Lake Elsinore & San Jacinto Watersheds Authority

# Public Education & Outreach Program

June 27, 2018



# Public Education & Outreach Program

- Media Outreach
- Facebook Page
- Outreach & Administration

- Issues Management
- Community Outreach



### Media Outreach



### Media Outreach

- News Release: Study results
- News Release: Alum Applications
- Public Notice: Alum Applications
- Media Advisory: LESJWA Summit
- Online Media Room
- The Friday Flyer
- The Press Enterprise
- √ Valley News
- Canyon Lake POA



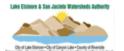


Control and Water Conservation District at the dinner table during the 2018 Lake Elsinore San Jacinto Water Authority Water Summit explains more about the county's effort to control the amount of pollutants going into the local lakes through a

Elsinore's Diamond Club in Diamond Stadium, reported on how the current drought and evaporation is impacting the region what LESJWA is doing to furthe protect the local watersheds, accomplishments made and upcoming major projects to help reach water quality goals.

The key issue facing both Lake Elsinore and Canyon Lake that are symbiotic to much of southwest

### Alum Applications



#### ANNOUNCEMENT OF PUBLIC NOTICE TO CANYON LAKE COMMUNITY Canyon Lake Alum Application, September 25-19, 2017

Lake Elsinore & San Jacinto Watersheds Authority (LESJWA), is informing the Canyon

Lake community that doses of alum will be applied to the lake in the main body, east bay and the area north of the causeway from September 25-29, 2017. Stormwater runoff carries with it high levels of nutrients including nitrogen and phosphorus that hurt water quality and threaten marine life. This dose will be the seventh Canvon Lake alum application that has taken place.

Alum, the method selected to provide the best results for Canvon Lake, has a proven track record of success and is safe to both humans and marine life. Drinking water quality will not be affected by any of the treatment options. Canyon Lake will remain open during the entire treatment process. Recreational users will experience little disruption during treatment application and implementation.

In order to comply with water quality regulations enforced by the State through the local Santa Ana Regional Water Quality Control Board, the Lake Elsinore & Canyon Lake Nutrient Total Maximum Daily Load (TMDL) Task Force using local stakeholder funding to continue alum water treatments in Canyon Lake. The TMDL Task Force evaluated several options during the CEQA process and determined that alum application provides the best option as a step to effectively treat the entire lake in a timely manner with minimal impact to Canyon Lake residents.

#### Alum Schedule (subject to change)

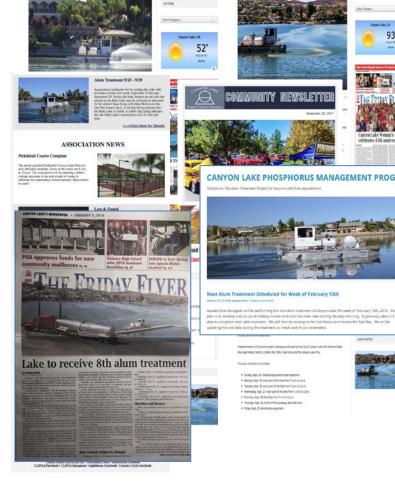
 Sunday, Sept. 24 Mobilize equipment/ boat inspection Monday, Sept. 25 Holiday Harbor 7:00 a.m. - 4:00 n.m. Tuesday, Sept. 26 7:00 a.m. - 5:00 p.m. Wednesday, Sept. 27 Holiday Harbor 7:00 a.m. - 3 p.m. Thursday, Sept. 28 East Ramp 7:00 a.m. - 2:00 p.m. Thursday, Sept. 28 North Causeway Pending (late afternoon)

Canyon Lake Alum Application video - https://youtu.be/D0iUtkTVGnc

For daily operational updates visit - www.canvonlakealum.wordpress.com

#### ADDITIONAL INFORMATION:

Mark Norton, Lake Fisingre & San Jacinto Watershed Authority 951-354-4221 MNorton@sawpa.org





days to complete main lake treatment. We will then be equing to the Tast Sawo and treated the East Saw. We will be

Municipal Water District, LESSAN, the TMOX Task Force and the Conyon Lake PCA.

- . Tumble, Sept. 26, main part of the lake from Taun, to Ep. m.

- 4. Thyrolog Sept. 28, north of the Javanese, See afternoon
- · Stoy Sex 25 devotes excens





## Manage Social Media: Facebook



### Facebook

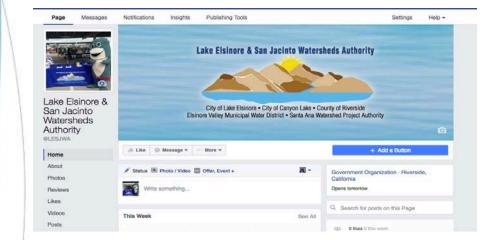
- LESJWA
- Launched: October 6, 2016
- Likes: 979
- Followers: 982

#### **EVMWD**

- Likes: 1,494 / Followers: 1,478
- Canyon Lake
- Likes: 1,235 / Followers: 1,252

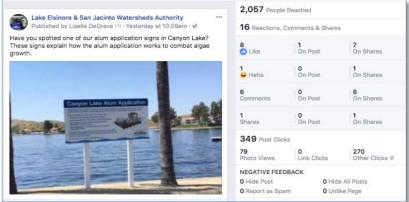
#### Lake Elsinore

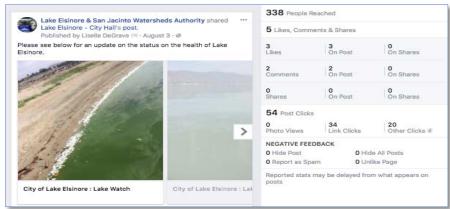
Likes: 6,602 / Followers: 6,710





# Highlights















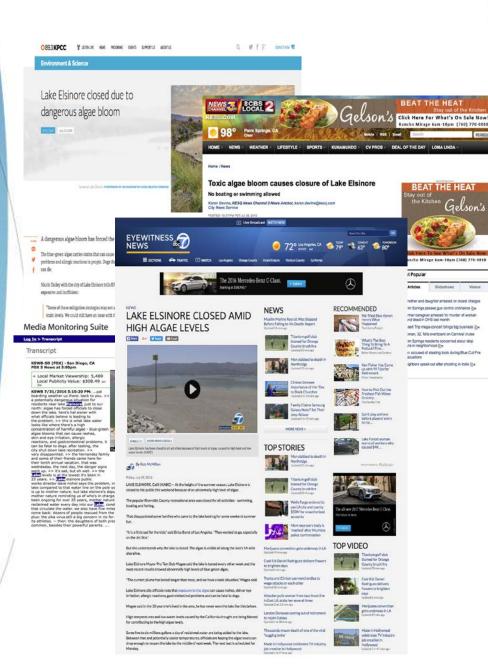


### Outreach & Administration



# Outreach & Administration

- Quarterly EO meetings
- Quarterly reports/evaluation
- Media monitoring





# Issues Management Support



# Issues Management

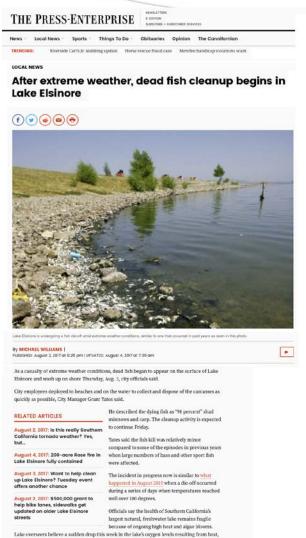
- Lake Watch 2017
- TCHS Class Letters Response
- Fish Die-off 2018







### Lake Watch 2017







"We can gladly say no on was injured," Yates said. "R was really good teamwork on all level



#### Fish Die Off Reported At Lake Elsinore

City officials say they are using a surf rake, "which is working well to quickly and effectively clean up the

By Rener Schwerze Pleth Ruff - Updated Nature 3, 207 925 on 67





LAKE ELSINORE, CA - Lake Elsinore officials on Thursday announced a "Stage a Lake Watch Alert" after a "minor" fish die off happened on the lake, involving mostly threadin shad or large carn. The city says they want everyone to be on high alort about the valuembility of a die

"In response, our teams mobilised quickly and have successfully cleared most of the fish along the lake's shoreline," the city said. "In recent years, the City acquired a usef rate, which is working well to existly and effectively clean up the aboveline."

The die off is not a surprise to officials, who are they know what likely caused it.

"Today's minor fish kill is the direct result of low water levels, increasingly hot temperatures during the day and night a falory includence and durining dissolved occurs levels for sustained periods of time," a statement from the Oby of Take Eleinore said. "A fish kill is nature's was to rebalance the fish population and improve the overall health and quality of the lake."



'As part of Stage 1, the City is asking our regional partners businesses, community groups and residents to be engaged and prepared," the city said. "The City and our teams remain on High Alert and we are prepared to address any additional concerns in the coming days."

Find out more and find updates about the lake at annualiste elatione are falmostel.

- Image via Skutterstock





7 Total Solar Etipse Survival Guide

Cvil War Rattle







### TCHS Student Letters

July 13, 2017

Temecula Canyon High School Attn: Shaun Galvan, Chemistry Teacher 28755 El Toro Road Loke Esinore, CA 92532

Dear Mr. Gaylan.

I am writing in response to several letters that your chemistry students sent to the mayors of Canyon Lake and Lake Bishare regarding water quality concerns within our watershed. We appreciate your enthusiasm for teaching students how to take complex science-related topics and applying them to relevant issues taking place in our community.

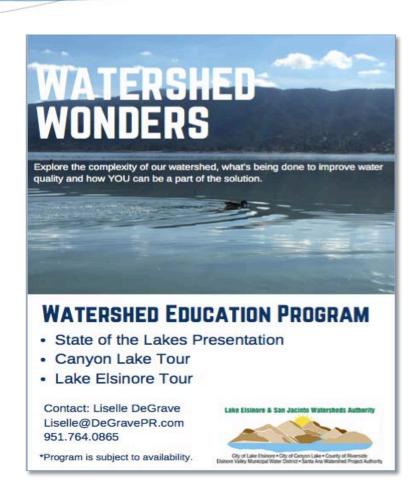
As the representative from the Lake Elsinore & San Jacinto Watersheds Authority (LESJWA), a joint powers authority formed to improve water quality and wildlife habitats, I would like to share with you a few of the key projects that have taken place over the past 17 years. In addition to regular water quality testing that takes place in both Lake Elsinore and Canyon Lake, the organization has been responsible for several lake improvement projects including, the addition of a pipeline that brings in recycled water to Lake Elsinore, which offsets evaporation; the establishment of an aeration system at Lake Elsinore; fish harvesting; sediment removal and more recently alum freatments at Canyon Lake.

There is no denying that the Lake Elsinore Watershed is complex. Maintaining a healthy water quality balance is a challenge. Through the use of scientists and internationally recognized lake experts, LESJWA has been able to meet government water quality standards set for our watershed. We would like to provide the apportunity for myself and city staff to visit with you and your students to explain the complexities of the watershed, what we have accomplished over the past years to improve water quality, solutions that have been explained and why, as well as answer questions form your students.

Again, we thank you for encouraging your students to explore and study our watershed. To coordinate a date for myself and city staff to visit with you and your students to discuss the complexity of our watershed, feel free to contact me at MNorton@SAWPA.org or 1951) 354-4221.

Sincerely.

Mark R. Norton, PE, LEED AP, ENV SP Administrator Lake Eisinore & San Jacinto Watersheds Authority





# Fish Die-off 2018



Lake Elsinore & San Jacinto Watersheds Authority shared a \*\*\* post.

Published by Liselle DeGrave [?] · May 30 at 9:46pm · ❸

Update on fish die-off at Lake Elsinore. Over the past few days, Lake Elsinore has experienced a minor fish die-off. This is just nature's way of rebalancing the fish population and improve the overall health and quality of the lake, as well as the fishery.





# Community Outreach



# Community Outreach

- Community Events
- Splash Into Spring
- Fiesta Day





### LESJWA Summit

- Increased attendance from approx. 30 to 100+
- Participation from cities, county and state.
- New location





## Next Steps

Manage FB Page



Community Partnerships



Media Outreach



Community events





## Next Steps

♦ 2018-2019 OWOW Conference









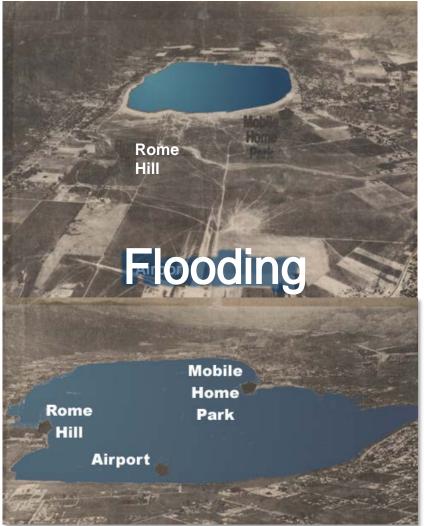
DEGRAVE COMMUNICATIONS PUBLIC RELATIONS



# Challenges for Lake Elsinore









# Lake Elsinore is a Freshwater Lake

Historic R	ainfall 1993 - 2004	Historic	Rainfall 2005	- 2018
1993	25.20	200	6 8.0	62
1994	10.14	200	7 1.	60
1995	18.92	200	9.3	34
1996	7.31	200	9 8.8	81
1997	8.35	201	0 11.	.39
1998	24.41	201	1 14.	.97
1999	5.79	201	2 5.	78
2000	6.20	201	3 4.4	42
2001	9.10	201	4 4.	59
2002	2.90	201	5 7.0	01
2003	13.52	201	6.0	62
2004	6.70	201	7 14.	.61
2005	28.80	201	8 3.	38

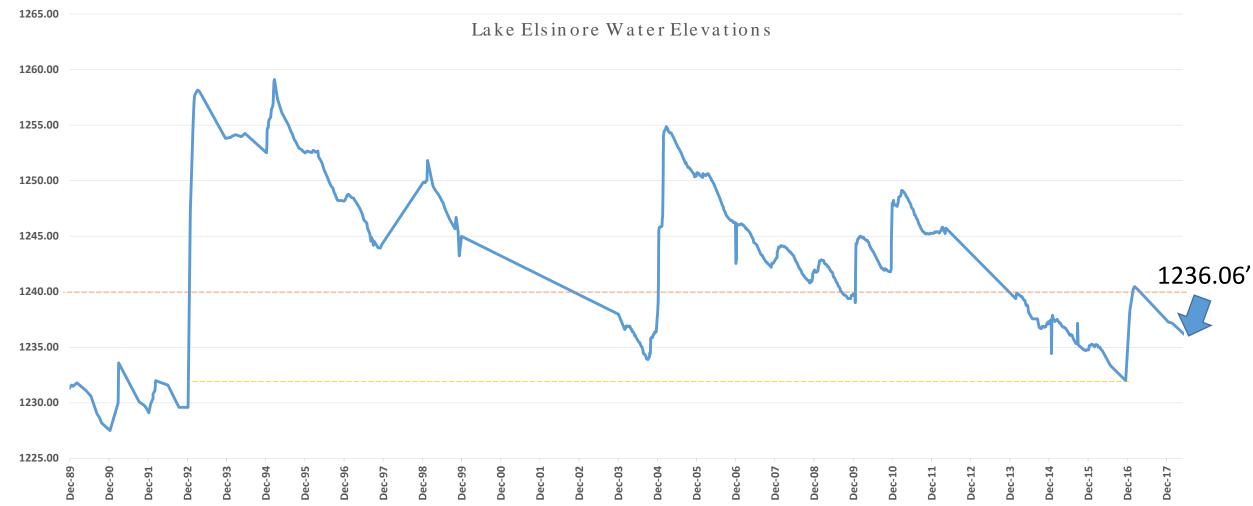
Spill Overs into LE			
2003	11 wks		
2004	6 wks		
2005	18 wks		
2006	4 wks		
2007	-		
2008	4 wks		
2009	1 wk		
2010	5 wks		
2011	5 wks		
2012	-		
2013	-		
2014	-		
2015	-		
2016	1 wk		
2017	4 wks		

Average Rainfall: 11 inches

Year Starts July 1

# Struggling Lake Levels





# Managing a Complex Waterbody

- Summer 2013 Above 1240'
- Summer 2014 Free Boating Days
- May 2015 Fish Survey Shows Imbalance
- July 2015 Launched Lake Watch
- August 2015 Minor Fish Die Off
- Summer 2016 Lowest in 23 years
- July 2016 Suffer New Blue-Green Algae Blooms
- Summer 2016 Lake closes, Reopens to Limited Body Contact
- Winter 2017 Lake Elsinore Receives Over 14" of Rain, Toxins Eliminated

June 2017 – City Posts Permanent Caution Sign at All Beaches

July 2017 – Algae Bloom Occurs, City Changes Caution Signs

August 2017 – Minor Fish Die Off

Summer 2017 – Toxins Remain Elevated Above Caution Levels

February 2018 – City Ends Monitoring

April 2018 – No Cyanotoxins, LESJWA ends monitoring

May 2018 - Minor Fish Die Off

June 2018 – State Water Board Sampling

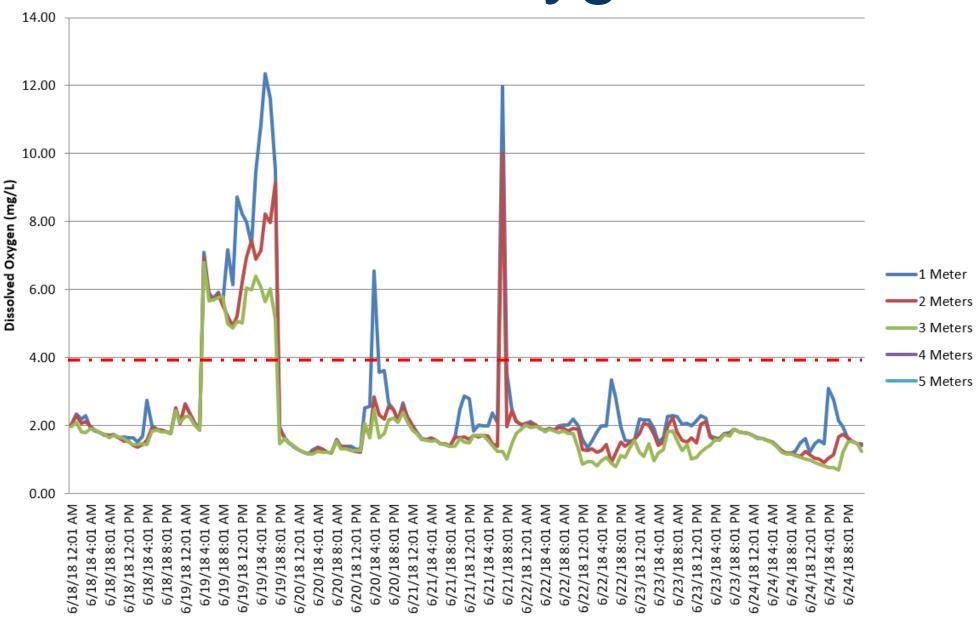
### Recent Fish Die Offs



- 2015
  - August 5 8: 11 tons
  - August 10 11: 5 tons
  - August 19: 7 tons
- 2017
  - August 3 − 5: 2 tons
- 2018
  - May 26 June 1: 41 tons



# Dissolved Oxygen Levels



# Cyanobacteria Update



- Cyanobacteria = Blue Green Algae.
- Harmful Cyanotoxin types:
  - Microcystins
  - Anatoxin -a
  - Cylindrospermopsin
- First major bloom was in 2016.
- City conducted regular sampling from July 2016 to February 2018.
- LESJWA TMDL Taskforce conducted sampling from June 2017 to April 2018.
- State samples in May and June 2018.

#### **CAUTION**

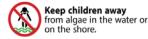
#### Harmful algae may be present in this water. For your family's safety:



You can swim in this water, but stay away from algae and scum in the water.

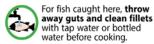


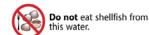
Do not let pets and other animals go into or drink the water, or eat scum on the





**Do not** drink this water or use it for cooking.





Call your doctor or veterinarian if you or your pet get sick after going in the water.

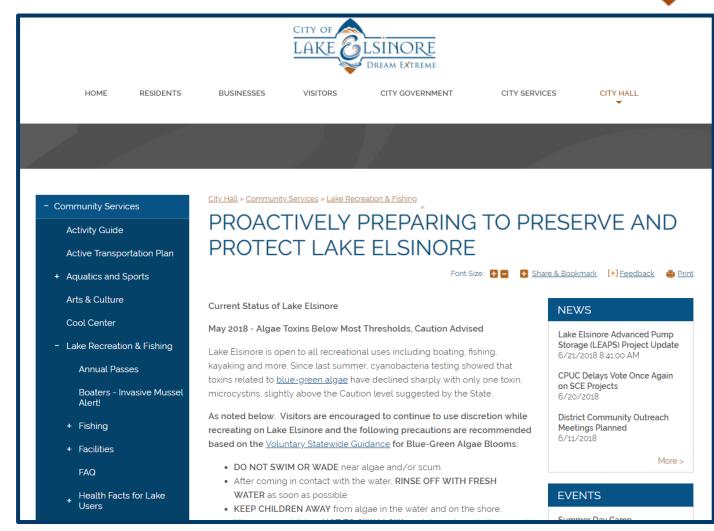
For information on harmful algae, go to mywaterquality.ca.gov/monitoring\_council/cyanohab\_network

For local information, contact:

# Cyanobacteria Results



- February Non-Detect
- April Non Detect
- May (State) –
   Microcystins at Caution Levels
- June (State) Microcysitins at Caution Levels



www.lake-elsinore.org/LakeWatch

- Reduced Lake Use Fees
- Invited New Concessionaires
- New Recreational Programs
- La Laguna Resort & Boat Launch Renovations
- Increased Fish Stocking Program
- Expanded Fishing Areas
- More Recreational Opportunities, i.e. swimming, night boating, inflatables, etc.

#### 'Catch and 'elease' for cats could be coming

Strays would be erilized, returned to the outdoors.







# Lake Elsinore pumping up namesake despite drough

Measures include allowing alcohol consumption at the city-owned beach a

### What's Next for Lake Elsinore

- LESJWA's Fish Population Survey
- Design New Lake Signage
- Capture Economic Development Opportunities
- Ongoing Water Quality Monitoring
- Seek Federal and State Support
- Research Funding/Revenue Opportunities



- Collaboration and Communication with Regional Partners and Community.
- Explore short and long -term strategies for overall health of Lake Elsinore