2) Project approval/disapproval authority.
        (3) Expertise concerning the action's environmental effects.
        (4) Duration of agency's involvement.
        (5) Sequence of agency's involvement." 40 C.F.R. § 1501.5(c).

- Here, EPA has *no* permitting or approval authority over the Project and is not likely to have expertise regarding the Project's potential effects on cultural or other physical resources.

- The District is not acting under the auspices of the EPA. The Clean Air Act provides for EPA to set air quality standards, designate areas that do not attain the standards and set schedules for the submission of plans to attain the standards. Preparation, implementation and enforcement of attainment plans are the responsibility of the states. CAA § 172. Under state law, the District has "the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles." Calif. Health and Safety Code § 40000. In addition, with respect to air pollution caused by the City of Los Angeles' water diversion activities, the District is specifically empowered under state law to require LADWP to control that air pollution. CH&S § 42316.

- Moreover, to the extent that BLM's assertion is based on the idea that the District is operating on delegated authority to issue permits and orders pursuant to the federal Clean Air Act (CAA), it is relevant to note that *all* actions under the CAA are expressly exempted from NEPA by federal statute, 15 U.S.C § 793(c)(1): "No action taken under the Clean Air Act [42 U.S.C. § 7401 et seq.] shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 [42 U.S.C. § 4321 et seq.]."

In summary, it is clear to the District that LADWP is the appropriate lead agency for the Phase 9/10 Owens Lake dust control project, that BLM is not required to conduct NHPA Section 106 consultation with respect to the entire Project site, and that LADWP is not required to put its CEQA process on hold pending NEPA/NHPA review and permitting for the small portion of the

Project located on federal land. As such, the District expects LADWP to comply with the current deadlines for implementation of the Project and to have the required public-health-protecting air pollution controls in place and operational between May and December 2016. I would be happy to meet with both of you to discuss LADWP's path toward implementing the Phase 9/10 Project.

Sincerely,

Theodore D. Schade, P.E.
Air Pollution Control Officer

Cc: Allan Zabel, USEPA, Region 9
David Porter, LADWP

Attachments

A. *Sierra Club v. Kenna*, 2013 U.S. Dist. LEXIS 4743 (E.D. Cal., Jan. 11, 2013).

B. *Preservation Coalition of Erie County v. Fed. Transit Admin.*, 356 F.3d 444 (2d Cir. 2004).

C. *Clover Valley Found. v. City of Rocklin*, 197 Cal. App. 4th 200 (2011).

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ATTACHMENT A

SIERRA CLUB, CENTER FOR BIOLOGICAL DIVERSITY, and DEFENDERS OF WILDLIFE, Plaintiffs, v. JAMES KENNA, in his official capacity as California State Director, Bureau of Land Management, UNITED STATES BUREAU OF LAND MANAGEMENT, and KEN L. SALAZAR, in his official capacity as Secretary, United States Department of the Interior, Federal Defendants, NORTH SKY RIVER ENERGY, LLC, Intervenor-Defendant.

1:12-cv-1193 AWI JLT

UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF CALIFORNIA

2013 U.S. Dist. LEXIS 4743

January 11, 2013, Decided
January 11, 2013, Filed

COUNSEL: **[*1]** For Sierra Club, Plaintiff: Gregory Buppert, PHV, LEAD ATTORNEY, Defenders of Wildlife, Washington, DC; Lisa Tamara Belenky, LEAD ATTORNEY, Center for Biological Diversity, San Francisco, CA; Matthew Vespa, LEAD ATTORNEY, Sierra Club, San Francisco, CA.

For Center for Biological Diversity, Defenders of Wildlife, Plaintiffs: Lisa Tamara Belenky, LEAD ATTORNEY, Center for Biological Diversity, San Francisco, CA; Gregory Buppert, PHV, Defenders of Wildlife, Washington, DC.

For United States Bureau of Land Management, in his official capacity, Ken Salazar, James Kenna, in his official capacity, Defendants: Stephen Finn, GOVT, LEAD ATTORNEY, U.S. Department of Justice, Environmen & Natural Resources Div, NRS, Washington, DC; Bradley H. Oliphant, US Department Of Justice, Env. & Natural Resources Division, Denver, CO; Jared S. Pettinato, United States Department of Justice, Washington, DC.

For North Sky River Energy, LLC, Intervenor Defendant: Elizabeth Lynch Bridges, LEAD ATTORNEY, Zachary R. Walton, LEAD ATTORNEY, Christine Wade Griffith, SSL Law Firm LLP, San Francisco, CA; Andrew C. Lillie, PHV, PRO HAC VICE, Andrew L. Spielman, PHV, PRO HAC VICE, Daniel J. Dunn, PHV, PRO HAC VICE, Jennifer **[*2]** Biever, PHV, PRO HAC VICE, Margaret A. Parish, PHV, PRO HAC VICE, Hogan Lovells US LLP, Denver, CO.

JUDGES: ANTHONY W. ISHII, SENIOR UNITED STATES DISTRICT JUDGE.

OPINION BY: ANTHONY W. ISHII

OPINION

MEMORANDUM OPINION AND ORDER ON PARTIES' MOTIONS AND CROSS MOTIONS FOR SUMMARY JUDGMENT

Doc. #'s 64, 70 and 71

This is an action for injunctive relief by plaintiffs Sierra Club, Center for Biological Diversity, and Defenders of Wildlife ("Plaintiffs") against defendants James Kenna in his official capacity, United States Bureau of Land Management and Ken L. Salazar in his official capacity ("Federal Defendants") and Intervenor-Defendant North Sky River Energy, LLC ("NSRE") (collectively, "Defendants"). Plaintiffs' complaint seeks judicial review of a decision by defendant Bureau of Land Management ("BLM") to grant right of way to NRSE for a route over federal land connecting a state road with a wind energy project located entirely on private land. Plaintiffs' complaint alleges the grant of right of way was made in violation of the National Environmental Policy Act ("NEPA") and the Endangered Spe-

cies Act ("ESA"). Currently before the court are motions and cross-motions by all parties for summary judgment. Federal subject **[*3]** matter jurisdiction exists pursuant to *28 U.S.C. § 1331*. Venue is proper in this court.

FACTUAL BACKGROUND/UNDISPUTED MATERIAL FACTS

Defendant-Intervenor NSRE, a developer of wind-power projects, proposes to develop 12,781 acres of entirely private land situated at the southern end of the Sierra Nevada mountain range north-east of Tehachapi, California, for the purpose of wind power generation (the "Wind Project") . The Wind Project is anticipated to contain up to 102 wind turbines and have a maximum electrical output of up to 300 megawatts. The parties agree that the operation of wind turbines inevitably results in some level of avian fatalities due to the collision of birds with moving turbine blades. In this regard there are three bird species that are of particular interest to Plaintiffs' complaint; the California condor (*Gymnogyps californicus*), the southwestern willow flycatcher (*Empidonax traillii extimus*), and the golden eagle (*Aquila chrysaetos*). Of these three species the first two are listed as endangered under the California Endangered Species Act; *Cal. Fish & Game Code § 2050 et seq.*, and the third species is federally protected under the Bald and Golden Eagle Protection **[*4]** Act, *16 U.S.C. § 668 et seq.*

In December 2010, NSRE applied to BLM for a right of way over federal land for the purpose of establishing a road to service the Wind Project and for the purpose of establishing underground power transmission lines and fiber optic communications lines (hereinafter the "Road" or "Road Project"). BLM conducted an environmental assessment (EA) of the Road Project. In conducting the EA on the Road Project, BLM determination that its scope of review must be confined to the environmental impacts of the construction of the Road itself because the Road and Wind Projects are not connected. Thus, BLM concluded its EA could not incorporate the much broader impacts of the Road plus the Wind Project. BLM's EA resulted in a finding of no significant impact (FONSI) based on this narrower scope of review. Based on its FONSI and based on the undisputed fact that the establishment of the Road Project over federal land would involve less environmental impact than the establishment of access to the Wind Project over private land, BLM issued the requested right of way to NSRE.

BLM based its scope of review decision on the conclusion that the Road and Wind Project were not interdependent **[*5]** because the Wind Project would continue with or without the Road Project. BLM found that NSRE could and would obtain access to the Wind Project over private land should BLM deny the Road Project right of way application. BLM's conclusion that the Road and Wind Project are not interdependent is at the heart of Plaintiff's action. The facts that underlie BLM's decision are highly disputed. First and foremost, BLM's finding is based on NSRE's representation that if BLM were to decline to issue the requested right of way, the Project would nonetheless proceed over a roadway situated entirely on private property. There is no dispute that a route over private land has been planned and described by NSRE, that the private road would be 28 miles long as compared with a 10 mile long route for the Project Road. It is also not disputed that the private road would involve the construction of more new roadway than would be required for construction of the Project Road and that the total acreage of new, repaved, straightened and widened road, along with the total of acreage disturbed by the construction process would be greater for the private road. Plaintiffs' main contention is that BLM was clearly **[*6]** erroneous in finding that a route over private is feasible. Plaintiffs contend the route over private land is not feasible because of the large number of private property owners whose land would be traversed by the route and who had not, at the time of BLM's decision, granted access to NSRE. Plaintiffs also dispute BLM's finding that the Project Road would have value independent of its use as an access road for the Wind Project.

The parties have submitted statements of undisputed material facts that are far more extensive than what would be required to address the threshold question of whether BLM was clearly erroneous in its determination that the Road Project and the Wind Project are not interconnected such that a broader environmental review of the project would be required. As will be discussed more completely *infra*, the determination of whether BLM was clearly erroneous is the sum and substance of Plaintiffs' complaint and of the parties cross-motions for summary judgment. For that reason the court will reproduce here only those few undisputed material facts that play on BLM's determination.

Most of the factual dispute relevant to the instant action is embodied in Federal Defendants' **[*7]** sixth proffered undisputed material fact and in Plaintiff's accompanying response: "BLM concluded that analyzing the Wind Project along with the Road Project under NEPA was useless because [NSRE] would have built the private Wind Project via the Private Road even if the BLM had denied the Road Project Application. AR20763. Doc. # 73-1 at ¶ 6. Plaintiffs respond:

> Plaintiffs dispute this statement. The [Administrative Record] establishes that the private route required the consent of multiple private land owners and that NSRE had not obtained land control nec-

> essary to access the private lands and construct the road. *See* AR8968-69; AR 20861. Plaintiffs also dispute that BLM's analysis of the "Wind Project under NEPA was useless" because NSRE has elected to pursue the public lands rights-of-way, *see* AR20769-20780, and BLM has statutory authority to condition its grants to protect imperiled wildlife species. *See 43 U.S.C. § 1761(a)* & *(b)(1), § 1765(a).*

Id.

Federal Defendants' tenth proffered undisputed material fact alleges that in "December 2010, NSRE applied to the BLM for a right of way for the Road Project to support the Wind Project. EA1-1; DR 2. Plaintiffs respond:

> Plaintiffs do not dispute **[*8]** that NSRE applied to BLM for rights-of-way across public lands in December 2010 in order to construct and operate a wind farm on adjacent private lands. *See* AR 20793-94. Plaintiffs dispute BLM's characterization of the "Road Project" and the "Wind Project" as separate actions because the public lands provide the only existing access to the site, *see* AR 17913-14; AR20797, are NSRE's most cost-effective means for accessing the site, *see* AR20794 and provide "the most direct and efficient access" to the site, *see* AR20757. The "Road Project" and "Wind Project" are, in fact, components of the larger, comprehensive scheme to develop renewable energy on the site.

Doc. # 73-1 at ¶ 10.

The Federal Defendants allege that NSRE informed BLM that it would "pursue construction of private land access roads if the [Road Project] grant request is denied." Doc. # 73-1 at ¶ 13 (citing AR 20812). Plaintiffs do not dispute that NSRE made the quoted statement, but dispute that "BLM made any determination about whether NSRE could obtain land control necessary to construct the private route, whether the private route was economically feasible, or whether the private route met NSRE's project milestones." Id. **[*9]** (citing AR8968-69). Similarly, Plaintiffs do not dispute Federal Defendants' allegation that the "Wind Project" is entirely on private land and that "Kern County acted as the lead agency in reviewing the 'Wind Project's' potential environmental impacts pursuant to the California Environmental Quality Act (CEQA), *Cal. Pub. Res. Code §§ 21000 et seq.* AR11546." Doc. # 73-1 at ¶ 38. Rather, Plaintiffs dispute the Wind Project's characterization as "'private' since it relies on access roads constructed on public lands." Id.

The complaint in this action was filed on April 13, 2012. Plaintiffs moved for preliminary injunction on May 14, 2012, but that motion was withdrawn on August 28, 2012. Federal Defendants answered Plaintiffs' complaint on June 1, 2012. The motion by NSRE to intervene as defendant was granted on June 27, 2012. Plaintiff's filed their motion for summary judgment on September 7, 2012. Federal Defendants and NSRE filed their oppositions to Plaintiffs' motion and cross-motions for summary judgment on October 12, 2012. Plaintiffs filed their opposition to Defendants' cross-motions for summary judgment and reply to Defendant's opposition on October 26, 2012. Defendants filed **[*10]** their replies to Plaintiffs' opposition to November 9, 2012.

LEGAL STANDARD

I. Summary Judgment

Summary judgment is appropriate when it is demonstrated that there exists no genuine issue as to any material fact, and that the moving party is entitled to judgment as a matter of law. *Fed. R. Civ. P. 56(c)*; *Adickes v. S.H. Kress & Co., 398 U.S. 144, 157, 90 S. Ct. 1598, 26 L. Ed. 2d 142 (1970)*; *Poller v. Columbia Broadcast System, 368 U.S. 464, 467, 82 S. Ct. 486, 7 L. Ed. 2d 458 (1962)*; *Jung v. FMC Corp., 755 F.2d 708, 710 (9th Cir. 1985)*; *Loehr v. Ventura County Community College Dist., 743 F.2d 1310, 1313 (9th Cir. 1984).*

> Under summary judgment practice, the moving party always bears the initial responsibility of informing the district court of the basis for its motion, and identifying those portions of "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any," which it believes demonstrate the absence of a genuine issue of material fact.

Celotex Corp. v. Catrett, 477 U.S. 317, 323, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986). Although the party moving for summary judgment always has the initial responsibility of informing the court, the nature of the responsibility varies "depending on whether the legal issues are ones on which **[*11]** the movant or the non-movant

would bear the burden of proof at trial." *Cecala v. Newman, 532 F.Supp.2d 1118, 1132-1133 (D. Ariz. 2007)*. When the moving party has the burden of proof at trial, that party must carry its initial burden at summary judgment by presenting evidence affirmatively showing, for all essential elements of its case, that no reasonable jury could find for the non-moving party. *United States v. Four Parcels of Real Property, 941 F.2d 1428, 1438 (11th Cir.1991)* (en banc); *Calderone v. United States, 799 F.2d 254, 259 (6th Cir. 1986)*; see also *E.E.O.C. v. Union Independiente De La Autoridad De Acueductos Y Alcantarillados De Puerto Rico, 279 F.3d 49, 55 (1st Cir. 2002)* (stating that if "party moving for summary judgment bears the burden of proof on an issue, he cannot prevail unless the evidence that he provides on that issue is conclusive.")

If the moving party meets its initial responsibility, the burden then shifts to the opposing party to establish that a genuine issue as to any material fact actually does exist. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586, 106 S. Ct. 1348, 89 L. Ed. 2d 538 (1986)*; *First Nat'l Bank of Arizona v. Cities Serv. Co., 391 U.S. 253, 288-89, 88 S. Ct. 1575, 20 L. Ed. 2d 569 (1968)*; **[*12]** *Ruffin v. County of Los Angeles, 607 F.2d 1276, 1280 (9th Cir. 1979)*. In attempting to establish the existence of this factual dispute, the opposing party may not rely upon the mere allegations or denials of its pleadings, but is required to tender evidence of specific facts in the form of affidavits, and/or admissible discovery material, in support of its contention that the dispute exists. *Rule 56(e)*; *Matsushita, 475 U.S. at 586 n.11*; *First Nat'l Bank, 391 U.S. at 289*; *Strong v. France, 474 F.2d 747, 749 (9th Cir. 1973)*. The opposing party must demonstrate that the fact in contention is material, i.e., a fact that might affect the outcome of the suit under the governing law, *Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986)*; *T.W. Elec. Serv., Inc. v. Pacific Elec. Contractors Ass'n, 809 F.2d 626, 630 (9th Cir. 1987)*, and that the dispute is genuine, i.e., the evidence is such that a reasonable jury could return a verdict for the nonmoving party, *Anderson, 477 U.S. 248-49*; *Wool v. Tandem Computers, Inc., 818 F.2d 1433, 1436 (9th Cir. 1987)*.

In the endeavor to establish the existence of a factual dispute, the opposing party need not establish a material issue of fact conclusively **[*13]** in its favor. It is sufficient that "the claimed factual dispute be shown to require a jury or judge to resolve the parties' differing versions of the truth at trial." *First Nat'l Bank, 391 U.S. at 290*; *T.W. Elec. Serv., 809 F.2d at 631*. Thus, the "purpose of summary judgment is to 'pierce the pleadings and to assess the proof in order to see whether there is a genuine need for trial.'" *Matsushita, 475 U.S. at 587* (quoting *Fed. R. Civ. P. 56(e)* advisory committee's note on 1963 amendments); *International Union of Bricklayers v. Martin Jaska, Inc., 752 F.2d 1401, 1405 (9th Cir. 1985)*.

In resolving the summary judgment motion, the court examines the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any. *Rule 56(c)*; *Poller, 368 U.S. at 468*; *SEC v. Seaboard Corp., 677 F.2d 1301, 1305-06 (9th Cir. 1982)*. The evidence of the opposing party is to be believed, *Anderson, 477 U.S. at 255*, and all reasonable inferences that may be drawn from the facts placed before the court must be drawn in favor of the opposing party, *Matsushita, 475 U.S. at 587* (citing *United States v. Diebold, Inc., 369 U.S. 654, 655, 82 S. Ct. 993, 8 L. Ed. 2d 176 (1962)*(per curiam); *Abramson v. University of Hawaii, 594 F.2d 202, 208 (9th Cir. 1979)*. **[*14]** Nevertheless, inferences are not drawn out of the air, and it is the opposing party's obligation to produce a factual predicate from which the inference may be drawn. *Richards v. Nielsen Freight Lines, 602 F. Supp. 1224, 1244-45 (E.D. Cal. 1985)*, aff'd, *810 F.2d 898, 902 (9th Cir. 1987)*.

II. Judicial Review of Administrative Decision - Administrative Procedures Act

Judicial review of agency action is governed by Administrative Procedures Act ("APA"). Pursuant to the provisions of the APA as codified at *5 U.S.C. § 706*, an agency action may only be set aside if it is "'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.' [Citation.]" *Wilderness Soc'y v. United States Fish & Wildlife Serv., 316 F.3d 913, 921 (9th Cir. 2003)*. Generally, courts give wide discretion to agency factual determinations within their area of expertise. *Pub Utility Dist. No. 1 of Franklin County v. Big Bend Elec. Coop, Inc., 618 F.2d 601, 603 (9th Cir. 1980)*.

DISCUSSION

I. ESA

At the heart of the ESA is the requirement that "federal agencies [. . .] ensure that none of their activities, including the granting of licenses and permits, will jeopardize the continued existence of list **[*15]** species or adversely modify a species' critical habitat. [Citation.]" *Karuk Tribe of California v. United States, 681 F.3d 1006, 1020 (9th Cir. 2012)* (citing *Babbitt v. Sweet Home Chapter, 515 U.S. 687, 692, 115 S. Ct. 2407, 132 L. Ed. 2d 597 (1995)*). "*Section 7 of the ESA* imposes on all agencies a duty to consult with either the Fish and Wildlife Service or the NOAA Fisheries Service before engaging in any discretionary action that may affect a listed species or critical habitat." Id. (citing *Turtle Island Restoration Network v. Nat'l Marine Fisheries Serv., 340*

F.3d 969, 974 (9th Cir. 2003)). The regulations implementing Section of the ESA require that:

> Each Federal agency shall review its actions at the earliest possible time to determine whether any *action* may affect listed species or critical habitat . If such a determination is made, formal consultation is required . . . .

50 C.F.R. § 402.14(a) (italics added). Among the actions of an agency that constitute "action" within the meaning of the regulation are "the granting of licenses, contract, leases, easements, rights of way, permits, or grants-in-aid." *50 C.F.R. § 402.02*.

However, regulations limit the application of *Section 7* to "actions in which there is discretionary **[*16]** Federal involvement or control." *Nat'l Ass'n of Home Builders v. Defenders of Wildlife, 551 U.S. 644, 666, 127 S. Ct. 2518, 168 L. Ed. 2d 467 (2007)*. There are two inquiries in the determination "Federal involvement or control." First, a court must determine whether an agency affirmatively performed one of the actions set forth in *50 C.F.R. § 402.02*. In this case there is no dispute that the BLM action in question -- the grant of a requested right-of-way -- is an action of the sort listed in *50 C.F.R. § 402.02*. Second, the court must determine "whether the agency [has] some discretion to influence or change the activity for the benefit of a protected species." *Karuk Tribe, 681 F.3d at 1021*. "The touchstone of major federal action [triggering the requirement of consultation] is an agency's authority to influence significant nonfederal activity." *Sierra Club v. Hodel, 848 F.2d 1068, 1089 (10 Cir. 1988)* ("Hodel"). This is the central point upon which Plaintiff's action turns.

What triggers an agency's obligation to consult is the taking of "any discretionary action that *may affect* a listed species or critical habitat." *Babbitt, 515 U.S. at 692*. The question therefore is what *effects* BLM is to be considered responsible for **[*17]** when it grants the requested right of way to NSRE. Regulations enabling *Section 7 of the ESA* provide the following definition of the "effects" of a project:

> Effects of the action refers to the direct and indirect effects of an action of the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section consultation, and the impact of Sate or private actions which are contemporaneous with the consultation in process. *Indirect effects* are those that are caused by the proposed action and are later in time, but are reasonably certain to occur. *Interrelated actions* are those that are part of a larger action and depend on the larger action for their justification. *Interdependent action* are those that have no independent utility apart from the action under consideration.

50 C.F.R. § 402.02 (italics **[*18]** added).

A federal agency's duty to consult under *Section 7* is triggered by the direct and indirect affects of *its* actions, along with the effects of *interrelated and interdependent* actions on listed species. See *Sierra Club v. Marsh, 816 F.2d 1376, 1387* (9 Cir. 1987) ("Marsh") (duty to reinitiate consultation is imposed where new information reveals interrelated or interdependent actions may have effects on listed species). On the other hand, effects that are "cumulative" to the federal Road Project do not trigger Section 7's consultation requirement. *Center for Biological Diversity v. BLM, 698 F.3d 1101, 1113 (9th Cir. 2012)*. "Cumulative effects" are defined as "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." *50 C.F.R. § 402.02*; see also *Marsh, 816 F.3d at 1387* ("The effects of unrelated private or state activities that are reasonably certain to occur are 'cumulative effects'").

There is no allegation that the Road Project, in isolation, has any significant impact with regard to listed species. Thus, the issue that is the focus of both parties **[*19]** is whether the Road Project and the Wind Project are "interrelated" or "interdependent" within the meaning of *50 C.F.R. § 402.02*, or whether the effects of the Wind Project are merely "cumulative" to the effects of the Road Project making consultation by BLM unnecessary. See *Center for Biological Diversity, 698 F.3d at 1113* (categorization of relationship of projects is critical because "nonfederal actions giving rise to 'cumulative effects' are not enforceable under the ESA, meaning that: they are not subject to the ESA consultation procedures . . . ."). "The test for interrelatedness or interdependentness is 'but for' causation: but for the federal project, these activities would not occur. [citation.]" *Marsh, 816 F.2d at 1387* (citing *51 Fed.Reg. 19,932 (1986))*.

Plaintiffs present what they represent are two different arguments for the proposition that BLM unlawfully granted NSRE's right of way request without consultation with Fish and Wildlife Service as required by *Section 7*. In actuality, there is only one relevant argument. Recalling that an "agency action" giving rise to a duty to consult has two components: the component of affirmative action to carry out the underlying activity **[*20]** and the component of discretion to influence the activity to benefit a listed species, *Karuk Tribe, 681 F.3d at 1021*, Plaintiffs argue "that the 'action' that BLM must evaluate in its 'may effect' analysis is the entire Project, *i.e.* the rights of way *and* the wind turbines. Each are components of a single, comprehensive wind energy development scheme, and the sole purpose of the rights-of-way is to provide the access and transmission connections to build and operate the Project." Doc. # 64-1 at 20:18-21 (italics in original). It is obvious to the court that Plaintiffs' argument regarding the "oneness" of the Wind and Road Project is a conclusion based on the success of Plaintiffs' contention that the Road and Wind Projects are interdependent and/or interconnected. In the face of Defendants' contention that the Road and Wind Projects are separate, there is no reason for the court to accept, *a priori*, the proposition that they are the same Project.

At this point, Plaintiff's argument takes an ambiguous turn. Essentially, Plaintiffs contend that BLM had *discretio*n to influence NSRE's private conduct with regard to the Wind Project because BLM *could have* conditioned a grant of the requested **[*21]** right-of-way on significant concessions by NRSE in favor of the listed species. There are two possible interpretations of Plaintiffs' contention: either (1) Plaintiff's are contending that BLM had actual discretion to impose changes on NRSE's conduct because the Road Project and the Wind Project were parts of the same overall Project (this is obviously a contention that presupposes the success of Plaintiffs' argument concerning interconnectedness of the two projects as noted above); or (2) it is possible that Plaintiffs are contending that BLM has *discretion* to influence private behavior in favor of a listed species if it would successfully bargain with the NSRE using its grant of right-of-way as a bargaining chip. This latter contention, in the court's opinion, stretches the idea of agency discretion too far. While the ability to play a bargaining chip wisely may indeed result in changes in private conduct benefitting listed species, the actual discretion in such a situation belongs to the private party to accept the bargain or not, not to the federal agency. In this court's view, agency discretion must refer to something more than the ability to play a good hand of poker.

The court **[*22]** concludes that Plaintiff's cannot escape the need to demonstrate that, contrary to BLM's determination, the Wind Project and the Road Project were either interrelated or interdependent within the meaning of *50 C.F.R. § 402.02*. In this regard there are two sub-issues; first, what standard of review is applicable to BLM's determination the two Projects were not interrelated or interdependent; and, second, are facts discernable in the Administrative Record that adequately support BLM's conclusion under the appropriate standard of review?

BLM's "no jeopardy" determination is a "final agency action" with regard to BLM's actions with regard to the ESA and is therefore subject to judicial review under the Administrative Procedures Act. *Southwest Center for Biological Diversity v. Bureau of Reclamation, 143 F.3d 515, 522 (9th Cir. 1988)*. As noted previously, an agency action may only be set aside if it is "'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Wilderness Soc'y, 316 F.3d at 921*.

> To determine whether an agency action was arbitrary and capricious, the court must "determine whether the agency articulated a rational connection between the facts **[*23]** and the choice made." [Citation.] As long as the agency decision was based on a consideration of relevant factors and there is no clear error of judgment, the reviewing court may not overturn the agency's action. [Citation.] In particular the reviewing court must defer to the agency's decision when the resolution of the dispute involves issues of fact or requires a high level of technical expertise. [Citations.] Accordingly, the court may set aside only those conclusions that do not have a basis in fact, not those with which it disagrees. [Citation.]

San Francisco Baykeeper v. Army Corps of Engineers, 219 F.Supp.2d 1001, 1011-1012 (N.D. Cal. 2002) ("Baykeeper") (internal citations omitted).

At the outset, it is significant that Plaintiffs do not allege that BLM failed to consider or make a determination whether the Road Project and the Wind Project are interdependent or interconnected. Plaintiffs contend, rather, that BLM considered evidence pertaining to the possible interconnectedness of the Projects and came to a conclusion that was capricious or contrary to fact. Plaintiffs contend that the evidence available from the Administrative Record ("AR") is insufficient to establish that **[*24]** BLM had any purpose in granting the right-of-way other than to facilitate the Wind Project, on

one hand, or to establish that the Wind Project could exist but for BLM's grant of right of way on the other. Of these, the allegation that the Wind Project would not exist but for the Road Project is the more weighty consideration with regard to both Plaintiffs' ESA and NEPA claims. However, the court will first briefly address Plaintiffs' contention that the Road Project would not exist but for the Wind Project.

BLM opposes Plaintiff's contention by pointing out that it concluded that the development of a road across the right of way would serve public purposes not connected to the Wind Project such as improving access control to the Pacific Rim Trail. Plaintiffs do not contend that the benefits BLM finds in the completion of the Road Project are specious or illusory; instead Plaintiffs characterize these alleged benefits as "weak." However, Plaintiffs point to no authority for the proposition that the strength of the independent benefits to BLM from the Road Project must be sufficient to cause BLM to build the road with BLM's money even in the absence of any Wind Project before the Projects **[*25]** can be deemed unrelated. In the court's view, the legal standard applicable to its review of BLM's decision requires that the court ask whether BLM can point to facts supporting its determination that the Road Project was of *some* benefit to BLM's purposes independent of servicing the Wind Project so that it would be reasonable for BLM to permit NSRE to build the road with NRSE's money. Since BLM has cited *some* benefits that accrue to BLM's purposes independent of the construction or servicing of the Wind Project, BLM has shown that it was not unreasonable in allowing NSRE to build the Road Project at NSRE's expense since BLM stood to benefit for public purposes at no public cost. As this court understands its standard of review, this is all that BLM is required to show to support its decision that the Wind Project was not the "but for" cause of the Road Project.

Having shown that the Wind Project was not the "but for" cause of the Road Project, BLM need only show that evidence existed in the Administrative Record to show that their determination that the Road Project was not the "but for" cause of the Wind Project was not arbitrary, capricious or contrary to law. The court will discuss **[*26]** this issue in detail below in connection with Plaintiff's NEPA claim. However, in the interest of brevity the court simply states here that it is satisfied that facts in the Administrative Record do support BLM's conclusion that the Wind Project could have been completed by NSRE without the benefit of BLM's grant of right-of-way. Consistent with its standard of review, the court therefore finds that BLM's conclusion that the Wind and Road Projects were not interdependent for purposes of the Endangered Species Act is not arbitrary, capricious, or contrary to law. BLM was therefore not erroneous in confining it's EA to the impacts occasioned by the Road Project itself and was therefore not erroneous in determining that formal consultation was not required under the ESA.

II. NEPA

> NEPA is the basic "national charter for protection of the environment." *40 C.F.R. § 1500.1(a)*. It requires all federal agencies to prepare an environmental impact statement (EIS) for "major federal actions significantly affecting the quality of the human environment." *42 U.S.C. § 4332(C)*. The responsible federal agency may first choose to prepare an environmental assessment (EA), a preliminary document which "briefly **[*27]** provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or finding of no significant impact." *40 C.F.R. § 1508.9*. After considering the EA, the agency may then decide to issue either a finding of no significant impact (FONSI) or a more detailed EIS.

Baykeeper, 219 F.Supp.2d at 1007.

> Under NEPA, an agency is required to provide an EIS only if it will be undertaking a "major Federal Actio[n]." which "significantly affect[s] the quality of the human environment. *42 U.S.C. § 4332(2)(C)*. Under applicable CEQ regulations, "major Federal action" is defined to "include actions with effects that may be major and which are potentially subject to Federal control and responsibility. *40 C.F.R. § 1508.18 (2003)*. "Effects" is defined to "include: (a) Direct effects, which are caused by the action and occur at the same time and place," and (b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *40 C.F.R. § 1508.8*.

Dep't of Transportation v. Public Citizen, 541 U.S. 752, 763-764, 124 S. Ct. 2204, 159 L. Ed. 2d 60 (2004) ("DOT").

Unlike the analysis of effects under ESA, "indirect effects" under **[*28]** NEPA is understood to include

cumulative effects including those of non-Federal actors. *Baykeeper, 219 F.Supp.2d at 1016-1017*. Pursuant to *40 C.F.R. § 1508*, a EIS or EA "must consider the cumulative effects of a project" in addition to project specific impacts. Id. For purposes of NEPA, cumulative impacts are defined as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7. Although NEPA arguably encompasses a broader range of actual or potential effects in determining whether the Federal action is a "major action" requiring an EIS, a Federal agency has no duty to consider cumulative effects where the agency "has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions." *DOT, 541 U.S. at 770*.

As is the case with federal agency decisions regarding ESA, the standard for review of agency decisions under **[*29]** NEPA is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *5 U.S.C. § 706(2)(A)*; *DOT, 541 U.S. at 763*; *Marsh v. Oregon Nat. Res. Council, 490 U.S. 360, 375, 109 S. Ct. 1851, 104 L. Ed. 2d 377 (1989)*.

> [I]n making the factual inquiry concerning whether an agency decision was "arbitrary or capricious." the reviewing court "must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." The inquiry must "be searching and careful," but "the ultimate standard of review is a narrow one." [Citation.] When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.

Id. at 378 (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416, 91 S. Ct. 814, 28 L. Ed. 2d 136 (1971)*. While an agency's decision must be supported by facts evident in the administrative record, the burden to prove that the agency's decision was unreasonable or an abuse of discretion falls on the party challenging the agency's determination. *Hodel, 848 F.2d at 1089*.

Plaintiffs contend that the FONSI determination **[*30]** in BLM's EA was arrived in a manner contrary to law because the EA failed to take into account the impacts of the Wind Project; that is, Plaintiffs contend there is but one Project of which the Road Project and the Wind Project are parts. Since a federal agency is required to consider all impacts resulting from its actions, Plaintiffs contend the failure to consider impacts arising from the "wind portion" of the Project is contrary to law. As above, Defendants counter by contending the Wind Project - a private project on private land - did not and does not depend on BLM's grant of rights-of-way for its existence and that BLM therefore has no authority over the development of the Wind Project. In framing and presenting their contentions and counter-contentions, the parties either tacitly or expressly agree to certain facts which the court takes as background. First, there is no contention that BLM's EA erroneously arrived at a conclusion of "no significant impact" with respect to the proposed Road Project as limited by BLM's conception of it. That is, there is no contention that BLM's FONSI with respect to the grading, paving, straightening, and trenching the right of way to accommodate **[*31]** transmission and communications lines over its length was erroneous. Second, there is no contention that BLM gave no consideration to the connection between the Road Project and the Wind Project; there is only the contention that BLM gave consideration and came to the wrong conclusion. Third, there is no dispute that the Wind Project did, in fact, receive environmental review under the California Environmental Quality Act, which serves the same function as NEPA for purposes of projects coming under state jurisdiction, and that the review was carried out by Kern County officials.

The determination of the connectedness of federal and non-federal actions under NEPA differs from the "but for" test applicable to the same question under ESA in two ways that are significant in the context of this action. First, under NEPA, "a 'but for' causal relationship is insufficient to make an agency responsible for a particular effect under NEPA and the relevant regulations." *DOT, 541 U.S. at 767*. "NEPA requires 'a reasonably close causal relationship' between the environmental effect and the alleged cause. The court analogized this requirement to the 'familiar doctrine of proximate cause from tort law.'" **[*32]** Id. (quoting *Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 774, 103 S. Ct. 1556, 75 L. Ed. 2d 534 (1983)*. Second, "inherent in NEPA and its implementing regulations is a

'rule of reason' which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision making process. [Citation.] Where the preparation of an EIS would serve 'no purpose" in light of NEPA's regulatory scheme as a whole, no rule of reason worthy of that title would require an agency to prepare an EIS. [Citations.]" *DOT, 541 U.S. at 767-768* (internal citations and quotes omitted).

The court first turns to the central issue of whether BLM's decision to confine its environmental assessment solely to the Road Project and to omit any consideration of the impact of the wind turbines on protected species was clearly erroneous or contrary to law. As noted, that decision is not erroneous if BLM's grant of right-of-way to NSRE is not the proximate cause of the environmental harms that are at issue. "The requirement for a NEPA study hinges on the presence of major federal action." *Hodel, 848 F.2d at 1089*. While NEPA does not define "major federal action," **[*33]** the regulatory framework requires an agency to address actions by the federal agency and "actions by nonfederal actors 'with effects that may be major *and which are potentially subject to federal control and responsibility*.'" Id. (quoting *40 C.F.R. 1508.18*) (italics in original). "The touchstone of major federal action [. . .] is an agency's authority to influence significant nonfederal activity. This influence must be more than the power to give nonbinding advice to the nonfederal actor." Id. Plaintiffs' argument in favor of major federal action is based on the contention that BLM has control over NSRE's actions because BLM's grant of right-of-way is a necessary precondition to the existence of NSRE's Wind Project. Neither party makes any claim that BLM would have any authority at all over NSRE's activities but for their access to the Wind Project over federal land. Defendants, as previously noted, contend that the Wind Project would exist without the right of way across Federal land and that consequently BLM has no authority to influence the Wind Project.

It is important to keep in mind that the court's function is not to determine whether the Wind Project is dependant on BLM's grant **[*34]** of right-of-way over federal land. Pursuant to the standard of review discussed above, the court's task is to determine whether BLM had a reasonable basis for its conclusion that the Wind Project was not dependant on BLM's grant of right-of-way. There is no dispute that the preliminary draft EA submitted by NSRE was rejected by BLM with directions to "'integrate and incorporate by reference the private land alternative and fully analyze it in the EA.'" Doc. # 73-2 at ¶ 17 (quoting a communication between BLM and NSRE dated October 18, 2011). It is also not disputed that the final EA gives a full description of the private alternative route and describes the time and work required to develop that route as well as the potential disturbances to the environment resulting from the development of the private route. Practically speaking, Plaintiffs' contention that the right of way was the "but for" cause of the Wind Project is voiced in Plaintiffs' oft-repeated assertion that "Plaintiff's dispute that BLM made any determination about whether NSRE could obtain land control necessary to construct the private route, whether the private route was economically feasible, or whether the private **[*35]** route met NSRE's project milestones." Doc. # 73-2 at 16:15-17.

Plaintiffs do not provide case authority for the proposition that any particular facts need to be alleged or proved to provide a sufficient factual basis for BLM's conclusion that the private alternative route is plausible. Plaintiffs appear to have identified two elements - landowner cooperation, and financial acceptability - that they allege were not adequately considered by BLM and assert without any legal support that BLM's determination must be held arbitrary, capricious or contrary to law in the absence of proof of those facts. The court concludes that Plaintiffs are asking the court to substitute its judgment for that of BLM to an extent that is not permissible under the governing standard of review. The function of BLM is, in major part, to act as the primary intermediary at the interface between private activity and public resource ownership. Assessment of what is and is not within the realm of plausible private activity is necessarily well within the scope of what BLM must routinely determine and BLM is therefore entitled to wide deference with regard to the decisions they reach. *Pub. Utility Dist. No. 1 of Franklin County, 618 F.2d at 603*.

The **[*36]** administrative record and the undisputed facts establish that BLM knew how many parcels, how many owners and how much right-of-way was involved in the private road option. Where the record establishes that these facts were before the BLM and considered by them (as is admittedly the case here) the court is in no position to impose a contrary conclusion simply because an opposing party is of the opinion that more proof should have been required. As to Plaintiffs' contention that BLM was also obliged to consider whether the private road option was within financially acceptable limits as far as NSRE was concerned or met their project time requirements, the court finds that Plaintiffs are impermissibly trying to shift the burden of proof onto BLM. While there is evidence in both the undisputed facts and in the Administrative record that the private alternative would have been more costly and would perhaps have presented some challenges to NSRE's funding because of possible funding restrictions, there is no admission or facts to support a conclusion that NSRE would have abandoned the project in the absence of BLM's grant of right-of-way. If BLM's decision regarding NSRE's fi-

nancial capability **[*37]** to carry out the private road alternative involves some speculation, Plaintiff's contention that financial considerations would have prevented the Wind Project in the absence of BLM's grant of right-of-way necessarily requires equal speculation in the opposite direction.

The court observes that any assessment of a third party's ability to do anything prior to the time they actually do it necessarily involves some speculation. Plaintiffs, as the party opposing BLM's decision to grant the right-of-way, have the burden to show that BLM's speculation - assuming there was any - with regard to NSRE's capacity to carry out the private option was arbitrary, capricious or contrary to law. Plaintiffs have failed to meet the required standard of proof. Where, as here, the opposing party is not able to show what the legal limits to the speculative discretion of a federal agency are, the court must give the nod to the federal agency where their assessment, including any speculation they must make, is within the scope of their presumed expertise. Plaintiffs allege that BLM was completely aware of the interaction between NSRE's project scheduling demands and its funding and alleges that BLM took those **[*38]** issues into consideration. In fact, Plaintiffs allege BLM was unduly influenced by NSRE's concerns over its project deadlines. Having made that factual concession, Plaintiffs cannot argue that BLM failed to give consideration to financial and temporal factors involved in NSRE's ability to execute the private road option. Plaintiffs allege no facts from which the court could draw the conclusion that BLM's conclusion was arbitrary, capricious or contrary to law.

In addition, the so-called "rule of reason" also favors the conclusion that BLM's decision not to include effects from the Wind Project in its EA was arbitrary or capricious. It is not disputed that the Wind Project was subject to scrutiny under California's Environmental Quality Act ("CEQA") and that an Environmental Impact Report ("EIR") was produced as a result of that process. "The statutory provisions of CEQA expressly allow that an EIS, which is the NEPA counterpart to an EIR, may be used in lieu of an EIR if the EIS, or that part of the EIS that is used, 'complies with the requirements of this division and the guidelines adopted pursuant thereto.' ([*Cal. Pub. Res. Code] § 21083.5, subd. (a)*)." *Nelson v. County of Kern, 190 Cal.App.4th 252, 279, 118 Cal. Rptr. 3d 736* **[*39]** (5 Dist. 2010). While neither party has offered, and the court cannot find, any statutory basis for reciprocal acceptance of a CEQA-produced EIR in lieu of a NEPA-mandated EIS, the "rule of reason" militates against the imposition of information-gathering and dissemination burdens on Federal agencies that are duplicative of information previously gathered, circulated and subjected to public comment in the state process.

Plaintiffs concede that all of the effects on protected species that may foreseeably arise as a result of BLM's grant of right-of-way are a result of the operation of the planned wind turbines only, whether or not the Wind Project and the Road Project are considered a single Project. Second, and perhaps more tellingly, there is no allegation or contention that important information concerning threats to protected species went undetermined, unconsidered, undisclosed or withheld from public scrutiny in the state CEQA process. Seen in this light, Plaintiffs' contention that BLM unlawfully failed to conduct a full EIS and instead issued a FONSI appears to center more on the formalities of procedure rather than on environmental benefits potentially lost. While it is no doubt **[*40]** true that Plaintiffs disagree with the outcome of the state process, the court has no facts before it to conclude that requiring BLM to produce an EIS that takes into account the environmental impacts of the Wind Project would produce anything more than an opportunity for Plaintiffs to advance the same arguments on the same facts that were advanced in the state CEQA process. While the rule of reason is not determinative, in and of itself, of the issue of whether BLM unlawfully failed to produce an EIS that incorporated the expected impacts if the Wind Project on protected species, it is clear that the rule of reason does not favor Plaintiffs' position.

Since Plaintiffs argument fails to show that BLM's conclusion that the private road option was viable is either clearly erroneous or contrary to law, it follows that Plaintiffs' contention that BLM was clearly erroneous in its determination that BLM lacked authority over NSRE's actions also fails.

CONCLUSION AND ORDER

Plaintiff's complaint requests declaratory judgment as to Plaintiff's contentions that BLM violated both the ESA by erroneously reaching a "no effect" determination with regard to the proposed grant of right-of-way to NSRE **[*41]** and seeks declaratory judgment as to their contention that BLM's FONSI and its reliance thereon in the granting the right-of-way to NSRE violates NEPA. Pursuant to the foregoing discussion, Plaintiff's are not entitled to summary judgment and Defendant's are correspondingly entitled to summary judgment as to Plaintiffs' first and second claims for relief as a matter of law. Because Plaintiffs' claims for declaratory relief fail, their claim for injunctive relief fails as well and Defendants' are correspondingly entitled to summary judgment as to Plaintiffs' action for injunctive relief.

THEREFORE, for the reasons discussed above, it is hereby ORDERED that Plaintiffs' motion for summary judgment is DENIED in its entirety. Defendants' motion for summary judgment is correspondingly GRANTED in

its entirety. The Clerk of the Court shall enter judgment in favor of Defendants and CLOSE the CASE.

IT IS SO ORDERED.

Dated: January 11, 2013

/s/ Anthony W. Ishii

SENIOR DISTRICT JUDGE

ATTACHMENT B

PRESERVATION COALITION OF ERIE COUNTY, Plaintiff-Appellee, - v. - FEDERAL TRANSIT ADMINISTRATION; NIAGARA FRONTIER TRANSIT AUTHORITY; NEW YORK STATE URBAN DEVELOPMENT CORPORATION d/b/a Empire State Development Corporation, Defendants-Appellants, NEW YORK STATE THRUWAY AUTHORITY; NEW YORK STATE OFFICE OF PARKS, RECREATION & HISTORIC PRESERVATION, Defendants.

Docket No. 02-6198/02-6208

UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

356 F.3d 444*; *2004 U.S. App. LEXIS 1115

April 7, 2003, Argued
January 26, 2004, Decided

SUBSEQUENT HISTORY: On remand at, Costs and fees proceeding at, Motion granted by, in part, Motion denied by, in part *Pres. Coalition v. Fed. Transit Admin., 2006 U.S. Dist. LEXIS 11960 (W.D.N.Y., Feb. 26, 2006)*

PRIOR HISTORY: **[**1]** Appeal from an award by the United States District Court for the Western District of New York (William M. Skretny, Judge) of attorneys' fees to the plaintiff as a prevailing party under the National Historic Preservation Act. Affirmed, in part, but remanded for recalculation of attorneys' fees and costs consistent with this opinion; and reversed, in part.
Pres. Coalition v. Fed. Transit Admin., 2001 U.S. Dist. LEXIS 24654 (W.D.N.Y., Jan. 23, 2001)

DISPOSITION: Affirmed in part, vacated in part, and remanded.

COUNSEL: TODD S. KIM (David C. Shilton, of counsel), Department of Justice, Environment and Natural Resources Division, Washington D.C., (Michael A. Battle and Mary K. Roach, United States Attorney's Office, Western District of New York, Trudy B. Levy, Office of Chief Counsel, Federal Transit Administration, Thomas L. Sansonetti, Assistant Attorney General, of counsel), for Defendant-Appellant Federal Transit Authority.

ALICE J. KRYZAN, Harris Beach LLP, Hamburg, New York, for Defendant-Appellant Niagara Frontier Transit Authority and New York State Urban Development Corporation.

RICHARD G. BERGER (Francis C. Amendola, on the brief), Buffalo, New York, for Plaintiff-Appellee.

JUDGES: Before: WALKER, Chief Judge, OAKES, and WINTER, Circuit Judges.

OPINION BY: WINTER

OPINION

[*446] WINTER, Circuit Judge:

The Federal Transit Administration **[**2]** ("FTA"), Niagara Frontier Transit Authority ("NFTA"), and New York State Urban Development Corporation, doing business as the Empire State Development Corporation ("ESDC"), appeal from Judge Skretny's award of attorneys' fees to appellee as a prevailing party under the *National Historic Preservation Act* ("NHPA"). We reverse the award against the NFTA and the ESDC because the NHPA does not apply to them. We hold that the FTA is subject to an award of fees under the NHPA but remand for a recalculation of the award to limit it to work expended in obtaining the court-ordered Supplemental Environmental Impact Statement ("SEIS").

BACKGROUND

The full factual and procedural background to this case is set forth in the district court's prior decisions, *Preservation Coalition v. FTA, 129 F. Supp. 2d 538*, and *129 F. Supp. 2d 551 (W.D.N.Y. 2000)*. We outline here those facts relevant to a resolution of the issues on the present appeal.

[*447] a) The Project

Appellants FTA, NFTA and ESDC were responsible for a development styled the Inner Harbor Project. The Project involved an area on Buffalo's waterfront that included the terminus of the historic Erie **[**3]** Canal. As participants in a joint federal-state project, some or all of the appellants were required under various federal and state laws to consider the Project's impact on historic resources and to implement plans to mitigate any harm to those resources. The ESDC was the "lead agency" for environmental and historical review of the project. See *Preservation Coalition, 129 F. Supp. 2d at 541*. However, the FTA, although in many ways a passive participant in the Project, was responsible for federal oversight and for the Project's compliance with all relevant federal regulations. See, e.g., *16 U.S.C. § 470f* (the NHPA requires that "the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included **[**4]** in or eligible for inclusion in the National Register.").

The pertinent statutes are the National Environmental Policy Act ("NEPA"), *42 U.S.C. § 4321, et seq.*, the National Historic Preservation Act, *16 U.S.C. § 470, et seq.*, and Section 4(f) of the Transportation Act, *49 U.S.C. § 303(c)*. NEPA mandates that federal agencies "use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may . . . preserve important historic, cultural, and natural aspects of our national heritage." *42 U.S.C. § 4331(b)(4)*.

The regulations implementing the NHPA require agencies involved in projects such as the present one to consult with state historic preservation officers ("SHPOs"), make reasonable and good faith efforts to identify historic properties, determine their eligibility for listing in the National Register of Historic Places, and assess the effects of a project on such properties. This consultation process is commonly referred to as the "Section 106" process **[**5]** after Section 106 of the NHPA. See *16 U.S.C. § 470f*.

Under regulations implementing *Section 4(f) of the Transportation Act of 1966*, a transportation project that impacts a historic site cannot be undertaken unless the agency shows that there is no feasible and prudent alternative to the use of the site and that it has done all possible planning to minimize harm to the site. See *23 C.F.R. § 771.135(a)(1)*. Under the so-called "archeological exception" to *Section 4(f)*, these restrictions do not apply if the "archeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place." *23 C.F.R. § 771.135(g)(2)*. Consultation with the SHPO is also required as part of the *Section 4(f)* process. See *23 C.F.R. § 771.135(e)*.

Because appellants were aware that the Inner Harbor Project might impact historic resources, an archeological exploration of the site was commissioned to determine the likely extent of such resources. *Preservation Coalition, 129 F. Supp. 2d at 557*. On December 18, 1998, following **[**6]** the completion of Stage II excavations of the Inner Harbor Project site, the Field Services **[*448]** Bureau of the State Office of Parks and Recreation and Historic Preservation (which serves as New York's SHPO) concluded that the Inner Harbor Project would have "no adverse effect" on any historic structures. The SHPO's finding of "no adverse effect" was premised in part on its conclusion that the *Section 4(f)* "archeology exception" applied to historic resources at the project site. *129 F. Supp. 2d at 558*. Significantly, the SHPO qualified its conclusions upon the yet-to-be-learned results of upcoming Stage III excavations. Id. While the Stage III excavations continued, appellants issued a Final Environmental Impact Statement ("FEIS") for the Inner Harbor Project in February, 1999, and a Record of Decision ("ROD") -- the final document in the administrative process -- was issued on June 22, 1999.

The present dispute arose in May, 1999, after the issuance of the FEIS, when excavators discovered "a roughly eight foot section of the eastern portion of the Commercial Slip Wall [of the Erie Canal terminus] as rebuilt in the 1880s." *Id. at 559*. On May 18, 1999, the **[**7]** SHPO informed the ESDC that the Commercial Slip Wall met the criteria for listing in the National Register of Historic Places, and on August 6, 1999, the SHPO informed the ESDC that it would not be feasible to preserve the Wall in an exposed condition. As an alternative to exposed preservation, the SHPO recommended that the ESDC conduct a detailed documentation of the Wall, rebury it, and provide appropriate historical interpretation of the Wall through marking and signage in the project design.

On October 6, 1999, appellee brought the present complaint, asserting claims under the NHPA, NEPA, and *Section 4(f)* of the Transportation Act. The complaint alleged that construction at the Inner Harbor Project site threatened the historic Commercial Slip Wall of the Erie Canal terminus and that appellants had violated various federal and state laws requiring both consideration of the

impact of the Inner Harbor Project on historic resources and planning to mitigate harm to those resources.

One of appellee's principal claims was that the FEIS prepared by the appellants in February, 1999 was inadequate because it self-evidently failed to account for the subsequently discovered historic Commercial **[**8]** Slip Wall in May, 1999. See Compl. PP 33, 34, at 8. Appellee sought an injunction against appellants from further construction until they had fully complied with various environmental and historic preservation laws and regulations, including the NEPA, NHPA and *Section 4(f)* with regard to the Commercial Slip Wall, and a writ of mandamus requiring appellants to prepare an EIS or SEIS satisfying the requirements of these statutes. See Compl. PP E, F, at 11-12. Although the district court declined to issue an injunction, it found the FEIS inadequate and, on March 31, 2000, ordered appellants to prepare a SEIS to address the issues raised by the discovery of the Commercial Slip Wall. See *Preservation Coalition, 129 F. Supp. 2d at 576-77*; see also *id. at 570* ("This court finds that subsequent developments implicated . . . significant issues in a way that was not adequately addressed in the FEIS."). The district court also threatened appellants with an injunction if the SEIS was not prepared expeditiously. *Id. at 577*.

About three months after the district court's ruling and after publication of a draft SEIS -- a final SEIS was never **[**9]** issued -- appellants agreed to halt all work at the Inner Harbor Project site for sixty days to consider revisions to the Project in line with the appellee's concerns. Six months later, on December 14, 2000, the parties appeared before the district court **[*449]** with a settlement agreement embodied in a proposed Stipulation and Order.

The Stipulation reflected an agreement among the parties that the Inner Harbor Project should include the Commercial Slip Wall and other historic structures. The Order, signed by Judge Skretny, dismissed appellee's claims with prejudice and vacated the district court's prior orders. However, the Stipulation obligated appellants to start the environmental and historical review process from scratch, including compliance with the relevant statutes. Appellants therefore had to produce a new FEIS for the Project, while appellee retained the right to bring new claims if it determined that the new FEIS violated federal law. The new FEIS would not, however, be subject to the timetable set out by the district court in its prior orders, because the Order had vacated them.

The last provision of the Stipulation and Order addressed the question of costs and attorneys' **[**10]** fees:

> STIPULATED AND AGREED that the plaintiff [i.e., appellee] shall submit its request for attorney's fees and costs pursuant to the National Historic Preservation Act, *16 U.S.C. § 470w-4* to the Court by motion within 30 days after the entry of this Stipulation and Order and defendants shall respond thereto in accordance with a scheduling order to be issued by the Court.

Preservation Coalition v. FTA, No. 99-CV-745S, slip op. at 2-3 (W.D.N.Y. Dec. 18, 1999) (Stipulation and Order of Discontinuance and Dismissal). The district court, over the objections of appellants, initially awarded appellee $ 118,031 in attorneys' fees and a total of $ 6,470.62 in costs. See Preservation Coalition v. FTA, No. 99-CV-745S, slip op. at 21 (W.D.N.Y. June 13, 2001) (Decision and Order). In subsequent rulings, the district court awarded appellee additional fees and costs in the amount of $ 42,291.79, see Preservation Coalition v. FTA, No. 99-CV-745S, slip op. at 10 (W.D.N.Y. Feb. 28, 2002) (Decision and Order), and found that appellants were jointly and severally liable for the fees and costs awarded to appellee, see Preservation Coalition **[**11]** v. FTA, No. 99-CV-745S, slip op. at 10 (W.D.N.Y. May 28, 2002) (Decision and Order). This appeal followed.

DISCUSSION

Appellants argue on appeal that appellee cannot recover attorneys' fees and costs because it is not a "prevailing party" as defined by the Supreme Court in *Buckhannon Board & Care Home, Inc. v. West Virginia Department of Health and Human Resources, 532 U.S. 598, 603-05, 149 L. Ed. 2d 855, 121 S. Ct. 1835 (2001)*. Appellants also argue that even if we were to determine that appellee had "substantially prevailed," it could not recover under the NHPA because the relief awarded -- a court-ordered SEIS -- is relief available exclusively under the NEPA, not NHPA. Thus, appellants contend, if appellee is entitled to fees, it must seek them under the Equal Access to Justice Act ("EAJA"). [1] See *28 U.S.C. § 2412*. NFTA and ESDC argue in addition that they cannot be liable for attorneys' fees under the NHPA because they are not federal agencies.

> 1 Appellants speculate that appellee did not invoke the EAJA "because EAJA claims depend upon a showing that the agency's position was not

'substantially justified' and because the EAJA limits the rates that attorneys can claim." Brief for Appellant FTA at 22 (quoting *28 U.S.C. § 2412(d)(1)(A)*).

[12]** Appellee counters that the court-ordered SEIS satisfies Buckhannon because it worked a judicially sanctioned change in the legal relationship of the parties and that the award of fees under the NHPA **[*450]** was appropriate because the issues to be addressed in the SEIS were related wholly to the NHPA. See *Preservation Coalition, 129 F. Supp. 2d at 577* (requiring SEIS to address four issues related to the Commercial Slip Wall as well as the Coalition's proposals to incorporate the Wall into final Project); see also Preservation Coalition, No. 99-CV-745S, slip op. at 7-8 (W.D.N.Y. June 13, 2001) (Decision and Order) ("Preservation Coalition brought the present Action to enforce the provisions of NHPA. It invoked NEPA and *§ 4(f)* as [a] means of insuring that Defendants adequately consider the impact of the Inner Harbor Project on resources that it alleged were protected under NHPA . . . To hold that Plaintiff is not entitled to attorney fees under [NHPA] because it prevailed on a claim under NEPA rather than a claim directly under NHPA would elevate form over substance. This case was not about water or air quality, noise pollution, traffic congestion or any of **[**13]** the multifarious components of the environment that NEPA is meant to protect. It was about historic resources."). Appellee also argues that the NFTA and ESDC can be liable under the NHPA as non-federal actors because the fee-shifting provisions of federal statutes reach non-federal actors who are found to have violated federal law.

"We review a trial court's decision whether to award attorneys' fees to a prevailing party, and in what amount, under an abuse of discretion standard." *Cassuto v. Commissioner, 936 F.2d 736, 740 (2d Cir. 1991)* (citations omitted). "However, where an appellant's contention on appeal regarding an award of attorneys' fees is that the district court made an error of law in granting or denying such an award, the district court's rulings of law are reviewed de novo." *Baker v. Health Mgmt. Sys., 264 F.3d 144, 149 (2d Cir. 2001)* (citation omitted); see also *Christina A. v. Bloomberg, 315 F.3d 990, 992 (8th Cir. 2003)* (reviewing de novo "the legal question of whether a litigant is a prevailing party" (quoting *Jenkins v. Missouri, 127 F.3d 709, 713 (8th Cir. 1997))*).

a) **[**14]** "Prevailing Party" Status Under *Buckhannon*

The NHPA authorizes awards of attorneys' fees, expert witness fees, and other costs to any person who "substantially prevails" in an action to enforce the provisions of the NHPA. *16 U.S.C. § 470w-4*. [2] When Preservation Coalition brought this action, whether a plaintiff was a "prevailing party" or had "substantially prevailed" [3] turned in this Circuit upon application of the so-called "catalyst theory" of recovery. See *Union of Needletrades, Indus. & Textile Employees (UNITE) v. INS, 336 F.3d 200, 203 (2d Cir. 2003)* (citing cases). Under the catalyst theory, a court could award attorneys' fees based solely upon a private agreement among the parties settling their dispute, even though no legal relief such as a consent decree had been obtained. See *Buckhannon, 532 U.S. at 601* (noting that under catalyst theory, a plaintiff was considered a "prevailing party" if its lawsuit brought about a voluntary change in defendant's conduct). Under the catalyst theory, therefore, appellee **[*451]** would have been considered a prevailing party and entitled to all fees and costs associated with the litigation **[**15]** that resulted in the settlement agreement.

2 A fortiori, the EAJA also requires that the claimant be a "prevailing party" in order to recover. *28 U.S.C. § 2412(d)(1)(A)*.

3 We recently concluded that the terms "prevailing party" and "substantially prevails" are fundamentally the same for purposes of determining whether a plaintiff can recover under a fee-shifting statute. See *Union of Needletrades, Indus. & Textile Employees (UNITE) v. INS, 336 F.3d 200, 206-08 (2d Cir. 2003)* (citing *Oil, Chem. & Atomic Workers Int'l Union, AFL-CIO v. Dep't of Energy, 351 U.S. App. D.C. 199, 288 F.3d 452, 454-55 (D.C. Cir. 2002))*.

In Buckhannon, however, the Supreme Court rejected the catalyst theory and held that the term "prevailing party" required a "'material alteration of the legal relationship of the parties'" or a "court ordered 'change [in] the legal relationship between [the plaintiff] and the defendant.'" *532 U.S. at 604* (quoting **[**16]** *Tex. State Teachers Ass'n v. Garland Indep. School Dist., 489 U.S. 782, 792, 103 L. Ed. 2d 866, 109 S. Ct. 1486 (1989)* (alterations in Buckhannon)). As examples of the types of actions that would convey the necessary judicial imprimatur or sanction, the Court offered settlement agreements enforced through consent decrees and judgments on the merits. *Buckhannon, 532 U.S. at 604*. As examples of the types of actions that would not convey the necessary imprimatur, the Court offered successful results obtained through private settlement agreements, non-dispositive victories such as surviving a motion to dismiss for lack of jurisdiction, prevailing over a motion to dismiss for failure to state a claim upon which relief could be granted, or receiving an interlocutory ruling that reversed a dismissal for failure to state a claim. See *id. at 604-05* & n.7. In Buckhannon itself, legislative action -- not judicial action -- provided the plaintiff the desired relief and mooted the underlying claims. *Id. at 601*.

We agree with appellants that, under Buckhannon -- which was decided after the settlement was reached -- appellee is **[**17]** not entitled to recover the fees and costs associated with obtaining the Stipulation and Order that dismissed the case with prejudice. The effect of the Stipulation and Order was to vacate the district court's orders providing for ongoing judicial involvement and to begin the environmental review process anew. This Stipulation and Order is functionally a private settlement agreement that the Supreme Court concluded does not provide prevailing party status to a plaintiff because, by its own terms, it eliminated the ongoing judicial oversight in favor of restarting the review process from scratch. See *id. at 604-05* & n.7.

However, a very different issue is presented by the question of whether appellee is entitled to recover for the fees and costs associated with obtaining the court-ordered SEIS. See *Preservation Coalition, 129 F. Supp. 2d at 577-78*. Appellee contends that the ordering of the SEIS constitutes a "'material alteration of the legal relationship of the parties,'" *532 U.S. at 604* (quoting *Garland, 489 U.S. at 792-93*), sufficient to confer prevailing party status under *Buckhannon*. Appellants argue that **[**18]** the SEIS was little more than "interlocutory relief unaccompanied by an enforceable final judgment or a consent decree" and therefore lacked the finality necessary for prevailing party status. Brief for Appellant FTA at 14.

After Buckhannon, courts have split on the kinds of judicial actions that confer prevailing party status. The Eighth Circuit has interpreted Buckhannon narrowly and held that a plaintiff is a prevailing party "only if it receives either an enforceable judgment on the merits or a consent degree." *Christina A., 315 F.3d at 993*. The First Circuit, by contrast, has interpreted Buckhannon more broadly and focused on the "materiality of a judicial outcome" and "whether the result is purely procedural or whether it actually accomplishes something substantive for the winning party." *Me. Sch. Admin. Dist. No. 35 v. Mr. & Mrs. R., 321 F.3d 9, 17 (1st* **[*452]** *Cir. 2003)* (citations omitted). The First Circuit decision also observed that when interlocutory orders confer substantive relief they have often "been viewed as sufficient to carry the weight of a fee award." *Id. at 15*.

We agree with the First Circuit that **[**19]** Buckhannon does not limit fee awards to enforceable judgments on the merits or to consent decrees. While these orders were cited by the Court as examples of the types of actions that would convey the judicial imprimatur necessary to a fee award, broader language in Buckhannon indicates that these examples are not an exclusive list. Rather, as noted, Buckhannon states that status as a prevailing party is conferred whenever there is a "court ordered 'change [in] the legal relationship between [the plaintiff] and the defendant'" or a "'material alteration of the legal relationship of the parties.'" *532 U.S. at 604* (quoting *Garland, 489 U.S. at 792* (alterations in Buckhannon)). This language clearly encompasses a broader range of outcomes than the examples given and is consistent with how we have previously interpreted Buckhannon. See *N.Y. State Fed'n of Taxi Drivers, Inc. v. Westchester County Taxi & Limousine Comm'n, 272 F.3d 154, 158 (2d Cir. 2001)* (per curiam) ("The essence of being a prevailing party is achieving a material alteration of the legal relationship of the parties that is judicially sanctioned.") **[**20]** (internal quotation marks and citation omitted). [4] Accordingly, we conclude that appellee attained prevailing party status under Buckhannon when it obtained the court order requiring appellants to prepare a SEIS under threat of further injunctive relief. The SEIS was both judicially sanctioned and effectuated a substantive, material alteration in the legal relationship of the parties.

4 We are not persuaded by appellants' arguments regarding our recent decision in *Union of Needletrades, Indus. & Textile Emples. v. INS, 336 F.3d 200*. In UNITE, plaintiffs obtained the voluntary cooperation of the INS in response to a FOIA request. We held that such voluntary cooperation did not entitle UNITE to prevailing party status because it had "failed to secure either a judgment on the merits, or a court-ordered consent decree." *Id. at 206*. Appellants contend that UNITE precludes appellee from attaining prevailing party status because it obtained neither of these two specified outcomes. However, we do not read UNITE to require a full judgment on the merits (or a court-ordered consent decree) to entitle a party to counsel fees. The quoted passage appeared in a section of the UNITE opinion where we were contrasting the voluntary nature of the relief obtained by the plaintiffs with what were the two most likely outcomes had plaintiffs continued to litigate their dispute. Moreover, the sentence just prior to the quoted passage mentions not only a consent decree but also the fact that UNITE never "requested that the district court . . . endorse, or retain jurisdiction over, a settlement agreement" as justifying the denial of prevailing party status. Id. Finally, UNITE favorably quoted New York State Federation of Taxi Drivers for the proposition that a plaintiff need only effectuate a "'judicially sanctioned change in the legal relationship of the parties'" to become a prevailing party. *Id. at 207* (quoting *N.Y. State Fed'n of Taxi Drivers, 272 F.3d at 158-59*). This language is broad enough to encompass some court-ordered outcomes that are

neither judgments on the merits nor consent decrees.

[21]** b) Relief under the NHPA or the NEPA

Having determined that the court-ordered SEIS made appellee a prevailing party, we turn next to whether the SEIS is judicially sanctioned relief under the NHPA or the NEPA. As noted, see supra note 1, the distinction is important because the NHPA contains a more liberal fee-shifting provision than the EAJA, which governs under the NEPA. Appellants contend that, while appellee is a prevailing party, it prevailed only under the NEPA because a SEIS is NEPA-based relief. Appellee counters that the substance of **[*453]** the SEIS concerned NHPA subject matter. The district court agreed with appellee, observing that appellants' argument "elevate[s] form over substance." Preservation Coalition, No. 99-CV-745S, slip op. at 8 (W.D.N.Y. June 13, 2001) (Decision and Order). However, the NHPA/NEPA distinction is statutory and cannot be summarily dismissed without more. But there is more because, for the reasons discussed below, NHPA regulations in effect during the relevant time period render appellee a prevailing party under the NHPA as well as the NEPA.

Approximately two months after discovery of the Commercial Slip Wall and two months **[**22]** prior to the conclusion of the consultation process between the ESDC and SHPO, the Advisory Council on Historic Preservation [5] issued new NHPA regulations that formally integrated NEPA procedures into the NHPA process. See *36 C.F.R. § 800.8* (effective June 17, 1999) (permitting agencies to meet their Section 106 NHPA requirements with steps taken to meet their NEPA requirements); see also *64 Fed. Reg. 27044, 27060 (May 18, 1999)* ("*Use of NEPA compliance to meet Section 106 requirements authorized*. Agencies are authorized to use the preparation of Environmental Impact Statements and Environmental Assessments under the National Environmental Policy Act to meet section 106 needs in lieu of following the specified Council process. This is expected to be a major opportunity for agencies with well-developed NEPA processes to simplify concurrent reviews, reduce costs to applicants and avoid redundant paperwork."). Under the current regulations, therefore, an agency may fulfill its NHPA obligations by either following the old, non-integrated Section 106 process, see *36 C.F.R. §§ 800.3-800.6*, or through the new **[**23]** integrated NEPA/NHPA process, see *36 C.F.R. § 800.8*.

5 The Advisory Council is an independent federal agency created by the NHPA. *16 U.S.C. § 470i*. The NHPA authorizes the Advisory Council to "promulgate such rules and regulations as it deems necessary to govern the implementation of section 106." *16 U.S.C. § 470s*.

Consistent with the integration of NHPA and NEPA procedures, the regulations explicitly call for production of "supplemental environmental documents" in circumstances where an agency undertaking is modified following a final agency action: [6]

> *Modification of the undertaking*. If the undertaking is modified after approval of the FONSI [7] or the ROD in a manner that changes the undertaking or alters its effects on historic properties . . . the agency official shall notify the Council and all consulting parties that supplemental environmental documents will be prepared in compliance with NEPA or that the procedures **[**24]** in *§§ 800.3 through 800.6* will be followed as necessary.

36 C.F.R. § 800.8(c)(5) (effective June 17, 1999).

6 In this case, the final agency action occurred in February, 1999 with the issuance of the FEIS. The ROD -- the final document in the administrative process -- was issued on June 22, 1999.

7 A FONSI is frequently included in a FEIS.

Because neither party had addressed the new regulations in their briefs, we requested that they submit letter briefs on the question of whether the new regulations made the court-ordered SEIS a form of NHPA relief. Appellee answered in the affirmative, while appellants raised a number of objections. First, appellants questioned whether the discovery of the Commercial Slip Wall was a "modification of undertaking" significant enough to trigger *Section 800.8(c)(5)*, see Letter Brief for **[*454]** Appellant FTA at 2 n.*, and whether the new regulations applied temporally, see Letter Brief for Appellants NFTA & ESDC at 1-2. In our view, discovery **[**25]** of the Wall effected a "modification of the undertaking" sufficient to trigger the regulation. As the district court described the event:

> The FEIS does not discuss the discovery of the Commercial Slip Wall, any of the information that [the archeologist] acquired from experts regarding feasibility of preserving the Slip Wall above ground, or the considerations that led SHPO and ESDC to decide that it is necessary to bury the Wall. It is therefore impossible for this Court to make a reasoned decision, based on the FEIS and its exhibits, whether the Inner Harbor Project included all possible planning to mitigate harm to the Commercial Slip Wall. A

> SEIS is therefore required to address this question . . . . The Stage III excavations also impact on the determination that [other structures around the Wall] are ineligible for inclusion in the National Register. . . . The Stage III discoveries must be at least taken into account, since they arguably affect that determination "in a significant manner" and "to a significant extent" not considered in the FEIS. The SEIS, therefore, must also address this issue.

Preservation Coalition, 129 F. Supp. 2d at 571 **[**26]** (internal citation omitted).

Appellants also contend that the new regulations do not apply because the FEIS and other related consultations were completed prior to June 17, 1999, and while appellants only had the option of complying with the NHPA under the old, non-integrated Section 106 process. See Letter Brief for Appellants NFTA & ESDC, at 2 ("[Appellants] did not elect and, indeed, could not have elected, to utilize the alternative process set forth in [the new] regulations, since that option was not available at the time the section 106 process was undertaken and completed for the Project here."). While it is true that the FEIS was completed in February, 1999, the subsequent discovery of the Commercial Slip Wall rendered it inadequate, resulting in consultations between the SHPO and ESDC that continued until August, 1999. Contrary to appellants' argument, the language of the new regulations does not foreclose relying on the new, integrated NHPA process once there has been a "modification of the undertaking." A SEIS therefore was a viable option for remedying the inadequacies of the FEIS by the time the consultations between the SHPO and ESDC concluded in August, 1999.

[27]** Appellants' remaining claims concern the power of the pertinent governmental bodies to integrate NEPA-based procedures into the NHPA. First, appellants contend that it was essentially illegal for the Advisory Council to issue regulations requiring an agency to prepare a SEIS to meet its NHPA requirements. See Letter Brief for Appellant FTA at 3 ("Even if the regulations ever required any agency to prepare an SEIS or any other NEPA document, the Advisory Council has no authority to establish any such requirement."). We note in passing the anomaly of one federal agency asking us to invalidate a regulation of another federal agency -- a dispute that might have implications as to standing and the existence of a case or controversy. *United States v. Nixon, 418 U.S. 683, 692-97, 41 L. Ed. 2d 1039, 94 S. Ct. 3090 (1974)* (discussing barriers to justiciability of disputes between two executive branch officers). In any event, the Advisory Council's regulation is clearly a reasonable response to a situation involving the interplay of two federal statutes. *Barnhart v. Thomas, 157 L. Ed. 2d 333, 124 S. Ct. 376, 382* **[*455]** *(2003)* (stating that in determining whether agency action **[**28]** is within agency's discretion, the "proper Chevron inquiry is . . . whether, in light of the alternatives, the agency construction is reasonable" (referring to *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 81 L. Ed. 2d 694, 104 S. Ct. 2778 (1984))).*

Second, appellants argue that the district court lacked the authority to order a SEIS because the decision to comply with the NHPA under the old, non-integrated Section 106 process or the new, integrated NHPA/NEPA process rests within the discretion of the relevant governmental agency. While we would likely agree with appellants that a court might not be authorized prospectively to order an agency to comply with the NHPA through one procedure rather than another, and that the language of *Section 800.8(c)(5)* leaves it to the agency to decide how to rectify the deficiencies in the FONSI or ROD when an undertaking is subsequently modified, a court nonetheless retains the authority to enforce regulations when it finds that an agency has failed to meet its regulatory and statutory obligations under the NHPA. In this case, the district court was confronted with an inadequate FEIS that had failed to take **[**29]** into consideration significant changes in, and modifications to, the Project plan. Under such circumstances, a district court's ordering of a SEIS was appropriate in order to bring appellants into compliance with the NHPA.

Although the SEIS was relief made available by the NEPA, it was also a form of NHPA relief under the June, 1999 regulations. Accordingly, appellee is entitled to recover attorneys' fees and costs under the NHPA fee-shifting provisions for its expenses in obtaining the March 31, 2000 Order of the district court directing appellants to prepare the SEIS. See *Preservation Coalition, 129 F. Supp. 2d 538*; *129 F. Supp. 2d 551*. However, under *Buckhannon*, appellee is not entitled to recover expenses for activities after that date, because no court-ordered alteration of the parties' legal relationship resulted from those efforts. The district court's May 23, 2000 order compelling discovery (and other rulings subsequent to its March 31, 2000 SEIS order) resulted in the settlement and worked a procedural change between the parties rather than a material alteration of their legal relationship sufficient to warrant attorneys' fees. **[**30]** See, e.g., *Mr. & Mrs. R., 321 F.3d at 17* (focusing on the "materiality of a judicial outcome" and "whether the result is purely procedural or whether it actually accomplishes something substantive for the winning party.").

c) Liability of NFTA and ESDC

NFTA and ESDC contend that, as state agencies, they cannot be liable for the attorneys' fees and costs at issue on this appeal. We agree. Non-federal agencies are not liable for violations of the NHPA. See *W. Mohegan Tribe & Nation of N.Y. v. New York, 246 F.3d 230, 232 (2d Cir. 2001)* ("The law makes it clear that the violations of the NHPA can only be committed by a federal agency.") (citations omitted); *Vieux Carre Prop. Owners, Residents & Assocs. Inc. v. Brown, 875 F.2d 453, 458 (5th Cir. 1989)* ("By its terms, only a federal agency can violate [the NHPA]"); *Ely v. Velde, 451 F.2d 1130, 1139 (4th Cir. 1971)* (holding that the NHPA imposes no duties upon state officials but only upon federal officials); *Woonsocket Historical Soc'y v. City of Woonsocket, 120 R.I. 259, 387 A.2d 530, 532 (R.I. 1978)* (dismissing action against state **[**31]** officials under the NHPA because "the mandate [of the NHPA] is directed towards heads of federal agencies and departments, not toward state or municipal **[*456]** officers"); cf. *Indep. Fed'n of Flight Attendants v. Zipes, 491 U.S. 754, 762-63, 105 L. Ed. 2d 639, 109 S. Ct. 2732 (1989)* (holding that where there is no finding of liability under a federal statute, there can be no award of attorneys' fees).

While the district court implicitly conceded the NFTA and ESDC could not be liable under the NHPA, it nonetheless found the state agencies liable under the NEPA and *Section 4(f)* of the Transportation Act because appellee had asserted claims under these statutes. See Preservation Coalition, No. 99-CV-745S, slip op. at 9 (W.D.N.Y. June 13, 2001) (Decision and Order). Even though appellee asserted claims under these other statutes, the SEIS was ordered pursuant to the NHPA. The NFTA and ESDC, therefore, cannot be held liable for these NHPA-related fees and costs.

CONCLUSION

Appellee is entitled to attorneys' fees as costs associated with obtaining the March 31, 2000 order compelling the SEIS. Appellee is not, however, entitled to recover fees as costs incurred with regard to the **[**32]** Stipulation and Order that settled the litigation between the parties or for any fees incurred for work subsequent to the court's March 31, 2000 order. Nor is appellee entitled to recover fees and costs against the state agencies involved in this litigation. Accordingly, we vacate the award of fees against appellants NFTA and ESDC. We affirm the award against the FTS but remand for a recalculation consistent with this opinion.

ATTACHMENT C

CLOVER VALLEY FOUNDATION et al., Plaintiffs and Appellants, v. CITY OF ROCKLIN et al., Defendants and Respondents; ROCKLIN 650 VENTURE et al., Real Parties in Interest and Respondents. TOWN OF LOOMIS, Plaintiff and Appellant, v. CITY OF ROCKLIN et al., Defendants and Respondents; ROCKLIN 650 VENTURE et al., Real Parties in Interest and Respondents.

C061808

COURT OF APPEAL OF CALIFORNIA, THIRD APPELLATE DISTRICT

197 Cal. App. 4th 200*; *128 Cal. Rptr. 3d 733*; *2011 Cal. App. LEXIS 884

July 8, 2011, Filed

PRIOR HISTORY: [*1]**

APPEAL from a judgment of the Superior Court of Sacramento County, No. 34-2007-00002871-CU-WM-GDS, Lloyd G. Connelly, Judge.

DISPOSITION: Affirmed.

SUMMARY:

CALIFORNIA OFFICIAL REPORTS SUMMARY

The trial court denied petitions for writs of mandate challenging a city's approval of a subdivision project. Revisions to the project included transferring prehistoric Native American artifacts for preservation. The city prepared a recirculated draft environmental impact report (RDEIR) to analyze the revised project. The locations and specific characteristics of the cultural resources were not described. After the RDEIR had been circulated and a public hearing held, the city provided additional information briefly describing the characteristics of the cultural resources, the project's effects on them, and planned mitigation measures. (Superior Court of Sacramento County, No. 34-2007-00002871-CU-WM-GDS, Lloyd G. Connelly, Judge.)

The Court of Appeal affirmed, holding that the additional information did not require recirculation of the RDEIR (*Pub. Resources Code, §§ 21092.1, 21166*; *Cal. Code Regs., tit. 14, § 15088.5, subds. (a), (b)*) because the changes were not significant in light of disclosure restrictions pertaining to cultural resources (*Gov. Code, § 6254, subd. (r)*; *Pub. Resources Code, §§ 5097.9, 5097.993*; *Cal. Code Regs., tit. 14, § 15120, subd. (d)*). Growth-inducing impacts were adequately discussed (*Pub. Resources Code, § 21100, subd. (b)(5)*). Mitigation measures for oak trees, birds, and aesthetic impact were sufficient. Traffic and water supplies were sufficiently analyzed. (Opinion by Nicholson, Acting P. J., with Hull and Robie, JJ., concurring.) **[*201]**

HEADNOTES

CALIFORNIA OFFICIAL REPORTS HEADNOTES

(1) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Description of Environmental Setting.--*Cal. Code Regs., tit. 14, § 15151*, requires an environmental impact report (EIR) to be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences. The sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. The courts look not for perfection but for adequacy, completeness, and a good faith effort at full disclosure. If the description of the environmental setting of the project site and surrounding area is inaccurate, incomplete or misleading, the EIR does not comply with the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*). Without accurate and complete information pertaining to the setting of the project and surrounding uses, it cannot be found that the EIR adequately investigated and discussed the environmental impacts of the development project.

(2) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Nondisclosure of Historic Resource Information.--Exclusion under the California Environmental Quality Act (CEQA) (*Pub. Resources Code, § 21000 et seq.*) of archaeological site information from an environmental impact report reflects California's strong policy in protecting Native American artifacts. A city or county prior to amending a general plan must consult with affected Native American tribes to preserve or mitigate impacts to Native American artifacts that are located within the city or county's jurisdiction (*Gov. Code, § 65352.3, subd. (a)(1)*). As part of that process, the city or county must, consistent with Tribal Consultation Guidelines developed by the Governor's Office of Planning and Research, protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects (*§ 65352.3, subd. (b)*). The Tribal Consultation Guidelines, in turn, counsel local governments to avoid including any specific cultural place information within CEQA documents or staff reports which are required to be available at a public hearing. In such cases, confidential cultural resource inventories or reports generated for environmental documents should be maintained under separate cover and shall not be available to the public (Governor's Office of Planning and Research, Cal. Tribal Consultation Guidelines, General Plan Guidelines (Nov. 14, 2005 supp.) p. 27). **[*202]**

(3) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Recirculation.--Once a draft environmental impact report (EIR) has been circulated for public review, the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) does not require any additional public review of the document before the lead agency may certify the EIR except in circumstances requiring recirculation. A lead agency must recirculate an EIR when significant new information is added to an EIR after the draft EIR has been circulated for public review (*Pub. Resources Code, § 21092.1*; *Cal. Code Regs., tit. 14, § 15088.5, subd. (a)*).

(4) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Recirculation.--Significant new information in an environmental impact report (EIR) includes a disclosure that (1) a new significant environmental impact would result from the project or a new mitigation measure; (2) a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted; (3) a feasible alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the project's significant impacts but the project's proponents decline to adopt it; or (4) the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (*Cal. Code Regs., tit. 14, § 15088.5, subd. (a)*).

(5) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Nondisclosure of Historic Resource Information.--A city and the trial court determined that an analysis of cultural resources in a recirculated draft environmental impact report (RDEIR) was not deficient by reason of its nondisclosure of information regarding the resources. Substantial evidence supported that determination. Because the RDEIR did not qualify for recirculation, and the entire environmental impact report satisfied the disclosure requirements of the California Environmental Quality Act (CEQA) (*Pub. Resources Code, § 21000 et seq.*) for cultural resources, the demands of CEQA were satisfied.

[*Manaster & Selmi, Cal. Environmental Law & Land Use Practice (2011) ch. 22, § 22.03*; *Cal. Forms of Pleading and Practice (2011) ch. 418, Pollution and Environmental Matters, § 418.36*; 12 Witkin, Summary of Cal. Law (10th ed. 2005) Real Property, § 841; 8 Witkin, Summary of Cal. Law (10th ed. 2005) Constitutional Law, § 1014.]

(6) Pollution and Conservation Laws § 2.6--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Future Impact--Housing and Growth.--An environmental impact **[*203]** report is not required to make a detailed analysis of the impacts of a project on housing and growth. Only a general analysis of projected growth is required. The detail required in any particular case necessarily depends on a multitude of factors, including, but not limited to, the nature of the project, the directness or indirectness of the contemplated impact and the ability to forecast the actual effects the project will have on the physical environment. In addition, it is relevant, although by no means determinative, that future effects will themselves require analysis under the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*).

(7) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency.--An environmental impact report, when looked at as a whole, must provide a reasonable, good faith disclosure and analysis of the project's environmental impacts.

(8) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation

Measures.--The California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) requires an environmental impact report (EIR) to describe feasible mitigation measures which could minimize significant adverse impacts (*Cal. Code Regs., tit. 14, § 15126.4, subd. (a)(1)*). Measures must be provided for each significant environmental impact identified in the EIR (*§ 15126.4, subd. (a)(1)(A)*).

(9) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation Measures--Deferral.--Impermissible deferral of mitigation measures occurs when an environmental impact report (EIR) puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR.

(10) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation Measures.--A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure.

(11) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation Measures--Deferral.--Courts have approved deferring the formulation of the details of a mitigation measure where another regulatory agency will issue a permit for the project and is expected to impose **[*204]** mitigation requirements independent of the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) process so long as the environmental impact report includes performance criteria and the lead agency has committed itself to mitigation.

(12) Zoning and Planning § 6--General Plan--Operation and Effect--Conformity of Project.--A project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment. A given project need not be in perfect conformity with each and every general plan policy. To be consistent, a subdivision development must be compatible with the objectives, policies, general land uses and programs specified in the general plan.

(13) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Aesthetic Impacts.--Aesthetic issues are properly studied in an environmental impact report (EIR) to assess the impacts of a project (*Pub. Resources Code, § 21100, subd. (d)*). However, a lead agency has the discretion to determine whether to classify an impact described in an EIR as significant, depending on the nature of the area affected (*Cal. Code Regs., tit. 14, § 15064, subd. (b)*). In exercising its discretion, a lead agency must necessarily make a policy decision in distinguishing between substantial and insubstantial adverse environmental impacts based, in part, on the setting. Where the agency determines that a project impact is insignificant, an EIR need only contain a brief statement addressing the reasons for that conclusion (*Cal. Code Regs., tit. 14, § 15128*). The possibility of significant adverse environmental impact is not raised simply because of individualized complaints regarding the aesthetic merit of a project. Under the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*), the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons.

(14) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation Measures--Feasibility.--Environmental impact reports (EIR's) are to identify feasible mitigation measures for each significant impact (*Cal. Code Regs., tit. 14, §§ 15121, subd. (a), 15126.4, subd. (a)*). Although an EIR must identify proposed mitigation measures for adverse effects of the project, the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) does not require analysis of every imaginable alternative or mitigation measure; its concern is with feasible means of reducing environmental effects. An EIR need not identify and discuss mitigation measures that are infeasible. **[*205]**

(15) Pollution and Conservation Laws § 2.5--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Mitigation Measures--Feasibility.--Nothing in the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) requires an environmental impact report (EIR) to explain why certain mitigation measures are infeasible. Rather, the statute directs agencies to propose feasible mitigation measures in an EIR.

(16) Pollution and Conservation Laws § 2.3--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Additional Studies.--The California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*) does not require a lead agency to conduct every

recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required.

(17) Pollution and Conservation Laws § 2.6--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Future Impact--Water Supplies.--The California Supreme Court has established four principles that govern an analysis of water supply impacts in an environmental impact report (EIR). First, decision makers must, under the law, be presented with sufficient facts to evaluate the pros and cons of supplying the amount of water that a project will need. Second, an EIR evaluating a planned land use project must assume that all phases of the project will eventually be built and will need water, and must analyze, to the extent reasonably possible, the impacts of providing water to the entire proposed project. Third, the future water supplies identified and analyzed must bear a likelihood of actually proving available; speculative sources and unrealistic allocations (paper water) are insufficient bases for decisionmaking under the California Environmental Quality Act (CEQA) (*Pub. Resources Code, § 21000 et seq.*). An EIR for a land use project must address the impacts of likely future water sources, and the EIR's discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water's availability. Fourth, where, despite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies.

(18) Pollution and Conservation Laws § 2.6--California Environmental Quality Act--Environmental Impact Reports--Contents and Sufficiency--Future Impact--Water Supplies.--Taken together, Wat. Code, §§ 10910-10912, and *Gov. Code, § 66473.7*, demand that water supplies **[*206]** must be identified with more specificity at each step as land use planning and water supply planning move forward from general phases to more specific phases. The plans and estimates that *§ 10910* mandates for future water supplies at the time of any approval subject to the California Environmental Quality Act (CEQA) (*Pub. Resources Code, § 21000 et seq.*) must, under *§ 66473.7*, be replaced by firm assurances at the subdivision map approval stage. To pass muster under CEQA, the future water supplies identified and analyzed must bear a likelihood of actually proving available.

COUNSEL: Kenyon Yeates, Charity Kenyon, Bill Yeates and Christina Morkner Brown for Plaintiffs and Appellants Clover Valley Foundation and Sierra Club.

Law Offices of Donald B. Mooney and Donald B. Mooney for Plaintiff and Appellant Town of Loomis.

Russell A. Hildebrand, City Attorney, for Defendants and Respondents.

Jarvis, Fay, Doporto & Gibson and Rick W. Jarvis for Real Parties in Interest and Respondents.

JUDGES: Opinion by Nicholson, Acting P. J., with Hull and Robie, JJ., concurring.

OPINION BY: Nicholson

OPINION

[738] NICHOLSON, Acting P. J.**--

INTRODUCTION

This is a case where CEQA worked.[1] The City of Rocklin (the City) in 2007 **[**739]** approved a residential development project for an undeveloped area of the City known as Clover Valley. The approval culminated more than 10 years of planning and environmental review for the site's development. Since 1981, zoning authorized nearly 1,000 homes for the site. The site's owners applied to develop a project for that size in 1991, and environmental review began in earnest in 1995. As a result of environmental concerns analyzed since then, the approved project is roughly half the size it could have been. **[***2]** The amount of open space has increased by a factor of five. The project owners have already paid millions of dollars to the City to construct needed **[*207]** infrastructure. The approved project has been redesigned to protect numerous environmental resources on the site, particularly prehistoric Native American artifacts.

1 CEQA is the acronym for the California Environmental Quality Act (*Pub. Resources Code, § 21000 et seq.*).

Plaintiffs Clover Valley Foundation, the Sierra Club, and the Town of Loomis, however, claim the City has still failed to conduct legally sufficient environmental review. They filed separate petitions for writs of mandate challenging the City's project approval, claiming the City failed to comply with CEQA and the state Planning and Zoning Law (*Gov. Code, § 65000 et seq.*).

The trial court denied their petitions, and plaintiffs now appeal those judgments. Plaintiffs argue the City

abused its discretion in violation of CEQA by certifying an environmental impact report (EIR) they assert failed on many fronts. It allegedly failed to describe the sites' cultural resources, consider a sewer pipeline's growth-inducing effects, consider all oak trees that will be removed, protect **[***3]** a listed species, analyze view and traffic impacts, and document an adequate water supply. Plaintiffs also claim the project, by including road construction within a 50-foot buffer zone, is not consistent with the City's general plan.

We disagree with each of plaintiffs' claims and affirm the trial court's judgments. The EIR complies with all of CEQA's procedural demands, and its factual conclusions are supported by substantial evidence. All of the impacts raised by plaintiffs were sufficiently described and adequately mitigated in the EIR. In addition, the City did not abuse its discretion in concluding the project was consistent with the City's general plan.

FACTS

The project at issue, commonly called the Clover Valley Project, is a residential subdivision proposed for the northern end of Clover Valley, a small, narrow valley located in the City's northeast corner. Presently, this part of Clover Valley is undeveloped. Clover Valley Creek runs through the site from north to south. The area includes grasslands, wooded hillsides, oak woodlands, historic rock walls, and prehistoric cultural and archaeological resources.

As approved by the City, the 622-acre project will create 558 homes, **[***4]** a 5.3-acre neighborhood park, a 5-acre commercial site, a 1-acre site for a future fire station, and related infrastructure and streets. One of those streets would be a new road named Valley View Parkway, a road that had earlier been specified in the City's general plan. The project would preserve 366 acres of open space. **[*208]**

Planning for developing Clover Valley began years ago. Since at least 1981, the site has been zoned for residential development of as many as 974 homes. In 1991, the owners of the site applied to develop 974 homes with only 69.8 acres of open space, and for annexation of the site into the City. In 1995, the City circulated a draft EIR for this project. The City prepared a final EIR in 1996, and certified it in 1997. This EIR was not challenged.

[740]** Based upon this EIR, the site was annexed by the City, and the City approved general plan and zoning amendments along with a development agreement to allow the proposed project to proceed. The development agreement, approved in late 1997 and effective January 9, 1998, required the owners to pay $1.5 million to the City for a public recreation facility, which the owners did. The development agreement's initial term was 10 years, **[***5]** but the term would automatically be extended for the period of time any litigation challenging any later project approval was pending.

In 2000, the current owners, real parties in interest, submitted an application to begin subdividing the project site into 47 large lots, and the ultimate subdivision of those lots into as many as 933 lots. The City in 2002 circulated a draft EIR for this proposal, which tiered from the earlier annexation EIR certified in 1997.

During the review of this proposal, real parties in interest repeatedly agreed to reduce the size of the project. In October 2003, they reduced the number of homes to 753. In April 2004, they reduced the number to 710 homes. In August 2004, they reduced the number to 689 homes. They ultimately reduced the number to the 558 ultimately approved by the City. As part of this revision, real parties in interest agreed to increase the amount of open space from 69.9 acres to 366 acres, and to reduce Valley View Parkway from a four-lane road to two lanes.

As part of the revised project, the City and real parties in interest negotiated an amendment to the 1997 development agreement. This amendment extended the agreement's term by 10 years, **[***6]** limited the number of homes that could be built to 558, required real parties in interest to pay the City $1 million towards construction of a new fire station, and committed real parties in interest to transfer certain cultural sites on the land to the United Auburn Indian Community for preservation.

The revised project necessitated general plan and zoning amendments to account for the reduced acreage and number of housing units, the increased acreage of open space, and the other project revisions. Rather than use the 2002 draft EIR for the revised and reduced project, City staff determined to prepare a new draft EIR to analyze the revised project. This draft EIR, **[*209]** referred to as the recirculated draft EIR (RDEIR), was publicly circulated during the first quarter of 2006.

The RDEIR generated 196 comment letters and 74 sets of oral comments. It took the City 15 months, until June 2007, to prepare responses to all of the comments and to release the final EIR (FEIR).

The June 2007 FEIR included 49 pages of "Master Responses" addressing the primary comments that had been raised. The FEIR also included revisions to the RDEIR text and a mitigation monitoring plan.

Members of the public submitted additional **[***7]** comments to the FEIR. As a result, although not required by CEQA, City staff prepared "Responses to Additional Public Comments" (Additional Responses), dated August 20, 2007. The Additional Responses stated they were intended to be incorporated into the FEIR and were to be read together with the Master Responses.

Prior to the release of the Additional Responses, the City's planning commission on July 30 and 31, 2007, held a public hearing and unanimously recommended that the city council certify the EIR and approve the project.

On August 27 and 28, 2007, the city council held a public hearing on the project. At the close of the hearing, the city council certified the EIR (which included **[**741]** the RDEIR, the FEIR and its Master Responses, and the Additional Responses), adopted CEQA findings, and unanimously approved the project, the necessary general plan and zoning code amendments and subdivision maps, and the negotiated amendment to the development agreement.

Plaintiffs Clover Valley Foundation and the Sierra Club (collectively, the Foundation), and plaintiff Town of Loomis (Loomis) filed separate petitions for writs of mandate challenging the City's approval of the EIR and the project. The **[***8]** parties agreed to consolidate the two petitions and to change venue to Sacramento County Superior Court.

On February 6, 2009, the trial court issued a ruling denying the consolidated petitions. On February 27, 2009, the court entered judgment in favor of the City and real parties in interest.

The Foundation and Loomis appeal from the trial court's judgment.

The Foundation alleges the City violated CEQA by failing to:

1. include in the EIR identifying and descriptive information of cultural resources on the project site; **[*210]**

2. consider a proposed sewer pipeline's growth-inducing impacts;

3. evaluate and mitigate for all of the oak trees that will be removed for the project; and

4. adopt legally enforceable mitigation measures to protect the California black rail, a bird species listed as threatened under the California Endangered Species Act (*Fish & G. Code, § 2050 et seq.*).

The Foundation also claims the City violated the state Planning and Zoning Law (*Gov. Code, § 65000 et seq.*) by approving a development project that allegedly was inconsistent with the City's general plan, specifically the general plan's policy prohibiting development within 50 feet of streambanks.

Loomis alleges the City violated **[***9]** CEQA by failing to:

1. adequately analyze the project's impacts on views from Loomis or to discuss possible mitigation measures to avoid or reduce those visual impacts;

2. adequately analyze the project's impacts to transportation and circulation; and

3. identify a legally adequate long-term water supply for the project.

We address each contention below, providing more detailed factual information relevant to each argument.

DISCUSSION

I

CEQA Standard of Review

Before addressing the parties' arguments, we review the standard of review we are to apply in a CEQA appeal. Our Supreme Court recently explained the standard of review as follows:

"In reviewing an agency's compliance with CEQA in the course of its legislative or quasi-legislative actions, the courts' inquiry 'shall extend only to whether there was a prejudicial abuse of discretion.' (*Pub. Resources Code, § 21168.5*.) Such an abuse is established 'if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence.' (*§ 21168.5*; see *Western States Petroleum Assn. v. Superior Court [(1995)] 9 Cal.4th [559,] 568 [38 Cal. Rptr. 2d 139, 888 P.2d* **[*211]** *1268]*; *Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 392-393 [253 Cal.Rptr. 426, 764 P.2d 278]* **[***10]** (*Laurel Heights I*).)

"An appellate court's review of the administrative record for legal error and substantial **[**742]** evidence in a CEQA case, as in other mandamus cases, is the same as the trial court's: The appellate court reviews the agency's action, not the trial court's decision; in that sense appellate judicial review under CEQA is de novo. [Citations.] We therefore resolve the substantive CEQA issues ... by independently determining whether the administrative record demonstrates any legal error by the [City] and whether it contains substantial evidence to support the [City's] factual determinations." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 426-427 [53 Cal. Rptr. 3d 821, 150 P.3d 709]*, fns. omitted (*Vineyard Area Citizens*).)

"[A]n agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence. ([*Pub. Resources Code,] § 21168.5*.) Judicial review of these two types of error dif-

fers significantly: While we determine de novo whether the agency has employed the correct procedures, 'scrupulously enforc[ing] all legislatively mandated CEQA requirements' (*Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564 [276 Cal. Rptr. 410, 801 P.2d 1161])*, **[***11]** we accord greater deference to the agency's substantive factual conclusions. In reviewing for substantial evidence, the reviewing court 'may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable,' for, on factual questions, our task 'is not to weigh conflicting evidence and determine who has the better argument.' (*Laurel Heights I, supra, 47 Cal.3d at p. 393*.)

"In evaluating an EIR for CEQA compliance, then, a reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts. For example, where an agency failed to require an applicant to provide certain information mandated by CEQA and to include that information in its environmental analysis, we held the agency 'failed to proceed in the manner prescribed by CEQA.' (*Sierra Club v. State Bd. of Forestry (1994) 7 Cal.4th 1215, 1236 [32 Cal. Rptr. 2d 19, 876 P.2d 505]*; see also *Santiago County Water Dist. v. County of Orange [(1981)] 118 Cal.App.3d [818,] 829 [173 Cal. Rptr. 602]* [EIR legally inadequate because of lack of water supply and facilities analysis].) In contrast, in a factual dispute over 'whether **[***12]** adverse effects have been mitigated or could be better mitigated' (*Laurel Heights I, supra, 47 Cal.3d at p. 393*), the agency's conclusion would be reviewed only for **[*212]** substantial evidence. Thus, in *Laurel Heights I*, we rejected as a matter of law the agency's contention that the EIR did not need to evaluate the impacts of the project's foreseeable future uses because there had not yet been a formal decision on those uses (*id. at pp. 393-399*), but upheld as supported by substantial evidence the agency's finding that the project impacts described in the EIR were adequately mitigated (*id. at pp. 407-408*)." (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 435*.)

We proceed to apply these standards to plaintiffs' CEQA allegations.

II

The Foundation's Appeal

A. *Description of cultural resources*

The Foundation claims the EIR failed to properly describe the cultural resources existing on the site and, in particular, eight cultural sites that, despite project redesigns, **[**743]** are in harm's way. It asserts the EIR failed to provide an adequate description of the existing cultural resources and failed to identify any mitigation measures to remedy impacts to the resources. It also faults the City for not providing **[***13]** detailed information about the sites to the State Historic Preservation Officer upon the latter's request.

The Foundation acknowledges the City provided information and proposed mitigation measures regarding the eight affected cultural sites in the City's Additional Responses, but it claims this information came too late. CEQA, the Foundation argues, required this information to be included in the publicly circulated RDEIR, and the City allegedly abused its discretion by failing to comply with this directive.

We disagree with the Foundation's argument. The City's description of the existing cultural resources in all of the documents that comprise the EIR satisfied CEQA's requirement to make a good faith effort at describing the existing conditions, particularly in light of conflicting requirements that prohibited the City from disclosing detailed information about the location and type of cultural resources on the site.

CEQA, federal law, and other state laws uniformly require the City to protect the confidentiality of Native American cultural resources to preserve them from harm. The Foundation's argument, purportedly in the guise of protecting the environment, actually would defeat **[***14]** the confidentiality and expose the resources to possible destruction. This would turn CEQA on its head. **[*213]**

1. *Additional background information*

a. *RDEIR's description and analysis of cultural sites and proposed mitigation measures*

The RDEIR begins its analysis of the project's impacts on cultural resources by providing a 20-page overview of the prehistoric and historic settlement of the Sierra Nevada and the Central Valley, and the archeological and ethnographic studies that have documented that settlement. The discussion emphasizes studies that were performed in areas near the project site. Prehistoric Native American sites and artifacts have been found and are well documented in areas around Rocklin, Newcastle, and Auburn. The discussion also relates the history of the area since Americans of European descent arrived in the 1800's.

Regarding the project site, the RDEIR states record searches and field surveys resulted in locating 34 prehistoric period resources and one historic period resource within the project site. Test excavations at some of these sites encountered Native American remains.

The RDEIR noted that in 2002, the United States Army Corps of Engineers and the State Historic **[***15]** Preservation Officer (SHPO) determined these resources formed an archaeological district eligible for listing on the National Register of Historic Places under the National Historic Preservation Act (*16 U.S.C. § 470 et seq.*) (NHPA). This determination was based on a study prepared by Peak & Associates referred to as a DOE, an acronym for "A Determination of Eligibility and Effect on Cultural Resources within the Clover Valley Lakes Project Area."

The RDEIR stated that because the Army Corps of Engineers and the SHPO had determined the proposed project could adversely affect the resources in this archaeological district, the Army Corps of Engineers had initiated a process under *section 106 of the NHPA* to develop a management plan known as a historic properties management plan (HPMP) to mitigate the project's adverse effects on the cultural resources. (The HPMP was **[**744]** submitted to the Army Corps of Engineers and the SHPO for review and approval in July 2007.)

The RDEIR identifies the resources located in the project site by a number on a chart, and for each resource it notes whether the resource contains bedrock mortars, a midden,[2] circular-shaped depressions, human remains, **[*214]** projectile points, **[***16]** ground stone, lithic tools,[3] and obsidian debitage.[4] The RDEIR does not provide any further identification or description of the resources, such as their location, size, or significance. It does not do so because that information is contained in the proposed HPMP, and that document is confidential and not available for public review in order to protect against vandalism and artifact collecting.

> 2 A midden is a dunghill or refuse heap. (Merriam-Webster's Collegiate Dict. (11th ed. 2003) p. 786.)
>
> 3 Lithic tools are tools made from stone. (Merriam-Webster's Collegiate Dict., *supra,* at p. 727.)
>
> 4 Debitage is waste material produced in making prehistoric stone implements. (Oxford Dictionaries <http://oxforddictionaries.com/definition/debitage> [as of July 8, 2011].)

The RDEIR concluded the project could result in a potentially significant impact to these historic and cultural resources. The RDEIR explained: "Although project site design has been revised a number of times to avoid and protect resources, not all of the resources can be avoided through project design. A program of mitigation has been designed to satisfy the federal requirements for this undertaking in the Management **[***17]** Plan [HPMP] that require[s] approval by the U.S. Army Corps of Engineers and the State Office of Historic Preservation. Due to the sensitive nature of information contained in the [HPMP], the HPMP is not available for public review. Implementation measures for the cultural resources sites include installation of temporary construction fencing to avoid short-term impacts, as well as the use of monitors during construction to ensure that sites are not damaged or disturbed during construction. However, for some cultural sites, data recovery excavations may not occur prior to the initiation of construction; therefore, the proposed project would result in a ***potentially significant*** impact." (Original boldface & italics.)

To reduce this impact to a less-than-significant level, the RDEIR proposed a number of mitigation measures. Prior to receiving a grading permit, real parties in interest must hire an archaeologist who will assist in providing "cultural resource sensitivity training" to all construction personnel. Real parties in interest must monitor all earthmoving activities, and place construction fencing around cultural resource sites.

Despite project redesigns, eight resource sites **[***18]** could not be protected. The RDEIR required "data recovery excavations" to occur at those sites, as detailed in the confidential HPMP. Project construction was not to commence until the Army Corps of Engineers accepted a preliminary report from the testing done at those sites.

In addition, to protect against vandalism and artifact collecting resulting from additional people living near the resource sites, those sites identified in the HPMP to be preserved are to be permanently fenced prior to the issuance **[*215]** of a grading permit to minimize access. Also, monitoring and checking of the sites will occur throughout each year.

If during construction an archeological or historical resource is discovered, all work will immediately stop within 100 feet of the find until Native American representatives **[**745]** and archaeologists can determine whether the resource qualifies for protection and mitigation measures can be recommended and implemented. If human remains are found, all work will be halted until the coroner makes final disposition of the remains.

b. *Comments to RDEIR analysis and City's response*

After it circulated the RDEIR for public comment, the City received numerous requests to disclose the location **[***19]** and character of the cultural resources. In the Master Responses included in the FEIR, the City explained its refusal to provide additional identifying information. It feared disclosure would result in vandalism to the resources. It also claimed its refusal was consistent with the NHPA, which required a federal agency not to disclose to the public information about a historical resource's location and character if disclosure would

harm the resource. The City in the RDEIR had disclosed the archaeologically important elements of each cultural site within the context of an extensive discussion of the ethnographic context.[5] That description, the City stated, was adequate to meet the disclosure purposes of CEQA while protecting the resources from harm. Personnel with a need to know had access to the DOE and the draft HPMP, which in the federal permit process would be reviewed by the Army Corps of Engineers and the SHPO. The City claimed the federal process was much more stringent than the CEQA process and would develop the best possible preservation and mitigation measures for the cultural sites.

5 Ethnography is the study and systematic recording of human cultures. (Merriam-Webster's **[***20]** Collegiate Dict., *supra*, at p. 429.)

One of the requests for additional information came from the SHPO. Following his review of the RDEIR, the SHPO wrote to the City and requested copies of the DOE and the draft HPMP. The City responded by giving the SHPO a copy of the DOE. The City noted that the SHPO had already received the DOE as part of determining the cultural resources on the site qualified as an archeological district under the NHPA.

The City, however, refused to give the SHPO a copy of the draft HPMP as part of the CEQA review process for the reasons already mentioned. However, the SHPO would obtain a copy of the HPMP as part of its requirement under the NHPA to consult with the Army Corps of Engineers before the **[*216]** Army Corps of Engineers grants permits for the project. This consultation would occur after the CEQA process was completed. The City included copies of this correspondence in the FEIR.

c. *Comments to FEIR and City's response in its Additional Responses*

Following its release of the FEIR, the City received additional comments criticizing its refusal to disclose the location and character of the cultural sites. The SHPO criticized the RDEIR and the FEIR for not providing an adequate description **[***21]** of the archeological sites and their significance because the DOE and the draft HPMP were not made available to the public. The SHPO claimed that "[w]hile sensitive information such as archeological site records, sacred sites or maps by law should not be made available, a redacted, but complete version of the reports used in the preparation of a [draft EIR] is required to either be circulated or made available."

The SHPO also claimed the RDEIR and the FEIR failed to include any mitigation **[**746]** measures for the project's impacts to the cultural resources. He faulted the City for deferring to mitigation measures that would eventually be developed under the HPMP process as fulfilling the CEQA requirement to include mitigation measures in the EIR.

The Foundation made similar complaints against the FEIR. It also noted the City, in the original draft EIR prepared in 2002, had provided a narrative description of the cultural sites. It argued the City was required to do the same in the RDEIR.

The City responded to these criticisms in its Additional Responses. The City recognized CEQA's demand to make a good faith effort at full disclosure, but noted it was also bound to follow legal requirements that prohibited **[***22]** full disclosure of information concerning cultural resources. CEQA prohibits the disclosure of information about the location of archaeological sites and sacred lands, or any other information subject to disclosure restrictions under the state Public Records Act (*Gov. Code, § 6254*). (*CEQA Guidelines, Cal. Code Regs., tit. 14, § 15120, subd. (d)*.)[6] The Public Records Act, in turn, does not require disclosure of any records of Native American graves, cemeteries, places, features, and objects in the possession of a local agency. (*Gov. Code, § 6254, subd. (r)*.)

6 All references to "Guidelines" are to the state CEQA guidelines, the regulations which implement the provisions of CEQA. (*Cal. Code Regs., tit. 14, § 15000 et seq.*)

Moreover, as already mentioned, the NHPA authorized federal agencies not to disclose information regarding the location and character of a historic **[*217]** resource. The City stated its refusal to disclose more information than it did in the RDEIR was in compliance with the federal law's intent.[7]

7 The City also stated that the United Auburn Indian Community, with which it was consulting to prepare the HPMP, had "insisted that the City and the Developer take every precaution to maintain the confidentiality of the location and **[***23]** contents of the site. The City's caution is justified as evidenced by the multitude of commentors that have related their discoveries of biological and cultural resources after having trespassed on the developer's private property."

The City rejected the Foundation's criticism that it should have provided a narrative description of the cultural resources in the RDEIR instead of providing the information in a summary table. The City argues its use of the summary table was "merely a different way to communicate nearly the same information."

Despite its claim that it had complied with the demands of CEQA regarding disclosure of cultural resources, the City nonetheless provided as part of its Additional Responses more information concerning the eight cultural resource sites the project would impact. The information, depicted in a table called the Clover Valley Cultural Resources Description, Treatment and Management Table, was derived from redacted site descriptions contained in the DOE and the draft HPMP. The City provided the table "as a clarification or explanation and [it] does not represent any new environmental effects."

This table provided more information than the summary table used in **[***24]** the RDEIR. The table named each of the eight affected cultural sites by number, and for each site recited a brief site description, the amount of the site that would be affected by the project, the reason for the effect, and the management and treatment actions planned to mitigate the effect.

For example, for the cultural site designated as No. CVL-7, the table described the site as "Bedrock mortar features. Associated **[**747]** deposit of cultural material. Relatively deep (70 centimeter) deposit of cultural material in the central portion and a much shallower and less dense deposit in the western portion. Three projectile points; two are large. The third point is a Rose Springs Contracting Stem point."

The portion of the resource site area affected by the project equaled 3,082.9 square meters, or roughly three-quarters of an acre. The impact would arise from construction activities, permanent infrastructure, and house pads. To mitigate the impact, the City would require permanent fencing around the site area not directly affected by construction, biannual monitoring, and data recovery excavations. Similar descriptions were made for each of the eight affected sites. **[*218]**

Regarding the claim that the City was wrongfully **[***25]** deferring mitigation until the federal HPMP process was completed, the City in its Additional Responses reminded the Foundation that the RDEIR included a number of mitigation measures to reduce impacts to a less-than-significant level independent of the HPMP process. The City claimed its mitigation regime satisfied the demands of CEQA.

d. *Trial court's ruling*

At the hearing on the petitions, the trial court ordered the parties to submit supplemental briefing on whether the EIR adequately disclosed information about the cultural sites, the timeliness of the disclosures made in the Additional Responses, and the effect the *NHPA section 106* process would have on the project. On the issue of adequacy, the court wondered why the information about the sites contained in the Additional Responses was not also made available for the other cultural sites. On the issue of timing, the court inquired whether CEQA's policy of affording decision makers and the public an opportunity to comment was fulfilled by including the additional information in the Additional Responses prior to the city council's hearing on the project.

After reviewing the additional briefing, the trial court determined the EIR's **[***26]** analysis of cultural resources, contained in the RDEIR, the FEIR, the Master Responses, and the Additional Responses, satisfied CEQA's requirements. The trial court determined the EIR sufficiently identified the characteristics of the cultural resources, identified the adverse impacts the project would cause to those resources, and specified feasible mitigation measures to mitigate those impacts.

Regarding the level of disclosure made in the EIR, the trial court ruled: "In short, the EIR provides sufficiently clear, comprehensible and comprehensive information to permit decisionmakers and members of the public to intelligently assess potential adverse project impacts to cultural resources and the effectiveness of the specified mitigation measures in avoiding or reducing the impacts to insignificance. The omission of details from the DOE and HPMP does not preclude accurate assessment about the cultural significance of the contents of the documented cultural resources, about the risk of damage and destruction posed to the cultural significance of the resource contents by project construction, and about the feasibility of the specified mitigation measures to preserve documented and accidentally **[***27]** discovered cultural resources in place while recovering data from those portions of cultural resources that will be damaged or destroyed by project construction. [The City's] withholding of details from the DOE and HPMP in accordance with CEQA Guideline 15120(d) and NHPA regulations has not impaired the EIR **[*219]** as an informational document enabling informed public participation in the CEQA review process." (Fn. omitted.)

[748]** Before us, the Foundation claims the trial court erred. It asserts the City prejudicially abused its discretion when it refused to provide in the RDEIR redacted versions of the DOE and HPMP to describe the cultural sites and proposed mitigation measures for each. Omitting this information, the Foundation argues, subverted CEQA's public review purpose.

2. *Analysis*

We must determine whether the EIR contains a sufficient description of the historical and cultural resources existing on the project site. "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time ... envi-

ronmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the **[***28]** baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives." (*Guidelines, § 15125, subd. (a)*.)

(1) "*Guidelines section 15151* requires an EIR to be prepared 'with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences. ... [T]he sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. ... The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.' (See also *San Francisco Ecology Center v. City and County of San Francisco (1975) 48 Cal.App.3d 584, 594 [122 Cal. Rptr. 100]*.)" (*County of Amador v. El Dorado County Water Agency (1999) 76 Cal.App.4th 931, 954 [91 Cal. Rptr. 2d 66]*.)

"If the description of the environmental setting of the project site and surrounding area is inaccurate, incomplete or misleading, the EIR does not comply with CEQA. (*San Joaquin Raptor[/Wildlife Rescue Center v. County of Stanislaus (1994) 27 Cal.App.4th 713,] 729 [32 Cal.Rptr.2d 704]*.) **[***29]** 'Without accurate and complete information pertaining to the setting of the project and surrounding uses, it cannot be found that the [EIR] adequately investigated and discussed the environmental impacts of the development project.' (*Ibid.*)" (*Cadiz Land Co. v. Rail Cycle (2000) 83 Cal.App.4th 74, 87 [99 Cal. Rptr. 2d 378]*.)

This case presents a paradoxical twist on the issue of good faith effort at full disclosure, as CEQA and the Public Records Act actually *restrict* the **[*220]** amount of information regarding cultural resources that can be disclosed in an EIR. The Guidelines prohibit an EIR from including "information about the location of archaeological sites and sacred lands, or any other information that is subject to the disclosure restrictions of *Section 6254 of the Government Code* [(part of the Public Records Act)]." (*Guidelines, § 15120, subd. (d)*.) In turn, *Government Code section 6254* of the Public Records Act lists as exempt from public disclosure any records "of Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects described in *Sections 5097.9* and *5097.993 of the Public Resources Code* maintained by, or in the possession of, the **[***30]** Native American Heritage Commission, another state agency, or a local agency." (*Gov. Code, § 6254, subd. (r)*.)

Public Resources Code sections 5097.9 and *5097.993* list the Native American places, features, and objects, the records of which are not to be publicly disclosed under the Public Records Act: "any Native **[**749]** American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property" (*§ 5097.9*) and any "Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources ... , including any historic or prehistoric ruins, any burial ground, any archaeological or historic site, any inscriptions made by Native Americans at such a site, any archaeological or historic Native American rock art, or any archaeological or historic feature of a Native American historic, cultural, or sacred site ... ." (*§ 5097.993, subd. (a)(1)*.)[8,9]

8 The Public Records Act also includes a separate statute, *Government Code section 6254.10*, which prohibits disclosure of archaeological records. That provision reads: "Nothing in [the Public Records Act] requires disclosure of records **[***31]** that relate to archaeological site information and reports maintained by, or in the possession of ... a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency."

9 As a model, the City also relied upon the authority granted to federal agencies under the NHPA to "withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary [of the Interior] and the agency determine that disclosure may ... [¶] ... [¶] ... risk harm to the historic resources ... ." (*16 U.S.C. § 470w-3(a)*.)

These Guidelines and statutes prohibited the City from disclosing records and information concerning the project site's archeological resources in the EIR, including the records demanded by the SHPO. The archaeological resources, comprising as they do an archaeological district eligible for listing on the National Register of Historic Places under the NHPA, are Native American objects, the records of which in the City's possession are not subject to disclosure under the Public Records Act. Thus, information about **[*221]** those objects contained **[***32]** in those records, including the DOE and the draft HPMP, are to be excluded under *Guidelines section 15120* from publication in the EIR.[10]

10 At oral argument, the Foundation for the first time argued the lists of Native American objects contained in *Public Resources Code sections 5097.9* and *5097.993* do not apply to limit disclosure of archeological resources under

> CEQA. The Foundation bases this argument on the following sentence from *Public Resources Code section 5097.9*: "The provisions of this chapter shall not be construed to limit the requirements of the Environmental Quality Act of 1970 [(CEQA)]." The Foundation misapplies this sentence. *Public Resources Code sections 5097.9* and *5097.993* are not being construed to limit CEQA's requirements. Rather, CEQA, in the form of *Guidelines section 15120*, simply incorporates the objects listed in *Public Resources Code sections 5097.9* and *5097.993* into *its* list of objects, the information of which need not be disclosed in an EIR. It is CEQA that is limiting CEQA, not the chapter in which *Public Resources Code sections 5097.9* and *5097.993* are codified.

In an effort to make full disclosure of the existing physical conditions while also trying to comply **[***33]** with the prohibitions on disclosing information on archeological resources, the City in the RDEIR provided a chart noting the types of archaeological resources and recommended mitigation measures to mitigate impacts to those resources. In the Additional Comments, the City provided more detailed information of the resources that could not be protected and recommended specific mitigation measures for each. In this effort, the City provided more information about the cultural sites than CEQA required.

(2) CEQA's exclusion of archaeological site information from an EIR reflects the state's strong policy in protecting Native American artifacts. Indeed, state law now requires a city or county prior to amending **[**750]** a general plan to consult with affected Native American tribes to preserve or mitigate impacts to Native American artifacts that are located within the city or county's jurisdiction. (*Gov. Code, § 65352.3, subd. (a)(1).*) As part of that process, the city or county must, consistent with guidelines developed by the Governor's Office of Planning and Research, "protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, **[***34]** and objects." (*Gov. Code, § 65352.3, subd. (b).*)

The Governor's Office of Planning and Research guidelines, in turn, counsel local governments to "avoid including any specific cultural place information within CEQA documents (such as Environmental Impact Reports, Negative Declaration, and Mitigated Negative Declarations) or staff reports which are required to be available at a public hearing. In such cases, confidential cultural resource inventories or reports generated for environmental documents should be maintained under separate cover and shall not be available to the public." (Governor's Office of Planning & Research, Cal. Tribal Consultation Guidelines, General Plan Guidelines (Nov. 14, 2005 supp.) p. 27.) **[*222]**

Working within these specific restrictions, the City provided sufficient information in the EIR to satisfy CEQA's general demand for full disclosure of the environmental setting. As the trial court correctly found, the EIR provides sufficient information to permit decision makers and members of the public generally to assess the existence of confidential archaeological resources on the site, the potential adverse impacts the project would impose on those resources, **[***35]** and the effectiveness of the specified mitigation measures in avoiding or reducing those impacts to a level of insignificance.

The Foundation claims the lack of detailed information in the EIR about the archaeological resources precluded meaningful opportunity to comment on the project's effects on those resources. We disagree. The public knew that of the 34 archaeological resources found on the site, all but eight would be fully protected due to the project's redesign. Of the remaining eight, the public knew they would be subject to highly regulated and observed data excavations. CEQA did not require the public to know, at the risk of vandalism and destruction of the resources, the exact nature and location of the resources being protected.

Indisputably, the City complied with the requirements of CEQA. Consequently, there is no prejudicial error. The City made a remarkably good faith effort at full disclosure of the existence of archaeological resources on the site, but did so in recognition of, and submission to, express prohibitions in CEQA not to disclose information regarding the location, use and character of the resources.

At oral argument, counsel for the Foundation reluctantly **[***36]** agreed that the Foundation was not primarily concerned with the sufficiency of the information the EIR eventually provided on the eight affected archeological sites. Indeed, responding to questioning from the panel, counsel agreed the Foundation would not be before the court on this issue had the information provided in the Additional Responses about the eight sites been included in the RDEIR.

Instead, counsel stated the Foundation's real CEQA concern was that the information included in the Additional Responses was not first included in the RDEIR, thereby depriving the public of an opportunity to comment on the information as part of the RDEIR's public review. The difficulty with this argument, however, **[**751]** is that CEQA provides the remedy of recirculation to address a deficient draft EIR, and the information added to the Additional Responses did not trigger an obligation to recirculate the RDEIR. Thus, CEQA pro-

vides no remedy for the fault in the RDEIR alleged by the Foundation. **[*223]**

(3) Once a draft EIR has been circulated for public review, CEQA does not require any additional public review of the document before the lead agency may certify the EIR except in circumstances requiring recirculation. **[***37]** A lead agency must recirculate an EIR when "significant new information" is added to an EIR after the draft EIR has been circulated for public review. (*Pub. Resources Code, § 21092.1*; *Guidelines, § 15088.5, subd. (a)*.) New information added to an EIR is not "significant" unless "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement." (*Guidelines, § 15088.5, subd. (a)*.)

(4) "Significant new information" includes, for example, a disclosure that (1) a new significant environmental impact would result from the project or a new mitigation measure; (2) a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted; (3) a feasible alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the project's significant impacts but the project's proponents decline to adopt it; or (4) the draft EIR "was so fundamentally and basically inadequate **[***38]** and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish & Game Com. (1989) 214 Cal.App.3d 1043 [263 Cal. Rptr. 104]*.)" (*Guidelines, § 15088.5, subd. (a)*.)

"Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." (*Guidelines, § 15088.5, subd. (b)*.)

The City effectively concluded the information added to the Additional Responses about the eight cultural sites did not constitute "significant information," and it did not recirculate the EIR. As did the trial court, we apply the substantial evidence test to the City's determination. (*Laurel Heights Improvement Assn. v. Regents of University of California (1993) 6 Cal.4th 1112, 1135 [26 Cal. Rptr. 2d 231, 864 P.2d 502]* (*Laurel Heights II*).)

We agree with the trial court's finding that substantial evidence supported the determination not to recirculate the RDEIR: "Notably, the additional information released by [the City] about the eight cultural resources requiring data recovery excavation adds narrative detail about the resources' characteristics but not new substantive information which would militate against **[***39]** the resources' cultural significance and need for preservation." (Fn. omitted.) "The information ... did not require recirculation of the EIR for public comment pursuant to *Public Resources Code section 21166* [(regarding **[*224]** changes necessitating a subsequent or supplemental EIR)] and CEQA Guidelines 15088.5 [(regarding recirculating a draft EIR)]. The additional information about the eight cultural resources merely clarified or amplified information in the EIR."

Because recirculation was not required, we have no opportunity or obligation under CEQA to review the adequacy of the RDEIR divorced from the other documents that comprise the EIR, including the FEIR and the Additional Responses.

[752]** The Foundation argues recirculation is not the only remedy for addressing a defective draft EIR. It claims we can invalidate the certification of the entire EIR based on the alleged defective nature of the RDEIR. It cites *Mountain Lion Coalition v. Fish & Game Com., supra, 214 Cal.App.3d 1043* (*Mountain Lion Coalition*), as the basis for such authority. *Mountain Lion Coalition*, however, is inapposite.

That case concerned the state Fish and Game Commission's failure to prepare an adequate second draft EIR in compliance with a prior court order that **[***40]** had invalidated the first environmental document. The Court of Appeal sustained the trial court's exercise of its continuing jurisdiction over the matter and the grant of a writ of mandate against the second draft EIR because the new draft failed to comply with the trial court's earlier order. (*Mountain Lion Coalition, supra, 214 Cal.App.3d at pp. 1051, 1052*.) The commission abused its discretion by not strictly following the prior order. (*Id. at p. 1052*.) Thus, the remedy exercised by the court in the case is limited to its unique factual situation of enforcing a prior court order.

Moreover, any precedential value of *Mountain Lion Coalition*, as noted above, has been codified at *Guidelines section 15088.5*. Citing to the case, the Guideline requires recirculation of an EIR if the "draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." (*Guidelines, § 15088.5, subd. (a)(4)*.)

(5) The City and the trial court determined the RDEIR's analysis of the cultural resources was not so deficient, and substantial evidence supports that determination. Because the RDEIR did not qualify for recirculation, and the entire EIR satisfied **[***41]** CEQA's disclosure requirements for cultural resources, the demands of CEQA are satisfied, and we do not, and cannot, take any action against the RDEIR.

B. *Sewer pipeline's growth-inducing impacts*

The Foundation claims the EIR failed to analyze the growth-inducing impacts that construction of an offsite sewer pipeline to serve the project's **[*225]** 558 homes and an additional 524 homes would create. We disagree. The EIR explained the pipeline's growth-inducing impact, that it would remove an obstacle to future growth. No further analysis was required, as that growth had already been expressly contemplated in the City's general plan and the general plan EIR.

1. *Additional background information*

a. *EIR's analysis of pipeline's growth-inducing impacts*

The project includes construction of an offsite sewer line that will accommodate not only this project, but also the eventual additional development of 501 dwelling units to the north of the project site and 23 units to the south. The City claims its zoning already provides for this additional development in these locations, and the upgrade in the sewer infrastructure is required by the South Placer Municipal Utility District (SPMUD) master plan's **[***42]** requirements for providing sewer to the project and the additional development.

The RDEIR acknowledged the proposed sewer infrastructure would generate a growth-inducing impact. It stated that because the SPMUD master plan included the additional development north of the project site, the project's infrastructure was designed to meet the needs of the project and this additional approved development. The RDEIR recognized, however, that any development outside the project site would be required to undergo discretionary approval by the City, including **[**753]** annexation and subdivision map approval.

The Foundation accused the RDEIR of omitting details about the sewer line's growth-inducing effects. It alleged the RDEIR failed to adequately analyze the significance of the growth-inducing impact and it wrongly deferred mitigating the impact. It claimed the EIR had to evaluate the growth-inducing impacts of the sewer line, determine the significance of the growth-inducing impacts, and, if the impacts are significant, identify and discuss feasible mitigation measures.

The City responded to the Foundation's criticisms in its Master Responses. The City acknowledged the project's development of the additional **[***43]** sewer capacity would eliminate "an obstacle to development of these units, and, to that degree, could be considered 'growth-inducing.'" However, the City disagreed with the Foundation's claim that CEQA required the RDEIR to analyze the environmental impacts of the additional development, which may or may not ever occur. The City claimed it was sufficient under CEQA for the EIR to acknowledge the project is removing an obstacle to such future growth.

The City also stated there was a distinction between inducing new growth and merely accommodating growth for which the City has already planned: **[*226]** "The City's General Plan already designates the areas in question outside the project for the 501 additional units to the north and the 23 units to the south. The City's long-term plans thus already call for the eventual development of these sites, and the City has already certified an EIR for its General Plan analyzing, at a programmatic level, the environmental impacts of such future development. A project's growth inducing impacts can be a problem where a project is inducing growth to occur which is not already planned for [*sic*]. The present project does not raise this problem. In fact, the City **[***44]** is requiring the present project to size the sewer pipes to accommodate this additional growth in order to be consistent with the South Placer Municpal [*sic*] Utility District's long-term infrastructure Master Plan. The project's growth 'inducing' (or, rather, 'accommodating') impacts thus do not constitute a significant adverse environmental impact."

b. *Trial court's ruling*

The trial court held the EIR's discussion of growth-inducing impacts satisfied CEQA's requirements. The EIR acknowledged the pipeline was growth inducing insofar as it removed an obstacle to residential development already contemplated by the City's general plan and SPMUD's master plan. The EIR did not need to analyze the environmental impacts of that growth because the general plan EIR had already done so at a programmatic level, the growth was not part of the project being approved, and the growth will undergo separate CEQA review when it is begun.

Before us, the Foundation claims the City misstated the law, and, as a result, failed to describe adequately the project's growth-inducing impacts and to evaluate the environmental effects of the foreseeable offsite development.

2. *Analysis*

CEQA requires an EIR to "include **[***45]** a detailed statement setting forth ... [¶] ... [¶] ... [t]he growth-inducing impact of the proposed project." (*Pub. Resources Code, § 21100, subd. (b)(5).*) *Section 15126.2, subdivision (d),* of the Guidelines explains this requirement obligates an EIR to "[d]iscuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in **[**754]** the surrounding environment. Included in this are projects which would

remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which **[*227]** may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

The EIR's discussion of the sewer line's growth-inducing impacts satisfied **[***46]** this requirement. The RDEIR and the Master Comments explained the sewer improvements would provide part of the infrastructure required later to undertake construction of additional housing to the north and south of the project, thereby removing, euphemistically speaking, "an obstacle to development": the present lack of sufficient sewer capacity. The additional development would indeed tax existing sewage capacity, so this project would alleviate that problem.

(6) No further detail or analysis was required of the potential impacts the additional planned development could cause. An EIR is not "required to make a detailed analysis of the impacts of a project on housing and growth. Nothing in the Guidelines, or in the cases, requires more than a general analysis of projected growth. The detail required in any particular case necessarily depends on a multitude of factors, including, but not limited to, the nature of the project, the directness or indirectness of the contemplated impact and the ability to forecast the actual effects the project will have on the physical environment. In addition, it is relevant, although by no means determinative, that future effects will themselves require analysis **[***47]** under CEQA." (*Napa Citizens for Honest Government v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 369 [110 Cal. Rptr. 2d 579]*.)

Here, more detail was not required for at least three reasons. First, the purpose and nature of this project was not to facilitate additional development after the project is completed. In *City of Antioch v. City Council (1986) 187 Cal.App.3d 1325 [232 Cal. Rptr. 507]*, a case relied upon by the Foundation, the court struck down the use of a negative declaration to conclude construction of a proposed road and utility infrastructure through undeveloped land would not have a significant effect on the environment. The court found the city needed to prepare an EIR and analyze the impacts of future development that would utilize the improvements where "the sole reason to construct the road and sewer project is to provide a catalyst for further development in the immediate area." (*Id. at p. 1337*.)

Here, the sole reason for constructing the sewer pipeline is not to provide a catalyst for further development. Rather, it is first to meet the needs of the current project. And the nature of the project is not to facilitate additional development. **[*228]**

Second, the contemplated impact on growth **[***48]** is indirect. Although the sewer line will provide essential capacity for the additional housing, it removes only one of potentially numerous obstacles and approval requirements for developing the additional housing that may arise if and when an application to develop it is ever submitted.

Third, any future effects of that additional development will undergo CEQA analysis. In fact, in this case, that growth has already been analyzed in the City's **[**755]** general plan EIR and was contemplated in the general plan and the SPMUD master plan. The possible development's general impacts had already been considered and approved on a program level. CEQA did not require the City to redo that analysis in this project EIR as part of the growth-inducing impacts analysis. (*Pub. Resources Code, § 21094, subd. (a)*.)

The Foundation claims there is no evidence in the record that the general plan EIR actually considered the impacts from the proposed additional housing, and thus the City cannot rely upon it. It faults the City for attempting to rely on the general plan EIR without complying with CEQA's procedures for tiering from another EIR or for incorporating by reference a portion of another EIR. (See *Guidelines,* **[***49]** *§ 15152, subds. (a), (g)*.) The Foundation admits the general plan EIR was mentioned in the City's Master Responses and listed in the references section of the RDEIR, but that allegedly was not good enough. Also, the general plan EIR itself is not included in the administrative record.

A reasonable person would have understood the City was incorporating analysis from its general plan EIR and the SPMUD master plan when it referenced the reader to those documents and stated those analyses had already evaluated the environmental impacts of the additional growth. The opinions of the staff expressed in the FEIR are evidence the general plan EIR includes the analysis, and we are required to presume that EIR is valid. (*River Valley Preservation Project v. Metropolitan Transit Development Bd. (1995) 37 Cal.App.4th 154, 178 [43 Cal. Rptr. 2d 501]*.) The EIR's discussion thus referenced the reader to the additional information.

For all of these reasons, CEQA required nothing more in this EIR concerning growth-inducing impacts than what is already contained in the document. The EIR

informed decision makers and the public about the pipeline's growth-inducing effects and referenced where those impacts were reviewed in more **[***50]** detail. That was enough.

C. *Oak tree removal*

The Foundation claims the EIR fails to account for all of the oak trees that will be removed due to the project. To the contrary, the EIR disclosed the loss **[*229]** of all oak trees that would be affected by the project and determined the impact was significant and unavoidable. The EIR satisfied CEQA's requirements.

1. *Additional background information*

a. *EIR's analysis of project's impact on oak trees*

The RDEIR states oak woodland covers approximately 185 acres, or 29 percent, of the project area. The woodland provides a number of important wildlife resources, including food, shelter, roosting, and breeding sites. An inventory counted 28,246 trees on the project site. Development of the project would result in the loss of 7,422 trees. Construction of the major roadways would remove 1,632 trees, and construction of minor streets and small lots would remove 5,790 trees. According to the RDEIR, these calculations of trees to be lost do not include any trees that would be removed from commercial areas.

The City regulates oak tree removal pursuant to general plan polices, its oak tree preservation ordinance, and, in this instance, by the terms of the development **[***51]** agreement between the City and real parties in interest. The general plan, in policy 4 of the plan's open space, conservation and recreation element, states it is the City's policy to "encourage the protection of oak trees, including heritage oaks, **[**756]** and other significant vegetation from destruction."

The oak tree preservation ordinance implements this policy by requiring a permit for the removal of an oak tree that has a trunk diameter at breast height of six inches or more. Mitigation is required and can be made either by tree replacement or payment into the City's oak tree preservation fund.

The development agreement between the City and real parties in interest also addressed oak tree removal. The agreement requires real parties in interest to grant to the City open space and conservation easements for an oak tree preserve and an open space trail system. The agreement also requires real parties in interest to construct a bicycle/pedestrian trail system. In exchange for real parties in interest fulfilling these obligations, the City would deem the preserve and trail system as full mitigation for oak tree removal under the oak tree preservation ordinance so long as the number of oak **[***52]** trees removed does not exceed 25 percent of the oak trees in the project.

The development agreement also stated that trees removed for constructing the major roadways, estimated at 1,632 trees, would not count towards the 25 percent cap. Excluding those trees from the total estimated number of trees to **[*230]** be lost, 7,422, results in a loss of 5,790 trees, or about 20.5 percent of the total number of trees on the project site, well within the 25 percent cap.

Also, the RDEIR states trees in the proposed commercial areas were not included in the final calculations for tree removal because the oak tree preservation ordinance does not apply to commercial lands.

The RDEIR stated that despite the mitigation required by the development agreement, that agreement did not address removal of trees located within the major roadways associated with the offsite sewer pipeline. Thus, "the loss of trees resulting from the ultimate anticipated development of the project and associated infrastructure would be considered to be a ***significant*** effect." (Original boldface & italics.) To mitigate that effect, the RDEIR recommended that the City enforce the mitigation measures agreed to in the development **[***53]** agreement, and that real parties in interest develop an oak tree mitigation strategy for impacts to oak trees along the offsite sewer line. The strategy had to be reviewed and approved by the City pursuant to the oak tree preservation ordinance prior to recording a final subdivision map. Even with this mitigation, however, the impact remained significant and unavoidable.

The City received a number of comments on the RDEIR questioning its analysis of trees to be removed by construction of the major roadways as well as the adequacy of the development agreement to mitigate impacts. In its Master Responses, the City responded to the comments by clarifying that oak trees removed for construction of three major roadways through the project would not be counted as trees removed by real parties in interest for purposes of the development agreement.

Rather, mitigation for the loss of those trees would be applied pursuant to policy 4 of the general plan's open space, conservation and recreation element. The general plan EIR, adopted in 1991, had found that impacts on biological resources from constructing roadways where none had existed were significant and unavoidable. In response, the City **[***54]** adopted policy 4. It then implemented that policy through the oak tree preservation ordinance, and through the planning review and land use entitlement process requiring tree replacement and open space preservation.

[757]** The City stated mitigation for oak tree loss from construction of general plan roadways throughout the City is accomplished "at a Citywide level" by implementing policy 4. It said mitigating the loss of trees from the project's major roadways, which the City did not count as losses caused by the project, would similarly be accomplished by implementation of policy 4.

After receiving still additional criticisms, the City in its Additional Responses further clarified its analysis of the potential loss of oak trees. The **[*231]** City concluded the impacts to oak trees lost from construction of the major roadways in the project "will be significant and unavoidable," notwithstanding implementation of mitigation measures pursuant to the general plan policy. In contrast, the City found that impacts to oak trees from development of the project, other than for trees lost from constructing the major roadways, would be mitigated to less than significant through implementation of the development **[***55]** agreement conditions and the requirements of the oak tree preservation ordinance.

The City corrected the RDEIR to read that the development agreement did not address removal of trees located within the major roadways or associated with the offsite sewer alignment. Thus, the loss of trees from ultimate development of the project would be a significant impact.

In its CEQA findings made upon approving the project, the City stated impacts "related to loss of oak trees on the project site due to project implementation" had not been mitigated to a less-than-significant level and were therefore significant and unavoidable impacts.

b. *Trial court's ruling*

The trial court determined the EIR's analysis of project impacts on oak trees satisfied the requirements of CEQA. Regarding oak trees to be removed for construction of the major roadways, the court stated the EIR properly analyzed and mitigated those impacts by relying on the general plan policy and concluding the loss of these trees was significant and unavoidable.

The court also determined the EIR had, in fact, analyzed the loss of trees on proposed commercial lots. Contradicting the statement in the EIR that oak trees to be removed from commercial **[***56]** lots were not considered, the tree inventory report states the 5,790 trees to be removed for purposes other than construction of the major roadways were "located within the planned residential, commercial and easement areas." In light of this evidence, the trial court concluded the statement in the EIR was erroneous and that oak trees to be removed from commercial areas were in fact considered in the EIR.

The Foundation asserts the City violated CEQA by excluding from the RDEIR any analysis of the 1,632 oak trees to be lost due to construction of the major roadways. It also faults the City's response in the Master Responses that these oak trees would be addressed under the City's general plan policy and oak tree preservation ordinance. It claims this discussion does not satisfy CEQA because, among other reasons, the general plan policy is not specific to loss of trees caused by construction of roadways, the City's CEQA **[*232]** findings do not reference these policies as a mitigation measure, the master findings do not comply with CEQA procedures regarding reference to other EIR's, and the general plan EIR is not included in the record and we thus cannot determine whether it in fact addressed **[***57]** the loss of oak trees due to construction of major roads in the City.

The Foundation also claims the City violated CEQA by excluding from analysis the loss of oak trees from the project's **[**758]** **[**759]** commercial areas. It asserts the trial court's conclusion that these oak trees were in fact included in the analysis is not supported by evidence.

2. *Analysis*

(7) An EIR, when looked at as a whole, must provide a reasonable, good faith disclosure and analysis of the project's environmental impacts. (*Laurel Heights Improvement Assn. v. Regents of University of California, supra, 47 Cal.3d at p. 392*.) This EIR's analysis of the project's impacts on oak trees satisfied this standard.

The EIR disclosed 1,632 oak trees would be lost to construction of major roadways. It determined this impact was significant. Mitigation for these impacts was outside the scope of the development agreement and was to be evaluated and mitigated on a citywide level pursuant to the general plan policy and the City's oak tree preservation ordinance, but even so, the impact remained significant and unavoidable.

The EIR's analysis provided decision makers and the public with a sufficient degree of information on which they could determine whether to approve the project in light of the project's **[***58]** unavoidable environmental impacts. If the project was to be built, oak trees would be lost due to road construction. Mitigation was limited to what the City could enforce through its oak tree preservation ordinance, but that mitigation would not render the impact insignificant. On this point, the EIR did not need to be more specific than it already was.

The Foundation's other arguments also do not fare well. The Foundation claims the EIR violated CEQA by relying on the general plan policy and the general plan EIR without incorporating any discussion in those doc-

uments by reference, without summarizing any portion that was incorporated, or without including a copy of the general plan EIR in the record. However, the EIR clearly quoted the general plan policy and summarized portions of the general plan EIR for use in this EIR. In addition, the EIR itself is substantial evidence of what is said in the general plan and general plan EIR. This discussion was sufficient to enable the decision makers and the public to render an environmentally informed judgment on the project. **[*233]**

We also reject the Foundation's attack on the trial court's factual finding that the EIR analysis included the impacts **[***59]** to trees on lands designated for commercial uses. Substantial evidence supports the trial court's resolution of the conflict between the tree inventory report and the EIR. The EIR discussion was based on the inventory report, and the latter indicates trees on commercial land were considered. That is sufficient evidence to pass CEQA muster.

D. *California black rail*

The Foundation asserts the City failed to adopt a legally enforceable mitigation measure to protect against impacts to the California black rail, a protected bird species. The Foundation argues the mitigation measure that was adopted wrongfully defers mitigation, and it also imposes a permit requirement that does not exist in law.

We conclude the EIR's analysis of the project's impacts on the black rail complied with CEQA. The EIR proposed mitigation measures that are legally enforceable and do not unlawfully defer mitigation.

1. *Additional background information*

a. *EIR's analysis of effect on black rails*

The RDEIR describes the black rail's status. The bird is listed under the California Endangered Species Act (*Fish & G. Code, § 2050 et seq.*) **[**760]** as a threatened species. The Legislature has also designated the black rail as a "fully **[***60]** protected bird." (*Fish & G. Code, § 3511*.) Birds designated as "fully protected" may not be taken (killed) or possessed at any time, and no state law may be construed to authorize the issuance of licenses or permits to take such birds. (*Fish & G. Code, § 3511*.)

The RDEIR discloses that the marshes on the project site are a potentially suitable habitat for the black rail. However, at the time of the RDEIR's preparation, no black rails had been observed on the site.

The RDEIR determined the project could create a potentially significant impact to freshwater marsh-occupying birds such as the black rail. Although no permanent impacts were expected due to the incorporation of a buffer around the marshes, temporary impacts could occur due to "culvert/outfall installation," as well as construction of the offsite sewer line.

To mitigate these impacts to a less-than-significant level, the RDEIR recommended, as mitigation measure 4.8MM-13, that real parties in interest **[*234]** conduct bird surveys within 30 days of performing any ground-disturbing activities. If no birds were identified, no further mitigation would be required. If a nonlisted species was identified, construction activities would be scheduled **[***61]** to occur outside of the breeding season and/or individual birds would be relocated away from the impact area according to applicable governmental protocols. Monitoring of construction would be conducted by a qualified biologist and reported to the appropriate agency.

If a listed species, such as the black rail, is identified, real parties in interest would pursue appropriate permitting with the agency having regulatory authority over the species. Mitigation and monitoring measures stipulated in the permitting instrument would be imposed.

In response to comments made to the RDEIR, real parties in interest commissioned a survey of the project site by a black rail expert. The survey, conducted in June 2006, detected one black rail in a large central wetland in the project site's main drainage. The expert stated real parties in interest would have to consult with the Department of Fish and Game, as the wetland was occupied black rail habitat and the development called for a road to bridge the wetland. The expert recommended the wetland be clearly delineated during construction and no destructive entry be allowed, and that roadways and other drains that might put large quantities of water **[***62]** and noxious runoff into the wetland or cause destructive siltation be routed to prevent those effects from happening.

The expert noted he had "observed Black Rails existing continuously over many years in close proximity to the human disturbances associated with residences, household pets, livestock, intense traffic disturbance, and the like. Wetland islands located where such disturbances are to occur should not be written off as habitat of no future potential; to the contrary, they are worthy of protection and maintenance."

In its Additional Responses, the City reported on the survey results and recommendations, and it determined it had sufficiently mitigated any impacts to the black rail. The City stated the expert's proposed mitigation measures were already included as part of the project design or as mitigation measures contained elsewhere in the RDEIR addressing impacts to wetland habitat: "For

example, Mitigation Measures 4.8MM-4(d) and 4.8MM-7 both require fencing and avoidance of wetland areas, and Mitigation Measures 4.8MM-8 **[**761]** and 4.11MM-5(c) address stormwater runoff. Likewise, under the project as designed, all stormwater runoff from the project site (including roads) will **[***63]** be treated prior to discharge and then discharged so as not to allow large quantities of water, noxious runoff, or siltation in any wetland areas, including this central wetland. Thus, Mitigation Measure 4.8MM-13 [(the measure **[*235]** recommended in the RDEIR specifically to address impacts to freshwater marsh fowl)], together with these other mitigation measures and project design features, will ensure mitigation of impacts to the black rail."

In its findings approving the project, the City adopted all of the mitigation measures referenced in its Additional Responses that address potential impacts on freshwater marsh-occupying birds and their habitats. These measures require the real parties in interest to, among other things, obtain necessary permits from the Army Corps of Engineers and the Department of Fish and Game that regulate developments affecting wetland habitat, replace affected onsite wetlands on a "no-net-loss" basis, use high visibility fencing during construction to mark off and prevent inadvertent encroachment into wetland habitat; develop a siltation and erosion control program for stream crossing areas prior to construction; implement a management plan to minimize production **[***64]** of site runoff and eliminate water quality contaminants originating from the project site; and conduct bird surveys and comply with established protocols if freshwater marsh-occupying birds are located, including relocation of nonlisted species, preventing construction during breeding season, and complying with all mitigation measures imposed by regulatory agencies in the event listed species such as the black rail are discovered.

b. *Trial court's ruling*

At trial, the Foundation claimed the EIR failed to analyze the project's impacts on the black rail and its habitat, failed to discuss mitigation measures to reduce such project impacts, and improperly deferred mitigation until future surveys identify the black rail on the site. The trial court rejected the Foundation's claims. The court ruled that the Foundation's arguments disregarded the EIR's detailed analysis of project impacts on riparian and wetland habitat and its specification of mitigation measures to protect those habitats. Those measures apply to wetlands on the project even when no black rails are found on the site.

The trial court also ruled that the Foundation's arguments failed to recognize that the EIR's mitigation measures **[***65]** set forth mandatory procedures to be followed if a protected species like the black rail was identified on site, including procedures pursuant to the California Endangered Species Act. The court found these measures did not improperly defer the formulation of mitigation measures.

Before us, the Foundation claims the City failed to adopt legally enforceable mitigation measures to protect the black rail. It claims the mitigation measure for protecting listed species, mitigation measure 4.8MM-13, defers the formulation of mitigation to a vague, future regulatory process. It asserts **[*236]** the trial court's interpretation of this process to include a permitting process from the Department of Fish and Game is not supported by the EIR's express language, which does not mention specifically a Department of Fish and Game permit.

The Foundation also argues the trial court's assumption that the Department of Fish and Game would be the appropriate permitting authority is incorrect. Because the black rail is a "fully protected" bird, the Department of Fish and Game has no authority to permit any activity that could result in the incidental taking of that species. **[**762]** Thus, the Foundation argues, any future mitigation strategy **[***66]** based on a Department of Fish and Game permit would not be enforceable.

2. *Analysis*

(8) CEQA requires an EIR to describe feasible mitigation measures which could minimize significant adverse impacts. (*Guidelines, § 15126.4, subd. (a)(1).*) Measures must be provided for each significant environmental impact identified in the EIR. (*Guidelines, § 15126.4, subd. (a)(1)(A).*)

"Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." (*Guidelines, § 15126.4, subd. (a)(1)(B).*)

(9) "Impermissible deferral of mitigation measures occurs when an EIR puts off analysis or orders a report without either setting standards or demonstrating how the impact can be mitigated in the manner described in the EIR." (*City of Long Beach v. Los Angeles Unified School Dist. (2009) 176 Cal.App.4th 889, 915-916 [98 Cal. Rptr. 3d 137]*.)

Here, there was no impermissible deferral. The RDEIR fully evaluated any impacts the project would have on freshwater marsh-occupying birds, which included the black rail. It determined there would be no permanent impacts **[***67]** on these birds due to the project's design of protecting wetlands, and it proposed

mitigation measures to minimize the project's possible temporary impacts. Thus, mitigation of impacts on black rails and all other freshwater marsh-occupying birds was not improperly deferred.

(10) The Foundation's attack on the mitigation measure's requiring compliance with regulatory permitting requirements if an endangered species such as the black rail is discovered is a red herring. "A condition requiring compliance with environmental regulations is a common and reasonable mitigating measure. [Citation.]" (*Sundstrom v. County of Mendocino (1988)* **[*237]** *202 Cal.App.3d 296, 308 [248 Cal. Rptr. 352]*.) The condition is particularly reasonable here because the City required real parties in interest to obtain all necessary federal and state permits from the Army Corps of Engineers and the state Department of Fish and Game regulating the project's impacts on wetlands, which happen also to be the very procedures in which the project's potential impacts on endangered species would be addressed, arising as they would in this project by means of impacts on wetlands. (See *16 U.S.C. § 1536*; *Fish & G. Code, § 1600 et seq.*)

That a permit cannot **[***68]** be issued to authorize taking a black rail is irrelevant. At issue is whether requiring real parties in interest to obtain the permits that must be obtained and to comply with the mitigation measures imposed on those permits, as well as those imposed by the City, as a way to prevent the project from taking black rails is an enforceable mitigation measure. We conclude it is.

(11) Courts have approved deferring the formulation of the details of a mitigation measure where another regulatory agency will issue a permit for the project and is expected to impose mitigation requirements independent of the CEQA process so long as the EIR included performance criteria and the lead agency committed itself to mitigation. (*Endangered Habitats League, Inc. v. County of Orange (2005) 131 Cal.App.4th 777, 793-794 [32 Cal. Rptr. 3d 177]*.)

Here, the EIR stated the performance standard regarding black rails clearly: they are "fully protected birds," and thus **[**763]** the project cannot take them incidentally or otherwise. Moreover, the City committed to mitigate any impact on black rails by requiring real parties in interest to obtain all necessary permits regarding the project's impacts on the site's wetlands. In this circumstance, this was **[***69]** a sufficient mitigation measure that did not violate the requirements of CEQA.

E. *Project's consistency with City's general plan*

The Foundation claims the project as approved is inconsistent with the City's general plan. It asserts the project violates the general plan by permitting construction of a roadway on land designated as open space. We, like the trial court, conclude the City did not abuse its discretion in determining the proposed road did not violate its general plan.

1. *Additional background information*

The City's general plan requires the City to apply open space designations to all land located within 50 feet from the banks of streams. The Foundation **[*238]** claims the City violated this policy when it approved a road, Nature Trail Way, to make two limited encroachments into the 50-foot buffer established for Clover Valley Creek.

In the FEIR, the City determined these two encroachments into the buffer, as well as a pedestrian and bicycle path in the buffer zone, were consistent with the general plan. The FEIR states: "The City of Rocklin has historically allowed for the construction of necessary roadways and public bike trails within the 50-foot open space buffer surrounding creeks. [¶] **[***70]** Additionally, the City determined that if Nature Trail Way was moved outward beyond the 50-foot buffer, the road would require additional grading and the clearing of a number of oak trees which exist on the western side of the proposed location for Nature Trail Way. The City considers the placement of Nature Trail Way within the 50-foot open space buffer area to be the environmentally superior design choice due to the fact that placement outside of the buffer at these locations would result in additional hillside grading and additional loss of oak trees."

The Foundation claims the City's approval of these encroachments into the 50-foot buffer violates the general plan.

2. *Analysis*

(12) "A project is consistent with the general plan "'if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." ' [Citation.] A given project need not be in perfect conformity with each and every general plan policy. (*Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 719 [29 Cal. Rptr. 2d 182]* (*Sequoyah*).) To be consistent, a subdivision development must be 'compatible with' the objectives, policies, general land uses and programs specified **[***71]** in the general plan. (*Id. at pp. 717-718.*)" (*Families Unafraid to Uphold Rural etc. County v. Board of Supervisors (1998) 62 Cal.App.4th 1332, 1336 [74 Cal. Rptr. 2d 1]* (*FUTURE*).)

A city's determination that a project is consistent with the city's general plan "carries a strong presumption of regularity. (*Sequoyah, supra, 23 Cal.App.4th at p.*

717.) This determination can be overturned only if the [city] abused its discretion--that is, did not proceed legally, or if the determination is not supported by findings, or if the findings are not supported by substantial evidence. (*Ibid.*) As for this substantial evidence prong, it has been said that a determination of general plan consistency will be reversed only if, based on the evidence before the local governing body, '... a reasonable person could not have **[**764]** reached the same conclusion.' (*No Oil, Inc. v. City of Los Angeles (1987) 196 Cal.App.3d 223, 243 [242 Cal. Rptr. 37]*.)" (*FUTURE, supra, 62 Cal.App.4th at p. 1338*.) **[*239]**

When we apply this standard, "the nature of the policy and the nature of the inconsistency are critical factors to consider." (*FUTURE, supra, 62 Cal.App.4th at p. 1341*.) In addition, general consistencies with plan policies cannot overcome "specific, mandatory **[***72]** and fundamental inconsistencies" with plan policies. (*Id. at p. 1342*.)

Reviewing the evidence that was before the City, no reasonable person would have determined the project was inconsistent with the general plan. Allowance of the encroachment into the 50-foot buffer in this case actually furthers the general plan's policies. The open space land use designation required by the general plan is designed to protect fish and wildlife, natural vegetation and habitat, and scenic areas. The buffer is used to protect those areas from development. In this case, strictly enforcing the buffer defeats its purposes and likely conflicts with other general plan policies, as the City would be required to perform additional grading into a hillside and remove additional oak trees.

Thus, any inconsistency that exists here is not fundamental. Nor was it not discussed. A reasonable person, seeking to implement the general plan's policies of preserving habitat, open space, and scenic vistas, clearly would have concluded the deviation from the buffer zone requirement in this instance better fulfills the general plan's objectives and requirements. The City did not abuse its discretion in finding the project **[***73]** is consistent with the general plan.

III

Loomis's Appeal

A. *Impacts on views*

Loomis claims the EIR failed to analyze sufficiently the project's impacts on views or to discuss possible mitigation measures to reduce those impacts. It claims no evidence supports the EIR's conclusion that impacts on views from western Loomis will not be significant, and that the City violated CEQA by not proposing measures to mitigate the impacts on views from Sierra College Boulevard. We disagree, and find the EIR adequately analyzes and mitigates the project's impacts on views. Some residents of Loomis may not want their views towards Clover Valley to change, but CEQA is satisfied if the impacts are disclosed, analyzed, and feasibly mitigated. **[*240]**

1. *Additional background information*

a. *EIR's analysis of impacts on views*

The RDEIR explains that Loomis lies to the east and southeast of the project site. Only a limited portion of the site is visible to the public from those areas. A portion on the site's eastern part is visible from areas within Loomis and by travelers along a short portion of Sierra College Boulevard. The site's southern part is visible to immediately adjoining residents of the existing Loomis subdivision **[***74]** to the east.

The RDEIR, in impact 4.3I-1, states implementation of the project, with its construction of roadways, infrastructure, and single-family homes, "would constitute a substantial permanent alteration of the existing visual character of the project site." The grading required for the project will eliminate existing vegetation on the project site, substantially altering the site's aesthetic value. This impact is considered significant and unavoidable, even when **[**765]** mitigated by requiring real parties in interest to submit and comply with a revegetation plan for all areas affected by grading.

The RDEIR also lists as two specific impacts the impacts the project will have on views from the Loomis area. The first, impact 4.3I-2, lists as significant and unavoidable the impacts the project will have on views from Sierra College Boulevard and the northwest Loomis area. Sierra College Boulevard runs contiguous to the project site's northeast border along the site's eastern ridgeline. At that point, referred to by the RDEIR as a "summit," the existing land uses distinctly change from rural urbanization to undeveloped land. The project would result in residential and commercial development **[***75]** being built along that portion of Sierra College Boulevard, eliminating the current demarcation between developed and undeveloped land. The RDEIR determined this unbuffered change would be a significant and unavoidable impact to persons traveling along Sierra College Boulevard and who live in Loomis north of the "summit." The RDEIR claims there are no feasible mitigation measures for this impact.

The second relevant impact, impact 4.3I-3, lists as less than significant any aesthetic impact the project will have on views from western Loomis. Residents of that area will have unrestricted views of the development

proposed for the site's southeastern ridgeline, south of the "summit" and west of Del Mar Avenue. The project calls for building single-family residences along the top of that ridge, some 100 to 150 feet above Loomis's valley floor. The slope between the Loomis residences and the project's hilltop residences will not be developed and will act as a buffer.

The RDEIR claims impact 4.3I-3 is less than significant and requires no mitigation. The RDEIR states that "[d]espite the project's high visibility, the **[*241]** project uses would be consistent with the surrounding off-site homes. [¶] **[***76]** Viewers from this area are expected to tolerate a low-to-moderate level of visual change because of the quality of existing views, and because views from residences are particularly sensitive to the residents. Although the project would result in a high level of change as viewed from this area, the proposed project incorporates buffers in the southeast area of the project site. ... [T]he proposed project includes a buffer zone of 250-280 feet at the crest of the hill on the southeastern boundary of the proposed project site. Therefore, the impact of the anticipated development and the proposed project is considered ***less-than-significant***." (Original boldface & italics.)

In its Master Comments of the FEIR, the City responded to public comments critical of the RDEIR's conclusion that certain view-related impacts were less than significant. The City claimed the comments misunderstood the RDEIR's discussion: "[T]he overall aesthetic impact of developing the project site is significant and unavoidable due to the loss of existing visual resources within the project site. The discussions under Impacts 4.3I-3 through 4.3I-6 address the additional question of the aesthetic consistency **[***77]** of the proposed development with surrounding development. Because the project proposes development that is consistent with surrounding development, this additional impact is deemed less than significant, even though the overall aesthetic impact is significant and unavoidable. [¶] As explained in the RDEIR, aesthetic impacts to viewers from western Loomis are not considered to be significant, due to the visual consistency of project development with surrounding off-site homes and the incorporation of a visual buffer of 250-280 feet at the crest of the hill. Contrary to the statement made in the comment, the EIR does not state that homes in the development **[**766]** site will be 'invisible' to Loomis residents. To the contrary, the RDEIR acknowledges that development would be visible." (Italics omitted.)

The City in the FEIR also responded to criticism that the RDEIR did not contain any feasible mitigation measures to minimize the significant impact on views along Sierra College Boulevard. The City disagreed with the claim, stating that "[m]easures to mitigate the impact (though not to a less-than-significant level) would be implemented as part of the project description, including landscaping **[***78]** and other design features to help decrease impacts related to aesthetics and visual resources. The City did not determine that any additional mitigation beyond those included with the project design would be feasible. Additionally, the Alternatives chapter [of the RDEIR] includes several alternatives for the proposed project, such as the Maximum of 180 Units Alternative, which would decrease the total buildout of the proposed project and potentially decrease these impacts." **[*242]**

b. *Trial court's ruling*

Loomis challenged the EIR's analysis of the project's impacts on views. It claimed the analysis was contradictory by stating alteration of views from western Loomis would be less than significant while at the same time stating viewers from this area would experience a high level of change.

Loomis also claimed the analysis was conclusory. The EIR claimed impacts to views from Sierra College Boulevard were significant and unavoidable, and that no feasible mitigation measures existed to mitigate this impact. Loomis argued there was no substantial evidence to claim no feasible mitigation measures existed.

The trial court disagreed with both of Loomis's arguments. It found the City clarified in the **[***79]** Master Responses that it was addressing two separate impacts on views and there was no contradiction. The project's overall aesthetic impact was significant due to the loss of resources within the project site. However, when the project is considered in relation to surrounding development, the impact is less than significant because both the project and the surrounding uses consist primarily of residential development.

The trial court also determined the EIR did not err in concluding the impact to views along Sierra College Boulevard was significant and unavoidable because no feasible mitigation measure is available. It determined substantial evidence in the record established that the project's overall aesthetic impact was significant and unavoidable despite efforts to minimize the impact. The court did not directly discuss the EIR's conclusion that no feasible mitigation measures were available to mitigate this impact.

Loomis claims the trial court's ruling is incorrect. It claims (1) substantial evidence does not support the EIR's conclusion that view impacts from western Loomis toward the project's southeast border will be less than significant; (2) impact 4.3I-3 is internally inconsistent **[***80]** by concluding the project will result in a high level of change to residents of western Loomis but the

impact is less than significant; and (3) the EIR fails to discuss possible mitigation measures to the substantial and unavoidable impacts to views from Sierra College Boulevard or to substantiate that any possible mitigation measures were infeasible.

2. *Analysis*

(13) "Aesthetic issues are properly studied in an EIR to assess the impacts of a project. (*Pub. Resources Code, § 21100, subd. (d)*; *Pocket Protectors v. City of Sacramento (2004) 124 Cal.App.4th 903, 936-940 [21* **[*243]** *Cal. Rptr. 3d 791]*.) However, a lead agency **[**767]** has the discretion to determine whether to classify an impact described in an EIR as 'significant,' depending on the nature of the area affected. (*Guidelines, § 15064, subd. (b)*; *Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 492-493 [14 Cal. Rptr. 3d 308]* (*Mira Mar*); *National Parks & Conservation Assn. v. County of Riverside (1999) 71 Cal.App.4th 1341, 1357 [84 Cal. Rptr. 2d 563]*.) ...

"'In exercising its discretion, a lead agency must necessarily make a policy decision in distinguishing between substantial and insubstantial adverse environmental impacts based, in part, on the setting. (CEQA *Guidelines, § 15064, subd.* **[***81]** *(b)*.) Where the agency determines that a project impact is insignificant, an EIR need only contain a brief statement addressing the reasons for that conclusion. (CEQA *Guidelines, § 15128*.)' (*Mira Mar, supra, 119 Cal.App.4th at pp. 492-493*.) [¶] ... [¶]

"The possibility of significant adverse environmental impact is not raised simply because of individualized complaints regarding the aesthetic merit of a project. (See *Bowman v. City of Berkeley (2004) 122 Cal.App.4th 572, 584-593 [18 Cal. Rptr. 3d 814]*.) 'Under CEQA, the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons.' (*Mira Mar, supra, 119 Cal.App.4th at p. 492*.)" (*Eureka Citizens for Responsible Government v. City of Eureka (2007) 147 Cal.App.4th 357, 375-376 [54 Cal. Rptr. 3d 485]*, fn. omitted (*Eureka Citizens*).)

Disagreements regarding the adequacy of an EIR's impact analysis will be resolved in favor of the lead agency if any substantial evidence supports the lead agency's determination. (See *Laurel Heights Improvement Assn. v. Regents of University of California, supra, 47 Cal.3d at p. 409*; see also 1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont.Ed.Bar 2d ed. 2011) § 13.26, pp. 637-638 (rev. 1/10).)

Loomis claims the EIR's conclusion **[***82]** that impacts on views from western Loomis toward the project's southeastern border would be a "high level" of change but would not be significant is not supported by substantial evidence and is contradictory. We disagree. The EIR stated an impact to aesthetic resources would be considered significant if the proposed project would "[s]ubstantially alter or degrade the visual character or quality of the project site; or [¶] [h]ave a substantial adverse effect on a scenic vista ... ." Using this standard of significance, the EIR concluded the impacts on views from western Loomis toward the project's southeastern border would be less than significant. **[*244]**

Substantial evidence supports this conclusion, and the finding is not contradictory. The EIR claimed the impact would not be significant due to the buffer between the valley floor and the new homes to be built on the top of the ridge. Although it is a "high level" of change, it is not a significant impact because the area is already a residential area. By containing factual statements addressing why this impact is not significant, the EIR provided substantial evidence supporting its conclusion, and the conclusion is not contradictory. (*Eureka Citizens, supra, 147 Cal.App.4th at p. 376*.)

Loomis **[***83]** also faults the EIR for not setting forth feasible mitigation measures to minimize the significant impacts to views along Sierra College Boulevard at the project's northeast border. It suggests the EIR could have recommended measures such as reduced building sizes, screening using vegetation, avoiding building in key locations on the ridge, limiting the height of homes on the ridge, imposing design requirements such as colors to **[**768]** blend with the hillsides, or modifying building features to reduce light and glare. Instead, Loomis claims, the EIR simply concluded the significant impacts could not be mitigated.

(14) EIR's are to identify feasible mitigation measures for each significant impact. (*Guidelines, §§ 15121, subd. (a), 15126.4, subd. (a)*.) "Although an EIR must identify proposed mitigation measures for adverse effects of the project, "'CEQA does not require analysis of every *imaginable* alternative or mitigation measure; its concern is with *feasible* means of reducing environmental effects.'" [Citation.]" (*Concerned Citizens of South Central L.A. v. Los Angeles Unified School Dist. (1994) 24 Cal.App.4th 826, 841 [29 Cal. Rptr. 2d 492]*, original italics.) An EIR need not identify and discuss mitigation measures **[***84]** that are infeasible.

Here, the FEIR noted that feasible mitigation measures, including some similar to those suggested by Loomis would be imposed at the design stage. These included landscaping and specific design features to help decrease aesthetic impacts.

In another section, the FEIR also explained why one of Loomis's proposed mitigation measures, relocating lots from off of the ridge, was not feasible. Such an ac-

tion may not be legally feasible in light of the commitments the City made to real parties in interest in the development agreement. Moreover, relocating development off the ridge to some other location on the project site would affect open space areas that have been planned to protect the site's most environmentally sensitive resources. This proposed mitigation measure thus could actually impact the environment more than the project would as currently planned. **[*245]**

(15) Nothing in CEQA requires an EIR to explain why certain mitigation measures are infeasible. Rather, the statute directs agencies to propose feasible mitigation measures in an EIR. Substantial evidence indicates the City has analyzed the project's impacts on views, and has proposed feasible mitigation measures to minimize **[***85]** those impacts. That is sufficient for CEQA.

B. *Impacts on traffic*

Loomis claims the EIR is inadequate because it did not analyze traffic impacts at two particular intersections in Loomis, and because it did not analyze traffic impacts during school travel times.

The City claims the EIR's analysis of impacts at 17 different intersections, including three in Loomis, and its use of "PM peak hour" traffic analyses, when traffic is heavier than in "AM" (morning) conditions, satisfy the demands of CEQA. We, as did the trial court, agree with the City.

(16) "CEQA does not require a lead agency to conduct every recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required." (*Association of Irritated Residents v. County of Madera (2003) 107 Cal.App.4th 1383, 1396 [133 Cal. Rptr. 2d 718]*.) "CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors." (*Guidelines, § 15204, subd. (a)*.)

Rather, CEQA requires an EIR to "be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them **[***86]** to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible." (*Guidelines, § 15151*.)

[769]** The EIR's analysis of traffic satisfied this standard. The RDEIR analyzed levels of service at 17 nearby intersections during the "PM" (evening) peak hour under five different scenarios: the existing conditions, the existing conditions plus the project conditions, the year 2025 projected conditions under the current general plan if the project is not built, the year 2025 projected conditions if the project is built, and the year 2025 projected conditions under a new, proposed general plan if the project is built. The analysis relied upon PM peak hour counts for two reasons: the City has historically relied upon PM peak hour counts, and PM conditions tend to have higher traffic volumes than AM (morning) conditions. The analysis determined the project's impact on traffic under each of these scenarios would be less than significant. **[*246]**

Loomis does not fault this analysis. Rather, it claims the City did not **[***87]** do enough analysis because it omitted two additional Loomis intersections, King Road at Taylor Road, and Horseshoe Bar Road at Interstate 80. It also claims the City erred by not analyzing the AM school time period.

In the FEIR, the City responded to Loomis's criticisms. It analyzed the percent changes in daily traffic volumes to the two locations suggested by Loomis under three scenarios, and determined the increase in volume to be as follows:

Scenario	King Road/Taylor Road	Horseshoe Bar Rd/I-80
Existing plus project	Less than 2%	Less than 2%
2025 current general plan plus project	14%	Less than 2%
2025 proposed general plan plus project	4%	Less than 2%

Based on this analysis, the City determined that changes in traffic volumes at these two intersections would be small, and thus the City did not perform a formal level of service intersection analysis for them.

The City also explained its use of the PM peak period for its analysis instead of Loomis's proposed "school time" period. The PM peak hour is when the highest traffic volumes are on the roadway system. Also, there is no evidence that time periods before or after school would be more critical than the PM peak hour.

The EIR's analysis of traffic **[***88]** impacts thus satisfied CEQA. By addressing Loomis's concerns in the FEIR, the EIR gave decision makers sufficient information of the project's impacts on traffic, in light of what was reasonably feasible to analyze. CEQA required nothing more.

C. *Impacts on water supply*

Loomis claims substantial evidence does not support the EIR's conclusion that an adequate water supply will be available for the project. It faults the EIR for allegedly not demonstrating the water supply is sufficiently guaranteed for this project in the event the project is delayed and other development projects use the available water first. We conclude the EIR's analysis is sufficient.

1. *Additional background information*

The RDEIR explained that the City's water is provided by the Placer County Water Agency (PCWA). PCWA approved the City's request to supply **[*247]** water to the project. It determined it had an adequate supply and sufficient infrastructure to meet the project's demands as well as the anticipated demands for new development in western Placer County for the next 20 years.

[770]** As of 2007, PCWA had 17,358 acre-feet per year (afy) of uncommitted water to be used by new development in western Placer County. PCWA calculated **[***89]** this project at buildout would require approximately 631 afy. The RDEIR thus concluded the project currently had a sufficient water supply.

However, the RDEIR noted that because PCWA has a "first-come, first-serve[d]" policy for serving new customers, a delay in constructing the project could jeopardize the project's access to the surplus water. If that were to happen, certain infrastructure projects already planned by PCWA would have to be implemented to provide adequate water to the project. PCWA would determine the need for these improvements when real parties in interest paid to be connected to the system. If PCWA determined it did not have adequate supply to service the project at that time, the project would not proceed until such time when the infrastructure improvements were made. If PCWA determined it had adequate supply for the project, it would guarantee water to serve the site.

In response to comments about the RDEIR's water supply analysis, the City in its Master Comments to the FEIR expanded its discussion of water supply impacts. Regarding the possibility of PCWA not having sufficient supplies if the project is delayed unexpectedly, the City explained that PCWA has additional **[***90]** water rights to the American River, which it is currently negotiating to transfer to the Sacramento River. If the transfer occurs this additional water would be available to service the project.

Specifically, PCWA has rights to an additional 35,000 afy of water from the American River through the federal Central Valley Project administered by the Bureau of Reclamation. The City anticipates this water being available by 2015 by means of a unique contractual agreement. Pursuant to an agreement signed by numerous water purveyors in Northern California known as the Water Forum Agreement, PCWA has applied to divert 35,000 afy from the Sacramento River in lieu of taking the same amount of water from the American River. This diversion is already undergoing environmental review under CEQA and its federal counterpart.

The City claims a reasonable certainty that this water will be available to it. The diversion is based on actual rights the City has to American River water, not so-called entitlements to paper water; the diversion has the support of all Water Forum Agreement signatories as it will have less environmental **[*248]** impact than taking water from the American River; and the project has been **[***91]** encouraged by federal legislation.

The City acknowledges the diversion faces regulatory hurdles that could cause delays: completion of environmental review, approval of a contract between PCWA and the Bureau of Reclamation, approval of a wetlands "fill" permit by the Army Corps of Engineers under the federal Clean Water Act of 1977 (Pub.L. No. 95-217 (Dec. 27, 1977) 91 Stat. 1566), and consultations required under the federal Endangered Species Act of 1973 (*16 U.S.C. § 1531 et seq.*). However, the City and other agencies participating in the diversion project have already taken steps to minimize impacts the project may have on endangered species.

The FEIR reminds the reader that notwithstanding these contingencies, PCWA has certified that it has sufficient water supplies for this project and all other contemplated development within its service area through the next 20 years barring any unforeseen and unexpected delays in project development.

2. *Analysis*

(17) In *Vineyard Area Citizens, supra, 40 Cal.4th 412*, **[**771]** our Supreme Court established four principles that govern an EIR's analysis of water supply

impacts. First, "[d]ecision makers **[***92]** must, under the law, be presented with sufficient facts to 'evaluate the pros and cons of supplying the amount of water that the [project] will need.' [Citation.]" (*Id. at p. 431*.)

Second, an EIR "evaluating a planned land use project must assume that all phases of the project will eventually be built and will need water, and must analyze, to the extent reasonably possible, the impacts of providing water to the entire proposed project. [Citation.]" (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 431*.)

"Third, the future water supplies identified and analyzed must bear a likelihood of actually proving available; speculative sources and unrealistic allocations ('paper water') are insufficient bases for decisionmaking under CEQA. [Citation.] An EIR for a land use project must address the impacts of *likely* future water sources, and the EIR's discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water's availability." (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 432*, original italics.)

Fourth, "where, despite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some **[***93]** discussion of possible replacement sources or alternatives to **[*249]** use of the anticipated water, and of the environmental consequences of those contingencies. [Citation.]" (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 432*.)

Loomis targets the EIR's compliance with *Vineyard Area Citizens*'s third and fourth principles: the likelihood that identified future water supplies will be able to provide the needed water, and a discussion of possible replacement sources if it is impossible to confidently determine the anticipated water will be available. Loomis claims the EIR's analysis fails to verify PCWA water will be able to provide the needed water due to PCWA's "first come, first serve[d]" policy, and that the EIR's discussion of a possible replacement source, the Sacramento River diversion water, is too uncertain a possibility to be considered as a viable replacement source.

Our review convinces us the EIR satisfies the standards set forth in *Vineyard Area Citizens*. The EIR identifies future water supplies sufficient to satisfy the project's needs that have a likelihood of actually being available, it analyzes the circumstances affecting the likelihood of the water's availability, and it **[***94]** discusses possible replacement sources in the event the primary source proves to be unavailable.

Pursuant to statutory mandates, PCWA certified to the City in writing that it has sufficient water to meet the development's needs, and, indeed, the needs of all other contemplated development within PCWA's service area for the next 20 years. "*Government Code section 66473.7* generally requires a city or county, before approving a subdivision map for a residential development of more than 500 units, to obtain from the applicable public water system a 'written verification' that adequate water supplies will be available for that project as well as other existing and planned future uses for a projected 20-year period. When the verification rests on supplies not yet available to the water provider, it is to be based on firm indications the water will be available in the future, including written contracts for water rights, approved financing programs for delivery facilities, and the regulatory approvals required to construct infrastructure and deliver the water. (*Id., subd. (d)*.) The subdivision **[**772]** map may be approved only if the water system verifies, or the city or county finds on substantial **[***95]** evidence, that water supplies will be adequate. (*Id., subd. (b)*; see Tepper, *New Water Requirements for Large-Scale Developments* [(Jan. 2005)] 27 L.A. Law. [18,] 20.)" (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 433*.)

In addition, "*Water Code sections 10910 to 10912*, enacted in 1995 but substantially amended in 2001, apply more broadly to any large land use project (not only residential developments) and to approval of any such project subject to CEQA (not only to subdivision map approvals). (*Wat. Code,* **[*250]** *§§ 10910, subd. (a), 10912, subds. (a), (b)*.) They require the city or county considering a project to obtain, at the outset of the CEQA process, a water supply 'assessment' from the applicable public water system. (*Wat. Code, § 10910, subd. (b)*.) The 'water supply assessment' is then to be included in any CEQA document the city or county prepares for the project. (*Wat. Code, § 10911, subd. (b)*.) With regard to *existing* supply entitlements and rights, a water supply assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction (paralleling the assurances *Gov. Code, § 66473.7, subd. (d)* requires for future **[***96]** water), but as to additional *future* supplies needed to serve the project, the assessment need include only the public water system's plans for acquiring the additional supplies, including cost and time estimates and regulatory approvals the system anticipates needing. (*Wat. Code, §§ 10910, subd. (d)(2), 10911, subd. (a)*.)" (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 433*, original italics, fn. omitted.)

(18) "Taken together, *Water Code sections 10910 to 10912* and *Government Code section 66473.7* thus demand ... that 'water supplies must be identified with more specificity at each step as land use planning and water supply planning move forward from general phases to more specific phases.' The plans and estimates that *Water Code section 10910* mandates for future water supplies at

the time of *any* approval subject to CEQA must, under *Government Code section 66473.7*, be replaced by firm assurances at the subdivision map approval stage." (*Vineyard Area Citizens, supra, 40 Cal.4th at pp. 433-434*, original italics.)

Loomis claims PCWA's written certification of sufficient water supply for this project does not qualify as a firm assurance because PCWA's "first come, first serve[d]" policy leaves **[***97]** open the possibility of not having sufficient water should this project be unexpectedly delayed. However, the Supreme Court stated that to pass muster under CEQA, the future water supplies identified and analyzed "must bear a likelihood of actually proving available." (*Vineyard Area Citizens, supra, 40 Cal.4th at p. 432*.) Clearly, PCWA's written certification that it currently has sufficient water for this project and all other developments contemplated for the next 20 years satisfies this test. It has over 17,000 afy of unclaimed water, and this project at full buildout will require only 631 afy, or approximately 4 percent, of that water. This verification rests on supplies that are available. There is no mere likelihood here. This evidence establishes a virtual certainty the water will be available, far more than CEQA requires.

Also, because in this instance it was not "impossible to confidently determine that anticipated future water sources will be available," the EIR was not required **[**773]** to satisfy *Vineyard Area Citizens*'s fourth principle, that of **[*251]** including some discussion of a possible replacement source. Nevertheless, the EIR included that discussion. It explained PCWA would **[***98]** likely obtain another 35,000 afy of water from the Sacramento River, subject to ongoing governmental approvals. That discussion was also adequate, as it related only to a viable future source that was not likely needed to provide water to this project. Thus, like the assessment required under *Water Code section 10910*, the EIR's analysis needed to include only PCWA's plans for acquiring the additional water and the regulatory approvals it would need to acquire the water. This EIR included that discussion.

We thus conclude the EIR complied with CEQA's requirements for analyzing water supply, and that substantial evidence supports the EIR's and the City's determinations that the project's impacts on water supply would not be significant.

DISPOSITION

The judgment is affirmed. Costs on appeal are awarded to the City and real parties in interest. (*Cal. Rules of Court, rule 8.278(a)*.)

Hull, J., and Robie, J., concurred.

Appendix C

Air Pollutant and GHG Calculations

Table C-1
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Equipment Assumptions

Equipment	FUEL	HP	No of Equipment	Hrs Per Day	Days in Service
Shallow Flood					
Shallow Flood Areas - Turnout Facilities					
Earthen Pad Construction					
Dozer	DIESEL	358	1	5	34
Excavator	DIESEL	157	1	5	34
Dump Truck	DIESEL	381	2	2	34
Vibratory Roller Compactor	DIESEL	84	1	6	34
Mainline Connection					
Vactor Truck	DIESEL	250	1	6	38
Excavator	DIESEL	157	1	6	38
Excavator with roller bucket or sheep-foot	DIESEL	157	1	6	38
Dump Truck	DIESEL	381	1	6	38
Vibratory Roller Compactor	DIESEL	84	2	6	38
Submain and Header Installation					
Vactor Truck	DIESEL	250	1	2	44
Excavator	DIESEL	157	1	5	44
Excavator with roller bucket or sheets foot	DIESEL	157	1	5	44
Wacker Compactor	GAS	5.5	1	6	44
Underground Electrical Conduit Installation					
Backhoe	DIESEL	75	1	5	75
Dump Truck	DIESEL	381	1	2	75
Ready Mix Truck	DIESEL	250	1	4	75
Wacker Compactor	GAS	5.5	1	6	75
Subgrade Preparation					
Dump Truck	DIESEL	381	1	2	25
Grader	DIESEL	162	1	5	25
Vibratory Roller Compactor	DIESEL	84	1	6	25
Wacker Compactor	GAS	5.5	1	6	25
Construct Concrete Pads					
Ready Mix Truck	DIESEL	250	1	4	8
Install Above Grade Piping, etc.					
Ready Mix Truck	DIESEL	250	1	4	150
Telehandler	DIESEL	250	1	5	150
Forklift	DIESEL	83	1	5	150
Boom Truck	DIESEL	250	1	2	150
Shallow Flood Areas					
HDPE Submain and Flush Pipe Installation					
Trencher	DIESEL	69	2	4	220
Excavator	DIESEL	157	2	4	220
Dozer	DIESEL	358	2	5	220
Scraper	DIESEL	356	2	5	220
Generator	DIESEL	50	2	8	220
Drain Line					
Tractor	DIESEL	75	2	5	190
Trencher	DIESEL	69	2	4	190
Dozer	DIESEL	358	2	5	190
Scraper	DIESEL	356	2	5	190

Table C-1
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Equipment Assumptions

Equipment	FUEL	HP	No of Equipment	Hrs Per Day	Days in Service
HDPE Laterals and Risers Installation					
Tractor	DIESEL	75	2	5	220
Trencher	DIESEL	69	2	8	220
Dozer	DIESEL	358	2	5	220
Scraper	DIESEL	356	2	5	220
HDPE Fusing Machine (Generator)	DIESEL	84	2	5	220
Quads	DIESEL	50	2	8	220
High Voltage Cable					
Backhoe	DIESEL	75	1	5	125
Tractor with cable reel	DIESEL	75	1	4	125
Dump Truck	DIESEL	381	1	2	125
Ready Mix Truck	DIESEL	250	1	2	125
Motor Grader	DIESEL	162	1	5	125
Miscellaneous Concrete Structures					
Excavator	DIESEL	157	2	4	175
Dozer	DIESEL	358	1	5	175
Loader	DIESEL	75	1	5	175
Dump Truck	DIESEL	381	3	2	175
Ready Mix Trucks	DIESEL	250	4	2	175
Wacker Compactor	GAS	5.5	1	5	175
Flushing and Testing					
Quads	DIESEL	50	2	2	40
Managed Vegetation Areas					
Excavation, Soil Conditioning, and Land Leveling					
Dozer	DIESEL	358	1	5	40
Farm Tractor	DIESEL	75	1	5	40
Quad Tractor with Scraper	DIESEL	50	4	5	40
Road					
Dozer	DIESEL	358	1	5	30
Motor Grader	DIESEL	162	1	2	30
Skid Steer	DIESEL	37	1	2	30
Dump Trucks	DIESEL	381	2	2	30
Quad Tractor with Scraper	DIESEL	50	4	5	30
Road Base Course and Armoring					
Dump Truck	DIESEL	381	10	5	20
Dozer	DIESEL	358	2	5	20
Loaders	DIESEL	75	2	5	20
Grader	DIESEL	162	1	5	20
HDPE Submain, Laterals, and Risers Installation					
Tractor	DIESEL	75	2	5	40
Trencher	DIESEL	69	2	4	40
Dozer	DIESEL	358	2	5	40
Scraper	DIESEL	356	2	5	40
HDPE Fusing Machine (Generator)	DIESEL	84	2	8	40
Quads	DIESEL	50	2	2	40
Diesel Generator (50 hp)	DIESEL	50	2	8	40
Flushing and Testing					
Quads	DIESEL	50	2	2	10
Seeding and Planting					
Seeding Machine	DIESEL	50	1	8	25
Gravel Installation					
Staging Area Preparation					
Dozer	DIESEL	358	3	5	50

Table C-1
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Equipment Assumptions

Equipment	FUEL	HP	No of Equipment	Hrs Per Day	Days in Service
Access Roadways					
Dozer	DIESEL	358	2	5	200
Scraper	DIESEL	356	1	5	200
Gravel Delivery to Stockpile					
Dump Truck (see truck mileage)	DIESEL	381	20	1	320
Dozer	DIESEL	358	3	5	320
Loaders	DIESEL	75	7	5	320
Gravel Delivery from Stockpile to DCM Area					
Dump Trucks (see truck mileage)	DIESEL	381	10	1	315
Geotextile and Gravel Application					
Backhoe/tractor/dozer	DIESEL	75	4	5	315
D6 Dozers	DIESEL	358	8	5	315

All Activities		No.	VMT	Days
Flatbed Truck - All Deliveries	Heavy Duty Truck, Diesel	1	80	390
Fuel and Water Trucks - All Activities	Medium Duty Truck, Diesel	7	20	390
Light Duty Trucks - All Activities	Light Duty Truck, Diesel	20	20	390

Table C-2
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Heavy Equipment Emissions

			Emission Factors													Emissions									Emission, tons (total)							
Equipment	FUEL	HP	ROG (lb/hr)	CO (lb/hr)	NOX (lb/hr)	SOX (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	CO2 (lb/hr)	CH4 (lb/hr)	N2O (lb/hr)	No of Equipment	Hrs Per Day	Days in Service	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 lbs/day	CH4 lbs/day	N2O lbs/day	ROG tons (total)	CO tons (total)	NOX tons (total)	SOX tons (total)	PM10 tons (total)	PM2.5 tons (total)	CO2 tons (total)	CH4 tons (total)	N2O tons (total)
Shallow Flood Areas - Turnout Facilities																																
Earthen Pad Construction																																
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	1	5	34	1.10	4.21	8.86	0.01	0.36	0.32	1021	0.10	0.84	0.019	0.072	0.151	0.000	0.006	0.005	16	0.002	0.013
Excavator	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	1	5	34	0.47	3.09	3.11	0.01	0.19	0.17	496	0.04	0.30	0.008	0.053	0.053	0.000	0.003	0.003	8	0.001	0.005
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	2	2	34	0.56	1.75	3.86	0.01	0.14	0.12	815	0.05	0.37	0.010	0.030	0.066	0.000	0.002	0.002	13	0.001	0.006
Vibratory Roller Compactor	DIESEL	84	0.0673	0.3035	0.3626	0.0005	0.0296	0.0263	41.6412	0.0061	0.0344	1	6	34	0.40	1.82	2.18	0.00	0.18	0.16	250	0.04	0.21	0.007	0.031	0.037	0.000	0.003	0.003	4	0.001	0.003
Subtotal															**2.54**	**10.87**	**18.01**	**0.03**	**0.87**	**0.77**	**2582**	**0.23**	**1.71**	**0.04**	**0.18**	**0.31**	**0.00**	**0.01**	**0.01**	**40**	**0.00**	**0.03**
Mainline Connection																																
Vactor Truck	DIESEL	250	0.1179	0.3651	0.8678	0.0019	0.0290	0.0258	166.5454	0.0106	0.0824	1	6	38	0.71	2.19	5.21	0.01	0.17	0.16	999	0.06	0.49	0.013	0.042	0.099	0.000	0.003	0.003	17	0.001	0.009
Excavator	DIESEL	157	0.1179	0.3651	0.8678	0.0019	0.0290	0.0258	99.2859	0.0085	0.0824	1	6	38	0.71	2.19	5.21	0.01	0.17	0.16	596	0.05	0.49	0.013	0.042	0.099	0.000	0.003	0.003	10	0.001	0.009
Excavator with roller bucket or sheep-foot	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	1	6	38	0.57	3.71	3.73	0.01	0.23	0.20	596	0.05	0.35	0.011	0.070	0.071	0.000	0.004	0.004	10	0.001	0.006
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	1	6	38	0.84	2.62	5.80	0.01	0.20	0.18	1222	0.08	0.55	0.016	0.050	0.110	0.000	0.004	0.003	21	0.001	0.009
Vibratory Roller Compactor	DIESEL	84	0.0673	0.3035	0.3626	0.0005	0.0296	0.0263	41.6412	0.0061	0.0344	2	6	38	0.81	3.64	4.35	0.01	0.35	0.32	500	0.07	0.41	0.015	0.069	0.083	0.000	0.007	0.006	9	0.001	0.007
Subtotal															**3.63**	**14.35**	**24.29**	**0.05**	**1.14**	**1.01**	**3913**	**0.31**	**2.31**	**0.07**	**0.27**	**0.46**	**0.00**	**0.02**	**0.02**	**67**	**0.01**	**0.04**
Submain and Header Installation																																
Vactor Truck	DIESEL	250	0.1179	0.3651	0.8678	0.0019	0.0290	0.0258	166.5454	0.0106	0.0824	1	2	44	0.24	0.73	1.74	0.00	0.06	0.05	333	0.02	0.16	0.005	0.016	0.038	0.000	0.001	0.001	7	0.000	0.003
Excavator	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	1	5	44	0.47	3.09	3.11	0.01	0.19	0.17	496	0.04	0.30	0.010	0.068	0.068	0.000	0.004	0.004	10	0.001	0.006
Excavator with roller bucket or sheets foot	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	1	5	44	0.47	3.09	3.11	0.01	0.19	0.17	496	0.04	0.30	0.010	0.068	0.068	0.000	0.004	0.004	10	0.001	0.006
Wacker Compactor	GAS	5.5	5.2273	224.6638	4.0282	0.0177	3.6001	3.2041	429.4472	0.3240	0.6410	1	6	44	31.36	1347.98	24.17	0.11	21.60	19.22	2577	1.94	3.85	0.690	29.656	0.532	0.002	0.475	0.423	51	0.039	0.077
Subtotal															**32.54**	**1354.89**	**32.12**	**0.12**	**22.04**	**19.62**	**3903**	**2.05**	**4.60**	**0.72**	**29.81**	**0.71**	**0.00**	**0.48**	**0.43**	**78**	**0.04**	**0.09**
Underground Electrical Conduit Installation																																
Backhoe	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	1	5	75	0.21	1.25	1.22	0.00	0.09	0.08	171	0.02	0.12	0.008	0.047	0.046	0.000	0.003	0.003	6	0.001	0.004
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	1	2	75	0.28	0.87	1.93	0.00	0.07	0.06	407	0.03	0.18	0.011	0.033	0.072	0.000	0.003	0.002	14	0.001	0.006
Ready Mix Truck	DIESEL	250	0.1179	0.9397	2.1025	0.0044	0.0741	0.0659	441.7386	0.0273	0.1997	1	4	75	0.47	3.76	8.41	0.02	0.30	0.26	1767	0.11	0.80	0.018	0.141	0.315	0.001	0.011	0.010	60	0.004	0.027
Wacker Compactor	GAS	5.5	5.2273	224.6638	4.0282	0.0177	3.6001	3.2041	429.4472	0.3240	0.6410	1	6	75	31.36	1347.98	24.17	0.11	21.60	19.22	2577	1.94	3.85	1.176	50.549	0.906	0.004	0.810	0.721	88	0.066	0.131
Subtotal															**32.32**	**1353.86**	**35.73**	**0.13**	**22.05**	**19.62**	**4922**	**2.10**	**4.94**	**1.21**	**50.77**	**1.34**	**0.00**	**0.83**	**0.74**	**167**	**0.07**	**0.17**
Subgrade Preparation																																
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	1	2	25	0.28	0.87	1.93	0.00	0.07	0.06	407	0.03	0.18	0.004	0.011	0.024	0.000	0.001	0.001	5	0.000	0.002
Grader	DIESEL	162	0.0985	0.6677	0.8563	0.0014	0.0458	0.0408	123.0527	0.0089	0.0814	1	5	25	0.49	3.34	4.28	0.01	0.23	0.20	615	0.04	0.41	0.006	0.042	0.054	0.000	0.003	0.003	7	0.001	0.005
Vibratory Roller Compactor	DIESEL	84	0.0673	0.3035	0.3626	0.0005	0.0296	0.0263	41.6412	0.0061	0.0344	1	6	25	0.40	1.82	2.18	0.00	0.18	0.16	250	0.04	0.21	0.005	0.023	0.027	0.000	0.002	0.002	3	0.000	0.002
Wacker Compactor	GAS	5.5	5.2273	224.6638	4.0282	0.0177	3.6001	3.2041	429.4472	0.3240	0.6410	1	6	25	31.36	1347.98	24.17	0.11	21.60	19.22	2577	1.94	3.85	0.392	16.850	0.302	0.001	0.270	0.240	29	0.022	0.044
Subtotal															**32.54**	**1354.02**	**32.56**	**0.12**	**22.07**	**19.65**	**3849**	**2.05**	**4.64**	**0.41**	**16.93**	**0.41**	**0.00**	**0.28**	**0.25**	**44**	**0.02**	**0.05**
Construct Concrete Pads																																
Ready Mix Truck	DIESEL	250	0.1179	0.2449	0.2003	0.0003	0.0171	0.0152	21.7446	0.0063	0.0190	1	4	8	0.47	0.98	0.80	0.00	0.07	0.06	87	0.03	0.08	0.002	0.004	0.003	0.000	0.000	0.000	0	0.000	0.000
Subtotal															**0.47**	**0.98**	**0.80**	**0.00**	**0.07**	**0.06**	**87**	**0.03**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**
Install Above Grade Piping, etc.																																
Ready Mix Truck	DIESEL	250	0.1179	0.5599	1.4849	0.0026	0.0511	0.0454	265.4118	0.0165	0.1411	1	4	150	0.47	2.24	5.94	0.01	0.20	0.18	1062	0.07	0.56	0.035	0.168	0.445	0.001	0.015	0.014	72	0.004	0.038
Telehandler	DIESEL	250	0.1107	0.3592	0.9207	0.0019	0.0302	0.0269	170.7966	0.0100	0.0875	1	5	150	0.55	1.80	4.60	0.01	0.15	0.13	854	0.05	0.44	0.042	0.135	0.345	0.001	0.011	0.010	58	0.003	0.030
Forklift	DIESEL	83	0.0254	0.1623	0.1560	0.0003	0.0107	0.0096	22.0052	0.0023	0.0148	1	5	150	0.13	0.81	0.78	0.00	0.05	0.05	110	0.01	0.07	0.010	0.061	0.059	0.000	0.004	0.004	7	0.001	0.005
Boom Truck	DIESEL	250	0.1179	0.3651	0.8678	0.0019	0.0290	0.0258	166.5454	0.0106	0.0824	1	2	150	0.24	0.73	1.74	0.00	0.06	0.05	333	0.02	0.16	0.018	0.055	0.130	0.000	0.004	0.004	23	0.001	0.011
Subtotal															**1.39**	**5.58**	**13.06**	**0.03**	**0.47**	**0.42**	**2359**	**0.15**	**1.24**	**0.10**	**0.42**	**0.98**	**0.00**	**0.04**	**0.03**	**160**	**0.01**	**0.08**
Shallow Flood Areas																																
HDPE Submain and Flush Pipe Installation																																
Trencher	DIESEL	69	0.0795	0.3014	0.3901	0.0005	0.0330	0.0294	38.5147	0.0072	0.0371	2	4	220	0.64	2.41	3.12	0.00	0.26	0.23	308	0.06	0.30	0.070	0.265	0.343	0.000	0.029	0.026	31	0.006	0.030
Excavator	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	2	4	220	0.75	4.94	4.98	0.01	0.31	0.27	794	0.07	0.47	0.083	0.544	0.547	0.001	0.034	0.030	79	0.007	0.047
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	220	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.242	0.927	1.949	0.002	0.080	0.071	204	0.020	0.168
Scraper	DIESEL	356	0.2103	0.7377	1.7217	0.0025	0.0658	0.0585	47.0485	0.0037	0.1636	2	5	220	2.10	7.38	17.22	0.02	0.66	0.59	470	0.04	1.64	0.231	0.811	1.894	0.003	0.072	0.064	47	0.004	0.163
Generator	DIESEL	50	0.0630	0.2393	0.2532	0.0004	0.0174	0.0155	30.6230	0.0057	0.0241	2	8	220	1.01	3.83	4.05	0.01	0.28	0.25	490	0.09	0.38	0.111	0.421	0.446	0.001	0.031	0.027	49	0.001	0.038
Subtotal															**6.70**	**26.99**	**47.08**	**0.06**	**2.23**	**1.99**	**4106**	**0.45**	**4.47**	**0.74**	**2.97**	**5.18**	**0.01**	**0.25**	**0.22**	**410**	**0.05**	**0.45**
Drain Line																																
Tractor	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	2	5	190	0.42	2.50	2.44	0.00	0.17	0.15	343	0.04	0.23	0.040	0.237	0.232	0.000	0.016	0.014	30	0.003	0.020
Trencher	DIESEL	69	0.0795	0.3014	0.3901	0.0005	0.0330	0.0294	38.5147	0.0072	0.0371	2	4	190	0.64	2.41	3.12	0.00	0.26	0.23	308	0.06	0.30	0.060	0.229	0.296	0.000	0.025	0.022	27	0.005	0.026
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	190	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.209	0.801	1.683	0.002	0.069	0.061	176	0.017	0.145
Scraper	DIESEL	356	0.2103	0.7377	1.7217	0.0025	0.0658	0.0585	47.0485	0.0037	0.1636	2	5	190	2.10	7.38	17.22	0.02	0.66	0.59	470	0.04	1.64	0.200	0.701	1.636	0.002	0.062	0.056	41	0.003	0.141
Subtotal															**5.36**	**20.71**	**40.49**	**0.05**	**1.82**	**1.62**	**3164**	**0.33**	**3.85**	**0.51**	**1.97**	**3.85**	**0.01**	**0.17**	**0.15**	**273**	**0.03**	**0.33**
HDPE Laterals and Risers Installation																																
Tractor	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	2	5	220	0.42	2.50	2.44	0.00	0.17	0.15	343	0.04	0.23	0.046	0.275	0.268	0.000	0.019	0.017	34	0.004	0.023
Trencher	DIESEL	69	0.0795	0.3014	0.3901	0.0005	0.0330	0.0294	38.5147	0.0072	0.0371	2	8	220	1.27	4.82	6.24	0.01	0.53	0.47	616	0.11	0.59	0.140	0.530	0.687	0.001	0.058	0.052	61	0.011	0.059
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	220	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.242	0.927	1.949	0.002	0.080	0.071	204	0.020	0.168
Scraper	DIESEL	356	0.2103	0.7377	1.7217	0.0025	0.0658	0.0585	47.0485	0.0037	0.1636	2	5	220	2.10	7.38	17.22	0.02	0.66	0.59	470	0.04	1.64	0.231	0.811	1.894	0.003	0.072	0.064	47	0.004	0.163
HDPE Fusing Machine (Generator)	DIESEL	84	0.0642	0.3438	0.4269	0.0006	0.0300	0.0267	44.4420	0.0048	0.0406	2	5	220	0.64	3.44	4.27	0.01	0.30	0.27	444	0.05	0.41	0.071	0.378	0.470	0.001	0.033	0.029	44	0.005	0.040
Quads	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	2	8	220	6.52	10.19	0.00	0.02	0.08	0.07	22	0.41	0.01	0.718	1.121	0.000	0.002	0.009	0.008	2	0.040	0.001
Subtotal															**13.16**	**36.75**	**47.88**	**0.08**	**2.46**	**2.19**	**3938**	**0.84**	**4.56**	**1.45**	**4.04**	**5.27**	**0.01**	**0.27**	**0.24**	**393**	**0.08**	**0.45**
High Voltage Cable																																
Backhoe	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	1	5	125	0.21	1.25	1.22	0.00	0.09	0.08	171	0.02	0.12	0.013	0.078	0.076	0.000	0.005	0.005	10	0.001	0.007
Tractor with cable reel	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	1	4	125	0.17	1.00	0.98	0.00	0.07	0.06	137	0.02	0.09	0.010	0.062	0.061	0.000	0.004	0.004	8	0.001	0.005
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	1	2	125	0.28	0.87	1.93	0.00	0.07	0.06	407	0.03	0.18	0.018	0.055	0.121	0.000	0.004	0.004	23	0.001	0.010
Ready Mix Truck	DIESEL	250	0.1179	0.2785	0.3830	0.0006	0.0239	0.0213	49.6067	0.0051	0.0364	1	2	125	0.24	0.56	0.77	0.00	0.05	0.04	99	0.01	0.07	0.015	0.035	0.048	0.000	0.003	0.003	6	0.001	0.004
Motor Grader	DIESEL	162	0.0985	0.6677	0.8563	0.0014	0.0458	0.0408	123.0527	0.0089	0.0814	1	5	125	0.49	3.34	4.28	0.01	0.23	0.20	615	0.04	0.41	0.031	0.209	0.268	0.000	0.014	0.013	35	0.003	0.023
Subtotal															**1.38**	**7.02**	**9.18**	**0.02**	**0.50**	**0.44**	**1430**	**0.11**	**0.87**	**0.09**	**0.44**	**0.57**	**0.00**	**0.03**	**0.03**	**81**	**0.01**	**0.05**
Miscellaneous Concrete Structures																																
Excavator	DIESEL	157	0.0942	0.6178	0.6219	0.0011	0.0382	0.0340	99.2859	0.0085	0.0591	2	4	175	0.75	4.94	4.98	0.01	0.31	0.27	794	0.07	0.47	0.066	0.432	0.435	0.001	0.027	0.024	63	0.005	0.038
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	1	5	175	1.10	4.21	8.86	0.01	0.36	0.32	1021	0.10	0.84	0.096	0.369	0.775	0.001	0.032	0.028	81	0.008	0.067
Loader	DIESEL	75	0.0611	0.2907	0.3189	0.0005	0.0254	0.0226	38.2860	0.0055	0.0303	1	5	175	0.31	1.45	1.59	0.00	0.13	0.11	191	0.03	0.15	0.027	0.127	0.139	0.000	0.011	0.010	15	0.002	0.012
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	3	2	175	0.84	2.62	5.80	0.01	0.20	0.18	1222	0.08	0.55	0.074	0.229	0.507	0.001	0.018	0.016	97	0.006	0.044
Ready Mix Trucks	DIESEL	250	0.1179	0.3459	0.2954	0.0004	0.0216	0.0192	33.8583	0.0076	0.0281	4	2	175	0.94	2.77	2.36	0.00	0.17	0.15	271	0.06	0.22	0.083	0.242	0.207	0.000	0.015	0.013	22	0.005	0.018
Wacker Compactor	GAS	5.5	5.2273	224.6638	4.0282	0.0177	3.6001	3.2041	429.4472	0.3240	0.6410	1	5	175	26.14	1123.32	20.14	0.09	18.00	16.02	2147	1.62	3.21	2.287	98.290	1.762	0.008	1.575	1.402	170	0.129	0.254
Subtotal															**30.08**	**1139.31**	**43.73**	**0.13**	**19.17**	**17.06**	**5647**	**1.95**	**5.45**	**2.63**	**99.69**	**3.83**	**0.01**	**1.68**	**1.49**	**448**	**0.15**	**0.43**
Flushing and Testing																																
Quads	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	2	2	40	1.63	2.55	0.00	0.01	0.02	0.02	5	0.10	0.00	0.033	0.051	0.000	0.000	0.000	0.000	0	0.002	0.000
Subtotal															**1.63**	**2.55**	**0.00**	**0.01**	**0.02**	**0.02**	**5**	**0.10**	**0.00**	**0.03**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**

Table C-2
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Heavy Equipment Emissions

Equipment	FUEL	HP	ROG (lb/hr)	CO (lb/hr)	NOX (lb/hr)	SOX (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	CO2 (lb/hr)	CH4 (lb/hr)	N2O (lb/hr)	No of Equipment	Hrs Per Day	Days in Service	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 lbs/day	CH4 lbs/day	N2O lbs/day	ROG tons (total)	CO tons (total)	NOX tons (total)	SOX tons (total)	PM10 tons (total)	PM2.5 tons (total)	CO2 tons (total)	CH4 tons (total)	N2O tons (total)
Managed Vegetation Areas																																
Excavation, Soil Conditioning, and Land Leveling																																
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	1	5	40	1.10	4.21	8.86	0.01	0.36	0.32	1021	0.10	0.84	0.022	0.084	0.177	0.000	0.007	0.006	19	0.002	0.015
Farm Tractor	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	1	5	40	0.21	1.25	1.22	0.00	0.09	0.08	171	0.02	0.12	0.004	0.025	0.024	0.000	0.002	0.002	3	0.000	0.002
Quad	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	4	5	40	8.15	12.74	0.00	0.03	0.10	0.09	27	0.51	0.01	0.163	0.255	0.000	0.001	0.002	0.002	0	0.009	0.000
Subtotal															**9.46**	**18.20**	**10.08**	**0.04**	**0.55**	**0.49**	**1220**	**0.62**	**0.97**	**0.19**	**0.36**	**0.20**	**0.00**	**0.01**	**0.01**	**22**	**0.01**	**0.02**
Road																																
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	1	5	30	1.10	4.21	8.86	0.01	0.36	0.32	1021	0.10	0.84	0.017	0.063	0.133	0.000	0.005	0.005	14	0.001	0.011
Motor Grader	DIESEL	162	0.0985	0.6677	0.8563	0.0014	0.0458	0.0408	123.0527	0.0089	0.0814	1	2	30	0.20	1.34	1.71	0.00	0.09	0.08	246	0.02	0.16	0.003	0.020	0.026	0.000	0.001	0.001	3	0.000	0.002
Skid Steer	DIESEL	37	0.0246	0.1412	0.1484	0.0002	0.0072	0.0064	19.1904	0.0022	0.0141	1	2	30	0.05	0.28	0.30	0.00	0.01	0.01	38	0.00	0.03	0.001	0.004	0.004	0.000	0.000	0.000	1	0.000	0.000
Dump Trucks	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	2	2	30	0.56	1.75	3.86	0.01	0.14	0.12	815	0.05	0.37	0.008	0.026	0.058	0.000	0.002	0.002	11	0.001	0.005
Quad	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	4	5	30	8.15	12.74	0.00	0.03	0.10	0.09	27	0.51	0.01	0.122	0.191	0.000	0.000	0.001	0.001	0	0.007	0.000
Subtotal															**10.06**	**20.32**	**14.73**	**0.05**	**0.70**	**0.63**	**2148**	**0.68**	**1.41**	**0.15**	**0.30**	**0.22**	**0.00**	**0.01**	**0.01**	**29**	**0.01**	**0.02**
Road Base Course and Armoring																																
Dump Truck	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	10	5	20	7.00	21.83	48.30	0.10	1.70	1.51	10185	0.63	4.59	0.070	0.218	0.483	0.001	0.017	0.015	92	0.006	0.042
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	20	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.022	0.084	0.177	0.000	0.007	0.006	19	0.002	0.015
Loaders	DIESEL	75	0.0611	0.2907	0.3189	0.0005	0.0254	0.0226	38.2860	0.0055	0.0303	2	5	20	0.61	2.91	3.19	0.00	0.25	0.23	383	0.06	0.30	0.006	0.029	0.032	0.000	0.003	0.002	3	0.001	0.003
Grader	DIESEL	162	0.0985	0.6677	0.8563	0.0014	0.0458	0.0408	123.0527	0.0089	0.0814	1	5	20	0.49	3.34	4.28	0.01	0.23	0.20	615	0.04	0.41	0.005	0.033	0.043	0.000	0.002	0.002	6	0.000	0.004
Subtotal															**10.31**	**36.50**	**73.48**	**0.14**	**2.91**	**2.59**	**13225**	**0.93**	**6.98**	**0.10**	**0.36**	**0.73**	**0.00**	**0.03**	**0.03**	**120**	**0.01**	**0.06**
HDPE Submain, Laterals, and Risers Installation																																
Tractor	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	2	5	40	0.42	2.50	2.44	0.00	0.17	0.15	343	0.04	0.23	0.008	0.050	0.049	0.000	0.003	0.003	6	0.001	0.004
Trencher	DIESEL	69	0.0795	0.3014	0.3901	0.0005	0.0330	0.0294	38.5147	0.0072	0.0371	2	4	40	0.64	2.41	3.12	0.00	0.26	0.23	308	0.06	0.30	0.013	0.048	0.062	0.000	0.005	0.005	6	0.001	0.005
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	40	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.044	0.169	0.354	0.000	0.015	0.013	37	0.004	0.031
Scraper	DIESEL	356	0.2103	0.7377	1.7217	0.0025	0.0658	0.0585	47.0485	0.0037	0.1636	2	5	40	2.10	7.38	17.22	0.02	0.66	0.59	470	0.04	1.64	0.042	0.148	0.344	0.000	0.013	0.012	9	0.001	0.030
HDPE Fusing Machine (Generator)	DIESEL	84	0.0642	0.3438	0.4269	0.0006	0.0300	0.0267	44.4420	0.0048	0.0406	2	8	40	1.03	5.50	6.83	0.01	0.48	0.43	711	0.08	0.65	0.021	0.110	0.137	0.000	0.010	0.009	13	0.001	0.012
Quads	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	2	2	40	1.63	2.55	0.00	0.01	0.02	0.02	5	0.10	0.00	0.033	0.051	0.000	0.000	0.000	0.000	0	0.002	0.000
Diesel Generator (50 hp)	DIESEL	50	0.0630	0.2393	0.2532	0.0004	0.0174	0.0155	30.6230	0.0057	0.0241	2	8	40	1.01	3.83	4.05	0.01	0.28	0.25	490	0.09	0.38	0.020	0.077	0.081	0.000	0.006	0.005	9	0.002	0.007
Subtotal															**9.02**	**32.59**	**51.37**	**0.08**	**2.60**	**2.31**	**4371**	**0.60**	**4.88**	**0.18**	**0.65**	**1.03**	**0.00**	**0.05**	**0.05**	**79**	**0.01**	**0.09**
Flushing and Testing																																
Quads	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	2	2	10	1.63	2.55	0.00	0.01	0.02	0.02	5	0.10	0.00	0.008	0.013	0.000	0.000	0.000	0.000	0	0.000	0.000
Subtotal															**1.63**	**2.55**	**0.00**	**0.01**	**0.02**	**0.02**	**5**	**0.10**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**
Seeding and Planting																																
Seeding Machine	DIESEL	50	0.4077	0.6371	0.0001	0.0013	0.0049	0.0044	1.3532	0.0253	0.0005	1	8	25	3.26	5.10	0.00	0.01	0.04	0.04	11	0.20	0.00	0.041	0.064	0.000	0.000	0.000	0.000	0	0.002	0.000
Subtotal															**3.26**	**5.10**	**0.00**	**0.01**	**0.04**	**0.04**	**11**	**0.20**	**0.00**	**0.04**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**
Gravel Installation																																
Staging Area Preparation																																
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	3	5	50	3.30	12.64	26.57	0.03	1.09	0.97	3064	0.30	2.52	0.083	0.316	0.664	0.001	0.027	0.024	69	0.007	0.057
Subtotal															**3.30**	**12.64**	**26.57**	**0.03**	**1.09**	**0.97**	**3064**	**0.30**	**2.52**	**0.08**	**0.32**	**0.66**	**0.00**	**0.03**	**0.02**	**69**	**0.01**	**0.06**
Access Roadways																																
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	2	5	200	2.20	8.43	17.71	0.02	0.73	0.65	2043	0.20	1.68	0.220	0.843	1.771	0.002	0.073	0.065	185	0.018	0.153
Scraper	DIESEL	356	0.2103	0.7377	1.7217	0.0025	0.0658	0.0585	47.0485	0.0037	0.1636	1	5	200	1.05	3.69	8.61	0.01	0.33	0.29	235	0.02	0.82	0.105	0.369	0.861	0.001	0.033	0.029	21	0.002	0.074
Subtotal															**3.25**	**12.12**	**26.32**	**0.03**	**1.06**	**0.94**	**2278**	**0.22**	**2.50**	**0.33**	**1.21**	**2.63**	**0.00**	**0.11**	**0.09**	**207**	**0.02**	**0.23**
Gravel Delivery to Stockpile																																
Dump Truck (see truck mileage)	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	20	1	320	2.80	8.73	19.32	0.04	0.68	0.61	4074	0.25	1.84	0.448	1.397	3.091	0.007	0.109	0.097	591	0.037	0.266
Dozer	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	3	5	320	3.30	12.64	26.57	0.03	1.09	0.97	3064	0.30	2.52	0.528	2.022	4.251	0.005	0.174	0.155	445	0.043	0.366
Loaders	DIESEL	75	0.0611	0.2907	0.3189	0.0005	0.0254	0.0226	38.2860	0.0055	0.0303	7	5	320	2.14	10.17	11.16	0.02	0.89	0.79	1340	0.19	1.06	0.342	1.628	1.786	0.003	0.142	0.127	195	0.028	0.154
Subtotal															**8.24**	**31.54**	**57.05**	**0.09**	**2.66**	**2.37**	**8478**	**0.74**	**5.42**	**1.32**	**5.05**	**9.13**	**0.01**	**0.43**	**0.38**	**1231**	**0.11**	**0.79**
Gravel Delivery from Stockpile to DCM Area																																
Dump Trucks (see truck mileage)	DIESEL	381	0.1400	0.4365	0.9659	0.0021	0.0340	0.0303	203.6914	0.0126	0.0918	10	1	315	1.40	4.37	9.66	0.02	0.34	0.30	2037	0.13	0.92	0.221	0.688	1.521	0.003	0.054	0.048	291	0.018	0.131
Subtotal															**1.40**	**4.37**	**9.66**	**0.02**	**0.34**	**0.30**	**2037**	**0.13**	**0.92**	**0.22**	**0.69**	**1.52**	**0.00**	**0.05**	**0.05**	**291**	**0.02**	**0.13**
Geotextile and Gravel Application																																
Backhoe/tractor/dozer	DIESEL	75	0.0417	0.2497	0.2441	0.0004	0.0171	0.0152	34.2813	0.0038	0.0232	4	5	315	0.83	4.99	4.88	0.01	0.34	0.30	686	0.08	0.46	0.132	0.786	0.769	0.001	0.054	0.048	98	0.011	0.066
D6 Dozers	DIESEL	358	0.2201	0.8427	1.7715	0.0021	0.0727	0.0647	204.2697	0.0199	0.1683	8	5	315	8.81	33.71	70.86	0.08	2.91	2.59	8171	0.79	6.73	1.387	5.309	11.160	0.013	0.458	0.407	1167	0.114	0.962
Subtotal															**9.64**	**38.70**	**75.74**	**0.09**	**3.25**	**2.89**	**8856**	**0.87**	**7.20**	**1.52**	**6.10**	**11.93**	**0.01**	**0.51**	**0.46**	**1265**	**0.12**	**1.03**
Total															**233.33**	**5542.50**	**689.94**	**1.40**	**110.12**	**98.01**	**85598.86**	**16.10**	**71.52**	**12.14**	**222.66**	**50.96**	**0.09**	**5.28**	**4.70**	**5475.93**	**0.79**	**4.60**

Table C-3
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction Truck Trip Emissions

				CO (lbs/mi)	NO_x (lbs/mi)	ROG (lbs/mi)	SOx (lbs/mi)	PM10 (lbs/mi)	PM2.5 (lbs/mi)	CO2 (lbs/mi)	CH4 (lbs/mi)	N2O (lbs/mi)
Delivery Trucks - Gravel	Heavy Duty Truck, Diesel	100	24	0.007046	0.01887374	0.00161	0.00003952	0.00094448	0.00078443	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	0.00078443	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	0.00078443	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	0.00006131	1.10677664	0.00005623	0.00005

Emissions (lbs/day)

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
16.91	45.30	3.86	0.09	2.27	1.88	41.99	8.82	604.34	60.43	10106	0.18	4.30
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
20.76	**49.67**	**4.47**	**0.11**	**2.51**	**2.08**	**44.01**	**9.24**	**894.35**	**89.43**	**11475**	**0.22**	**4.72**

Total Emissions (tons)

Construction 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
390	3.30	8.83	0.75364	1.85E-02	0.44202	0.36711	8.18795	1.71947	117.84593	11.78459	1971	0.03514	0.83913
390	0.11	0.29	0.02512	6.17E-04	0.01473	0.01224	0.27293	0.05732	1.17846	0.11785	66	0.00117	0.02797
390	0.19	0.52	0.04396	1.08E-03	0.02578	0.02141	0.11941	0.02508	27.49738	2.74974	115	0.00205	0.04895
390	0.45	0.04	0.04934	8.35E-04	0.00733	0.00478	0.00191	0.00040	27.87554	2.78755	86	0.00439	0.00412
	4.05	**9.69**	**0.87**	**0.02**	**0.49**	**0.41**	**8.58**	**1.80**	**174.40**	**17.44**	**2029.88**	**0.04**	**0.83**

Emission Factors from EMFAC Year 2016
Unpaved Road Fugitive Dust
EPA's AP-42, Section 13.2.2
Industrial Roads
E = k (s/12)^a x (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

Paved Road Fugitive Dust
EPA's AP-42, Section 13.2.1, November 2006
E = k(sL/2)^0.65 x (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/m3
Assume k = 0.016 PM10
Emission Factors

PM10, LDT	9.81E-05
PM10, HDT	0.017496

Table C-4
Owens Lake Dust Mitigation Program - Phase 9/10 Project
Construction and Operations Workers
Commute Emission Calculations

Construction Period	Vehicle Class	Average No. of Workers per day	VMT (mi/vehicle-day)	CO (lbs/mi)	NO_X (lbs/mi)	ROG (lbs/mi)	SOx (lbs/mi)	PM10 (lbs/mi)	PM2.5 (lbs/mi)	CO2 (lbs/mi)	CH4 (lbs/mi)	N2O (lbs/mi)
390 workdays (18 months)	Passenger Vehicle	100	90	0.005758	0.00055658	0.00063254	0.00001071	0.00009392	0.00006131	1.10677664	0.00005623	0.00005
Operations	Passenger Vehicle	4	66	0.005758	0.00055658	0.00063254	0.00001071	0.00009392	0.00006131	1.10677664	0.00005623	0.00005

Emissions (lbs/day)											
CO	NOx	ROG	SOx	PM10	PM2.5	Paved Road Fugitive Dust PM10	Paved Road Fugitive Dust PM2.5	CO2	CH4	N2O
51.82	5.01	5.69	0.10	0.85	0.55	0.88	0.19	9960.99	0.51	0.48
51.82	**5.01**	**5.69**	**0.10**	**0.85**	**0.55**	**0.88**	**0.19**	**9960.99**	**0.51**	**0.48**
1.52	0.15	0.17	0.00	0.02	0.02	0.03	0.01	292.19	0.01	0.01
1.52	**0.15**	**0.17**	**0.00**	**0.02**	**0.02**	**0.03**	**0.01**	**292.19**	**0.01**	**0.01**

Total Emissions (tons)											
Construction Days	CO	NOx	ROG	SOx	PM10	PM2.5	Paved Road Fugitive Dust PM10	Paved Road Fugitive Dust PM2.5	CO2	CH4	N2O
	10.11	0.98	1.11011	1.88E-02	0.16483	0.10760	0.17221	0.03616	1942	0.09868	0.09280
390											
	10.11	**0.98**	**1.11**	**0.02**	**0.16**	**0.11**	**0.17**	**0.04**	**1762.13**	**0.09**	**0.08**
Operations Workdays per Year											
	0.20	0.02	0.02171	3.68E-04	0.00322	0.00210	0.00337	0.00071	38	0.00193	0.00181
260											
	0.20	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**34.46**	**0.00**	**0.00**

Source: EMFAC Year 2016

Average mileage per construction worker assumes 50 percent of workers are from Lone Pine (5 miles from project site), 20 percent from Ridgecrest (48 miles from project site), 20 percent from Bishop (61 miles from project site), and 10 percent from Los Angeles (200 miles from project site).

Average mileage per operations worker assumes 50 percent of workers are from Lone Pine (5 miles from project site), 50 percent from Bishop (61 miles from project site).

Paved Road Fugitive Dust
EPA's AP-42, Section 13.2.1, November 2006
E = k(sL/2)^0.65 x (W/3)^1.5 - C
For light-duty trucks assume 2 tons/vehicle
Assume silt loading for 10,000 ADT roadways = 0.03 g/m3
Assume k = 0.016 PM10
Assume 6 miles in addition for track-out for PM10
Emission Factors
PM10 9.81231E-05

Table C-5
Owens Lake Dust Mitigation Project - Phase 9/10 Project
Fugitive Dust Emission Calculations

Fugitive Dust Emissions by Activity

Assuming moisture content equivalent to watering 3 x dail
Control Efficiency: 61 percent

Grading	Total Area to be Disturbed	Maximum Daily Grading	Emission Factor, lbs PM10/acre/day	Emissions, lbs PM10/day	Emissions, lbs PM2.5/day	Emissions, lbs PM10/day	Emissions, lbs PM2.5/day
	3478	200	20	4000	840	1560	327.6

PM10 Emissions, tons/year	PM2.5 Emissions, tons/year
195	40.95

Assume 200 acres of site to be disturbed per day during site preparation.

256 acres/day could be disturbed
Most surfaces would be wet/flooded from seasonal rains.
For annual emissions, assume 10% of the time (25 days per year) the site would be undergoing disturbance.

Table C-6
Owens Lake Dust MItigation Program - Phase 9/10 Project
Summary of Emission Calculations

Total Emissions - Construction Phase

Source	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day	PM10 lbs/day	PM2.5 lbs/day	CO2 lbs/day	CH4 lbs/day	N2O lbs/day	ROG tons (total)	CO tons (total)	NOX tons (total)	SOX tons (total)	PM10 tons (total)	PM2.5 tons (total)	CO2 tons (total)	CH4 tons (total)	N2O tons (total)
Offroad Equipment	233.33	5542.50	689.94	1.40	110.12	98.01	85598.86	16.10	71.52	12.14	222.66	50.96	0.09	5.28	4.70	5475.93	0.79	4.60
Worker Trips	5.69	51.82	5.01	0.10	1.73	0.74	9961	0.51	0.48	1.11	10.11	0.98	0.02	0.34	0.14	1762	0.09	0.08
Construction Trucks	4.47	20.76	49.67	0.11	940.87	100.76	11475	0.22	4.72	0.87	4.05	9.69	0.02	183.47	19.65	2030	0.04	0.83
Fugitive Dust					1560	327.6								195	40.95			
Total	**243.49**	**5615.08**	**744.63**	**1.61**	**2612.72**	**527.10**	**107034**	**16.82**	**76.71**	**14.12**	**236.81**	**61.62**	**0.13**	**384.09**	**65.44**	**9268**	**0.92**	**5.52**

Total Emissions - Operational Phase - GHGs

Source	CO2 tons (total)	CH4 tons (total)	N2O tons (total)
Offroad Equipment	55.741	0.005	0.039
Worker Trips	69.702	0.004	0.003
Construction Trucks	39.411	0.001	0.017
Total	**164.854**	**0.009**	**0.059**

Appendix D

Phase 9/10 Project Bird Counts and Project Vegetation Conditions

Source: LADWP, 2015

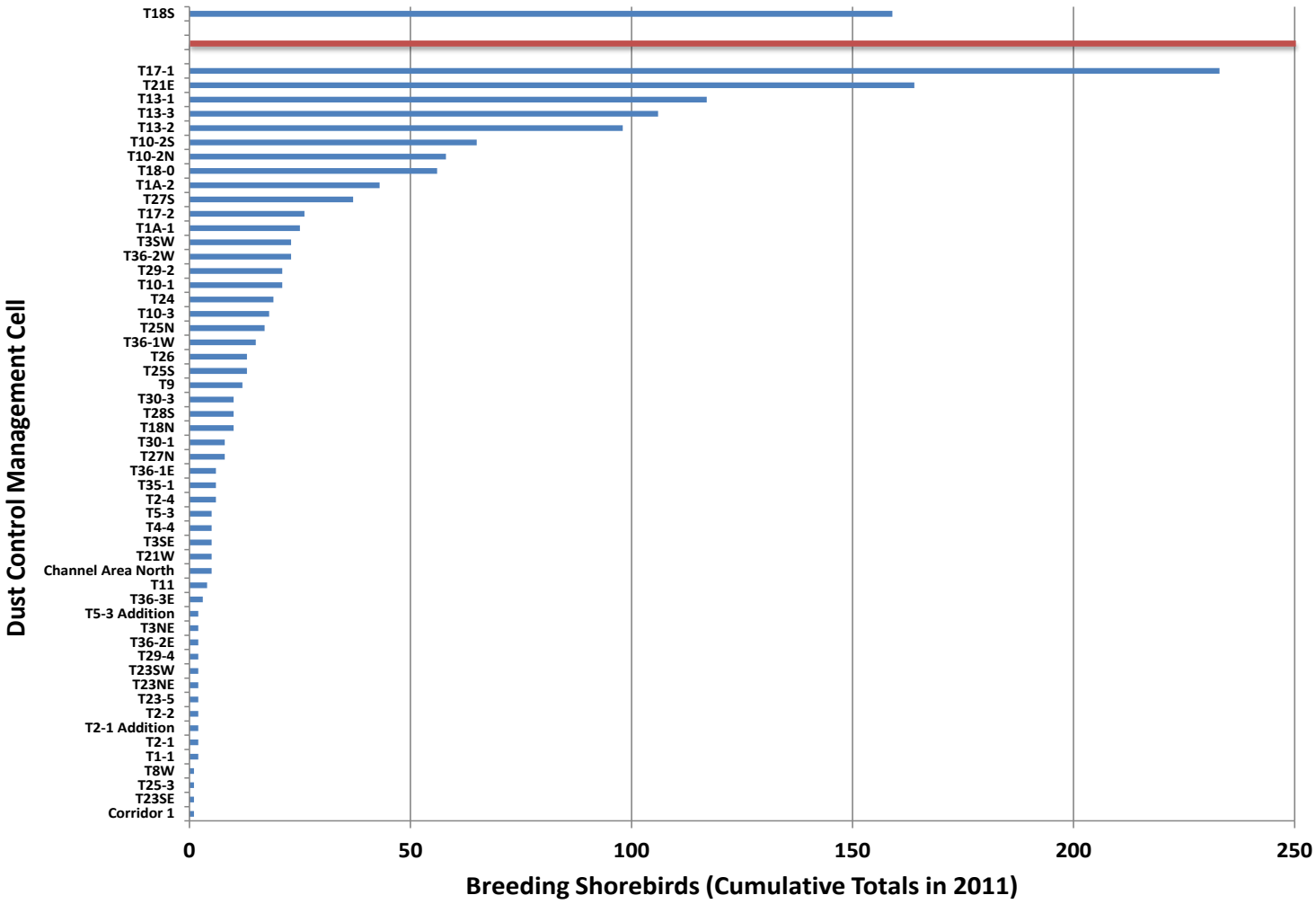


Figure 3. Breeding Shorebirds observed During Surveys in 2011

No Breeding Shorebirds were counted in the following Dust Control Management Cells: Channel Area South, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T16, T18N Addition, T1A-3, T1A-4, T2-3, T23NW, T24 Addition, T2-5, T27 Addition, T28N, T29-1, T29-3, T30-2, T32-1, T35-2, T36-3W, T36-3 Addition, T37-1, T37-2, T3SE Addition, T4-3, T4-3 Addition, T4-5, T5-1, T5-1 Addition, T5-2 and T5-4.

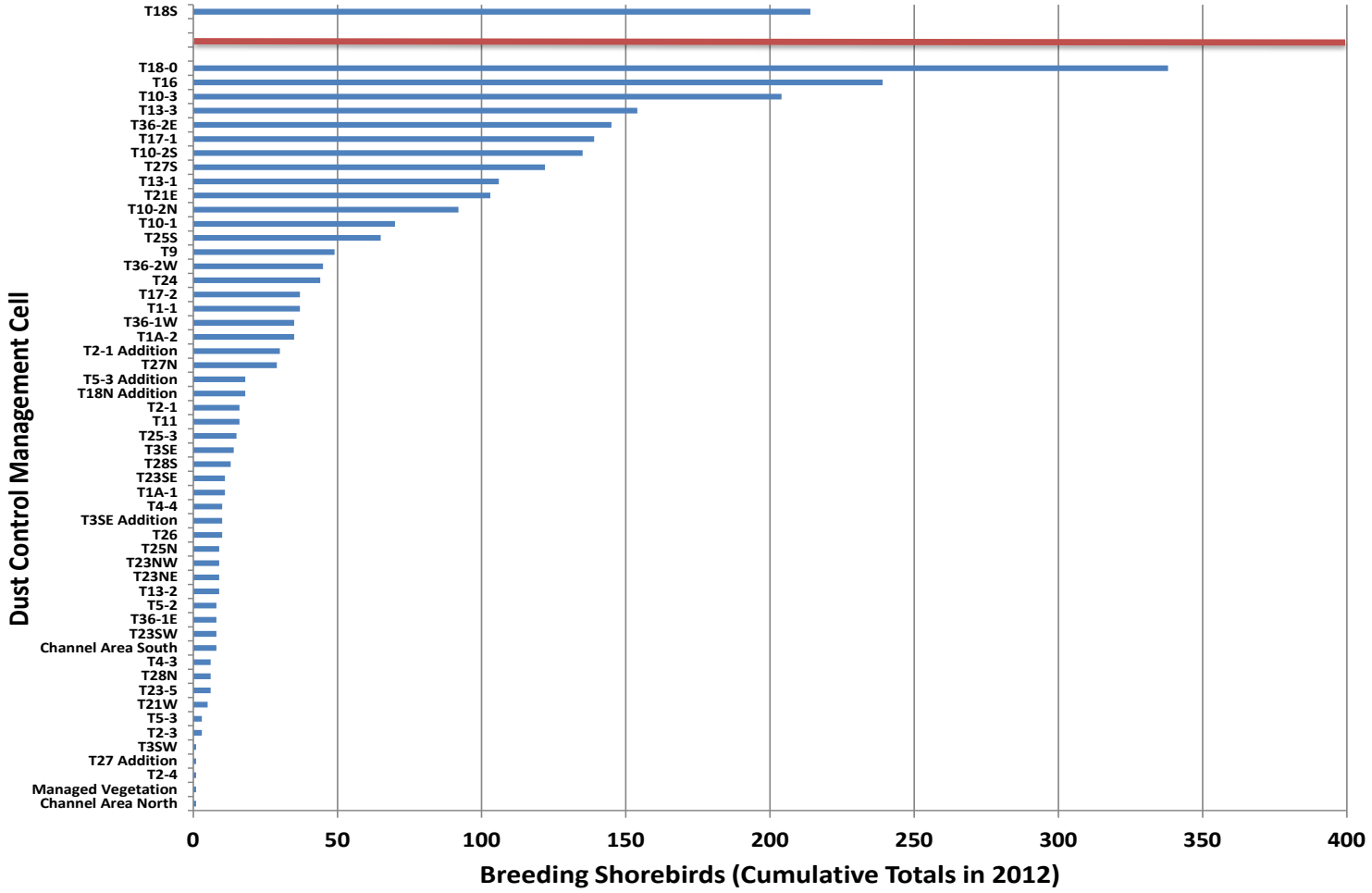


Figure 4. Breeding Shorebirds observed during surveys in 2012

No Breeding Shorebirds were counted in the following Dust Control Management Cells: Corridor 1, Phase 8, T12-1, T13-1 Addition, T18N, T1A-3, T1A-4, T2-2, T24 Addition, T2-5, T29-1, T29-2, T29-3, T29-4, T30-1, T30-2, T30-3, T32-1, T35-1, T35-2, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T4-3 Addition, T4-5, T5-1, T5-1 Addition, T5-4 and T8W.

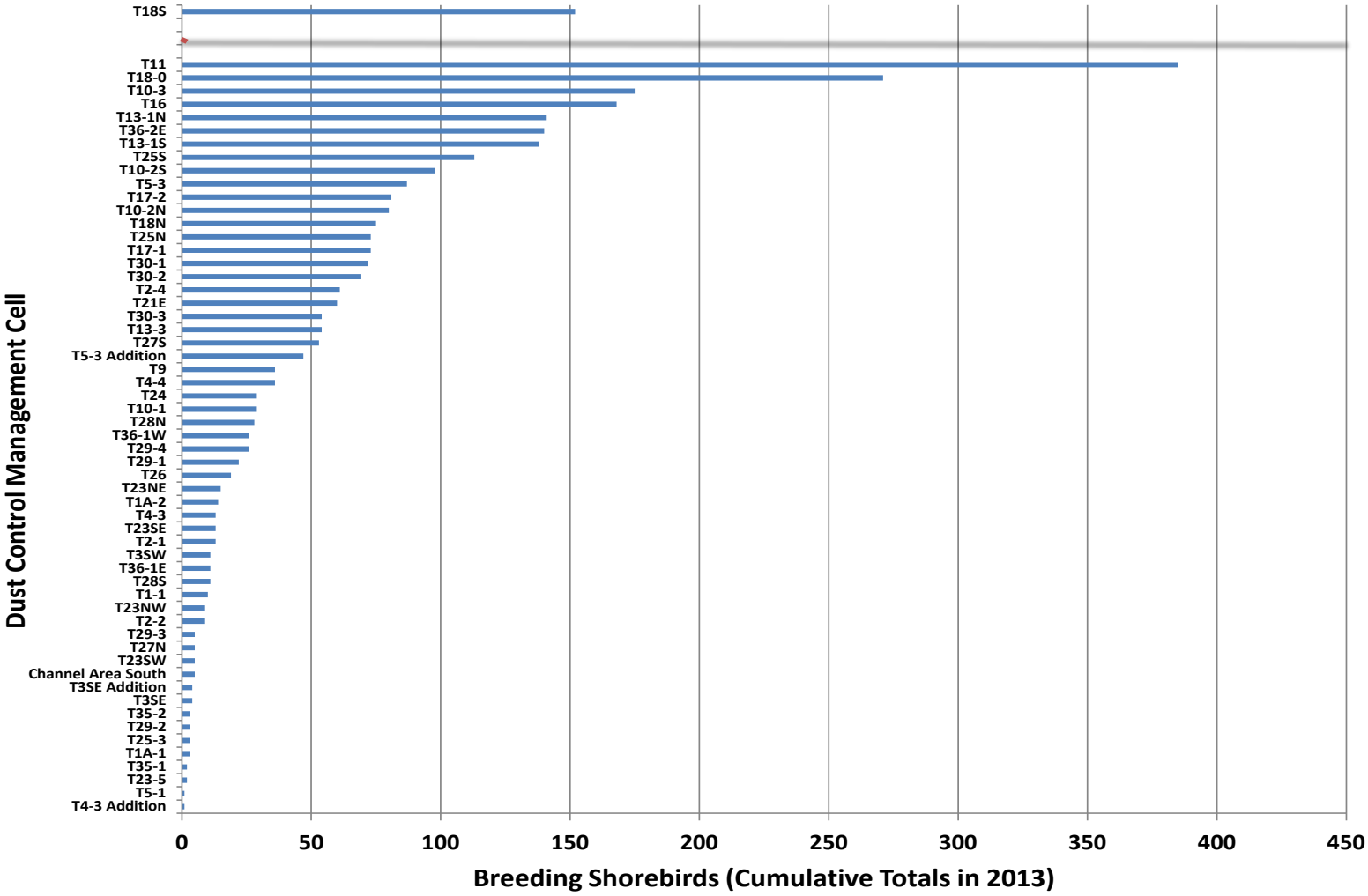


Figure 5. Breeding Shorebirds observed during surveys in 2013

No Breeding Shorebirds were counted in the following Dust Control Management Cells: Channel Area North, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T13-2, T18N Addition, T1A-3, T1A-4, T21W, T2-1 Addition, T2-3, T24 Addition, T2-5, T27 Addition, T32-1,T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T4-5, T5-1 Addition, T5-2, T5-4 and T8W.

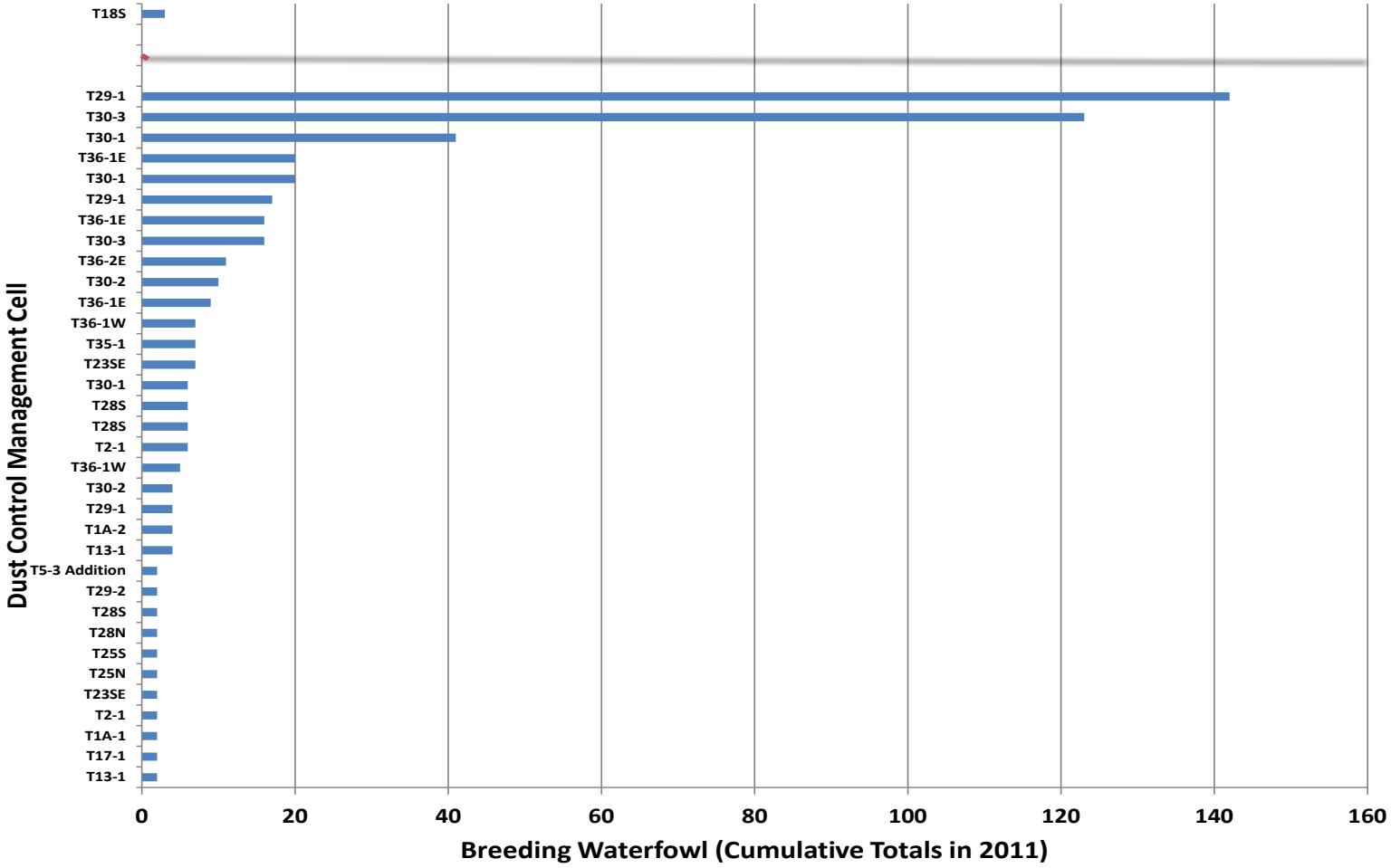


Figure 6. Breeding Waterfowl observed during surveys in 2011

No Breeding Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Managed Vegetation, Phase 8, T10-1, T10-2N, T10-2S, T10-3, T11, T1-1, T13-1, T13-1 Addition, T13-2, T13-3, T17-1, T17-2, T18-0, T18N, T1A-1, T1A-3, T1A-4, T21, T2-1 Addition, T2-2, T2-3, T23-5, T23NE, T23NW, T23SW, T24, T2-4, T24 Addition, T2-5, T26, T27 Addition, T27N, T27S, T29-3, T29-4, T32-1, T35-2, T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T3SE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-4, T4-5, T5-1, T5-1 Addition, T5-2, T5-3, T5-4, T8W and T9.

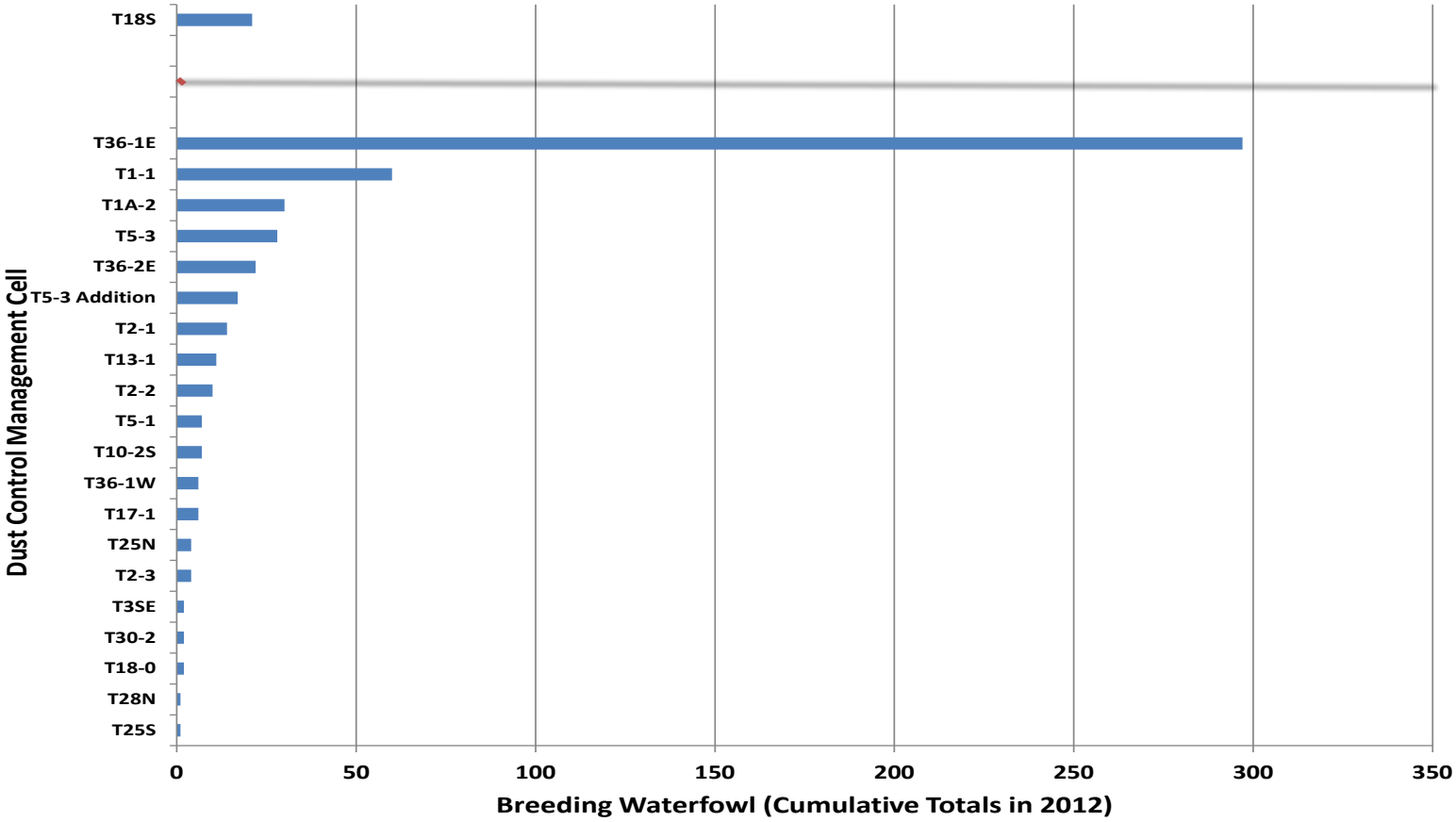


Figure 6. Breeding Waterfowl observed during surveys in 2012

No Breeding Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T10-1, T10-2N, T10-3, T11, T12-1, T13-1 Addition, T13-2, T13-3, T16, T17-2, T18N, T18N Addition, T1A-1, T1A-3, T1A-4, T21, T2-1 Addition, T23-5, T23NE, T23NW, T23SE, T23SW, T24, T2-4, T24 Addition, T2-5, T25-3, T26, T27 Addition, T27N, T27S, T28S, T29-1, T29-2, T29-3, T29-4, T30-1, T30-3, T32-1, T35-1, T35-2, T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-4, T4-5, T5-1 Addition, T5-2, T5-4, T8W and T9.

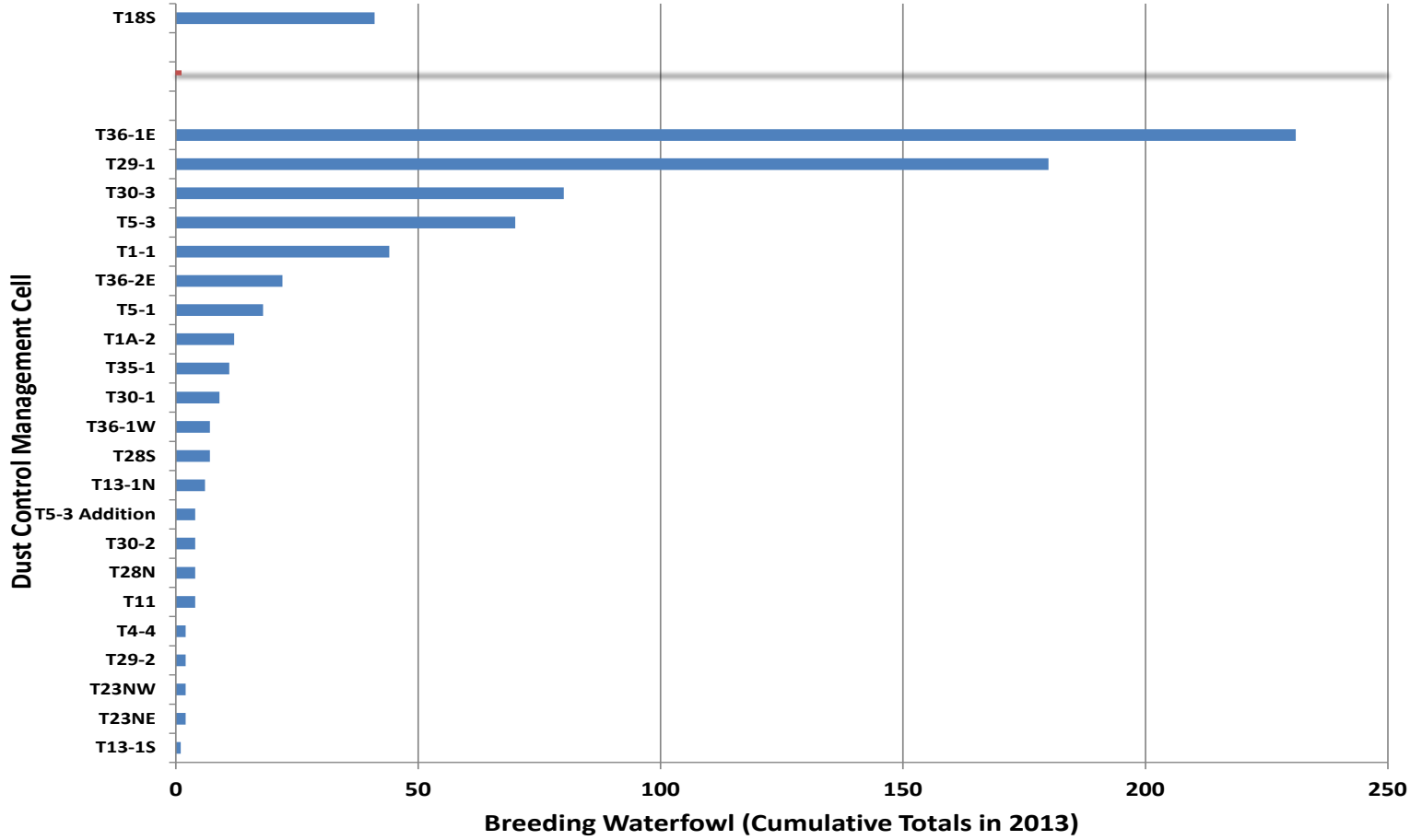


Figure 7. Breeding Waterfowl observed during surveys in 2013

No Breeding Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T10-1, T10-2N, T10-2S, T10-3, T12-1, T13-1 Addition, T13-2, T13-3, T16, T17-1, T17-2, T18-0, T18N, T18N Addition, T1A-1, T1A-3, T1A-4, T21, T2-1, T2-1 Addition, T2-2, T2-3, T23-5, T23SE, T23SW, T24, T2-4, T24 Addition, T2-5, T25-3, T25N, T25S, T26, T27 Addition, T27N, T27S, T29-3, T29-4, T32-1, T35-2, T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T3SE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-5, T5-1 Addition, T5-2, T5-4, T8W and T9.

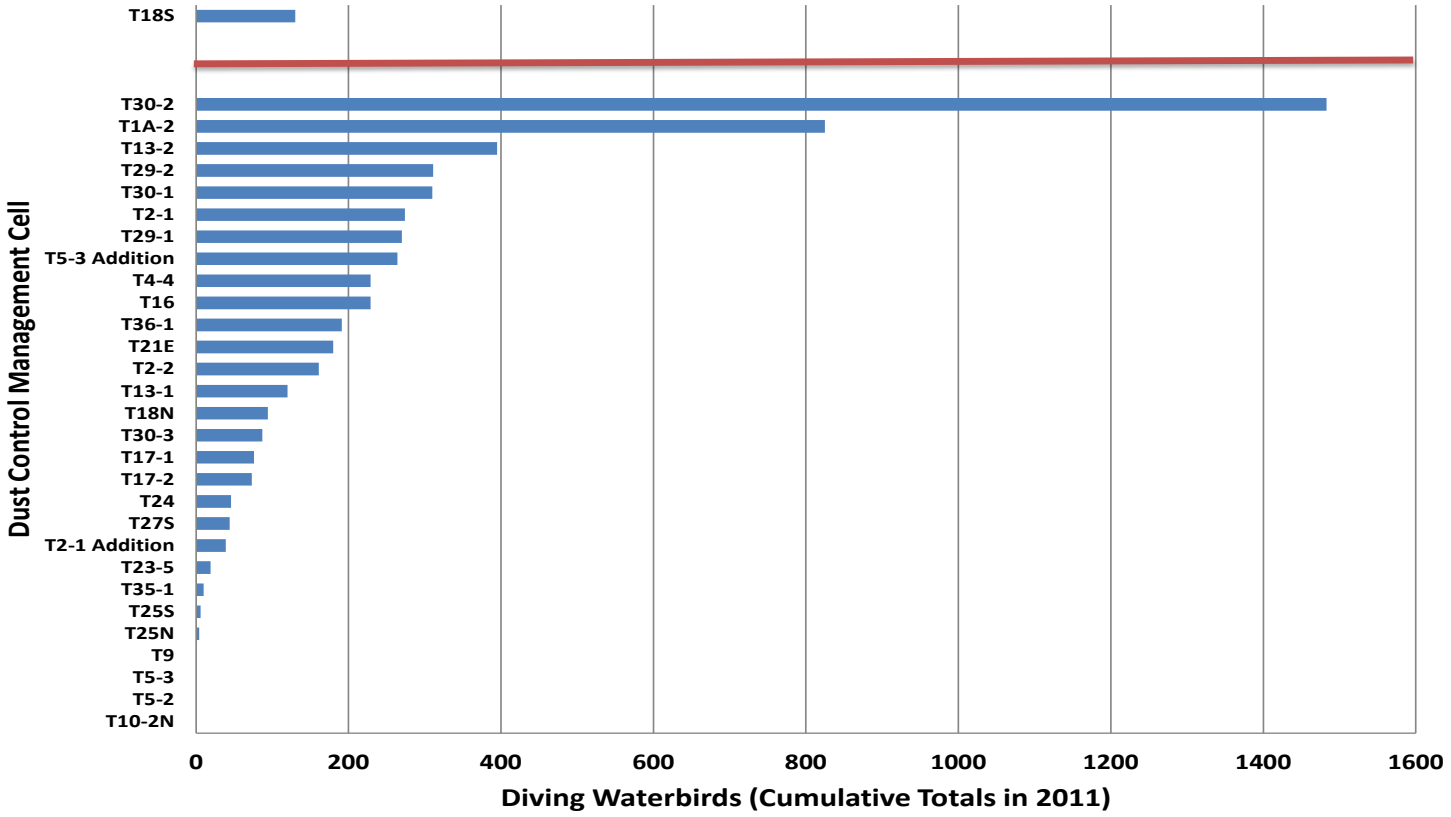


Figure 8. Diving Waterbirds observed during surveys in 2011

No Diving Waterbirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T10-1, T10-2S, T10-3, T11, T1-1, T12-1, T13-1 Addition, T13-3, T18-0, T18N Addition, T1A-1, T1A-3, T1A-4, T2-3, T23NE, T23NW, T23SE, T23SW, T2-4, T24 Addition, T2-5, T25-3, T26, T27 Addition, T27N, T28N, T28S, T29-3, T29-4, T32-1, T35-2, T36-2E, T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2,T3NE, T3SE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-5, T5-1, T5-1 Addition, T5-4 and T8W.

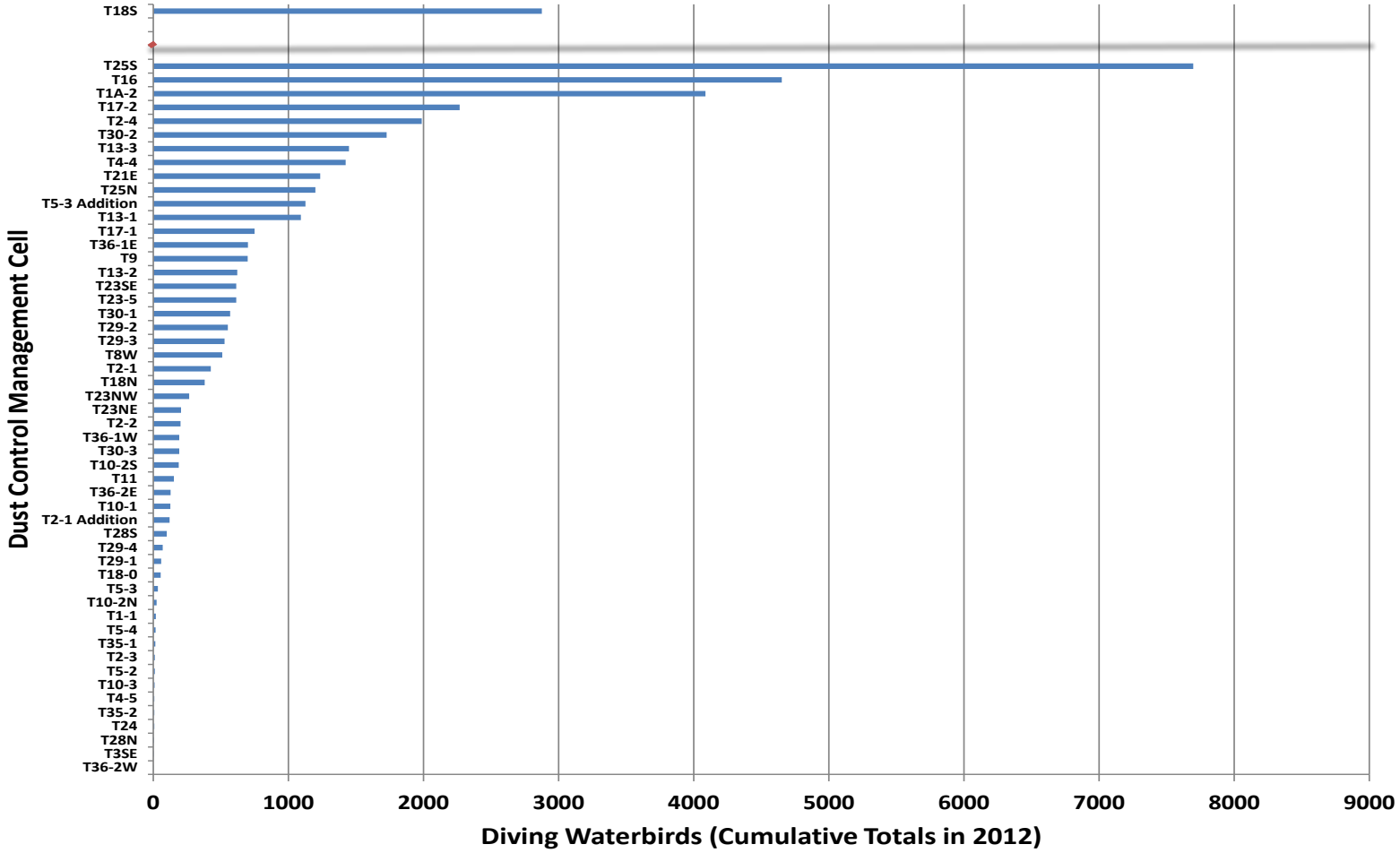


Figure 9. Diving Waterbirds observed during surveys in 2012

No Diving Waterbirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T23SW, T24 Addition, T2-5, T25-3, T26, T27 Addition, T27N, T27S, T32-1, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2, T3NE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T5-1 and T5-1 Addition.

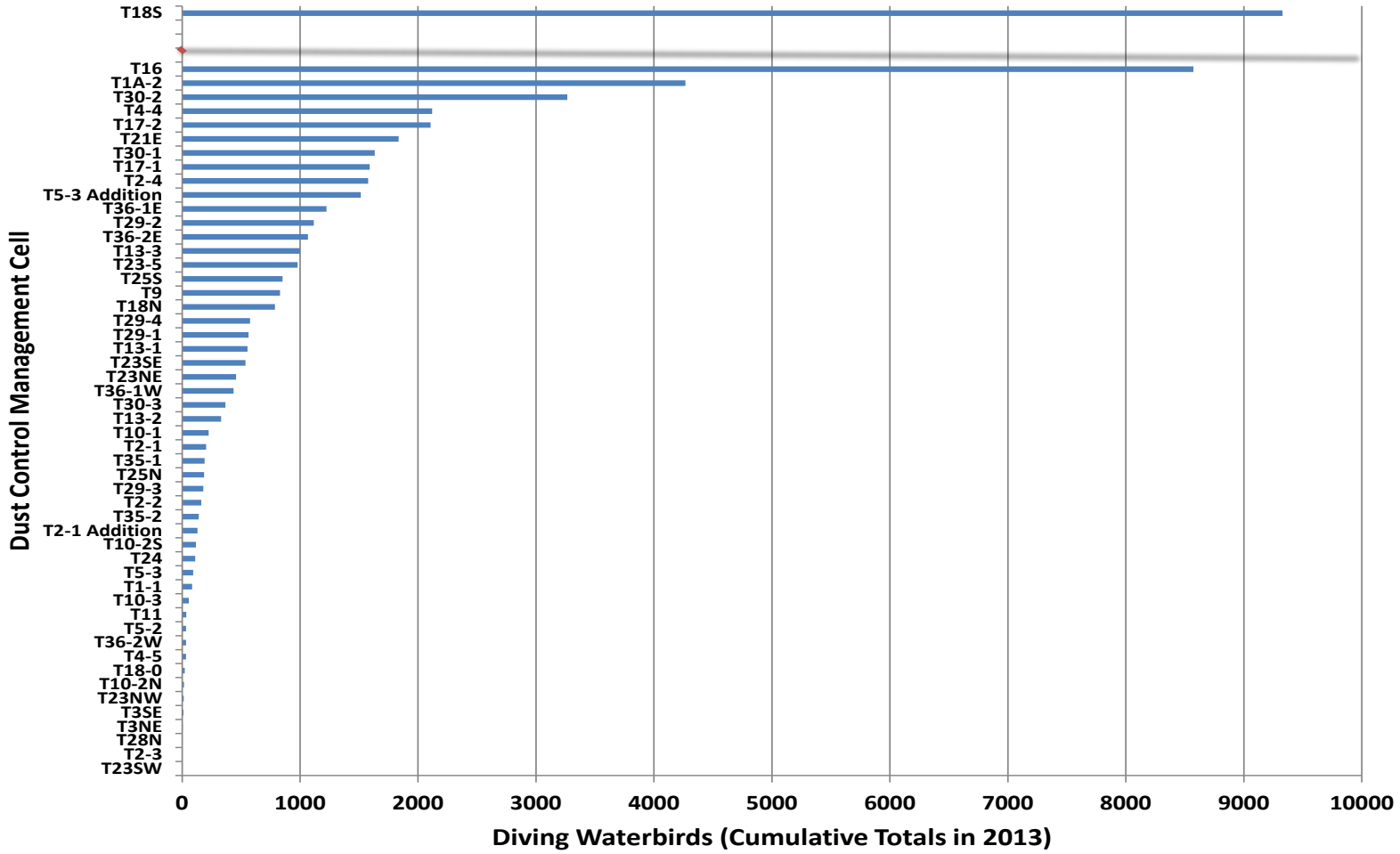


Figure 10. Diving Waterbirds observed during surveys in 2013

No Diving Waterbirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T24 Addition, T2-5, T25-3, T26, T27 Addition, T27N, T27S, T28S, T32-1, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2, T3SE Addition, T3SW, T4-3, T4-3 Addition, T5-1, T5-1 Addition, T5-4 and T8W.

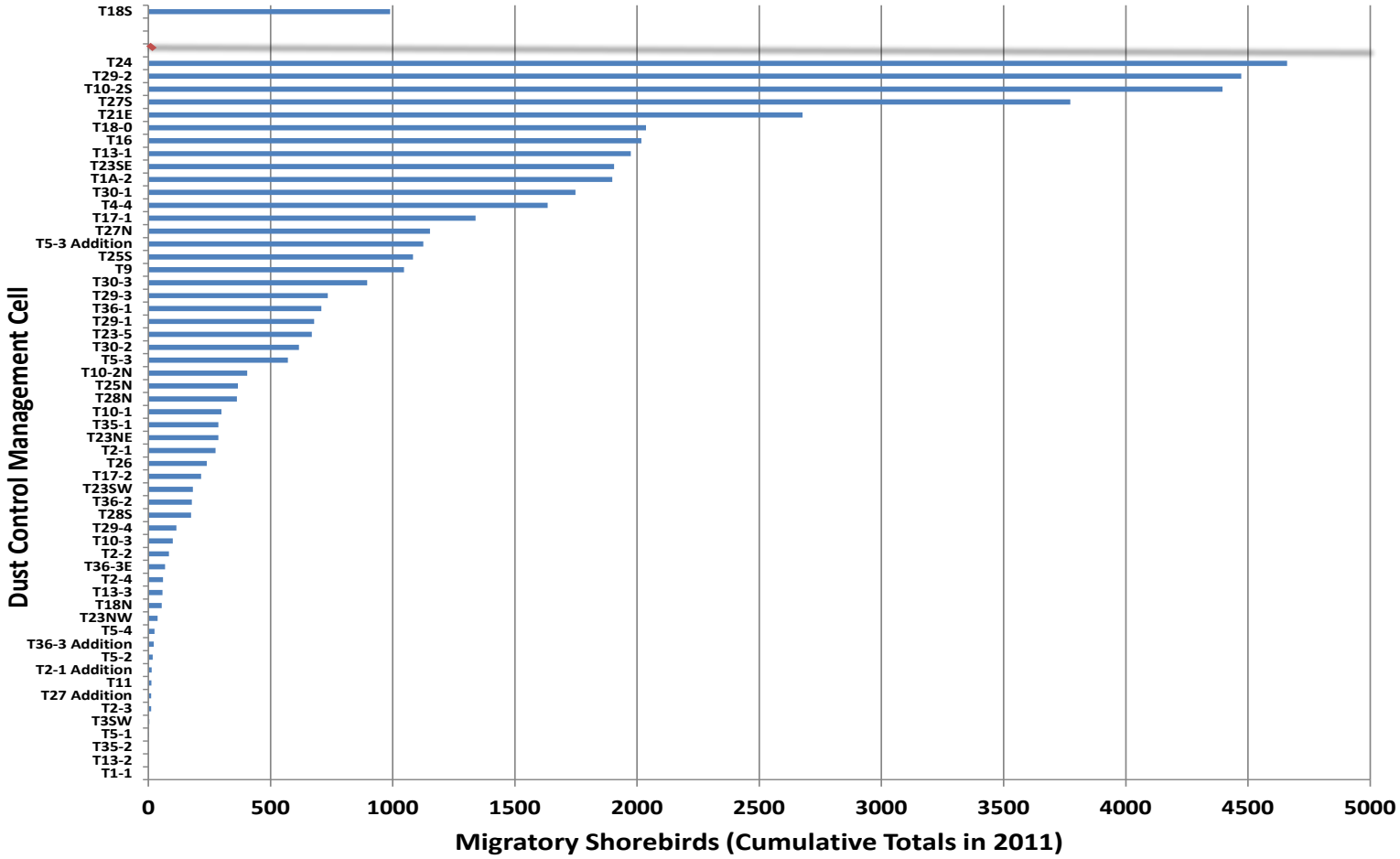


Figure 11. Migrating Shorebirds observed during surveys in 2011

No Migrating Shorebirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T24 Addition, T2-5, T25-3, T32-1, T37-1, T37-2, T3NE, T3SE, T3SE Addition, T4-3, T4-3 Addition, T4-5, T5-1 Addition and T8W.

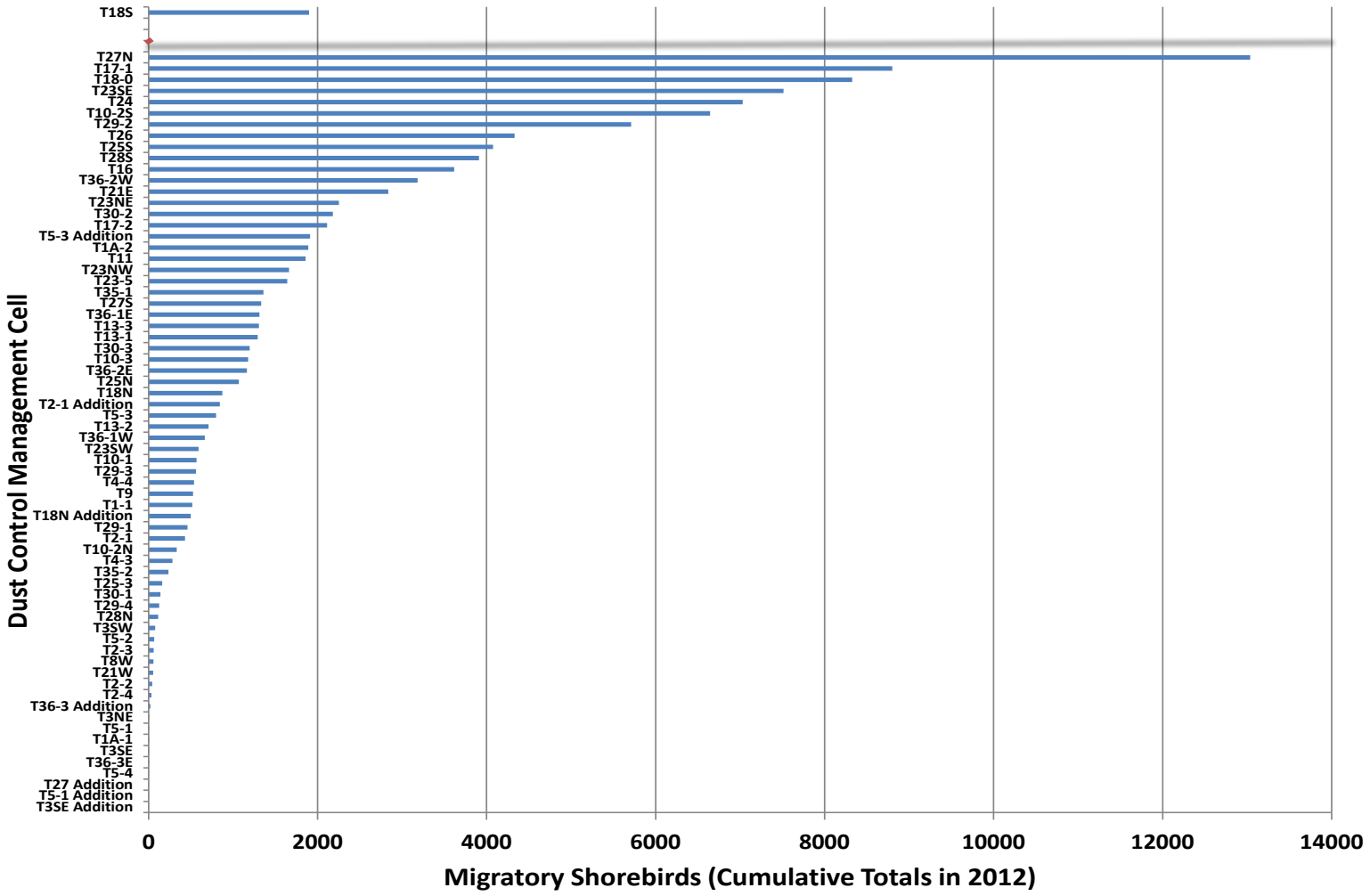


Figure 12. Migrating Shorebirds observed during surveys in 2012

No Migrating Shorebirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T1A-3, T1A-4, T24 Addition, T2-5, T32-1, T36-3W, T37-1, T37-2, T4-3 Addition and T4-5.

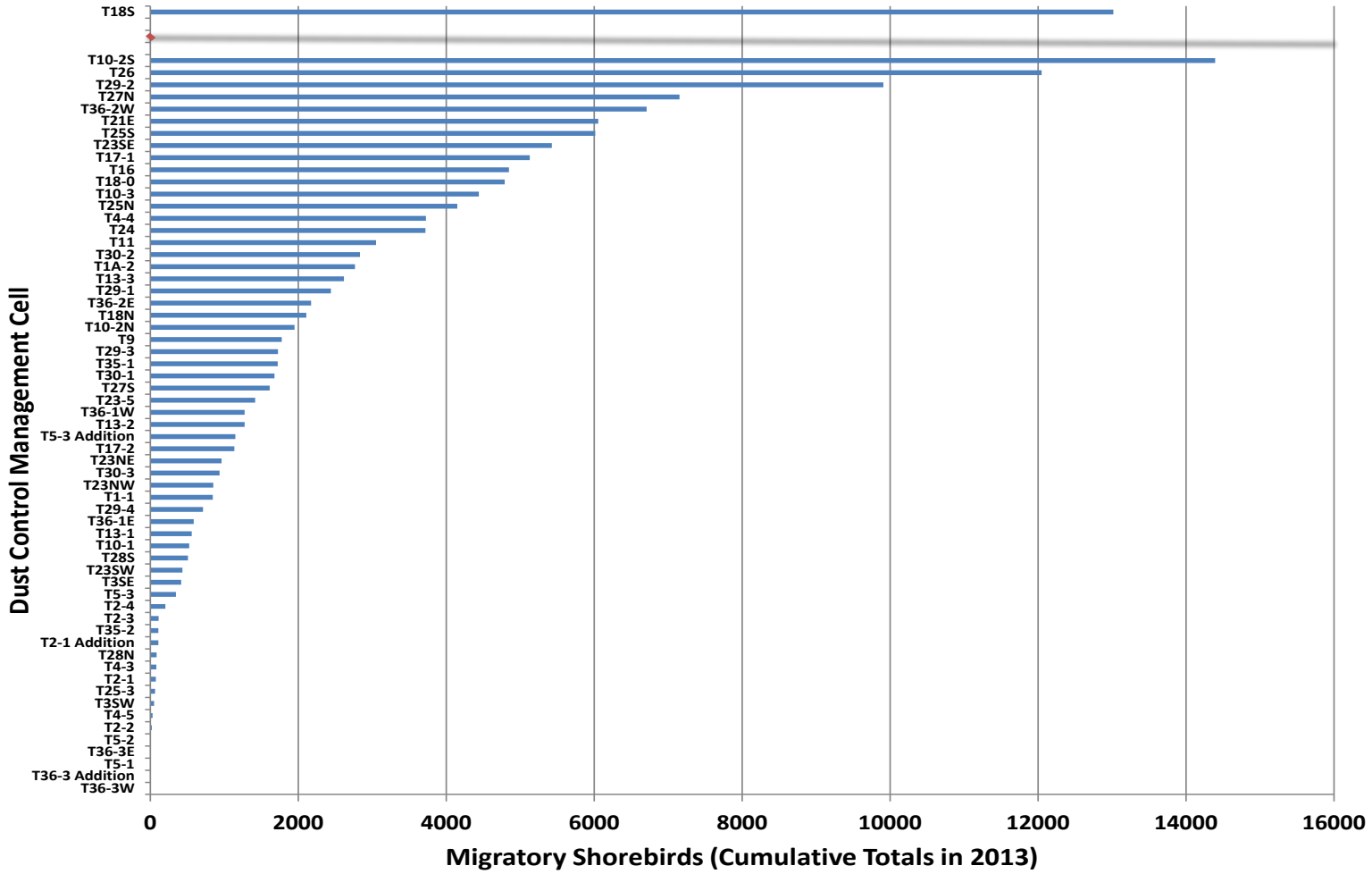


Figure 13. Migrating Shorebirds observed during surveys in 2013

No Migrating Shorebirds were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T24 Addition, T2-5, T27 Addition, T32-1, T37-1, T37-2, T3NE, T3SE Addition, T4-3 Addition, T5-1 Addition, T5-4 and T8W.

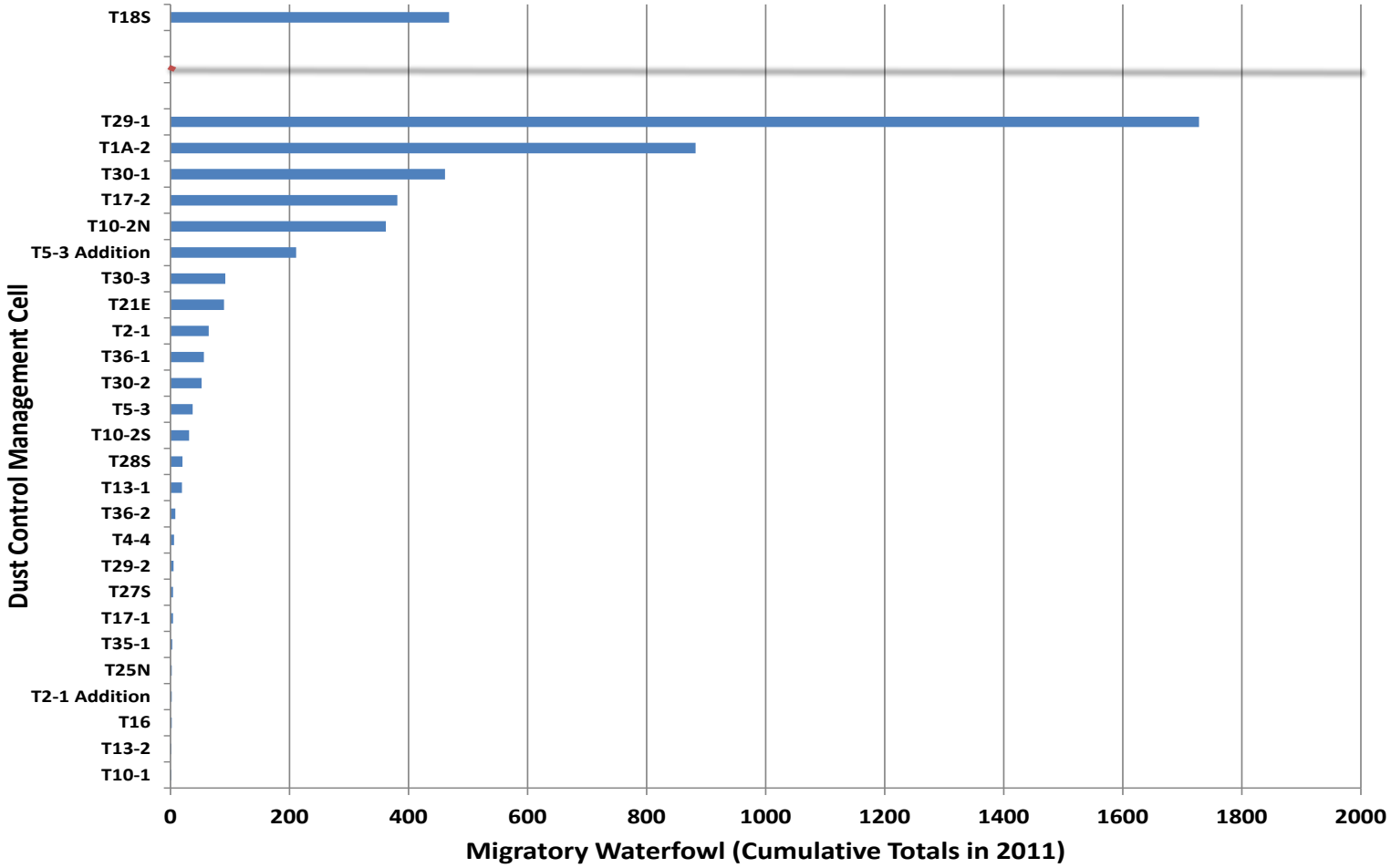


Figure 14. Migrating Waterfowl observed during surveys in 2011

No Migrating Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T10-3, T11, T1-1, T12-1, T13-1 Addition, T13-3, T18-0, T18N, T18N Addition, T1A-1, T1A-3, T1A-4, T2-2, T2-3, T23-5, T23NE, T23NW, T23SE, T23SW, T24, T2-4, T24 Addition, T2-5, T25-3, T25S, T26, T27 Addition, T27N, T28N, T29-3, T29-4, T32-1, T35-2, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2, T3NE, T3SE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-5, T5-1, T5-1 Addition, T5-2, T5-4, T8W and T9.

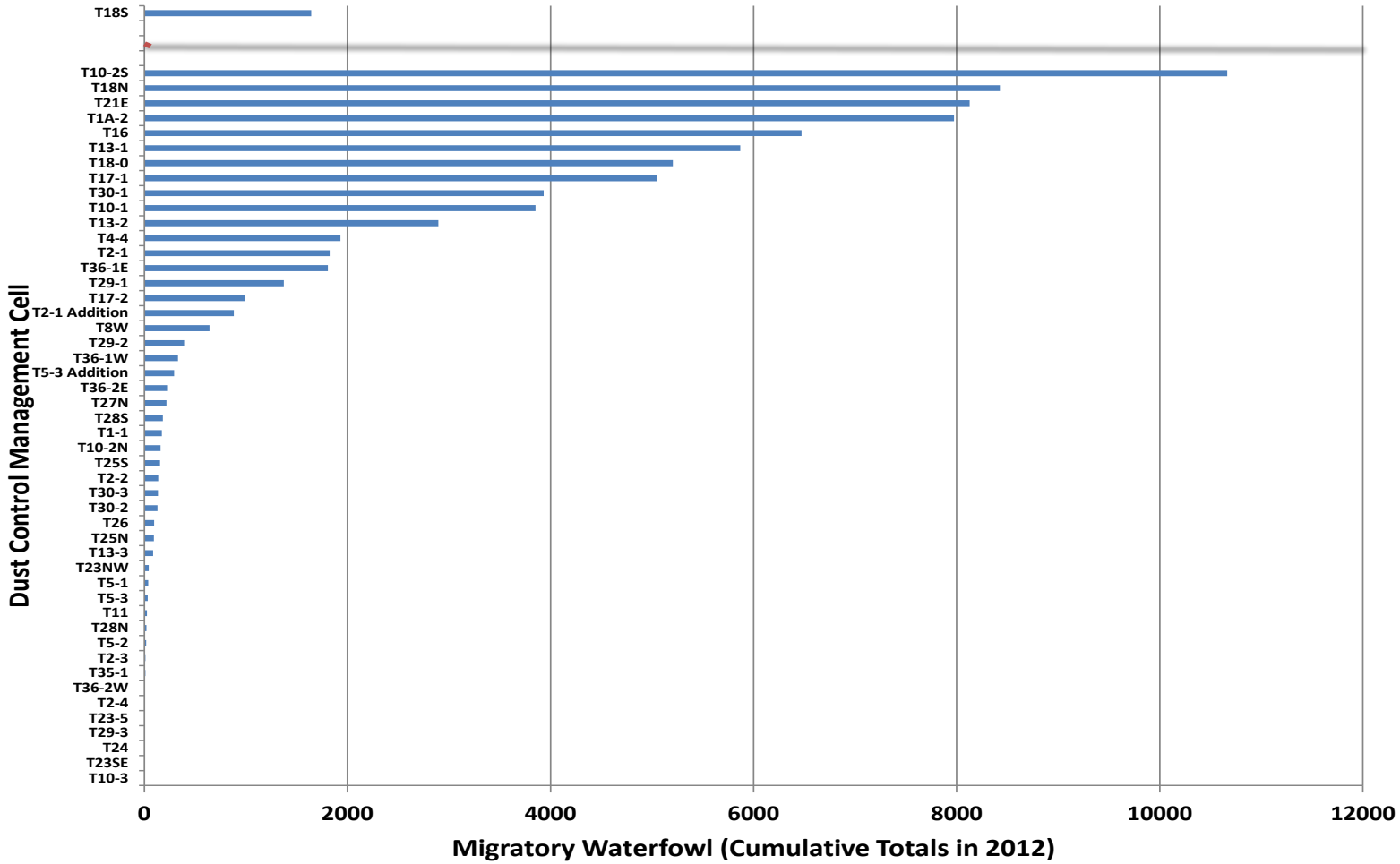


Figure 15. Migrating Waterfowl observed during surveys in 2012

No Migrating Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T23NE, T23SW, T24 Addition, T2-5, T25-3, T27 Addition, T27S, T29-4, T32-1, T35-2, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2, T3NE, T3SE, T3SE Addition, T3SW, T4-3, T4-3 Addition, T4-5, T5-1 Addition, T5-4 and T9.

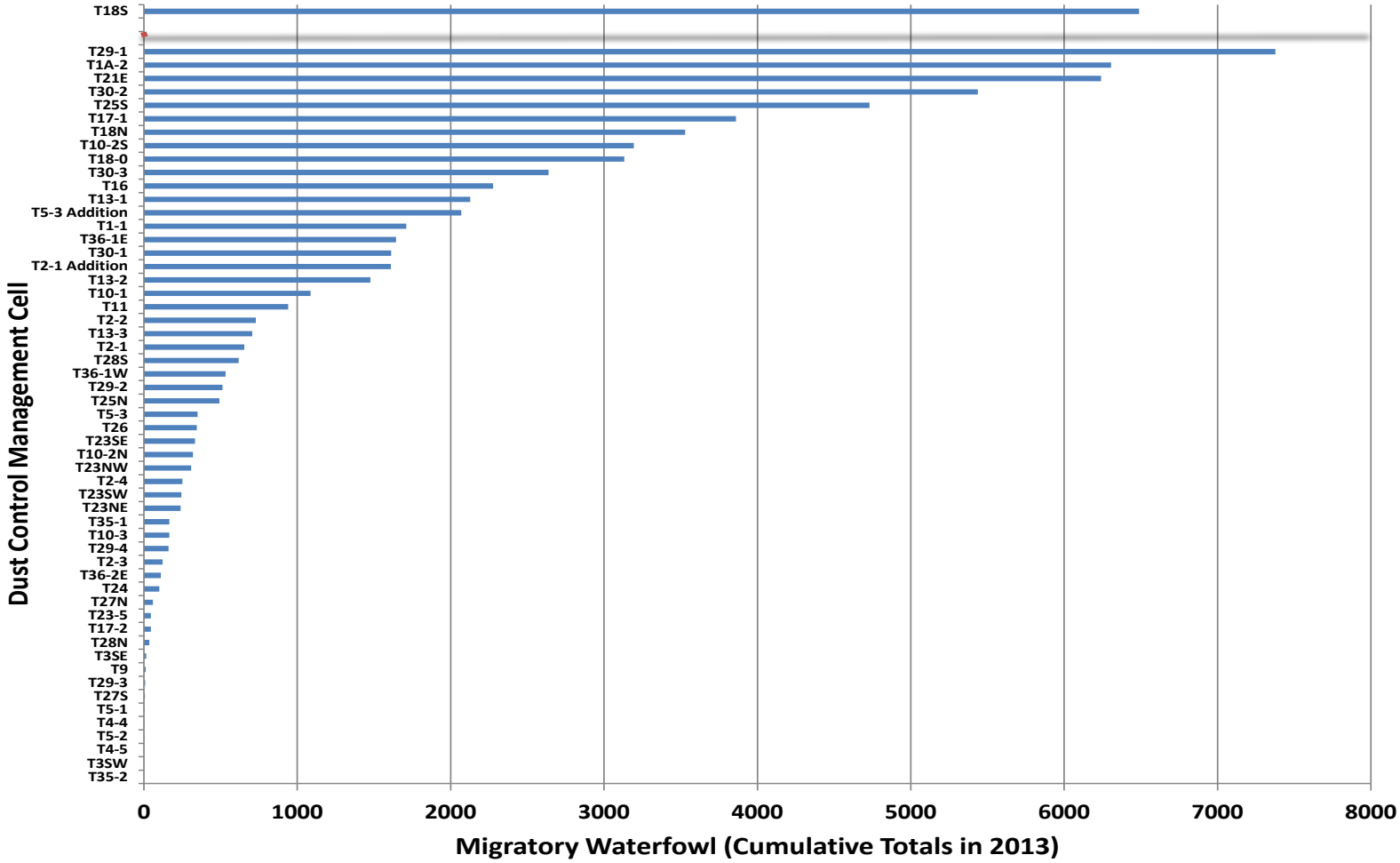
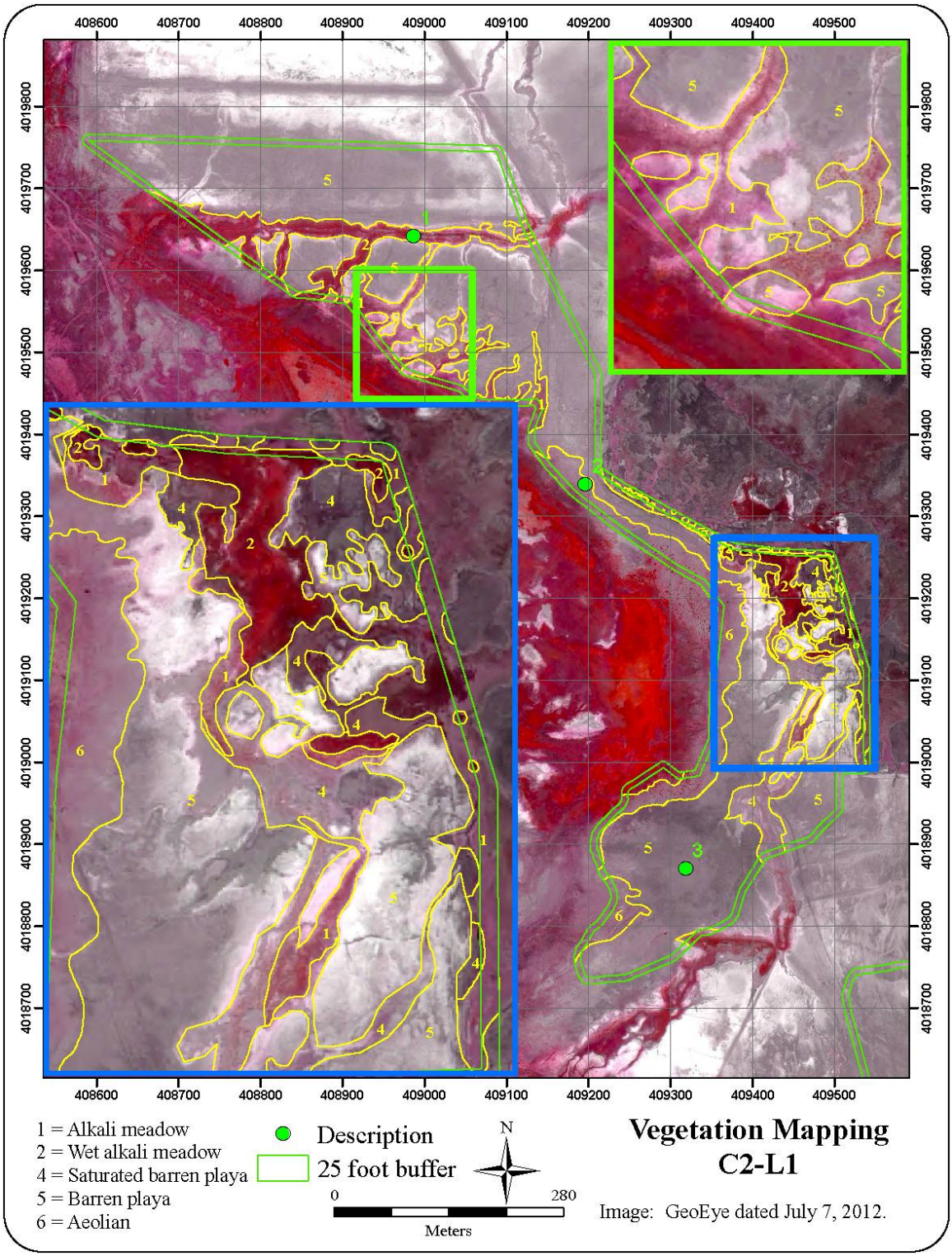


Figure 16. Migrating Waterfowl observed during surveys in 2013

No Migrating Waterfowl were counted in the following Dust Control Management Cells: Channel Area North, Channel Area South, Corridor 1, Phase 8, Managed Vegetation, T12-1, T13-1 Addition, T18N Addition, T1A-1, T1A-3, T1A-4, T24 Addition, T2-5, T25-3, T27 Addition, T32-1, T36-2W, T36-3E, T36-3W, T36-3 Addition, T37-1, T37-2, T3NE, T3SE Addition, T4-3, T4-3 Addition, T5-1 Addition, T5-4 and T8W.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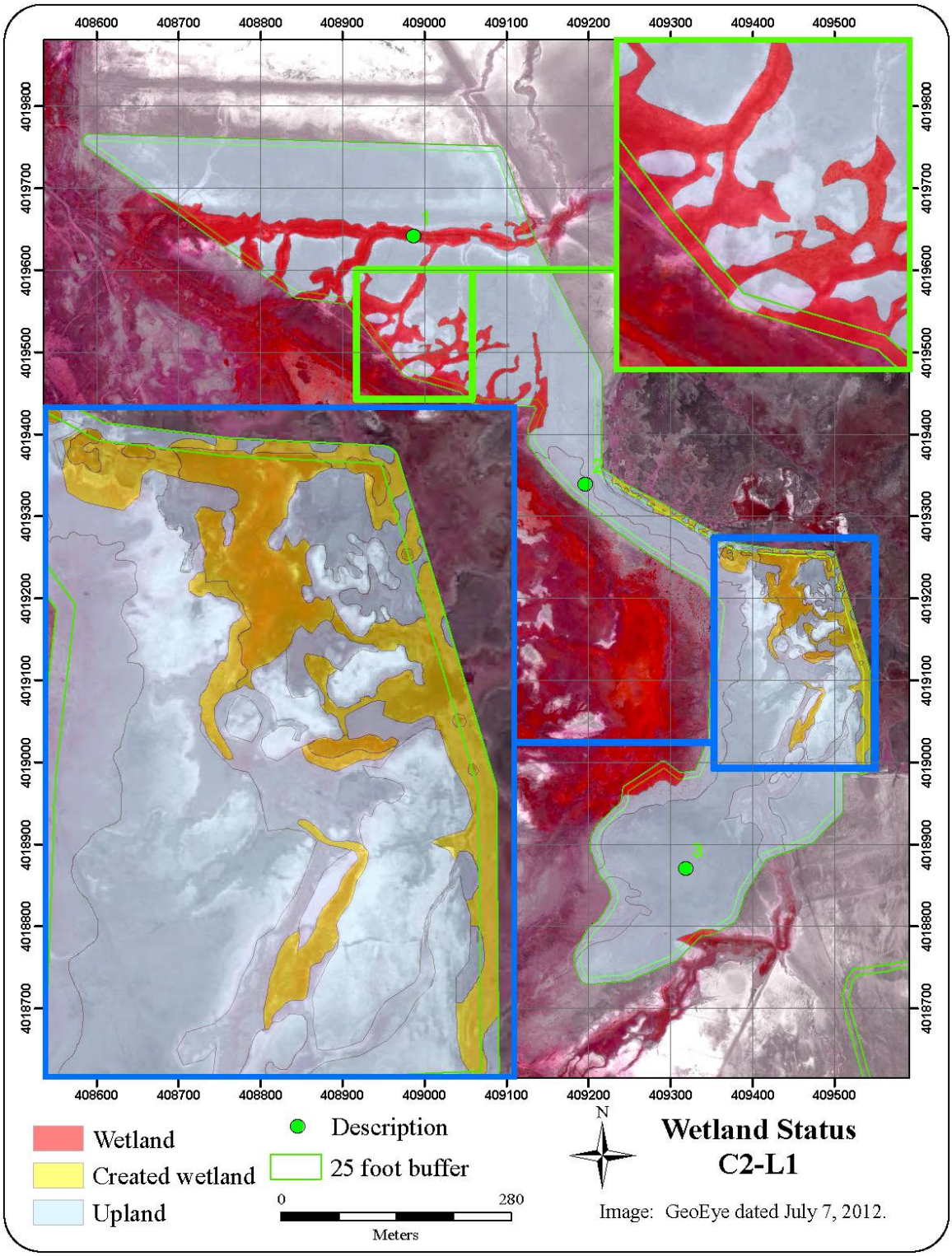
408700
408800
408900
409000
409100
409200
409300
409400
409500
4019800
4019700
4019600
4019500
4019400
4019300
4019200
4019100
4019000
4018900
4018800
4018700
1 = Alkali meadow
2 = Wet alkali meadow
4 = Saturated barren playa
5 = Barren playa
6 = Aeolian
Description
25 foot buffer
N
0
280
Meters
Vegetation Mapping
C2-L1
Image: GeoEye dated July 7, 2012.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408700
408800
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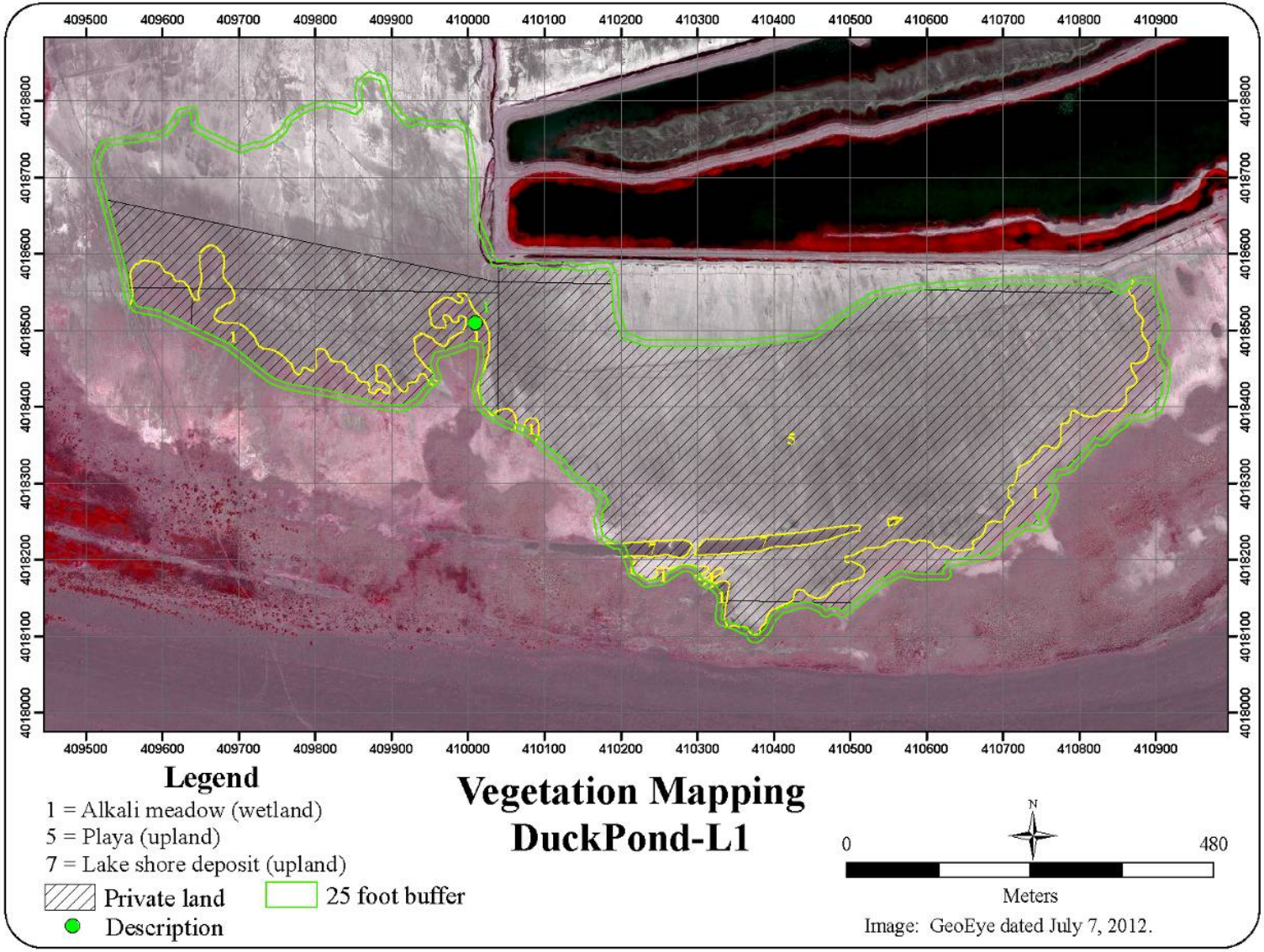
409400
409500
4019800
4019700
4019600
4019500
4019400
4019300
4019200
4019100
4019000
4018900
4018800
4018700
1
3
Wetland
Created wetland
Upland
Description
25 foot buffer
0
280
Meters
N
Wetland Status
C2-L1
Image: GeoEye dated July 7, 2012.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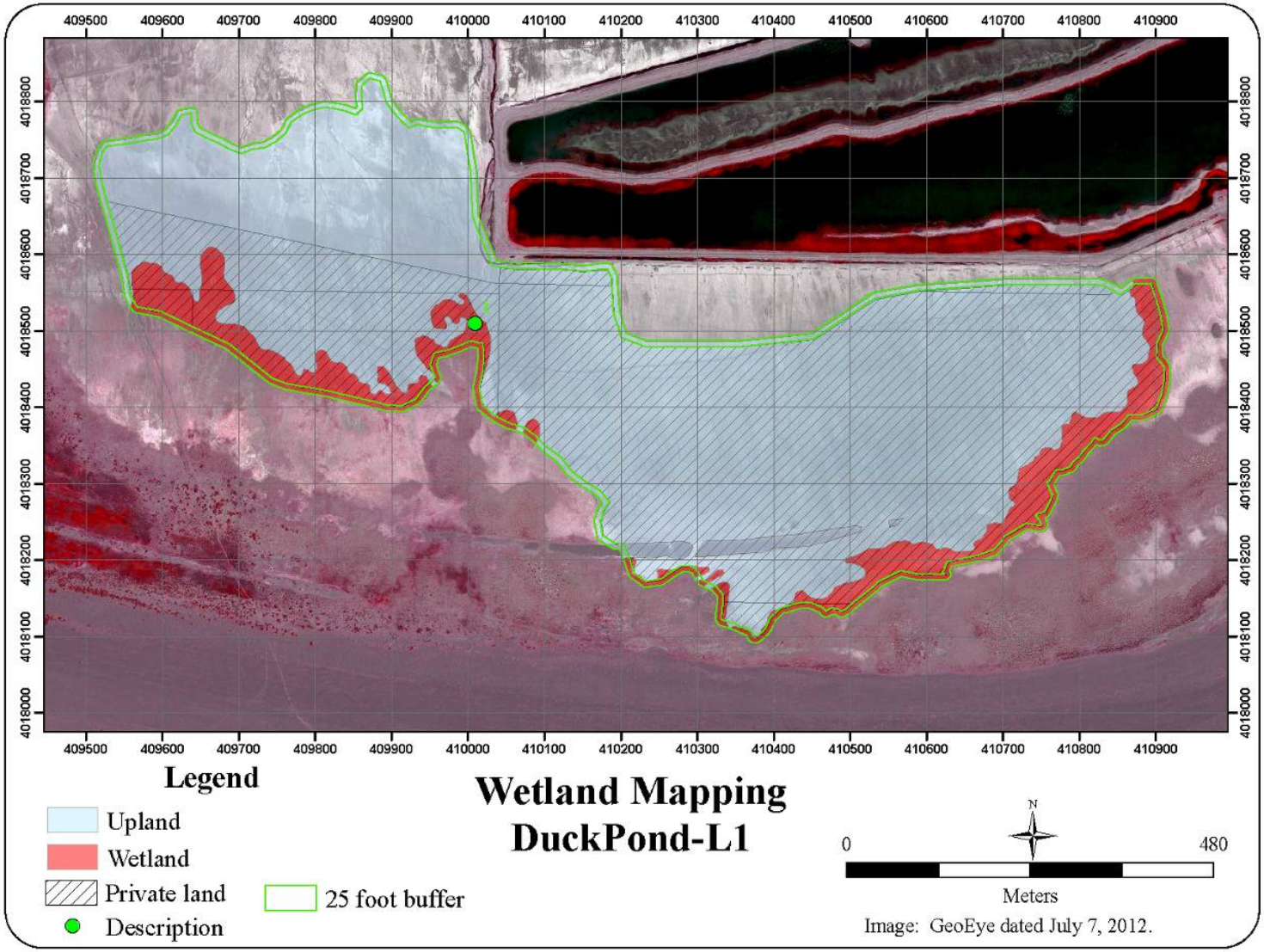
409600
409700
409800
409900
410000
410100
410200
410300
410400
410500
410600
410700
410800
410900
4018800
4018700
4018600
4018500
4018400
4018300
4018200
4018100
4018000
Legend
1 = Alkali meadow (wetland)
5 = Playa (upland)
7 = Lake shore deposit (upland)
Private land
25 foot buffer
Description
Vegetation Mapping
DuckPond-L1
N
0
480
Meters
Image: GeoEye dated July 7, 2012.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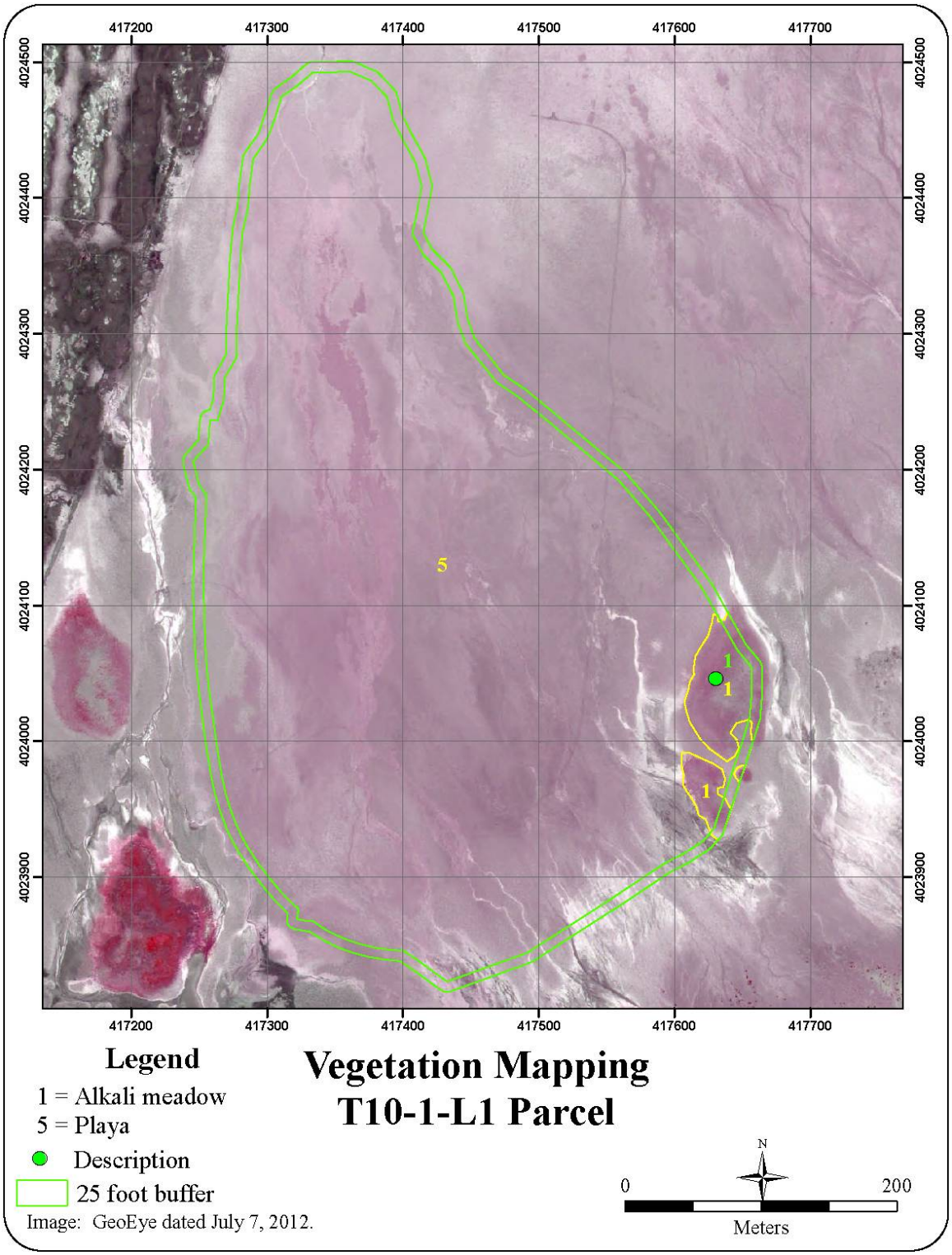
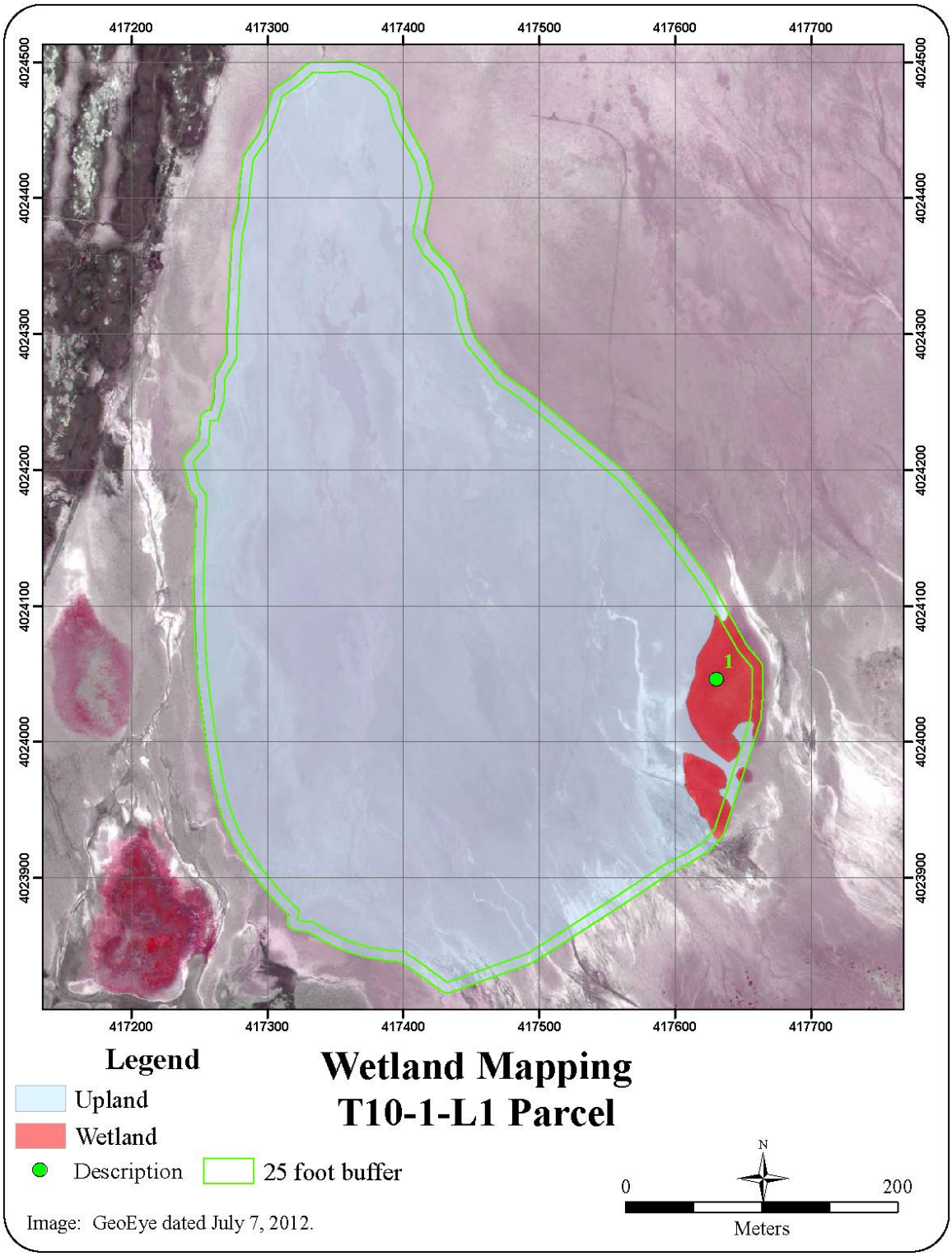
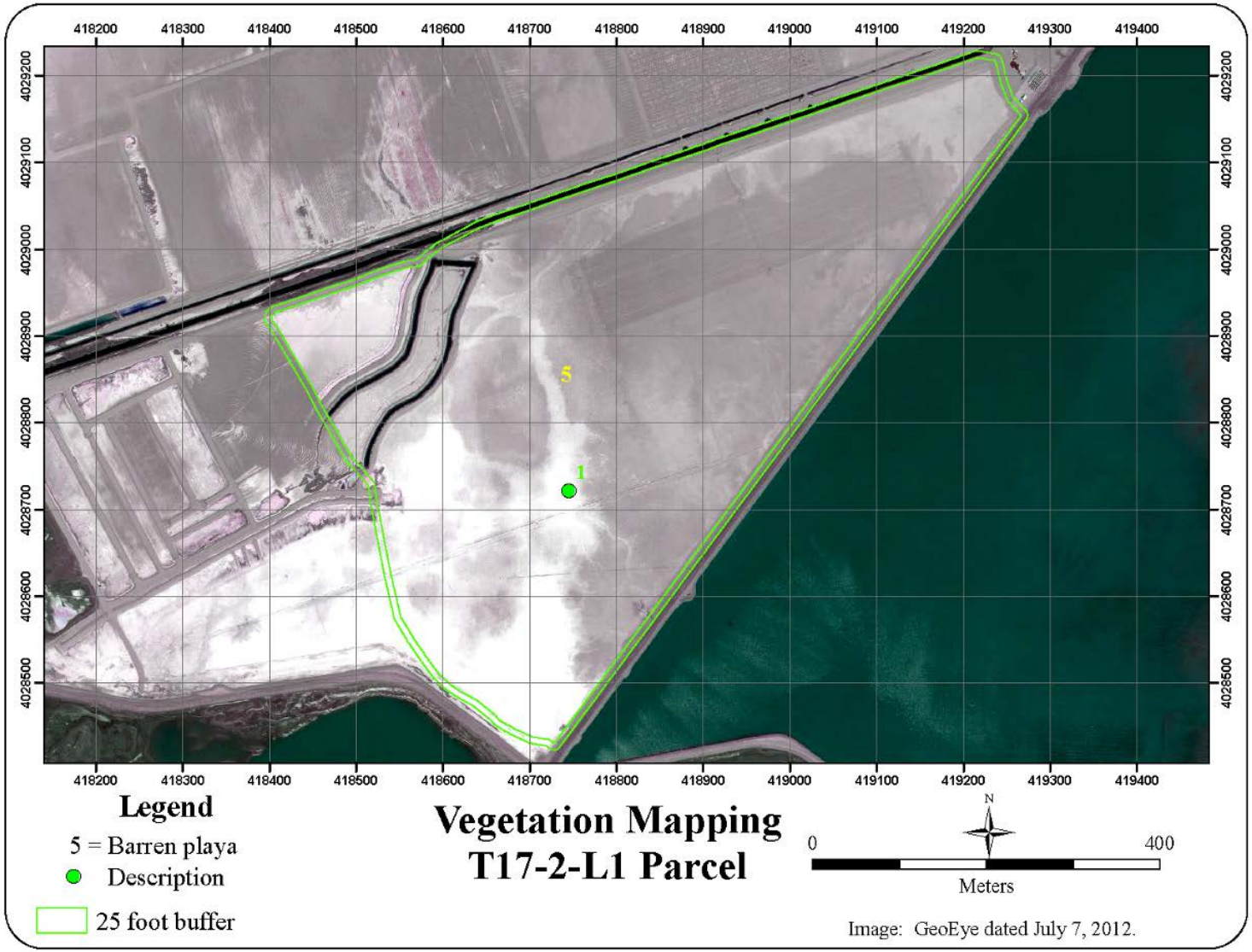
409600
409700
409800
409900
410000
410100
410200
410300
410400
410500
410600
410700
410800
410900
4018800
4018700
4018600
4018500
4018400
4018300
4018200
4018100
4018000
Legend
Upland
Wetland
Private land
Description
25 foot buffer
Wetland Mapping
DuckPond-L1
N
0
480
Meters
Image: GeoEye dated July 7, 2012.


417200
417300
417400
417500
417600
417700
4024500
4024400
4024300
4024200
4024100
4024000
4023900
5
1
1
1
Legend
1 = Alkali meadow
5 = Playa
Description
25 foot buffer
Image: GeoEye dated July 7, 2012.
Vegetation Mapping
T10-1-L1 Parcel
N
0
200
Meters


417200
417300
417400
417500
417600
417700
4024500
4024400
4024300
4024200
4024100
4024000
4023900
1
Legend
Upland
Wetland
Description
25 foot buffer
Wetland Mapping
T10-1-L1 Parcel
N
0
200
Meters
Image: GeoEye dated July 7, 2012.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418600
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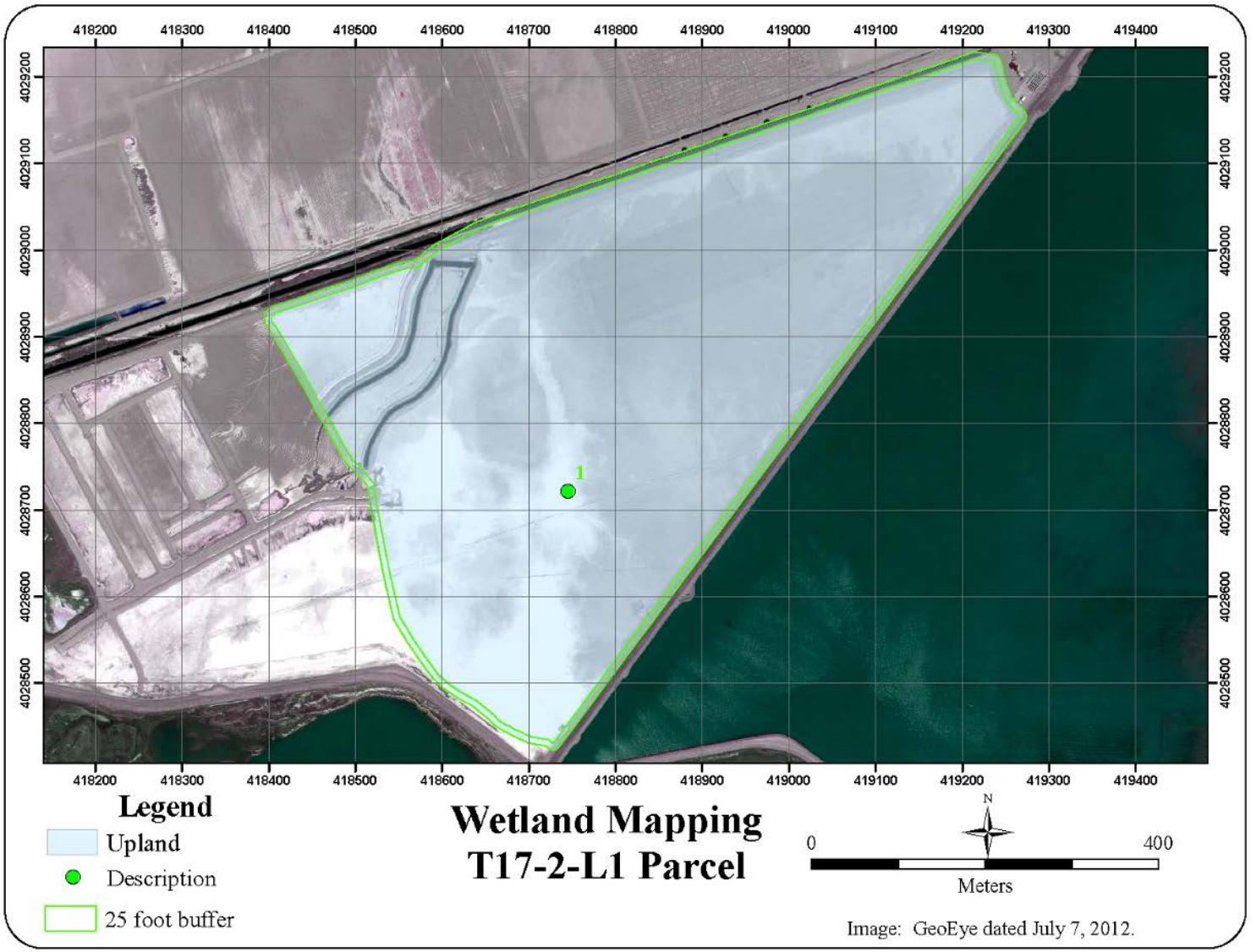
418800
418900
419000
419100
419200
419300
419400
4029200
4029100
4029000
4028900
4028800
4028700
4028600
4028500
5
1
Legend
5 = Barren playa
Description
25 foot buffer
Vegetation Mapping
T17-2-L1 Parcel
N
0
400
Meters
Image: GeoEye dated July 7, 2012.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418500
418600
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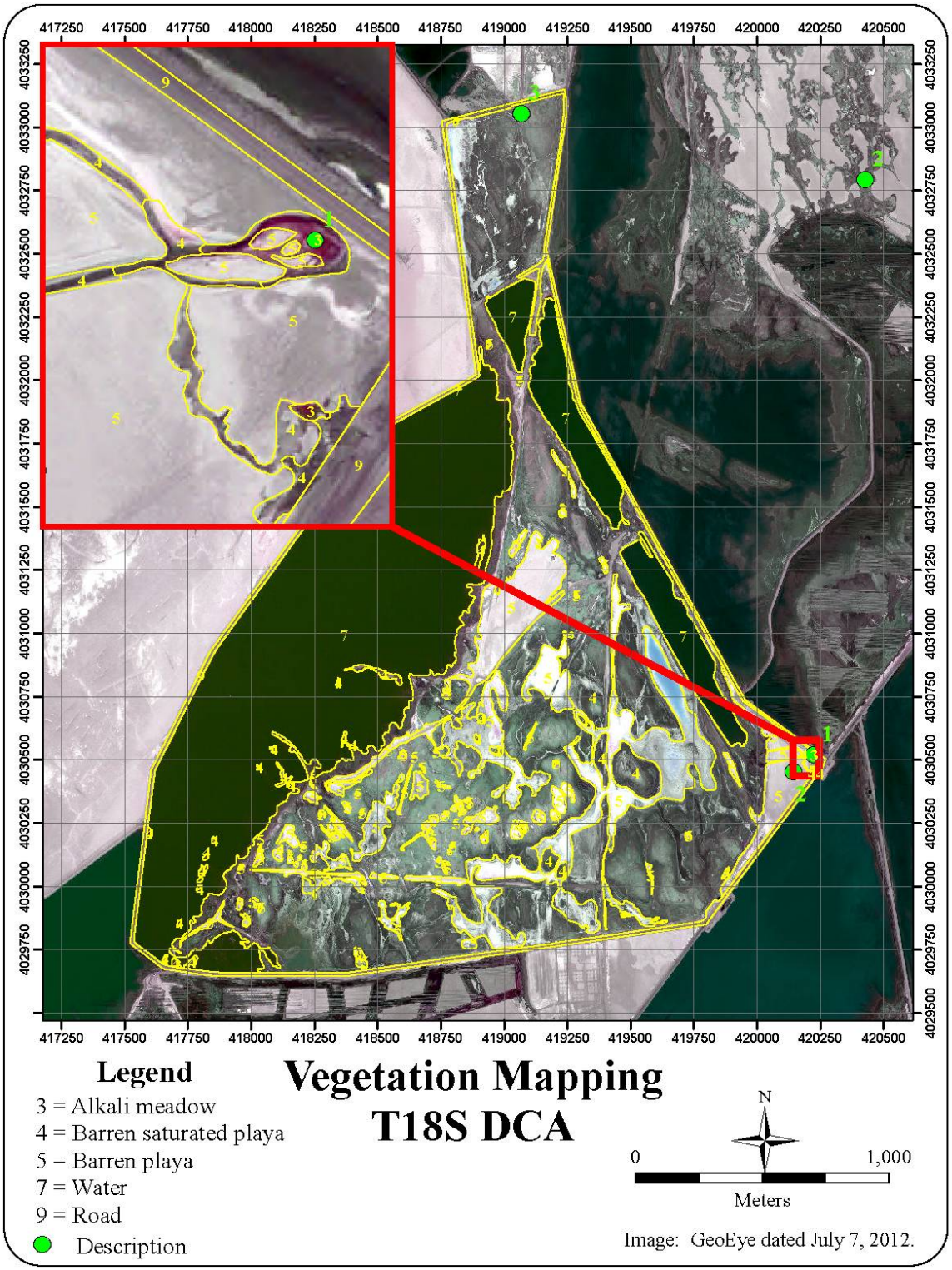
418800
418900
419000
419100
419200
419300
419400
4029200
4029100
4029000
4028900
4028800
4028700
4028600
4028500
1
Legend
Upland
Description
25 foot buffer
Wetland Mapping
T17-2-L1 Parcel
N
0
400
Meters
Image: GeoEye dated July 7, 2012.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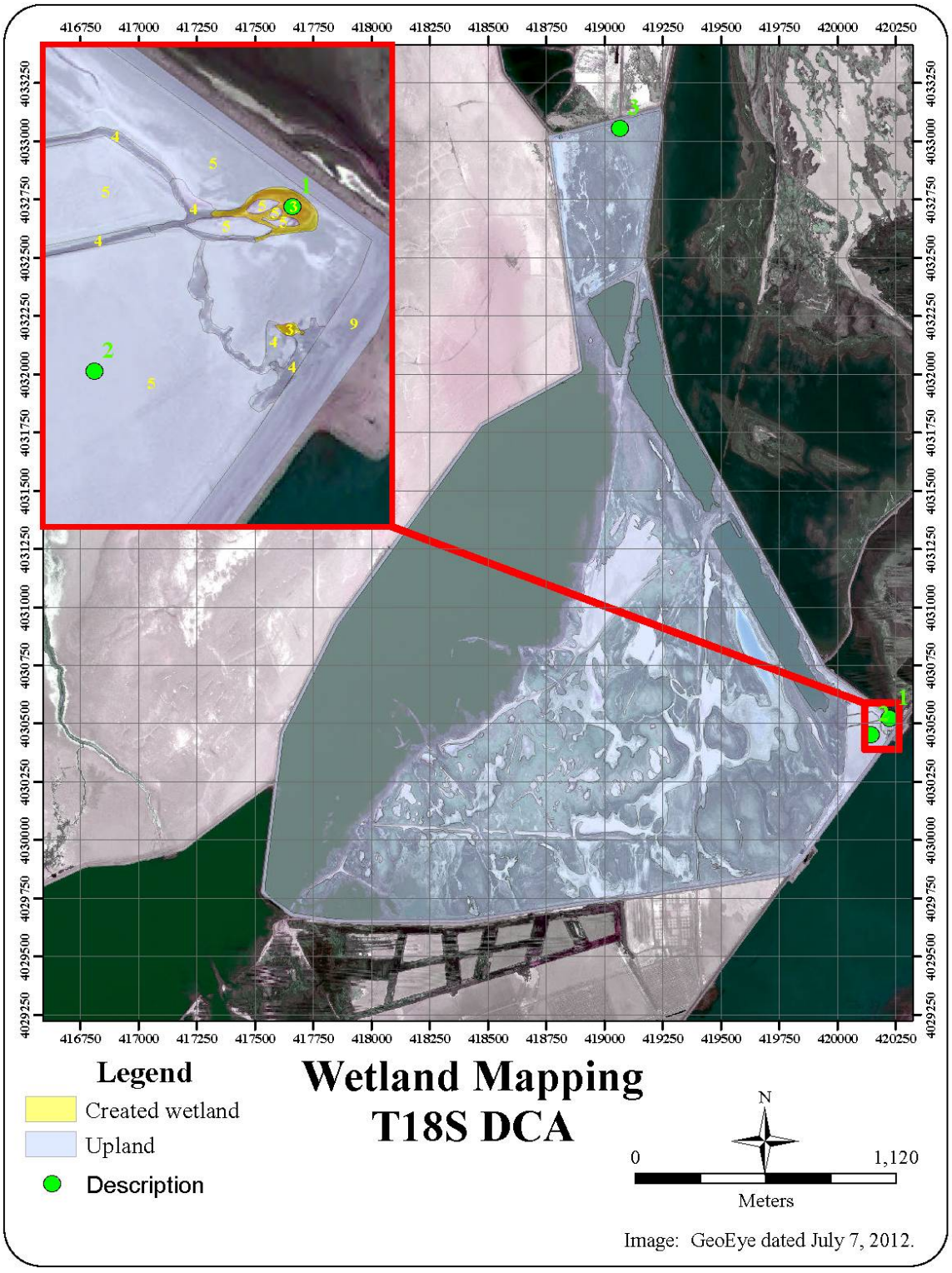
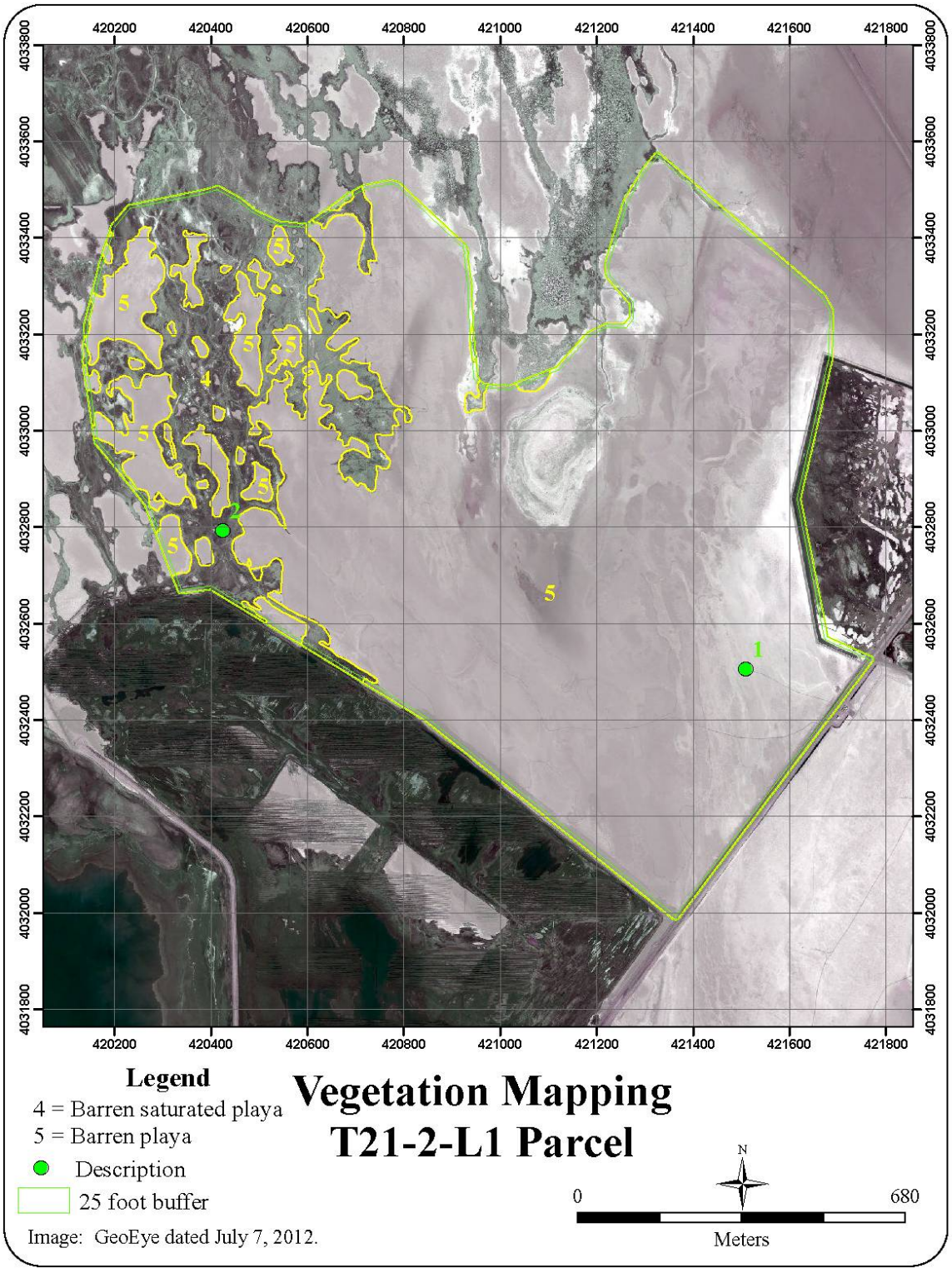
4033250 4033000 4032750 4032500 4032250 4032000 4031750 4031500 4031250 4031000 4030750 4030500 4030250 4030000 4029750 4029500
Legend
3 = Alkali meadow
4 = Barren saturated playa
5 = Barren playa
7 = Water
9 = Road
Description
Vegetation Mapping
T18S DCA
N
0
1,000
Meters
Image: GeoEye dated July 7, 2012.


Legend
Created wetland
Upland
Description
Wetland Mapping
T18S DCA
N
0
1,120
Meters
Image: GeoEye dated July 7, 2012.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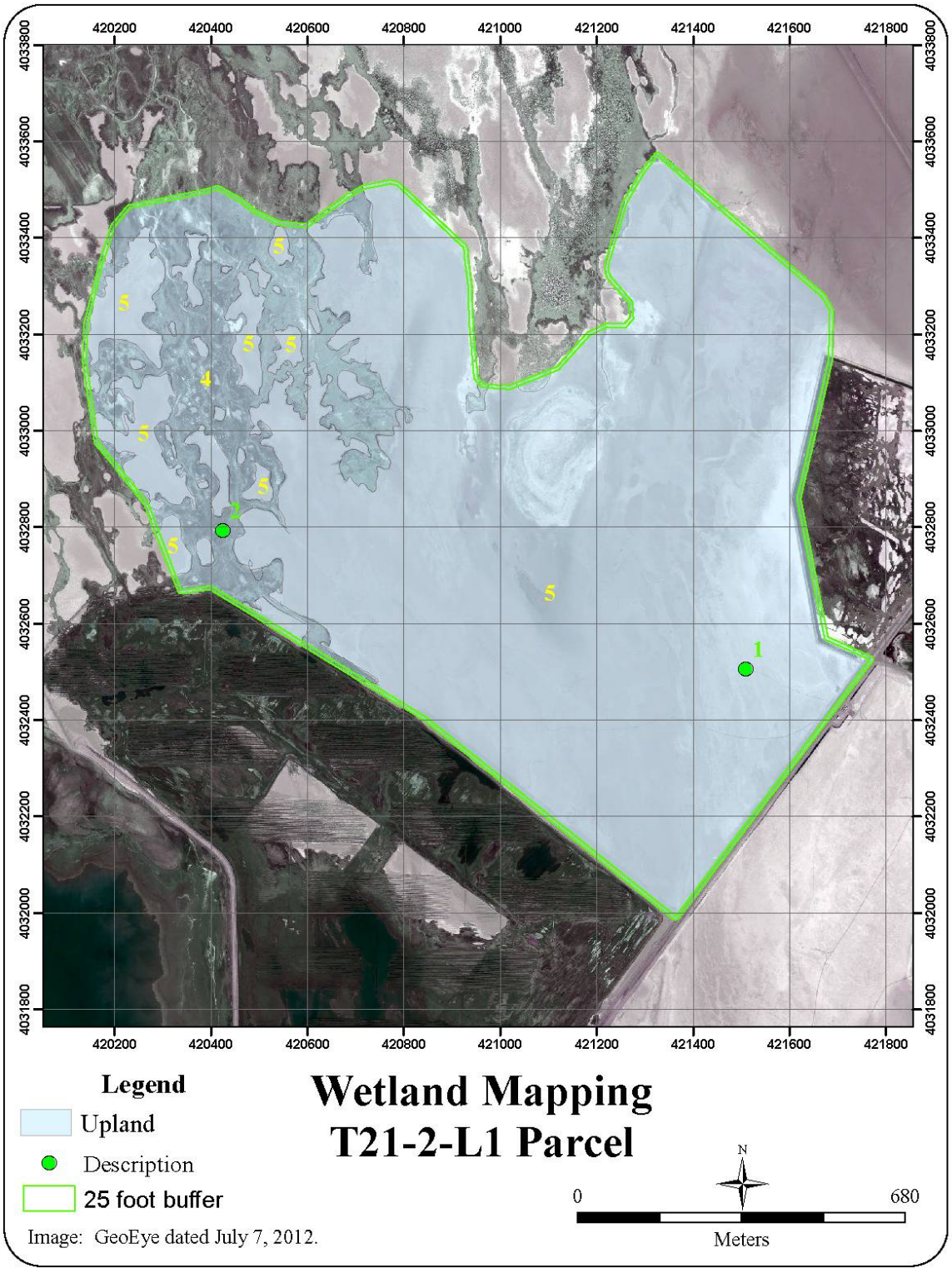
420400
420600
420800
421000
421200
421400
421600
421800
4033800
4033600
4033400
4033200
4033000
4032800
4032600
4032400
4032200
4032000
4031800
5
4
2
1
Legend
4 = Barren saturated playa
5 = Barren playa
Description
25 foot buffer
Image: GeoEye dated July 7, 2012.
Vegetation Mapping
T21-2-L1 Parcel
N
0
680
Meters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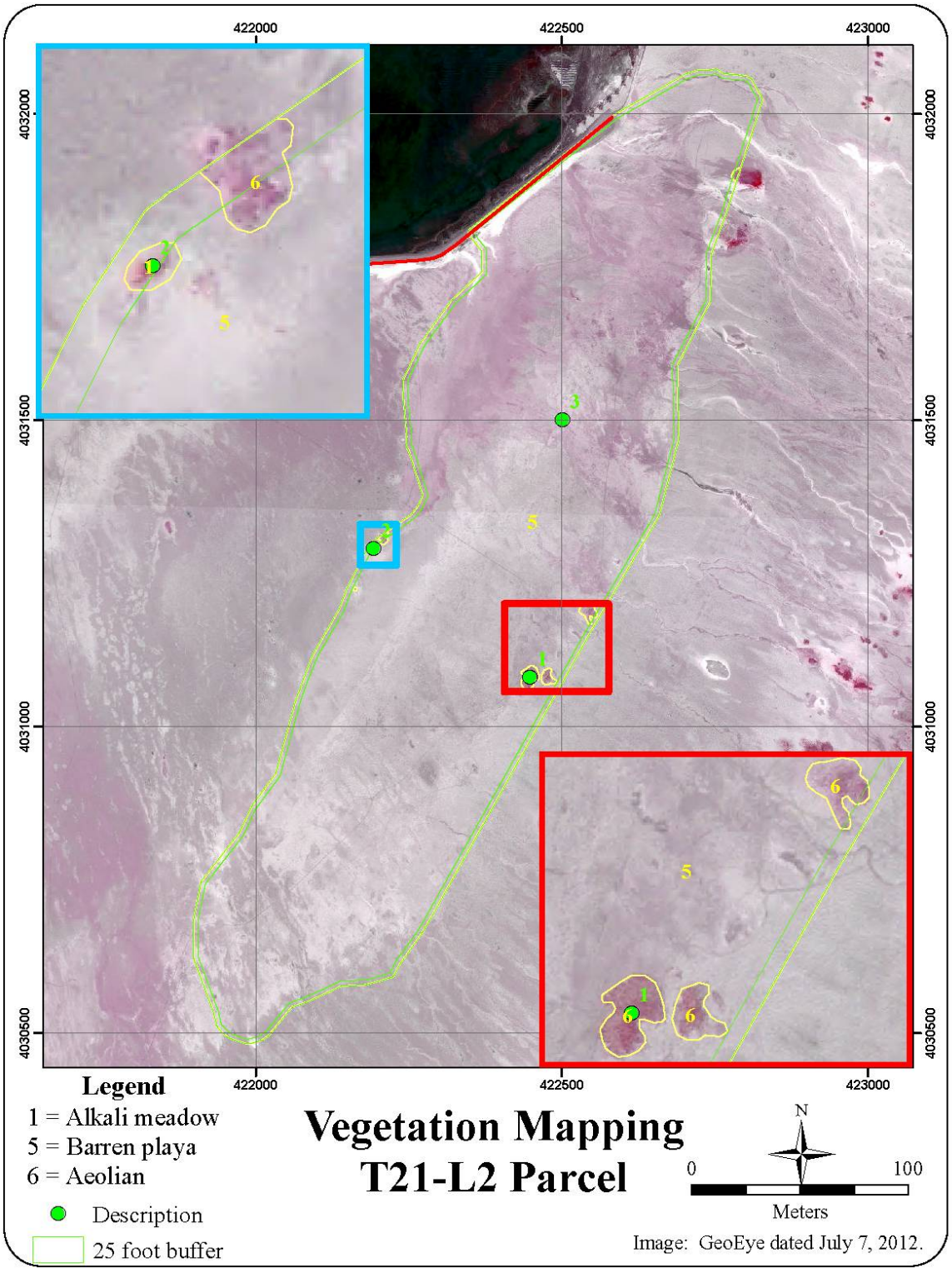
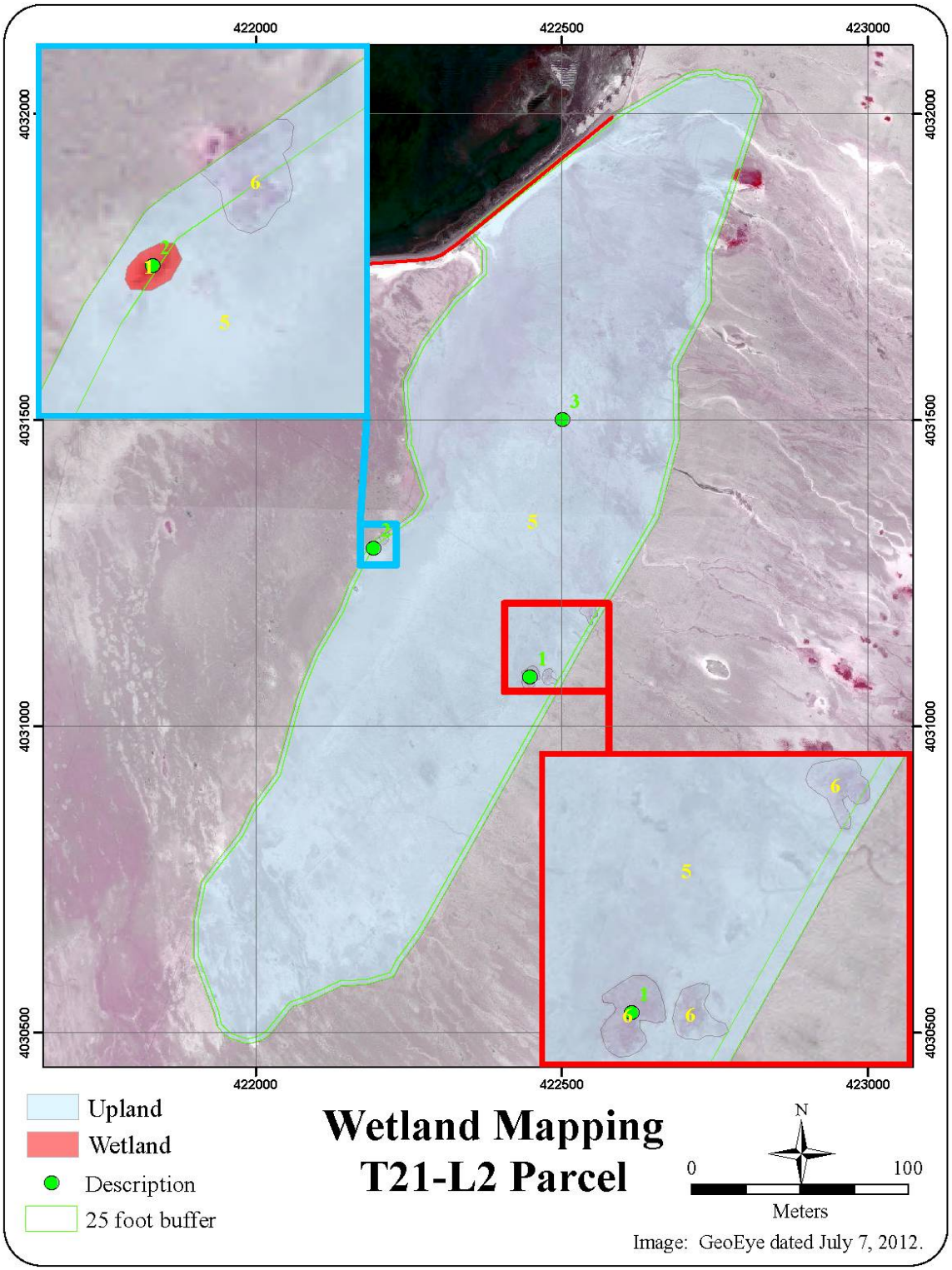
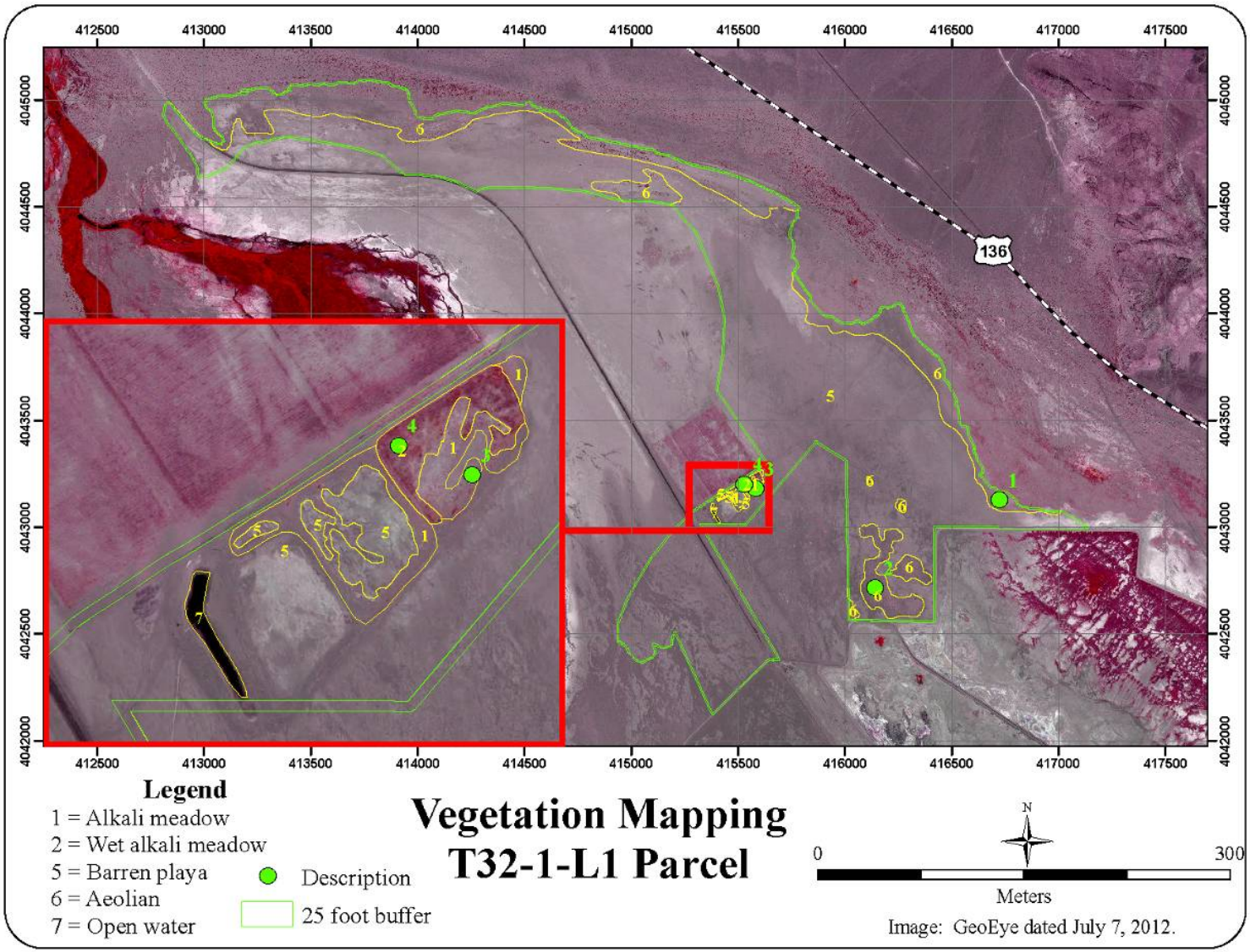
421400
421600
421800
4033800
4033600
4033400
4033200
4033000
4032800
4032600
4032400
4032200
4032000
4031800
5
4
2
1
Legend
Upland
Description
25 foot buffer
Image: GeoEye dated July 7, 2012.
Wetland Mapping
T21-2-L1 Parcel
N
0
680
Meters


422000
422500
423000
4032000
4031500
4031000
4030500
Legend
1 = Alkali meadow
5 = Barren playa
6 = Aeolian
Description
25 foot buffer
Vegetation Mapping
T21-L2 Parcel
N
0
100
Meters
Image: GeoEye dated July 7, 2012.


422000
422500
423000
4032000
4031500
4031000
4030500
Upland
Wetland
Description
25 foot buffer
Wetland Mapping
T21-L2 Parcel
N
0
100
Meters
Image: GeoEye dated July 7, 2012.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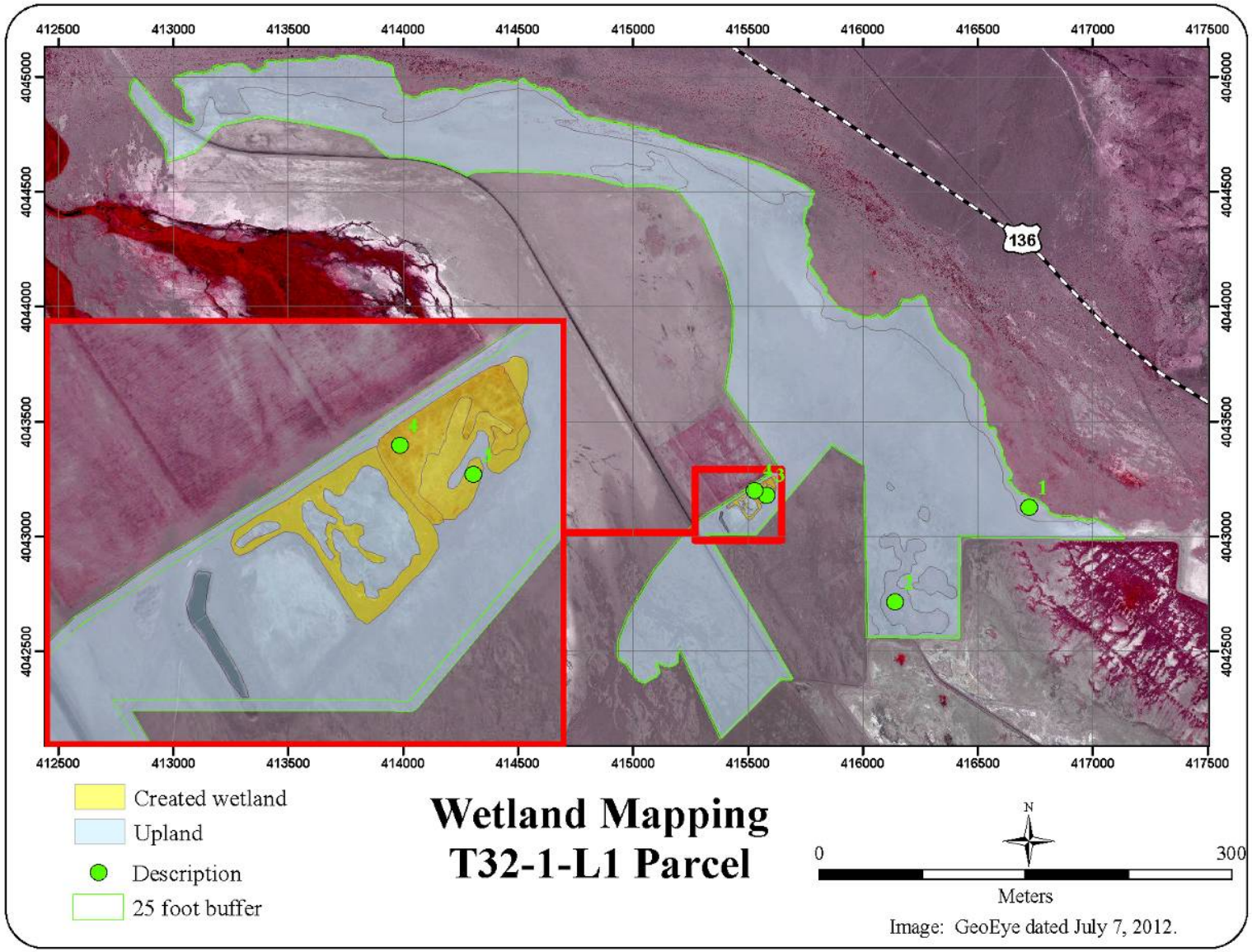
414500
415000
415500
416000
416500
417000
417500
4045000
4044500
4044000
4043500
4043000
4042500
4042000
136
Legend
1 = Alkali meadow
2 = Wet alkali meadow
5 = Barren playa
6 = Aeolian
7 = Open water
Description
25 foot buffer
Vegetation Mapping
T32-1-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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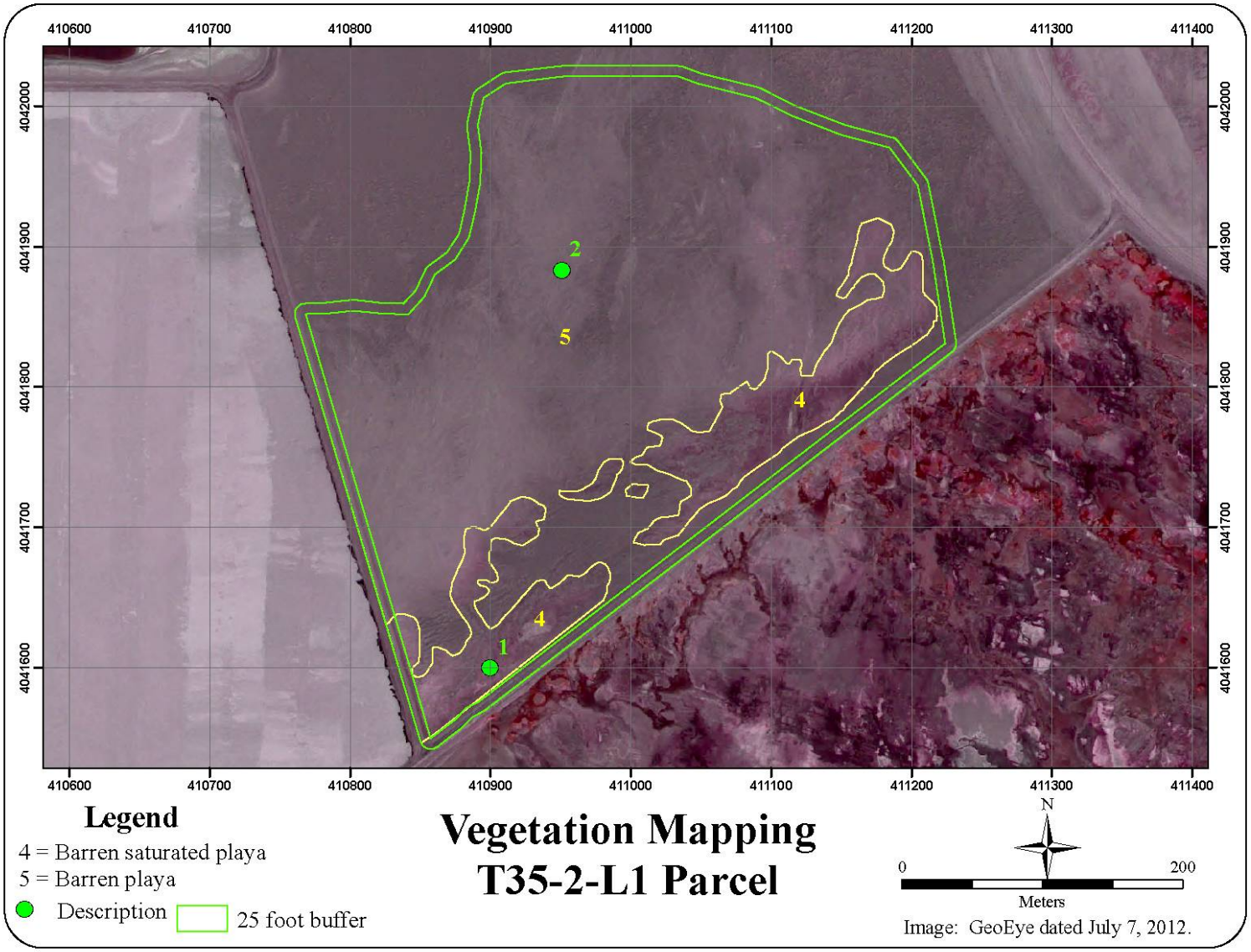
414000
414500
415000
415500
416000
416500
417000
417500
4045000
4044500
4044000
4043500
4043000
4042500
136
1
3
Created wetland
Upland
Description
25 foot buffer
Wetland Mapping
T32-1-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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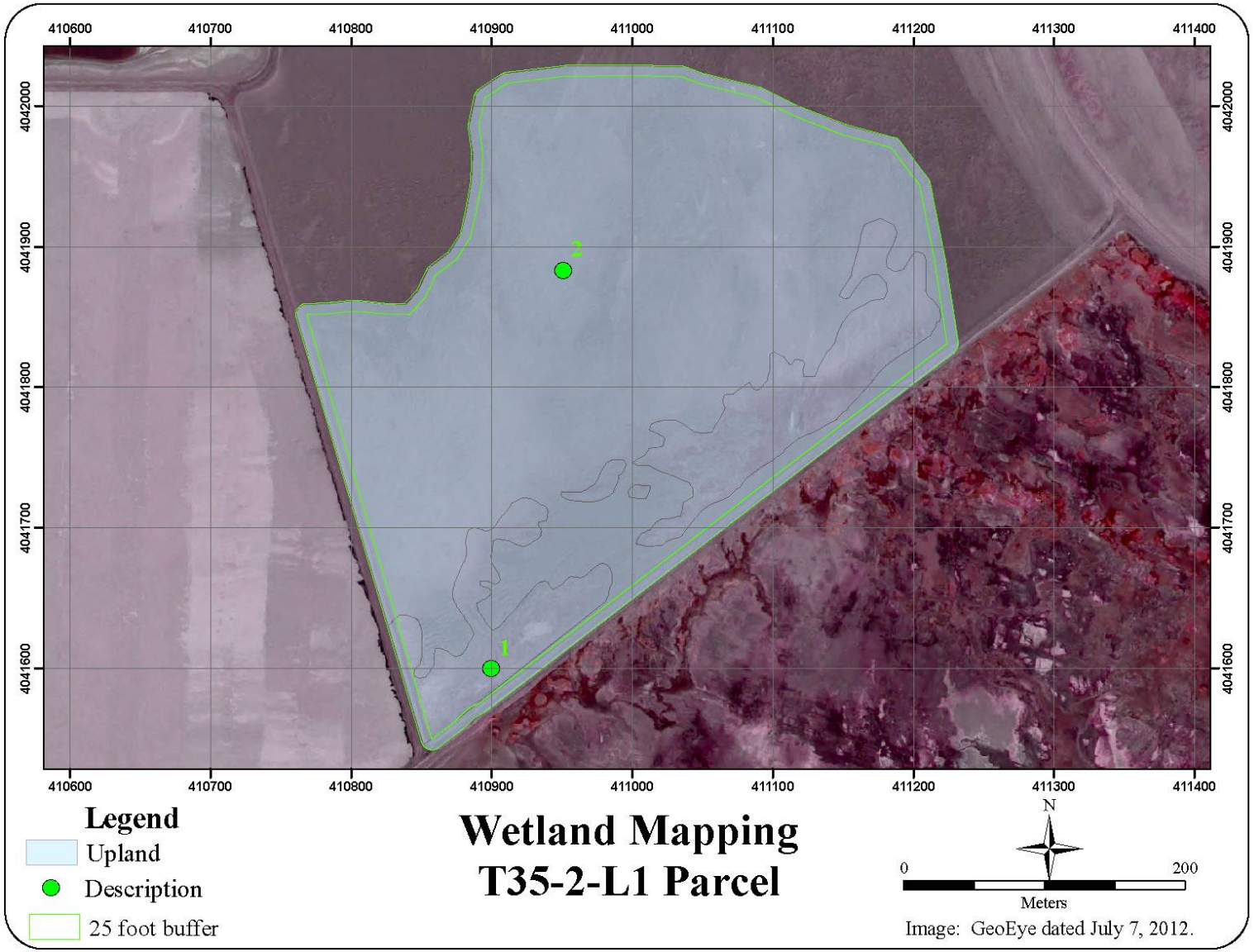
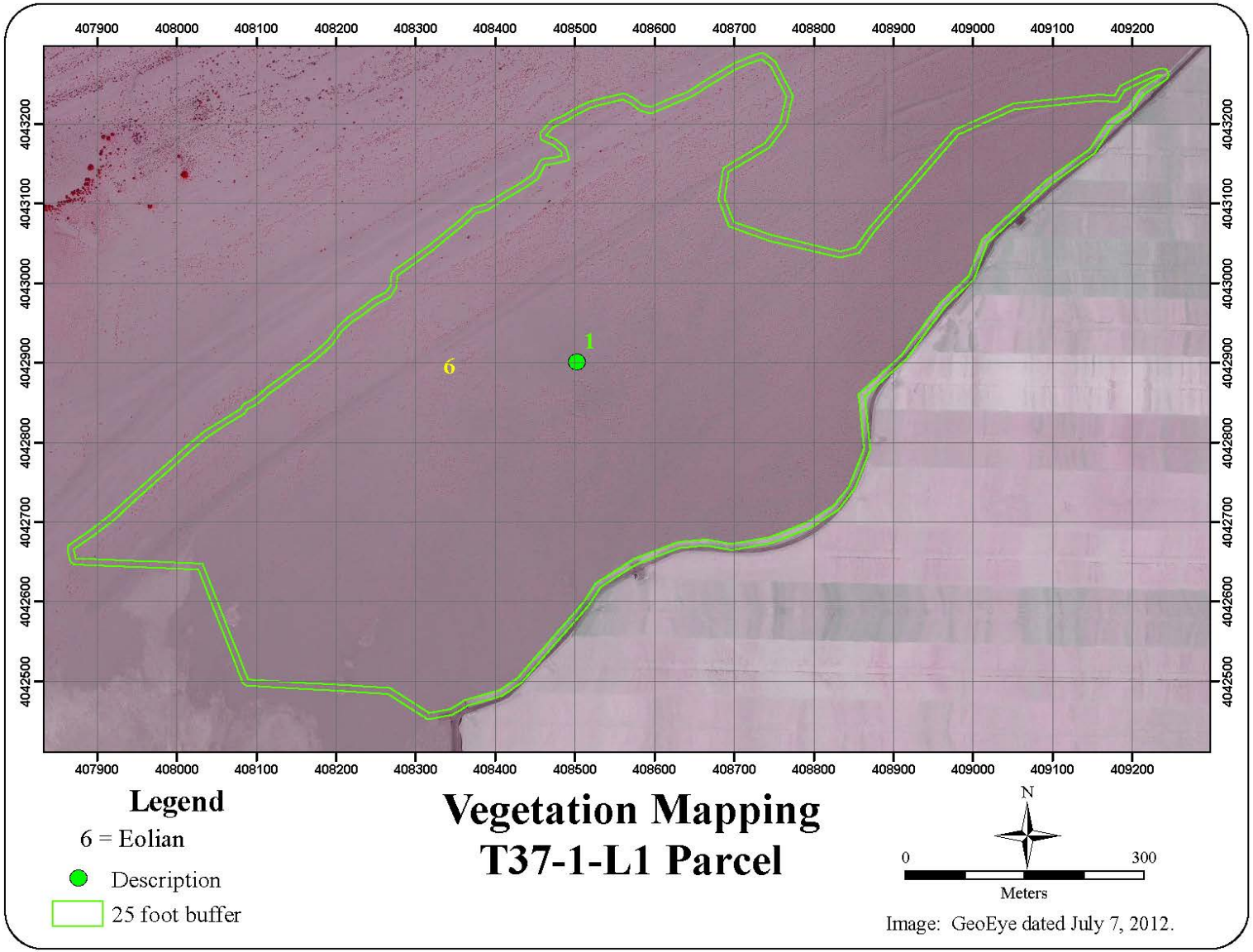
410700
410800
410900
411000
411100
411200
411300
411400
4042000
4041900
4041800
4041700
4041600
2
5
4
4
1
Legend
4 = Barren saturated playa
5 = Barren playa
Description
25 foot buffer
Vegetation Mapping
T35-2-L1 Parcel
N
0
200
Meters
Image: GeoEye dated July 7, 2012.


410600
410700
410800
410900
411000
411100
411200
411300
411400
4042000
4041900
4041800
4041700
4041600
2
1
Legend
Upland
Description
25 foot buffer
Wetland Mapping
T35-2-L1 Parcel
N
0
200
Meters
Image: GeoEye dated July 7, 2012.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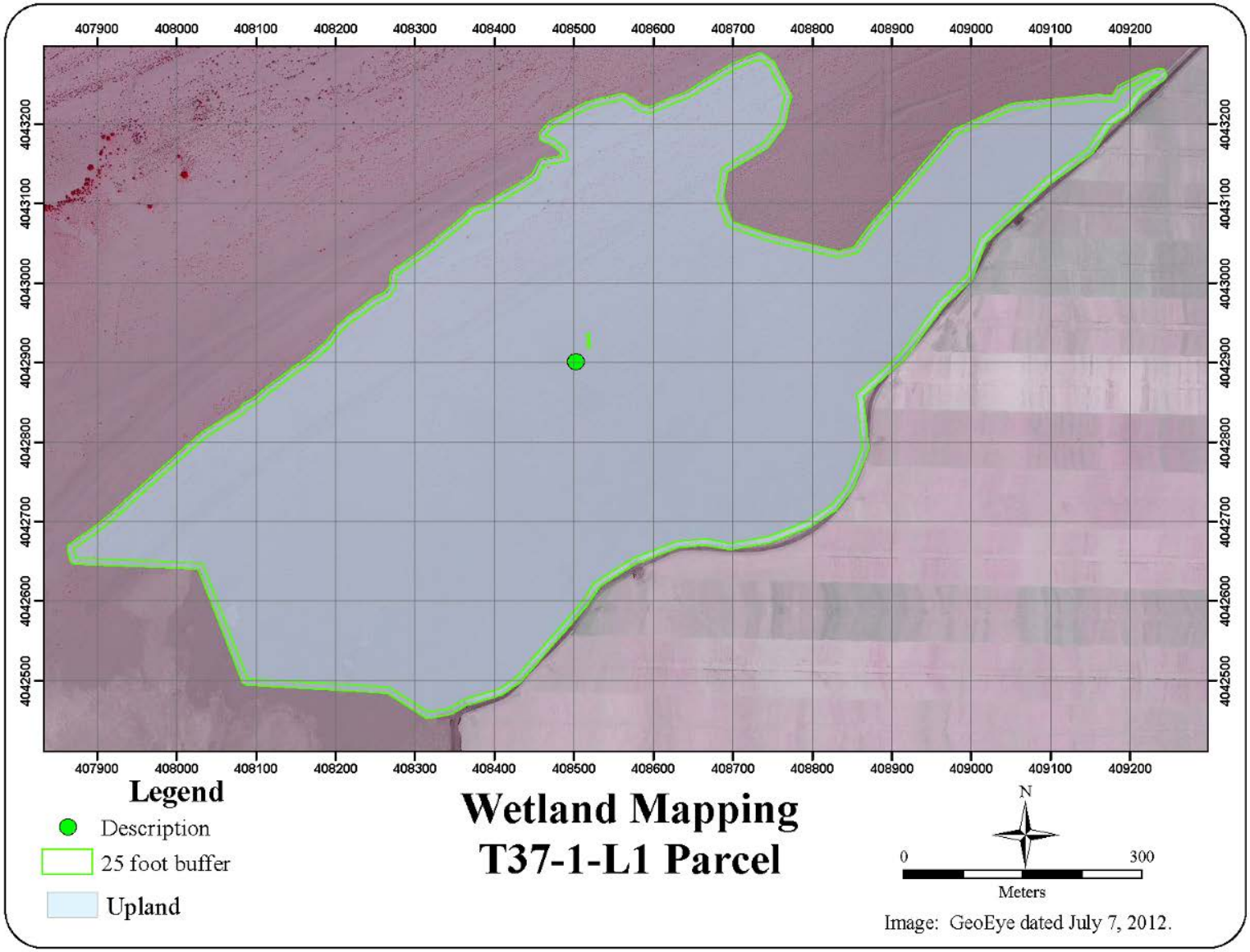
408800
408900
409000
409100
409200
4043200
4043100
4043000
4042900
4042800
4042700
4042600
4042500
6
1
Legend
6 = Eolian
Description
25 foot buffer
Vegetation Mapping
T37-1-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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408400
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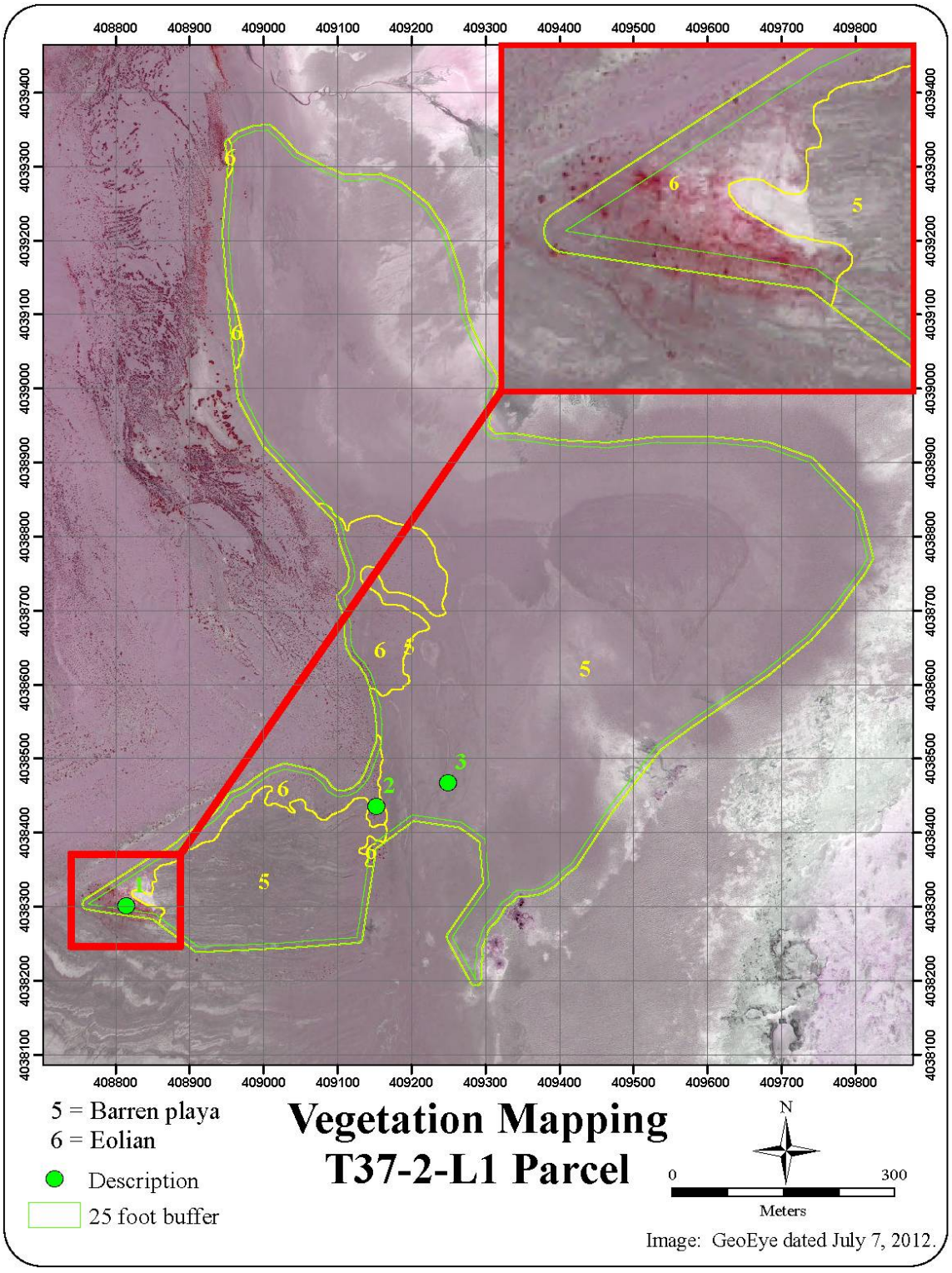
408800
408900
409000
409100
409200
4043200
4043100
4043000
4042900
4042800
4042700
4042600
4042500
Legend
Description
25 foot buffer
Upland
Wetland Mapping
T37-1-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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409400
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409600
409700
409800
4039400
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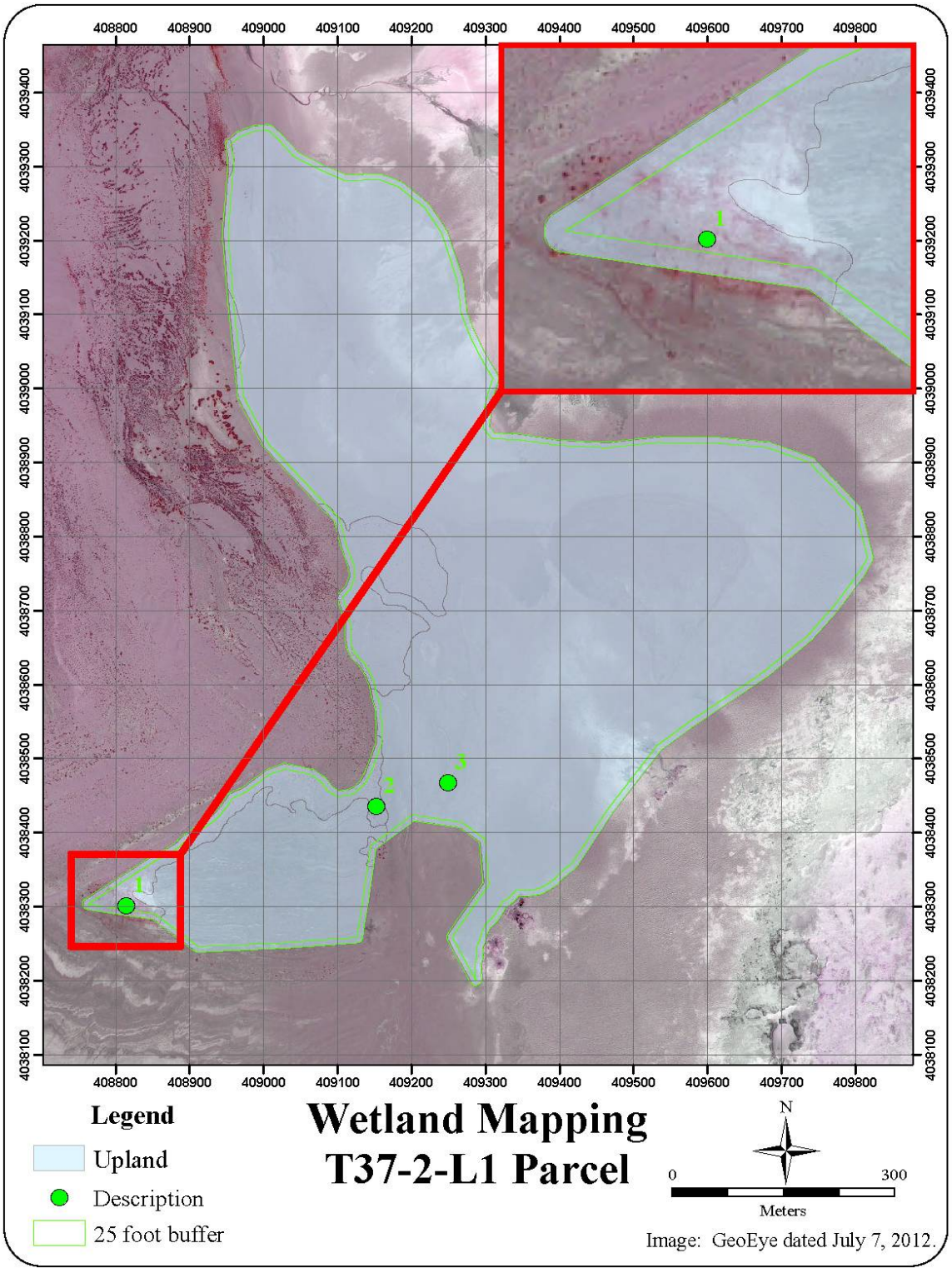
4039100
4039000
4038900
4038800
4038700
4038600
4038500
4038400
4038300
4038200
4038100
6
5
1
2
3
5 = Barren playa
6 = Eolian
Description
25 foot buffer
Vegetation Mapping
T37-2-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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409500
409600
409700
409800
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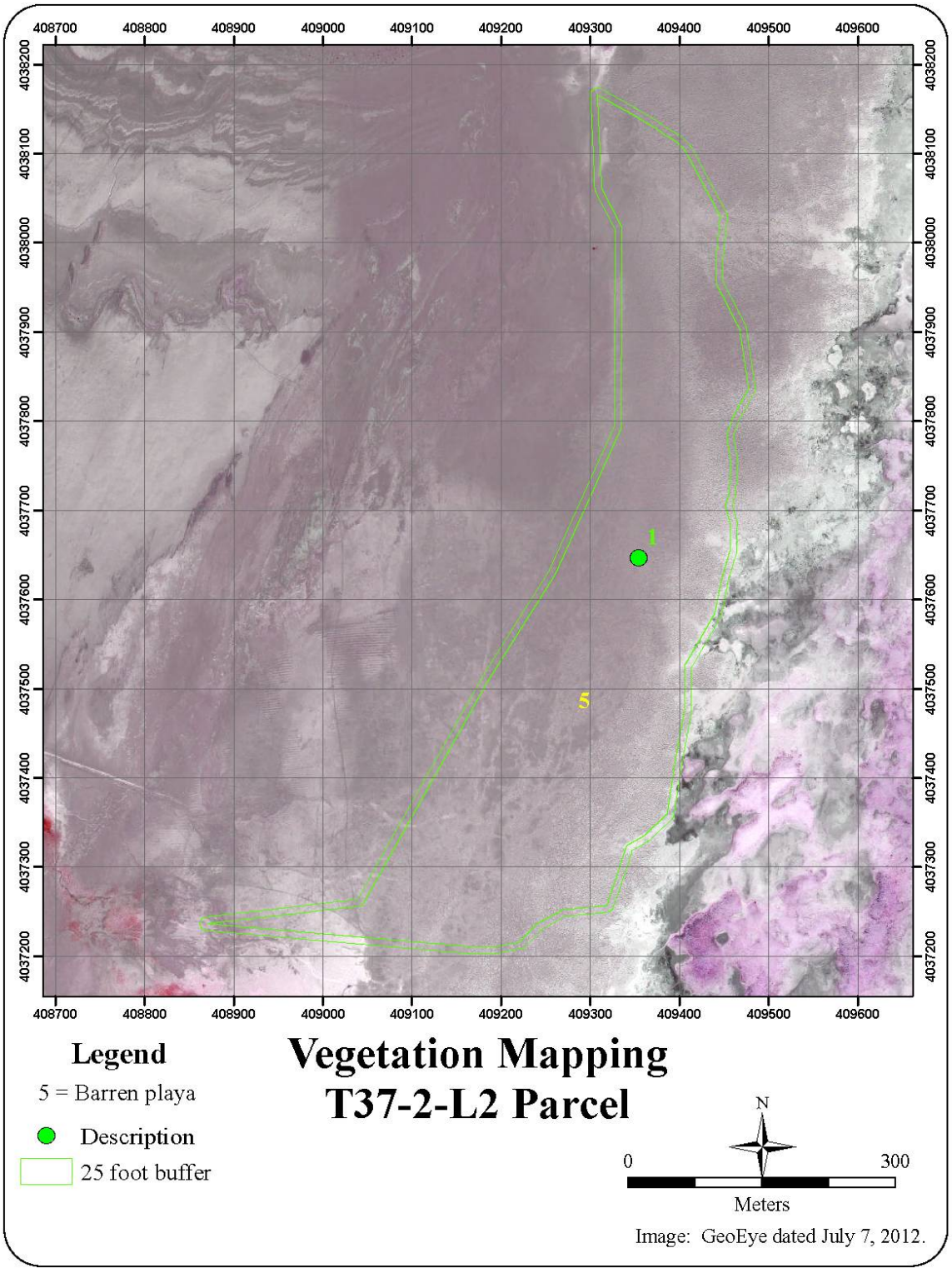
4039100
4039000
4038900
4038800
4038700
4038600
4038500
4038400
4038300
4038200
4038100
1
2
3
Legend
Upland
Description
25 foot buffer
Wetland Mapping
T37-2-L1 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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408800
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409100
409200
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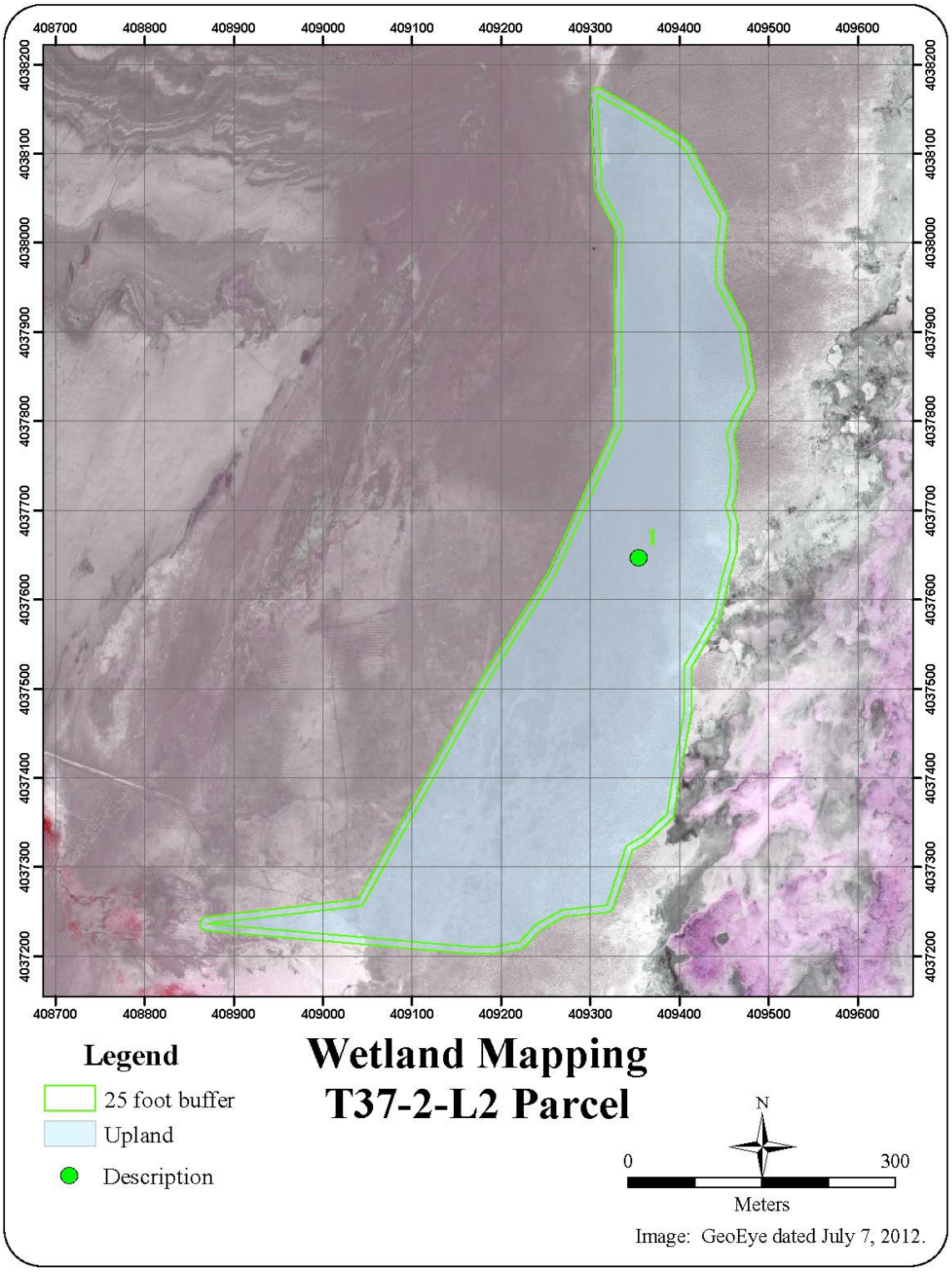
409400
409500
409600
4038200
4038100
4038000
4037900
4037800
4037700
4037600
4037500
4037400
4037300
4037200
1
5
Legend
5 = Barren playa
Description
25 foot buffer
Vegetation Mapping
T37-2-L2 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.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408800
408900
409000
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409200
409300
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409500
409600
4038200
4038100
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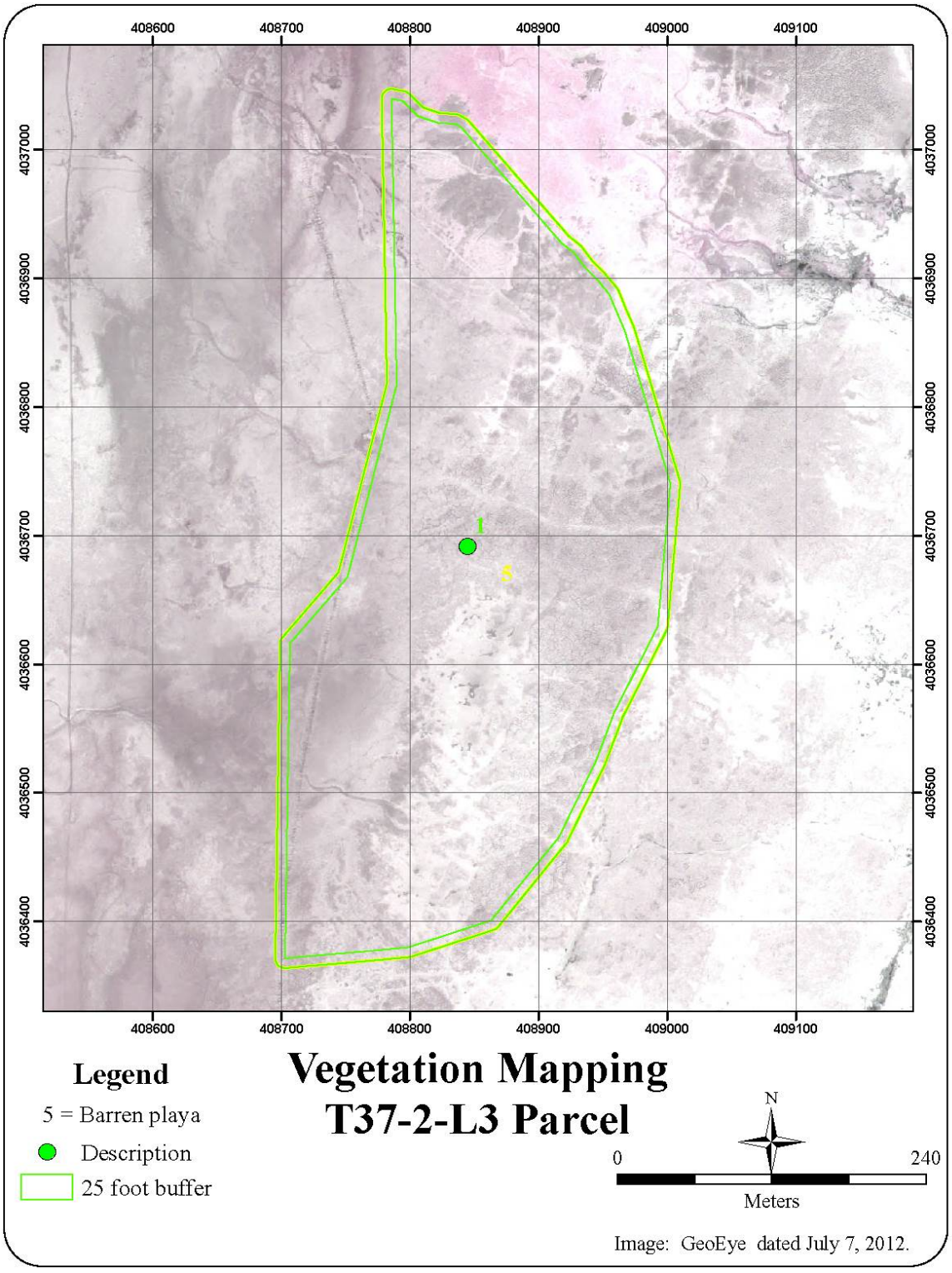
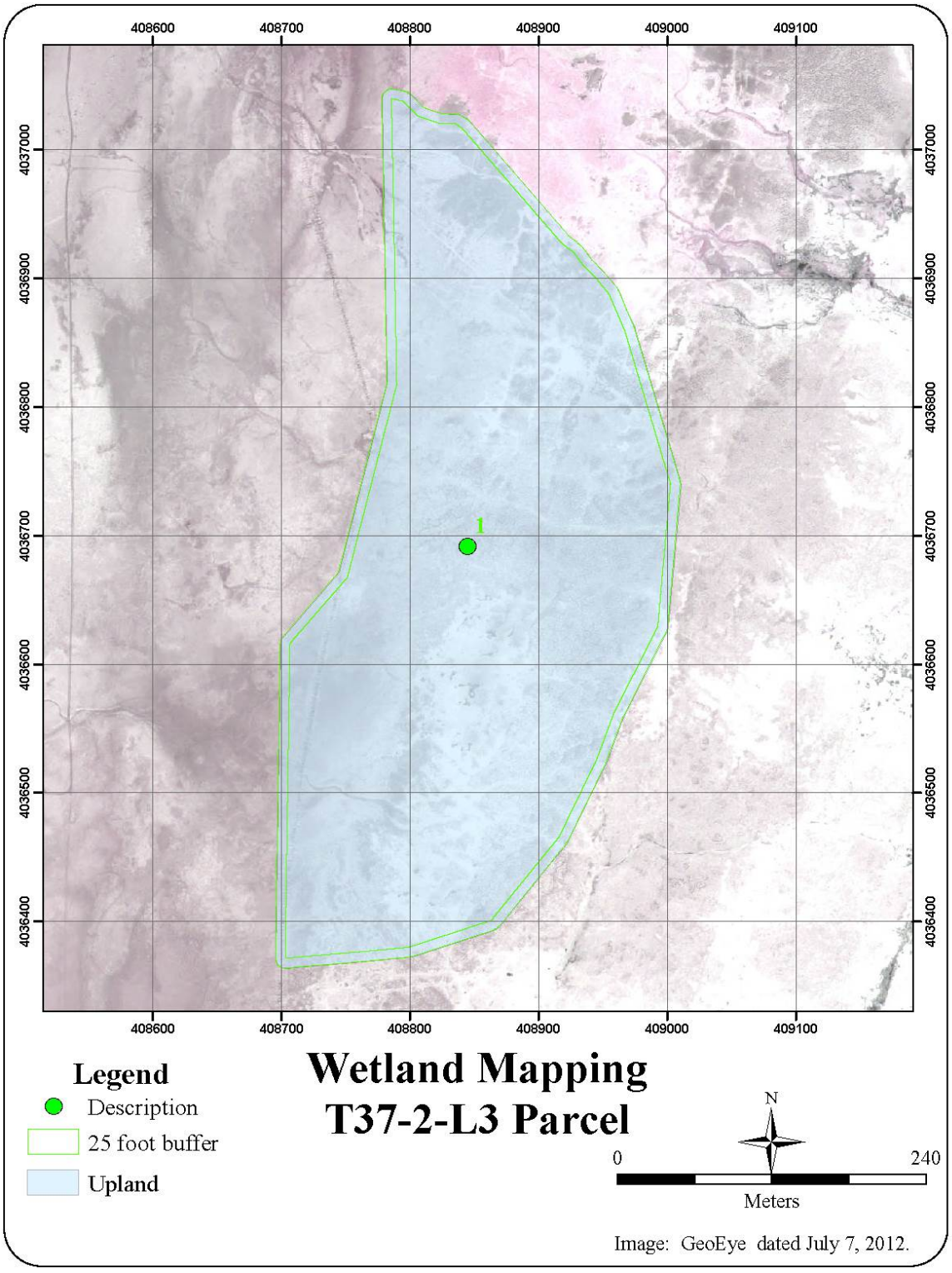
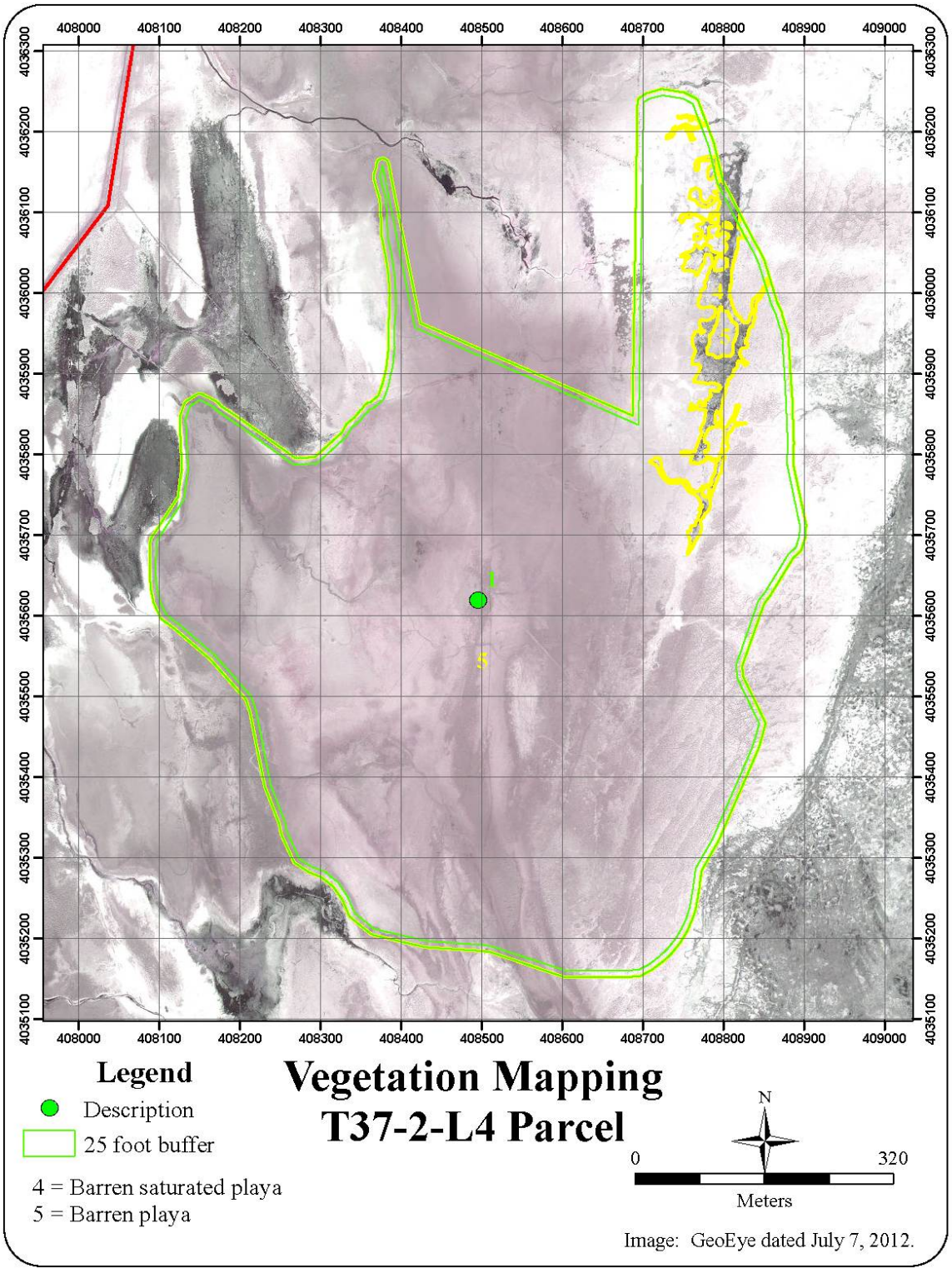
4037900
4037800
4037700
4037600
4037500
4037400
4037300
4037200
Legend
25 foot buffer
Upland
Description
Wetland Mapping
T37-2-L2 Parcel
N
0
300
Meters
Image: GeoEye dated July 7, 2012.


408600
408700
408800
408900
409000
409100
4037000
4036900
4036800
4036700
4036600
4036500
4036400
1
5
Legend
5 = Barren playa
Description
25 foot buffer
Vegetation Mapping
T37-2-L3 Parcel
N
0
240
Meters
Image: GeoEye dated July 7, 2012.


408600
408700
408800
408900
409000
409100
4037000
4036900
4036800
4036700
4036600
4036500
4036400
1
Legend
Description
25 foot buffer
Upland
Wetland Mapping
T37-2-L3 Parcel
N
0
240
Meters
Image: GeoEye dated July 7, 2012.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408100
408200
408300
408400
408500
408600
408700
408800
408900
409000
4036300
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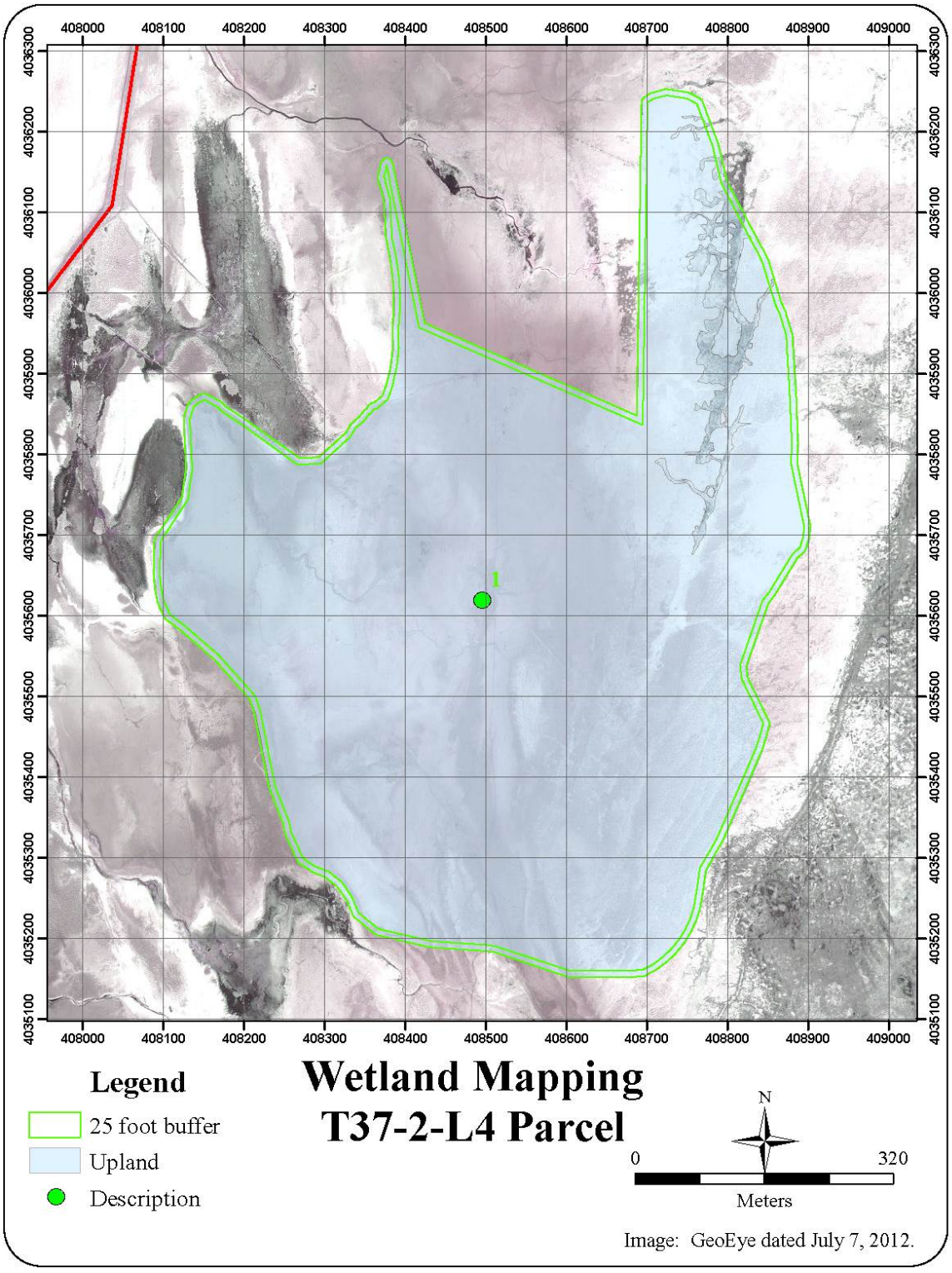
4036100
4036000
4035900
4035800
4035700
4035600
4035500
4035400
4035300
4035200
4035100
1
5
Legend
Description
25 foot buffer
4 = Barren saturated playa
5 = Barren playa
Vegetation Mapping
T37-2-L4 Parcel
N
0
320
Meters
Image: GeoEye dated July 7, 2012.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408100
408200
408300
408400
408500
408600
408700
408800
408900
409000
4036300
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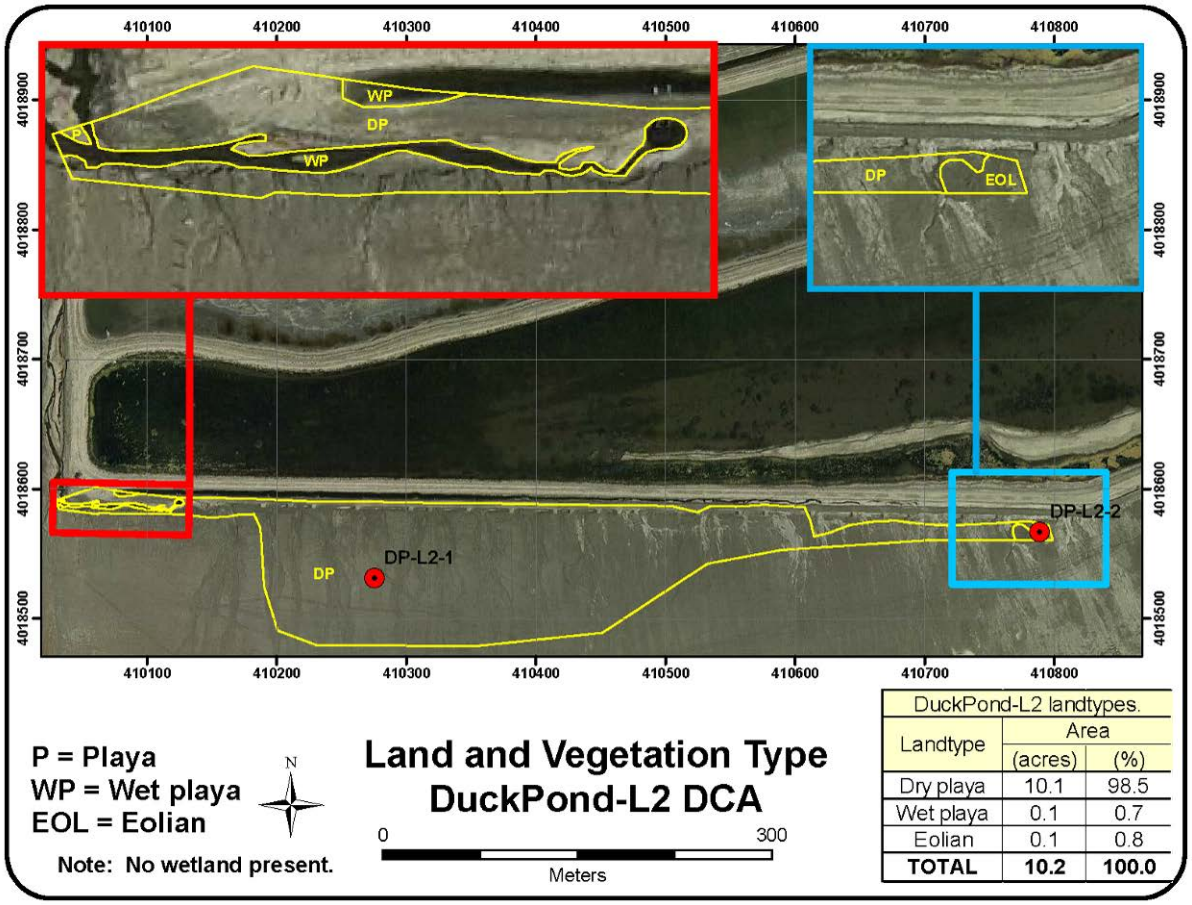
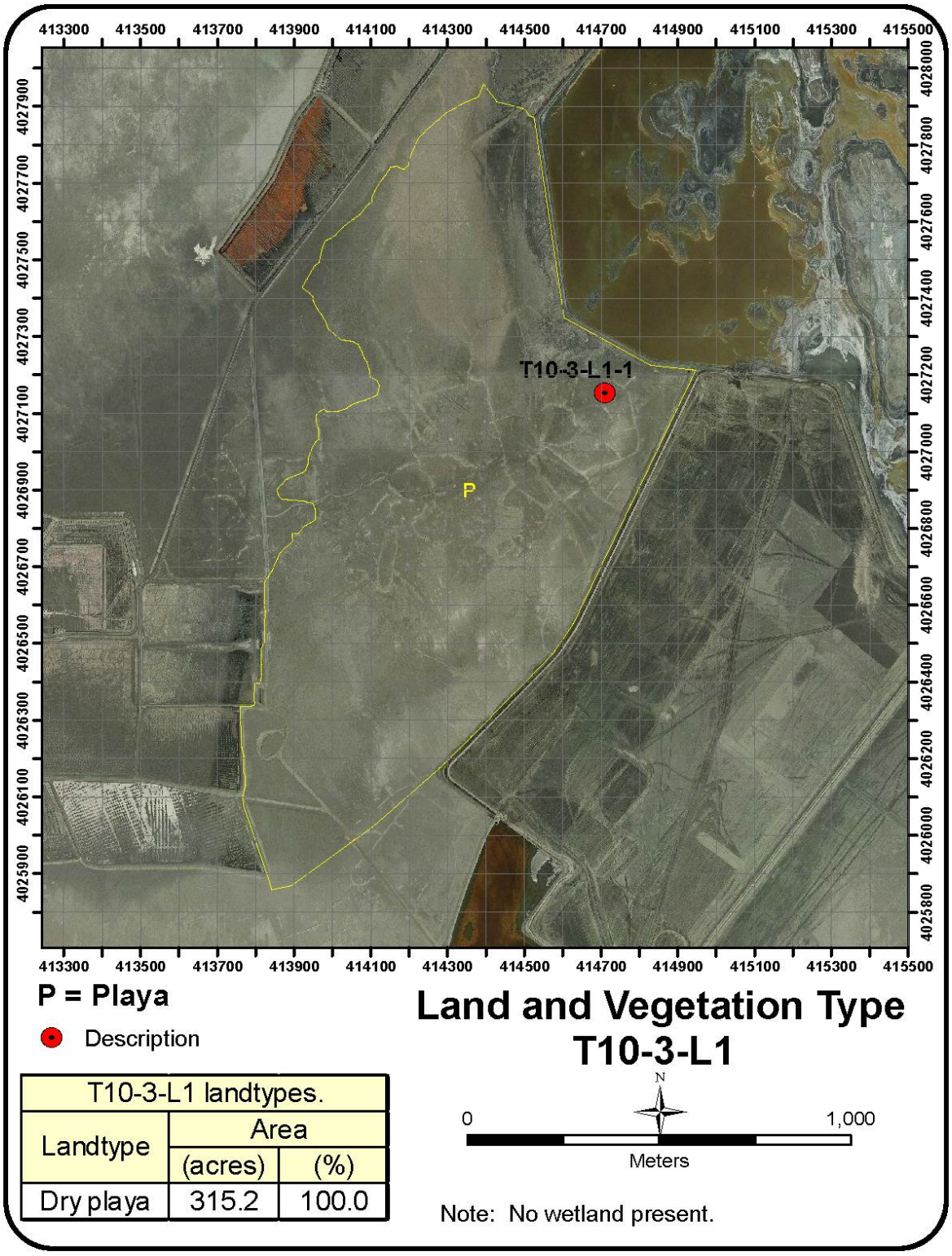
4036100
4036000
4035900
4035800
4035700
4035600
4035500
4035400
4035300
4035200
4035100
1
Legend
25 foot buffer
Upland
Description
Wetland Mapping
T37-2-L4 Parcel
N
0
320
Meters
Image: GeoEye dated July 7, 2012.

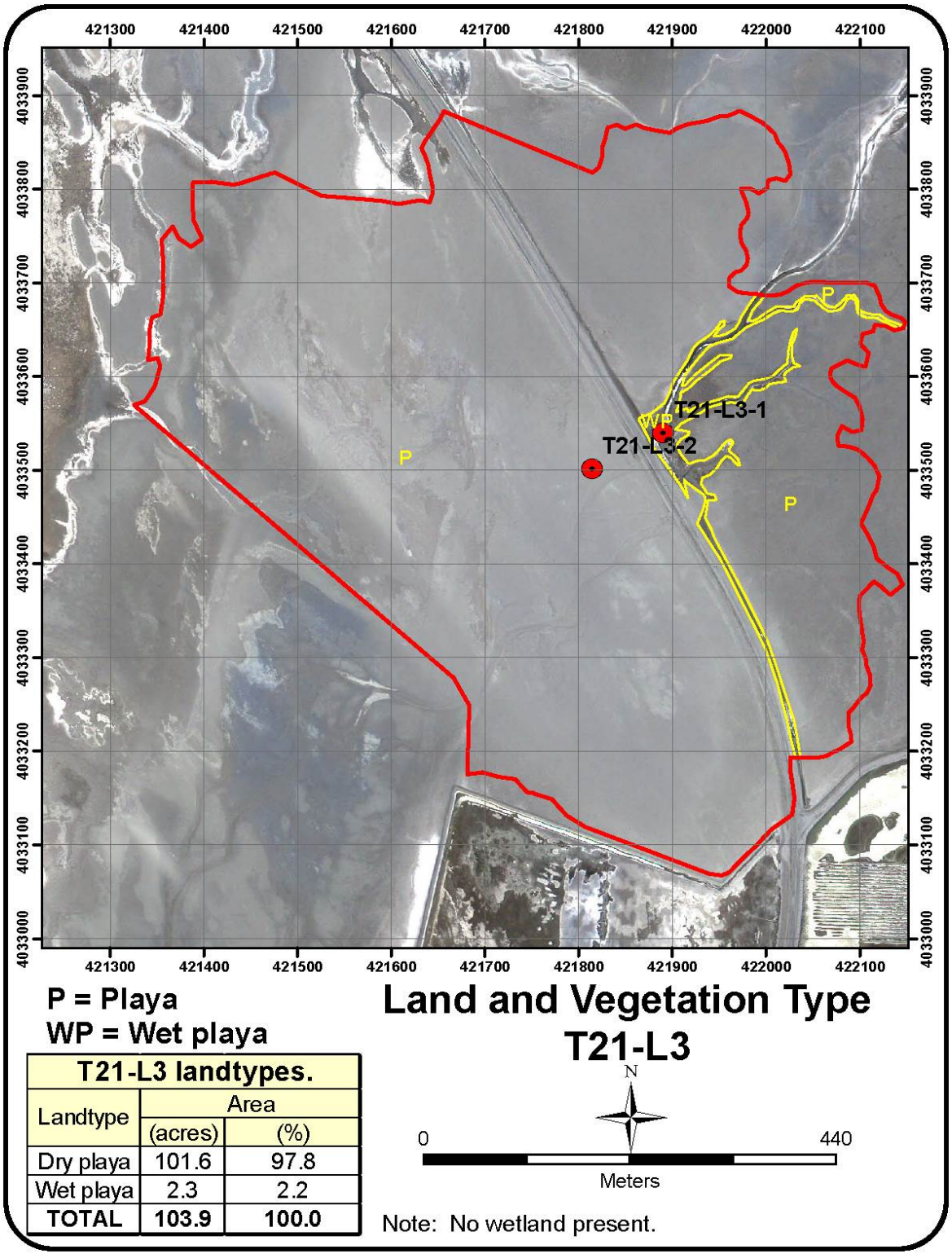


DuckPond-L2 landtypes.

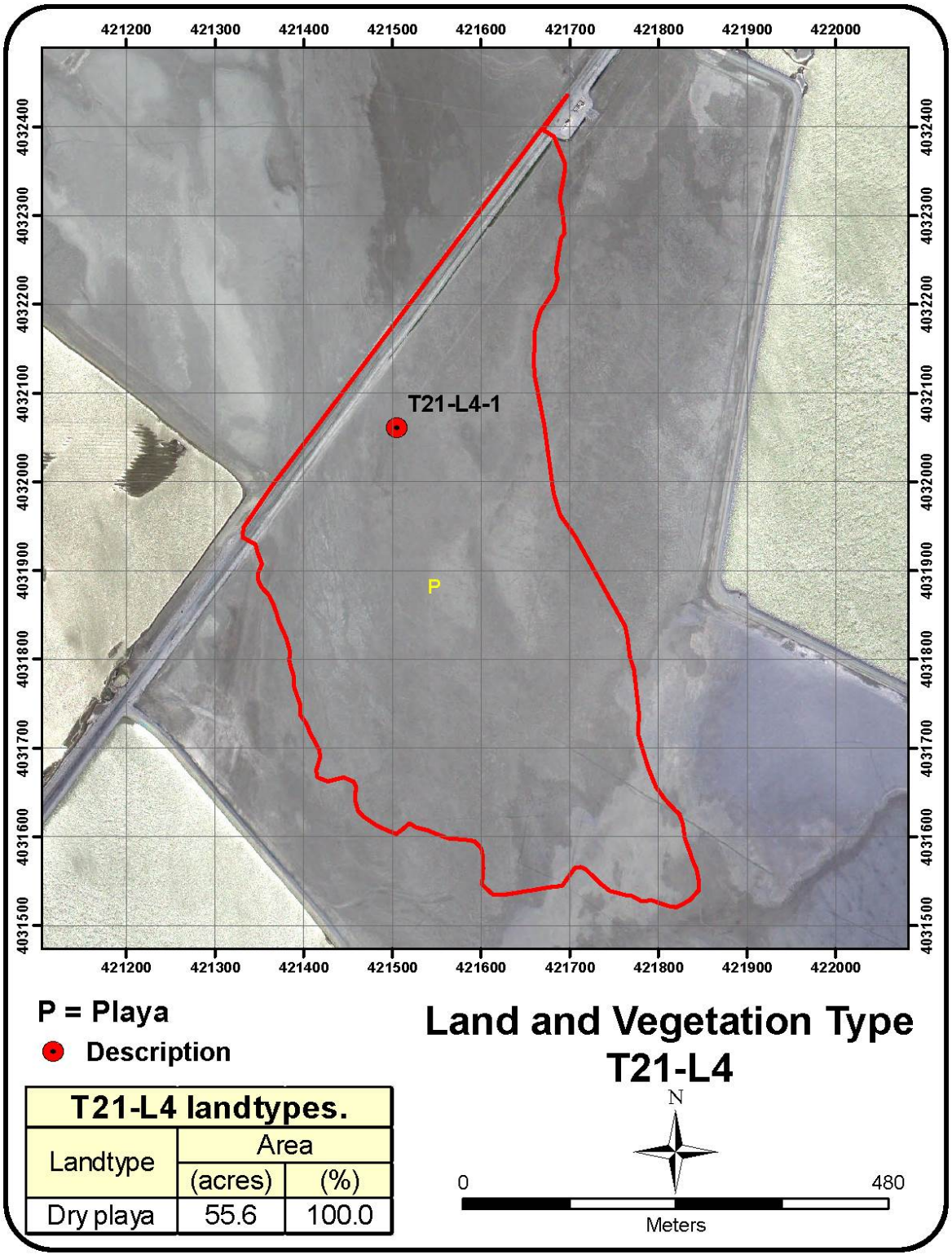
Landtype	Area (acres)	Area (%)
Dry playa	10.1	98.5
Wet playa	0.1	0.7
Eolian	0.1	0.8
TOTAL	**10.2**	**100.0**



T10-3-L1 landtypes.		
Landtype	Area	
	(acres)	(%)
Dry playa	315.2	100.0



T21-L3 landtypes.		
Landtype	Area	
	(acres)	(%)
Dry playa	101.6	97.8
Wet playa	2.3	2.2
TOTAL	**103.9**	**100.0**



T21-L4 landtypes.		
Landtype	Area	
	(acres)	(%)
Dry playa	55.6	100.0