



Department of Public Works

MEMORANDUM

TO: Tracy Cline, Resource Planner

FROM: Scott De Leon, Director

SUBJECT: Boat Ramp Extension Project at Various Locations

DATE: September 30, 2021

Per your request, I've prepared a Project Description Memorandum to assist in the completion of the necessary environmental clearances for the subject project. The locations I am hoping to perform ramp extensions include:

- 3rd and 5th Street Boat Ramps in the City of Lakeport
- Lakeside County Park
- Clearlake Oaks Boat Ramp
- Redbud Park Boat Ramp in the City of Clearlake

Summary of the Problems

With the exception of 5th Street Ramp which ends at -5.0 Rumsey, all the other ramps end at or around -3.0 Rumsey. With the lake reaching historical low levels (-2.01 Rumsey on today's date) there is insufficient water depth to float boats off of their trailers on all but 5th Street Ramp. Additionally, over the years of use at all of these ramps, a bank of sediment and/or gravel has accumulated beyond the ends of the ramps as a result of the currents created by boat propellers as the boats are loaded onto the trailers. This current also erodes the ends of the existing ramps, creating significant ledges or "drop-offs" at the ends of the concrete. These ledges can become so severe that vehicles are either unable to pull the trailer tires back up the ledge, or trailer axles become stuck on the ledge where they will sometimes break.

While we all hope for above-average rainfall this winter, we need to plan for the possibility of a poor rainy season and the lake not returning to useable levels. As you are aware, Clear Lake is a significant economic factor in Lake County, and if we don't maintain access to it, our economy will surely suffer.

Proposed Project

The project that we are proposing includes the installation of a pre-cast concrete mat at the ends of the ramps to extend them into deeper water and the dredging of a channel from the ends of the ramps to deeper water. The dredged channel is expected to not exceed 3' in depth and no material will be removed from the lake. A barge-supported excavator will begin pulling material from the end of the existing ramp and pull the material out into the lake – eventually "daylighting" the channel whenever the existing lake bottom elevation meets the channel depth. Estimated distances of the channel for each ramp are shown below. The width of the channel is expected to be 30' to accommodate two-way boat traffic. Red and Green channel markers will be placed on either side of the channel to direct boaters to the deeper water. Typical section drawings of the proposed work are attached.

Estimated channel distances per ramp, based on lake-bottom surveys: 3rd and 5th Street Ramps, Lakeport – 1200' Clearlake Oaks Ramp – 20' to 25' Redbud Park Ramp, Clearlake – 450' Lakeside Park, Kelseyville – 500'

Miscellaneous Information

During the lake-bottom surveys, it was observed that a silt layer of nearly 24 inches in thickness exists above the more firm lake bottom outside the 3rd and 5th Street Ramps in Lakeport. This silt layer made determining the actual lake bottom difficult, and it was decided in the field to place the survey rod at or near the top of the silt layer. This layer is mostly water and easily moved, and boat propellers currently go through the silt leaving a plume in their wake as they motor into deeper water. Excavation of this silt material will also be challenging and will most certainly create turbidity in the water, however the silt material settles quickly and the temporary construction impacts won't exceed the disturbances caused by multiple boats or the type of turbidity seen during wave action from winds and storms.

Clearlake Oaks Boat Ramp has the smallest amount of material to move and the deep water immediately offshore from the ramp will provide a useable ramp for months to come – even if the lake does not recover. The materials here are all rocks and gravel, and construction impacts to water quality should be minimal.

Lakeside Park and Redbud Park Ramps were similar in lake-bottom consistency – both were relatively firm with minimal silt. Deeper water exists a shorter distance from shore, so the channel dredging for these ramps is much less than the ramps in Lakeport. To try and minimize the amount of dredging, we presumed that only the two southerly ramps at Redbud would be used and the north

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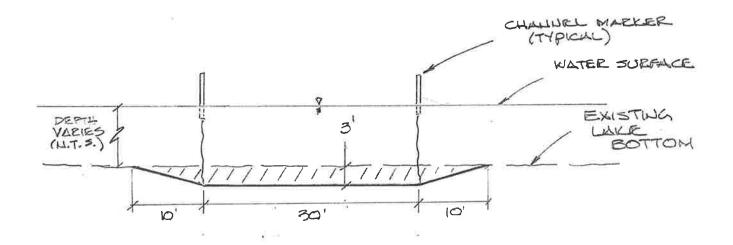
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EXISTING LAVE
BOTTOM

SEE TYPICAL
BOATING CHANNEL
SECTION

RAMP EXTENSION PROFILE





BOATING CHAMMEL SECTION

76PS.

NOTICE OF EXEMPTION

TO: County Clerk Office of Planning & Research

County of Lake 1400 Tenth Street

Lakeport, CA 95453 Sacramento, CA 95814-3044

FROM: Lake County Community Development Dept.

255 North Forbes Street Lakeport, CA 95453

PROJECT TITLE: Lake County Drought Emergency - Boat Ramp Extensions

PROJECT LOCATION: 20 Third Street, Lakeport, CA 95453 – Third Street Ramp

15 Fifth Street, Lakeport, CA 95453 - Fifth Street Ramp

1985 Park Dr., Kelseyville, CA 95451 – Lakeside County Park Ramp 14655 Ball Park Ave., Clearlake, CA 95422 – Redbud Park Ramp 12639 Island Dr., Clearlake Oaks, CA 95423 - Clearlake Oaks Ramp

APN(s): Third St. Ramp – 025-383-24

Fifth Street Ramp – 025-382-25 Lakeside Ramp – 008-011-02 Redbud Ramp – 040-240-10

Clearlake Oaks Ramp - 035-240-04

COUNTY: Lake

PURPOSE AND NEED OF THE PROJECT:

On April 12, 2021, May 10, 2021, July 8, 2021 and October 19, 2021, the Governor of California, Gavin Newsom, proclaimed states of emergency to exist throughout California due to severe drought conditions. The proclamation stated "the increasing frequency of multiyear droughts presents a significant risk to California's ability to ensure adequate water supplies for communities". The proclamation goes on to state that it is "necessary to expeditiously mitigate the effects of the drought conditions to ensure the protection of health, safety and the environment".

The severe drought conditions throughout California have led to extremely low water levels in Clear Lake. There are numerous private and public water systems (<25 water companies) throughout Lake County that utilize water from Clear Lake to provide drinking water to their communities and neighborhoods. Approximately seventy percent (70%) of the population of this rural county get their drinking water from the lake. Each water system has an intake pipe located in Clear Lake. The current drought conditions have led to extremely low water levels, which have impacted the intake systems. Many of these water companies are making efforts to extend their intake pipes into deeper waters and further into the lake. In order to successfully protect the community drinking water supplies, the water companies and private citizens need sufficient access to those intake systems, by boat. Access to Clear Lake is critical to the implementation of these water system projects.

Current drought conditions have dropped water levels so low that there is insufficient water depth to float boats off of their trailers, limiting access to Clear Lake and thereby limiting the ability to access the water intake systems that provide critical drinking water to the community. The lack of access to Clear Lake also impedes the ability of the Sheriff's Office and Search and Rescue teams to respond to emergencies on the lake.

In addition to the low water levels, many of the public boat ramps have significant ledges or "drop-offs" at the end of the ramps as a result of currents created by boat propellers as the boats are loaded onto their trailers. The ledges have become so severe that vehicles are either unable to pull the trailer tires back up the ledge, or trailer axles become stuck on the ledge where they will sometimes break. The current created by boat propellers has displaced gravel in the boat launch channel, creating a ledge at the end of the boat ramp and a build-up of gravel in the channel, changing the natural slope of the lakebed to create mounds of gravel. Under normal circumstances, the water is deep enough that these accumulations of gravel do not create an obstacle. However, due to the extreme drought conditions and low water levels, these accumulations of gravel are now creating a hazard to boats. The "drop-offs" and mounds of gravel at the public boat launching ramps have created a public safety hazard.

DESCRIPTION OF PROJECT:

In order to address the public health and safety concerns that have arisen from the low water levels and the lack of access to Clear Lake for emergency services and projects, the County of Lake Public Works Department proposes to install pre-cast concrete mats at the end of the existing ramps to extend the useable surface of the ramps for continued access to Clear Lake, as the drought is expected to continue and water levels continue to drop. The ledges and "drop-offs" will be filled in using the accumulated gravel present on site. The accumulated gravel at the end of the ramps will be spread out to level the boat ramp approach so as to create a slightly deeper channel for boats to launch from. The channel will not exceed 3 feet in depth and no material will be removed from the lake. A barge-supported excavator will spread the material from the end of the existing ramps in the lake. Only the material that is contributing to a public safety hazard in the channels will be managed.

Implementation of these ramp maintenance projects will allow the public and private water companies, Sheriff's Department and Search and Rescue teams to continue to access Clear Lake so they can continue to provide the community with drinking water and respond to safety concerns and emergencies.

NAME OF PUBLIC AGENCY APPROVING PROJECT: Lake County Community Development

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: County of Lake Public Services Department

EXEMPT STATUS:

Emergency Exemption - 14CCR 15269 (a) - Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with Section 8550 of the Government Code.

Emergency Exemption - 14CCR 15269 (b) - Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.

Emergency Exemption - 14CCR 15269 (c) - Specific actions necessary to prevent or mitigate an emergency.

REASONS WHY PROJECT IS EXEMPT:

On April 12, 2021, May 10, 2021, July 8, 2021 and October 19, 2021, the Governor of California, Gavin Newsome, proclaimed states of emergency to exist throughout California due to severe drought conditions. The proclamation stated "the increasing frequency of multiyear droughts presents a significant risk to California's ability to ensure adequate water supplies for communities". The proclamation goes on to state that it is "necessary to expeditiously mitigate the effects of the drought conditions to ensure the protection of health, safety and the environment". Four operative orders of the proclamation apply to this project. Operative paragraphs 2, 6, 7 and 12 would be appropriately applied to this project.

Paragraph 2 states, "the orders and provisions contained in the April 21, May 10 and July 8 Proclamations remain in full force and effect. State agencies shall continue to implement all direction from those Proclamations and accelerate implementation where feasible."

Paragraph 6 states, "As necessary to assist local governments and for the protection of public health and the environment, state agencies shall enter into contracts to arrange for the procurement of materials, goods, and services necessary to quickly assist with the response to and recovery from the impacts of the drought."

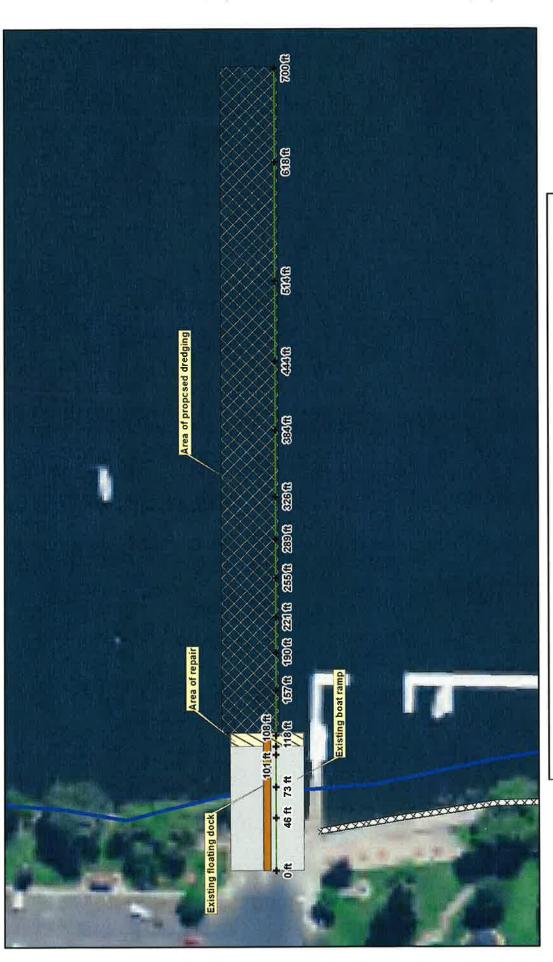
Paragraph 7 states, "To proactively prevent situations where a community runs out of drinking water, the Water Board, the Department of Water Resources, the Office of Emergency Services, and the Office of Planning and Research shall assist local agencies with identifying acute drinking water shortages in domestic water supplies, and shall work with local agencies in implementing solutions to those water shortages."

Paragraph 12 states, "For purposes of carrying out or approving any actions contemplated by the directives in operative paragraphs 5, 6 and 9, the environmental review by state agencies required by the California Environmental Quality Act (CEQA) in Public Resources Code, Division 13 (commencing with Section 21000) and regulations adopted pursuant to that Division are hereby suspended to the extent necessary to address the impacts of the drought."

The County of Lake Community Development Department finds that this project complies with the intent and overall direction of the State Proclamations of Emergency and is thereby exempt from the provisions of CEOA.

CONTACT PERSON: Tracy Cline TELEPHONE NUMBER: 707-263-2221

Tracy Clins
Title: Associate Resource Planner Date: 12-17-21 Signature:



Site Map City of Lakeport Boat Ramp 3rd Street 15 10 0 Rumsey 10 15

Scale: 1 " = 80 ft



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Lakebed

Boat ramp

Date of Profile: 08/24/2021 Lake Level: -1.5 R

Verticle Profile

Water Resources Department

Lakeward

Natural Features

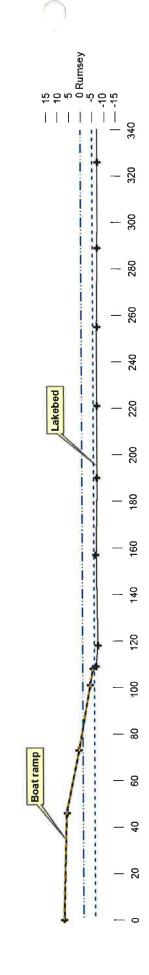
Trees

Landward

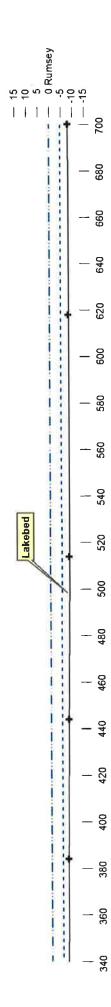
City of Lakeport Boat Ramp – 3rd Street

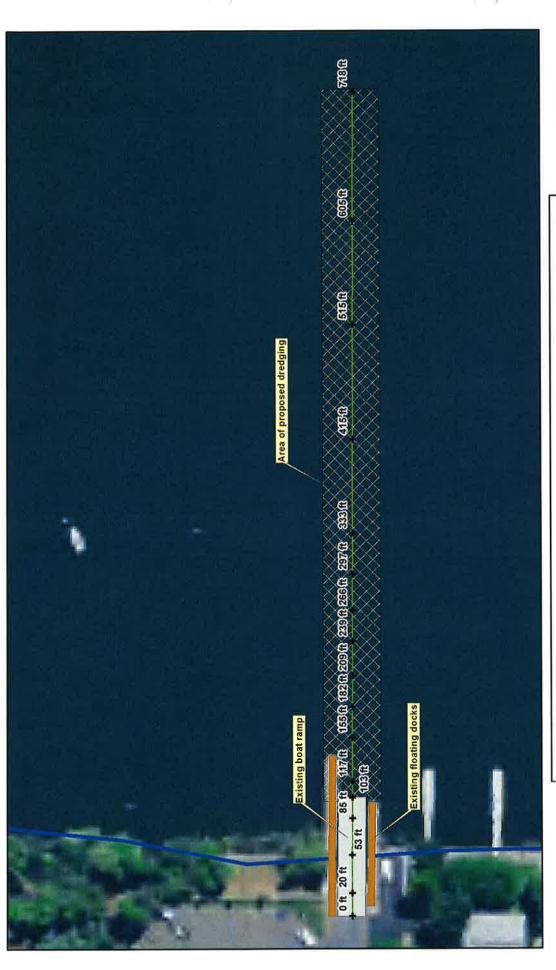
top of ramp	Elevation (ft)	Rumsey (ft)	Comments
0	1326.5	8.2	top of ramp
46	1325	6.7	
73	1320	1.7	
101	1315	-3.3	
108	1313.8	4.5	end of ramp
109	1312.5	-5.8	begin lakebed
118	1311.7	-6.6	
157	1312.5	-5.08	
190	1311.9	-6.4	
221	1311.7	-6.6	
255	1311.5	φ. Θ.	
289	1311.3	0.7-	
326	1311.1	-7.2	
384	1311.1	-7.2	
444	1310.7	-7.6	
514	1310.3	-8.0	
618	1310.4	6.7-	
700	1310.4	-7.9	end of survey

City of Lakeport Boat Ramp – 3rd Street Vertical Profile 0 to 340 feet



City of Lakeport Boat Ramp – 3rd Street Vertical Profile 340 to 700 feet





Site Map City of Lakeport Boat Ramp 5th Street - 15 - 10 - 10 - 5 Rumany - 10 - 10 - 15 - 15

Verticle Profile

Scale: 1 " = 80 ft



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Water Resources Department Lakeward

Natural Features

Date of Profile: 08/26/2021 Lake Level: -1.5 R

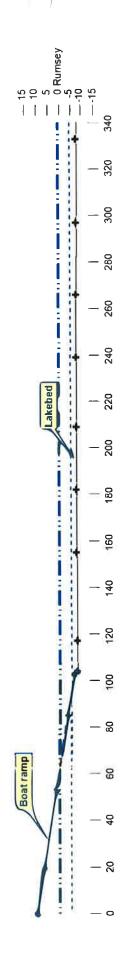
Trees

Landward

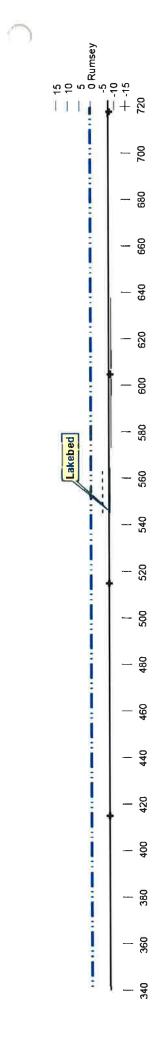
City of Lakeport Boat Ramp – 5th Street

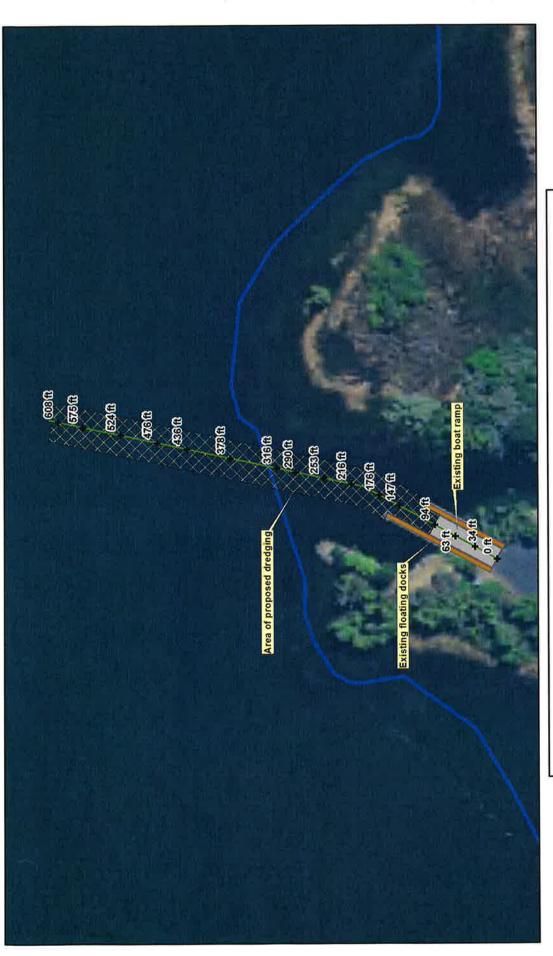
top of ramp	Elevation (ft)	Rumsey (ft) Comments	Comments
0	1327.9	9.6	top of ramp
20	1325	6.7	
53	1320	1.7	
85	1315	-3.3	
103	1311.8	-6.5	end of ramp
104	1310.9	-7.4	begin lakebed
117	1310.7	-7.6	
155	1311.1	-7.2	
182	1311.1	-7.2	
209	1311.0	-7.3	
239	1311.0	-7.3	
266	1311.1	-7.2	
297	1310.8	-7.5	
333	1310.6	7.7-	
415	1310.6	7.7-	
516	1310.5	-7.8	
605	1309.9	-8.4	
718	1310.2	-8.1	end of survey

City of Lakeport Boat Ramp – 5th Street Vertical Profile 0 to 340 feet



City of Lakeport Boat Ramp – 5th Street Vertical Profile 340 to 720 feet





Site Map County Boat Ramp Lakeside, Kelseyville Scale: 1 " = 120 ft



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Landward

Lakebed

Verticle Profile

Water Resources Department

Lakeward

Natural Features

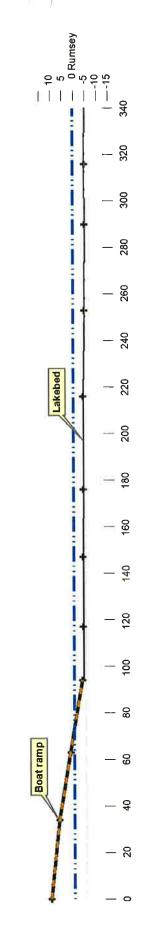
Date of Profile: 08/24/2021 Lake Level: -1.6 R

Trees

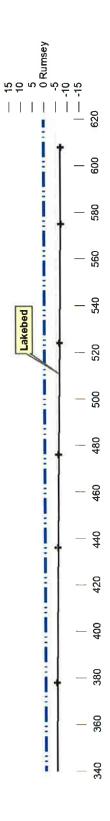
County Boat Ramp – Lakeside, Kelseyville

top of ramp	Elevation (ft)	Rumsey (ft)	Comments
8	1325	6.7	
63	1320	1.7	
26	1314.9	-3.4	end of ramp
117	1314.6	-3.7	begin lakebed
147	1314.6	-3.7	
176	1314.4	-3.9	
216	1314.3	4.0	
253	1313.7	4.6	
290	1313.5	4.8	
316	1313.6	4.7	
378	1313.4	4.9	
436	1312.8	-5.5	
476	1312.4	-5.9	
524	1311.8	-6.5	
575	1311.1	-7.2	
809	1311.1	-7.2	end of survey

County Boat Ramp – Lakeside, Kelseyville Vertical Profile 0 to 340 ft



County Boat Ramp – Lakeside, Kelseyville Vertical Profile 340 to 620 ft



Site Map County Boat Ramps Clearlake Oaks Scale: 1 " = 40 ft



Water Resources Department

Natural Features

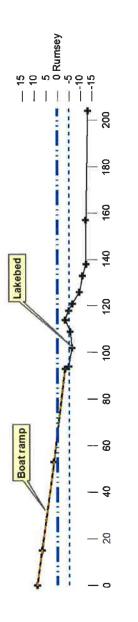
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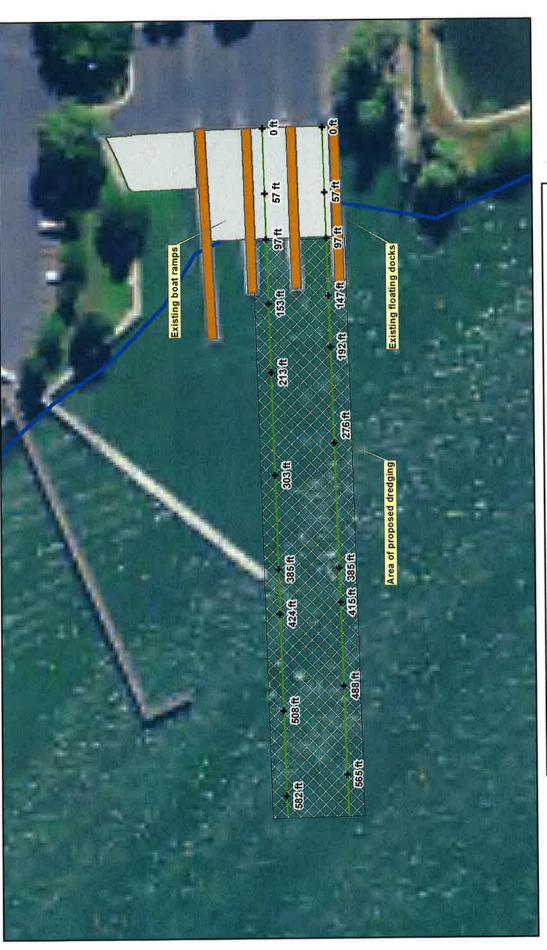
Date of Profile: Lake Level: Trees Tules

County Boat Ramp – Clearlake Oaks

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msey (ft)
Rumsey (ft) Comments

County Boat Ramp – Clearlake Oaks Vertical Profile 0 to 205 feet





Site Map City of Clearlake Boat Ramp Red Bud Park



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Landward

Lakebed

Boat ramp

Verticle Profile South Middle

Water Resources Department

Lakeward

Natural Features

Date of Profile: 08/24/2021 Lake Level: -1.5 R

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City of Clearlake Boat Ramp – Red Bud Park

South Middle Ramp

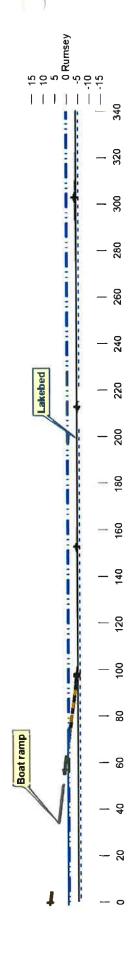
Elevation data

Comments	8.4 top of ramp		end of boat ramp	begin lakebed							end of survey
Rumsey (ft) Comments	8.4	1.7	-3.3	-3.6	-3.5	-4.1	-3.2	4.2	-7.1	-8.7	80
Elevation (ft)	1326,7	1320	1315	1314.7	1314.8	1314.2	1315.1	1314.1	1311.2	1309.6	1309.5
Distance from top of ramp	О	25	26	86	153	213	303	385	424	208	582

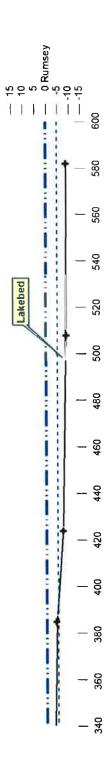
South Ramp

Distance from top of ramp 0	Elevation (ft) 1326.7 1320.0	Rumsey (ft) Comments 8.4 top of ramp 1.7	Comments top of ramp
97	1314.9	-3.4	end of ramp
98	1314,7	9.0	begin lakebed
192	1314.0	-5.4	-5.2 elevation from contour
276	1313.0	-5.3	elevation from contour
385	1312.0	-6.3	elevation from contour
415	1311.1	-7.2	
488	1309.9	-8.4	
565	1309.3	0.6-	A D And of Suppose

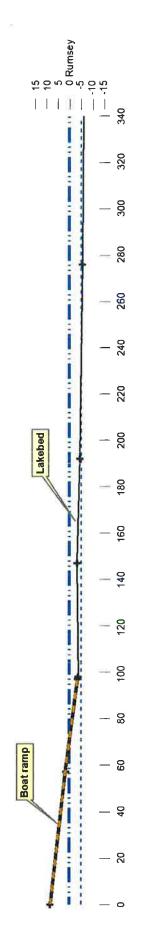
City of Clearlake Boat Ramp – Red Bud Park South Middle Ramp Vertical Profile 0 to 340 feet



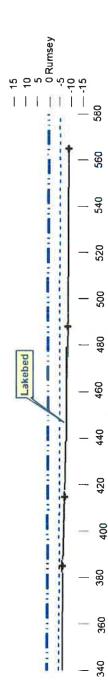
City of Clearlake Boat Ramp – Red Bud Park South Middle Ramp Vertical Profile 340 to 600 feet

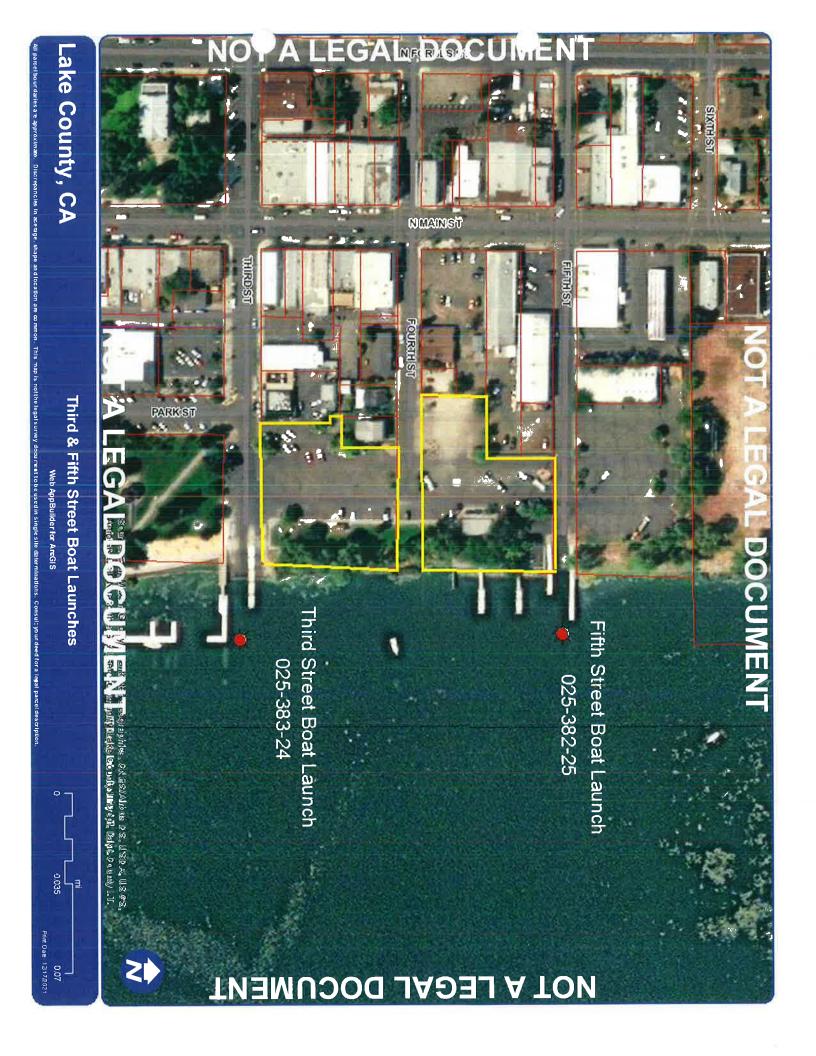


City of Clearlake Boat Ramp – Red Bud Park South Ramp Vertical Profile 0 to 340 feet



City of Clearlake Boat Ramp – Red Bud Park South Ramp Vertical Profile 340 to 580 feet







Natural Features

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Scale: 1 " = 80 ft

Boat ramp

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Landward

Water Resources Department

Lakeward

City of Lakeport Boat Ramp – 3rd Street

Elevation data

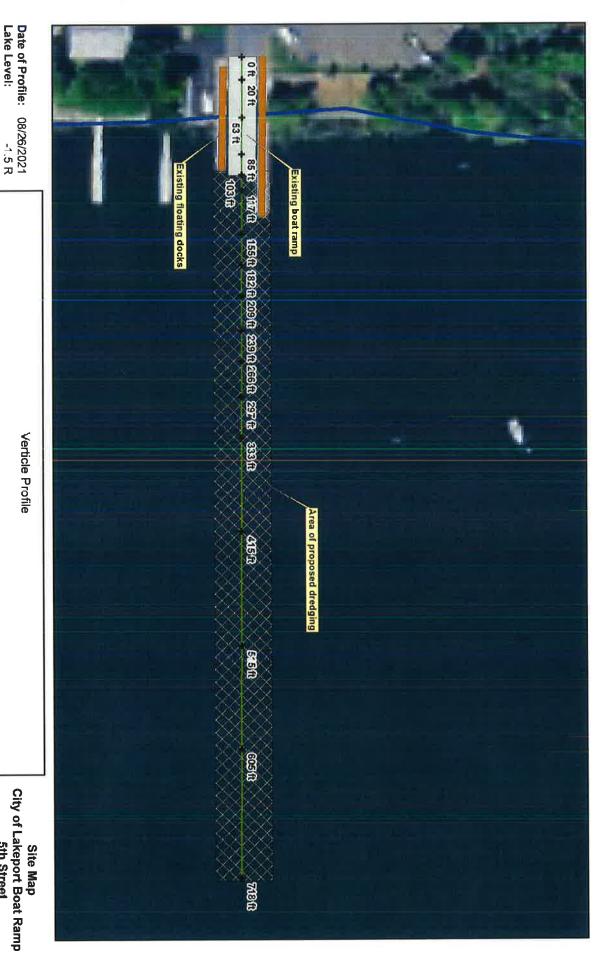
700	618	514	444	384	326	289	255	221	190	157	118	109	108	101	73	46	0	top of ramp
1310 /	1310.4	1310.3	1310.7	1311.1	1311.1	1311.3	1311.5	1311.7	1311.9	1312.5	1311.7	1312.5	1313.8	1315	1320	1325	1326.5	Elevation (ft)
_70	-7.9	-8.0	-7.6	-7.2	-7.2	-7.0	-6.8	-6.6	-6.4	-5.8	-6.6	-5.8	-4.5	-3.3	1.7	6.7	8.2	Rumsey (ft) Comments
-79 and of sunvey												begin lakebed	end of ramp				top of ramp	Comments

- 4 Boat ramp e – 8 – 10 — City of Lakeport Boat Ramp – 3rd Street
Vertical Profile
340 to 700 feet 200 — Lakebed 10 5 0 Rumsey 10 10

City of Lakeport Boat Ramp – 3rd Street
Vertical Profile
0 to 340 feet

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Lakebed



Natural Features

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Site Map
City of Lakeport Boat Ramp
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Water Resources Department

Lakeward

City of Lakeport Boat Ramp – 5th Street

718	605	516	415	333	297	266	239	209	182	155	117	104	103	85	53	20	0	top of ramp
1310.2	1309.9	1310.5	1310.6	1310.6	1310.8	1311.1	1311.0	1311.0	1311.1	1311.1	1310.7	1310.9	1311.8	1315	1320	1325	1327.9	Elevation (ft)
-8.1	-8.4	-7.8	-7.7	-7.7	-7.5	-7.2	-7.3	-7.3	-7.2	-7.2	-7.6	-7.4	-6.5	-3.3	1.7	6.7	9.6	Rumsey (ft) Comments
end of survey												begin lakebed	end of ramp				top of ramp	Comments

120 City of Lakeport Boat Ramp – 5th Street Vertical Profile 0 to 340 feet 200 — Lakebed 220 240

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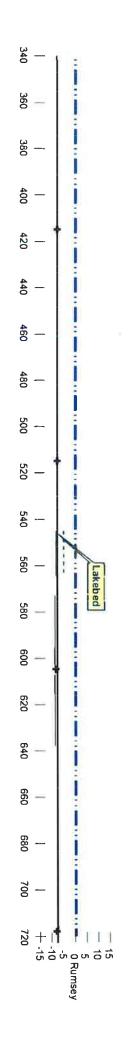
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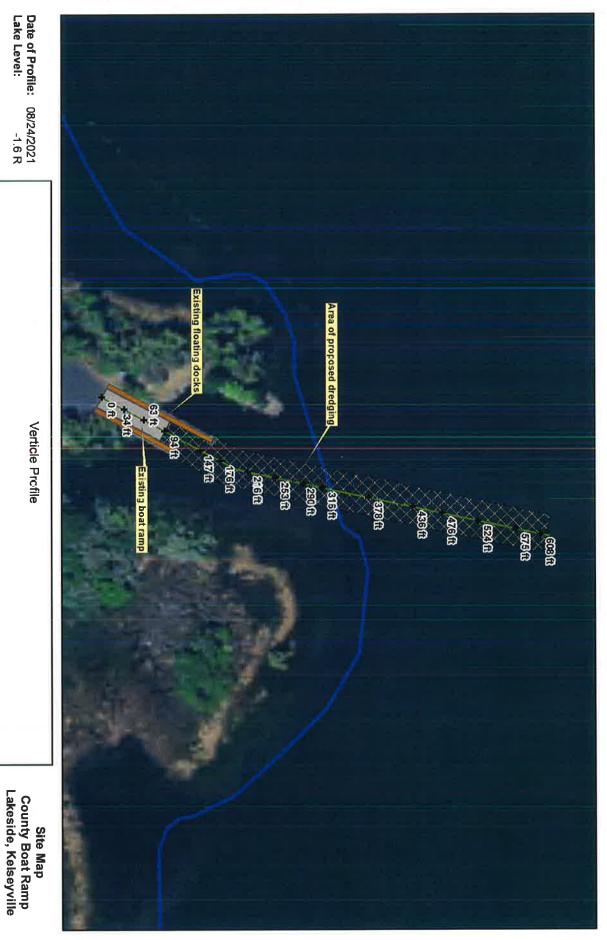
— 15 — 10 — 5 — 0 Rumsey — — 10

Boat ramp





NOT A LEGAL DOCUMENT ake County, CA **NOT A LEGAL DOCUMENT** Lakeside County Park Boat Launch akeside County Park Boat Launch Web AppBuilder for ArcGIS 008-011-02 NOT A LEGAL DOCUMENT





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Scale: 1 " = 120 ft

Trees

Date of Profile: 08/24/2021 Lake Level: -1.6 R

Verticle Profile

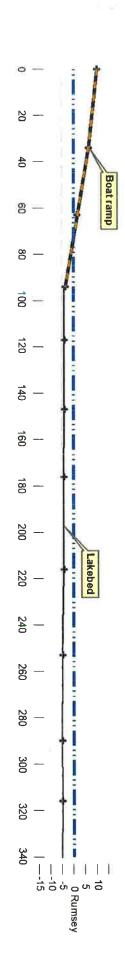
Water Resources Department

Lakeward

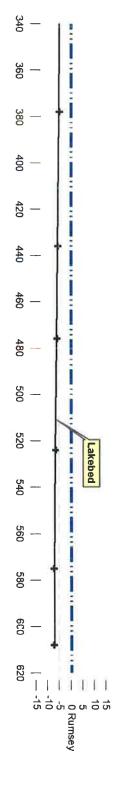
County Boat Ramp – Lakeside, Kelseyville

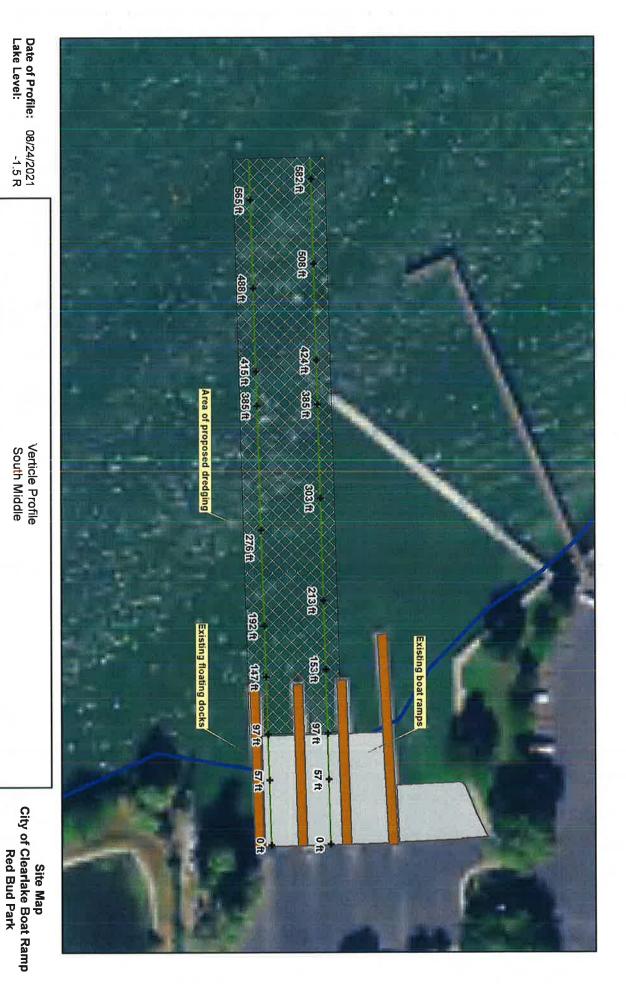
608	575	524	476	436	378	316	290	253	216	176	147	117	94	63	34	0	top of ramp
1311.1	1311.1	1311.8	1312.4	1312.8	1313.4	1313.6	1313.5	1313.7	1314.3	1314.4	1314.6	1314.6	1314.9	1320	1325	1328.6	Elevation (ft)
-7.2	-7.2	-6.5	-5.9	-5.5	4.9	4.7	4.8	-4.6	4.0	-3.9	-3.7	-3.7	-3.4	1.7	6.7	10.3	Rumsey (ft)
end of survey												begin lakebed	end of ramp			top of ramp	Comments

County Boat Ramp – Lakeside, Kelseyville Vertical Profile 0 to 340 ft









Natural Features

Trees

Tules

Landward

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Lakeward

Water Resources Department

15 - 10 - 10 - 10 - 10 - 15 - 15 - 14 - 15 Scale: 1 " = 80 ft