



Great Basin Unified Air Pollution Control District

2015-2016 Fiscal Year SB270 Budget and Fee Assessment

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Phillip L. Kiddoo Air Pollution Control Officer
157 Short Street, Bishop, California 93514
Tel: (760) 872-8211
Fax: (760) 872-6109
E-m: pkiddoo@gbuapcd.org

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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 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 (City) 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 City's water-gathering activities, the development of air quality plans, monitoring the City'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 material/equipment costs. For 2015-16 the fee continues to include costs for equipment and consulting associated with the implementation of the 2008 SIP Board Order¹ and EIR² that were adopted on February 1, 2008; the 2010 Coso Junction Maintenance Plan³, and costs associated with implementing the December 2014 Stipulated Judgment⁴.

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 the City's efforts to control the air pollution caused by its water-gathering activities. The proposed fee total is \$5,737,000. Compared to the 2014-15 fee total of \$5,200,000, the proposed fee total represents an 10.33% increase (\$537,000) over fiscal year 2014-15. The 2015-16 budget contains estimates in each category to meet commitments made by the District in the 2008 SIP Board Order¹ & EIR and 2010 Coso Junction Maintenance Plan, including: 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 and Mono Lakes; 3) legal fees related to the December 2014 Stipulated Judgment⁴ to implement the terms of the stipulation and agreement; and 4) consultant fees for an advisory panel pursuant to the 2014 Stipulated Judgment. The assessment is summarized in Table 2 and details on some of the categories are shown in Table 3. The personnel associated with the SB 270 assessment are summarized in Table 4. A summary of the assessment components is shown in Table 1. A graphic comparison of this year's assessment with previous years is shown in Figure 1. The \$537,000 (10.33%) increase in the proposed fee from the 2014-15 fee is related to implementation of the 2014 Stipulated Judgment including additional employee costs, consulting fees and the cost of the Owens Lake Scientific Advisory Panel.

¹ 2008 Owens Valley PM₁₀ Planning Area Demonstration of Attainment State Implementation Plan (SIP) as amended in 2013 and to be amended in 2015.

² 2008 Subsequent Environmental Impact Report (EIR)

³ 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.

⁴ Sacramento County Superior Court No. 34-2013-80001451-CU-WM-GDS (2011 SCR D)

The 2014 Stipulated Judgment provides for financial support by the LADWP of the Owens Lake Scientific Advisory Panel (OLSAP, Item 12.G). 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. 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. Funding for OLSAP is included in this final budget to be adopted in May 2015 and will be assessed to the LADWP

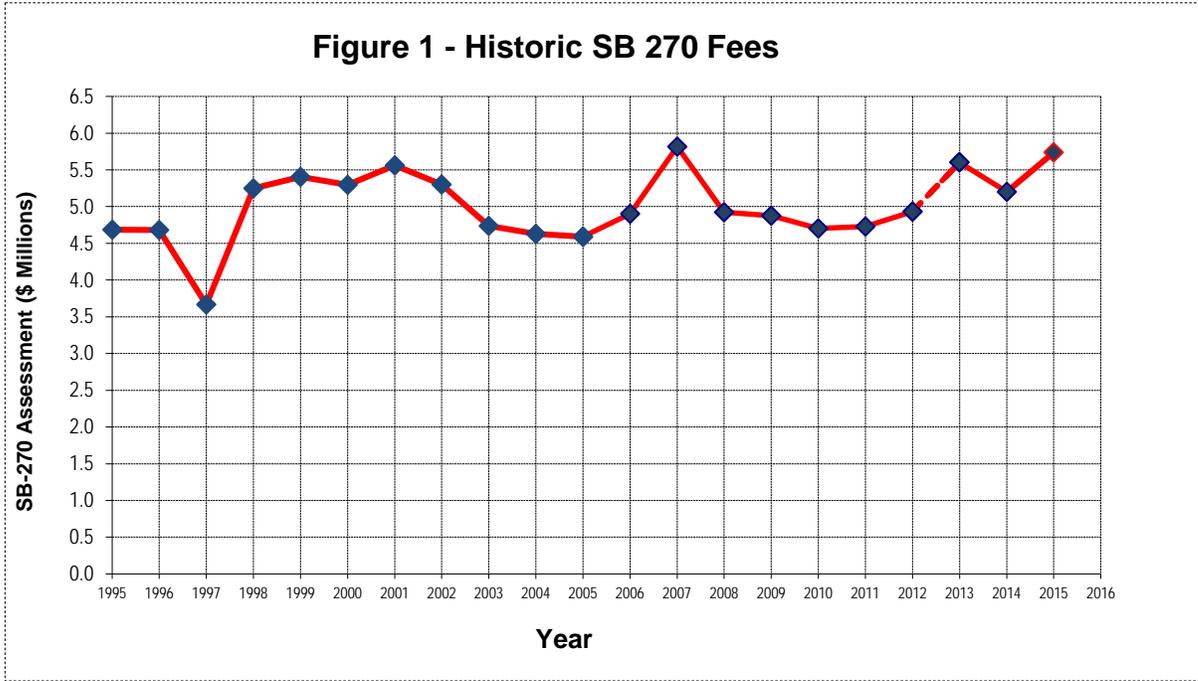
Compared to 20 years ago in 1995, the proposed FY 2015-16 SB 270 estimated budget and fee assessment has increased a total of \$1,050,586 (22.42%). Compared to the 2007 assessment of \$5,816,250 when the City and District were implementing the 2006 Settlement Agreement, the FY 2015-16 assessment is \$79,250 less (-1.36%). Since 1995, the California consumer price index has increased by 58.8% and by 11.5% since 2007.

TABLE 1

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FY 2015-16 SB 270 Total Fee Summary

	2014-15	2015-16	% Change
Assessment Expenses			
I. Employee Costs	2,495,000	2,723,000	9.14%
II. Operating & Compliance	1,505,000	1,440,000	-4.32%
III. Materials & Equipment	-	24,000	0.00%
Sub-Total SB 270 Fee	4,000,000	4,187,000	4.68%
			187,000
IV. Special Legal Fee Assessment	1,200,000	800,000	-33.33%
V. OLSAP Assessment	-	750,000	0.00%
			750,000
Total SB 270 Fee Assessment	5,200,000	5,737,000	10.33%
			537,000
Less Reserve Policy Credit	(488,232)	(213,337)	
SB 270 Fee Due	4,711,768	5,523,663	17.23%
			811,895



Year	Amount
1995	4,686,414
1996	4,682,317
1997	3,666,543
1998	5,246,725
1999	5,403,643
2000	5,295,089
2001	5,561,270
2002	5,300,597
2003	4,739,313
2004	4,631,000

Year	Amount
2005	4,591,000
2006	4,903,825
2007	5,816,250
2008	4,922,265
2009	4,876,300
2010	4,703,600
2011	4,730,000
2012	4,934,550
2013	5,601,000
2014	5,200,000
2015	5,737,000

Fee Assessment Details

Fee Assessment Details

Introduction

The 2015-16 proposed SB 270 fee total is \$5,737,000. Compared to the 2014-15 fee total of \$5,200,000 the proposed assessment represents an 10.33% increase (\$537,000). The assessment is summarized in Table 2 and details on some of the categories are shown in Table 3. The 2015-16 budget contains cost estimates in each category to meet commitments made by the District in the 2008 SIP Board Order (as amended) and EIR, the 2010 Coso Junction Maintenance Plan and the 2014 Stipulated Judgment including: 1) maintenance and replacement of air monitoring equipment at Owens Lake; 2) staff and consulting costs necessary to enforce mandatory regulatory and compliance requirements; 3) legal fees related to the December 2014 Stipulated Judgment⁴ to implement the terms of the stipulation and agreement; and 4) consultant fees for an advisory panel pursuant to the 2014 Stipulated Judgment. In December 2012, the Los Angeles Department of Water and Power (LADWP or City) appealed a decision by the California Air Resources Board on the 2011 Supplemental Control Requirements Determination (SCRD) in Sacramento County Court. The matter was concluded via a Stipulated Judgment entered by the Court on December 30, 2014 (2014 Stipulated Judgment) and included resolution of several dust control matters at Owens Lake⁵.

The LADWP appealed the District's fee orders for FY 2011-12⁶, FY 2012-13 and FY 2013-14 to the California Air Resources Board (CARB). Administrative hearings were held before CARB in June of 2013 regarding the fee orders issued for FY 2011-12 and FY 2012-13. On February 10, 2014, a settlement agreement was entered into by the LADWP and District along with a Stipulated Judgment that was entered in Kern County Superior Court resolving the disputed fee orders and related matters. See 'Legal Fee Assessment' section for additional information.

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 2015-16, it is proposed that the SB 270 fee assessment pay for a total of 20.85 full-time-equivalent employees (FTE), including eighteen (18.00) regular employees and 2.85 benefited contract employees (See Table 4 - Employee Time Allocation). This is an increase of 2.55 FTE compared to FY 2014-15 and a reduction of 1.87 FTEs (-8.97%) since FY 2008-09.

Total employee costs are estimated to be \$2,723,000 an increase of 9.14% (\$228,000) over FY 2014-15. The increase is primarily attributable to the proposed addition of 2.55 full-time contract employees that are needed to implement the monitoring requirements contained in the 2014 Stipulated Judgment. Recent discussions with LADWP indicate that they would like the District to conduct the additional monitoring under the 2014 Stipulated Judgment. The additional number of personnel needed may increase and/or be hired into a standing vacant position. Not including the proposed new contract positions, employee costs for 2015-16 remain stagnant with only a slight increase of \$23,000 (.92%), which includes a 1% COLA as part of a standing 2-year Memorandum of Understanding with employees. This category includes an allocation of wages,

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

⁶ CARB Appeal No. 3: FY 2011-12 fee order for \$250,000 (supplemental).

retirement, medical benefits, taxes, unfunded liability for future retiree medical insurance and workers compensation insurance. The LADWP has been assessed an annual amount since the 2005-06 FY for the cost of the unfunded liability of SB 270 retiree medical costs. A revised actuarial valuation was completed in 2013 regarding the unfunded retiree medical liability (Table 1, Item I.E). Due to higher returns than expected, the actuary recommended that the annual required contribution be zero for a few years with another review in 2016. Since inception of the trust in 2009, the five-year period ending December 2014 saw a return rate of 6.33%, as opposed to the 5.5% assumption. In 2016-17, it is anticipated that a limited contribution may be needed to adjust for increased costs or other factors such as annual normal service costs (present value of benefits accruing in the current year). This price-index-adjusted contribution expense may be funded out of general reserves or expensed to the budget annually. In 2009 the District adopted and partially funded an IRS §115 trust under Governmental Accounting Standards Board (GASB) 45 requirements.

As mentioned above, the assessment shows an increase in FTEs of 2.55 for the 2015-16 FY needed to implement terms under the 2014 Stipulated Judgment. The increased FTE is for 2.0 full-time field contract employees and an additional .55 FTE to a current contract employee for associated administrative tasks and duties. The 2014 Stipulated Judgment approved a dust control measure called Tillage with BACM Back-up (TwB2), which is expected to require more staff time to monitor these areas. Currently LADWP is planning to operate 4 square miles of the lake using TwB2 and each of these areas are required by the 2014 Stipulated Judgment to be inspected on a regular basis. One of the proposed FTE positions will aid in these inspections as well as aid in the continued operation and maintenance of approximately 180 sand motion monitoring sites and 22 camera sites. The 2014 Stipulated Judgment also required LADWP to conduct PM₁₀ monitoring at each of the TwB2 areas. The District has offered to help or conduct the PM₁₀ monitoring if the City prefers. Discussions with City staff indicate that they may want the District operate up to six (6) new PM₁₀ monitoring stations sited to monitor the TwB2 areas and the second proposed FTE position would fill this responsibility. These two FTE positions will be contract positions for one or two years until the District determines the actual amount of time required to meet the requirements of the 2014 Stipulated Judgment. Other factors reflected in the employee costs section include regular promotion opportunities, regular step increases, employee retirement costs, payroll taxes and workers compensation insurance.

The FY 2015-16 budget also proposes an increase of the current contract Administrative Clerk from .45 to 1.0 FTE, this would be an increase of .55. The Administrative Clerk would continue to aid staff in the Bishop Office and add assistance to the Keeler office. The Keeler office has never had an administrative clerk and as such, there are quite a few administrative duties that need immediate attention. Over the past four years, legal matters demanded immediate and prioritized administrative support. As such several routine tasks such as document archival and scanning, inventory of equipment, filing and fiscal support duties have not been completed and are needed in the Bishop and Keeler offices. With the addition of two FTE and associated monitoring at the Keeler office, additional administrative help is needed to fulfill these duties efficiently and accurately. The total cost to add the 2.55 FTE, with benefits, is \$205,000.

The FY 2015-16 budget proposes 12.15 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. There are 2.95 FTEs to do data processing and analysis, preparation of maps and figures, maintenance of the GIS system, operation of the Owens Lake Health Advisory Network, and purchasing and maintenance of all computer hardware/software. There are 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. There are 2.85 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 \$1,440,000 which represents a decrease of \$65,000 or -4.23% compared to FY 2014-15. Items in this category that require more explanation are described below.

II.C. – Equipment: Scientific, Computer, Software, Furniture, Office, Safety & General (<\$5,000)

This category encompasses items costing \$5,000 or less and includes new scientific equipment (calibration devices, etc.) and related equipment (electronic test equipment, digital multimeters, etc.), computer equipment (including printers, scanners and parts), software (office upgrades, data logger, GIS, accounting software, anti-virus), furniture, office machines and safety equipment. Monies are budgeted for replacement of wind, humidity, temperature, barometric pressure and precipitation equipment as the sensors in the field age and breakdown. The budget includes funds for Sensit and datalogger upgrades. The current Dust ID network consists of approximately 180 Sensit sites 22 cameras, and a lake-wide wireless broadband communication system. The information collected from the Dust ID network has been highly successful in supplying real time data to the District, LADWP and the public. District staff working out of the Keeler office extensively use this information to make decisions when and where to collect field data during and directly after dust events. The cost to purchase, maintain and upgrade items in this category will be \$125,500. This is a slight increase of \$5,000 or 4.15% from 2014-15.

II.G.2. – Leases and Rents

Rental and lease costs are up slightly this year (\$4,000 or 3.77%) due to expected market increases in office rents (\$110,000).

II.H. – Maintenance of Equipment – Labor

Included in this category are: annual certifications of laboratory equipment, including balances and standard weights. These certifications are a requirement for the District to maintain an EPA-certified laboratory for particulate matter filter processing (Title 40 CFR Part 50, App. L, Sec. 8.1; QA Guidance Document 2.12, Nov. 1998, Sec. 7.2 and 7.3). Additionally, all calibration and audit equipment used by the District's air monitoring technicians must be certified annually. These devices (the District owns 12) must be sent out to the manufacturer for certification. These certifications are required by EPA regulations for all entities conducting air quality monitoring (Title 40 CFR Part 50 App. L, Sec. 9.2.2). This

category also includes vehicle maintenance, i.e. tires, oil changes, tune-ups, etc. for the District's 15 vehicles allocated to SB270 activities. There is a decrease of \$6,000 or -17.07% for estimated expenses as older vehicles requiring maintenance have been replaced. (\$34,000)

II.I. – Maintenance of Equipment – Materials

The District operates twenty-one (21) or more (depending on special projects) PM monitors in the Owens Lake and Mono Basin networks. Items included in this category for those monitors include: pumps, filters, solar panels, batteries, air inlets, bearings, rebuild kits, and other associated equipment. This category also includes the cost to maintain 180+ Owens and Mono Lake Sensit sand-motion monitoring sites (including solar panels, regulators, batteries, radio communication, camera replacement and other associated equipment), purchase parts for existing ATV's, vehicles, plus monitoring stations (shelters, tubes, rails, pipes). The 16-year old Sensit network is performing much better than expected in the harsh Owens Lake environment but does require continual repairs and replacements. Further, maintenance items have been included for the 17 meteorological stations with sensors that can be repaired and/or refurbished and 12 camera sites. \$95,000 has been budgeted for this category (-\$2,000 or -2.06%).

II.K.12 – Owens Lake Scientific and Historic Consulting

\$10,000 is budgeted for technical support on issues related to science and history of Owens Lake. These funds are budgeted for services to support the District on scientific issues related to the character, nature and development of Owens Lake.

II.K.13 – Owens Lake Air Quality Modeling

The District has retained the services of Mr. Ken Richmond to conduct Owens and Mono Lake air quality modeling since the 1990's. Mr. Richmond leads a team of scientists for ENVIRON International Corp which recently merged with Ramboll, a Denmark based firm. The proposed assessment includes \$250,000 for ENVIRON to assist the District with the preparation and review of particulate matter air quality modeling at Owens and Mono Lakes and to perform air quality model-related investigations needed to support the Owens and Mono Lake PM₁₀ State Implementation Plans. Air quality modeling is used to help identify areas that cause or contribute to air quality violations at Owens and Mono Lake and is required as part of the Owens Lake Dust ID Program pursuant to District Board Order #080128-01 and the 2014 Stipulated Judgment. The budget is the same as last year at \$250,000.

II.K.14 – Dust Compliance Measurement & Enforcement Consulting

The work tasks in this portion of the budget are separated into two parts. The first part consists of work associated with evaluation of dust control areas on Owens Lake via remote sensing. The second part consists of work associated with enforcement monitoring of the TwB2 areas to determine if they are potentially becoming emissive such that they need to be re-flooded or re-tilled.

Remote Sensing. Because of the large arial extent of the dust controls on Owens Lake, the District uses satellite imagery to evaluate the LADWP's ongoing compliance with the performance requirements associated with the managed vegetation and shallow flooding dust control measures. This component of the assessment is for professional services associated

with compliance analysis efforts. District staff conducts much of the compliance analyses in-house as opposed to through a consultant but is still in need of technical assistance by remote sensing professionals in the review, development and evaluation of methodologies and in data analysis.

The primary work to be completed with these funds includes the following main tasks: 1) Development of a compliance evaluation methodology for the Hybrid dust control areas; 2) Technical assistance and review of the 2015 compliance call for Managed Vegetation; 3) Development of a wetness threshold for the new Worldview-3 imagery used to determine the percentage of wet cover of the LADWP's Shallow Flooding wetness cover tests; 4) Assistance with monitoring of TwB2 areas; and 5) General consulting services.

In 2014-15, the assessed amount was \$100,000 for professional remote sensing services from the Desert Research Institute (DRI). For 2015-16, the amount budgeted for professional remote sensing services from DRI is \$150,000. The increase is due to development of a method for determining compliance of the new Phase 7a hybrid dust control measure areas, the use of enhanced World View 3 imagery with multispectral SWIR bands and assistance with remote sensing monitoring of TwB2 areas.

Tillage with Best Available Control Measure (BACM) Backup (TwB2). The 2014 Stipulated Judgment contains a protocol for monitoring and enforcing TwB2—a variation on the Shallow Flood BACM, that wets and/or roughens emissive Owens Lake bed surfaces to prevent emissions. TwB2 consists of soil tilling and/or wetting within all or portions of Shallow Flood BACM PM₁₀ control areas where sufficient shallow flood infrastructure and available water supply exists. The District requires the LADWP to maintain all TwB2 areas in compliance with all conditions and procedures contained in the 2014 Stipulated Judgment (Attachments B & C) such that TwB2 areas provide the 99 percent PM₁₀ reduction levels associated with the most stringent measure BACM required on Owens Lake.

During FY 2014-15, the District began working with consultants at the Desert Research Institute to develop the Induced Particulate Erosion Test (IPET) for characterization of potentially emissive surfaces on the dried bed of Owens Lake. Application of TwB2 means the District needs to develop a reliable method to monitor these dry areas to determine when an area needs additional measures, controls, or enhancements. It is important for the District to be able to monitor large areas quickly and accurately and be able to determine if an area is changing, or may become a problem. The IPET would be one tool available to the District to monitor these waterless BACM areas as well as map new source areas on the lakebed.

The 2014-15 DRI IPET project consisted of two phases. The first phase was to characterize the airflow conditions beneath a radio-controlled helicopter-type craft (Radio-Controlled Wind Induction Device, or RC-WInD). By defining the wind field beneath the RC-WInD a standardized measurement can be developed based on the RC-WInD's size and weight, thus enabling any rotary-winged aircraft to be used.

The second phase of the project examined PM₁₀ suspended by the RC-WInD and compare the IPETs dust sensor readings with that of a stationary wind inducing device developed by DRI and currently used by the LADWP. This device is known as the PI-SWERL. The study

looked into the placement of an onboard dust sensor to determine if such a sensor is feasible and reliable. The second part of Phase II was to compare the onboard dust sensors to the PI-SWRL and see if a relationship between the two devices can be made. These two tests were completed during the 2014-15 fiscal year and produced promising results. As the District moves forward using the IPET method to determine compliance in the TwB² areas, as well as mapping of new source areas using the RC platform, DRI would be used as needed to help develop and test new related methods.

For 2015-16, the amount budgeted for professional development services of the IPET with regard to TwB2 from DRI is \$50,000. The total for this category is \$200,000.

II.K.15 – Dust Compliance Measurement & Enforcement: Satellite Imagery

\$40,000 is budgeted for purchase of satellite images for compliance monitoring and enforcement of Owens Lake dust control areas. In 2014-2015 this budget item was \$10,000 primarily for purchasing of SPOT5 imagery in order to provide higher spatial resolution of areas controlled with Shallow Flooding by sprinklers. In 2015-2016, the amount of money for this budget item is increased to \$40,000 due to the need to purchase additional high resolution multispectral imagery for determining compliance in the hybrid dust control areas as well as imagery for the TwB2 areas and Shallow Flooding wetness cover tests.

II.K.16. and II.K.17 – Environmental Consulting Services

The District will be seeking bids for environmental consulting work to assist District staff with ongoing environmental compliance monitoring and special environmental consulting. On-call field services for environmental resource issues and tracking of compliance with all required environmental impact mitigation measures associated with Owens Lake dust controls will be needed. The budget contains \$30,000 for the ongoing environmental services. Additionally, for FY 2015-16, \$40,000 is budgeted for conducting required natural resource environmental surveys of new monitoring sites on Owens Lake under the 2014 Stipulated Judgment.

The environmental consultant will also provide archeological and environmental services related to the Cultural Resource Task Force per the 2013 Stipulated Order of Abatement (2013 SOA) for Phase 7a and the 2014 Stipulated Judgment for Phase 9/10 (\$100,000).

The total budget for the three tasks is estimated at \$170,000. A more detailed description of environmental consultant work efforts is found on page 20.

II.L. – Supplies and Tools

Budgeted items for this category include office supplies, general use supplies, computer supplies and in-field supplies and materials. Items in this category typically have a limited operating life. Backup meteorological and flow rate calibration and audit equipment and miscellaneous tools are required for the District to maintain all of the monitoring equipment in good operating order. Many of the District's meteorological systems are more than 10 years old, as is the equipment used to audit them. It is important to keep the calibration and audit equipment in good working order and to have funds available to procure additional equipment, should the aging equipment in use fail. \$30,000 (no change) has been budgeted for the Supplies and Tools category.

II.N. – Utilities

This category includes all communications and internet services for the Bishop and Keeler offices. Additional wireless DSL business services for remote monitoring site connections, data acquisition and wireless modem communications with ambient air quality monitoring sites, and telemetry data lines for remote data collection are also included. Peripheral computing and personal remote device connections are also maintained with these services.

Each District facility that houses electronic equipment must maintain the temperature within certain limits for the equipment to properly function. In the environment in the Eastern Sierra, this results in significant costs for heating in the winter, when night time temperatures regularly fall well below freezing, and for cooling in the summer, when the temperatures frequently exceed 100°F. In the case of the monitoring stations that house EPA monitors, the criteria are very restrictive with regard to station temperatures (EPA Quality Assurance Handbook Volume II, Appendix D, December 2013). Maintaining the station temperatures within the limits for collection of valid data results in high electrical costs. The utilities category budget is estimated at \$61,000 [no change].

II.O – Project Demonstration: Control Measure Testing

Testing Engineered Roughness to Control Dust Emissions from Owens Lake

\$100,000 is budgeted for a contract with the Desert Research Institute (DRI) to continue to study and investigate the testing of “engineered roughness elements” (ERE) as a waterless approach to controlling the lake bed surface and dust emissions. If such control effectiveness can be achieved, it could potentially translate into dust control strategies that are not only cost effective but also water efficient.

During the 2013-14 fiscal year the District and LADWP worked cooperatively on the first phase of a small-scale pilot project to test the use of roughness elements for dust control with DRI leading the research. The first phase of the testing was conducted in the Phase 7a area T1A-4. The Phase 1 ERE test was removed in June 2014 due to construction of the permanent dust controls in T1A-4. In fiscal year 14-15 DRI will reinstall the EREs and scientific instrumentation at a new location as part of the Phase 2 testing. The Phase 2 testing is scheduled to begin in March 2015 and will extend until the end of June 2016. The \$300,000 budgeted in 2014-15 extended the project at the new test location and allowed for additional testing, data analysis and control measure development through June 2015. The FY 2015-16 funds of \$100,000 will be needed for to continue the testing until June 2016.

III. – Materials and Equipment Costs

This category 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 for 2012-13 totaled \$10,000 and nothing was budgeted for FY 2013-14 or 2014-15.

III.A. – Equipment: Scientific, Computer, Office, & General (>\$5,000)

This category encompasses items costing more than \$5,000 and includes new or replacement scientific equipment, air monitors and related parts, certain computer equipment, software (office upgrades, data logger, GIS, accounting, anti-virus), furniture, office machines and safety equipment. The current copier, scanner and fax machine is now 6 years old. It has been used extensively the past 5 years and frequently breaks down requiring servicing during

critical use periods. The reliability, quality and usefulness has deteriorated and warrants purchase or leasing of a new machine during 2015-16 at a cost not to exceed \$24,000 (including taxes, delivery, monthly maintenance and toner supplies).

The air quality monitoring equipment the District currently uses will typically have an operational lifespan of five to seven years, given the harsh environment in which it functions. Some of the older monitors currently in operation were purchased in 1999, are worn out and need replacement. Equipment failures are likely given the age of the monitoring equipment currently in place. In order to address these failures and avoid data loss, which would jeopardize the District's ability to determine the efficacy of the LADWP mitigation measures, sufficient funds need to be budgeted for replacement equipment each year. During the 2008-2009 fiscal year, the District started capital accrual accounts for equipment replacement. In order to minimize the impact that wholesale equipment replacement would cause in any single budget year, District staff proposed spreading the equipment replacement over several years, thereby reducing the impact in any one year and smoothing out year-to-year budget variations.

Additional accrual account funds were removed from the FY2012-2013 budget due to the fact that the company that produced the TEOM monitors (Rupprecht & Patashnick) was purchased by Thermo Fisher Environmental. Thermo will discontinue support of the R&P model 1400a(AB), which comprises all the monitors in the District's current stock, in 2020. Thermo has produced an upgraded version of the TEOM that collects both PM2.5 and PM10 data that recently passed EPA certification for PM10, PM2.5 and PM10-2.5 monitoring. Since FY 2012-2013, staff has determined the more prudent course was to postpone accruals for instrument purchase until two upgraded TEOM PM2.5/PM10 monitors could be tested by District staff. The District has procured two of these monitors and has begun testing them at the White Mountain Research Center site and at the Keeler site, comparing them with the existing monitors at the two locations. The test will continue through the 2014-15 dust season, after which the data from all of the monitors in the test will be evaluated leading toward a decision regarding replacement monitors for the District's aging TEOM monitors.

III.B. – Vehicles and ATVs

The District relies daily on off-road vehicles and all-terrain vehicles (ATVs) for transportation from and to monitoring stations at Owens Lake and Mono Lake. The District policy on replacement of vehicles states that field vehicles may be replaced after they have accumulated 110,000 miles, or when staff determines significant maintenance and/or safety issues warrant replacement. Staff may determine that vehicles be kept beyond the 110,000 mile limit but must inspect the vehicles regularly and annually reassess them.

No funding for vehicles or ATVs is anticipated for the 2015-16 fiscal year.

Workplan

The following efforts will take place under the SB 270 Assessment:

Air Quality Monitoring

For fiscal year 2015-16 the SB 270 program will operate 21 air quality monitors (17 TEOMS and 4 Partisols in operation; 5 TEOMs ready for deployment) at 14 separate sites at Owens Lake and 2 sites at Mono Lake. These sites have been selected by District staff and approved by the EPA. They were selected in accordance with Title 40 CFR Part 58, Sections 58.3, 58.10, 58.13, 58.14, 58.20, and Appendix D. These stations are operated in accordance with Title 40 CFR Part 58 Appendix A. In addition to the air quality monitors, there are 19 meteorological sites at Owens Lake and one at Mono Lake (many of the meteorological sites are located at air monitoring sites). District personnel are responsible for the operation and maintenance of the monitoring equipment as well as installing and removing filters, weighing filters, validating data, conducting quality control checks, conducting quality assurance audits, and data reporting.

Dust ID Program

The District will continue to operate the Owens Lake and Mono Lake Dust Identification Programs. The effort at Owens Lake consists of operating approximately 180 Sensit sand motion sensing devices on the lake bed, and within the Keeler Dunes, mapping the location of dust emissions during dust storms, time-lapse video recording of dust events and GPS mapping the location of emission areas on the lake bed after dust storms.

The Dust ID program at Mono Lake consists of 10 Sensit sites collocated with Cox Sand Catchers (CSCs), seventeen (17) additional CSC-only sites and two cameras. The purpose of this network is to characterize the exposed playa source area contribution to the PM₁₀ impacts on the northeast shore of Mono Lake.

The Dust ID Program at Owens Lake is an ongoing effort to identify dust source areas at the Lake, and to quantify their dust emissions and impacts on air quality. The program was initiated in 1999 and includes an extensive network of erosion monitoring equipment, time lapse cameras, PM₁₀ monitors, and meteorological towers. The Dust ID Program also provides resources for personnel to map source area boundaries and dust plumes, and to collect and analyze the information.

The Dust ID Program at Owens Lake is a required component of the 2008 SIP Board Order and 2010 Coso Junction Maintenance Plan and is the primary method used to identify dust source areas that cause or contribute to exceedances of the PM₁₀ standard. These would include new sources of the dust that may need control or controlled areas that are out of compliance with SIP and Maintenance Plan requirements.

TABLE 2
FY 2015-16 SB 270 Fee

150417

EXPENSES	2014-15	2015-16	% change
I. Employee Costs			
A. Employee Wages	1,495,000	1,511,000	1.07%
B. Retirement	400,000	425,000	6.25%
C. Insurance Benefits	310,000	299,000	-3.55%
D. Taxes	270,000	267,000	-1.11%
E. Retiree Medical Insurance Unfunded Liability	0	0	0.00%
F. Worker's Compensation Insurance	20,000	16,000	-20.00%
Employee Costs	2,495,000	2,518,000	0.92%
			23,000
G. Proposed FTE (+2.55): Air Monitoring Tech I (1.0), Field Services Tech I (1.0), Administrative Clerk (.55)		205,000	
Employee Costs w/ +2.55 FTE		2,723,000	9.14%
			228,000
II. Operating & Compliance			
A. Advertising - Legal Notices & Ads	4,000	5,000	25.00%
B. Dues, Subscriptions, Education, Use Tax & Fees	26,000	26,000	0.00%
C. Equipment: Computer, Furniture, General, Office, Safety, Scientific, Software (<\$5,000 ea)	120,500	125,500	4.15%
D. Fuel & Gasoline	31,000	31,000	0.00%
E. Health & Safety	4,000	4,000	0.00%
F. Insurance - Liability, Fire & Casualty	46,000	46,000	0.00%
G. Leases & Rents: Equipment, Office, Site, Storage	106,000	110,000	3.77%
H. Maintenance & Repairs of Equipment - Labor	41,000	34,000	-17.07%
I. Maintenance & Repairs of Equipment - Materials	97,000	95,000	-2.06%
J. Postage & Shipping	4,000	4,000	0.00%
K. Professional & Special Services	616,500	750,500	21.74%
L. Supplies & Tools (In-Field, Office, General Use)	30,000	30,000	0.00%
M. Transportation & Travel	18,000	18,000	0.00%
N. Utilities	61,000	61,000	0.00%
O. Project Demonstration: Control Measure Testing	300,000	100,000	-66.67%
Operating & Compliance Costs	1,505,000	1,440,000	-4.32%
			-65,000
III. Materials & Equipment			
A. Equipment: Computer, Furniture, General, Office, Scientific, Software, Furniture (>\$5,000 ea)		24,000	
B. Vehicles & ATVs	0	0	
Materials & Equipment Costs	0	24,000	
			24,000
ExpensesTotal (Parts I, II, III)	4,000,000	4,187,000	4.68%
			187,000
IV. Special Legal Fee			
A. Legal services to implement terms of the 2014 Stipulated Judgement between District and LADWP (Sacramento County Superior Court Case No. 34-2013-80001451-CU-WM-GDS (2011 SCR))		800,000	-33.33%
Special Legal Fee Assessment	1,200,000	800,000	-33.33%
			-400,000
V. Owens Lake Scientific Advisory Panel			
A. 2014 Stipulated Judgment (Article 12.G)	0	750,000	0.00%
SB 270 Total Fee Assessment (Parts I - V)	5,200,000	5,737,000	10.33%
General Fund Reserves Balance as of March 31, 2014	1,528,232		537,000
General Fund Reserves Balance as of March 31, 2015		1,360,737	
Minimum Reserve Policy Amount @ 20% of FY Costs	1,040,000	1,147,400	
Credit to SB 270 Fee Assessment	488,232	213,337	
FY 2015-2016 SB 270 Fee Due	4,711,768	5,523,663	17.23%

811,895

FY 2015-2016 DETAILS

TABLE 3

II.C. - Equipment (<\$5k)		SB270
1	Computers, Printers, Scanners, Parts	25,000
2	Furniture	500
3	General Use & Safety	1,000
4	Office Communications (Digital 395)	5,000
5	Scientific (SB270: Sensits & Datalogger Upgrades; Wind Sensors)	70,000
6	Software	20,000
7	Audio Visual Equipment & Conferencing	4,000
Equipment (<\$5k)		125,500
II.G. - Leases & Rents		SB270
1	Bishop - Main Office	73,000
2	Bishop - Tech Workspace	7,000
3	Bishop / White Mtn Research	-
4	Equipment	3,000
5	Keeler - Office (Owens Lake)	9,000
6	Keeler - Office Portable Trailer (Owens Lake)	7,000
7	Lone Pine - Site	1,000
8	Mammoth Lakes - Site	-
9	Mono Lake - Simis Site + Storage Site	2,000
10	Olancha - Site w/ Utilities	3,000
11	Parking	3,000
12	Storage	2,000
Leases & Rents		110,000
II.H. - Maintenance & Repairs of Equipment - Labor		SB270
1	Scientific: monitor repairs, lab certifications, calibrations	19,000
2	Vehicles: tires, tune-ups, oil changes, repairs, washing	10,000
3	General: offices, equipment, maintenance	1,000
4	Transportation/Installation of short-term monitors	-
5	Safety respiratory screen	4,000
M&R-Labor		34,000
II.I. - Maintenance & Repairs of Equipment - Materials		SB270
1	Scientific: monitors, repair parts, equipment, lab, QA	25,000
2	Vehicles: parts, equipment, tires	5,000
3	General: office equipment parts, batteries, miscellaneous	5,000
4	Sensit Network, camera site upgrades, NRG wind sensors	60,000
M&R-Materials		95,000
II.K. - Professional & Special Services		SB270
1	Board Stipend	4,200
2	Board Stipend - Hearing Board	1,000
3	Payroll & Financial Software Support	4,000
4	Human Resources Consulting	3,000
5	Independent Fiscal Auditor	7,500
6	Inyo Co. Auditor: Fiscal Support	5,100
7	Inyo Co. Counsel: Legal	11,000
8	Janitorial Services	8,000
9	Consulting Services: IT, Data Mgmt, Web	7,700
10	Air Monitoring Consulting Services	4,000
11	Legal Services: General	25,000
12	Owens Lake Science and History	10,000
13	Owens Lake Air Quality Modeling Consulting	250,000
14	Dust Compliance Measurement & Enforcement Consulting	200,000
15	Dust Compliance Measurement & Enforcement: Satellite Imagery	40,000
16	Environmental Consulting (Compliance & Site Surveys)	70,000
17	Environmental Consulting (Cultural Resources Task Force)	100,000
18		
Professional & Special Services		750,500

FY 2015-2016 DETAILS

TABLE 3

II.N. - Utilities		<u>SB270</u>
1	Electric/Water/Gas/Trash	22,500
2	Communications/Internet/Telephone	30,500
3	Cell Phones	8,000
	Utilities	<u>61,000</u>
II.O. - Project Demonstration: Control Measure Testing		<u>SB270</u>
1	Engineered Roughness Elements: Consulting & Prof. Services	100,000
2		-
3		-
	Control Measure Testing	<u>100,000</u>
III.A. - Equipment: Scientific, Computer, Office, Furniture(>\$5k)		<u>SB270</u>
1	Replacement PM Filter Monitors, @\$18,000 ea.	-
2	Backup TEOM Replacement, @\$36,000 ea.	-
3	Mono Network Upgrades	-
4	Owens Lake PM Monitoring Network Upgrades	-
5	Replacement Lab Temp/RH Control System	-
6	Copier, Scanner & Fax Machine	24,000
	Equipment (>\$5k)	<u>24,000</u>
III.B - Vehicles & ATVs		<u>SB270</u>
1	Replacement Vehicles (Capital Expenditure Fund)	-
2	Replacement ATVs	-
		<u>-</u>

TABLE 4

150417

FY 2015-16 Employee Time Allocation	District	SB-270	FTE	
Regular Employees				
Air Pollution Control Officer	0.10	0.90		
Deputy Air Pollution Cont Officer	0.20	0.80		
Air Quality Specialist II	2.00	-		
Director Technical Services	-	1.00		
Field Services Technician II	0.30	1.70		
Sr. Systems & Research Analyst	0.05	0.95		
Systems Research Analyst	0.10	2.90		
Senior Scientist	0.20	0.80		
Admin. Projects Manager	0.15	0.85		
Admin Asst/ Board & Permit Clerk	0.25	0.75		
Fiscal Services Technician	0.15	0.85		
Air Monitoring Specialist	0.15	0.85		
Air Monitoring Technical Specialist	-	1.00		
Air Monitoring Tech II	-	2.00		
Air Monitoring Tech II	0.35	2.65		
Subtotal Regular Employees	4.00	18.00	22.00	
	0.50	-0.50	0.00	
Contract Employees				
Administrative Clerk	0.15	0.85		
Air Monitoring Technician I	-	1.00		
Field Services Technician	-	1.00		
Subtotal Contract Employees	0.15	2.85	3.00	
TOTAL 2015-16 FTE	4.15	20.85	25.00	2.55
TOTAL 2014-15 FTE	4.11	18.34	22.45	-0.92
TOTAL 2013-14 FTE	3.56	19.81	23.37	1.00
TOTAL 2012-13 FTE	3.51	18.86	22.37	-1.50
TOTAL 2011-12 FTE	3.58	20.29	23.87	-0.75
TOTAL 2010-11 FTE	3.55	21.07	24.62	-1.75
TOTAL 2009-10 FTE	3.66	22.71	26.37	0.00
TOTAL 2008-09 FTE	3.65	22.72	26.37	

Additional Details Regarding Professional Services Items II.K.12, II.K.14, II.K.15, II.K.16 and II.K.17

The Professional Services sub-budget contains funds for contracts with consultants for technical support in remote sensing techniques for dust control measure compliance development and enforcement, for science and history of Owens Lake, for testing of Engineered Roughness Elements as a measure for dust control on Owens Lake and for environmental services associated with the implementation of the 2008 SIP EIR and now the 2014 Stipulated Judgment. Additional details on the scope of work for these contracts are provided below.

II.K.16 & II.K.17 – Environmental Consulting Services

There are three main items to be included in budget category II.K.16 and II.K.17. The first item consists of work related to the environmental impacts and mitigation measures from the 2008 SIP and EIR (\$30,000). The second item provides for natural resource surveys of new monitoring sites in the Dust ID program (\$40,000). The third item consists of technical work and participation in the Cultural Resource Task Force (CRTF) (\$100,000). The total amount of the three items in budget category II.K.16 and 17 is \$170,000. For FY 2015-16, the District plans to request bid proposals for this work.

The 2008 Owens Valley SIP and EIR contain a considerable number of mandatory mitigation measures to reduce the environmental impacts caused by the dust control project. The District has implemented an Environmental Quality Assurance Program (EQAP) to ensure objective and timely compliance and reporting pursuant to the Mitigation Monitoring and Reporting Program (MMRP). The MMRP is a mandatory component of the 2008 EIR and is required by the California Environmental Quality Act (CEQA). The efficient implementation of the EQAP and MMRP involves coordination, communication, and reporting among the District, the LADWP, responsible public agencies, interested public agencies, and the public. These other agencies mainly include the California State Lands Commission and the California Department of Fish and Wildlife. This effort involves reviewing the adequacy of compliance plans submitted to the District by the LADWP in fulfillment of mitigation measure requirements to avoid and/or reduce environmental impacts. As the MMRP is implemented, the District will be responsible for ensuring compliance with dozens of subtasks within the MMRP and compliance programs. Where compliance is achieved, the District intends to document it and report it to responsible agencies and the public. The budget contains a \$30,000 for both the compliance monitoring and reporting and for general environmental issues assistance.

For FY 2015-16, the environmental consultant will provide archeological and environmental services related to any Dust ID network expansion onto un-surveyed areas of the Owens playa. As emissive areas on the playa are controlled not many new source areas are expected outside of the existing Dust Control Areas (DCA's). However it may be necessary as new areas are identified to expand the Dust ID network into areas that are currently not monitored by sand flux monitors. In order to comply with state and federal agencies, as well as landowner requirements for environmental monitoring before sites can be added, the budget contains \$40,000 to provide necessary surveys and environmental documentation and review.

For FY 2015-16, the environmental consultant will also provide archeological and environmental services related to the Cultural Resource Task Force (CRTF) per the 2013 Phase 7a and Keeler Dunes Settlement Agreement and related 2013 SOA. As the District has no archaeological

expertise and the CRTF is dealing with complex technical and legal archaeological issues, the District must retain outside assistance. The budget contains \$100,000 for work related to the CRTF.

II.K.14. – Dust Control Measure Compliance and Enforcement – DRI

Remote Sensing. The FY 2015-2016 budget contains funds for dust control measure compliance enforcement and for technical support by the Desert Research Institute (DRI) of the District's remote sensing efforts (\$150,000) and IPET for the TwB2 monitoring protocol (\$50,000) (Operating Costs, Section II, Item II.K. 14 above for details). Work tasks provide for consultation services with District staff for compliance measurements for the existing Managed Vegetation area, development of a method for determining compliance of the Hybrid dust control areas with performance requirements, development of a wetness threshold for the new high-resolution Worldview3 satellite imagery, work on the TwB2 monitoring and the Shallow Flooding Wetness Tests as well as general consulting services. Each task is discussed in more detail below.

Remote Sensing Work Tasks: (\$150,000)

Managed Vegetation Compliance

An evaluation of the saltgrass vegetation cover on the Managed Vegetation dust control measure on the southern portion of Owens Lake will be completed with satellite imagery. This evaluation of the saltgrass cover will be performed in 2015-16 for the 2015 growing season. In 2013-2014, the District tasked DRI to develop and establish a routine so that the Managed Vegetation analysis could be conducted in-house. District staff plans to run the 2014 and 2015 Managed Vegetation calls while being trained in the routine established by DRI. A portion of the funds budgeted in II.K.14 are to provide the District with technical support from DRI in the training and review of the 2015 Managed Vegetation compliance call.

Additionally, the LADWP has created a new vegetated area in the northern portion of the lake bed (T30-1). This area was planted in a Shallow Flood dust control area in 2006. The T30-1 area varies substantially from the traditional Managed Vegetation area in that it consists of several different plant species that provide both vertical and horizontal variation. Due to this structural and compositional diversity, the current approved compliance determination method is not capable of accurately evaluating the compliance conditions on the T30-1 area. As a result, the District and LADWP are working together on developing a new vegetation compliance method that can be applied to the T30-1 area and similar varied vegetation sites that are being planned in the future. A portion of the funds budgeted in II.K.14 are to provide the District with technical support from DRI in the development of this proposed new vegetation compliance method as well as conducting a compliance call for the existing Managed Vegetation area on the southern portion of the lake bed..

Hybrid Shallow Flooding-Managed Vegetation Compliance

Current dust control compliance determinations are based on whether an area meets either the Shallow Flooding wetness cover, the Managed Vegetation cover requirement or the Gravel requirements with credit only allowed for one measure within an area. The LADWP has designed into the Phase 7a dust control project the creation of several square

miles of a dust control composed of a mix of the three approved BACM (Shallow Flooding, Managed Vegetation, and Gravel). The three measures are mixed in order to increase habitat value, increase aesthetic value and to conserve water. Within the vegetation portion of the control areas, the vegetation will be a mix of several different species instead of the mono-culture of saltgrass present in the traditional Managed Vegetation area providing both vertical and horizontal variability. Due to this structural and compositional diversity, the current approved compliance determination method for vegetation is not capable of accurately evaluating the compliance conditions of the vegetation in the Hybrid areas. As a result, the District and LADWP are working together on developing a new compliance method that can be applied to the Hybrid areas. This task is to continue to work on the establishment of a method for determining compliance in an area with mixed vegetation, water, and gravel such that all control techniques are credited and factored into the compliance call. A portion of the DRI II.K.14 budget will be used to provide technical support in this effort.

Worldview3 Wetness Threshold

Thresholds for determining wetness levels and compliance with Shallow Flooding performance requirements have been developed by the District for Landsat5, Landsat7, Landsat8 and SPOT 5 satellite imagery using the SWIR portion of the spectrum. The horizontal spatial resolution of the Landsat sensors and SPOT sensor is coarse (30-meters and 20-meters, respectively). This resolution has worked well for the compliance calls where the shallow Flooding areas are large. However, with the plans for reducing the size of the Shallow Flooding areas and converting many of the Shallow Flooding areas to sprinklers the coarse resolution of the Landsat and SPOT imagery does not allow accurate measurements of the wet cover present in many of the Shallow Flooding areas. As such it may be necessary to use a satellite platform that has the same capabilities of the Landsat and SPOT but with higher resolution. The new Worldview3 satellite has spatial resolution of 3.7 meters and several SWIR bands. The purpose of this task is to conduct a study to determine the wetness threshold for the Worldview3 satellite so that it can be used to determine wetness cover levels in areas that require higher spatial resolution. A portion of the DRI II.K.14 budget will be used to provide technical support in this effort.

Monitoring of Shallow Flooding Wetness Cover Tests and TwB2

The LADWP is conducting tests of Shallow Flooding using sprinklers in order to refine the curve that relates control efficiency to wetness cover. The work plan for the testing calls for wetness cover measurements across the four test areas every 1-2 weeks either using a commercially available satellite image with SWIR sensors or a sensor mounted on one of the District's UAVs. Additionally, the LADWP plans to convert 4 square miles of Shallow Flooding to TwB2 per the 2014 Stipulated Judgment. The roughness, emissivity, and clod cover of the TwB2 areas will be monitored throughout the project. Based on the size of the area that needs to be monitored, it is important to develop a quick remotely sensed method for determining if a TwB2 area needs to be re-tilled or re-wetted. The District plans to use the professional services of experts at DRI to assist in developing the methods and in data analysis and evaluation for both the Shallow Flooding Wetness Tests and the TwB2 areas. A portion of the DRI II.K.14 budget will be used to provide technical support in this effort.

IPET Monitoring of TwB2: (\$50,000)

In FY 2014-15 the District worked with DRI to characterize the wind produced by the RC-WInD quad-copter that will be used to evaluate the surface stability of TWB2 areas. In FY 2015-16 the District plans to continue with investigations to expand the application of the RC-WInD platform and the IPET method to evaluate the surface stability of soils on and around Owens Lake. These investigations may provide us with better methods to identify and characterize erodible surfaces that cause or contribute to exceedances of the air quality standards.

II.K.15. – Satellite Images

As discussed above, District staff will be conducting the Shallow Flooding dust control compliance determinations in 2015-16. Due to the large areal extent of the dust control areas (currently approximately 42 square miles), the only practical way to conduct the compliance determinations is through analysis of satellite imagery. The current method used for compliance determinations on the Shallow Flooding areas generally uses LandSat8 satellite imagery. This imagery is obtained at no cost from the USGS. However, this free imagery is only available on a regular schedule (every 16 days) and has a horizontal resolution of 30 meters. This frequency and spatial resolution is sufficient most of the time, but restricts the District in its ability to conduct wetness calls in the Shallow Flooding areas during cloudy periods and during certain times of year when higher resolution is needed.

Fortunately, there are other satellite platforms that can provide the same information as LandSat which can be tasked to collect an image of Owens Lake on a specific date. However, unlike the LandSat images which are free, there is a cost alternate imagery. The District plans to use the LandSat image overpasses as the primary compliance tool for the Shallow Flooding areas in 2015-16. The alternate platform images will be used for compliance analyses of the Shallow Flooding areas when needed either due to weather conditions making the use LandSat impossible or “on demand” when there is a concern that certain areas are not meeting the dust control wetness requirements and also in the spring when higher resolution data is needed in order to determine the compliance of sprinkler areas.

Additionally, the District has need to purchase high resolution satellite imagery as part of the compliance monitoring method determination for the Hybrid dust control areas that are required to be operational by December 31, 2015. There is \$40,000 budgeted in II.K.15 for purchase of satellite imagery for the 2015-16 year.

II.K.16. – Owens Lake Scientific and Historic Consulting

\$10,000 is budgeted in II.K.16 for technical support on issues related to science and history of Owens Lake. These funds are budgeted for services to support the District on scientific issues related to the character, nature and development of Owens Lake.

Additional Details Regarding: Project Demonstration: Control Measure Testing, Item II.O.

FY 2015-16: Engineered Roughness Elements (\$100,000)

During the 2013-14 fiscal year, the District and LADWP worked cooperatively on a research project conducted by DRI on the development of a potential new waterless dust control measure. The project, termed the Engineered Roughness Element (ERE) project, involves the placement of solid object (roughness elements) in an array on the lake bed surface to reduce dust emissions from the area. The District considers the ERE measure to be promising for effective temporary as well as permanent dust control on the lake bed. A small-scale pilot test of the measure was conducted from February 2014-June 2014 in the Phase 7a area T1A-4. Due to construction of the required Shallow Flooding area in T1A-4 by the LADWP, the Phase 1 project was removed from the test area after just over 4 months of data collection.

Based on the relatively short testing period for the project, the District anticipates that further testing, data collection and control measure evaluation will be needed in order to determine the effectiveness of EREs for dust control on the lakebed. As such, the second phase of the project (Phase 2) is set to begin in March of 2015 either in one of the Phase 9/10 control areas or in a small portion of one of the Shallow Flooding cells on the northeastern portion of the lakebed. The funds budgeted for 2015-16 (\$100,000) are to provide additional data collection and analysis by DRI of the promising ERE measure.

IV. Legal Fee Assessment

During FY 2014-15, the District incurred legal services costs to defend the 2011 Supplemental Control Requirements Determination (SCRD) in Sacramento County Superior Court as well as the 2012 SCR D appeal before CARB, and related matters. SB 270 fee assessment appeals for the three fiscal years preceding FY 2014-15 were appealed and resolved in February 2014. An extensive description and detailed list of the legal actions taken to date can be found in the FY 2014-15 SB 270 Budget and Assessment dated May 5, 2014.

SUMMARY

Fees

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 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 LADWP paid \$1,350,000 to the District as an environmental public benefit payment for solar power to public service districts and \$1.2MM 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 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 CARB.

Dust Control Measures

On December 16, 2014, the Sacramento County Superior Court issued a ruling denying LADWP's petition requesting that CARB's 2011 SCR D decision in favor of the District, be overturned. On December 30, 2014, the Sacramento Superior Court approved a stipulated judgment (2014 Stipulated Judgment⁷) 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 LADWP. The 2014 Stipulated Judgment negotiated between the District Governing Board and the LADWP Commission settles the dispute initiated with the 2011 SCR D. It brings 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 LADWP completing dust control measures on 48.6 square miles of the Owens Lake bed, while also saving water, and ultimately it will bring the Owens Valley into compliance with the federal air quality standard.

LADWP and the District made many new commitments that are contained in the 2014 Stipulated Judgment. District and LADWP staff have a common goal, which is to get the final dust control measures implemented and to do it in a way that will help LADWP reduce the amount of water used at Owens Lake. As discussed in earlier sections, there are additional costs for personnel,

⁷Sacramento County Superior Court No. 34-2013-80001451-CU-WM-GDS

equipment and professional services for dust control measures and monitoring tasks to be carried out over the next three to five years. A significant requirement of the agreement is the preparation and amendment of the District adopted Board Order No. 080128-01 (2008 SIP Order) during FY 2015-16. In order to prepare the 2015 SIP amendment, District will require assistance from its long standing legal counsel to assist in the complicated procedure. The amendment requires extensive background knowledge and detailed review of previous 2008 SIP Board Order amendments that were made in 2011 and 2013.

In addition, the LADWP and District will continue to implement the provisions of the Keeler Dunes settlement agreement. In part, that agreement provides for additional procedures for the analysis and implementation of control measures in areas where cultural resources issues are or may be present. Control measures will also involve coordination between other agencies with responsibilities and jurisdictions including but not limited to the U.S. Bureau of Land Management and State Lands Commission, as well as potential negotiations for access from private land owners. In addition, LADWP continues to implement the provisions of a Stipulated Order of Abatement under the oversight of the District. Because these activities are legally mandated, any interpretation or enforcement of those provisions will involve consultations on legal issues. The complexity of these matters will require further assistance from District counsel.

It is estimated that \$800,000 will be needed for legal services to assist the District during FY 2015-16. This amount is an estimate of a reasonable fee to allow the District to respond to any unanticipated legal challenges with necessary and appropriately qualified legal counsel. SB 270 provides for the annual assessment of fees related to the above projects and other related activities. It is difficult to anticipate the total estimated budget for legal services actions in part because of unpredictable circumstances that could arise not only by LADWP but from other private or public agencies. The District cannot be placed in a position of underestimating the total cost to respond to any and all legal actions. The District must carry out its legal duties under California law to protect the environment and public health. It should be noted that unexpended SB 270 fees are can either be re-directed to other approved costs or are credited back to the LADWP the following fiscal year.

V. Owens Lake Scientific Advisory Panel (OLSAP)

The 2014 Stipulated Judgment provides for financial support by the LADWP of the Owens Lake Scientific Advisory Panel (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 provided by LADWP for field studies and additional projects that are deemed necessary to address the tasks given to the OLSAP. OLSAP funding for this first year effort in FY 2015-16 will be \$750,000. If the OLSAP requires additional funding for field work or other investigations in 2015-16, the District and LADWP will consider a supplemental assessment under SB-270 to obtain the necessary funds.