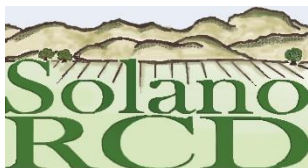


LAKE BERRYESSA BOATER OUTREACH SUMMER 2019 PROGRAM



**Solano Resource Conservation District
2019 Lake Berryessa Boater Outreach Interns
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Table of Contents

INTRODUCTION	2
BOATER EDUCATIONAL OUTREACH	2
RECREATOR EDUCATIONAL OUTREACH	5
COMMUNITY CLEAN UP EVENTS	8
PROGRAM TOTALS	9
PHOTOS	10

Acknowledgement of Funders & Partners



Funders Include: Solano County Water Agency, Napa County, Solano County and Cities of Vallejo, Benicia, Fairfield, Suisun City, Rio Vista and Vacaville

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INTRODUCTION

The Lake Berryessa Boater Outreach Program is managed by the Solano Resource Conservation District and focuses on boater education at Lake Berryessa. The reservoir serves as a drinking water source for approximately 500,000 people in Solano County, as irrigation for agriculture, and use for local businesses such as Jelly Belly and Anheuser-Busch. This report will cover the accomplishments and scope of the program for the 2019 season, which began in mid-May and concluded in early-September.

A team of two Lake Berryessa Boater Outreach interns conducted one-on-one educational surveys with boaters and recreational users at Lake Berryessa every weekend, covering topics such as hazardous waste disposal and precautions to help keep the water clean. Boater surveys were conducted primarily at the three busiest launch concessions: Markley Cove, Steele Canyon and Capell Cove, with some explorative outreach at Pleasure Cove and Putah Canyon. Recreator surveys were conducted at the busiest recreational site: Oak Shores. Data collected from the surveys were managed by the interns and digested into weekly reports for the Lake Berryessa Watershed Partnership. Lake Berryessa boater outreach interns also assisted in two community clean up events: World Environment Day and Coastal Cleanup Day.

BOATER EDUCATIONAL OUTREACH

The goal was to reach over 800 surveys and educate boaters on clean boating practices. Interns conducted one-on-one surveys with boaters, motivated them to install oil absorbent pillows and taught them how to dispose of used pillows, and educated boaters on the importance of Lake Berryessa as a drinking water source.

Boater Kits and Premiums

After a boater completed the survey, they would receive a free “Clean and Green” boating kit. Boating kits included a fueling bib to prevent gasoline spills while refueling, a West Marine coupon for \$15 dollars, and oil absorbent pillow and to prevent oil and hazardous contaminants from leaking into the lake. Useful information such as a map of Lake Berryessa, booklets about California boating and environmental laws, and information explaining clean boating practices were also included in the boating kit. For fisherman, fishing line containers were distributed so that the fishing line could be collected and recycled safely.

If boaters installed an oil absorbent pillow after the survey, they received a premium gift. They could choose from a Lake Berryessa T-shirt, a metal canteen or an orange ski flag. This year the most popular premium gift was the flag, with approximately 70% of installers choosing it as their premium gift.

Boater Survey Questions and Responses

Each boater surveyed was asked for their zip code and their city of residence. Figure 1 shows the distribution of boaters surveyed who came from Solano County and Napa County. Of the boaters surveyed, 32.0% are from Solano County, and 11.5% are from Napa County.

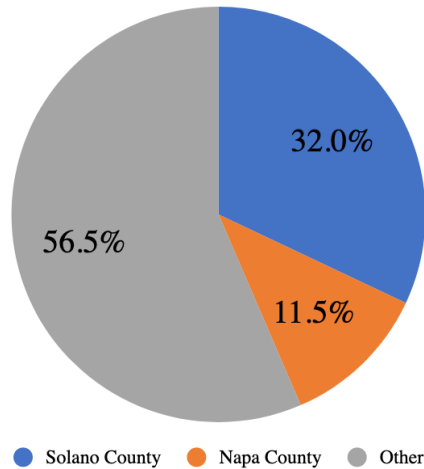


Figure 1: Summer 2019 Lake Berryessa boaters by county of residence

Of the Solano County boaters surveyed, most of the boaters came from Vacaville (47% of Solano County boaters surveyed), with Fairfield in second (22.4%) and Vallejo in third (10.7%), as shown in Figure 2.

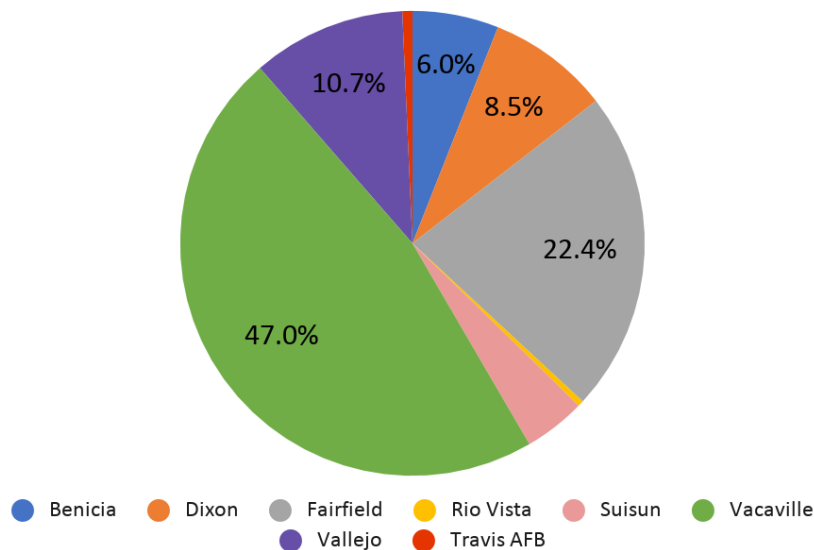


Figure 2: Distribution of boaters surveyed by cities in Solano County

Of the Napa County boaters surveyed, the vast majority of boaters came from Napa (85.1% of Napa County boaters surveyed), with American Canyon in second (10.9%) and Calistoga in third (2%), as shown in Figure 3.

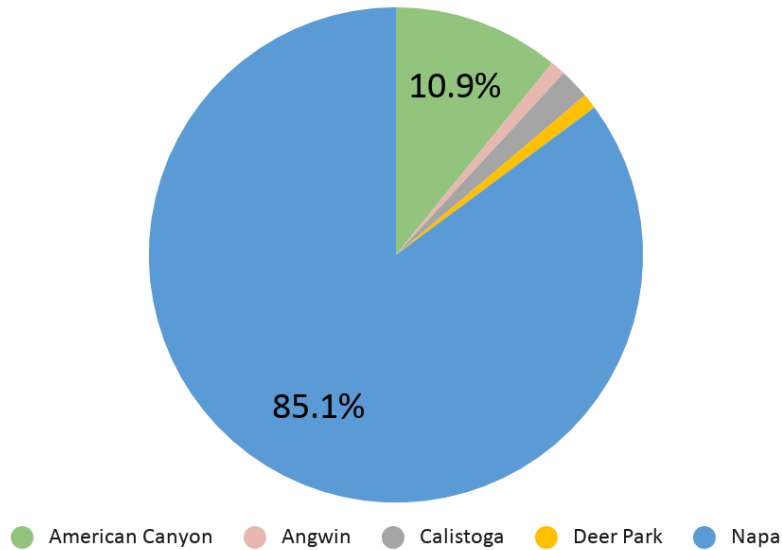


Figure 3: Distribution of boaters surveyed by cities in Napa County

After learning where boaters were coming from, questions were asked in order to collect insight on how well boaters understand various clean boating practices, as well as how Lake Berryessa is used as a drinking water source for Solano County Residents.

This year, 64.7% of boaters responded “yes” when asked if they think Lake Berryessa is a drinking water source, compared to 75% from the previous year. The overall trend seems to be that at only about 60%-70% of boaters in any given year know that Lake Berryessa is a drinking water source, as shown in Figure 4.

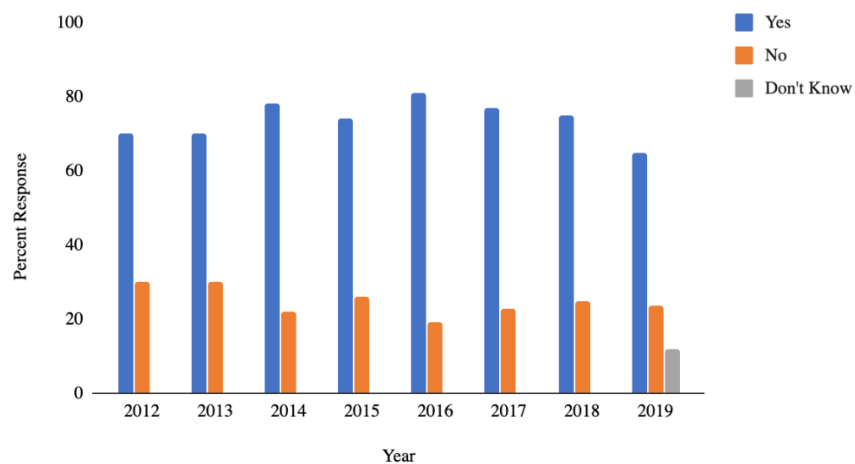


Figure 4: Percentage of boaters surveyed who answered “yes” when asked if they think Lake Berryessa is a drinking water source for the last seven years of the Lake Berryessa Boater Outreach program

Boaters were also asked what they thought might happen to those who discharge untreated boat sewage within the 3-mile territorial limit. Only 51.4% of the boaters responded with the correct answer: violators would be charged a \$2,000.00 fine.

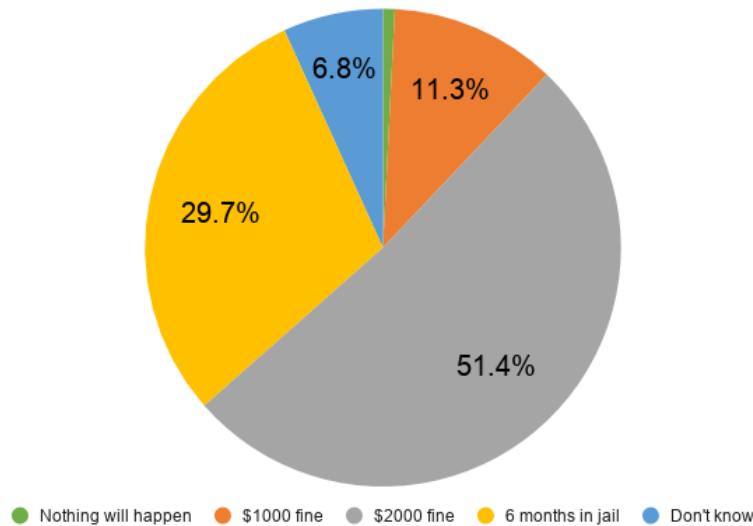


Figure 5: Responses of boaters when asked what they thought might happen to those who discharge untreated boat sewage within the 3-mile territorial limit

After asking the boaters questions on clean boating practices, the boaters were asked whether or not they have used oil absorbent pillows in their bilge compartments. Of those surveyed, only 36.8% of boaters have used an oil absorbent pillow in the past, as shown in Figure 6.

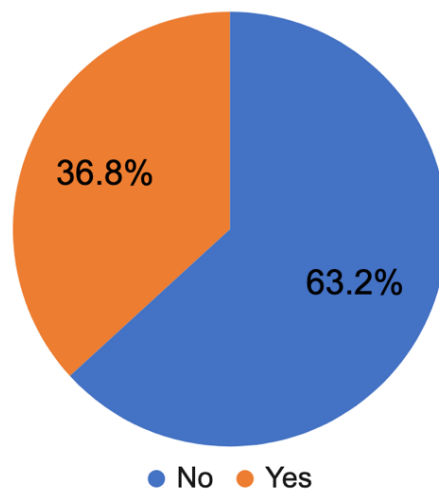


Figure 6: Percentage of boaters who had used an oil absorbent pillow in the past

RECREATOR EDUCATIONAL OUTREACH

Interns conducted surveys at Oak Shores to educate the day-use recreators. Accompanying the interns was “Bilgee,” a giant oil absorbent pillow who is the protector of clean waterways and a real-life superhero. Being large and over the top, Bilgee attracted the eye of boaters and day users alike. The day use survey enabled interns to interact with the non-boating public about hazardous

waste disposal and how to keep the water clean. This year, interns conducted 86 recreator surveys and educated 670 people.

Recreator Survey Questions and Responses

After Bilgee was introduced, day-use recreators were asked for their zip code and their city of residence. Figure 7 shows the distribution of recreators surveyed who came from Solano County and Napa County. Of those surveyed, 32.6% of recreators came from Solano County, and 9.3% came from Napa County.

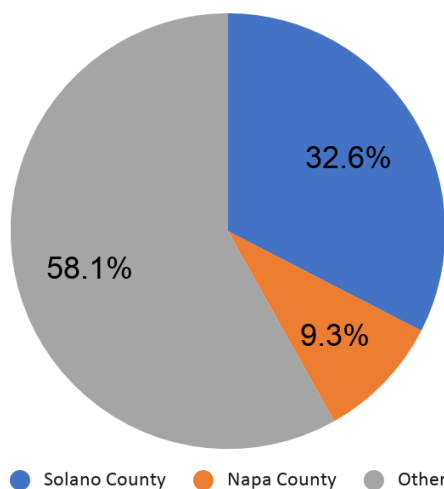


Figure 7: Distribution of recreators surveyed by county of residence

Of the Solano County Recreators surveyed, Vacaville (32.1% of Solano County boaters surveyed) and Fairfield (32.1%) tied for most prevalent population, with Vallejo coming in second (28.6%), and Suisun City in third (7.1%), as shown in Figure 8.

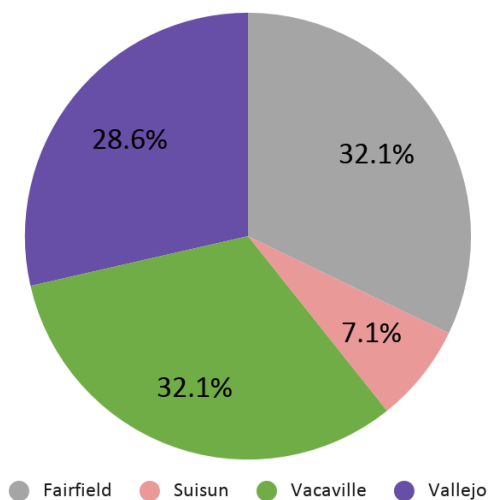


Figure 8: Distribution of recreators surveyed by cities in Solano County

Of the Napa County Recreators surveyed, all of the recreators came from the city of Napa (100% of Napa County boaters surveyed), as shown in Figure 9.

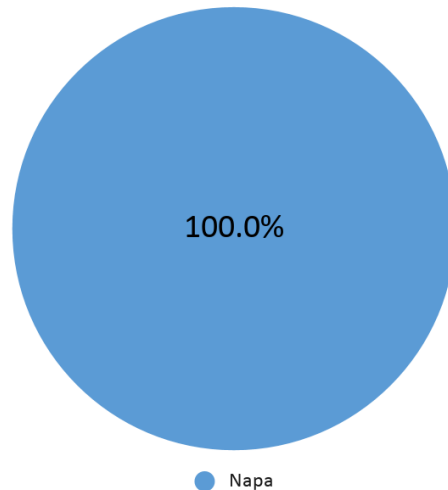


Figure 9: Distribution of recreators surveyed by cities in Napa County

The next question asked recreators if they thought Lake Berryessa is a drinking water source. This year, only 30.2% of recreators responded “yes”, compared to 39% last year. This low percentage of recreators who think Lake Berryessa is a drinking water source demonstrates the need to further expand the education on water quality. Figure 10 summarizes the response from recreators for the past seven years.

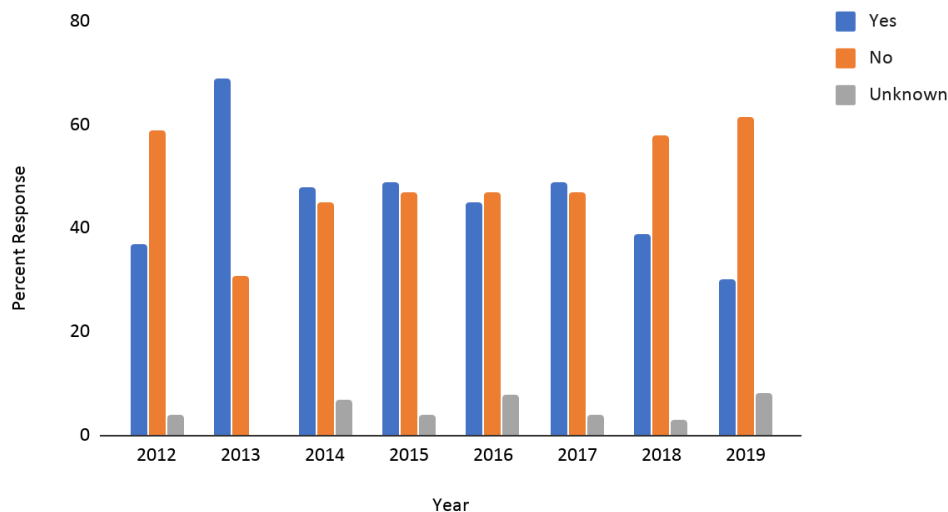


Figure 10: Percentage of recreators surveyed who answered “yes” when asked if they think Lake Berryessa is a drinking water source over the last seven years of the Lake Berryessa Boater Outreach program

Recreators were also asked to suggest ways to help keep Lake Berryessa clean. Most of the recreators suggested not littering (77 responses), with the second most being not using the lake as a restroom (57 responses). Figure 11 shows the summary of the recreator responses.

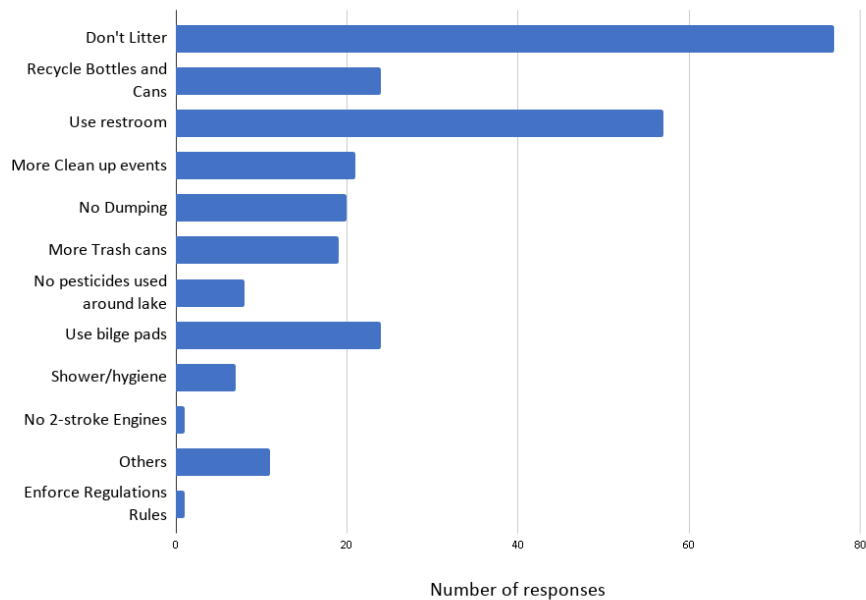


Figure 11: Responses of recreators when asked to suggest ways to help keep Lake Berryessa clean

COMMUNITY CLEAN UP EVENTS

Solano RCD coordinated two community clean-up days: World Environment Day took place on June 1 and Coastal Cleanup Day on September 21. 184 volunteers attended World Environment Day and 327 pounds of garbage and 676 pounds of recyclables were removed from the shores of Lake Berryessa. For Coastal Cleanup Day, 74 volunteers attended and 327 pounds of garbage and 196 pounds of recyclables was collected.

CONCLUSION

The 2019 Lake Berryessa Boater Outreach program achieved its goal. Interns educated 3,582 people and conducted 878 boater surveys. Lake Berryessa Boater Outreach interns motivated eligible boaters and jet skiers to install a total of 365 oil absorbents, each of which can absorb up to a quart of oil. The work completed this summer has further advanced the education of boaters and recreators on oil absorbents and where to recycle them, as well as provided information on clean boating practices to keep Lake Berryessa one of the cleanest drinking water sources in California.

PROGRAM TOTALS

Year	2012	2013	2014	2015	2016	2017	2018	2019
# of interns	2	6	6	14	12	16	3	2
Total boater surveys	722	1568	1670	1195	1210	1115	825	878
Total recreator surveys	109	325	300	392	265	224	107	86
Oil absorbents distributed at exchanged stations	832	646	521	653	1100	606	822	778
Install rate*	45%	51%	50%	57%	50%	41%	48%	58%

*Table 1: Outreach program achievements by year. *Install rates based on compatible boats only.*

PHOTOS



Summer 2019 LBBO Interns Kaitlin and Mike with program supervisor Laura and Bilgee.



A young boater from Napa placing in a new oil absorbent pillow.



A pair of boaters from Fairfield placing in an oil absorbent pillow.



Bilgee at Oak Shores interacting with recreators from Napa.



World Environment Day 2019, which included cleanups at Lake Berryessa, Lake Solano, and Dry Creek.