Fall 2022

SIGHTLINES

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SELKIRK CONSERVATION ALLIANCE

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WEBSITE : WWW.SCAWILD.ORG
EMAIL : SCA@SCAWILD.ORG
PHONE : (208)448-1110

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NEW LOOK – SAME GREAT FLAVOR!!

Hello, devoted members of SCA! We have a bit of an announcement to make; Sightlines is being handled by a new production team – Amy & Jennae! For many years Sarah J. Stoner (Eleanor Hungate-Jones daughter) magically transformed our article submissions into a physical newsletter free of charge for SCA. Sarah has retired from this position and rather than try and farm out the work – SCA has decided to produce the Sightlines newsletter "in-house". A HUGE THANK YOU to Sarah for all of her valuable time and the creative energy she poured into producing Sightlines for SCA. Please let us know what you think of this new version of the same old GREAT newsletter!

PRESIDENT'S MESSAGE

Wetland Protections in the news and on the Chopping Block

The Supreme Court Kick-off to its 2022 term is a re-hash of the Sackett vs EPA Wetland case. The case is being litigated and funded by a Libertarian Public Interest Law Firm, the Pacific Legal Foundation. If it seems like we have been there before, well, we have. The environmental dispute began in 2007 after a wetland property 300 feet from Priest Lake and 30 feet from a tributary of Kalispell Creek was filled with 1700 cubic yards of sand and gravel without proper permitting by the Army Corps of Engineers. The EPA, enforcing its obligation to protect the Water of the United States (WOTUS) outlined by the Clean Water Act (CWA) stopped the project. A legal battle was launched and traveled through repeated court hearings to the Supreme Court and back again. Arguments have centered on the definition of WOTUS (which varies by political administration) and specifically how closely connected wetlands need to be to navigable waters to require CWA protection. The timing of this court hearing as the first scheduled case of the season on the docket of the most conservative Supreme Court in decades is not surprising.

Fast forward to the controversial development of the Coolin Wetlands (a Class I Highest Conservation Priority Lacustrine Peatland). Through repeated Freedom of Information Act requests by the SCA, it was learned that on 7/29/22, the Army Corps of Engineers (ACOE) approved a Nationwide Permit allowing discharge of 1449 cubic yards of fill (over 100 dump trucks) in the first of up to 34 lots in the development. The ACOE permit follows a litany of allegations of serious land division procedural concerns, lack of public transparency and appropriate notifications, application and ownership discrepancies, disregards of the flood plain/ wetland designation and a lack of available sewer services for a new development. The ACOE has an obligation under section 404 of the Clean Water Act to protect the water of the US. Their decision to permit the first step in this development which adversely impacts a wetland contiguous to Priest Lake, a navigable body of water, is difficult to understand.

Wetland protection in the United States is indeed on the chopping block and threatened with a two headed axe. Ideally, projects are appropriately reviewed for environmental impact and permitted methodically prior to construction. Experience with the Coolin-Warren Beach Wetland suggests that the process is incredibly complex and shrouded in clandestine maneuvering to protect financial outcomes at the expense of environmental concerns. In the Sackett case, it would seem that the legality of filling a wetland without a permit will be determined by the most conservative law firm and court in the country. If the EPA loses the Sackett case, the definition of WOTUS will be weakened, and close to 50% of wetlands in the US will be at risk.

The public disclosure of the ACOE permit for initiation of the “Coolin Wetland Fill” was forced by the tenacity of your Selkirk Conservation Alliance. Diligent use of the Freedom of Information Act, as well as Amy Anderson’s understanding of the broad governmental process has allowed us to stay involved in a meaningful way. We are continuing our work with multiple other organizations to encourage meaningful Public Interest Review. Your ongoing generous support of the SCA will make a difference in our involvement with these critical environmental issues.

Curtis Wickre MD
SCA Board President

PRIEST LAKE SEWER DISTRICT REPORT CARD

BY: DR. JAMES LEA

When we flush our toilet we don't worry about what happens to the waste. As an article of faith we assume it will be disposed of appropriately. For the most part our assumption is accurate. With the passage of the Clean Water Act of 1972 both drinking water delivery and wastewater treatment improved immeasurably, such that now days we assume that our drinking water is safe and that our waste is disposed of in such a way that it does not pose a heath or environmental risk.

Sewer district	EDU's	2021 Inflow	2012 Inflow	2012 Inflow/ EDU/ DAY	2021 July Inflow/ EDU/ Day
Outlet Bay	597	13.94	17.08	64 gal/day	118 gal/day
Kalispell Bay	369	5.09	7.00	38 gal/day	62 gal/day
Granite Reeder	423	5.17	3.86 (2013)	33 gal/day	73 gal/day
Huckleberry	245	3.75	1.94	42 gal/day	140 gal/day
Coolin	543	8.90	11.50	45 gal/day	73 gal/day

In those days Priest Lake was in the vanguard. Prior to the 1970s waste was treated in an outhouse or septic tank. The former is obviously inadequate and the latter only a step above. Both the Kalispell Bay Sewer District and Coolin District were formed in the early 70s. Huckleberry Bay was established in the 1990s. The most recent district to form is Granite Reeder which went into full service in 2013. As our older districts are approaching 50 years SCA thought it would be informative to analyze all the districts around the lake to see how each is doing. Here we have excluded Sandpiper Shores which is very small and is situated in a very unique environment. Below is a table demonstrating a variety of parameters. EDU is the Idaho Department of Environmental Quality designation of equivalent domestic unit. Inflow refers to the yearly measured inflow into the treatment lagoons in millions of gallons.

The first thing to note is that for Granite Reeder and Huckleberry there has been increased inflows over the last decade, 34% and 93%, respectively. This should be anticipated because of the increased development and use over these last ten years. In contrast there has been a reduction of flow at the other, older facilities with a decline of 27% at Kalispell Bay, 23% at Coolin and 18% at Outlet.

The average wastewater use per person per day in America is 60 gallons. Planning departments plan for 150-200 gal per household per day. Because of the seasonal nature of use at Priest Lake it is not reasonable to expect those kinds of estimates on a yearly basis, however, the heavier summer use should approximate those values. You can see that Huckleberry and Outlet come close to that estimate with theothers lagging. The two largest districts are Outlet and Coolin. One would thing they would also be similar because they both have a number of year round residents and consist of a blend of residential and commercial clients. Yet there are striking differences. Inflow data are gathered by flow meters that are calibrated regularly. Outlet has flow meters that are calibrated regularly. Outlet has flow meters that automatically record and store daily flow data leaving no room for human error. The other districts have meters that require reading usually done weekly. On one occasion Coolin had a gap of 5 weeks.

The table presents information that is related to performance as documented in the 2021 annual report mandated by IDEQ. Coliform refers to the measurement of bacteria in the treated water. At a maximum there should be less than 230. Under nutrients is listed the amount of ortho-phosphate per kilogram of soil from the irrigated land.

Permit violations should occur infrequently since most of the variables are under the control of the operator. In the case of Kalispell Bay the amount irrigated was more than permitted although not by a great deal. In the case of Coolin, irrigation occurred in October which is a significant violation.

Continues on next page

DID YOU KNOW WETLANDS COVER ONLY 5-6% OF THE EARTH'S SURFACE, BUT ARE HOME TO 31% OF THE EARTH'S PLANT SPECIES, AND STORE 10-20% OF THE EARTH'S CARBON.

Sewer district	Permit Violations	Coliforms	Nutrients Post Treatment	Inflow Data	Report Clarity
Outlet Bay	none	0/5>230	<15mg/kg o-PO4	daily digital reads	A-
Kalispell Bay	exceeded hydraulic loading in Sept	2/5>1600,1/5>230	<50mg/kg o-PO4	regular manual reads	A
Granite Reeder	none	0/5>230	<50mg/kg o-PO	regular manual reads	B
Huckleberry	none	1/5>1600	<50mg/kg o-PO4	raw data not provided	B
Coolin	irrigation outside of permit season	2/3>1600	>200mg/kg o-PO4	irregular readings	A

Coliform bacterial counts are measured as a proxy for estimating the likelihood of human bacterial or viral contamination from human feces. Small amounts of coliform bacteria are allowed because there are naturally occurring soil bacteria that are not a health hazard. Measurement of coliforms is supposed to occur monthly during the irrigation season of May through September. Coolin made this measurement only three times and twice the reading was greater than 1600, which is to say off the scale. The actual reading may have been much higher. Measurements should be less than 230 and ideally 0. Kalispell had one measurement over 230 and two over 1600. Huckleberry had only one greater than 1600. Granite, Reeder, and Outlet had measurements all less than 230 and the greatest recorded ever for Outlet was 15. Usually there were no detectable bacteria. DEQ requires the districts to measure the concentration of the nutrient ortho-phosphate in the soil of the irrigated zone yearly. If the concentration of phosphate is high (the lower the number the better), it can leach into the soil and find its way into the lake causing excess aquatic vegetation, which is to say algae and water “weeds”. Annual reports are required and either written by an outside engineering firm or in the case of Outlet by the operator.

Our two oldest districts are the ones that exhibit the greatest reduction of wastewater inflow over the last ten years. This is in spite of increased development and visitation. It is possible that the flow gauges are not accurate, but this seems unlikely since they are calibrated on a regular basis. The other more worrisome possibility is that leakage of wastewater may be occurring in the lines. In an article in the Wall Street Journal of 9/3/2022 there is a write up on our ageing drinking water and wastewater infrastructure. Many of the pipes used in the sewer systems installed after the Clean Water Act legislation in 1972 are reaching the end of their useful life and will require replacement. About 14% of treated water is lost to leaks, with some water systems reporting losses of more than 60%, the EPA says. At Priest the PVC pipe was billed as having 100 to 300 years of service, however, that was for a low pressure scenario. In our systems the pipes are under pressure at all times and experience pressure cycles as the pumps are periodically activated. This could shorten the life expectancy dramatically to as low as 15-25 years. Clearly some type of testing should be performed to assess the lines. Finally the districts need to anticipate a graduated replacement of the oldest lines.

If SCA were to grade the various districts based on the 2021 reports, we would award the following:

District Grade:

Outlet Bay..... A
Kalispell Bay..... C
Granite Reeder..... B
Huckleberry..... B
Coolin.....D

As you can see there are opportunities for most districts to improve. Although each district treats sewage using the exact same methodology, Outlet Bay consistently stands out. What has become apparent to SCA through this exercise is that the most critical factor in successful operation of a sewer district is the operator. If the operator is both knowledgeable and attentive, the district can do a very good job even given our relatively primitive treatment methodology. We do not think that it is an exaggeration to say that our wastewater operators are the most important stewards of our Priest Lake water quality. SCA hopes to repeat this assessment next year and trust that the districts will do better.

ECONOMICS AND WETLANDS PRESERVATION

BY: JON MILLER

Many would take a very Green view of wetlands preservation. Based on the right set of values, it's simply something that we should do. Wetlands provide valuable ecological service functions such as protecting water quality, flood control, fish and wildlife habitat, and recreation. Too many wetlands have been developed already. Let's preserve those remaining. By contrast, the standard economic view of wetlands preservation is more moderate in approach and based on the classic problem of tradeoffs in resource use, the basic economic problem of scarcity. In mainstream economics, the goal is to maximize the value of the resource. This may well be preservation, or it may not.

In a recent article in the American Economic Review, the journal of the American Economic Association, economists estimated that the average hectare (2.47 acres) of lost U.S. wetlands between 2001 and 2016 cost society $1,840 annually in flood damage alone. In developed areas, the figure was over $8,000. And this doesn't even count lost value of the other ecological service functions mentioned above. On the other hand (There are no one-armed economists.), because of their proximity to rivers, lakes, and streams, wetlands provide large agricultural, industrial, and residential value, especially when drained or filled. Many of us in the SCA are familiar with residential threats to wetlands at both ends of Priest Lake, the Coolin wetlands near Warren Beach Road, highlighted in recent issues of Sightlines, and the Mosquito Bay Fen, just north of the Thorofare.

Even if the economic value of wetlands preservation outweighs that of development, we can't rely on the market mechanism to come to the right conclusion. For many resources, such as labor and capital, market prices can be relied upon to guide resources to their highest and best uses. If we establish and enforce rights of ownership and contracts among resource owners, a market system does a tolerable job. Most of us don't need to be told what to do in terms of our own employment. We simply follow the monetary and non-monetary benefits to our best jobs. With wetlands, however, decisions about resource use are much more problematic. In our employment, we capture the entire amount of our value because this value is obtained through a market transaction. By contrast, a wetland owner cannot capture the value of his or her flood control, wildlife habitat, and water quality. These values accrue to others. This is what economists call external benefits and the market system does a lousy job of taking account of them.

The high cost of negotiating and enforcing contracts related to wetlands preservation and development is one of the reasons for wetlands market failure. Suppose that we agree that a wetland could be developed only if compensation is paid to those harmed from the development. It would be very difficult for developers to find and compensate all of those who benefit from preservation. The cost of executing these transactions would be prohibitive. Now suppose we make the opposite assignment of rights. Developers have a right to develop wetlands and, if we don't like it, we can pay developers not to develop them. Again, very high transaction cost would preclude these agreements.

One way to lessen the transaction cost of wetlands agreements is the existence of environmental intermediaries, such as the Nature Conservancy and Ducks Unlimited, global organizations that raise money from contributors and purchase environmentally sensitive lands or create conservation easements that enable preservation. Local and regional examples are the Kaniksu Land Trust, the Lands Council, the Dishman Hills Conservancy, and the Palouse Land Trust, among others. The use of collaboration and market or market- like transactions endear these types of organizations to many economists like me.

Since 1972, through their permitting authority on "navigable waters" granted by the Clean Water Act, the Environmental Protection Agency and the U.S. Army Corps of Engineers have been largely on the side of wetlands preservation. It was, in part, appeal to this authority that once saved the Mosquito Bay Fen from development. This wetlands-favorable federal permitting authority is threatened on at least two fronts. In the courts, the definition of navigable waters is becoming narrower, and the administrative jurisdiction will likely become more local after the U.S. Supreme Court releases its decision in Priest Lake's own Sackett Case next year.Unfortunately, rights to development of wetlands are shifting in the wrong direction.

While we are doing all we can at SCA to slow down wetlands development in our advocacy area and educate the community on the economic value of wetlands, we are also trying to inspire, coordinate, and facilitate collaborative efforts by environmental intermediaries to use market-like methods to preserve our valuable wetlands resources.

SCA VOLUNTEER THANK YOU!

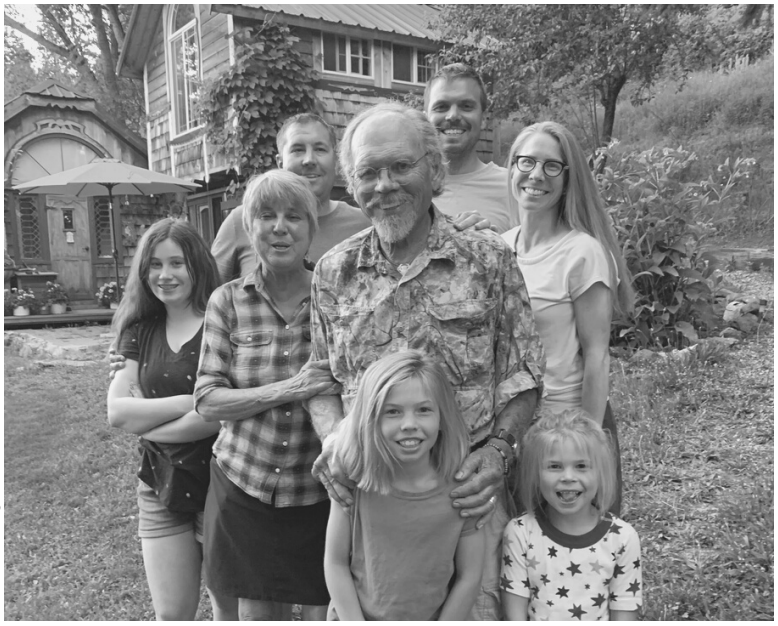
Thank you Janet Torline!

BY: AMY ANDERSON

SCA would like to thank and recognize one of our most outstanding and beloved volunteers Janet Torline for her work on our Fundraising Committee! Janet is a long time environmentalist that has dedicated her life to protecting and conserving our regions natural resources and beauty. In addition to her down to business, upbeat, positive and inspiring work helping SCA develop and facilitate fundraising campaigns she is a fierce defender of the last remaining WILD and has fought passionately on the boards of nonprofits, in particular, environmental nonprofits for decades! And, on a personal note, she is a loving, caring and supportive mentor and friend to many in this fight who has given much needed WISE counsel on many occasions!

Thanks SO VERY MUCH Janet!!

Without the volunteer time (and just general injection of love) of folks like Janet we could not do what we do.



Janet Torline and her beautiful family!

If you are interested in joining SCA's Fundraising Committee or Board please contact us at sca@scawild.org!

LAKE QUALITY MONITORING RESULTS

BY: STAN MILLER

The SCA Citizen Volunteer Monitoring Program (CVMP) completed half of its planned 2022 lake monitoring program on July 29th.

The SCA Lake Team measures several water quality parameters in the lake for three main reasons: 1) Assess the trophic status of the lake. 2) Identify trends in lake quality. 3) Help the Idaho Department of Environmental Quality maintain its statewide database.

In the 1990's, IDEQ conducted an intensive study of Priest Lake's water quality. They collected samples from about 16 sites for at least six months a year over a three year period. The IDEQ work examined over a dozen chemical and physical parameters related to water quality. The SCA Lake Team monitors only a few key parameters. Only about eight sites are sampled per year and the team alternates sites so 16 key sites are covered every two years. The sites monitored each year are more or less evenly distributed to cover the entire lake. The Table at the end of this article summarizes several standard indicators of trophic status (purity of the water) of the lake. Oligotrophic means the lake is nutrient poor: unpolluted. Eutrophic means the lake is high in nutrients and will have abundant algae and rooted plant growth.

Based on this year's testing, the lake remains in an oligotrophic, very clean, state. The three indicators of trophic status are measured by total phosphorus, chlorophyl a (a green pigment found in algae indicating how much algae is growing in the lake), and secchi depth (a measure of light penetration into the lake – also a measure of algae present in the lake).

The average total P for the seven main lake sites in June, July, August and September was <4 µgP/L. Looking at all the sites for the four months there were only half (13) of the 26 tests for phosphorus had concentrations above the detection limit of 3.4 µg/L Of these, 7 occurred during the September sampling run. but most were below. The highest phosphorus concentrations occurred in some of the bays. Distillery Bay (Dist) and the Lower Priest River (LWPR) site about a quarter mile above the dam each had two tests above the detection limit. The highest total phosphorus was measured 20.4 µg P /L in the July sample at Lower Priest River. The August and September samples for LWPR averaged < 6 µgP/L. Anything less than 10 µg/L is considered oligotrophic.

The average chlorophyl a for the four rounds of sampling of 7 main lake and one Upper Lake

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site was <2 µg Chl a/L and the maximum value was 1.97 µg/L. Oligotrophic status calls for an average of < 2.5 µg/L and a maximum of < 8µg/L.

Due to the heavy, late runoff, the June secchi depths averaged about 6 meters. In our July sampling run these depths had increased to an average of about 10 meters. The June numbers are marginal for an oligotrophic lake (>6 meters is the arbitrary boundary), but by July the increased sediment from the high runoff appears to have settled out of the lake and more normal depths were seen.

Another aspect of lake quality that SCA tracks is temperature. At each site we monitor, SCA does a temperature profile. That is, temperature is measured from the surface to the bottom of the lake. These profiles are important because they tell us how the surface temperature changes from year to year and they tell us if the deep lake temperatures are also changing significantly.

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In summary, currently the lake is still in very good condition. There are some warning signs however. Some of the bays show elevated, though not dangerously high, phosphorus concentrations. Residential development, bank erosion from boat wakes, and stream inputs are some of the many potential causes for this. In addition it is clear that the lake surface in summer has warmed considerably since the 1990's, but, due to winter cooling of the entire lake, temperatures near the bottom of the lake remain as cold as in the 1990's.

The most widely accepted limits are those suggested by the Organization for Economic Cooperation and Development (OECD):

Trophic category	Mean total, P (µg l −1)	Mean (µg chl-a l −1)	Max. (µg chl-a l −1)	Mean Secchi depth (m)
Oligotrophic	<10	<2.5	<8	>6
Mesotrophic	10-35	2.5-8	8-25	6-3
Eutrophic	>35	>8	>25	<3

BUGS BATTLING THE INVASION:
Bio-Control of Spotted Knapweed

BY: MARY AND JON QUINN-HURST

Spotted knapweed is a non-native invasive weed that inhabits pastures, open forests, meadows and disturbed areas. It also produces toxins that inhibit the growth of nearby plants. It is a biennial to short lived perennial, with branched stems with flowers that are pink to purple. Spotted knapweed is difficult to control, and until the introduction of bio-control agents it required the hard work of manual removal (aching backs!), or the use of herbicides.

Photo of spotted Knapweed

Bonner County of North Idaho is listed as one of four counties in Idaho as a spotted knapweed infested county, which covers a great portion of the Selkirk Conservation Alliance's advocacy area.

We were introduced to spotted knapweed in 2001 shortly after we had a portion of our acreage selectively logged, which created a "disturbed area", fertile ground for the knapweed seeds that hitched a ride on the skidders used in the

Continues on next page

logging, brought in from a previous job. This resulted in an infestation of the “pretty purple flowers” of the spotted knapweed.

Once we learned that this was an invasive weed, we began to research how to control it, as it really thrived in our meadow and the open forest created by the logging. We attended a workshop conducted by the Bonner County Noxious Weed Department where we learned of our options in dealing with this invasive weed. We were drawn to the advantages of bio-control agents because of these advantages: the insects are host specific (they don’t disturb other plants), reproduce on their own, increase in numbers to attack more weeds, move by themselves through weed infestations and the target weeds seldom develop resistance to the insects as can happen with herbicides. Most importantly we wanted to avoid the use of herbicides as the acreage is adjacent to Priest River. The insects support clean water!

We obtained two insect agents from the Nez Perce Bio Control Center, a knapweed root weevil and a flower weevil. The root weevil larvae feed on the roots, reducing flower production and plant vigor. The flower weevil larvae reduce seed production, complimenting the root feeder.

Bio-control of spotted knapweed takes patience and will not eradicate a weed infestation. The insects reduce weed populations to an acceptable level, where manual removal can be reasonably achieved. As the weed population drops the biological control agent population will also decrease. When the weed population rises, the insect population rises. In our case we have been very satisfied with the results. We have witnessed the ebb and flow of this method and see it as a balanced way to develop long term control of spotted knapweed.

HELLO & WELCOME SCA'S NEW DIRECTORS

New Directors Jane Hoover and Hank Jones with other SCA members getting their hands dirty during the fall HWY 57 litter pickup!

It is with so much joy and love that we usher in and welcome a new era of SCA Board members! Not only has SCA balanced our male and female Board energy, we are welcoming some FAB and passionate new volunteer power to our Board!

Please take a moment to visit our website at www.scawild.org and read their Board Bios! Welcome Jane Hoover, Pam Duquette and Hank Jones! Thank you to all who participated in the e-voting process!

SCA BUSINESS MEMBER HIGHLIGHT:
BRIAN HOOKER: RIVER COUNTRY MOTEL AND RV PARK

SCA wants to highlight our Business Member, Brian Hooker with River Country RV for his support!

Born and raised in Coeur d' Alene where he worked in construction and excavating. He found his love for nature as a hunting guide while living near the Bob Marshall Wilderness area. In 2018 he bought the River Country Motel and RV Park, a long term residence located off Highway 2, in Priest River.

As an avid fly fisherman, Brian's biggest concern is the fight for the Priest River. He recalls days floating the river and the spectacular fishing Priest River was historically revered for. He and his wife both believe its not too late for the river and explained the importance of acting now and following the science.

If you're a business owner, consider becoming an SCA business member! Along with being apart of the change, advertising opportunities are available for our business members!

WETLANDS ARE THE KIDNEYS OF THE PLANET! THEY FILTER WATER
AND TRAP SEDIMENTS AND POLLUTANTS, SUCH AS NUTRIENTS FROM FERTILIZERS, MANURE, LEAKING SEPTIC SYSTEMS, AND SEWAGE HOLDING PONDS FROM ENTERING SURFACE AND GROUNDWATER SOURCES!

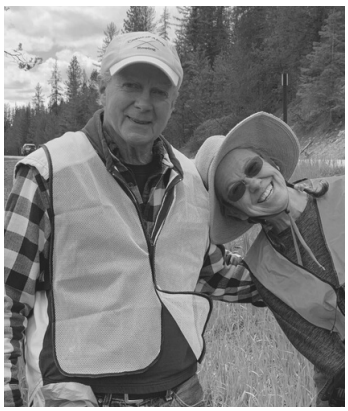
A FOND FAREWELL

With sadness and a huge amount of thanks, the SCA is losing 3 stalwart Board Members to term limits in January. The SCA has morphed into a very balanced organization over the last several years largely due to a very talented, hardworking, and diverse Board of Directors. We have been fortunate to have brainiac scientists, legal-eagle scholars, and people focused educators as Board Members guiding the SCA to a much stronger environmental presence over the last few years.

Eleanor Hungate-Jones: Thank you for not just your institutional guidance, but also your personal counsel. The Hungate family DNA is one with Priest Lake, and you have been an amazing advocate for the health of the Selkirk Watershed for years. Your tone of emotional stability and your constructive, sensitive conflict management skills will be hard to replace. Thank you for the subtle reminders that people are attached to all these scientific theories.

SCA Vice President Eleanor Hungate-Jones

Martin Stacey: Your innate wisdom has been a true anchor and voice of calm for the SCA during some pretty difficult times. Thank you. You have been integral to rewriting bylaws and guiding us to procedural correctness. You have assured that our governance structure has been integrated in our process. You will always be remembered for the SCA Board Motto - “Consistent with our mission.” The Board will always use that motto as a litmus test in perpetuity for difficult decisions. Although we may try, I doubt that we will ever match your eloquence.



Director Martin Stacey with Mary Quinn-Hurst during spring HWY 57 cleanup

Jim Lea: What can be said to thank you, a renaissance man. We have watched you over and over recognize a problem, predict the etiology, rally caring and knowledgeable people, organize a response team, and simplify data in a conclusive fashion. Pick the problem and you were there: algae growth, temperature impaired streams, sewer management, or epoxying temperature sensors deep in a freezing stream. Personally, I thank you for your friendship and the many stories of remote stream monitoring by foot, bicycle, water and brain power.

Director Dr. Jim Lea and his pup enjoying the sun during water quality monitoring!

Turnover at the Board level produces not just a little anxiety. We will miss these incredibly hard working people. Perhaps we cannot exactly replace the unique talents of Eleanor, Martin and Jim, but we have recruited several new Board members with their own set of talents and strengths we can learn from. (Read on in Sightlines for their introduction). As Board President, I commit to continue capitalization of our past Board Members' talents. We need to strengthen our non-Board committee structure with expansion and empowered membership involvement. Past Board members beware, you can run to your other volunteer positions, coach your competitive rowing teams, rescue the wayward racing sloop, groom Chipmunk Rapids for skiers, but we will not let you hide from the SCA!

Heartfelt thanks from
Curtis Wickre, Board President
On Behalf of the whole SCA Board and Staff

PRIEST RIVER: A KEY ELEMENT OF THE PRIEST LAKE BASIN NEEDS OUR PROTECTION!

The Lower Priest River needs our help. Thousands of people pass by the river each summer on their way to Priest Lake. The 45-mile-long section downstream from Priest Lake can be glimpsed from the highway at a few spots, so most folks miss the true splendor of this valuable natural resource and may not be aware of the threats to the river.

Priest River has two different sections. The Upper Priest River flows out of British Columbia near American Falls, flowing south to drain into Upper Priest Lake and fortunately faces minimal threats. The lower section of the Priest River flows from Outlet Bay at Priest Lake, converging with the Pend Oreille River on the eastern edge of the town of Priest River at the Army Corps of Engineers' Priest River Park ("The Mud Hole"). The Lower Priest River is impaired and is at risk.
The river experience includes low wetlands, rapids, riffles, pools, and meandering, lazy segments adjacent to forest and farmlands. Views vary from areas of confinement to panoramas with mountain backdrops. The Lower Priest River is a critical part of the habitat for many species of wildlife, most especially native west slope cutthroat trout and bull trout.

The Lower Priest River cold water fish habitat flowed freely from Priest Lake until a dam was constructed in 1950 downstream from where the river flows from Outlet Bay. This dam was replaced by a concrete gravity dam completed in 1978. The primary purpose of the dam is to maintain the lake level height desirable for recreation in the summer months. The Outlet Dam does not generate electricity.

There exists a misconception that Outlet Dam has had no influence on the health of the Lower Priest River. Altering the flow of the Lower Priest River for 72 years has resulted in unintended problems for the river: decreased flows in the river in late summer and increased water temperature of the water being released from the lake in late summer.

DECREASED FLOWS: During the months of August and September the storage of water in the lake, to maintain the level for recreational use, results in extremely low flows in the river below the lake. Prior to the construction of the Outlet Dam the mean minimum and average flows were higher volumes in late summer when compared to after construction of Outlet Dam.

	Before Dam (1914-1948) 34 yrs.	**After Dam (1951-1975) 24 yrs.**
August mean minimum	242 cfs	102 cfs
September mean minimum	174 cfs	71 cfs
August average	508 cfs	296 cfs
September average	337 cfs	277 cfs

(Source: Priest River: Wild and Scenic Draft Environmental Statement and Study Report, USGS Water Supply Papers, Water Resources Data for Idaho)

The average flows and the mean minimum flows significantly changed after installation of Outlet Dam, and that has negative impacts for the Lower Priest River, especially in late summer.

The USGS installed a gage downstream from Outlet Dam in 2015. Data collected from this site shows the same trends for outflows in late summer. For example, in 2021 the discharge from Outlet Dam was below 200 cfs for a significant period and below 100 cfs July 23 to August 9 and September 4 to 13. In the summer of 2022 the river fared somewhat better due to a good snowpack and a wet spring.

Water levels in the lake and the river are governed by state requirements. Recently updated Idaho state law requires that the lake level at the outlet gauge be maintained between 3 and 3.5 feet for the recreational season (Idaho Code §70-507). **The current minimum discharge requirement from the dam to the river is 60 cfs, based on an operations and maintenance agreement between the State of Idaho and the dam operator (currently IDWR**). The Idaho Water Resource Board holds a water right (Water Right No. 97-7380) on the Lower Priest River for 700 cfs between 7/1 to 7/31 and 300 cfs from 8/1 to 10/31.

There are periods in late summer where the 60 cfs minimum isn't being met because the mandated lake water rights has priority. The recreation level of the lake does not change in late summer and remains at that level until October when water is released to obtain winter lake elevation.

TEMPERATURE: The Lower Priest River has been identified as temperature impaired, primarily in late summer. The location and operation of the Outlet Dam results in lake water pooling

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CITIZEN SCIENCE VOLUNTEER MONITORING PROGRAM TO BE PRESENTED AT NATIONAL CONFERENCE

SCA Board Member Stan Miller will be moderating a session on Citizen Volunteer Monitoring Programs (CVMP) in the Inland Northwest at the American Water Resources Association National Conference in November. The session will spotlight four aspects of Citizen Science in the region. Dr. Jim Ekins from the University of Idaho will talk about the IDAH2O master water steward program and other citizen science efforts of the U of I's Water Extension program. Jule Shultz from the Spokane Riverkeeper will discuss the Latah Creek/Spokane River Sediment study being undertaken by the Riverkeeper. Rick Reynolds will describe the work being done on native and invasive crayfish in the Lake Roosevelt / Columbia River system. This work is an expansion of the "River Mile" CVMP emphasizing student involvement in water studies. Finally, Mr. Miller will describe the Selkirk Conservation Alliance's long term Priest Lake Monitoring Program and summarize the lake surface temperature changes that have occurred over the last three plus decades of observation.

Priest River: A Key Element of the Priest Lake Basin Needs our Protection

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upstream of the dam, and as the release of water is slowed down to maintain the recreation level of Priest Lake, the flow of water slows upstream of the dam. In the shallows upstream toward Outlet Bay aka Match Bay, this water is heated by the sun. In the shallow water there is no stratification of the temperature of the water. The temperature of the surface water is essentially the same as the water at the bottom of the river in the section above the dam. This warm water is released to the Lower Priest River.

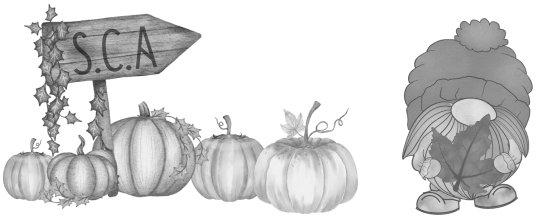
Two women on a log jam on Priest River.

The Outlet Dam is a tool that has been used for the primary purpose of holding back water to maintain a specific lake level. It is time to look at the dam as a multipurpose tool. In drought years, the dam is used to maintain a lake level that has no flexibility, and the Lower Priest River becomes expendable. Work started in 2020 to raise the height of Outlet Dam 6 inches, the purpose being to hold back additional water in the lake to be able to release more water to river in late summer, particularly during dry years. This is a step in a good direction in terms of improving volume of water being released in late summer but does nothing to address the temperature problem.

The solutions to the problems facing the Lower Priest River are achievable, but only through collaboration and compromise. The drainage cannot survive making the mistake of treating any portion as expendable. The best opportunity is to have all the stakeholders and resource managers collaborate in the assessment of the problems, and work to create solutions.

The momentum to restore and protect the Priest River is increasing. Several advocacy and outdoor groups have joined in support of looking for solutions in improving the habitat of the Lower Priest River, endorsing the work of the Priest River Project (priestriverproject.org), advocating restoration backed by science. Please take the time to explore the website and sign the petition to restore the river. Trout Unlimited and partners have begun efforts to establish a watershed advisory group, the Priest River Watershed Group (PRWG). It will be working to coordinate efforts centered on improving water quality, quantity, and the overall condition of habitat in the Lower Priest River. It is worth the effort to explore the Lower Priest River, become educated on the facts regarding the challenges, and support the restoration and enhancement of our valuable natural resource.

"PILLAR" PROGRAM UPDATES :
Education & Advocacy



SCA has three primary Pillar programs; Environmental Education Program, Scientific Research Program, and Environmental Advocacy Program with project activities occurring under each umbrella Pillar program. The following is a bit of an update on some of SCA's recent project work under each Pillar!

Advocacy Program

Citizens play a critical role in public agency oversight. SCA works to monitor the Bonner, Boundary and Pend Oreille county governments, Idaho Department of Water Resources (IDWR), Idaho Department of Lands (IDL), Army Corps of Engineers/Department of the Army (DA), and other regulatory agencies and local city governments for activities, plans, policies, projects etc. that would negatively impact regional, land, air, wildlife, forests and water resources. We develop and disseminate information, petitions and sign on letters, submit technical advice and comments, protest when necessary and conduct boots on the ground clean-ups and restoration projects. The historic outcome of increased public oversight and awareness of regulatory agency plans, policies, projects etc. is BETTER land management and stewardship of publicly owned natural resources!

Sandpiper Shores-Mosquito Bay Fen Wetlands Development

In February of this year, a 72 acre parcel encompassing much of the Sandpiper Shores Wetlands on the north end of Priest Lake was sold to two developers; Benjamin Grubb with Black Forest Construction LLC (Portland), Marissa Ferraro (Portland), Jessey L. Cereghino and his wife Linda with Cereghino Construction LLC. Concerned over the destruction of the wetland system, SCA has submitted letters of concern to ACOE, USFWS, IDFG, Lakes Commission, the Kalispel Tribe, IDEQ and Panhandle Health, as well as our allies at the Center for Biological Diversity, Idaho Conservation League and others. In addition, we developed and released a press release for media contacts and our membership and have an online petition circulating opposing development of the site. Our advocacy has led to the developer (Benjamin Grubb) and his planner reaching out to Kaniksu Land Trust (KLT) to discuss potentially placing 50+ of the wetland acres in to a conservation easement (CA) which KLT has stated they cannot take on, but the Kalispel Tribe has stepped up to the plate and has stated they would be interested in taking on the easement. SCA will keep you posted on this potential development and CA. During a site visit, the developer mentioned potentially filling in 4 acres of wetland to construct a road or boardwalk (1100 ft. long through the wetland), building a beach and punching in 8-10 new homes (north of Sandpiper road). SCA remains vigilant and submits regular records requests to the county and regulatory agencies for any necessary permits, approvals etc. needed by the developers to develop the wetland. Please keep an eye out for E-News updates and action alerts for this beloved and important wetland system!

Coolin-Chase Lake Wetland Development

As most of you know, in April of 2021 a 65 acre parcel in the heart of the Coolin Wetland system was awarded to developer Tricore Investments LLC. Despite great public outcry and regional concern for the system, over the course of the last year, this savvy developer was able to subdivide the acreage into 35 new parcels, 26 shoreline parcels and 9 parcels south of Warren Beach Road. SCA and the community have submitted petitions, Letters of Concern, Motions for Reconsideration for Minor Land Division (MLD) approvals, and have cited the many Bonner County Land Use Code violations and on and on….all have been met with a brick wall from the County Planning Department and BOCC. Further, SCA was shocked to learn through a public records request to the Army Corps of Engineers (ACOE) that a fill permit was granted on July 29! The permittee has been permitted by The Corps to discharge 1,449 cubic yards of fill in 0.315 acres of our beloved Coolin Wetlands for the purpose of constructing a driveway and structural fill pad to facilitate the development of a massive 4,080 sq. ft. building. There are some conditions, but unbelievably, the ACOE determined that the project "does not have adverse individual or cumulative impacts on environmental values". SCA has called on The Corps to revoke the permit for numerous egregious permitting application review and processing violations and important considerations.

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T**o read SCA's full letter to The Corps, visit our Facebook page.**

Please contact The Corps (see below for info) and let them know you want NWW-2022-00237: Gravelle – Warren Beach Road Development – REVOKED!

Here is a link to public comments for the ACOE and some other contact info.
https://www.nww.usace.army.mil/Contact.aspx

Walla Walla District Public Affairs
201 North 3rd Avenue
Walla Walla, WA 99362-1876
Phone: 509-527-7020
cenww-pa@usace.army.mil

Joslyn Park – Proposed City of Priest River wetland development

The City of Priest River has hired Welch-Comer & Associates Inc. and has been working on a plan to develop the Joslyn property which is across from the Mud-Hole at the confluence of the Priest & Pend Oreille Rivers. This 49 acre property encompasses important freshwater emergent and freshwater forested/shrub wetland habitat at the confluence of these two major river systems. The city is proposing major development on site with 30-40 RV spots, a marina, boat launch, soccer and softball fields, multiple parking lots, restrooms, basketball fields and more. Welch Comer presented their "master" plan on 10-20-22 at a community meeting in Priest River. SCA has been advocating for the conservation and protection of this wetland system and has engaged the help of Trout Unlimited, Idaho Conservation League and the Lakes Commission. We will keep you posted as we learn more and hope to work with the city to make this area a park that celebrates and preserves natural areas like wetlands!

Misc. agency oversight updates

SCA has also been actively monitoring activities on Priest Lake and Priest River shorelines and has recently petitioned IDWR and IDL on several permit violations in Kalispel Creek and Bay, Reeder Creek and Priest River. Stay tuned for our E-newsletter for updates on these issues!

This, by no means, is all we are working on, just some of the highlights of our recent advocacy work!

Education Program

One of SCA's primary mission goals is to educate the public about environmental issues that negatively impact regional air, land, forests, wildlife and water. Our goal is to cultivate an environmentally conscious community of active environmental stewards. We work to educate the community by giving free public talks and lectures & working with regional schools and partnering agencies, groups, associations, etc., to provide supplementary hands-on environmental education to our local youth. In addition, we work hard to keep up to date on issues and educate the community via regional media outlets and our social media platforms; Facebook, Instagram, E-News and our Sightlines newsletters.

SCA just wrapped up an amazing year of outdoor hands-on environmental education for our local Bonner and Pend Oreille County students! Throughout the months of June to September SCA was able to facilitate and participate in numerous outdoor environmental educational opportunities for our amazing local students. These field trips immerse our students in the living classroom around them! During some of these field trips students rotate through multiple stations; Native Fisheries, Water Quality, Aquatic Macroinvertebrates, Woodland Plant Identification, Fire Science, Nature Poetry and Wetlands. At each station, students learn to identify species, collect real time water quality data, collect biodiversity observations, observe living creatures and so much more! What a joy it is to see the next generation absorbing this information like a sponge (wetland!) and hands shooting up to ask and answer complex questions. The thrill that crosses the faces of our students when they go on a wetland walk, closely observe a caddis fly, watch a Mayfly hatch, collect water quality data like a true scientist, observe and identify native fish, etc., is worth its weight in gold. One of the best parts of our outdoor learning is students get to interact with and to learn from numerous local agency professionals including; Hydrologists, Wildlife Biologists, Conservation Biologists, Fire Science Managers, Environmental Attorneys, Rangeland Ecologists, Wetland Scientists, Conservation Officers, Fisheries Biologists (and more) from IDFG, USFS, Lakes Commission, ACOE, Kalispel Tribe, Master Naturalists, Trout Unlimited, Center for Biological Diversity and MORE! It is often said that if you cannot see it, you cannot be it. Our students got to see just how cool outdoor/natural science fields can be and we hope we inspired the next generation of stewards! Please check out our Facebook & IG pages for pictures!

SCA FINANCE COMMITTEE REPORT FOR 2022

WETLANDS ARE AMONG SOME OF THE MOST BIOLOGICALLY PRODUCTIVE AND DIVERSE COMMUNITIES ON THE PLANET;
COMPARABLE TO TROPICAL RAIN FORESTS AND CORAL REEFS.
UP TO 1/2 OF NORTH AMERICAN BIRD SPECIES NEST OR FEED IN WETLANDS.

BY: JON QUINN HURST, SCA DIRECTOR

The Selkirk Conservation Alliance budget is monitored on a quarterly basis by the SCA Finance Committee. The committee includes Jon Quinn-Hurst (Chairperson), Jon Miller, and Adam Kress. The committee is supported by Jennae Pegg, Office Manager, and is also attended by Amy Anderson, Executive Director.

The 2022 Budget saw an increase in expenditures due to rising supply costs, repairs for the research pontoon, increased insurance rates, and staffing. The increased expenditures have been well spent, resulting in increased advocacy for the environment and ability to respond to the challenges to clean water. SCA remains solvent due to the work of the Executive Director and the Fundraising Committee. SCA meets the expenses for projects and staffing in this budget year. We are engaging in the process of developing a 2023 budget.

The Selkirk Conservation Alliance is the lead environmental advocacy organization of the Priest Lake basin with legal standing on environmental issues.

SCA relies on the generous support of our members and donors to fulfill the mission of engaging the public in Southern Selkirk resource and land management issues. There are significant challenges and opportunities for the basin and to meet these the Board of Directors has chosen to focus on continuing to increase membership income and donations. The challenges include protecting the Priest Lake wetlands from destructive development, protecting the water quality of the Priest Lake basin, protection of the Lower Priest River and ongoing advocacy and protection of critical wildlife habitat, especially recovery zones for protected species.

SCA is thankful to our dedicated members who support the goals and projects through membership and donations. The Selkirk Conservation Alliance Board of Directors sincerely requests that you talk with your friends and neighbors about the work of SCA and encourage them to join SCA to fund its work in monitoring and protecting the environment of the Priest Lake Basin. Donations in addition to memberships are always greatly appreciated!

In summary, we have a tight balanced budget that we are closely monitoring, and our goal is to continue to fund the research, education and advocacy work of the Selkirk Conservation Alliance. We rely on member support and donations, so please keep SCA in mind as we continue to strive to Keep the Wild in the Selkirk Ecosystem.

DONATIONS NEEDED FOR FIRST-EVER SCA ONLINE AUCTION!

The MAJORITY of Selkirk Conservation Alliance's income comes from donations, memberships & fundraisers.

SCA had their first ever fundraising event; the Celebasin Celebration Film Festival and raised almost $10,000!! This is an amazing milestone for SCA and we NEED YOUR HELP for the next step in our journey.

This holiday season SCA will be rolling out our next fundraiser, hosting an online auction!

We are open to all donations of new and like new items!

Help us reach our goal of $15,000, and send your unused or donated items today!

Send your photos to SCA@SCAWILD.ORG

SELKIRK CONSERVATION ALLIANCE

OUR MISSION:

Engage the public in Southern Selkirk resources and land management issues through cooperation, scientific inquiry, education, and economic diversity.