



Spirit Lake Report

Periodic Update on Spirit Lake by the SPIRIT LAKE PROPERTY OWNERS ASSOCIATION

April 2022 Vol. 8

SLPOA Mission: To develop the capacity within our community to provide a sustainable lake habitat that will allow all people who live, work and play within its environment an optimal North Idaho experience.

SLPOA BOARD PRESIDENT' MESSAGE – Karen Cowan

When you think of something beautiful does Spirit Lake pop into your mind? On March 16th of 2022 SLPOA is turning 49 years old. Yes, we were approved as a 501 (c) (3) on March 16th, 1973. For the last 49 years your organization and board have worked hard to promote and maintain a beautiful, healthy lake environment. I'm excited as the newly elected board president to continue the efforts to promote the goals of our strategic plan and I would like to share three specific areas we are focusing on for 2022.

Membership

Increasing membership in 2022 is a vital part of our strategic plan and a must for the continued longevity of our organization. In January 2022 we sent a short newsletter to talk about how our membership dates have changed to a calendar year based on our new accounting software. Our dues are still only \$40 per year, what a deal! Of the 447 property owners on the lake, 198 have responded by paying their dues. Thank YOU, to everyone who has joined! Nevertheless, that is only 43% of property owners on the lake and the board has set a goal for 2022 of 80% of property owners becoming paid members. We would not be an operating organization if we had to pay fair market value for many of the services which are donated by board, advisory members and friends of Spirit Lake. For instance, invasive species cleanup/control alone, would take more than the dues for the year. Please help us spread the word about membership and dues—talk to friends and lake neighbors today!

Board of Directors

Having a strong group of board members to complete our 2022 goals is central to accomplishing the work of SLPOA. Also building a strong group of Advisory Board members who have expertise in areas needed to support our goals is crucial for our success. 2022 is a year of rebuilding our board of directors and adding a strong set of advisory board members to work with, as needed, on our projects. We currently have 3 board positions available. It does take some time to commit to the role, but a synergistic board is critical to direct and guide SLPOA. We know our membership has abundant talented and capable members! Consider joining the board, it's never been more important that folks from our membership step up to assist with the work and decisions necessary to ensure the environmental health of the lake that we love.

Weir/Dam Fund Raising and Replacement: Sometimes a picture is worth 1000 words. This picture was taken in October of 2021. It shows the undeniable need for our project. We have had great success in raising funds for our much-needed dam from 2019-2021. A total of \$117,867 has been raised as of March 16, 2022, with \$50,550 raised in 2021. We now have two generous SLPOA members who are willing to match—up to \$10,000 each—the donations made by members and Friends of Spirit Lake in 2022. That's a potential of \$40,000 to take our grand total to over \$150,000—just \$10,000 short of our projected \$160,000 dollars. We are ready to move to permits and requesting bids for the project by summer. This will allow us to complete the removal of the existing dam and construction of the new weir in the fall of 2022. Your support has been amazing! Let's finish the fundraising for this work and move to a 2022 completion!



Meet the Board of Directors – Paul Sturm, SLPOA Board Director



Karen Cowen, SLPOA President says, “I loved my years of lazy, crazy lake days! When I swam, water skied, barbecued, entertained friends and thought it would never end. I have learned that nothing stays the same and being involved in SPLOA and its vision and mission is the only way all of us will be able to continue to enjoy our lake time as we know it now!”

A property owner on Spirit Lake since 1989, Karen joined the SLPOA Board in 2014. She said she became interested in joining the board because “I was seeing a changing lake environment; more boats and people on the lake and congestion at the main boat launch. Friends had talked about the need for a new dam and the causeway issues. I wanted to learn more and be a part of the solution to guarantee a healthy Spirit Lake.” Karen’s expertise on the board comes from over 25 years as a school teacher, school administrator and business owner.

The main challenges she identifies facing SLPOA and Spirit Lake are increasing the membership in SLPOA and increasing participation in the work of maintaining and improving the Spirit Lake environment. The obvious and unobvious issues and needs surrounding and within Spirit Lake inspire me to continue the work of SLPOA. The only way we will make sure that Spirit Lake remains as healthy and vital as possible, is if the membership continues to be committed to the goals of SPLOA.

Jerry Peterson, SLPOA co-Treasurer, and his wife Kathy purchased an undeveloped, boat access only piece of property in 1978. They started to develop and build a log home in 1979, “doing all the construction ourselves—with a whole lot of help from our friends!!!”

Jerry joined the SLPOA board of directors in the late 1980’s, served two separate extended terms as President and currently serves as a Board Director/co-Treasurer. He was encouraged to join the board by Bob Bangerter (SLPOA President at the time), Bud Anderson (owner of Lake Haven Resort) and Sid Wurzburg (SLPOA board member & past President). They could see his passion for the area and willingness to devote time & effort to improve it.



Jerry retired from Western States/Caterpillar after 30 years. Working as a technician, supervisor and finally as a Regional Manager, in charge of 7 facilities throughout Eastern Washington, Northern Idaho and Western Montana. Jerry headed and served on numerous teams to develop & expand the company’s goals. “This has helped me understand what it takes to work with people and get projects accomplished. “

A couple of main challenges facing SLPOA and Spirit Lake that Jerry identified include:

- Growing our membership to include all property owners and anyone who cares & enjoys Spirit Lake. To get them to be more engaged in the current environmental issues and be a voice in those that we will face in the future.
- “Over” development of the area and the detrimental impacts it could have to the environment and recreational enjoyment.

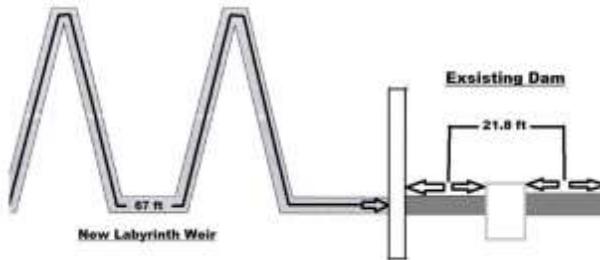
Jerry explained, “The commitment & desire of fellow board members and SLPOA members for continuous development & improvement of our organization is the inspiration that keeps me working with the SLPOA board. It is something I am proud of and want to continue to be a part of. Spirit Lake is our most favorite place in the world! We have motorcycled, snowmobiled, waterskied, jet-skied and boated in and around Spirit Lake for almost 45 years. Flying from our home in the Newman Lake area and landing on the lake within 12 minutes (on a good day!), never grows old!!!”

Your current board directors also include: Tony Brawner, Don Finney, Brad and Linda Pendleton, Paul Sturm and Sid Wurzburg. Advisory members include Carol Capra, Doug Freeland and Randy Hurst. Check them out at www.friendsofspiritlake.org. More Board highlights to come in future newsletters.

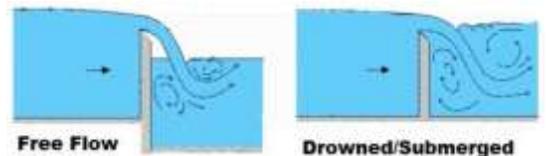
Engineering the Weir – Jerry Peterson, SLPOA Board Director

The current dam was built by Panhandle Lumber Co in 1908 to maintain the water level in the pond for their sawmill operation and is 114 years old. It consists of 6 removable boards (3 on each side) which have been replaced numerous times and a concrete structure that is deteriorating. Leakage can be observed not only around and through

the boards, but under the concrete structure itself due to undermining at the base. Removal and reinstallation of the boards to control the water level is not only extremely dangerous, but it is left up to the discretion (i.e. “best guess”) of humans as when it should occur. Letting out too much results in low lake levels, not letting enough results in flooding & shore line erosion. And, of course, there is always a chance of vandalism.

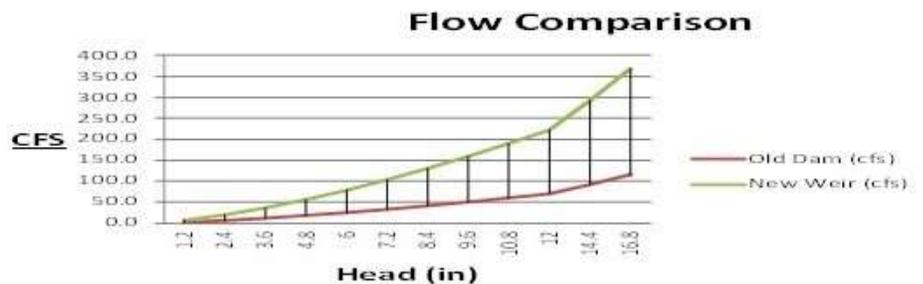


The proposed replacement for the Dam is a Labyrinth Weir and has been determined to be the best solution for all our situation. Because of its “W” design, it has an effective spillway length of 67 ft vs. the current 21.8 ft straight design, resulting in a minimum of 207% increase of water flow over the top. This is important to reduce flooding and erosion during extreme high-water conditions. The back of the Weir is taller. This creates a free flow design for additional water discharge with a plunge pool that will absorb the energy creating a gentler flow downstream with less erosion (see diagram).



Since the Weir is a standalone design, there will be no human decision or intervention needed. To reduce flooding and erosion along the lake shore, it will immediately start spilling water just below the Ordinary High Water (OHW) level, resulting in a gentle/moderate fluctuation in lake levels, as opposed to waiting until the water is well over the existing dam to pull boards, then, deciding when to replace them. The diagram (below) shows that the higher the lake level—Head inches—the amount of water that will flow past the weir is greater (cubic feet per second or CFS) than that flowing past the current dam. Thus, the weir can better manage flooding around the lake in a high runoff year.

Kootenai County established the 10-year elevation of Spirit Lake at 2445.8’ per the NAVD88 (North American Vertical Datum of 1988). The top of our current Dam is 2445.9’ and the top of the proposed new Weir would be 2445.75’—about 4 inches lower than the current Dam.



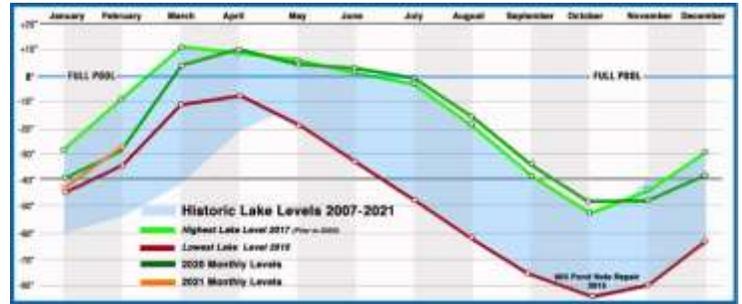
Flow calculations for the Weir design are based on historical data collected by hydrologist, Chris Hardy. These data show flows over the dam at about 190 cfs (cubic feet/second), in the latter portions of April.

What the Weir will and won't do:

- It *will* help retain the maximum amount of water that “Mother Nature” gives us, up to our OHW level each year, for as long as possible
- It *will* help erosion issues along the lake shore and downstream of the Weir by being able to discharge more water sooner and at a smooth/even rate, reducing rapid fluctuations in lake levels
- It *will* eliminate the safety issues and decision making for humans
- More water is good for fisheries
- More water *will* help mitigate algae blooms, reduce dock & water intake modifications and maintain property values
- It *won't* stop the build-up of silt behind the bridge causeway.
- It *won't* make “Mother Nature” give us more or less water each year
- It *won't* stop leakage into the aquifer through the bottom and sides of different parts of the lake and mill pond
- It *won't* stop invasive species or erosion and dock damage from boat wakes and wind

Lake News – Paul Sturm, SLPOA Board Director

On February 14, 2022, Sid Wurzburg—reporting in the “Latest News” tab at www.friendsofspiritlake.org—indicated that “The lake rose 6 inches in 3 weeks, then dropped 1/4-inch last week. It is still almost 5 feet below normal high water. The water content of Mt. Spokane snowpack is about 80% of normal water equivalency. With no significant snow in the forecast, I’m doubting we will start the summer with a full lake, but a really wet spring could change that. The lake level was down another 2 & 1/2 inches last week. It doesn’t look good for a full Lake.”



Coyote, singly and in pairs, have been spotted walking and running on the ice occasionally throughout the winter. Besides fishing, the long cold spells have produced ice thick enough for brave souls to venture out on snowmobiles, ATVs and occasionally a golf cart or two. Conditions have at times been favorable for ice skaters, cross country skiers, snowshoers, walkers and their companion canines.

On March 4, 2022, Sid reported that “2.44 inches of rain fell [in the previous] week with daytime highs in the 40s. This brought the lake up 14 inches.” Sid’s report states, “Ice is still thick once you get to it, but no one I’ve seen has been willing to wade through deep water then try to climb onto the solid ice. A thin fault line developed from Brickle Creek to near the Big Island. That is usual and warmer weather and some wind will eventually open it up and the real breakup will start. As of this report the lake is still iced over and water level is at the bottom of the dam elevation.”

As the breakup of the ice begins, the sounds of air gurgling under the ice can be heard along with cracking ice, heaving into small ice mountain ranges, and the melodic vibrations of ice sheets rubbing together. The ice may be gone by the time this report reaches you but the breakup can be dramatic to witness.

Friends of Spirit Lake
Spirit Lake Property Owners Association
PO Box 363
Spirit Lake, ID 83866



!!! BIG NEWS !!!

A New Matching Challenge For the Weir Project

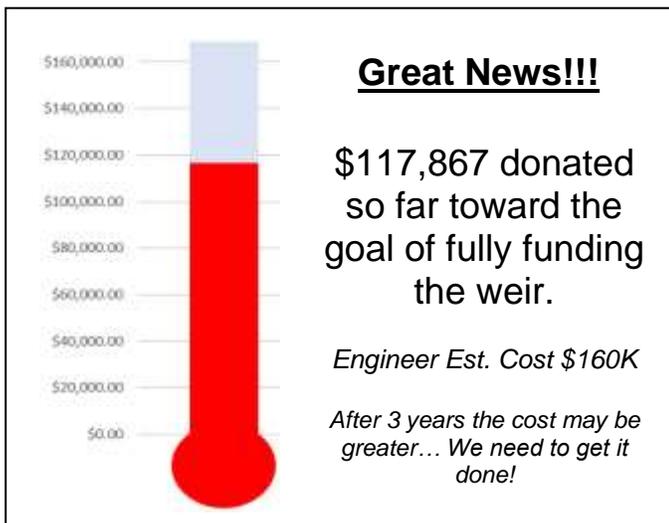
2022 JUMP IN CHALLENGE

Two of your lake neighbors are challenging us to raise \$20,000 and they will match it.

If you missed the “Double Your Money” drive in 2021 here is your chance to JUMP IN



TOGETHER WE CAN GET OVER THE TOP



HELP REPLACE THE DAM IN 2022

Send Donations To:

Spirit Lake Property Owners' Association
Po Box 363, Spirit Lake, Id 83869

Or Online At:

<https://www.friendsofspiritlake.com>

SLPOA is a 501(c)(3) organization - You will receive a donation confirmation for tax purposes

!!! HELP US SAVE YOUR CONTRIBUTIONS !!!

Help save SLPOA resources by saving postage. Provide us with your email address and we will send correspondence and newsletters via email. Email us at spiritlakepoa@gmail.com or from the website at www.friendsofspiritlake.com

JOIN US

Become a member by pointing your browser to www.friendsofspiritlake.com. Your annual dues of \$40 helps us keep you informed, pay the bills, and expand the impact of your association toward its mission: *To develop the capacity within our community to provide a sustainable lake habitat will allow all people who live, work and play within its environment an optimal North Idaho experience.*



Spirit Lake in Spring – Diane Rinck



Mt. Spokane in all its Glory – Diane Rinck



Arial Photos – Jerry Peterson 2020



Ice Fishing on Spirit Lake – Jerry Peterson 2009