Lake Elsinore & San Jacinto Watersheds Authority



City of Lake Elsinore • City of Canyon Lake • County of Riverside Elsinore Valley Municipal Water District • Santa Ana Watershed Project Authority

August 22, 2022

Jayne Joy, Executive Officer Santa Ana Regional Water Quality Control Board 3737 Main Street, Suite 500 Riverside, CA 92501

RE: 2021 Lake Elsinore Aeration and Mixing System (LEAMS) Nutrient Offset Credit Annual Accounting Report

Dear Ms. Joy:

On behalf of the Lake Elsinore San Jacinto Watershed Authority (LESJWA) and the Lake Elsinore & Canyon Lake TMDL Task Force, I am pleased to submit the 2021 Lake Elsinore Aeration and Mixing System (LEAMS) Nutrient Offset Credit Annual Accounting Report. LEAMS is managed and operated by the City of Lake Elsinore, the Elsinore Valley Municipal Water District (EVMWD) and the County of Riverside.

LEAMS is designed to mitigate nutrient (nitrogen & phosphorus) loads that originate from the sediments of Lake Elsinore and to generate offset credits which may be used by regulated dischargers to achieve compliance with the TMDL. A list of all the active participants in the LEAMS offset program, and the number of credits to which each is entitled, is shown in Table 4 and Table 6 of the Annual Report. In addition, a multi-year table summarizing the cumulative number of offset credits assigned to each stakeholder is provided in Attachment D to the 2021 Annual Report.

There are a several stakeholders with TMDL compliance obligations that have elected not to participate in the nutrient offset program and are not entitled to any compliance benefits from the LEAMS project. The non-participating dischargers include the U.S. Forest Service, the Native American Tribes, the California Department of Fish and Game and some agricultural operators.¹

The number of offset credits generated by LEAMS is calculated based on a methodology developed by Dr. Alex Horne that was reviewed and accepted by Regional Board staff.² Dr.

¹ The Western Riverside County Agricultural Coalition (WRCAC) has historically purchased LEAMS offset credits on behalf of their members but determined that such purchase was unnecessary in 2021 for its agricultural and dairy operators.

² Letter from Kurt Berchtold (RWQCB-8) to Dennis McBride (EVMWD). Approval of Lake Monitoring and TN/TP Offset Demonstration Programs. January 10, 2014.

Horne uses that methodology to assess the overall effectiveness of LEAMS. Dr. Horne's report for 2021 was submitted to the Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) on April 28, 2022 via EVMWD. The 2021 Report included additional analysis that takes into consideration data gathered from two sondes as well as monthly lake monitoring events to identify key algae species and heterocytes.

LESJWA and the Lake Elsinore and Canyon Lake Task Force continue to use deliberately conservative values for the licensing of offset credits. The licensing and purchase of offset credits as presented in the attached 2021 Annual Report are based on original estimates for the operation of LEAMS, after accounting for lake bottom sediment releases of nutrients.

We continue to support the overall operation of LEAMS and the watershed-wide commitment that numerous stakeholders have made to its continuing success. We also sincerely appreciate the support provided by the Regional Board and its staff for these innovative "offsets" approach to improving water quality and achieving regulatory compliance. Please contact me if you have any questions or concern regarding this 2021 Annual Report for LEAMS.

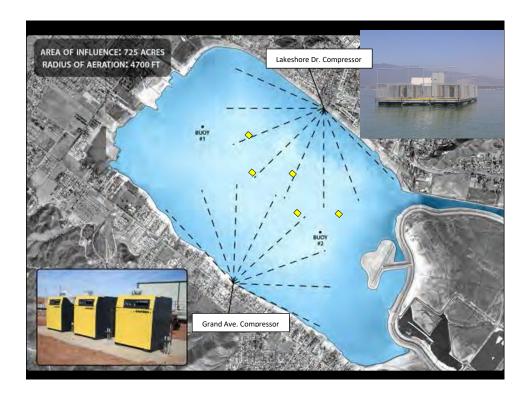
Respectfully submitted,

March R. North

Mark R. Norton, P.E., LEED AP LESJWA Authority Administrator

- Enc: 2021 Lake Elsinore Aeration and Mixing System (LEAMS) Nutrient Offset Credit Annual Accounting Report
- C: Barbara Barry, RWQCB

Lake Elsinore Aeration and Mixing System (LEAMS) FINAL 2021 Excess Offset Credit Annual Accounting Report



Prepared for: Operators of LEAMS

August 2022

Purpose

The purpose of this report is to fulfill the obligation of the Lake Elsinore and San Jacinto Watersheds Authority (LESJWA) to provide an annual Lake Elsinore Aeration and Mixing System (LEAMS) accounting report. This report details for calendar year 2021, the total number of offset credits available, the number of offset credits allocated to the Operators and the number and unit cost for each credit licenses sold to other stakeholders with Lake Elsinore and Canyon Lake Total Maximum Daily Load (TMDL) compliance obligations, as well as all fees collected for these credit licenses sold in calendar year 2021, and all marketing and administration expenses for that same calendar year.

It is intended, following receipt of this accounting report, that the Operators shall provide LESJWA with detailed instructions on how to disperse the net proceeds from the sale of the 2021 LEAMS offset credit licenses.

Background

LEAMS was designed and constructed by LESJWA using funding available through the Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection Bond Act of 2000. Completed in 2006, ownership of LEAMS was turned over to Elsinore Valley Municipal Water District (EVMWD), the City of Lake Elsinore and Riverside County identified collectively as the "Operators" to be operated and maintained as a joint project.

LEAMS consists of an aeration system operated by EVMWD and a Mixing System operated by the City of Lake Elsinore, which operated in tandem are intended to improve water quality in Lake Elsinore by improving the average concentration of dissolved oxygen (DO) in the water column. The system accomplishes this using a combination of shoreline compressors that disperse air from perforated pipelines anchored to the bottom of the lake and slow-turning propellers of an axial flow water pump mixing system located at five docking stations (4 axial flow pumps per station) around the high speed zone of the lake. The aeration system releases air bubbles from the pipeline perforations which rise to the surface and disperse air and oxygen. The axial flow pump mixing system turns propellers submerged below the docking stations and push high oxygenated surface water to the bottom of the lake which is low in dissolved oxygen where it will be reaerated, naturally.

When the TMDL was adopted, the Santa Ana Regional Water Quality Control Board (Regional Board) acknowledged that operation of LEAMS was expected to reduce internal phosphorus loads originating from lake bottom sediments by 35% or approximately 11,606 kg/yr.¹ Subsequent studies, conducted at the direction of the Regional Board, also demonstrated that the operation of LEAMS, based upon 2,000 hours of operation per year (hrs/yr), reduced the total mass of nitrogen in Lake Elsinore by an average of approximately 53,616 kg/yr.² Once the release of nutrients from lake bottom sediments are accounted for this results in approximately

¹ California Regional Water Quality Control Board - Santa Ana Region Res. No. R8-2004-0037 (Dec. 20, 2004).

² Dr. Alex Horne (U.C. - Berkeley). Nitrogen Offsets Produced by Artificial Water Column Mixing by Aeration Bubble Plumes in Lake Elsinore, CA. Dec. 3, 2012. Note: estimated nitrogen conversion/removal efficiency assumes that LEAMS operates a minimum of 2,000 hours/year. This is now a requirement in EVMWD's NPDES discharge permit.

7,000 kg/year in phosphorus and 44,000 kg/year in nitrogen removal capacity that is available as credits.

LEAMS Agreement to License Excess Offset Credits

The Exclusive License Agreement for Excess Offset Credits Generated by the Lake Elsinore Aeration & Mixing System (LEAMS Program), **Attachment A**, provides a mechanism for Operators of LEAMS (County of Riverside, City of Lake Elsinore and Elsinore Valley Municipal Water District) to market any excess offset credits generated by LEAMS to other stakeholders with TMDL compliance obligations, as defined in the Operation and Maintenance Agreement for LEAMS (Operators Agreement), **Attachment B**.

Through this Agreement, Operators may sell excess offset credits generated by LEAMS to offset annual O&M costs. The annual O&M budget for LEAMS, including a contingency fund for future repair & replacement costs is estimated at approximately \$ 500,000 per year. LEAMS O&M costs are shared equally among the three cost-sharing partners. In 2021, O&M expenditures for LEAMS totaled \$ 385,131. A summary of annual LEAMS O&M costs for FYE 2019 through 2021 are presented in **Table 1**. A detailed breakdown of annual O&M costs to each operator is available in **Attachment C.**

	FYE 2019 Annual O&M Costs	FYE 2020 Annual O&M Costs	FYE 2021 Annual O&M Costs
Lake Aeration Project O&M	\$ 295,363	\$ 240,003	\$ 346,731
Lake Mixing Project O&M	\$ 35,725	\$ 19,174	\$ 38,400
Total LEAMS O&M Costs	\$ 331,088	\$ 259,177	\$ 385,131

Table 1: LEAMS Annual O&M Costs FYE 2019 through 2021

The City of Lake Elsinore and EVMWD each maintain Contingency Funds to cover extraordinary and unforeseen expenses for their respective components of LEAMS. Additionally, this Contingency fund may be used by the Operators to replace, expand or otherwise enhance the Aeration System when mutually agreed. A summary of annual contributions by each Operator to their respective Contingency Fund for FYE 2019 through 2021 are presented in **Table 2**. A detailed breakdown of Contingency Fund contributions and withdrawals for each operator are available in **Attachment C.**

Table 2: LEAMS Reserve Fund Balance FYE 2019 through 2021

	FYE 2019 Annual Reserve Fund balance	FYE 2020 Annual Reserve Fund balance	FYE 2021 Annual Reserve Fund balance
Lake Aeration Project Reserve	\$ 759 <i>,</i> 688	\$ 844,100	\$ 864,100
Lake Mixing Project Reserve	\$ 395,788	\$ 445,788	\$ 477,090
Total LEAMS Reserve Fund Balance	\$ 1,155,476	\$ 1,289,888	\$ 1,341,190

In 2021, LEAMS Offset Credits are estimated based upon only 2,000 hours per year of operation of the system. In this scenario, the hourly nutrient reduction rates were adjusted to maintain the estimated 7,000 kg/yr. of phosphorus and 44,000 kg/yr. of nitrogen, as shown in **Table 3**.

Table 3: 2021 LEAMS Credit Hours Generated (Gross)

	Operation	Phosphorus	Nitrogen
	Hours	kg/yr.	kg/yr.
Total Nutrient Offset Credits Generated*	2,000	7,000	44,000

* 2021 estimate of Total Nutrient Offset Credits generated is a deliberately conservative value used for planning and budgeting. The actual long-term average value is much higher.

Operators reserve the offset credits generated by the operation of LEAMS to meet their own TMDL compliance obligations first. In 2021, the first 1,513 hours of LEAMS operation were reserved to the Operators as detailed in **Table 4**. A running total of the nutrient credits accrued by LEAMS Operators for compliance of the Lake Elsinore nutrient TMDL for the period of 2011 through 2021 is detailed in **Attachment D**.

Table 4: 2021 LEAMS Credit Hours Reserved to Operators

	Operation Hours	Phosphorus kg/yr.	Nitrogen kg/yr.
Credits Reserved to Offset EVMWD's Recycled Water	1,257	4,398	27,643
Credits Reserved by Riverside County for Urban Runoff	205	718	4,510
Credits Reserved by City of Lake Elsinore for Urban Runoff	51	179	1,122
Total Reserved Credits to Operators	1,513	5,295	33,275

In 2021, offset credits generated by the remaining 487 hours of operation, as detailed in **Table 5**, are available for licensing to other stakeholders with TMDL compliance obligations.

Table 5: 2021 LEAMS Credit Hours Excess (Available to License)

		-	
	Operation Hours	Phosphorus kg/yr.	Nitrogen kg/yr.
Nutrient Offset Credits Available to License	487	1,705	10,725

Through the LEAMS Agreement, stakeholders with TMDL compliance obligations (specifically LE&CL TMDL Task Force Stakeholders) may purchase available nutrient offset credits to demonstrate compliance with the Waste Load Allocations ("WLA") or Load Allocations ("LA") specified in the TMDL.

2021 LEAMS offset credits are available for purchase, in one-hour increments, for a one-time fee of \$300.00 per hour of LEAMS operation. This fee is based upon the required hours of operation of LEAMS estimated at no less than 2,000 hours per year. Through this agreement, each hour of LEAMS operation conveys 3.5 kg of phosphorus reduction credit and, when available, 22 kg of nitrogen reduction credit. The demand for annual LEAMS Offset Credits was estimated based upon the needs of the individual stakeholders to address their compliance obligations. 2021 LEAMS credit hours licensed to LE&CL TMDL stakeholders are detailed in

Table 6. A running total of the nutrient credits accrued by TMDL Task Force stakeholders forcompliance of the Lake Elsinore nutrient TMDL for the period of 2011 through 2021 is detailedin Attachment D.

Stakeholders	Operation Hours	Phosphorus kg/yr.	Nitrogen kg/yr.	Offset Credit Fees Collected
City of Beaumont	2	7	44	\$1,500
City of Canyon Lake	13	44	275	\$3,750
City of Hemet	28	97	605	\$8,250
City of Moreno Valley	106	371	2332	\$31,800
City of Murrieta	3	11	66	\$1,500
City of Perris	54	189	1188	\$16,200
City of Riverside	4	14	88	\$1,500
City of San Jacinto	8	28	176	\$2,400
City of Menifee	102	357	2244	\$30,600
City of Wildomar	24	84	528	\$7,200
San Jacinto Agricultural Operators ¹	0	0	0	\$-
San Jacinto Dairy & CAFO Operators ¹	0	0	0	\$-
CALTRANS	17	58	363	\$4,950
March Air Reserve Base Joint Powers Authority	3	11	66	\$1,500
US Air Force (March Air Reserve Base)	11	39	242	\$3,300
	375	1,310	8,217	\$114,450

¹ San Jacinto Agricultural and Dairy Operators opted not to purchase available 2021 credits.

The operators have designated LESJWA as the exclusive agent to market and administer any excess offset credits generated by LEAMS to other stakeholders with TMDL compliance obligations. LESJWA has full and complete responsibility for marketing the licenses for LEAMS credits and for collecting and remitting required license fees to the Operators. In 2021, the total number of Offset License Credits hours sold to other stakeholders with TMDL compliance obligations was 375 hours, which corresponded to \$114,450 in Offset Credit fees.

All expenses incurred by LESJWA to market and administer the LEAMS offset credit licensing program shall be reimbursed solely from the sale of offset credit licenses. In 2021, the sixth year of this License Agreement, expenses incurred by LESJWA to market and administer the LEAMS offset credit totaled \$12,000 resulting in net proceeds of \$102,450, as shown in **Table 7**, to be dispersed among the Operators as equal shares of \$34,150.

Table 7: 2021 LEAMS Agreement Net Proceeds

	LESJWA Administrative Budget	LESJWA Administrative Expenditures	Total Offset Credit Fees Collected	Offset Credit Net Proceeds to Operators	Equal Share Distribution of Proceeds
2021 Net Proceeds to LEAMS Operators	\$12,000	\$12,000	\$114,450	\$102,450	\$34,150

LEAMS Agreement Implementation schedule detailing the various deliverables and due dates is included as **Attachment E**.

Attachment A: Exclusive License Agreement for Excess Offset Credits Generated by the Lake Elsinore Aeration & Mixing System (LEAMS Program)

1 2 3	GE	EXCLUSIVE LICENSE AGREEMENT for EXCESS OFFSET CREDITS ENERATED by the LAKE ELSINORE AERATION & MIXING SYSTEM (LEAMS)
4	This EXCLUSI	VE LICENSE AGREEMENT for EXCESS OFFSET CREDITS generated by the LAKE
5	ELSINORE AE	RATION & MIXING SYSTEM (LEAMS) (hereinafter the "License Agreement") is
6		among the COUNTY OF RIVERSIDE ("COUNTY"), the CITY OF LAKE ELSINORE
7		ELSINORE VALLEY MUNICIPAL WATER DISTRICT ("DISTRICT") and the LAKE
8 9		ID SAN JACINTO WATERSHEDS AUTHORITY ("AUTHORITY"). The COUNTY, CITY, AUTHORITY are hereinafter collectively referred to as the "PARTIES." This License
10	Agreement.	once executed by all PARTIES, becomes effective on January 1, 2017.
11		shee executed by an Printies, becomes effective on January 1, 2017.
12		RECITALS
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14	a.	The CITY, DISTRICT and COUNTY are individual member agencies of the Lake
15		Elsinore and San Jacinto Watersheds Authority. The AUTHORITY is a joint
16		powers public agency formed for the purpose of implementing programs and
17		projects to rehabilitate and improve water quality in Lake Elsinore and Canyon
18		Lake and the watersheds that are tributary to these lakes.
19		
20	b.	The CITY holds title to and operates the Axial Flow Water Pump Destratification
21 22		System ("Mixing System") located in Lake Elsinore.
22	C.	The DISTRICT holds title to and ensure the later. This was Discussed
23	С.	The DISTRICT holds title to and operates the Lake Elsinore Phase II Aeration System ("Aeration System") located in Lake Elsinore.
25		System (Actuation System / located in Lake Lisindre.
26	d.	Collectively, the Mixing System and the Aeration System are known as the Lake
27		Elsinore Aeration and Mixing System ("LEAMS"). In general, the two systems are
28		run in tandem and operate on the same schedule.
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30	e.	The annual costs to operate and maintain LEAMS is shared equally between the
31		CITY, DISTRICT and COUNTY pursuant to a separate Agreement for the Operation
32		and Maintenance of LEAMS (dated May 23, 2017). For the purpose of
33		implementing this License Agreement, these three cost-sharing partners are
34 35		identified collectively as the "OPERATORS."
36	f.	The operation of LEAMS is intended to improve water quality in Lake Elsinore by
37	1.	improving the average concentration of dissolved oxygen. This, in turn, helps
38		reduce the average concentration of nitrogen and phosphorus ("nutrients") in
39		the lake. Elevated nutrient concentrations contribute to excessive algae growth
40		and interferes with recreation in Lake Elsinore. In addition, too much algae
41	A	adversely affects the aquatic habitat and increases the risk of fish kills. LEAMS
42		was designed and implemented to help prevent and reduce these challenges.
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44 45 The Santa Ana Regional Water Quality Control Board ("Regional Board") adopted g. a Total Maximum Daily Load ("TMDL") to improve water quality in Lake Elsinore 46 47 by controlling the amount of nutrients in the lake. The CITY, DISTRICT, COUNTY, 48 and numerous other stakeholders identified in the TMDL are obligated to limit 49 their nutrient contributions (called "loads") to Lake Elsinore. 50 51 h. When the TMDL was adopted, the Regional Board acknowledged that operation 52 of LEAMS was expected to reduce internal phosphorus loads originating from 53 lake bottom sediments by 35% or approximately 11,606 kg/yr. Subsequent 54 studies, conducted at the direction of the Regional Board, also demonstrated 55 that the operation of LEAMS was reducing the total mass of nitrogen in Lake 56 Elsinore by an average of approximately 53,616 kg/yr. 57 58 i. The Regional Board requires the DISTRICT to conduct additional studies, once 59 every three years, to reevaluate and confirm the overall effectiveness of LEAMS 60 at reducing nutrient concentrations in Lake Elsinore. The results are submitted 61 in a formal written report to the Regional Board. After the Regional Board accepts that report, the nutrient reductions generated by LEAMS are considered 62 63 approved "offset credits" provided LEAMS is operated in accordance with the 64 requirements of the DISTRICT's NPDES permit. 65 66 j. LEAMS is generally required to operate no less than 2,000 hours per year. 67 Therefore, on average, each hour of LEAMS operation generates approximately 68 3.5 kg of phosphorus reduction credits and 22 kg of nitrogen reduction credits. 69 70 k. All credits generated by the operation of LEAMS are the exclusive property of the 71 OPERATORS, and are owned in joint tenancy by the OPERATORS, and may not be 72 sold or transferred without the unanimous written consent of the OPERATORS. 73 74 ١. The Regional Board allows LEAMS credits to be used to demonstrate compliance 75 with the Waste Load Allocations ("WLA") or Load Allocations ("LA") specified in 76 the TMDL. The Regional Board recognizes LEAMS as an approved offset program 77 provided that LEAMS is operated in accordance with the DISTRICT's NPDES 78 permit. 79 80 Based on experience to date, the operation of LEAMS typically generates more m. 81 offset credits than the OPERATORS need in order to assure their own compliance with the TMDL's nutrient load restrictions. Therefore, the OPERATORS desire to 82 83 license some of the excess offset credits to other stakeholders named in the 84 TMDL so that these other stakeholders may rely on said credits to meet their 85 own TMDL compliance obligations subject to the review and approval of the 86 **Regional Board**. 87

88 n. Given the relatively large number of stakeholders that may be interested in 89 licensing excess offset credits to meet their own TMDL compliance obligations, 90 the OPERATORS determined it would be more efficient to administer all 91 licensing-related activity through the AUTHORITY. 92 93 This document describes the Terms and Conditions under which the OPERATORS p. 94 agree to license excess offset credits to other stakeholders named in the TMDL 95 using the AUTHORITY as their exclusive agent. 96 97 **TERMS AND CONDITIONS** 98 99 1) THE AUTHORITY AS EXCLUSIVE AGENT 100 101 The OPERATORS hereby designate the AUTHORITY as their exclusive agent to a. 102 market and administer limited-used licenses for any excess offset credits 103 generated by LEAMS to other stakeholders with TMDL compliance obligations. 104 The AUTHORITY shall have full and complete responsibility for marketing the 105 licenses for LEAMS credits and for collecting and remitting required license fees 106 to the OPERATORS. 107 108 b. All expenses incurred by the AUTHORITY to market and administer the LEAMS 109 offset credit licensing program shall be reimbursed solely from the sale of offset 110 credit licenses. The AUTHORITY is entitled to retain a sum, not to exceed 111 \$20,000 in the first year of this License Agreement and not to exceed \$12,000 in 112 any subsequent year of this License Agreement, from the proceeds received 113 from gross sales before remitting the remainder to the OPERATORS. 114 115 In the event that the proceeds received from gross sales are insufficient to c. reimburse the AUTHORITY's expenses, as described above, the OPERATORS have 116 no obligation to compensate the AUTHORITY for any difference or deficiency. 117 118 119 d. The AUTHORITY shall have primary responsibility for filing annual reports to the 120 Regional Board detailing and summarizing the disposition of all LEAMS offset credits. The AUTHORITY shall provide a copy of all such reports to the 121 122 OPERATORS at the same time these reports are submitted to the Regional Board. 123 The DISTRICT shall continue to have primary responsibility for developing the 124 documentation required to confirm the validity of the offset credits generated 125 by LEAMS and for reporting this information to the Regional Board in accordance 126 with the DISTRICT's NPDES permit. 127 128 Any person, municipality, corporation, government agency or other legal entity .e. 129 acquiring a valid license from the AUTHORITY shall hereinafter be referred to as 130 a LICENSEE.

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2) EXCLUSIVE LICENSES FOR EXCESS OFFSET CREDITS

- 133 No later than April 15th of each year, the OPERATORS shall notify the AUTHORITY a. 134 of the total number of excess offset credits, generated in the prior calendar year, 135 that are being made available for license to other TMDL stakeholders. The 136 AUTHORITY shall not offer any licenses for sale to others until officially notified 137 by the OPERATORS that excess offset credits are available, the amount of 138 nitrogen and phosphorus offset credit offered with each hour of LEAMS operation and the annual fee required for each license hour. All notices shall be 139 140 in writing and directed as described in Section 5 of this License Agreement.
- Available excess offset credits shall be licensed in one hour blocks of LEAMS 142 b. 143 operating time. Each available credit hour will be individually identified based on 144 the year the credit was generated and a unique sequential number (e.g. 2016-145 0129, 2019-0257, etc.). Each one hour block of LEAMS operating time 146 represents a volume of phosphorus and nitrogen reduction credits for the year 147 indicated by the block ID number as defined by the notification described in 148 §2(a) above. For 2015 and 2016 each hour of LEAMS operation conveys 3.5 kg of 149 phosphorus reduction credit and 22 kg of nitrogen reduction credit. However, 150 the OPERATORS reserve the right to revise the credit/hour ratio in future years.
- 152 The AUTHORITY is authorized to offer other TMDL stakeholders an exclusive С. 153 license to purchase and use available LEAMS offset credits for any lawful 154 purpose subject to all of provisions of this License Agreement. Each individually-155 numbered one hour block of LEAMS offset credits may be licensed for a one-156 time license fee of \$300.00. OPERATORS may also authorize the AUTHORITY to 157 market licenses for unused excess credits generated in calendar years prior to 158 2016, and to offer pro-rated discounts for credits generated in calendar years 159 2009 through 2015, subject to the written approval by the OPERATORS.
- 161d.The AUTHORITY shall provide an annual accounting report detailing all fees162collected for licenses sold in a given calendar year, and all marketing and163administration expenses for that same calendar year, to the OPERATORS by164January 31st of the following calendar year. Following receipt of this accounting165report, the OPERATORS shall provide the AUTHORITY with detailed instructions166on how to disperse the net proceeds from the sale of LEAMS offset credit167licenses in the prior calendar year.
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3) SALE OF LICENSES FOR EXCESS OFFSET CREDITS

171a.Ownership of all LEAMS facilities and of all offset credits generated by these172facilities shall remain with the OPERATORS. Only an exclusive license to use the173credits, as part of an approved offset program, is being offered by the174OPERATORS pursuant to this License Agreement.

175 b. The sale or purchase of LEAMS excess offset credits in any given year does not create an obligation to sell or buy licenses for LEAMS excess offset credits in any 176 177 other year. OPERATORS may elect to increase or decrease the number of 178 available LEAMS excess offset credits at their sole discretion. However, 179 OPERATORS shall not retroactively reduce the number of LEAMS excess offset 180 credit licenses available for sale in any given year below the number of licenses 181 already sold for that same year. 182 LEAMS excess offset credit licenses may not be bought, sold, leased, loaned, 183 c. borrowed or transferred except through the AUTHORITY acting as the Exclusive 184 185 Agent for the OPERATORS. Any attempt to do so automatically and irrevocably 186 invalidates each specific license involved without recourse to the LICENSEE. 187 d. 188 Neither the OPERATORS or the AUTHORITY offer any warranty whatsoever 189 regarding the use of LEAMS excess offset credits. It is the sole responsibility of 190 each prospective LICENSEE to determine for itself and to its own satisfaction, 191 through direct consultation with the Regional Board, how LEAMS excess offset 192 credits may be lawfully used to demonstrate compliance with the TMDL or any 193 related provisions of state and federal waste discharge requirements BEFORE 194 purchasing any excess offset license. Prospective LICENSEES are expressly 195 warned not to rely on any statements or representations made in this License 196 Agreement without further confirmation by the Regional Board. 197 198 Although each excess offset credit block is governed by a license, only the e. 199 Regional Board can determine the length of time any given block of excess offset credits may be used to compute compliance. The OPERATORS and the 200 201 AUTHORITY make no representation or warranty concerning the length of time any given block of excess offset credits may be used for compliance. 202 203 204 f. Fees paid to license LEAMS excess offset credits are non-refundable. 205 206 OPERATORS prepare and approve annual operating budgets and summaries of g. actual annual expenses in accordance with their separate Operations and 207 208 Maintenance Agreement for LEAMS (dated May 23, 2017). Copies of these 209 accounting documents shall be provided to the AUTHORITY no later than 30 days 210 after they have been approved by the OPERATORS. 211 212

213 Fees paid to license LEAMS excess offset credits shall become the sole property h. 214 of the OPERATORS. Said fees may be used to offset past or future LEAMS 215 operating expenses, effect LEAMS repairs, replace or expand LEAMS, held for a 216 LEAMS contingency, or any other lawful purpose related to LEAMS at the sole 217 discretion of the OPERATORS. The OPERATORS shall not be required to account 218 for the expenditure of any fees received from the sale of licenses for excess 219 offset credits. 220 221 i. The OPERATORS warrant that LEAMS was operated in accordance with 222 requirements established by the Regional Board and in a manner that they 223 reasonably believe generated the nutrient reduction credits now made available 224 for licensing by others. The operating reports, water quality monitoring data and 225 special studies used to support the estimated credit calculations are regularly 226 submitted to the Regional Board under penalty of perjury. A copy of all such 227 documents shall be provided to the AUTHORITY no later than 30 days after these 228 documents are submitted to the Regional Board. 229 230 Because the licenses offered are for excess offset credits generated by LEAMS in j. 231 the prior calendar year, the purchase of such licenses imposes no further 232 obligation on the LICENSEE to operate, maintain, fund or support LEAMS in any 233 other way. The OPERATORS, and not the AUTHORITY, bear sole responsibility for 234 affirming the validity of all offset credits declared and reported to the Regional 235 Board. 236 237 k. Because licenses are purchased for excess offset credits generated in the prior 238 calendar year, and the LICENSEES had no role or responsibility whatsoever for 239 the day-to-day operations of LEAMS, the LICENSEES are not liable for injury or 240 damages which may occur as a result of the actions or omissions of the 241 OPERATORS as these credits were being generated. The OPERATORS, and not 242 the AUTHORITY, shall indemnify and defend the LICENSEES against any and all 243 claims for injuries or damages related to the operation of LEAMS. 244 245 ١. OPERATORS are not responsible for any cost, expense, loss or other 246 consequential damages that may be incurred by LICENSEES in the event the 247 excess offset credit program is subsequently ruled invalid or illegal by any state 248 or federal regulatory agency or by a court of competent jurisdiction. 249 250 The AUTHORITY shall provide a full and complete copy of this License Agreement m. to any prospective LICENSEE. Furthermore, each prospective LICENSEE must 251 252 provide written and dated confirmation that it has received, read and 253 understood the entirety of this License Agreement as a prerequisite condition for 254 purchasing a license for excess offset credits. 255

- 256n.The PARTIES are required to notify one another as soon as is reasonably possible257if and when either becomes aware of any change in conditions that may258materially and adversely affect the validity of the LEAMS excess offset credits or259the ability of LICENSEES to rely on such credits to meet TMDL compliance260obligations. The AUTHORITY is solely responsible for notifying each individual261LICENSEE as described below.262
- 263o.The AUTHORITY and each LICENSEE are required to notify one another as soon264as is reasonably possible if and when either becomes aware of any change in265conditions that may materially and adversely affect the validity of the LEAMS266offset credits or the ability of LICENSEES to rely on such credits to meet TMDL267compliance obligations. Individual LICENSEES may, but are not required to,268provide similar notice to other individual LICENSEES.
 - p. The AUTHORITY and all LICENSEES are entitled to inspect the LEAMS facilities and may do so, upon request, at a time that is mutually convenient with the OPERATORS.
 - q. The OPERATORS are not entitled to reclaim any previously licensed excess offset credits without written consent of the LICENSEE.

278 4. GENERAL PROVISIONS

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- 280a.Jurisdiction. This License Agreement shall be deemed to have been made in281Riverside County, California regardless of the order of the signatures of the282PARTIES affixed hereto. Any litigation or other legal proceedings which arise in283connection with this License Agreement shall be conducted in a federal or state284court located within or for Riverside County, California. All PARTIES hereby285waive any defenses or objections based on the Doctrine of Forum Non-286conveniens.
 - b. **Property Rights.** No property rights are created or changed by this License Agreement.
- 291c.Third Parties. There are no third-party beneficiaries created, intended or292recognized by this License Agreement.
- 294d.Entire Agreement. This written License Agreement constitutes the full and295complete agreement between PARTIES. This License Agreement supersedes any296and all previous agreements, either oral or written, between the PARTIES hereto.297and contains all of the terms, conditions and agreements between the PARTIES298with respect to the subject matter of this License Agreement.

299e.Amendments. This License Agreement may only be amended by written300consent of all PARTIES. However, the terms and conditions of any previously301issued license may not be revised retroactively without the additional written302consent of the LICENSEE.

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- 304 f. Regional Board Review. A full and complete copy of this License Agreement has 305 been provided to the Regional Board staff for review to ensure consistency with 306 the assumptions and requirements of the TMDL and the Comprehensive Nutrient Reduction Plan (CNRP). Any changes proposed by the Regional Board 307 308 must be approved, in writing, as formal amendments to this License Agreement. 309 All amendments to this License Agreement shall also be submitted to the 310 Regional Board for review. 311
- 312g.Cooperation. The PARTIES agree to cooperate with one another to fulfill all313regulatory and contractual obligations related to this License Agreement. The314PARTIES further agree not to engage in any activities that undermine or315jeopardize the validity of the LEAMS offset credits or the related licenses offered316for sale to others.
 - h. **Waivers.** Failure to exercise any right or remedy related to this License Agreement shall not be construed as a waiver of that right or remedy.
- i. Severability. Any provision of this License Agreement that is subsequently found
 to be unconstitutional, illegal, or otherwise unenforceable shall be deemed void
 without subsequent effect on any of the remaining provisions in the License
 Agreement which shall continue to be implemented as originally intended.
- 326j.Term. This License Agreement shall expire on June 30, 2022 unless the PARTIES327agree, in writing, to extend that date. However, all licenses purchased prior to328the expiration date of this License Agreement shall remain valid.329
- 330 k. Default. Failure by a Party to comply with and observe any of the conditions, 331 terms, or covenants set forth in this License Agreement, if such failure remains uncured within thirty (30) days after written notice of such failure from the other 332 333 Party in the manner provided herein or, with respect to a default that cannot be 334 cured within thirty (30) days, if the Party in default fails to commence such cure 335 within such thirty (30) day period or thereafter fails to diligently and 336 continuously proceed with such cure to completion. However, if a different cure 337 period is specified under any other section of this License Agreement, then the 338 specific cure period shall control. 339

- Ι. 340 Independent Contractor. In performing under this License Agreement, it is 341 mutually understood that the AUTHORITY is acting as an independent 342 contractor, and not as an agent of the OPERATORS. The OPERATORS shall have 343 no responsibility for payment to any contractor, subcontractor or supplier of the 344 AUTHORITY. Nothing herein contained shall be deemed to create an agency, 345 joint venture, partnership or franchise relationship between the PARTIES hereto, 346 or between the PARTIES and any contractor retained by the OPERATORS in 347 connection with the services provided under this License Agreement, or between 348 the PARTIES and any person or organization that purchases a license for excess 349 offset credit pursuant to this License Agreement. 350
 - m. Authority and Requisite Action. The individuals executing this License Agreement (the "Signatories") covenant that they have the legal power, right and authority to enter into this License Agreement and to bind their respective principals/entities to the terms and conditions set forth herein. Furthermore, the Signatories covenant that all requisite action has been taken by their respective principals/entities in connection with the entering into this License Agreement and the instruments referenced herein, and the consummation of the transactions contemplated hereby.

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- n. Maintenance and Inspection. The AUTHORITY shall maintain complete and accurate records with respect to all licenses and fees under this License Agreement. All such records shall be clearly identifiable. The AUTHORITY shall allow a representative of OPERATORS to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this License Agreement during normal business hours. The AUTHORITY shall allow inspection of all work, data, documents, proceedings, and activities related to the License Agreement for a period of three (3) years from the date of final payment under this License Agreement.
- 370 Prohibited Interests. The AUTHORITY maintains and warrants that it has not ο. 371 employed nor retained any company or person, other than a bona fide employee working solely for the AUTHORITY, to solicit or secure this License Agreement. 372 373 Further, the AUTHORITY warrants that it has not paid nor has it agreed to pay 374 any company or person, other than a bona fide employee working solely for the 375 AUTHORITY, any fee, commission, percentage, brokerage fee, gift or other 376 consideration contingent upon or resulting from the award or making of this 377 License Agreement. For breach or violation of this warranty, OPERATORS shall 378 have the right to rescind this License Agreement without liability. For the term 379 of this License Agreement, no official, officer or employee of the OPERATORS, 380 during the term of his or her service with the OPERATORS, shall have any direct 381 interest in this License Agreement, or obtain any present or anticipated material 382 benefit arising therefrom. 383

384 385 386 387 388 389 390 391 392		p. q.	 Dispute Resolution. Any dispute which may arise by and between the parties to this License Agreement shall be submitted to non-binding mediation. Such mediation shall be conducted by any neutral, impartial mediation service that the Parties mutually agree upon, in writing, and in accordance with its rules in effect at the time of the commencement of the mediation proceeding. Attorney's Fees. The prevailing party in any action to enforce any provision of this License Agreement shall be entitled to its reasonable attorney's fees and
393 394 395 396		r.	costs. Counterpart Execution. This License Agreement may be signed in separate counterparts, each of which is an original and all of which, taken together, form
397 398 399 400	5.	NOTI	one single binding document. FICATIONS
401 402 403		a.	
404 405			All notifications made pursuant to this License Agreement shall be in writing.
406 407		b.	Notifications to the City of Lake Elsinore shall be directed to:
408			Name: Grant Yates
409			Title: <u>City Manager</u>
410			Address: <u>130 S. Main Street</u>
411			Addl. Address:
412			City, State, Zip: Lake Elsinore, CA 92530
413			Main Office Phone: (951) 674-3124
414			Email Address: gyates@lake-elsinore.org
415			Alternate Name:_Nicole Dailey
416			Alternate Phone: (951)833-5497
417			Alternate Email: <u>ndailey@lake-elsinore.org</u>
418 419		ŝ,	.W 9 Q

420 421 422	c.	Notifications to Elsinore Valley Municipal Water District shall be directed to: Name:
423		Title:
424		Address:
425		Addl. Address:
426		City, State, Zip:
427		Main Office Phone:
428		Email Address:
429		Alternate Name:
430		Alternate Phone:
431 432 433	d.	Notifications to the County of Riverside shall be directed to: Name: Steve Horn
434		Title: Principal Management Analyst
435		Address: 4080 Lemon Street, 4 th Floor
436		City, State, Zip: Riverside, CA 92501
437		Main Office Phone: 951-955-1110
438		Email Address: shorn@rivco.org
439		Alternate Name: Alex Gann
440		Alternate Phone: 951-955-1110
441 442		Alternate Email: agann@rivco.org
443 444	e.	All notifications to Lake Elsinore San Jacinto Watersheds Authority (LESJWA)
444 445		shall be directed to:
446		Name: Mark Morton, P.E.
447		Title: <u>Authority Administrator</u>
448		Address: 1/16/9 Sterling Ave
449		Addl. Address:
450	85	City, State, Zip: Riverside CA 92503
451		Main Office Phone: 951, 354, 4221

a.

452		Email Address: <u>Mnorton & Sawpa, org</u>
453		Alternate Name: Rick Whelsel
454		Alternate Phone: 951, 354, 4222
455		
456		
457	f.	The AUTHORITY shall maintain a directory of all past and present LICENSEES with
458		current contact information similar to that shown above and distribute an
459		updated copy of that directory at least once a year to the OPERATORS and the
460		Regional Board.
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462		

	ATORS and the AUTHORITY have affixed their signat be effective as of the date shown on the first page of
For the CITY OF LAKE ELSINORE:	M/MA a
6-20-2017	
Date	Mayor
Approved As To Form: 6 - 12 - 2017	5 Himan
Date	City Attorney
For the ELSINORE VALLEY MUNIC	PAL WATER DISTRICT (EVMWD)
Date	President, Board of Directors
Approved As To Form:	
Date	Counsel for EVMWD
For the COUNTY OF RIVERSIDE	
Date	Chairman, Board of Supervisors
Approved As To Form:	
Date	Counsel for the County of Riverside
Attested:	
Date	Clerk for the Board of Supervisors
For the LAKE ELSINORE SAN JACIN	TO WATERSHEDS AUTHORITY
Date	Chairman, Board of Directors
Approved As To Form	
ate	Counsel for LESJWA

Pg. 13 of 13

For the CITY OF LAKE ELSINO	RE:
Date	Mayor
Approved As To Form:	
Date	City Attorney
For the ELSINORE VALLEY MU	INICIPAL WATER DISTRICT (EVINWD)
Date	President, Board of Directors
Approved As To Form:	Mutu
Date	Counsel for EVMWD
For the COUNTY OF RIVERSID	E
Date	Chairman, Board of Supervisors
Approved As To Form:	
Date	Counsel for the County of Riverside
Attested:	
Date	Clerk for the Board of Supervisors
	ACINTO WATERSHEDS AUTHORITY
or the LAKE ELSINORE SAN J	
	Chairman, Board of Directors
For the LAKE ELSINORE SAN JA Date Approved As To Form	Chairman, Board of Directors

For the CITY OF LAKE ELSINO	RE:
Date	Mayor
Approved As To Form:	
Date	City Attorney
For the ELSINORE VALLEY MU	INICIPAL WATER DISTRICT (EVMWD)
Date	President, Board of Directors
Approved As To Form:	
Date	Counsel for EVMWD
For the COUNTY OF RIVERSID	E
MAY 2 3 2017	Et const
Date	Chairman, Board of Supervisors
Approved As To Form: S - 10 - (구	ACCE
Date	Counsel for the County of Riverside
Attested: MAY 2 3 2017	Kallubaston Den. h
Date	Clerk for the Board of Supervisors
or the LAKE ELSINORE SAN J	ACINTO WATERSHEDS AUTHORITY
Date	Chairman, Board of Directors
Approved As To Form	
Date	Counsel for LESJWA

For the CITY OF LAKE ELSING	
For the CITY OF LAKE ELSING	JRE:
Date	Mayor
Approved As To Form:	
Date	City Attorney
For the ELSINORE VALLEY M	UNICIPAL WATER DISTRICT (EVMWD)
Date	President, Board of Directors
Approved As To Form:	
Date	Counsel for EVMWD
For the COUNTY OF RIVERSI	DE
Date	Chairman, Board of Supervisors
Approved As To Form:	
Date	Counsel for the County of Riverside
Attested:	
Date	Clerk for the Board of Supervisors
or the LAKE ELSINORE SAN J	ACINTO WATERSHEDS AUTHORITY
4/19/17	Chriften
Daté /	Chairman, Board of Directors
Approved As To Form	

Attachment B: Agreement for the Operation and Maintenance of the Lake Elsinore Aeration and Mixing Systems (LEAMS) (Operators Agreement)

AGREEMENT FOR THE OPERATION AND MAINTENANCE OF THE LAKE ELSINORE AERATION AND MIXING SYSTEMS (AGREEMENT)

THIS AGREEMENT is made by and among the COUNTY OF RIVERSIDE (COUNTY), the CITY OF LAKE ELSINORE (CITY) and the ELSINORE VALLEY MUNICIPAL WATER DISTRICT (DISTRICT). The COUNTY, CITY and DISTRICT are sometimes collectively referred to individually as "PARTY" and collectively as the "PARTIES."

RECITALS

- A. The COUNTY, CITY and DISTRICT are Member Agencies of the Lake Elsinore and San Jacinto Watersheds Authority (LESJWA). LESJWA is a joint powers public agency formed for the purpose of implementing programs and projects to rehabilitate and improve water quality in Lake Elsinore and Canyon Lake and the rivers and streams that are tributary to these lakes.
- B. The STATE OF CALIFORNIA and U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) have determined that water quality in Lake Elsinore is impaired by elevated concentrations of nitrogen and phosphorus (aka nutrients) that contribute to excess algae growth in the lake. Excess algae tends to deplete dissolved oxygen levels in the lake which, in turn, increases the risk of fish kills. In addition, too much algae interferes with and detracts from beneficial uses in and near Lake Elsinore. These adverse effects severely impact tourism in the area and hurt the regional economy.
- C. In 2004, the SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD (REGIONAL BOARD) adopted a Total Maximum Daily Load (TMDL) to restore and protect the beneficial uses of Lake Elsinore by controlling and restricting the discharge of nutrients to the lake. The REGIONAL BOARD named the COUNTY, CITY and DISTRICT as three of several agencies responsible for implementing the TMDL.
- D. To improve water quality in Lake Elsinore, the PARTIES designed, constructed and operate two large in-lake remediation projects: the Axial Flow Water Pump Destratification System and the Lake Elsinore Phase II Aeration System constructed in 2004 and 2007, respectively. Both systems are intended to improve water quality by increasing dissolved oxygen concentrations in the lake and are collectively referred to as the Lake Elsinore Aeration and Mixing System (LEAMS).

- E. When it adopted the TMDL, the REGIONAL BOARD determined that long-term operation of LEAMS would improve dissolved oxygen concentrations in Lake Elsinore. This, in turn, would also reduce internal phosphorus loads released from the lake bottom sediments by 35% or approximately 11,606 kilograms per year. The Regional Board recognizes this reduction in phosphorus loads as an offset credit that can be used to demonstrate compliance with the load reduction requirements specified in the TMDL.
- F. The CITY holds title to the Axial Flow Water Pump Destratification System. The DISTRICT holds title to the Lake Elsinore Phase II Aeration System. All three PARTIES share equally the annual cost of operating and maintaining both systems. Therefore, all offset credits generated by LEAMS are owned collectively and exclusively by the PARTIES as tenants-in-common.
- G. Operation of LEAMS generates more offset credits than the PARTIES need in order to demonstrate their own individual compliance with the pollutant load reductions specified in TMDL. Therefore, the PARTIES desire to share some of these excess offset credits with other responsible agencies named in the TMDL, that have similar obligations to reduce nutrient loads to Lake Elsinore, through a limited licensing arrangement.
- H. The PARTIES previously formed a Technical Oversight Committee (TOC) to oversee operation and maintenance of LEAMS. The PARTIES intend to continue relying on the TOC to implement this AGREEMENT.
- 1. The PARTIES have previously entered into several previous short-term agreements to govern the operation and maintenance (O&M) of LEAMS and to share the associated implementation costs. This AGREEMENT is intended to supersede and replace all previous agreements with one integrated, long-term O&M contract between and among the PARTIES.
- J. The purpose of this AGREEMENT is to describe the roles and responsibilities of the CITY, COUNTY and DISTRICT; the distribution of offset credits to each of the PARTIES; and the terms and conditions for licensing excess offset credits to other responsible agencies named in the TMDL.
- K. The PARTIES believe that long-term operation of LEAMS will improve water quality and protect beneficial uses in Lake Elsinore. Doing so will enhance recreational opportunities and the overall economy of the region. In addition, the PARTIES rely on LEAMS to demonstrate compliance with certain TMDL requirements. Consequently, entering into a long-term agreement to operate and maintain LEAMS is in the best interests of the PARTIES and their respective constituencies.

NOW, THEREFORE, in consideration of the facts recited above, and the covenants, conditions and promise contained herein, the PARTIES set forth their mutual agreements.

AGREEMENT

- 1. **General Obligations.** Subject to all of the provisions of this AGREEMENT, the PARTIES hereby agree to the following:
 - a. Implement the AGREEMENT through the Technical Oversight Committee: As a means of ensuring the most optimal operation of LEAMS in order to maximize its benefits, the PARTIES agree to implement the Agreement through the previously established TOC. The TOC shall consist of one knowledgeable representative appointed by each PARTY. Each designated representative shall serve as a member of the TOC at the pleasure and expense of the PARTY making the appointment. The TOC shall meet at such times and places as its members may agree upon; but, shall convene at least once each year (in March or April) to review and approve a budget for the coming fiscal year (July 1st – June 30th). The primary duties of the TOC are to: (i) oversee the operations and maintenance of activities related to LEAMS; (ii) develop and refine parameters, processes and procedures needed to maximize the efficiency and effectiveness of LEAMS; (iii) develop and approve an annual operating budget; (iv) review actual expenses compared to the approved budget; (v) establish a method for calculating the number of offset credits available, the number of offset credits needed by the PARTIES to assure their own TMDL compliance, and the number of offset credits that may be available for licensing to other stakeholders named in the TMDL; (vi) as well as the annual fee to license any available credits.
 - b. **Financial Contribution:** The PARTIES agree to share equally the reasonable cost of managing, operating, monitoring, maintaining, repairing and replacing LEAMS in accordance with an annual budget approved by the PARTIES. Such costs include all reasonable expenses associated with collecting, analyzing and reporting data related to the operation and effectiveness of LEAMS that is required by federal or state authorities.
 - c. **Cooperation:** The PARTIES shall cooperate with one another to implement this AGREEMENT and shall not unreasonably withhold such cooperation in a manner that interferes with effective operation and maintenance of LEAMS.
 - d. **Notification:** The PARTIES shall notify one another as soon as practicable, in writing or by phone, whenever they become aware of any fact or circumstance that could adversely affect normal operation of LEAMS and which may jeopardize the availability of sufficient offset credits to assure the PARTIES ability to comply with any related TMDL requirements.

- 2. **DISTRICT's Obligations.** Subject to all of the provisions of this AGREEMENT, the DISTRICT hereby agrees to:
 - a. **Hold Title to the Lake Elsinore Phase II Aeration System (Aeration System):** To continue holding title to the Aeration System for the term of this AGREEMENT.
 - b. **Provision of Services:** To provide, or cause to be provided, all labor, tools, equipment, vehicles, materials, supplies and qualified personnel necessary to manage, operate, monitor, maintain and repair the Aeration System in accordance with the annual budget approved by the PARTIES and the Standard Operating Procedures (SOP) established by the TOC.
 - c. **Regulatory Compliance:** To comply with the federal and state statutes, rules, regulations and other requirements governing the Aeration System, and all direction given by the TOC.
 - d. **Monitoring and Remote Access to Data:** To continue operating and maintaining the sampling and monitoring program that, among other things, measures dissolved oxygen concentrations and water temperature in Lake Elsinore in the manner specified by the TOC and approved by the REGIONAL BOARD. To supply a remote access internet site for displaying and summarizing the aforementioned monitoring data that is accessible by the PARTIES. This internet site shall include real-time data for the most recent 24 hours and shall be restricted to viewing purposes only (i.e. data cannot be revised or altered by a remote viewer). The real-time file will be updated approximately every 15 minutes unless the monitoring system is undergoing maintenance or repairs. In addition, all data collected by the monitoring system will be stored in a database maintained by the DISTRICT and accessible to the PARTIES on an FTP website.
 - e. **Reports:** To prepare and submit annual reports summarizing the operation, maintenance and monitoring activities and other matters of interest as agreed by the PARTIES or otherwise required by federal or state authorities. At a minimum, the DISTRICT shall provide a report summarizing the daily hours of operation for the Aeration System. The DISTRICT shall also provide such other written or oral reports regarding the operation and maintenance of the Aeration System as may be reasonably requested by any of the other two PARTIES.

- f. **Budget:** To prepare, in cooperation with the TOC, and submit an annual proposed budget for continued operation and maintenance of the Aeration System in the forthcoming fiscal year (July 1st to June 30th). Said budget must be submitted to the CITY and COUNTY for review and approval no later than 90 days (March 1st) prior to the commencement of the new fiscal year. The budget shall estimate the expenditures necessary to operate and maintain the Aeration System in good working order. The budget should include a contingency fund, as agreed to by the TOC, to cover extraordinary and unforeseen expenses or to be used to replace, expand or otherwise enhance the Aeration System when mutually agreed. A template form for the budget proposal is attached as Exhibit 3 to this AGREEMENT. In the event that a budget acceptable to all PARTIES is not obtained prior to the start of the fiscal year, the DISTRICT shall continue to operate and maintain the Aeration system to the fullest extent possible, subject to the reasonable discretion and available resources of the DISTRICT and at the level of expenditure authorized by the most recently approved budget, and the PARTIES shall fund such budget until a new budget is approved. The DISTRICT may draw upon any available contingency funds that have been set aside in prior years, to support on-going operation of the Aeration System while a new budget is being reviewed and approved.
- g. **Cost Accounting:** To provide a financial statement itemizing and summarizing all expenses and charges incurred to operate and maintain the Aeration System for each calendar year. The DISTRICT will provide the financial statement at the same time the budget proposal is submitted on March 1st of each year. A template form for the financial statement is attached as Exhibit 4 to this AGREEMENT. The DISTRICT shall maintain copies of receipts as necessary to substantiate all cost accounting for a period of not less than 3 years after the expense is incurred and shall provide copies to PARTIES upon request.
- h. **Books and Records:** Maintain, and retain for a period of not less than three (3) years following the termination of this AGREEMENT, full and accurate books and accounts in accordance with the practices established by or consistent with those utilized by the Controller of the State of California for public agencies. Such books and accounts shall be maintained on a fiscal year basis (July 1st to June 30th). Such books and accounts shall be maintained by the DISTRICT as public records. All books and records developed in association with prior agreements between the PARTIES to share O&M costs for the Aeration System shall also continue to be preserved in accordance with the same terms and conditions specified for similar books and records generated in support of this AGREEMENT.

- i. Inspection: To permit inspection of the Aeration System by representatives of the COUNTY, CITY, LESJWA or other federal or state regulatory authorities upon request.
- j., Safety: The DISTRICT shall be responsible for the safety of all persons and property relative to the Aeration System. This responsibility shall be continuous and not be limited to normal working hours. The DISTRICT's duty to ensure safety shall include, without limitation, the placement of warning signs and markers (e.g. buoys and lights) to protect the Aeration System and all persons working or recreating in Lake Elsinore and along its shoreline (safety activities). Because the CITY has rights and responsibilities related to recreation on Lake Elsinore that are separate from those of the DISTRICT, including but not limited to enforcement of CITY ordinances and the Lake Elsinore Lake Use Guidelines, the DISTRICT shall coordinate all safety activities undertaken pursuant to this AGREEMENT, to the maximum extent practicable prior to commencing such activities. The PARTIES acknowledge that it may be necessary, from time to time, to modify existing CITY ordinances and the Lake Use Guidelines in order for the DISTRICT to implement necessary safety activities. The cost of such modifications, when needed, shall be shared equally among the PARTIES.
- 3. **CITY's Obligations.** Subject to all of the provisions of this AGREEMENT, the CITY hereby agrees to:
 - a. Hold Title to the Axial Flow Water Pump Destratification System (Mixing System): To continue holding title to the Mixing System for the term of this AGREEMENT.
 - b. **Provision of Services:** To provide, or cause to be provided, all labor, tools, equipment, vehicles, materials, supplies and qualified personnel necessary to manage, operate, monitor, maintain and repair the Mixing System in accordance with the annual budget approved by the PARTIES and the SOP established by the TOC.
 - c. **Regulatory Compliance:** To comply with the federal and state statutes, rules, regulations and other requirements governing the Mixing System, and all direction given by the TOC.

- d. **Reports:** To prepare and submit annual reports summarizing the operation, maintenance and monitoring activities and other matters of interest as agreed by the PARTIES or otherwise required by federal or state authorities. At a minimum, the CITY shall provide a report summarizing the daily hours of operation for the Mixing System. The CITY shall also provide such other written or oral reports regarding the operation and maintenance of the Mixing System as may be reasonably requested by any of the other two PARTIES.
- e. Budget: To prepare, in cooperation with the TOC, and submit an annual proposed budget for continued operation and maintenance of the Mixing System in the forthcoming fiscal year (July 1st to June 30th). Said budget must be submitted to the DISTRICT and COUNTY for review and approval no later than 90 days (March 1st) prior to the commencement of the new fiscal year. The budget shall estimate the expenditures necessary to operate and maintain the Mixing System in good working order. The budget should include a contingency fund, as agreed to by the TOC, to cover extraordinary and unforeseen expenses or to be used to replace, expand or otherwise enhance the Mixing System when mutually agreed. A template form for the budget proposal is attached as Exhibit 3 to this AGREEMENT. In the event that a budget acceptable to all PARTIES is not obtained prior to the start of the fiscal year, the CITY shall continue to operate and maintain the Mixing System to the fullest extent possible, subject to the reasonable discretion and available resources of the CITY and at the level of expenditure authorized by the most recently approved budget, and the PARTIES shall fund such budget until a new budget is approved. The CITY may draw upon any available contingency funds that have been set aside in prior years to support on-going operation of the Mixing System while a new budget is being reviewed and approved.
- f. **Cost Accounting:** To provide a financial statement itemizing and summarizing all expenses and charges incurred to operate and maintain the Mixing System for each calendar year. The CITY will provide the financial statement at the same time the budget proposal is submitted on March 1st of each year. A template form for the financial statement is attached as Exhibit 4 to this AGREEMENT. The CITY shall maintain copies of receipts as necessary to substantiate all cost accounting for a period of not less than 3 years after the expense is incurred and shall provide copies to PARTIES upon request.

- g. Books and Records: Maintain, and retain for a period of not less than three (3) years following the termination of this AGREEMENT, full and accurate books and accounts in accordance with the practices established by or consistent with those utilized by the Controller of the State of California for public agencies. Such books and accounts shall be maintained on a fiscal year basis (July 1st to June 30th). Such books and accounts shall be maintained by the CITY as public records. All books and records developed in association with prior agreements between the PARTIES to share O&M costs for the Mixing System shall also continue to be preserved in accordance with the same terms and conditions specified for similar books and records generated in support of this AGREEMENT.
- h. Inspection: To permit inspection of the Mixing System by representatives of the COUNTY, DISTRICT, LESJWA or other federal or state regulatory authorities upon request.
- ĩ. Safety: The CITY shall be responsible for the safety of all persons and property relative to the Mixing System. This responsibility shall be continuous and not be limited to normal working hours. The CITY's duty to ensure safety shall include, without limitation, the placement of warning signs and markers (e.g. buoys and lights) to protect the Mixing System and all persons working or recreating in Lake Elsinore and along its shoreline (safety activities). Because the CITY has rights and responsibilities related to recreation on Lake Elsinore that are separate from those of the DISTRICT, including but not limited to enforcement of CITY ordinances and the Lake Elsinore Lake Use Guidelines, the CITY shall coordinate all safety activities undertaken pursuant to this AGREEMENT, to the maximum extent practicable prior to commencing such activities. The PARTIES acknowledge that it may be necessary, from time to time, to modify existing CITY ordinances and the Lake Use Guidelines in order for the DISTRICT to implement necessary safety activities. The CITY shall not unreasonably withhold such modifications and will grant temporary authorization for the DISTRICT to implement necessary safety activities pending formal revision of related ordinances or Lake Use Guidelines for Lake Elsinore.
- 3. **COUNTY's Obligations.** Subject to all of the provisions of this AGREEMENT, the COUNTY hereby agrees to:
 - a. Reports: Coordinate and supervise LESJWA's preparation of an annual report to

 (i) estimate the number of offset credits generated by LEAMS in the prior year; (ii)
 estimate the number of offset credits needed by each of the PARTIES to maintain
 compliance with the TMDL and their respective NPDES discharge permits; and (iii)
 estimate the number of excess, unused offset credits that may be available for
 licensing to other stakeholders named in the TMDL. Report shall be distributed to
 all PARTIES by March 1st each year.

- b. **Coordinate with LESJWA** to license any excess, unused offset credits that the TOC elects to make available to other stakeholders named in the TMDL. However, all such licenses must be approved by unanimous consent of the TOC. Such consent shall not be unreasonably withheld.
- c. **Coordinate with the REGIONAL BOARD** to ascertain what documentation is required to: (i) corroborate the number of offset credits generated by LEAMS; (ii) corroborate the number of offset credits required by each of the PARTIES to ensure on-going compliance with the TMDL and their respective NPDES discharger permits; (iii) the number of offset credits that may be made available for licensing to other stakeholders named in the TMDL; and (iv) determine the duration and period for which a given set of offset credits remains valid for the purpose of demonstrating compliance with the TMDL load allocations or wasteload allocations.
- d. Licensing Fees: Make periodic recommendations to the TOC regarding reasonable fees to license excess, unused offset credits. The final fee structure must be approved by the TOC prior to entering into any licensing agreement with LESJWA or any other stakeholders named in the TMDL.

4. Miscellaneous Provisions

- a. **Independent Contractors:** The PARTIES shall perform all duties under this AGREEMENT as independent contractors and NOT as employees of one another.
- b. **Subcontractors:** The PARTIES may employ competent and qualified professionals, consultants and subcontractors as they deem necessary to fulfill their duties and obligations under this AGREEMENT provided that all related costs remain within the approved budget. Costs which exceed the approved budget must be approved, in advance, by the TOC unless said costs are required to address a bona fide emergency condition.
- c. **Assignment:** Neither this AGREEMENT nor any part of LEAMS may be assigned or otherwise transferred without prior written consent from all PARTIES.
- d. Amendment: This AGREEMENT may only be amended by mutual written agreement of all PARTIES. This AGREEMENT may not be amended by verbal agreement or through separate written agreements not contemplated within the AGREEMENT.

- e. **10-year Term:** The duty to meet all obligations and responsibilities identified in this AGREEMENT commences on the effective date shown on page 1 (above) and, unless subsequently extended by mutual written agreement of all PARTIES, terminates on June 30, 2027. During this term, no PARTY may abandon, sell, lease, dispose or substantially discontinue the use of LEAMS without prior written consent of all PARTIES.
- f. **Distribution of Surplus Funds**: If, upon termination of this AGREEMENT without extension, there are any unexpended funds in the custody and control of the PARTIES, including but not limited to any contingency or replacement funds, these funds shall be distributed to the PARTIES in proportion to the respective original contributions to such funds.
- g. **Early termination.** Any PARTY may terminate their participation in this AGREEMENT by providing one year's written notice to the other PARTIES. However, if a PARTY elects to terminate their participation prior to June 30, 2027 that PARTY forfeits and waives any claim for reimbursement of unexpended contingency and replacement funds collected in all prior years. In the event one PARTY elects an early termination, the other two PARTIES shall continue to implement the terms of this AGREEMENT but shall be absolved of any on-going duty or obligation to the departing PARTY.
- h. **Third Party Beneficiary.** The PARTIES acknowledge that the Lake Elsinore San Jacinto Watershed Authority (LESJWA) shall be a third-party beneficiary to this AGREEMENT in so far as reliable operation and maintenance of LEAMS is necessary to fulfill the terms and conditions set forth in any Exclusive License Agreement for Excess Offset Credits executed between the PARTIES and LESJWA. There are no other third party beneficiaries to this AGREEMENT.
- i. Interpretation. All provisions of this AGREEMENT shall be construed in a manner which best assures the long-term viability of LEAMS. All PARTIES share equal responsibility for drafting the language of this AGREEMENT.
- j. **Severability.** If any term, clause, sentence, provision, or paragraph of this AGREEMENT shall be held invalid, such invalidity shall not affect the other provisions of the AGREEMENT which can be given effect without the invalid provision, and to this end, the remainder of the AGREEMENT shall remain in full force and effect.

- k. **Budget Authority.** All PARTIES acknowledge that final authority to accept and approve a final budget for LEAMS rests with their respective governing Boards, Commissions and Councils. Members of the TOC can make agreement to recommend specific budgets actions, but cannot bind, their respective governing authorities. Consequently, no budget shall be deemed final until it is approved by the governing authorities for each of the PARTIES.
- I. Arbitration: Any dispute which may arise by and between the PARTIES to this AGREEMENT shall be submitted to binding arbitration. Arbitration shall be conducted by the Judicial Arbitration and Mediation Services, Inc., or its successor, or any other neutral, impartial arbitration service that the PARTIES mutually agree upon in accordance with its rule in effect at the time of the commencement of the arbitration proceeding, and as set forth in this Paragraph. The arbitrator chosen must decide each and every dispute in accordance with the laws of the State of California, and all other applicable laws. The arbitrator's decision and award are subject to judicial review by a Superior Court of competent venue and jurisdiction, only for material errors of fact or law. Upon a showing of good cause, the arbitrator may permit limited discovery in the arbitration proceeding. Unless the PARTIES enter into a written stipulation to the contrary, prior to the appointment of the arbitrator, all disputes shall first be submitted to non-binding mediation, conducted by the Judicial Arbitration and Mediation Services, Inc., or its successor, or any other neutral, impartial mediation service that the PARTIES mutually agree upon in accordance with its rules for such mediation.
- Enforced Delay; Extension of Times of Performance: In addition to specific m. provisions of this AGREEMENT, performance by any party hereunder shall not be deemed to be in default, and all performance and other dates specified in this AGREEMENT shall be extended, where delays or defaults are due to war; terrorism, moratorium, insurrection, strikes; lockouts; riots; floods, earthquakes; fires; casualties; acts of God; acts of a public enemy; epidemics; guarantine restrictions; freight embargos; litigation; unusually severe weather; acts or failures to act of any other public or governmental agency or entity (other than the acts or failures to act of the PARTIES); or any other cause(s) beyond the control or without the fault of the PARTY claiming an extension of time to perform, provided such cause would prevent the claiming PARTY from performing the provisions of this AGREEMENT. Notwithstanding any to the contrary in this AGREEMENT, an extension of time for any such cause shall be for the period of the enforced delay and shall commence to run from the time of the commencement of the cause, or notice by the PARTY claiming such extension is sent to the other PARTIES with thirty (30) days of the commencement of the cause.

- n. **Attorney's Fees.** In the event any of the PARTIES hereto shall bring an action to enforce any term of this AGREEMENT to recover any damages for and on account of any breach of any term or condition of this AGREEMENT, it is mutually agreed that the prevailing party in such action shall recover all costs thereof including reasonable attorneys' fees.
- O. **COUNTERPART EXECUTION.** This AGREEMENT may be executed simultaneously, or in any number of counterparts, each of which shall be deemed an original, but all of which, together, shall constitute one and the same instrument. The AGREEMENT may be signed by fax or scanned by email signature.
- p. **Effective Date.** This AGREEMENT is deemed effective upon execution by all of the PARTIES and, for budgeting and funding purposes, is retroactive to July 1, 2016.

IN WITNESS WHEREOF, the PARTIES acknowledge their acceptance of this AGREEMENT by affixing their signature(s) below.

[SIGNATURE PAGE(S) TO FOLLOW]

For the CITY OF LAKE ELSINORE:

Mayor

Date

Approved As To Form

Attestation (a/20)

6-12-2017 Date

17

Counsel for the City of Lake Elsinore

Date City Clerk
For the ELSINORE VALLEY MUNICIPAL WATER DISTRICT

Date

President, Board of Directors

Approved As To Form

Date

Counsel for EVMWD

For the COUNTY OF RIVERSIDE

Date

Chairman, Board of Supervisors

Approved As To Form

Date

Counsel for the County of Riverside

Attested

Date

Clerk for the Board of Supervisors

For the CITY OF LAKE ELSINORE:

Date Mayor Approved As To Form Counsel for the City of Lake Elsinore Date For the ELSINORE VALLEY MUNICIPAL WATER DISTRIC President, Board of Direc Date Approved As To Form Date **Counsel for EVMWD** For the COUNTY OF RIVERSIDE Chairman, Board of Supervisors Date Approved As To Form Counsel for the County of Riverside Date Attested Clerk for the Board of Supervisors Date

For the CITY OF LAKE ELSINORE:

Date	Mayor
Approved As To Form	
Date	Counsel for the City of Lake Elsinore
For the ELSINORE VALLEY MUN	ICIPAL WATER DISTRICT
Date	President, Board of Directors
Approved As To Form	
Date	Counsel for EVMWD
For the COUNTY OF RIVERSIDE	
MAY 2 3 2017 Date	Chairman, Board of Supervisors
Approved As To Form	JOHN TARAGLIONE
5-10-2017	Mr (los
Date	Counsel for the County of Riverside
Attested	
MAY 2 3 2017	Hall barton Deputy
Date	Clerk for the Board of Supervisors

Attachment C: Annual Operator Costs and Contingency Fund Contributions FYE 2019 through 2021

	FYE 2019 Budget	FYE 2019 Actual	FYE 2020 Budget	FYE 2020 Actual	FYE 2021 Budget	FYE 2021 Actual
County of Riverside Expenditures						
Payments to Operator Partners						
Elsinore Valley Municipal Water District, Aeration Project Invoiced Total:	\$-	\$ 90,073	\$ -	\$ 64,173	\$ -	\$ 94,021
Operations & Maintenance Costs:	\$ -	\$ 60,739	\$ -	\$ 34,839	\$ -	\$ 64,687
Reserve Fund Sources and Uses:	\$ -	\$ 29,334	\$ -	\$ 29,334	\$ -	\$ 29,334
City of Lake Elsinore, Mixing Project Invoiced Total:	\$-	\$ 24,095	\$ -	\$ 0	\$ -	\$ 23,951
Total:	\$-	\$ 114,167	\$ -	\$ 64,173	\$ -	\$ 117,971

	FYE 2019 Budget	FYE 2019 Actual	FYE 2020 Budget	FYE 2020 Actual	FYE 2021 Budget	FYE 2021 Actual
Elsinore Valley Municipal Water Dis	trict					
Payments to Operator Partners						
Operations & Maintenance Costs:		\$ 7,428		\$ 9,508		\$ 7,284
Replacement Reserve		\$ 16,668		\$ 16,667		\$ 16,667
City of Lake Elsinore, Mixing Project Invoiced Total:	\$ 50,000-	\$ 24,096	\$ 50,000-	\$ 26,175	\$ 50,000-	\$ 23,951
Lake Aeration Project			<u> </u>			
Operations & Maintenance Costs						
Direct Labor:	\$ 37,104	\$ 72,820	\$ 20,696	\$ 30,869	\$ 21,634	\$ 105,926
Repairs - Material:						
Repairs - Outside Services:						
Repairs & Maintenance:	\$ 99,000	\$ 49,271	\$ 80,000	\$ 65,820	\$ 80,000	\$ 63,371
Lake Monitoring:	\$ 15,000	\$ 60,937	\$ 125,000	\$ 59,115	\$ 125,000	\$ 88,000
Insurance:	\$ 414	\$ 265	\$ 400	\$ 369	\$ 400	\$ 411
Power:	\$ 119,551	\$ 112,069	\$ 124,200	\$ 83,829	\$ 130,400	\$ 89,022
Total:	\$ 271,069	\$ 295,363	\$ 350,296	\$ 240,003	\$ 357,434	\$ 346,731
Note: EVMWD bills versus the actual, the balance of remaining	funds are NOT addeo	d to the project Continge	ency Fund.			

Reserve Fund Sources and Uses

Replacement Fund Reserve Sources:	\$ 88,000	\$ 88,000	:	\$ 88,000	\$ 88,000	\$88,	,000	\$ 88,000
Replacement Fund Reserve Uses:		\$ (52,303)			\$ (3,588)			\$ (68,000)
Reserve Fund Balance								
Total Replacement Fund Reserve:	\$-	\$ 759,688	:	\$-	\$ 844,100	\$	-	\$ 864,100

	FYE 2019 Budget	FYE 2019 Actual	FYE 2020 Budget	FYE 2020 Actual	FYE 2021 Budget	FYE 2021 Actual
City of Lake Elsinore						
Payments to Operator Partners						
Elsinore Valley Municipal Water District, Aeration Project Invoiced Total:	\$-	\$ 84,804	\$ 93,880	\$ 41,725	\$ 93,880	\$ 0
Operations & Maintenance Costs:	\$-	\$ 55,470	\$ 64,546	\$ 12,391	\$ 64,546	\$ O
Reserve Fund Sources and Uses:	\$-	\$ 29,334	\$ 29,334	\$ 29,334	\$ 29,334	\$ O
Total:	\$-	\$ 84,804	\$ 93,880	\$ 41,725	\$ 93,880	\$ 0
Direct Labor:	\$ 42,092	\$ 4,863	\$ 42,092	\$ 12,772	\$ 24,000	\$ 4,827
Salaries & Benefits, Operations & Mainte						
Repairs - Material:	\$ 150,000	\$ 1,038	\$ 150,000	\$ 0	\$ 150,000	\$ 29,484
Repairs – Outside Services	\$ 49,200	\$ 23,586	\$ 49,200	\$ 2,229	\$ 49,200	\$ 0
Insurance:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0
Power:	\$ 13,100	\$ 6,238	\$ 13,100	\$ 4,173	\$ 10,000	\$ 4,089
Total:	\$ 254,392	\$ 35,725	\$ 254,392	\$ 19,174	\$ 233,200	\$ 38,400
Reserve Fund Sources and Uses						
Replacement Fund Reserve:	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Reserve Fund (Fund 631) Balance						
Total Replacement Fund Reserve:	\$-	\$ 395,788	\$ -	\$ 445,788	\$ -	\$ 477,090

Attachment D: LEAMS nutrient credits accrued for Lake Elsinore for the period 2011 through 2021

Lake Elsinore Aeration & Destratification System (LEAMS) Nutrient Off-Set Credit Allocation for Lake Elsinore for the Period 2011 through 2021

LEAMS Operators								2012			2013			2014			2015			2016			2017			2018			2019			2020		2021	
	Credits Hours	Nutrients Cumm		Credit	Nutri Remo		Credit	Nutri Remo		Credit	Nutri Rem		Credit	Nutrie Remo		Credit	Nutrie Remo		Credit	Nutrie Remo		Credit	Nutrie Remov		Credit	Nutri Remo		Credit	Nutri Rem		Credit	Nutrients Remove		Nutri t Remo	
	Cummulative	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours		'P Hours (g)	s TN (kg)	TP (kg)
Elsinore Valley Municipal Water District	7,601	186,619	27,472	220	4,839	770	487	10,698	1,705	583	12,824	2,041	473	10,387	1,656	862	18,943	3,017	1,022	22,475	3,577	1,172	25,781	4,102	1,266	27,851	4,431	1,145	25,178	477	371	0 1,	299	27,643	4,398
Riverside County	1,770	37,532	6,914	162	3,564	567	162	3,564	567	162	3,564	567	162	3,564	567	162	3,564	567	162	3,564	567	162	3,564	567	227	4,994	795	204	3,080	714	205	0	718	4,510	718
City of Lake Elsinore	436	10,481	1,582	44	968	154	44	968	154	44	968	154	44	968	154	44	968	154	44	968	154	44	968	154	77	1,694	270	41	889	20	10	0	35	1,122	179
Total Nutrient Offset Credits Reserved	9,807	234,704	35,968	426	9,372	1,491	693	15,246	2,426	789	17,358	2,762	679	14,938	2,377	1,068	23,496	3,738	1,228	27,016	4,298	1,378	30,316	4,823	1,570	34,540	5,495	1,390	29,147	1,211	586	0 2,)52 (0 33,275	5,295

Task Force Stakeholders					2011			2012			2013			2014			2015			2016		2017			2018			2019			2020			2021	
	Credits Hours	Nutrients Cumm		Credit	Nutrie Remo		Credit	Nutrier Remov		Credit	Nutri Rem		Credit	Nutri Remo		Credit	Nutrient: Remove	-	Credit	Nutrients Removed	Credit	Nutri Remo		Credit	Nutri Remo		Credit	Nutrie Remo		Credit	Nutrie Remo		Credit	Nutrie Remov	
	Cummulative	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours		TP kg)	Hours	TN TP (kg) (kg)		TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP l (kg)	Hours	TN (kg)	TP (kg)	Hours	TN (kg)	TP (kg)
City of Beaumont	22	264	56	0	0	0	0	0	0	3	66	11	2	44	7	5	0	7	0	0	0 C	0	0	3	66	11	2	44	7	5	0	7	2	44	7
City of Canyon Lake	157	3,201	538	17	374	60	17	374	60	20	440	70	13	275	44	5	0	14	17	374 6	D 17	374	60	20	440	70	13	275	44	5	0	14	13	275	44
City of Hemet	340	6,941	1,190	47	1,034	165	47	1,034	165	23	506	81	27	594	95	12	0	42	47	1,034 16	5 47	1,034	165	23	506	81	27	594	95	12	0	42	28	605	97
City of Moreno Valley	1,202	25,124	4,208	128	2,816	448	128	2,816	448	165	3,630	578	97	2,134	340	30	0	105	128	2,816 44	3 128	2,816	448	165	3,630	578	97	2,134	340	30	0	105	106	2,332	371
City of Murrieta	27	352	71	3	66	11	3	66	11		0	0	1	11	2	5	0	7	3	66 1	1 3	66	11		0	0	1	11	2	5	0	7	3	66	11
City of Perris	464	9,790	1,622	48	1,056	168	48	1,056	168	55	1,210	193	45	979	156	9	0	32	48	1,056 16	3 48	1,056	168	55	1,210	193	45	979	156	9	0	32	54	1,188	189
City of Riverside	46	836	147	5	110	18	5	110	18	7	154	25	0	0	0	4	0	7	5	110 1	3 5	110	18	7	154	25	0	0	0	4	0	7	4	88	14
City of San Jacinto	82	1,795	286	1	22	4	1	22	4	35	766	122	0	0	0	0	0	0	1	22	4 1	22	4	35	766	122	0	0	0	0	0	0	8	176	28
City of Menifee	1,114	22,374	3,897	128	2,816	448	128	2,816	448	104	2,288	364	98	2,145	342	48	0	168	128	2,816 44	3 128	2,816	448	104	2,288	364	98	2,145	342	48	0	168	102	2,244	357
City of Wildomar	276	5,764	967	32	704	112	32	704	112	31	682	109	24	528	84	7	0	25	32	704 11	2 32	704	112	31	682	109	24	528	84	7	0	25	24	528	84
San Jacinto Agricultural Operators	122	2,675	426	0	0	0	14	308	49	47	1,030	164	0	0	0	0	0	0	0	0	0 14	308	49	47	1,030	164	0	0	0	0	0	0	0	0	0
San Jacinto Dairy & CAFO Operators	56	1,210	194	0	0	0	9	198	32	9	198	32	10	209	34	0	0	0	0	0	9 0	198	32	9	198	32	10	209	34	0	0	0	0	0	0
CALTRANS - freeway	149	3,025	496	10	220	35	10	220	35	24	528	84	17	363	58	5	0	7	10	220 3	5 10	220	35	24	528	84	17	363	58	5	0	7	17	363	58
March Air Reserve Base Joint Powers Authority	53	924	163	5	110	18	5	110	18	6	132	21	4	77	13	5	0	7	5	110 1	8 5	110	18	6	132	21	4	77	13	5	0	7	3	66	11
US Air Force (March Air Reserve Base)	91	1,782	299	3	66	11	3	66	11	18	396	63	11	242	39	5	0	7	3	66 1	1 3	66	11	18	396	63	11	242	39	5	0	7	11	242	39
Total Nutrient Offset Credits Purchased	4,200	86,057	14,559	427	9,394	1,495	450	9,900	1,575	547	12,025	1,913	349	7,601	1,214	140	0	428	427	9,394 1,49	5 450	9,900	1,575	547	12,025	1,913	349	7,601	1,214	140	0	428	375	8,217	1,310
Unused Nutrient Off-Set Credits *				1,147	25,234	4,015	857	18,854	2,999	664	14,617	2,325	972	21,461	3,409	792	20,504 2,	834	345	7,590 1,20	3 172	3,784	602	(117)	(2,565)	(408)	261	7,252	4,575	1,274	44,000	4,520	1,625	2,508	395

Notes:

* Initial estimate of total offset credits generated (44,000/yr) is a deliberatel conservative value used for planning and budgeting. The actual long-term average value is much higher. We will substitute that higher value after the new offset validation study report is finalized in early 2019.

2011 through 2017 TN and TP offset credits to Riverside County and City of Lake Elsinore from "Distribution of Offset Credits Generated by the Lake Elsinore Aeration and Mixing System (LEAMS)" (10/24/2016)

2018 TN and TP offset credits to Riverside County and City of Lake Elsinore derived from FY 2018-19 LE&CL TMDL Task Force Budget Worksheet

2011 through 2018 TN and TP offset credits to EVMWD derived from Table 2, "Status Summary for Nitrogen Offsets Credits Generated by LEAMS (2011-2018)"

2016 and 2017 City of Perris provided an alternative contribution amount of \$14,124 (from \$18,300)

2017 San Jacinto Agricultural Operators contribution estimated at \$24,300 was prorated to 65% of the total load allocation attributed to Agriculture and for only the last quarter of 2017 (25%)

2017 San Jacinto Dairy & CAFO Operators contribution of \$2,700 not included in FY 2017-18 budget

2018 City of Murrieta opted not to purchase available 2018 credits (\$1,200).

2018 Cities of Menifee and Perris provided an alternative contribution amounts of \$31,200 (from \$46,500) and \$23,100 (from \$16,500) respectively.

2018 City of San Jacinto purchased an additional \$5,940 of nutrient off-set credits bringing their total credits to \$10,440 (from \$4500).

2018 San Jacinto Agricultural Operators 2018 contribution estimated at \$21,600 was prorated to 65% of the total load allocation attributed to Agriculture based upon stakeholder participation in WRCAC.

2019 City of San Jacinto and San Jacinto Agricultural Operators opted not to purchase available LEAMS nutrient offset credits

2020 City of San Jacinto and San Jacinto Agricultural and CAFO Operators opted not to purchase available LEAMS phosphorus offset credits

2021 San Jacinto Agricultural and CAFO Operators opted not to purchase available LEAMS phosphorus offset credits

Attachment E: LEAMS Program Implementation Schedule

CY	FY	Date	LEAMS-related ACTIVITY
		Jan., 2022	Task Force draft budget for FY22-23; est. CY2021 LEAMS credits needed
~	22	Feb., 2022	
02:	21-2	Mar., 2022	Task Force final budget for FY22-23; incl. est. CY2021 LEAMS credit fees
ar 2	FY2021-22	Apr., 2022	Partners certify credits generated & available for Calendar Year 2021
LEAMS Calendar Year 2022	ΕΥ	May, 2022	LESJWA pays LEAMS Partners for 2021 credit licenses
dar		June, 2022	
leno		July, 2022	LESJWA sends out Task Force invoices for FY22-23
Cal		Aug., 2022	LESJWA submits annual report for CY2021 LEAMS credits to Reg. Bd.
MS	33	Sep., 2022	
EA.	Fiscal Year 2022-2023	Oct., 2022	Task Force members pay LESJWA invoices for FY22-23
	22-:	Nov., 2022	
	20:	Dec., 2022	
	ear	Jan., 2023	Task Force draft budget for FY23-24; est. CY2022 LEAMS credits needed
ŝ	II Xe	Feb., 2023	
202	isca	Mar., 2023	Task Force final budget for FY23-24; incl. est. CY2022 LEAMS credit fees
ar 2	ΪĒ	Apr., 2023	Partners certify credits generated & available for Calendar Year 2022
Ye		May, 2023	LESJWA pays LEAMS Partners for 2022 credit licenses
LEAMS Calendar Year 2023		June, 2023	
len		July, 2023	LESJWA sends out Task Force invoices for FY23-24
Ca		Aug., 2023	LESJWA submits annual report for CY2022 LEAMS credits to Reg. Bd.
MS	54	Sep., 2023	
EA	202	Oct, 2023	Task Force members pay LESJWA invoices for FY23-24
	23-	Nov., 2023	
	Fiscal Year 2023-2024	Dec., 2023	
	ear	Jan., 2024	Task Force draft budget for FY24-25; est. CY2023 LEAMS credits needed
4	۲	Feb., 2024	
202	isca	Mar., 2024	Task Force final budget for FY24-25; incl. est. CY2023 LEAMS credit fees
ar	ш	Apr., 2024	Partners certify credits generated & available for Calendar Year 2023
LEAMS Calendar Year 2024		May, 2024	LESJWA pays LEAMS Partners for 2023 credit licenses
dar		June, 2024	
len		July, 2024	LESJWA sends out Task Force invoices for FY24-25
Ca		Aug., 2024	LESJWA submits annual report for CY2023 LEAMS credits to Reg. Bd.
MS	25	Sept. 2024	
EA	202	Oct., 2024	Task Force members pay LESJWA invoices for FY24-25
_	24-	Nov., 2024	
	20	Dec., 2024	
55	Fiscal Year 2024-2025	Jan., 2025	Task Force draft budget for FY25-26; est. CY2024 LEAMS credits needed
202	۱۲	Feb., 2025	
5	isca	Mar., 2025	Task Force final budget for FY25-26; incl. est. CY2024 LEAMS credit fees
٨S	ш	Apr., 2025	Partners certify credits generated & available for Calendar Year 2024
LEAMS CY 2025		May, 2025	LESJWA pays LEAMS Partners for 2023 credit licenses
		June, 2025	