

LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT

MEMORANDUM

DATE: March 23, 2021

TO: **BOARD OF DIRECTORS**
Lake Arrowhead Community Services District

FROM: **MARC LIPPERT, Public Programs Supervisor**

JOHN O'BRIEN, Finance Manager

CATHERINE CERRI, General Manager

SUBJECT: **CONSIDER APPROVING A CONTRACT FOR
WATERVIEW WITH EAGLEAERIAL SOLUTIONS**

A. RECOMMENDATION

It is recommended that the Board of Directors authorizes the General Manager to execute a 3-year contract with EagleAerial Solutions for WaterView software to provide information related to the District's upcoming Water Use Objective.

B. REASON FOR RECOMMENDATION

Water use efficiency legislation will determine the District's upcoming Water Use Objective which defines the amount of water that is considered efficient starting in 2022. WaterView software will incorporate multiple data points provided by the Department of Water Resources (DWR) before the District's Water Use Objective is finalized. This will allow the District to ensure the data is accurate and the Water Use Objective is viable.

C. BACKGROUND INFORMATION

In 2018, AB 1668 and SB 606 were passed to determine efficient uses of water. As part of this legislation, a Water Use Objective will be determined for each urban water supplier which will essentially act as a budget-based water use target. There are five elements which are combined to create the supplier's Water Use Objective:

1. Indoor Residential Water Use of 50-55 gallons per person per day (GPCD)
2. Outdoor Residential Water Use
3. Commercial Irrigation
4. System Water Loss
5. Approved Variances

EagleAerial has developed a software called WaterView that includes all of the data for the first two elements and calculates the water budget for each parcel which rolls up into the District's total Water Use Objective. This will help the District see what their calculated water budget will be in advance so staff can determine if the data is accurate and whether additional variance requests may be made. Individual customers will not be responsible for adhering to a water budget.

LACSD has multiple unique characteristics that will require an effort on the part of the District to identify, quantify and engage with DWR to ensure that the determined water budget for LACSD is viable for many years to come.

The three areas for concern are:

- A. Seasonal Population
- B. Steep Terrain
- C. Tree Canopy

The 2018 water use efficiency legislation specified that (A) Seasonal Populations would receive a variance for purposes of calculating the water budget for 1. Indoor Residential Water Use. District staff have been working with the University of California Davis Center for Water-Energy Efficiency to create a methodology for measuring what the variance will be for indoor residential water use. It is clear that the District will receive a variance for this concern.

The second two concerns (B and C) are related to 2. Outdoor Residential Water Use. DWR contracted with Quantum Spatial, Inc. and EagleAerial to make an assessment of how much water each supplier will need to efficiently maintain outdoor landscaping. They did this by overflying all of the water agencies in California and capturing one-foot resolution near-infrared imagery to determine the land use for each parcel. The land was segregated as impervious, irrigable or not irrigable. This estimated the total amount of irrigable land that the agency will get a water budget for. Evapotranspiration factors will be applied to the irrigable land area and an amount of water determined to be efficient will be calculated.

While this method is very accurate for a majority of water suppliers, steep terrain and heavy tree canopy have produced errors in the model. 617 of the District's 7,944 developed residential parcels (7.8%) were shown to have errors related to terrain. DWR believes they have created a methodology to account for these errors but the tree canopy has resulted in 22% of the District's residential land being categorized as "undeveloped" which does not receive any water budget. DWR has acknowledged that this may be a concern but the legislation doesn't call out tree canopy as a variance. They are interested to receive feedback from agencies that are affected by heavy tree canopy to determine if a variance is warranted.

D. FISCAL IMPACT

EagleAerial has provided two options for the software contract: 3 years and 5 years. Staff recommend entering into a 3-year contract at this time. Setup fees will be \$2,000.

Length	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Avg/Yr
3-Year	\$14,316	\$17,179	\$17,179	0	0	\$48,674	\$16,225
5-Year	\$14,316	\$14,316	\$14,316	\$14,316	\$14,316	\$71,580	\$14,316

E. ENVIRONMENTAL IMPACT

There are no environmental impacts associated with this item.

F. ATTACHMENTS

EagleAerial WaterView Quote



*Exclusive Provider of Irrigated
Landscape Measurement Analysis for DWR*

Contact Information:

Lake Arrowhead Community

27307 CA-189

Blue Jay, CA 92317

Catherine Cerri

ccerri@lakearrowheadcsd.com

(909) 336-7102

Eagle Aerial Solutions

3420 Bristol St, 6th Floor

Costa Mesa, CA 92626

Jazmine Molloy

jmolloy@eagleaerial.com

(714) 754-7670 x700

WaterView Portal Overview:

Thank you for your interest in using WaterView to help with your water efficiency efforts. By implementing WaterView, your district will get a head start on using the same portal that will be used as the DWR data is released. You will also have access to the premium features, tools and dashboard by integrating your water use data with WaterView.

The following sections are meant to provide information specific to your district:

of Connections: **8,500**

Pricing: **3 Year Agreement**

5 Year Agreement

Standard Retail Price: \$19,088

\$19,088

10% CalWEP Discount (\$850)

(\$850)

Annual Discounted Price **\$17,179**

\$17,179

Initial Setup Fee: \$2,000 – \$3,000 [One Time Fee TBD]

\$2,000 – \$3,000 [One Time Fee TBD]

--ADDITIONAL--

**15% Pre-DWR Data
Release Discount*** (\$2,863) *(This discount is applied in **year one only**)*

(\$2,8363) *(This discount **applied in ALL 5 YEARS**)*

Annual Payment Sched Y1: \$14,316 (+Set up Fee)

Y1: \$14,316 (+Set up Fee)

Y2: \$17,179

Y2: \$14,316

Y3: \$17,179

Y3: \$14,316

Y4: \$14,316

Y5: \$14,316

Annual Subscription and Renewal Rate:

WaterView is an annual subscription, Software as a Service (SaaS). All CalWEP members will receive the **CalWEP discount** for the lifetime of their WV subscription. *The 15% **“Pre-DWR Data Release Discount”** is extended only in year one of a 3 year agreement and extended across all years of a 5 year agreement. It is important to note that the “Pre-DWR Data Release Discount will not be extended after the initial 3 or 5 year contract. The **CalWEP discount will be applied to the subscription cost every year** the water district is a member of CalWEP.

DWR Statewide Project:

Eagle Aerial Solutions is the exclusive provider of irrigated landscape measurement analysis for the statewide DWR project. Approximately 12+ million single family and multi-family residential parcels across more than 400 water districts in the state are being measured and analyzed.

Why was WaterView developed?

The WaterView platform was developed by Eagle at the request of CalWEP members to have tools and enhanced data to meet the efficiency and allocation requirements established under new California legislation, SB606 and AB1668. WaterView will analyze total water allocation at the parcel level, in compliance with the new DWR standards.

Aerial Imagery:

Two different imagery layers will be available in WaterView;

- The 2018 1ft ortho imagery used in the DWR study [to be loaded as it becomes available]
- A default high resolution ortho data set that is automatically updated as new imagery becomes available.

Security of the WaterView Platform:

Eagle Aerial Solutions developed the WaterView portal in partnership with Digital Map Products, using their existing stable and robust online mapping technology. Digital Map Products has been providing mapping services for nearly 20 years to large enterprise and government customers including Zillow, Google, Apple, CBRE and the State of California. More than 350,000 users are accessing data from their platform daily to make informed decisions.

For more detailed information please refer to the full security statement:

<https://www.eagleaerial.com/docs/waterview-security.pdf>

Thank you again for your interest in WaterView! We look forward to working together on your agency’s water efficiency efforts.

-The Eagle Team

