



Great Basin Unified Air Pollution Control District

*2019-2020 Fiscal Year
SB270 Budget and Fee Assessment*

Final – April 2, 2019

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BUDGET AND FEE ASSESSMENT SUMMARY

Introduction

The annual SB 270 fee assessment is the Great Basin Unified Air Pollution Control District's (District) estimate of the reasonable cost of maintaining the level of effort necessary to address violations of state and federal air quality standards due to water-gathering activities by the City of Los Angeles Department of Water and Power (LADWP) within the District's boundaries (Inyo, Mono, and Alpine counties). The assessment is a reasonable fee as provided for in Section 42316 of the California Health and Safety Code. The fee funds the cost of monitoring air quality impacts caused by the LADWP's water-gathering activities, the development of air quality plans, monitoring the LADWP's implementation of control measures, enforcing control measure performance, and control measure research. The fee includes the costs associated with all District employees working on SB 270 matters, general recurring operating costs, the cost of enforcing air quality requirements, long-term or ongoing project costs, funding for dust source research and consulting (professional services) and capital outlay costs. For 2019-2020, the fee includes costs for equipment and consulting associated with the implementation of the 2016 SIP Board Order¹ adopted on April 13, 2016, the Phase 9/10² EIR, the December 2014 Stipulated Judgment,³ and the 2010 Coso Junction Maintenance Plan⁴.

SB 270 Fee Components

The SB 270 fee includes the estimated cost of all District employees (wages and benefits), operating costs (rent, utilities, insurance, supplies, travel and professional services associated with regular budget activities), and equipment costs associated with compliance monitoring and enforcement of the LADWP's efforts to control the air pollution caused by its water-gathering activities in the District. The proposed fee total is \$6,065,781. Compared to the 2018-2019 fee total of \$5,118,500, the proposed fee total represents an increase of 18.51% (\$947,281). The 2019-2020 budget contains estimates in each category to meet commitments made by the District in the 2016 SIP Board Order¹, Phase 9/10² EIR, December 2014 Stipulated Judgment³, and 2010 Coso Junction Maintenance Plan⁴. These commitments include: 1) maintenance and replacement of air monitoring equipment at Owens Lake; 2) consultant fees necessary to carry out committed regulatory and compliance tasks at Owens Lake and Mono Lake; and 3) the December 2014 Stipulated Judgment³ to implement the terms of the stipulation and agreement. The assessment is summarized in Table 1, with further detailed budget items in Table 2. The personnel associated with the SB 270 assessment are summarized in Table 3. Table 4 is a listing of all professional services contracts over \$25,000. A graphic comparison of this year's assessment with previous years is shown in Figure 1. The increase in the proposed fee from the 2018-2019 fee is detailed in the Fee Assessment Details section of this document.

¹ 2016 Owens Valley PM10 Planning Area Demonstration of Attainment State Implementation Plan (2016 SIP).

² Owens Lake Dust Mitigation Program – Phase 9/10 Project Environmental Impact Report (Phase 9/10 EIR). Previous Project Name: Owens Lake 2011 SCR and 2012 SCR Dust Control Measures Projects.

³ Sacramento County Superior Court No. 34-2013-80001451-CU-WM-GDS (2014 Stipulated Judgment)

⁴ See 2010 PM₁₀ Maintenance Plan and Redesignation Request for the Coso Junction Planning Area (CJPA). Windblown dust from uncontrolled areas at Owens Lake have been found to contribute to exceedances of the federal PM₁₀ standard in the CJPA. Costs associated with air quality monitoring in the CJMP are included in the SB270 budget and fee for operation of the Owens Lake monitoring network.

The Stipulated Judgment entered by the California Superior Court on December 30, 2014 (2014 Stipulated Judgment) included resolutions of several dust control matters at Owens Lake⁵.

The 2014 Stipulated Judgment provides for financial support by the LADWP of the Owens Lake Scientific Advisory Panel (OLSAP). Initial funding for the OLSAP in the amount of \$750,000 was made pursuant to fee orders by the District per California Health & Safety Code §42316 for FY 2015-2016. The LADWP is responsible for providing additional funding to the OLSAP for reporting and analyzing new and relevant testing data up to \$2,000,000 annually. Approval of a contract agreement with the National Academy of Sciences occurred on November 1, 2018 (Board Order #181101-04), with subsequent OLSAP activation taking place shortly thereafter. The OLSAP began working on the first task (Task 1). Task 1 is scheduled to take 18 months, through April 2020, at which time the OLSAP is anticipated to start work on the second task (Task 2). The total cost for Task 1 is \$850,871. The \$750,000 available from FY 2015-2016 is being used to fund the initial work for Task 1. The difference of \$100,781 between the amount of funds available from 2015-2016 and the overall cost of Task 1 is included in the budget for FY2019-2020. Anticipated expenditures for starting Task 2 is \$100,000. Thus, the total funding from the LADWP in 2019-2020 for the OLSAP is \$200,781.

Summary

In 2012, the LADWP failed to pay \$1,141,164 in SB270 fees ordered by the District. The District was forced to file a lawsuit in Inyo County Superior Court on August 31, 2012 (which was transferred to Kern County Superior Court, Case No. S-1500-CV-277962, SPC) to compel the LADWP to pay. The Court ordered the LADWP to make the payment and it did so on January 24, 2013.

A trial on the merits of the case was scheduled for October 21, 2013 and was continued until February 10, 2014. Trial was averted by entry of a Stipulated Judgment on February 13, 2014 and a Settlement Agreement by which the LADWP paid \$1,350,000 to the District as an environmental public benefit payment for solar power to public service districts and \$1.2 million to support District activities to reduce air pollution emissions.

The LADWP and District agreed, among other things, that several categories of fees under Health & Safety Code Section 42316 are legally valid. Included are the District's legal fees to respond to the LADWP's administrative comments, appeals, lawsuits, and other legal challenges related to H&S Section 42316, as well as costs of government (i.e. employee costs and overhead). The Stipulated Judgment for the District also required the LADWP to dismiss four (4) fee order appeals before the California Air Resources Board (CARB).

⁵ 2011 SCRD, 2012 SCRD, 2013 SCRD, 2014 SCRD (2014 Stipulated Judgment p. 17-18).

On December 16, 2014, the Sacramento County Superior Court issued a ruling denying the LADWP's petition requesting that CARB's 2011 SCRD decision in favor of the District, be overturned. On December 30, 2014, the Sacramento Superior Court approved a stipulated judgment (2014 Stipulated Judgment⁶) in favor of the District requiring completion of dust control measures at Owens Lake. This ruling follows prior decisions by other courts in favor of the District, the California Air Resources Board, and the State Lands Commission, which were sued by the LADWP.

The 2014 Stipulated Judgment negotiated between the District Governing Board and the LADWP Board of Commissioner settled the dispute initiated with the 2011 SCRD. It brought closure to a long series of legal battles primarily between the District and the LADWP that started in 2011. More importantly, it will result in the LADWP completing dust control measures on approximately 48.6 square miles of the Owens Lake bed, while also saving water, and ultimately bringing the Owens Valley Planning Area into compliance with federal and state air quality standards. The LADWP and the District made many new commitments that are contained in the 2014 Stipulated Judgment. Also detailed are the common goals of the District and the LADWP to implement required dust control measure to meet federal and state air quality standards, conserve water, and minimize impacts to cultural and biological resources at Owens Lake.

On April 13, 2016, the Great Basin Governing Board (Board) approved and adopted the following Board actions: 1) Board Order (BO) #160413-01 Requiring the City of Los Angeles to Undertake Measures to Control PM10 Emissions from the Dried Bed of Owens as authorized by California Health & Safety Code Section 42316 (CHSC 42316); 2) Great Basin Unified Air Pollution Control District Rule 433 - Control of Particulate Emissions at Owens Lake; and 3) 2016 Owens Valley Planning Area (OVPA) PM10 Demonstration of Attainment State Implementation Plan (2016 SIP). The SB270 budget contained herein provides for successful implementation and enforcement of Board Order #160413-01, Rule 433, and the 2016 OVPA SIP.

⁶Sacramento County Superior Court No. 34-2013-80001451-CU-WM-GDS

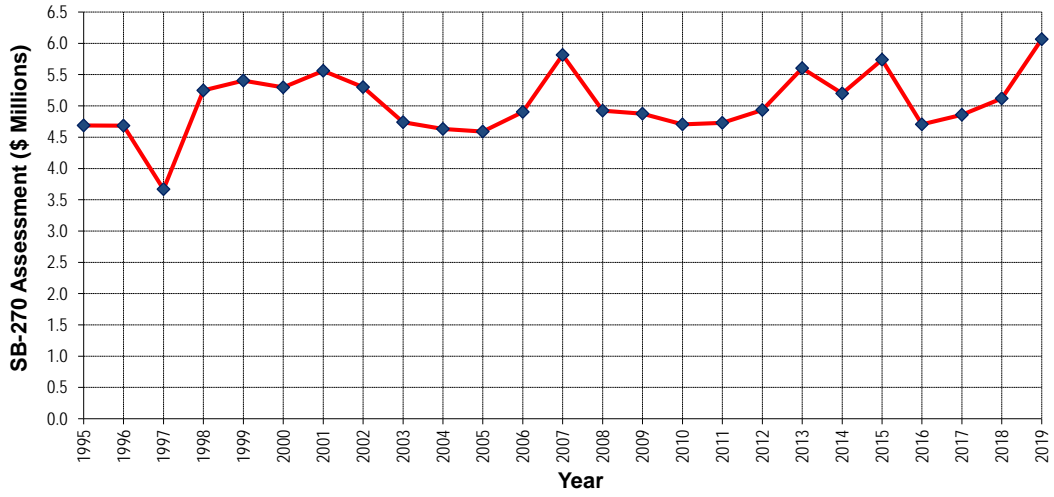
TABLE 1

2018.12.18

FY 2019-20 SB 270 Total Fee Summary

	2018-2019	2019-2020	% Change
Assessment Expenses			
I. Employee Costs	2,764,500	3,036,000	9.82%
II. Operating & Compliance	2,083,000	2,374,000	13.97%
III. Capital Outlay	271,000	455,000	67.90%
Sub-Total SB 270 Fee	5,118,500	5,865,000	14.58%
IV. OLSAP Assessment	0	200,781	
Total SB 270 Fee Assessment	5,118,500	6,065,781	18.51%
Less Reserve Policy Credit	0	0	
SB 270 Fee Due	5,118,500	6,065,781	18.51%

Figure 1 - Historic SB 270 Fees



FEE ASSESSMENT DETAILS

Introduction

The 2019-2020 proposed SB 270 fee total is \$6,065,781. Compared to the 2018-2019 fee total of \$5,118,500 the proposed assessment represents an increase of \$947,281. The assessment is summarized in Table 1 and details of the categories are shown in Table 2. The 2019-2020 budget contains cost estimates in each category to meet commitments made by the District in the 2016 SIP Board Order and Phase 9/10 EIR, the 2014 Stipulated Judgment, and the 2010 Coso Junction Maintenance Plan including: 1) maintenance and replacement of air monitoring equipment at Owens Lake; and 2) staff, legal, and consulting costs necessary to enforce mandatory regulatory and compliance requirements.

I. Employee Costs

Since SB 270 was incorporated into the California Health & Safety Code in 1983, the District has assessed fees to the LADWP for the cost of employees and employee overhead associated with the development, implementation and enforcement of dust controls associated with the LADWP's water-gathering activities in the District. For FY 2019-2020, it is proposed that the SB 270 fee assessment pay for a total of 19.75 full-time-equivalent employees (FTE) (See Table 3 - Employee Time Allocation). This budget proposes a shift of allocation for a Research and Systems Analyst II, decreasing the SB 270 portion to 95% from 100%. This is a decrease of 0.05 FTE (-0.25%) compared to FY 2018-2019 and a reduction of 2.97 FTEs (-13.07%) since FY 2008-2009. At this time, it is expected that 19.75 FTE is adequate to continue implementing terms under the 2014 Stipulated Judgment and requirements of the 2016 SIP.

Total employee costs are estimated to be \$3,036,000, an increase of 9.82% (\$271,500) over FY 2018-2019. This category includes an allocation of wages, retirement, medical benefits, taxes, unfunded liability for future retiree medical insurance and workers compensation insurance. Other factors reflected in the employee costs section include regular reclassification opportunities, regular step increases, retirement expenses, payroll taxes and workers compensation insurance. The major components of the increase are as follows:

- Approximately \$41,000 increase in normal employee wage increases (scheduled step increases and reclassifications) including associated tax, workers' compensation, and retirement increases predicated on wage.
- Health insurance increase of \$83,000 to cover known 2019 rates and anticipation of an additional 6% increase in calendar year 2020 based on trends.
- Retirement increase of \$148,000. \$65,000 is the increase required to make the 3rd of 30 payments toward the unfunded liability. This budget contemplates an additional \$83,000 toward the unfunded liability in order to move to a 15-year amortization as approved at the March 7, 2019 meeting of the District Board.

The FY 2019-2020 budget proposes:

- 12.00 FTEs to perform air quality monitoring and dust source identification at Owens Lake and Mono Lake, including design, purchasing, installation, data collection, maintenance, calibration, filter weighing, quality assurance, data review, and supervision.

- 2.85 FTEs to do data processing and analysis, preparation of maps and figures, maintenance of the Geographic Information System (GIS), operation of the Owens Lake Health Advisory Network, and purchasing and maintenance of all computer hardware/software. This is 0.05 fewer FTEs than FY 2018-2019.
- 2.90 FTEs to cover all administrative tasks such as policy recommendations to the Board, overall supervision, project design and management, contract management, document preparation, technical supervision, engineering design, compliance enforcement, government agency coordination, budget preparation, technical support to legal consultants, risk manager, personnel manager and public information.
- 2.0 FTEs to act as administrative assistants, receptionist, document copier, mail clerk, file clerk, supply clerk, billing clerk, fiscal supervisor, fiscal clerk/technician, safety clerk, and board clerk.

II. Operating Costs

This category includes a proportional allocation of rent for all offices (two offices in Bishop and the Keeler office), utilities, insurance, office supplies and equipment, travel and professional services. Materials and equipment in this category generally have a cost of less than \$5,000 each and/or a short life. Estimated operating costs are \$2,374,000 which represents an increase of \$291,000 or 13.97% compared to FY 2018-2019. The major components of the increase are as follows:

- \$31,000 increase in educational expenses due to several air quality monitoring conferences anticipated and monitoring equipment training for new equipment.
- \$79,000 decrease in leases and rents due to purchase of District office, offset by an anticipated \$12,000 increase in utilities that were previously paid by the landlord (water, sewer, trash, electric).
- \$96,000 increase in maintenance and repair of equipment (labor and materials) consisting of an increase in costs associated with maintaining the Sensit, camera, and wireless network as well as the Unmanned Aerial Vehicle (UAV), a fence replacement at the Stanley monitoring site, a contract for on-call emergency and routine HVAC maintenance, repair, and parts, and anticipated maintenance work on Thermo Scientific and Teledyne equipment.
- \$156,000 increase in professional services contracts, consisting of normal slight increases in ongoing services such as audit, actuarial, and software contracts, and new professional services for Owens Lake Hydrologic Services (\$150,000). A listing of professional services contracts in excess of \$25,000 is included as Table 4.
- \$25,000 addition for contingency expenditures. This will be used for unforeseen urgent or emergent issues.

III. Capital Outlay

This category (formerly Materials and Equipment >\$5K) includes materials and equipment not associated with general support. This equipment has a higher per item cost (more than \$5,000 each or as a whole) and a longer life. Materials and equipment costs in this category may vary substantially

from year to year due to specific plans for equipment purchases. Starting in FY 2019-202, this category also includes Building and Land purchase and improvements costs. For FY 2019-2020, \$455,000 is budgeted, and increase of \$184,000 or 67.90%.

- \$85,000 for building maintenance and improvements for District offices
- \$95,000 increase in equipment for a replacement SUV, 2 replacement PM filter monitors, and 5 replacement PM10 monitors.

IV. Owens Lake Scientific Advisory Panel (OLSAP)

The 2014 Stipulated Judgment provides for financial support by the LADWP of the OLSAP. Funding for the OLSAP will be made pursuant to fee orders by the District per California Health & Safety Code §42316. The fee order for OLSAP may vary based on the statement of work and tasks submitted to the National Academy of Sciences (NAS). Annual funding for the NAS to create and direct the OLSAP to address the tasks provided by the sponsors may range from \$500,000 to \$750,000. Additional funding up to \$2,000,000 annually may be required by LADWP for reporting and analyzing new and relevant testing data deemed necessary to address assigned OLSAP tasks. Initial OLSAP funding of \$750,000 for FY 2015-2016 and deferred until FY 2018-2019 are currently being expended. A contract was entered into with the National Academy of Sciences in November 2018 for \$850,781 for Task 1 and it is anticipated that upon completion in April 2019, another \$100,000 will be needed to begin task 2. Any remaining OLSAP funds in the SB 270 budget at the completion of NAS contracting and OLSAP work will be credited to the SB 270 fee for the subsequent fiscal year. The SB 270 fee assessment will be credited by the amount of unspent funds from the OLSAP budget line item to the SB 270 total operating budget.

TABLE 2
FY 2019-20 SB 270 Fee

EXPENSES	2018-2019 Budget	2019-2020 Budget	% change
I. Employee Costs			
A. Employee Wages	1,715,500	1,740,000	1.43%
B. Retirement	337,000	490,000	45.40%
C. Insurance Benefits	397,000	480,000	20.91%
D. Taxes	301,500	310,000	2.82%
E. Worker's Compensation Insurance	13,500	16,000	18.52%
Employee Costs	2,764,500	3,036,000	9.82%
II. Operating & Compliance			
A. Advertising - Legal Notices & Ads	4,500	1,500	-66.67%
B. Dues, Subscriptions, Education, Use Tax & Fees	33,000	64,000	93.94%
C. Equipment: Computer, Furniture, General, Office, Safety, Scientific, Software (<\$5,000 ea)	112,000	146,500	30.80%
D. Fuel & Gasoline	25,000	30,000	20.00%
E. Health & Safety	5,000	5,000	0.00%
F. Insurance - Liability, Fire & Casualty	52,000	58,000	11.54%
G. Leases & Rents: Equipment, Office, Site, Storage	112,000	33,000	-70.54%
H. Maintenance & Repairs of Equipment - Labor	50,500	71,000	40.59%
I. Maintenance & Repairs of Equipment - Materials	175,000	251,000	43.43%
J. Postage & Shipping	2,000	2,000	0.00%
K. Professional & Special Services	1,184,000	1,340,000	13.18%
L. Supplies & Tools (In-Field, Office, General Use)	22,500	27,500	22.22%
M. Transportation & Travel	28,000	29,500	5.36%
N. Utilities	67,500	80,000	18.52%
O. Control Measure Testing	200,000	200,000	0.00%
P. Public Outreach & Education	10,000	10,000	0.00%
Q. Contingency Expenditures	0	25,000	
Operating & Compliance Costs	2,083,000	2,374,000	13.97%
III. Capital Outlay			
A. Equipment: Computer, Furniture, General, Office, Scientific, Software, Furniture (>\$5,000 ea)	230,500	325,000	41.00%
B. Vehicles & ATVs	40,500	45,000	11.11%
C. Building and Land (From Reserve, not in 18/19 total)	510,000	0	-100.00%
D. Building Improvements	0	85,000	
Capital Outlay Costs	271,000	455,000	67.90%
Expenses Total (Parts I, II, III)	5,118,500	5,865,000	14.58%
IV. Owens Lake Scientific Advisory Panel			
A. 2014 Stipulated Judgment (Paragraph 12.G)	0	200,781	
SB 270 Total Fee Assessment (Parts I - IV)	5,118,500	6,065,781	18.51%
Reserves Balance as of March 31 (estimated)	1,575,999	1,752,417	
Reserve Policy Amount @ 33.3% of FY Costs (beginning FY 18/19)	1,704,461	2,019,905	
Credit to SB 270 Fee Assessment	-		
FY 2019-2020 SB 270 Fee Due	5,118,500	6,065,781	18.51%

TABLE 3

2019.02.02

FY 2019-20 Employee Time Allocation	GF	Keeler	SB-270	FTE
Regular Employees				
Admin Asst/ Board & Permit Clerk	0.25	0.00	0.75	1.00
Admin. Projects Manager	0.15	0.00	0.85	1.00
Air Monitoring Specialist	0.15	0.00	0.85	1.00
Air Monitoring Tech II	0.10	0.00	0.90	1.00
Air Monitoring Tech II	0.15	0.00	0.85	1.00
Air Monitoring Tech II	0.00	0.00	1.00	1.00
Air Monitoring Tech II	0.10	0.00	0.90	1.00
Air Monitoring Tech II	0.00	0.00	1.00	1.00
Air Monitoring Technical Specialist	0.05	0.00	0.95	1.00
Air Pollution Control Officer	0.10	0.00	0.90	1.00
Air Quality Specialist II	1.00	0.00	0.00	1.00
Air Quality Specialist II	1.00	0.00	0.00	1.00
Deputy Air Pollution Control Officer	0.20	0.00	0.80	1.00
Director Technical Services	0.00	0.00	1.00	1.00
Field Services Technician II	0.00	0.00	1.00	1.00
Field Services Technician II	0.00	0.00	1.00	1.00
Field Services Technician II	0.00	0.30	0.70	1.00
Fiscal Services Technician	0.15	0.00	0.85	1.00
Research & Systems Analyst II	0.10	0.00	0.90	1.00
Research & Systems Analyst II	0.05	0.00	0.95	1.00
Research & Systems Analyst II	0.05	0.00	0.95	1.00
Senior Scientist	0.00	0.20	0.80	1.00
Sr. Systems & Research Analyst	0.05	0.00	0.95	1.00
Technical Services Specialist	0.00	0.10	0.90	1.00
Subtotal Regular Employees	3.65	0.60	19.75	24.00
TOTAL 2019-2020 FTE	3.65	0.60	19.75	24.00
TOTAL 2018-2019 FTE	3.60	0.60	19.80	24.00
TOTAL 2008-2009 FTE	3.65	0.00	22.72	26.37
SB270 FTE change 2018-2019 to 2019-2020			-0.05	-0.25%
SB270 FTE change 2008-2009 to 2019-2020			-2.97	-13.07%

TABLE 4

2019.02.02

Professional and Special Services (over \$25,000)	SB270	Total
Satellite Imagery	25,000	25,000
Owens Lake Hydrologic Services	150,000	150,000
Mono Lake Hydrologic Services	150,000	150,000
Environmental Consulting (CRTF)	200,000	200,000
DRI (Remote Sensing - DCM Compliance)	210,000	210,000
King Spalding (Legal)	250,000	250,000
Ramboll-Environ Consulting - Owens Lake and Mono Lake Air Modeling	250,000	250,000

BUDGET NARRATIVE

This section breaks down the District by functional divisions and discusses the accomplishments each division has made or will make during the FY 2018-2019, as well as the expected accomplishments for the FY 2019-2020, subject to the District Governing Board's approval of the proposed budget that supports these goals.

Air Quality Monitoring Division

The District's Air Quality Monitoring Division (AQMD) implements, operates and maintains the District's air quality and meteorological monitoring network, the data from which are used to determine compliance with the national ambient air quality standards (NAAQS). The data are also used to aid the District in the development of emissions control strategies that protect the public health, and are provided to the State Air Resources Board, to the United States Environmental Protection Agency (US EPA), and to the public. The District's SB270 monitoring network includes fourteen (14) active PM10 and meteorological monitoring stations and six (6) additional meteorology-only monitoring stations all of which are operated by District Air Monitoring Technicians. The Air Quality Monitoring Division operates and maintains the District's California Air Resources Board-certified PM2.5 laboratory, where all of the PM filters collected throughout the District are processed and analyzed. Additionally, the division has a Quality Assurance component which conducts quarterly audits of air quality monitors throughout the District's network.

The District Air Quality Monitoring Division staff's regular responsibilities include: 1) the determination of monitoring locations; 2) the installation of monitoring stations; 3) the operation, maintenance, and calibration of field monitors; 4) operation, maintenance, and calibration of laboratory equipment used for filter processing; 5) internal quality assurance audits of monitoring equipment; and, 6) reporting of the collected data to local, state, and federal databases which is completed by the District's Data Systems and Technology Division.

During FY 2018-2019, in addition to regular operation and maintenance of the District's stations, the Air Quality Monitoring Division made a couple of significant achievements. A new monitoring site in Lee Vining was completed and real-time collection of continuous PM10 and PM2.5 data began in April 2018. A similar monitor was installed in the Mammoth station in August 2018 providing continuous PM10 and PM2.5 data for the District and the community. Goals for the upcoming fiscal year include replacement of community and non-community monitoring equipment in need of replacement with T640x, TEOM, and Partisol particulate monitors.

Owens Lake and Mono Lake Technical Services Division

The Owens Lake and Mono Lake Technical Services Division fall entirely under the SB270 budget. In addition to air quality monitoring discussed above, the Owens Lake Dust Identification Program (Dust ID) operated and maintained by the Technical Services Division performs data collection from approximately 100 co-located Cox Sand Catcher and Sensit sites (collectively, Sensit), 23 remote

cameras, aerial mapping, visual observations, and field inspections. The Mono Lake Dust ID Program is a smaller network of fifteen (15) Sensit sites and two (2) remote cameras. The focus of the Technical Services Division is to locate and document emissive uncontrolled areas of lakebed as a result of the LADWP's water diversion and conveyance activities. Emissions from source areas exceeding federal and state ambient air quality standards determine specific source areas requiring dust control mitigation and abatement. As a result of approximately 48.6 square miles of dust control implementation and mitigation at Owens Lake over the past 18 years, the Owens Lake Technical Services Division is redirecting focus towards compliance monitoring along with successful continuance of all Best Available Control Measure (BACM) performance criteria requirements.

Accomplishments during FY 2018-2019 include the continuing multi stage upgrade of communications and logging equipment on the Owens Lake. This upgrade was envisioned to take three years. Fiscal Year 2018-2019 was the second year of the three-year effort, and we continue to be on schedule to be completed next FY. Field compliance checks and test continue to be done, both visually and with the Districts existing Unmanned Aerial Vehicle (UAV) fleet. The UAV budgeted in FY 2018-2019 is currently being built and should be delivered in the next few months. This UAV will allow much larger areas to be analyzed in a shorter amount of time. Staff has also continued to work on developing a small air quality monitoring program that can be located around areas of interest on the Owens Playa. The first test area has recently had six monitors installed.

For FY 2019-2020, the final year of the planned upgrades to the Owens Lake Sensit network will continue along with continued upgrades to the communication and camera networks. One addition to our UAV fleet is also planned. We are planning to purchase a thermal camera that will help us with our vegetation and analysis.

Staff will continue to look into additional ways to monitor areas where substitution for traditional Sensit may be applicable. These include BACM Shallow Flooding areas wetted with sprinklers, certain areas of BACM Managed Vegetation, and specific areas previously ordered for dust control but in a state of monitoring and avoidance due to sensitive resources. As mentioned above, the first test of small air sensors used in an upwind downwind configuration was recently installed. Staff will continue with this study in FY 2019-2020. If results are encouraging, the small air sensor network may be expanded to other areas of interest.

Science and Research Division

The Science and Research Division conducts and supports the technical and scientific work being completed in association with Owens Lake and Mono Lake for the SB270 Program. The work completed by the Science and Research Division is completed as part of work duties by multiple District staff members including the Senior Scientist, Deputy Air Pollution Control Officer, Director of Technical Services, Technical Services Technicians, Air Quality Technicians, Research System Analysts, and other District staff. The main work tasks are given and described below.

Work Tasks Underway

1. Dust control compliance, enforcement, and monitoring of Owens Lake dust controls: The dust control project implemented on Owens Lake by LADWP covers over 48 square miles of the lake bed. The project consists of a mosaic of three BACM dust control measures: Shallow Flooding, Managed Vegetation, and Gravel Blanket. Each of these BACM have specific performance criteria, as specified in Board Order #160413-01, that must be met to ensure that there are no dust emissions from the control areas that cause or contribute to exceedances of the PM10 Federal standard at the 3,600-foot elevation regulatory shoreline or the California State PM10 standard in the local communities.

As much as possible, due to the large extent of the dust control areas, the required performance criteria are evaluated using remote sensing methods. The District conducts many of the routine compliance evaluations in-house using methods developed by experts in remote sensing. The current remote sensing expert working with the District is from the Desert Research Institute (DRI) in Reno, Nevada and works on technical issues of the compliance methodology and in developing new and more efficient ways to conduct the compliance evaluations.

BACM Shallow Flooding and BACM Managed Vegetation areas are monitored regularly to determine if they meet the minimum performance criteria. Shallow Flooding areas are required to have a minimum wetness cover throughout the dust year which is checked regularly (every 8 days when conditions are clear) primarily using the results of analysis from LandSat imagery. Managed Vegetation areas are assessed annually, at the end of the growing season in the fall, to determine if they have the required minimum level of ground cover and spatial distribution of plants. The method for evaluating the vegetation cover uses satellite imagery combined with field data collection.

Shallow Flooding has two variations that allow the LADWP to save water. The first of these variations is Tillage with BACM Backup (TwB2) that allows the surface to have large-scale tillage ridges present in place of water. The second variation is Brine with BACM Backup (Brine) that allows an area to be covered with a mix of water and specific types and thicknesses of salt crust. Should the TwB2 and Brine areas deteriorate such that they become potentially emissive, they are required to either be re-flooded or have maintenance activities performed. The order for re-flooding or maintenance work depends on the conditions present and how far they have deteriorated from the required compliance criteria. Both the TwB2 and Brine evaluations require analysis of remotely sensed imagery combined with field inspection of the conditions present on the ground. DRI assists the District in these evaluations, especially in the Brine work and required field inspections.

2. Participation in Habitat and Groundwater Workgroups for Owens Lake Master Project: The LADWP is in the process of developing a Master Project for Owens Lake. The development of the Master Project is being led by the LADWP to balance the requirements for dust control with a reduction in water use from the aqueduct, maintaining habitat value, protection of cultural resources, and allowing for and promoting recreation and access on the lake. Water use reduction is being promoted through a combination of utilization of low-water or waterless dust controls and development of local water sources from groundwater within the Owens Lake area.

A draft Environmental Impact Report (EIR) is being prepared by the LADWP and is scheduled for release in the fall of 2019. Critical components of the EIR and project description are the development of resource protection protocols (RPPs) for the vegetated areas along the shorelands of the lake and for groundwater levels and chemistry in the surrounding area.

District staff have been involved with the Master Project (formerly called the Master Plan) since it first began in 2010 as part of the Coordinating/Advisory Committee and as members of the Habitat Workgroup and the Groundwater Workgroup. The Habitat Workgroup has been working on the development of a Habitat Suitability Model and developing the management tiers and thresholds to protect the habitat resources present.

The LADWP began the Owens Lake Groundwater Evaluation Program in 2009 to evaluate the groundwater resources in the Owens Lake basin with a focus on potential use for dust control operation. Once the Master Project began, the Groundwater Workgroup was formed with interested stakeholders interested in preventing impacts to the area from development of a groundwater source for dust controls.

Resource Protection Protocols have been developed by the LADWP for the Habitat and Groundwater Workgroups. Both RPPs are highly technical and complex documents. The District has worked with experts in remote sensing and hydrology in the review of these documents to ensure the protection of the local environmental resources. Of concern is the potential to create new dust sources on and around Owens Lake with groundwater pumping.

3. Cultural Resource Task Force: The Cultural Resource Task Force (CRTF) was formed as part of the Settlement Agreement in 2013 with the LADWP. The purpose of the CRTF is to work with local tribes and other agencies to find ways to provide dust controls in areas with sensitive cultural resources. The CRTF has worked with the Tribes on the recommendations for resources that were found in the Phase 7a and Phase 9/10 projects and were evaluated and determined as eligible for listing on the California Register of Historic Resources (the eligible areas are termed Phase 7b and Phase 9/10b areas, respectively). Upon Tribal recommendation and approval by the Great Basin Governing Board, dust controls are currently being avoided in the Phase 7b and Phase 9/10b eligible areas. During the avoidance period, the resource areas are being monitored by the District for dust emissions and surface activity and by the CRTF monitoring subgroup for vegetation cover and human disturbance.

The Monitoring Committee of the CRTF is working designing a pilot dust control project in one of the avoidance areas. The project is being designed as a test of a low impact measure to provide some control of the area through irrigation to enhance existing vegetation and encourage natural recruitment of volunteers. On the ground work is expected to begin in the spring of 2019 and continue through the 2019-2020 fiscal year.

As the dust control project on Owens Lake has increased in size over the ten (10) phases of work completed to date, the impact to cultural resources has become more of an issue with the local Tribes and other agencies. To recognize the importance of the resources in the Owens Lake area to the local Tribes and develop a comprehensive management plan, the District, the California State Lands Commission, the National Historic Preservation Office, the local Tribal Nations, the Bureau of Land Management (BLM), and the LADWP are working on a creation and nomination of the Owens Lake to the National Register of Historic Places. Work on the nomination and management plan are anticipated to continue through the 2019-2010 fiscal year.

4. Management and oversight of professional services contracts: The District contracts with several firms for professional consulting services associated with the SB270 program. The Science and Research Division directs, manages, and oversees the contracts for the following services.

- Environmental consulting services (TEAM Engineering)
- Archaeological consulting services in support of the Cultural Resource Task Force (TEAM Engineering)
- Dust control compliance and enforcement - Remote sensing services (Desert Research Institute, DRI)
- Dust control measure research (TEAM Engineering, DRI, analytical labs)
- Hydrological evaluation services (Ramboll)
- Owens Lake science and history (DRI)

Work Tasks for 2019-2020 and Beyond

In FY 2019-2020, the Science and Research Division will continue to work on the four tasks described above. The District will continue to conduct regular evaluations of the Shallow Flooding and the original Managed Vegetation area and, with the assistance of DRI, will conduct evaluations of the Brine areas. The District will also perform regular evaluations of the TwB2 areas through review of sand flux and Light Detection and Ranging (LIDAR) data submitted by the LADWP and by conducting in-house IPET and surface observation testing. It is anticipated that most of the dust control evaluation work for the new Managed Vegetation areas completed as part of Phase 7a and Phase 9/10 will become more routine over the next year such that the District will take over running the compliance determinations. Currently the compliance evaluation is conducted by DRI for the District. It is expected that DRI will continue to work with and provide technical assistance to the District for all compliance related activities.

The District is concerned that the development of groundwater from under Owens Lake for use in the dust control areas will negatively impact environmental resources and create new and additional dust sources areas that will prevent the Owens Valley Planning Area from reaching attainment for PM10. During the 2019-2020 FY, the Science and Research Division will continue to participate in the Groundwater Working Group and Habitat Working Group of the Owens Lake Master Project and provide thorough technical review and comment on resource protection protocols and environmental analysis documents. Additionally, due to concerns about the number of continued exceedances on the Federal PM10 standard at Mono Lake and concerns that the lake level is not going to rise to submerge the exposed lake bed source areas, the Science and Research Division will be working with

other agencies and interested parties on potentially updating and refining the previous lake level model in advance of the upcoming State Water Resource Control Board Hearing.

The Tribes completed their recommendations for the Phase 9/10b resource areas and submitted them to the LADWP and to the District in December 2017. The District Governing Board approved temporary avoidance and monitoring of these areas per the Tribal recommendation at the January 2018 meeting. The areas that were avoided as part of Phase 7b and Phase 9/10b will continue to be monitored by the District and the CRTF Monitoring Subgroup. It is anticipated that the nomination process of the National Register Nomination will continue to progress over 2019-2020 with the completion of the ethnology work and then working on synthesis of past archaeological surveys as well as the development of a comprehensive management plan.

The Science and Research Division will continue to work on potential new alternative dust control measures. Initial research was started in 2018-2019 on the presence and potential use of biocrust at Owens lake. This work will continue in 2019-2020 with the collection and analysis of samples and work on developing methods for propagating them. Additionally, the Science and Research Division will be working with the CRTF Monitoring Group on the design and implementation of a pilot project for providing low-impact dust control in one of the avoidance areas.

Data Systems and Technology Division

The Data Systems and Technology Division (DSTD) is tasked with data analysis and validation, compliance assessment, information services, and public outreach. It is comprised of one Senior Research and Systems Analyst and three Research and Systems Analyst IIs. Together, DSTD staff oversee several specific programs including the following:

1. Owens Lake and Mono Lake DustID Modeling support and oversight
2. Data validation for all monitored parameters
3. EPA Air Quality System (AQS) updates, oversight, and certification
4. Database management
5. Computer and technology provisioning and support
6. Google Apps for Business administration
7. BACM Compliance
8. Air Quality Advisories
9. Web presence
10. Telephony system (VOIP)

Owens Lake and Mono Lake DustID Modeling support and oversight

Accomplishments: DustID has been a core task for DSTD for almost two decades and critical in determining the need for additional BACM dust control measures. It involves the generation and compilation of three components, 1) sand flux, 2) meteorological data, and 3) PM10 data. The flux data is generated by retrieving the Cox Sand Catch collection weights from Owens Lake and Mono Lake and time-resolving the sand mass with Sensit data. At present, this process is handled in Microsoft Access, which has been working satisfactorily since 2010. It is possible that in the future

we will consider switching to a more modern, efficient database. The meteorological and PM10 data are extracted from our database management system, AirVision. All these data are thoroughly QA/QCed before being provided to our modeling consultant, Ramboll Inc. Once the model has been run by Ramboll, DSTD staff processes and inspects the results to determine the quantity and frequency of PM10 emissions from the modeled source areas. These findings are used to determine if additional dust controls are required on Owens Lake. On Mono Lake, the model is used to assess the progress toward reaching attainment status in the Mono Basin PM10 Planning Area.

Goals: The District is obligated by the SIP to perform PM10 modeling annually, providing an assessment of the need for additional BACM controls by the end of each year. DSTD intends to continue annual modeling every year into the future. The cost for the modeling consultant in recent years has been \$250,000 and expected to be the same in 2019-2020. In addition to the DustID modeling, this cost covers the daily Owens Lake Yesterday modeling, which provides near-instantaneous PM10 emissions maps and animations.

Data validation for all monitored parameters

Accomplishments: This is also a core task for DSTD and receives much focus and staff time. The District has a very large network of air quality monitors, each collecting a variety of parameters, all of which need to be transmitted to a centralized data management system and validated in a three-level validation process. In 2016, the District recognized our data were outgrowing the Microsoft Access database size limitations and could not continue to manage and validate the growing volume of data. After much research, the District chose Agilaire Inc to provide a cloud-based database management system called AirVision to replace the Access database.

Goals: In 2019-2020 the annual budget for the cloud-based AirVision service is \$13,000. AirVision is a fully-fledged platform that is reliable, dependable, and used by many Air Quality management operations across the country. Since AirVision is cloud-based and Agilaire Inc is responsible for all technical upkeep, security, and maintenance, the District feels it's a very good value. DSTD is pleased with the efficiency AirVision has brought to the District and looks forward to its continued use.

EPA Air Quality System (AQS) updates, oversight, and certification

Accomplishments: One of the fundamental responsibilities of the District is reporting ambient air monitoring data to the Air Quality System (AQS) operated by the U.S. EPA. AQS is the repository that contains the air monitoring data of every air monitoring agency in the U.S. It is also the database that tracks the number federal exceedances of PM10 and other standards. The District monitors our AQS holdings carefully. Every quarter, after the District has performed all three levels of validation, the data are uploaded to the AQS database. AQS reports are then run to verify that the quarterly holdings are correct and accurate. Annually, on May 1, the District performs a thorough check of the AQS holding for the previous year and, once the District re-verifies their accuracy, certifies those holdings.

Goals: DSTD plans to continue its unwavering, excellent track record of timely and accurate AQS submission and annual certification. The cost to the District to load and manage AQS data is limited to staff time, annual AirVision subscription (detailed above), and attending biannual trainings.

Database management

Accomplishments: DSTD staff have developed several databases inhouse which are relied on extensively. One of the most critical is the Air Monitoring FileMaker database which allows District Air Monitoring Technicians to remotely enter site maintenance information to a central server in real-time. By working with Air Monitoring staff to develop this tool, DSTD has streamlined and modernized maintenance records into a searchable, shared resource. A secondary benefit of this database is automatic data pre-invalidation, so that data affected by maintenance activities are flagged, preventing inadvertent air quality alerts. Another example of a DSTD-developed database uses FileMaker to facilitate the rapid update of website contents such as wildfire information and public notices. Now, the District website backend is entirely data-driven through FileMaker, AirVision, and DSTD custom coding.

Goals: DSTD plans to continue to implement strategic database tools to increase efficiency and productivity. In 2019-2020, DSTD plans a complete overhaul of the District's internal permitting system, allowing multiple user access and a map-driven interface. The annual budget for FileMaker database software is \$2,500 in 2019-2020.

Computer and technology provisioning and support

Accomplishments: The DSTD provides the District with the technical capabilities and information resources required to make the District as efficient, advanced, and nimble as possible. This involves too many items to list here. It includes 1) maintenance and management of three Synology Network File Servers which securely disseminate shared files among District staff in our Bishop and Keeler offices, 2) management and operation of secure multi-node WAN fiber and cellular connections from the Bishop office to remote air quality monitors, 3) a tech refresh program which regularly evaluates computing hardware requirements and provisions replacement resources, and 4) providing staff with the technical software required to perform at optimum efficiency.

Goals: DSTD plans to continue to provide the District the technical resources required to perform high-end modeling, GIS, analysis, and reporting, as well as support staff on a technical level on a daily basis. In 2019-2020, DSTD has budgeted for several technological components, including additional Synology hard drive expansion/replacements, tech updates, and essential software (Office, ESRI for GIS, ENVI for Image Processing, etc.).

Google Apps for Business administration

Accomplishments: In 2015, the District took the step to centralize our email and documents to the Google Apps for Business cloud-based collaboration platform. The transition was complex and involved, though well-planned and well-executed. District staff now enjoy much more efficiency via email correspondence with a searchable, familiar interface accessible both on desktops and mobile. In addition, staff are now able to collaborate and share documents with ease within the District and

collaborators outside the District. The administration and oversight of Google Apps is straightforward and requires minimal effort.

Goals: DSTD recommends the continued subscription to Google Apps for Business. We have budgeted \$4,200, like previous years.

BACM Compliance and GIS Administration

Accomplishments: DSTD is committed to delivering timely and accurate BACM compliance assessments. During Shallow Flood compliance season (Oct-June), an assessment is generated for every cloud-free Landsat overpass (every 8 days). These assessments provide critical feedback, alerting LADWP managers and District staff to potential breakdowns, and identifying whether compliance thresholds are met or not. DSTD performs Managed Vegetation compliance calls on an annual basis, assessing whether BACM Managed Vegetation is compliant. Both compliance assessments rely heavily on our centrally managed GIS. Over the past few years, DSTD has organized a secure, centrally managed GIS repository. This GIS repository is administered by DSTD staff and accessible to all District employees. By having the repository centrally located, all GIS data used by staff in various projects are certain to reference the most current, up-to-date version.

Goals: DSTD plans to continue to provide the District timely and accurate compliance analyses and to administer a centrally managed GIS repository, adding and updating data as they become available. There is no additional impact to the budget other than staff time and the Synology servers and software which are budgeted for and discussed above.

Air Quality Advisories

Accomplishments: In 2014, with the intent of protecting public health, the District Governing Board adopted Rule 701 which establishes the District's Air Quality Advisory System. The Rule sets the PM concentration triggers for Stage 1 and Stage 2 PM Air Advisories for smoke and dust. This system is unique to the District – no other Air Monitoring Agency disseminates automated health alerts on an hourly basis. To accomplish this task, DSTD custom-coded those triggers into our AirVision data management system and has written extensive code to send community-specific alerts to concerned citizens, schools, and hospitals, both in Short Message Service (SMS) text and email. In addition, the alerts are automatically propagated to a prominent location on our website home page.

Goals: In 2019-2020, DSTD plans to continue to disseminate Air Advisories based on Rule 701 triggers. As PM monitors are upgraded from PM10 to PM10/PM2.5, DSTD will accommodate the new parameters in AirVision and the alert system. The annual budget impact is \$250 for a cellular API lookup service.

Web presence

Accomplishments: In 2017-2018, DSTD placed increased focus on expanding public outreach through the District website. We experienced a rapid growth in traffic and interest from the public, particularly during periods of high-volume air quality advisories. DSTD realized the functionality of the District website was lacking and not able to easily communicate important information to citizens. The previous design was from 2010, prior to the widespread use of mobile devices. To

address the issue, DSTD took it upon itself to develop a new mobile-friendly website, one that was scalable, attractive, easily navigated, and easy to update.

Goals: DSTD plans to manage the new website, keeping the content current and relevant. In 2019-2020, DSTD has budgeted \$2,200 for a web hosting service.

Telephony system (VOIP)

Accomplishments: In 2016, the District land-line based phone system was getting very antiquated and expensive and did not provide standard features such as call forwarding and voicemail to email. DSTD evaluated available options and identified a VOIP system that would reduce District costs and provide many additional features. DSTD acquired and installed the system and the District is now realizing substantial cost savings. The management of the system is only required when an employee leaves or enters employment with the District, so is generally minimal.

Goals: DSTD plans to continue to manage the VOIP phone system for the District. DSTD has budgeted \$9,500 for 2019-2020, which includes service to both Keeler and Bishop offices.

Administrative Services Division

The Administrative Services Division serves as the support staff for the District and is comprised of three positions:

- Administrative Projects Manager (APM) duties include contract management, budgeting, general administrative functions, human resources, RFP & bid processes, surplus processes, grant compliance, maintenance coordination, risk management, safety and education training, administrative portions of air pollution control projects, coordination of audit and actuary, reporting to state agencies, FPPC compliance officer, and supervision of the Administrative Services division.
- Fiscal Services Technician duties include accounts payable, accounts receivable, payroll, employee benefit coordination, fiscal support services, financial reporting for audits and Governing Board, coordination and reconciliation of accounting between the District and the Treasury, vendor account management, budget monitoring, and backup to the Administrative Specialist.
- Administrative Specialist/Permit Coordinator/Clerk of the Board duties include examination and acceptance of documents as official records, preparation of agendas, minutes, and board packets including resolutions and board orders, maintenance of the master calendar and docket, liaison between Governing Board, Hearing Board, staff, and public, and coordination of public record request responses.

The Administrative Services Division has been busy in FY 2018-2019. In addition to the yearly routine tasks such as budget preparation, payroll, and accounting functions, staff has or is in the process of:

- Coordinated the responses to all public records act requests
- Processed 11 contracts
- Coordinated the hiring and onboarding of one new employee
- Coordinated the retirement and offboarding of one employee

- Coordinated replacement of flooring in two offices
- Assisted in the preparation and coordination of processes to purchase the Bishop District offices
- Implemented the very successful Woodsmoke Reduction Pilot Program, resulting in 67 new EPA-certified woodstoves and wood insert replacements.
- Creation of the Family Leave Policy
- Creation of the Reasonable Accommodation Policy
- Completion of an update to the District's Policy and Procedure Manual, incorporating employee rules and board policies into a comprehensive, contemporary document
- Revocation of Rule 1101 – Purchasing, to be integrated as a policy in aforementioned Policy and Procedure Manual
- Continuation of efforts to digitize information for efficiency, ease of research, and storage concerns
- Transition to automated, electronic time off request system
- Successful fiscal year audit with no findings
- Continued regular surplus program, divesting of equipment no longer needed by District
- Implementation of new asset tracking system/software
- Conversion to new accounting software
- Achievement of the Risk Management Practitioner certification by the APM
- Onboarding of two new hearing board members
- Move to a 5-year lease system where appropriate to increase certainty of costs and decrease time spent renewing contracts
- Bring contractor to Bishop to provide management training for staff
- Final close out of the Environmental Public Benefit funding program

Looking forward to the new fiscal year, we have the following goals:

- Wrap up of any outstanding FY 2019-2020 projects that remain unfinished
- Digitizing variance files and creating a log similar to Board Order log
- Creation of an Emergency Action Plan for the Bishop office
- Create plan for deferred maintenance at the Bishop office and create a capital improvement plan
- Implement next round of Woodsmoke Reduction Program
- Implement Clean Air Project Program
- Revamp budgeting process
- RFPs for new actuary and auditor services

Errata Sheet

Changes between Draft dated February 5, 2019 and Final dated April 2, 2019

- Spacing and page breaks.
- Table 1, Section III “Materials and Equipment” updated to “Capital Outlay”
- Table 2, summary line on bottom “FY 2018-2019 SB 270 Fee Due” corrected to “FY 2019-2020 SB 270 Fee Due”
- Page 11, 3rd bullet under “Employee Costs” changed from prospective “proposed in an item on the March 7, 2019 agenda” to retrospective “as approved at the March 7, 2019 meeting” to reflect action of Board.