

BEAR VALLEY SPRINGS ASSOCIATION

Lake Quality Advisory Committee Agenda

5/7/2020 10:00AM -11:30AM

Zoom Online meeting (see login below)



Two separate logins are necessary to cover the material with the zoom time restriction

Topic: LQAC#1 Janet Fulks is inviting you to a scheduled Zoom meeting.

Time: May 7, 2020 10:00 AM Pacific Time (US and Canada)

Join Zoom Meeting <https://us02web.zoom.us/j/84492570935>

Meeting ID: 844 9257 0935

Topic: LQAC#2

Janet Fulks is inviting you to a scheduled Zoom meeting.

Time: May 7, 2020 10:30 AM Pacific Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/84306822996>

Meeting ID: 843 0682 2996

Call to Order at:

A. Attendance:

Voting Members:	<input type="checkbox"/> Janet Fulks, Chair <input type="checkbox"/> Fiona Nelson <input type="checkbox"/> Rick Flores <input type="checkbox"/> John Glaze <input type="checkbox"/> Scott Ostrem <input type="checkbox"/> Fred Hicks <input type="checkbox"/> Kimberly Clow <input type="checkbox"/> Linda Flores, Scribe
Staff (Non-Voting):	<input type="checkbox"/> Debbie Papac, BVSA Director, <input type="checkbox"/> Wes Shryock, General Manager, <input type="checkbox"/> Peggy Bergman-Smith Board Member

B. Approval of Agenda ((Consent)

C. Approval of Minutes (Consent)

April 2 ,2020

D. New Items: 2 items

1.	Phosphate Data Discussion summary, testing schedule moving forward to warm months phosphate test results
2.	Concerns about Roundup application and potential educational actions
3.	Fred & Debbie – Fish Planting Update
4.	Plant Pilot Update
5.	Tree planting Friends of Four Island Recommendation & update on cleanup and closing of islands for nesting
6.	Signage around lakes update
7.	Discuss how to start moving forward with establishing a five year plan
8.	Discuss if the name of the LQAC should be adjusted by making Lake plural
9.	Discuss new Google folder, docs, organization etc for committee
10	Small group for longterm plan specifics - a single voice and direction for taking care of the many factors coming out of this work e.g. use of effluent, lakeside maintenance (including downed trees,, water levels, etc We need direction from the board

E. Follow-Up Items: 0 item

1	Instrument - Hydrolab MS5 sonde update
2.	Bear Tracks Article & Online Questionnaire development for reporting in future

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3.	Report from Rec Committee
4.	Meeting June 4 – time issues
5.	Report on fish stocking April 25 and future plans

Next Meeting Dates: Location TBD due to COVID 19 regulations June 4, July 9, Aug 6, Sept 3, Oct 1, Nov 5, Dec 3.

Time of Adjournment:

Suggestion for Instrument and Data analysis

Hydrolab MS5 - Multiparameter Mini Sonde

The Hydrolab MS5 multiparameter water quality sonde offers a selection of Hydrolab sensors on a compact and lightweight multiprobe designed for either profiling or unattended monitoring. Temperature, Conductivity, Depth, pH, ORP, Dissolved Oxygen (LDO, Clark cell), Turbidity, Chlorophyll a, Blue-Green Algae, Rhodamine WT, Ammonium, Nitrate, Chloride, TDG

Summary of Information from Data Hack on Phosphate testing Thursday April 23

Some committee members met via zoom to review the data from the 100+ phosphate tests (**P**) to determine what to move forward to the committee meeting and to use for planning.

The review was facilitated by a new google sheet on phosphate testing that included the dates and maps of sampling locations. Data are divided into sheets as seen below:

Four Island Lake : The last testing in the lake was April 19, and all the tests were good. Buoy H (near the tee for the 7th hole restricted area) was expected to be higher but had a good reading as well.

Surprise Lake – These data revealed remarkably high levels of phosphates as the lake drains through fields of manure into Cub Lake. While the results vary, what does not vary is the decrease between S1 thru S5, This area contains many plants and the hypothesis is that the plants bind phosphate as the water flows thru them accounting for the gradual decrease. Between S5 and S6 there is non potable water used to water the area. The sub-committee recognizes that water flow levels will contribute to test results as well as temperature and amount of animal manure which change with the weather and usage.

Cub Lake Drainage – Currently there are no tests of Cub Lake. The drainage area was somewhat uncontaminated where it flows out of the lake to the end of the heavily planted area. This area comes from the dam, goes by the dump and flows to Jack's Hole. C4 is the only problem, water is coming from the waste transfer station. (Check on any CSD plans for barriers.) This area has potential for more planting to help with runoff nutrients. There were concerns about lack of water concentrating nutrients.

Jacks Hole – Currently no data is available for Jack's Hole. Samples were taken during the highest rain levels. The drainage area is broad and flat with many plants. Higher levels of phosphate were identified at J5 the confluence of three drains and area closest to the golf course. The results for J4, 5, & 6 were confusing and the committee needed to look at

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more information to understand how these water samples varied but were very near each other. It was hypothesized that the flow in adjoining drains was different.

Jamaica Dunes – Contrary to originally thought the large drainage from lower Valley to Jamaica Dunes is not primarily in ditches ending in the sump. It seems as though the water flows underground. While high levels were noted in low precipitation samples, the highest rain levels revealed lower **P** levels. The fields represent some manure and animal traffic.

Rolling Oak – This area had a surprisingly high **P** level at RO1 which needs further investigation. The rest of the drainage was uncontaminated until it approached the condos/ golf course and the cemented V drains at RO 5 and to a lesser extent RO4 & 6. RO5 has a confluence of drainage which may account for the levels.

Fawn way – This drainage area which originates high in the mountains and flows through many properties had good to fair readings during the high precipitation samples. And flows primarily through vegetated drains and along the golf course. (There is water coming out of the ground near Fawn way - we are wondering if it is a leak or a spring.)

Single site locations – These sites were good to fair along the external side of the golf course.

Wastewater Plant – These samples were taken from the reclamation plant and represent the highest and most harmful levels. These samples were taken on no precipitation days but the ponds should not be affected by this. The Effluent settling tank is chlorinated - not sure if any effect.

Conclusions: The subcommittee suggested developing a testing regimen and training other people to do the tests. There will be a follow-up zoom meeting April 28 2PM to review these data findings and plan for the upcoming committee meeting where these findings and suggestions will be considered.

Upper watershed – Water entering the valley is good and uncontaminated on both low and high precipitations days.

Precipitation – This sheet records the precipitation levels in Bear Valley on various recorded days.