

#### Call to Order at: 6:01 p.m. Adjourn: 7:15 p.m.

#### A. Attendance in Bold:

Voting Members:	Fred Hicks, Chair; Kimberly Clow; Rick Flores; Jane Custer; Jeff Gadzia; Layne Skeels; Andrei Karapetian; Debbie Papac, Scribe; Paul Garibaldi
Staff (Non-Voting):	(Ashley Krempien, Director of Recreation); Butch Reyburn, Board Member; (Don Ciota, BVSA General Manager)
Guest:	Carolyn Corporon

- **B.** Approval of Agenda Please send any additions or questions. Motion to approve the agenda with the addition of adding number 3 shirts and vests was made Jeff by and seconded by Kimberly. Passed with no opposition.
- **C. Approval of Minutes** December minutes were emailed to the committee. Motion to approve the minutes was made by Jane and seconded by Jeff. Passed with no opposition.

#### D. New Items:

1.	Chair and Scribe appointments - Fred				
	Motion to reappoint Fred Hicks as chair of the LQAC for the 2024-year was made by Butch 1 <sup>st</sup> , Paul 2 <sup>nd</sup> unanimous. Passed with no opposition.				
	Motion to appoint Debbie Papac as Scribe with Rick Flores serving as backup scribe was made by Paul 1 <sup>st</sup> , Jane 2 <sup>nd</sup> unanimous. Passed with no opposition.				
	Questions: - None				
2.	<ul> <li>2024 LQAC Meeting time discussion - Fred asked the committee if the six o'clock time still worked for everyone or if the committee would like to meet at a different time.</li> <li>After a small discussion on the Pros and Cons the committee agreed to move the meeting time to Mondays at 5:00 p.m. for the 2024 year.</li> <li>Questions: <ul> <li>None</li> </ul> </li> </ul>				
3.	<ul> <li>Added to agenda Shirts/Safety vests - Fred displayed the volunteer safety vests and t shirts that were purchased for committee members.</li> <li>Members were also able to use their own funds to purchase sweatshirts. He commented that Tilly Russel did a fantastic job on the design.</li> <li>Fred will hold on to the vest and pass them out when the group is on a volunteer detail.</li> <li>Questions:         <ul> <li>None</li> </ul> </li> </ul>				



Lake Quality Advisory Committee Minutes Location: Monday, February 5<sup>th</sup> 2024, at 6PM Whiting Center-Green Room

4.	<ul> <li>Lake Levels - Fred stated that he has begun pumping water (within the last two weeks) from Four Island Lake into Jacks Hole to make sure BVSA stores as much water as possible.</li> <li>In the last 1.5 weeks Fred and Brandon have released about 52-acre feet of water (approx. 2' of water depth) from Four Island Lake. This water is released to keep the lake from flooding and to create room for anticipated/predicted rainfall runoff water. Fred is anticipating that by mid-February all three lakes will be at full pool.</li> <li>Jacks Hole is approx. 3.5' below full pool.</li> </ul>				
	Questions: <ul> <li>Kimberly asks about the Jamaca Dunes sump area. Fred stated that he has not been in the area but will walk the drainage and collect samples when able.</li> </ul>				
5.	Water Quality - Fred				
	Sonde Fred stated the Sonde which he uses to sample the water wasn't functioning properly for use in December. Unfortunately, this wasn't discovered until December 31 <sup>st</sup> . There were issues with shipping the Sonde back to Hach as the company has changed the return program/procedure for return shipping. Hach technicians were unaware that Hach offered a quick ship return program and could not explain the program to Fred. In the end Fred shipped the Sonde back using BVSA's FedEx program. The Sonde is currently being serviced and should be received back within the next 10 days. So, there was no Sonde sampling for December/January. In the future Fred will test the Sonde two weeks before testing to ensure it's working when testing is necessary. - Sonde turnaround time for repairs is contracted at 5 days but typically it takes 10-15 days. - Fred is hoping to get 2 more years of functionality prior to purchasing another test unit.				
	Drainage sampling - Fred is still waiting for the rain to cooperate to begin the first of three drainage ditch samplings for the year. The previous storms have all happened when he was working on something else, unavailable, or after dark. - Lake water clarity in both Four Island and Cub Lake is approximately 1.5 feet.				
	Questions:				
	<ul> <li>Don Ciota asked if the lack of water clarity from both lakes is based on the algae growth?</li> <li>Fred states that the lack of clarity is due to the sediment from water runoff that feeds the lakes. The slight algae bloom in Four Island can be attributed to the seasonal end (April-October) of copper sulfate application that occurred in October. However, the algae is not cyanobacteria.</li> <li>Don asked if the Copper Sulfate application monthly or just done in the summer months?</li> <li>Fred states we treat the lakes April through October with Solitude Lake Management who is a licensed applicator and directed by Fred based on lake conditions. The applications occur every two weeks during this period.</li> </ul>				
6.	Habitat Projects Update:				
	<b>Christmas Tree habitat</b> - Approximately 35 trees were collected this year. Fred feels that this is primarily due to an advertising/public relations issue. Fred is thinking about trying to partner up with a youth club that could be hired by residents to pick up their Christmas trees after the holidays. The club could keep the money but deliver the trees to the BVSA rather than the landfill. Another option would be to work with the BV CSD and collect the				
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trees at the transfer station. Fred will work with local resident families one on one to place the trees within Four Island Lake. The new trees will be added to fill in the habitat that was created by cutting two large poplar trees and letting them fall into the lake on the Northwest side.

- Don states that if Fred needs anything communicated via RecDesk system, vs social media, and it has been effective.
- Jeff asked about building artificial trees, artificial habitat? Fred states that we can build artificial habitats but has stayed away from it due to costs. He has also thought about stake beds but due to their vertical orientation may become a paddleboard safety hazard.
  - Butch responds that funds are limited, and any addition fund expenditures would likely be disapproved.
  - $\circ$   $\;$   $\;$  Fred to work with the CSD next year in an attempt to collect trees prior to going into green waste.

**Gravel spawning beds** - Fred is planning to place another load of pea gravel within Four Island Lake this month as additional habitat. Dates are currently TBD. If you would like to help just let him know. Fred will be partnering again with the Kern River Fly Fishers to get their help with the placement.

**Shoreline stabilization** - After looking at the shoreline stabilization Fred is happy with the results. For 2024 he is going to focus on additional shoreline stabilizations. He will also start to install concrete toe stone blocks in certain areas. The concrete toe stone block is placed underwater at the bottom of the gravel bank layer. The gravel abuts the concrete toe stone block, and the block keeps the gravel from sliding down on itself and further into the lake. Fred will experiment with sizing and design but intends to build them in-house. He will place the blocks by working with the maintenance staff and using the tractor.

### Questions:

- Jeff asked if we could use broken concrete from any concrete contractor?
  - Fred states that he tries not to use broken concrete because he does not know where it has been prior to introducing it to the lakes. Plus, the toe stone is one large piece (4'x1'x1') with eyebolts on top for moving via tractor vs broken concrete that the gravel could work its way past the gravel bank layer areas.

#### 7. Fish remediation update Addendum A – Fred

- Additional notes:
  - 1K lbs. of Crappies taken out of Cub Lake in 2023, and the Crappies have gotten bigger in Cub Lake. Crappies are still overpopulated within the lake.
  - 3200 Shiners moved to Cub Lake in October. This is a huge savings for the association and will help with the food chain within Cub Lake.
  - To note, Four Island Lake should only hold 10K lbs. of fish at its max while 18K lbs. of catfish alone has been removed in 2024. However, in Jan 2023, 4.1K lbs. of catfish were removed vs 1.9K lbs. in Jan '24. In addition, more nets were used in Jan '24 vs Jan '23. So, the problem is getting better.
  - Finally, the type of nets used (4"x4" net openings) are tailored to bullheads vs large bass or large crappies thereby skewing the data towards small vs large fish.
  - Fred states, the netting process has developed into an extreme amount of labor. Fred has been using volunteer and hired help to work the task. This is being done at no additional cost to the association.



	<ul> <li>Andrei Karapetian, owner of Stallion Springs golf course, is getting ready to move fish from one pond to another and asked if we'd like some of the fish (Sacramento Black fish). Sacramento Black fish eats algae and plankton. He also has a friend who would donate to BVSA a clean transfer tank with aeration for fish movement if desired.</li> <li>Questions:         <ul> <li>Jeff asked, Does the recreation grant that we applied for have the potential for internship to help with the lake.</li> <li>Fred states that we put in for 4 internship positions and as long as Mountain View Consulting Group is a partner, and will help the interns for 5 years after the expiration of the grant. The grant only supports labor not equipment.</li> </ul> </li> </ul>			
<ul> <li>8. Fish program outreach - Ashley and Fred the outreach program has been setup for the year. Bear Val hosting the following fishing outreach programs for 2024: <ul> <li>Two intro to fishing seminars with two follow up on the water classes.</li> <li>Seminar participants will then be eligible to bring a younger participant (child, grandch the water class.</li> </ul> </li> <li>Two Cubs camp out events: <ul> <li>Fred asked Jeff to help out with food prep</li> </ul> </li> <li>4 Casting for Recovery Sister Saturday events.</li> <li>Attempting to bring in women who have suffered breast cancer within this commoutlying communities into BV and show them what flyfishing can be used as part of the process. This is being done in partnership with Casting for Recovery.</li> <li>3 Weekend long catfish derbies.</li> <li>In addition, Fred is contemplating a drop-in "Fish with Fred" based on scheduling.</li> <li>Don mentions that he has connections to a huge Bakersfield breast cancer recovery database Fred responds with the same.</li> </ul>				
	Questions: - None			
9.	<ul> <li>Plants – Fred/Rick <ul> <li>Water Hyacinth (currently green housed) has taken a hit (approx. 30% of the plant population) due to the cold weather. This confirms that the plant would not take over the lake despite their invasive nature.</li> <li>To combat the cold winter temps (&lt;40 degs) we opted to use sheets of foam insulation to cover the plant totes during the cold temps in addition to 500 watt aquarium heaters. \$20/mo will be paid to the greenhouse owner for electrical use.</li> <li>At the end of March/April we will be reworking the floating islands. The 10'x10' PVC tube frames will be reduced to 5'x10' frames encased in wire filled with a plant substrate. i.e. Coconut coir.</li> </ul> </li> </ul>			
	- None			
10.	<b>Five-year plan update</b> - Fred is about halfway through the five-year plan and hopes to meet separately with each individual section representative to go over and finalize for the next meeting. Section representatives are as follows:			

BEAR VALLEY SPRINGS ASSOCIATION

Lake Quality Advisory Committee Minutes

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	Watershed-Fred and Paul				
	Water quality-Fred and Jeff				
	Fish-Fred, and Layne				
	Plants-Rick and Fred Recreation-Kimberly Fred Ashley				
	Google drive-Fred				
	<ul> <li>Please update any document section by providing Fred with a Word document stating cell location and verbiage to be used.</li> </ul>				
	Questions:				
	- None				
11.	. Committee member comments and questions:				
	Fred- Fred thanked all the LQAC volunteers that volunteered their time to help him with the different lake projects throughout the year. Fred stated he is exceptionally busy. Enough so that Mountain View Consulting Group has contracted additional help for Fred, which will assist with various lake projects. This is being done at no additional cost to the association. This help will allow the lake projects (primarily Bullhead Catfish netting) to continue while Fred is out of town.				
	Questions: - None				
12.	Visitor Comments and Questions				
	Questions:				
	- Carolyn asks for a description of the floating islands.				
	<ul> <li>Fred provides the functionality of the floating island and the reason for their placement in and around the 7<sup>th</sup> Hole Pond and Four Island Lake.</li> </ul>				
	- Carolyn asks where does the water come from that supplies the water line at the northeast end of Cub				
	Lake? Fred informs her that the well immediately northeast of Cub Lake is the source. The source is a				
	non-potable well owned by the CSD. Carolyn questions if the water is color green but the group responds				
	that they have not ever seen green water coming out of the well.				
	- Fred questions who would like to write Bear Tracks articles? Rick asks if there is a list of topics that Fred				

#### E. Follow-Up Items: 3 items

1. Bear Tracks articles Don and Butch suggested that every other month is sufficient for LQAC articles. Fred will create a topic list for committee members to choose from. Ashley will write the March article advertising the upcoming fishing outreach programs.

LQAC 2024 scheduled meetings occur at 06:00 PM Pacific Time (US and Canada): To be determined.



## Addendum A Fish Remediation

2023 Netting Monthly Overview	Fish capture in pounds	
Four Island		
January full month (Hoop Netting)	4,107.00	
February 5 days (Hoop Netting)	210.00	
March full month (Hoop Netting)	2,101	
April full month (Hoop Netting)	483.00	
May full month (Hoop Netting)	209	
June full month (Hoop & cast netting)	2167	
July full month (Cast netting)	4390	
August full month (Cast netting)	1290	
September full month (Cast netting)	1340	
October full month (Cast netting)	395	
October full month (Cast netting) Golden Shiners		
transferred to Cub Lake 2-10 dollars each	3220	
November full month (Hoop netting)	580	
December full month (Hoop netting)	1340	
Total Bullhead Catfish Harvested in pounds between		
January 1 <sup>st</sup> 2023, and December 31 <sup>st</sup> , 2023	18612 lbs	



# BEAR VALLEY SPRINGS ASSOCIATION Lake Quality Advisory Committee Minutes Location: Monday, February 5<sup>th</sup> 2024, at 6PM Whiting Center-Green Room

December 2023	Number of net nights	180		
Location	Four Island Lake			
		4-7	7-10	10-13
Size range	0-4 inches	inches	inches	inches
Black Crappie	60	368	55	
Bluegill	1	215	9	
Redear Sunfish	1	19	16	
Green Sunfish	3	105	5	
Golden Shiner	11	181	43	
Bullhead catfish				
in lbs	1070 lbs			
Largemouth Bass			2	1
Channel catfish				

January 2024	Number of net nights	316		
Location	Four Island Lake			
		4-7	7-10	10-13
Size range	0-4 inches	inches	inches	inches
Black Crappie	28	297	49	
Bluegill	60	78	3	1
Redear Sunfish	1	26	10	
Green Sunfish	1	83	3	
Golden Shiner	104	326	37	
Bullhead catfish				
in lbs	1920 lbs			
Largemouth Bass			3	1
Channel catfish				