

Fall 2023

# SIGHTLINES

A PUBLICATION OF

SELKIRK CONSERVATION ALLIANCE

EST. 1986

Trestle Creek development UPDATE

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WEBSITE : [WWW.SCAWILD.ORG](http://WWW.SCAWILD.ORG)

EMAIL : [SCA@SCAWILD.ORG](mailto:SCA@SCAWILD.ORG)

PHONE : (208) 448-1110

William Henry "Billy" Egolf



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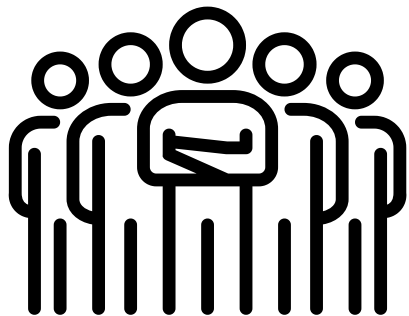
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# THANK YOU

## to our amazing sponsors

SCA would like to recognize the people and organizations that support our work!



**East Priest Lake Cabin Owners Association!**

**&**

**Beaver Creek Camp Association!**



## SCA WOULD LIKE TO EXTEND OUR DEEPEST GRATITUDE TO THE LOCAL BUSINESSES THAT WENT ABOVE AND BEYOND TO SUPPORT CONSERVATION!

**ACE Hardware Priest River, Evans Brothers Coffee Roasters & The Pour Authority!**

In September, Evans Brothers Coffee Roasters developed a special SELKIRK roast in which a percentage of the proceeds from every bag was donated to SCA! Also in September, Ace Hardware Priest River held a 'round-up' for SCA where every customer was asked to round up to the nearest dollar to support SCA! In October, The Pour Authority also hosted an SCA fundraiser event where a dollar for every beer sold was donated to SCA! WE CANNOT THANK THESE LOCAL BUSINESSES ENOUGH FOR THEIR SUPPORT!!!





# PRESIDENT'S MESSAGE

BY: CURT WICKRE, SCA PRESIDENT



Autumn has fallen upon Priest Lake. The morning fog rising off the lake bays is spectacular and the angle of the evening sun is dramatic. What is most remarkable however is the onset of solitude and peace that accompanies Labor Day annually and seems to arrive more precipitously every year. Buzzing jet skis suddenly disappear. Surf and wake boats with booming subwoofers no longer pound the shoreline with 3 foot waves. The clarity of our pristine lake water precipitously returns.

Indeed, the environmental quietude reflecting the onset of fall is becoming more prominent every year. I don't think that the increased awareness of seasonal lake ambience change is completely a result of an aging imagination or photo shopped memory. "Lake Season" has become much busier in the last several years making the end of "Lake Season" that much more - tranquil. Apparently, Priest Lake has been discovered and is providing enjoyment to more and more people. Just drive the roads to experience the summer traffic. Boat the shores to look at the many recently built homes and cabins. Stop at the Marinas and Resorts to see their recent expansion. Price the lake shore and golf course real estate. View the multiple large secondary and tertiary clearings and new community developments. Try to schedule a talented Priest Lake tradesperson for a cabin project during the working season.

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**“Apparently, Priest Lake has been discovered and is providing enjoyment to more and more people. Just drive the roads to experience the summer traffic. Boat the shores to look at the many recently built homes and cabins.”**

— ” —

The resorts have markedly expanded their Marinas recently, yet still struggle to meet the increasing demand to provide that romantic lake shore dinner event. What will be the expectation for lake and boat support as tourism and local development further increase? I wonder if less romantic lake infrastructure need, like sewer management, is able to stay of ahead of that human “impact.”

The Priest Lake Selkirk Basin has been discovered and further development is not just inevitable, but is here now. Accepting that fact should not be tantamount to ignoring potential problems, but instead, a loud mandate for active involvement to prevent adverse outcomes from becoming inevitable as well.

The advocacy arm of the Selkirk Conservation Alliance is working hard to monitor the planning and zoning processes to help assure good environmental outcomes. We are trying to prevent development that requires filling and destroying sensitive wetlands. Stream riparian health and fish habitats need our advocacy, not destruction. We are working to assure that the capacity of sewer systems is part of the planning process prior to project permitting to prevent lake and ground water contamination. Peering into the murky, opaque zoning process is crucial to assure that development projects meet defined community growth goals. We are monitoring water quality of the streams feeding the lake and lake water quality, all of which are at risk from increasing human impact.

I am sure we are all aware of the multiple environmental threats from the growing human impact on our Selkirk Priest Lake Basin. Perhaps we have a growing acceptance of the inevitability of further development. Now, we need to work together to attain a positive environmental outcome, or at least minimize environmental risk. The SCA is poised to be your active partner in that pursuit. We need however, your time, energy and ongoing generous financial support.

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## WELCOME TO OUR NEW (OLD) SCA BOARD MEMBER - DR. JIM LEA!

Once the SCA gets into your blood, you can't shake loose its DNA! With recent Board turnover resulting from By-law tenure status, the SCA vowed to not lose the talent and expertise of ex-officio Board Members. Jim's involvement with the SCA never wavered after leaving the Board and he has now agreed to return to leadership position with the SCA. Thank you Jim, for your ongoing support and hard work on behalf of the organization. We welcome you, your Scientific Principals, and your clean water advocacy back to the Board!



On behalf of the Board of Directors



# PART II - THE PHOSPHORUS (AND NITROGEN) STORY

BY: DR. JAMES LEA

Three years ago I wrote an article describing the importance of phosphorus (or rather its absence) in our Priest River/Lake watershed. Our lake and streams are generally crystal clear because the waters contain very minimal concentrations of nutrients. This makes it difficult for algae and aquatic vegetation to thrive. Since that time we have taken dozens of water samples from the lake as well as every major tributary stream. In addition this spring a Ph.D. thesis from University of Idaho examined the role of sewer districts in the management of nutrients such as phosphorus and nitrogen. So now is a very good time to review what we know about these nutrients and the issues they may create in our environment.

To briefly review, both nitrogen (N) and phosphorus (P) are quite scarce in our Priest environment. Weathering rock is ordinarily the natural source of P, but our igneous bedrock contains virtually no P. In the east side streams, especially the northern streams, we generally find that P levels are undetectable. Another source of P is rotting vegetation. This is probably why we find mildly elevated levels in some of the west side streams such as Kalispell and Reeder which both derive considerable water from wetlands such as Bismarck Meadows. Eroded soil will carry P that is adsorbed to soil particles but this is generally unavailable to plants.



Finally fertilizer probably was a significant contributor to the lake P in the past. However, since 2017 Washington has banned P in fertilizers labeled as lawn fertilizer. Since North Idaho receives shipments from Washington warehouses, we no longer likely have much P derived from lawn fertilization.

Nitrogen is principally derived from atmospheric molecular N<sub>2</sub>. This N is unavailable to plants until nitrogen fixing bacteria chemically convert it into nitrates and nitrites

Finally, large quantities of N and P are imported every month of every year by visitors to the lake and lake residents. These nutrients come from our groceries. Food is processed in our bodies (we need these nutrients too) and eliminated into our toilets. From there the wastewater is processed initially in a septic tank. Then it is pumped up to sewage lagoons where bacteria consume both P and N. The bacteria cannot remove all the nutrients so the remaining wastewater is irrigated out onto a plot of native vegetation, mostly consisting of conifers. The assumption has been that the trees will take up some of the nutrients and the soil will bind the rest.

This process was examined in research done by Eureka Joshi at the University of Idaho. Her thesis was published recently. In this study five districts, similar in every way to ours, located near Lake Pend Oreille and Lake Coeur d'Alene were evaluated. Some districts were relatively new although others had been in operation for 20-45 years.

In brief she found that in the early years the native conifers did a very good job of absorbing nutrients and this resulted in measurable growth. However, over the course of decades the effect waned.

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In time the soils began to show evidence of saturation, particularly to N. She estimates that this could begin to be an issue around 22 years of service.

So far most of the P seems to be bound to the soil, but the soil's capacity is not infinite. It appears that after a period of time, as yet to be determined, the irrigation plots will have to be retired and new land found. Mark Coleman, Eureka's supervisor at U of I, wants to confirm these findings and hopes to include some of our Priest Lake districts in these studies. This would provide very useful information to help guide further operation and planning of our current sewer districts.

We continue to observe plumes of aquatic vegetation growing over the course of the summer at groundwater outflows all along Kalispell Bay. For a number of years we have observed elevated levels of P in shallow groundwater wells near the lake. Since the P from our wastewater appears to be effectively bound by soils at the district sites, I asked Dr. Coleman what he thought might be the cause of our problems at lakeside. Without hesitation he indicated it is most likely due to leaky sewage pipes.

In this regard it is important to note that at Kalispell Bay and Coolin the oldest PVC sewage lines are 50 years old. This is their rated lifetime. Clearly the time has come to begin replacing our oldest lines, starting with the ones in closest proximity to the lake.



# DONATIONS ARE THE LIFEBLOOD OF SCA

BY: JON MILLER

A little over two years ago, SCA was struggling. A major source of our funding, a \$30,000 annual foundation grant, was ending. We had no executive director, and a Board of Directors trying valiantly, yet ineffectively, to operate as organization staff. On the finance committee, we were in crisis mode, asking questions like, "What would a bare-bones budget look like, enough to keep SCA alive?" Then, the late Barry Rosenberg, a founding board member of SCA, led a fundraising effort to hire an executive director. The money raised through Barry's initiative gave the Board enough hope and courage to hire Amy. SCA was on the move again, thanks to these special executive director contributions and subsequent donations from our members. Then, now, and always, donations from members, beyond their annual membership dues, are the lifeblood of SCA.

We now have about 170 memberships in SCA, individuals, couples, and families. On behalf of the Board of Directors of SCA, I thank you for your membership. It shows that you share in our vision and mission, that you recognize that the Selkirk's Priest Lake Environment is a special place worthy of our efforts in science, advocacy, and education. The more members we have, the more effective we can be. To some extent, "there is strength in numbers," but membership numbers alone won't accomplish our goals. Donations by members are more than nine times basic membership dues.

47% of our memberships include a donation above and beyond basic membership dues. We thank you so much. Donations, which range from \$5 to \$5,000, pay the salary of our executive director and other staff, fund our lake and stream water quality monitoring efforts, and help us "watchdog," stall, slow down, and hopefully stop unwarranted, unwise, destructive development, such as that planned in the Coolin Wetlands. And, in turn, our amazing executive director, Amy, expands our funding base with her grant writing skills.

If you are not a donor, please consider joining 47% of your fellow members and donate beyond your annual dues. I don't know what the right donation is for you, but it's probably not zero. Please check out possible funding levels on our enclosed membership form. One might be right for you. If you are an existing donor, we thank you. But we urge you to dig a little deeper into your pocketbook this year. When you swim, boat, ski, or paddle on the lake. When you float the river, or fish, or pick huckleberries, or hike, or camp, or live here for part of the year, you'll know it was worth it in this amazing place. You are supporting the ONLY organization dedicated to protecting and enhancing this place we love.

— “ —  
**TO SOME EXTENT, "THERE IS STRENGTH IN NUMBERS," BUT MEMBERSHIP NUMBERS ALONE WON'T ACCOMPLISH OUR GOALS. DONATIONS BY MEMBERS ARE MORE THAN NINE TIMES BASIC MEMBERSHIP DUES. 47% OF OUR MEMBERSHIPS INCLUDE A DONATION ABOVE AND BEYOND BASIC MEMBERSHIP DUES.**  
— ” —

## CYANOBACTERIA – NOT ALL "BLOOMS" ARE ALIKE – THE BASICS OF THESE BACTERIA

BY: STAN MILLER

Back in my high school and most of my early college years, all living things were either plants or animals. Today there are five or more "kingdoms" into which all life is placed. In the old days, cyanobacteria were simply lumped in with other single plants as "algae." Because of their color they were often referred to as blue green algae. In today's system, because they don't have a cell nucleus they are classified as bacteria in the kingdom Monera. The Kingdom Monera is characterized by organisms without a nucleus. It includes all the common bacteria such as, e coli, staphylococcus, streptococcus, other bacteria, and of course cyanobacteria.

Cyanobacteria are of interest to lake water quality specialists for two main reasons. First, while they are found in almost all natural waters, in eutrophic (nutrient rich) water they can easily form "blooms" characterized by slimy mats of green scum on a lake. Many of these organisms are able to fix nitrogen from the air into a form useful for plant growth. Consequently, an abundance of phosphorus often triggers a bloom. In mesoeutrophic to eutrophic lakes this often occurs in the fall, when plants growing on the bottom of a lake die. When this happens most of the phosphorus in these plants is released into the water column; a cyanobacteria bloom may occur. The second concern is that sometimes, not always, these organisms produce toxins. It is not uncommon for animals (pets especially) to die from ingesting these toxins. While humans can die from exposure, usually they only suffer skin irritation and a few days of serious gastrointestinal distress. In some especially severe cases liver and kidney damage can occur.



# TRIBUTE TO BILLY

BY: DAVE BOSWELL

**"ALL THE AIR A SOLEMN STILLNESS HOLDS."**

Listen, SCA members! Be grateful, quietly. A solemn stillness fills the air.

Dear reader, you got lucky. In 1976, the Selkirk-Priest Basin got lucky. We all got lucky. In 1976, William Henry "Billy" Egolf arrived here.

**"OFT DID THE HARVEST TO HIS SICKLE YIELD; HIS FURROW OF THE STUBBORN SOIL HAS BROKE."**

He'd come from New Jersey with his wife, Barbara, via Colorado and Addy, WA. Both were still in their twenties. They bought the old Bettencourt place on the Upper Bearpaw. Like many in those days, Billy was a "back-to-the-lander." Like others, he'd had it. He'd had it with the Vietnam War, had it with Dick Nixon, had it with the killings of Jack and Bobby and Martin, and others. So, with a big block of his life still ahead of him, he checked out -- with good reason. He went back to the land. He began a new life in the Selkirk-Priest Basin.

**"HOW JOCUND DID HE DRIVE HIS TEAMS AFIELD.... AND SCATTERED PLENTY OE'R A SMILINGLAND."**

Always the horseman, the cattleman, the stockman, the farmer, always a steward of his own ranch – the Washaho – he raised and showed Percheron draft horses for 40 years.

He would be appointed to the Board of Directors of the National Percheron Draft Horse Association. He worked out as a builder around Priest Lake. He proved himself steady, measured, reasoned, competent. All around.

**"ALONG THE COOL, SEQUESTERED VEIL OF LIFE HE KEPT THE NOISELESS TENOR OF HIS WAY."**

In 1983, Billy was asked to sign on as a founding director of the newly-formed Selkirk-Priest Basin Association ("SPBA"). Nothing good or responsible was happening on either state or federal lands at Priest Lake, or other lands around the Basin. One hundred million board feet of forest was being cut down every year from federal lands.

Much the same was happening on the state side of Priest Lake. Native species were going extinct. Creeks were filled with sediment. Logging roads riddled wildlife habitat. There was no stewardship. And so, Billy accepted. He was going to fight for conservation, for the environment, for right. He signed on. We all got lucky.

**"OFT HAVE WE SEEN HIM AT THE PEEP OF DAWN, BRUSHING WITH HASTY STEPS THE DEWS AWAY, TO MEET THE SUN UPON THE UPLAND LAWN."**

Over the decades, Billy was there. He was there when SPBA took aim at the massively rapacious and licentious logging on federal lands on the Priest Lake District, helping perfect the craft of filing formal appeals of proposed timber sales using science as the weapon -- and understanding that science, to win.

Billy was there when SPBA took aim at the catastrophic logging taking place on Idaho State lands (still) and supported SPBA's groundbreaking civil action against the Idaho Land Board, all the way to the Idaho Supreme Court (losing, of course, but not without a thoughtful dissent by one farsighted Justice).

Billy was there on the Board voting "yes" when SPBA successfully fought – and prevented -- the proposed federal clear-cutting of the entire Upper Priest River drainage, winning permanent protection for it, including nomination for Wild and Scenic River designation for the Upper Priest River.

Billy was there when SPBA orchestrated Endangered Species Act protection for the last remaining population of caribou in the contiguous United States and when a British financier sought (unsuccessfully) to commercialize 5000 acres of Priest Lake's shores and uplands in 1985.





## TRIBUTE TO BILLY CONTINUED.....

But he was also there as a sturdy friend. He was there to help neighbors put up firewood, to calve out in the Spring, to foal the horses, to plant, to harvest, to build. Billy was always there. We all got lucky.

**"LARGE WAS HIS BOUNTY, AND HIS SOUL SINCERE; HEAVEN DID A RECOMPENSE AS LARGELY SEND."**

Then came the tragedies. Billy and Barbara lost their only child, a son, in 2000. Later, the stroke. Billy had to give up an active seat on the Board. And though he would be confined, he kept his mind and his cheerfulness. When he died in July, I cast one longing, lingering look behind, as we all should.

We can read Billy's legacy in the protections he garnered for the Selkirk-Priest Basin – its unparalleled beauty, its continuing wildness, SCA's continuing work. This was Billy, a founder. You can read him all around us. He would want it to continue. So, be grateful. His was a life well-lived. His suffering is over. His work will remain. The memories will stay forever.

We all got lucky. Thank you, Billy.

**"HE GAVE TO MIS'RY (ALL HE HAD) A TEAR; HE GAIN'D FROM HEAVEN ('T WAS ALL HE WISH'D), A FRIEND."**

Godspeed, my friend.



William Henry "Billy" Egolf

MEMORIAL CONTRIBUTIONS SHOULD BE MADE TO:  
SCA P.O. BOX 1809, PRIEST RIVER, IDAHO 83856  
IN MEMORY OF BILL EGOLF

## THE "SCOOP" ON SCA PRIEST LAKE STREAM MONITORING

BY: DR. JAMES LEA

SCA has been monitoring stream chemistries and temperatures in the tributaries of Priest Lake since 2020. Each year we manage to add additional streams to the point where we now have included every significant stream flowing into the lake. Last year we added Lamb Creek, Binarch Creek and Upper West Branch. This year we added Reeder Creek, which had previously been omitted as an oversight. Many of the streams have now had chemistries measured up to 16 times altogether. We now measure the nutrient phosphorus (P) primarily since the aquatic vegetation in the lake is limited by the availability of P. Generally we want to see levels of 10 ug/l (micrograms per liter) or below. With regard to temperatures we want to see temps below 19C (66 degrees F) since our streams, river and lake support cold water species of fish and insects.

The east side streams generally are all quite cold and stay below 19C even in the hottest months with the exception of Soldier Creek, which in its lower elevation reach is sun exposed and slow moving. On the west side some years Kalispell, Reeder and Granite may touch 19C or above for a few hours on the hottest days. Lamb Creek generally stays cooler probably because it is fed by cold water from its aquifer. The big surprise is Binarch Creek, which flows into the river 2 miles below the dam. It is the coldest stream we have measured. This almost certainly is due to an extensive communication with groundwater, abundant shade and a general absence of recent logging in the drainage. (We wish Binarch was a much bigger stream.) In contrast the Upper West Branch, a few miles south of Binarch, is quite warm.

Levels of P are frequently undetectable on the east side, especially in the northern streams. Cougar Creek is the exception here with an average P of 15 ug/l. We are not sure why this is except there has been quite a bit of road construction in the drainage historically. On the west side we don't measure P in Binarch and Upper West Branch because of financial restraints. Granite has averaged a level of 7 ug/l which is excellent. The other streams (Reeder, Kalispell and Lamb) average out around 16 ug/l and show a common seasonal pattern. In the spring the values are always higher and associated with increased turbidity.

This suggests that P is elevated because soil is being eroded and P is known to bind to soil particles very tightly. All these drainages have had an extensive history of road building and logging over decades and this is a likely explanation for the spring run-off spike. Later in the summer the levels drop significantly to an acceptable 10 ug/l. Overall our streams continue to look reasonably good but we want to continue to monitor over time as our climate warms and we experience increased development. Also our data can be used to project a future Priest watershed utilizing various models developed by scientists from EPA and USGS. We are just now starting to envision this process.

Finally thanks to all those who have adopted a stream. If you or your family are interested in adopting a stream you love, please let us know! Visit our website [www.scawild.org](http://www.scawild.org) to ADOPT TODAY!

## CELEBRATING THE GREAT BEAR!

BY: PAM DUQUETTE

This summer, July 21-23 at the Wilderness Gateway Campground on the mighty Lochsa River, there was a campout celebrating the "Great Bear:" Ursa Horribilis! Heeding the call from Brett Haverstick of Wilderness Watch, and dubbed "The Great Bear Campout," about 60 scientists, lawyers, passionate citizens, Nez Perce, and activists, including our SCA Executive Director Amy, past Board Member Janet Torline, and myself gathered. We came together to strategize how to protect the grizzly bear from efforts by Idaho, Wyoming, and Montana to prematurely strip federal protections from the bear. We also took turns sharing our personal "why" we revered grizzly bears, and/or to share encounters we have had.

Two petitions from the governors of Montana and Wyoming were accepted in late 2021 by the U.S. Fish & Wildlife Service to review the listing status of grizzly bears in the Greater Yellowstone Ecosystem and the Northern Continental Divide Ecosystem.

This would return bears to state management where many northern Rockies state agencies are already preparing for trophy hunts should the bear lose its Endangered Species Act protections. Idaho's Governor Little was denied his petition to delist populations in the Cabinet Yaak, Northern Cascades, Bitterroot and Selkirk recovery zones, but he has joined a Memorandum of Agreement to delist them in the other areas. Now we await a 12 month finding of whether the bears in one or more population segments have recovered enough so they may be removed from the list of endangered and threatened wildlife.



Great Bear Campout 2023 participants!



One group presenting at the campout, the Wild Earth Guardians, say it has become clear that "staying on the defense is not enough. It's time for us to rise up and think outside the box - to get creative and go on the offense for grizzly bears." Besides shared ideas of how to accomplish this, we shared an amazing chili feed pot luck and took time to cool off in the river! A consensus was reached that we would again meet next spring to see where things are then.

I was happy to attend, and I learned a lot! I learned about the need for interconnectivity for the bear's survival and breeding. Interconnectivity is imperiled mostly by human impact. I was surprised to find out that here in our Selkirk's we have our own denning population of grizzlies. To make this possible, two females need to successfully reproduce for two years. This gives us more reason to protect and celebrate our Selkirk Basin Watershed!

STAY TUNED FOR THE NEXT SIGHTLINES PUBLICATION TO READ ABOUT A BONNER COUNTY "WIN/WIN" STORY FOR THE BEAR!

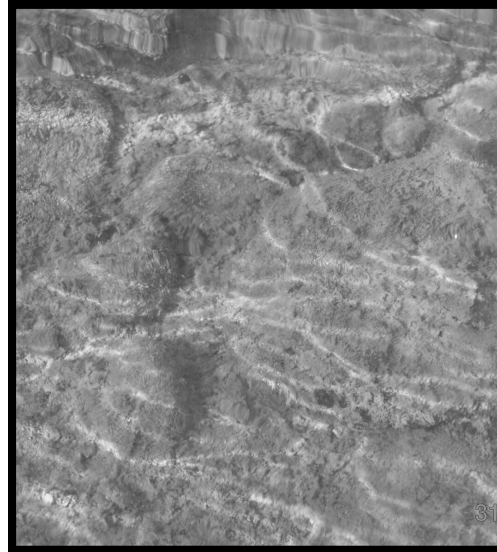
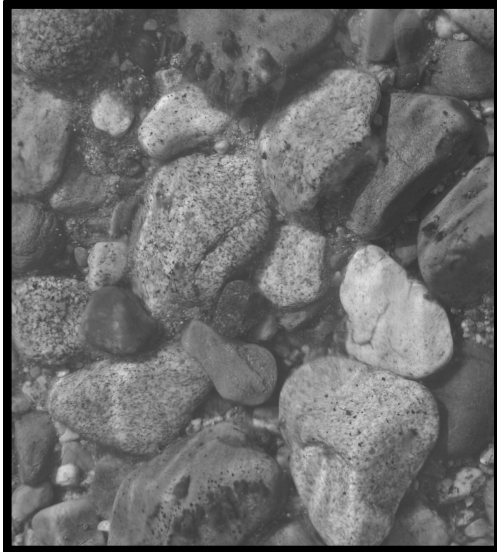


# **The *BROWN SLIME!* - not a horror movie from the 50's, but just as scary!**

BY: BETTY GARDNER

***DIDYMOSPHENIA GEMINATA, DIDYMO OR ROCK SNOT ON THE PRIEST RIVER: COMING SOON TO WATERWAYS ACROSS THE ENTIRE UNITED STATES!***

Look at the beautiful array of colors (use your imagination!) that rocks that do not have didymo on them include. See the cracks and crevices around the rocks which serve as nurseries for many species of living organisms. This is north of our spot on the river.



This is what a didymo infestation looks like. The floor of the river is mono-colored, brown and slimy. The natural, beautiful colors of the riverbed are obscured. There is nowhere for fish or macroinvertebrates to hide their eggs or to complete metamorphosis. This is on the river in front of our house.

I have been living on the Priest River for forty-five years. Like many water lovers, my family and I spend countless hours swimming, kayaking, boating, fishing, birdwatching, and loving the river almost daily throughout all four seasons. Around 2003 we noticed a thin, brown slimy film appearing on the banks spreading out a few feet into the river. The following year it reappeared but was thicker, by about  $\frac{1}{4}$ ," and was spreading further towards the center of the river doing the same on the other side. By the third summer the rock snot, or didymo, completely crossed the ninety-foot width of the river. We could see it in spots when we snorkeled, even where water was fast moving and six feet deep.

In three years, it covered about  $\frac{1}{8}$  of a mile of river on both sides. Let me paint a visual picture for you. This stuff looks like raw sewage. When you walk on rocks that are covered with it, chunks float up. Even in twelve inches of water you cannot see your feet, but you can see stuff that looks like vomit surrounding you and your grandbabies playing in the water. When you fall, because it is slippery, you will find yourself sitting in a mess. My son says, "It kind of looks like 'yak' in the toilet that swirls around when you flush it."

At an IDEQ meeting whose topic was the lower Priest River, I took samples of slimy rocks. I was told the rug-like mat was algae caused by warm water temperatures and sediment loading. The caveat being, "until public outcry demanded intervention nothing could be done and by the time the public demanded action it might be irreversible." Twenty years later, this invasive pest is appearing in many places on the Priest River. The key words here are, "it spreads."

*Didymosphenia Geminata*, Didymo or rock snot produces nuisance growths in freshwater rivers and streams. It can grow up to 7.78 inches thick. It is a diatom, a form of algae. Since the 1980's it has become invasive in the US and around the world, becoming noticeable in Idaho around the late 1990's. It is naturally occurring in cold water streams but imbalances in nutrients and climate change have caused it to spread uncontrollably. In the United States it is most prolific in Idaho, Washington, and Montana. It adversely affects stream ecosystems. It smothers macroinvertebrates like dragonfly larva and fish eggs. It fills in the cracks in a stream floor which when open, loose, and healthy, function as nurseries for many organisms needing those spaces for incubation and metamorphosis.

When a species cannot successfully reproduce and mature as nature intended, an imbalance occurs in the ecosystem that depends upon them as an integral part of the food chain. If those species don't mature, they can't eat and keep in check nuisance bugs like mosquitos and horseflies. If they disappear, the creatures that need them for food eventually deteriorate as well.

Fisheries have declined around the world, especially in New Zealand where didymo became endemic. A thick mat of didymo can make fly fishing difficult as lures become entangled in the brown rug. In New Zealand spreading didymo is punishable up to \$100,000 fine and imprisonment.

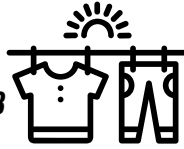
The following methods have been recommended to prevent the spread of didymo in New Zealand:

**CHECK: BEFORE LEAVING THE RIVER, REMOVE ALL OBVIOUS CLUMPS OF ALGAE AND LOOK FOR HIDDEN CLUMPS. LEAVE THEM AT THE SITE. IF YOU FIND CLUMPS LATER DO NOT WASH THEM DOWN THE DRAIN, TREAT THEM WITH THE APPROVED METHODS BELOW, DRY THEM AND SOAK THEM IN BLEACH FOR AT LEAST 4 HOURS.**



**CLEAN: SOAK AND SCRUB ALL ITEMS FOR AT LEAST ONE MINUTE IN EITHER HOT (140 DEGREES F) WATER, A 2% SOLUTION OF HOUSEHOLD BLEACH, ANTISEPTIC HAND CLEANER OR DISHWASHING DETERGENT.**

**DRY: IF CLEANING IS NOT PRACTICAL (E.G., LIVESTOCK, PETS), AFTER THE ITEM IS COMPLETELY DRY WAIT AN ADDITIONAL 48 HOURS BEFORE CONTACT OR USE IN ANY OTHER WATERWAY.**



Didymo causes problems by, “smothering native species of plants, insects, mollusks, and algae, and reducing habitat for insects, for aquatic insects and fish. “Macroinvertebrates that require exposed sediment are expected to be negatively impacted by this loss of habitat.” (Spaulding and Elwell 2007). I see this where we live by the almost complete disappearance of native brown crayfish for the entire one-eighth-mile stretch of river where didymo smothers the entire streambed floor. Another consideration is, “Didymosphenia geminata mats may provide habitat for Tubifex tubifex, which is a host to whirling disease (Myxobolus cerebralis) affecting salmonids; whirling disease prevalence is three times higher in streams with blooms of D. geminata.” (Byle 2014).

“D. geminata is: • the only freshwater diatom to exhibit large scale invasive behavior and a persistent phenomenon on a global scale; • a species with the biological capacity to produce inordinate amounts of stalk material (extracellular mucopolysaccharides) with unique properties; • a significant biological impact to stream ecosystem function with the ability to alter food web structure and hydraulics of streams and rivers; • an organism that has expanded its ecological range and tolerance, exhibiting a pattern of growth with potential to impact fisheries • a significant strain on regional and national economies through impacts to tourism, fisheries, and hydropower; and • an organism for which we lack basic biological study.” Increase in nuisance blooms and geographic expansion of the freshwater diatom Didymosphenia USGS. (Spaulding, S.A., and Elwell, L., 2007)

One map in that paper forecasts with red dots where didymo blooms will appear in the United States in the near future. This map colors most of the rivers and streams in the entire United States. It is time for people to demand action from IDEQ, IDF&G, EPA, IDL, BLM and other agencies that are responsible for protecting our water. Get informed about this. Voice your concerns with any and all agencies that are funded with your tax dollars. Presently we know the spread is human caused. Let us hope humans can come up with a remedy. If you love being on the water don't wait until this is in your favorite swimming or fishing hole to sound the alarm.

For more information:

Idaho State Department of Agriculture  
Aquatic Invasive Species Management & Control Program  
<https://invasivespecies.idaho.gov/aquatic-invasive-species#:~:text=The%20Idaho%20State%20Department%20of,by%20aquatic%20plants%20and%20pests.>

Idaho Department of Parks & Recreation  
Invasive Species Program  
<https://parksandrecreation.idaho.gov/activities/sailing/invasive-species-program/>

US Department of Agriculture  
National Invasive Species Information Center  
<https://www.invasivespeciesinfo.gov/us/idaho>

CONTINUED FROM PAGE 5 - CYANOBACTERIA

But, not all cyanobacteria blooms produce toxins. Studies reported by the National Institutes of Health indicate that between 25% and 75% of blooms produce toxins. Only by conducting tests specific for the toxins can one be assured whether a bloom is toxic or not. These are usually conducted by a public health agency like a health district. While there are relatively inexpensive screening tests (~ \$50/test), tests which identify specific toxins and thus the risk to human health are usually greater than \$500 per test.

While on rare occasions, cyanobacteria blooms have occurred in oligotrophic lakes like Priest Lake, they are usually found in eutrophic systems. Studies indicate that nutrients, temperature, and light are the main drivers for creation of toxic blooms. As indicated earlier, phosphorus is usually the nutrient that triggers a bloom. In a public information document titled “Blue-green algae and harmful algal blooms” the Minnesota Pollution Control Agency, indicates that cyanobacteria prefer calm sunny conditions. Water temperatures above 24 degrees Celsius (75 degrees Fahrenheit) are especially conducive to blooms. While summertime near surface water temperatures have been in the 25 degree C range the last several years, the extremely low nutrient levels (Total P ~ 0.005 mg/L) and often windy conditions, make cyanobacteria blooms on Priest extremely unlikely.

In Idaho the lead agency for suspected toxic algal blooms is the Idaho Department of Environmental Quality. Visit the IDEQ website for ways to report a potential cyanobacteria bloom. Cyanobacteria Harmful Algal Blooms | Idaho Department of Environmental Quality.



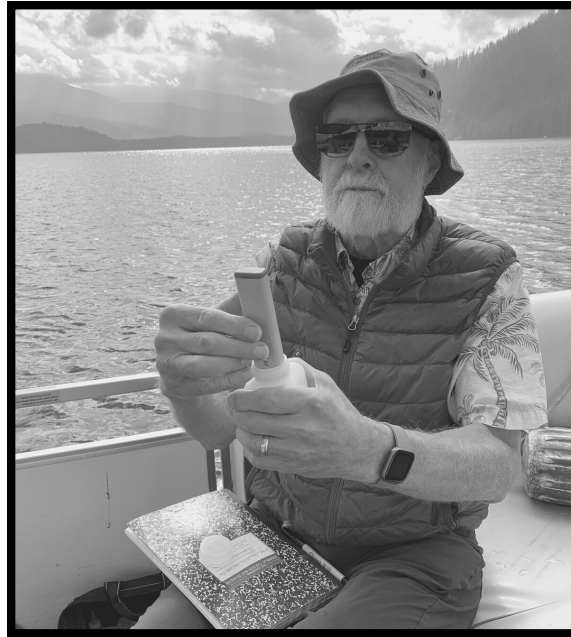
# SCA Board member wins distinguished award from the Washington Section of the American Water Resources Association!

BY: AMY ANDERSON

Stan Miller, SCA Director and Committee Chair of the SCA Priest Lake Citizen Science Water Quality Monitoring Program was recently awarded the 2023 Outstanding Water Resources Professional Award from the WA Section of the American Water Resources Association! Stan was awarded this prestigious award for his deep dedication to water resource and water conservation issues not only in 2023, but throughout a lifetime of service!

Stan Miller began his career in Water Resources in 1977 as part of the team at Spokane County looking at potential threats to the Spokane Valley Rathdrum Prairie Aquifer. The program now is called, Spokane County Water Resources. After completion of the Aquifer Protection Plan and its major addendum in 1983, Stan took over the role of Water Resources Program Manager in Spokane County.

With Stan Miller at the helm, Spokane County Water Resources took on Washington State's Watershed Planning Act studies for several Water Resource Inventory Areas in the Spokane River Basin.



From 1983 to his retirement in 2004, Stan received and managed almost five million dollars in state and federal grants.

The majority of this funding was used to acquire information about how the Spokane River/Aquifer system functioned and implement management actions needed to protect the uses of water in the region.

One key element of water management in Spokane County was bringing together a large number of businesses, regulators and service providers to reach a common goal; large scale, long term water resources protection. Stan was an integral part of bringing

different groups together to protect our shared water resources in the region. Those groups included over 20 public and private water supply entities, along with state and federal health and environmental protection agencies from Washington and Idaho.

During most of his tenure as a Water Resources professional, Stan was a member of the state and national sections of the American Water Resources Association. Stan served on the board for much of his tenure with the state section. For decades, Stan chaired the Fellowship and Awards Committee and was responsible for providing many students with fellowships to pursue other Water Resources related projects.

Today, Stan continues to dedicate his time and energy to water resources in Idaho and Washington and is a driving force behind SCA's Citizen Science Water Quality Monitoring Programs. SCA is truly honored to have Stan on our team, for the expertise he brings to the table with regard to water science and management is unparalleled.

**Thank you Stan for making SCA a stronger, more impactful organization and for a lifetime dedicated to conservation!**

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## Some recent letters and comments SCA has helped author &/or co-signed!

Final Kaniksu Over Snow Travel Plan Objection letter to the National Forest Service

Letter to the Council on Environmental Quality (CEQ) to strengthen the National Environmental Policy Act (NEPA)

Letter to the Bureau of Land Management (BLM) requesting climate actions on public lands, ending financial giveaways to the fossil fuel industry, and tying fossil fuel leasing and drilling decisions to our greenhouse gas reduction goals.

SCA and others called on members of Congress to stop providing funds for destructive degradation and deforestation of American forests. We called on EPA to resist pressure from some in Congress, and from lobbyists, who seek to prevent stricter PM2.5 standards for the purpose of permitting industrial-scale prescribed burns in combination with landscape-level commercial logging under the guise of "thinning".

SCA as an organization formally endorsed the September 17th national movement - MARCH TO END FOSSIL FUELS!

Letter (co-signed) to President Biden on the 50th anniversary of the Endangered Species Act to SAVE OUR WILD SALMON!

Thank you letter to the Biden Administration for canceling the last remaining oil and gas leases on the coastal plain of the Arctic National Wildlife Refuge.

# "PILLAR" PROGRAM UPDATES -Advocacy & Education

BY: AMY ANDERSON

SCA has three primary Pillar programs: Environmental Education, Scientific Research and Environmental Advocacy. The following is a bit of an update on *some* of SCA's recent project work under the Advocacy and Education Pillars!

## Advocacy Program

### Coolin-Chase Lake Wetland Development

The following is an update on updates to the many moving parts to conservation of this extraordinary wetland system! We felt it necessary for clarity to include some past updates before the latest news.

From last update: 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. PLEASE visit our website and Facebook pages for the full back-story!

From last update: On January 27th 2023 SCA formally requested that, in addition to revoking the Warren Beach Road development permit, the ACOE completely stop all 404, Nationwide and other permitting in Idaho CLASS I wetland systems. These systems are just TOO RARE and IRREPLACEBLE. Shockingly, the ACOE replied on February 27th stating that there are "NO CLASS I Wetlands in Bonner or Boundary Counties"

To which, SCA said, OH HECK NO!

After submitting a public records request and contacting IDFG and the lead author and researcher for the Conservation Data Center - Idaho Wetland Conservation Plans, Chris Murphy, SCA discovered that YES, in fact there are several known CLASS I wetlands in Bonner & Boundary Counties.

On March 20th SCA submitted another formal request to the ACOE to update their wetland classifications and site maps and exempt permitting in ALL CLASS I wetland systems AND REVOKE the Coolin wetlands - NWW-2022-00237: Gravelle - Warren Beach Road Development permit because it is, in fact, a CLASS I wetland of HIGHEST CONSERVATION PRIORITY!

On March 23 SCA received the following reply from the ACOE "We will review the information Selkirk Conservation Alliance has provided and will provide a response in the coming weeks."

NEW UPDATES!

## **IDFG wetland data mapper NOT up to date/accurate for at least 59 sites in northern Idaho!!**

On May 10, 2023 SCA received the following response letter from the ACOE Kristen A. Hafer Regulatory Program Manager - Walla Walla District

Excerpt from ACOE response;  
*Dear Ms. Anderson, I am writing in response to your follow up letter dated March 20, 2023, restating Selkirk Conservation Alliance's (SCA's) request that the Northwestern Division of the U.S. Army Corps of Engineers (Corps), in accordance with authorities granted under 33 CFR § 330.4(e)(1), revoke the use of Nationwide Permits (NWP) within Class I wetlands within Bonner and Boundary Counties, Idaho.*

*In your letter, you also provided additional information regarding Idaho's current classification of wetland sites in North Idaho. Thank you for the additional information. In your follow up letter, you wrote that information that was provided to you by the Idaho Department of Fish and Game (IDFG) stated that there were wetlands within Bonner and Boundary Counties classified as Class I by IDFG. As a result of your March 20, 2023, letter, my Division and Walla Walla District (NWW) Regulatory staff had further discussions with the IDFG regarding its classification effort (Conservation Strategy for Northern Idaho Wetlands; Jankovsky-Jones, Conservation Data Center for Idaho Department of Fish and Game (1997)) and the IDFG Wetland Data Viewer (WDV).*

*In accordance with the NWW Notification Procedures for certain Nationwide Permits in Idaho, NWW Regulatory staff, by agreement with IDFG, utilize the IDFG's WDV to determine whether coordination with IDFG is required for proposed activities in wetlands that are classified as Class I.*

*After receiving your first letter dated January 13, 2023, Corps Regulatory Program staff reviewed IDFG's publicly available WDV to determine if any wetlands within Bonner and Boundary Counties were classified as Class I by IDFG. The WDV indicated that there were no wetlands in Bonner and Boundary Counties ranked by IDFG as Class I.*



## CONTINUED FROM PAGE 12 - COOLIN WETLANDS

*The information in the WDV formed the basis of my previous response to you. After receiving your follow up letter, Regulatory Program staff reached out to IDFG to inquire about the discrepancy between your letter and the WDV and inquire whether the WDV was accurate and up to date.*

***Upon its review, IDFG informed the Corps that, prior to mid-March 2023, data in the WDV was indeed inaccurate for at least 59 sites in northern Idaho. These sites were labeled as "not ranked," rather than as Class I sites. IDFG further informed the Corps that the data for the WDV was being pulled from the wrong dataset and that the WDV has been updated to pull data from the correct source. As a result, the WDV now reflects the presence of Class I wetlands in Bonner and Boundary Counties.***

Update on another moving part....

On July 7, 2023 judge rules in favor of the East Priest Lake Cabin Owners Association (PLCOA) et al.

petition for judicial review against Bonner County & Tricore Investments Case number(s) CV09-22-1232 & CVO9-22-1717) minor land divisions on the south side of Warren Beach Road.

This ruling effectively dissolved the Bonner County minor land divisions that occurred on the south side of Warren Beach Road, Tricore Investments LLC property.

However, Tricore has written and submitted motions to dismiss all, and the County has filed a Motion for Reconsideration on the preliminary motion that removed/dissolved the subdivided lots south of the road in the heart of the Coolin wetland complex. It is SCA's understanding that those motions and related issues will come before the court this November.

SCA continues to remain vigilant and files regular public records requests (PRR) to the county and Freedom of Information Act (FOIA) to state and federal agencies for any permits or applications for permits needed to develop the wetland. These include Building Location Permits (BLP), Floodplain Development Permits (FDP), ACOE 404 permits, IDL encroachment permits and other.

### Trestle Creek

SCA pushes back against development of the mouth of Trestle Creek!

SCA files formal objection letter and raises public awareness to proposed development at the mouth of Trestle Creek a critical habitat for the Endangered Species Act (ESA) listed north Idaho native Bull Trout (*Salvelinus confluentus*).

On July 21st SCA in partnership with the Center for Biological Diversity and the Panhandle Chapter of Trout Unlimited submitted formal comments to the Idaho Department of Lands (IDL), Army Corps of Engineers (ACOE) and the Idaho Department of Water Resources (IDWR) in OPPOSITION of a proposed development located at the mouth of Trestle Creek.

The Applicant seeks to;

1. Excavate, fill and reconfigure the existing boat basin, slack water channel and adjacent shoreline
2. Fill 1.19 acres of wetlands and excavate 1.43 acres of wetlands (Total 2.26 wetland acres - 24,310 cubic yards)
3. Discharge 10,410 cubic yards of dirt/topsoil (8820 cy) and gravel, rock or stone (1590 cy) below the ordinary high water mark and /or wetlands
4. Redirect the North Branch of Trestle Creek
5. Remove an existing boat launch
6. Construct 105 fixed pier docks
7. Shoreline/upland development of five residential home sites
8. Development of a private park and beach
9. Road access and parking lot development for private residential community

Trestle Creek has been identified as a primary spawning area for Bull Trout supporting a large percent of the Lake Pend Oreille (LPOR) Bull Trout population. Bull Trout populations are declining drastically throughout the majority of their current range & the species is extinct from much of its historic range. LPOR is one of the only lakes in the nation that has a relatively stable population of these threatened native fish. Agencies & entities such as Avista, Trout Unlimited, Idaho Department of Fish & Game and others have invested millions into restoring spawning & rearing habitat for this threatened species within this important drainage. LPOR is a stronghold for this threatened species and very important centerpiece of recovery for the nation. Please read SCA's full opposition letter for more information!

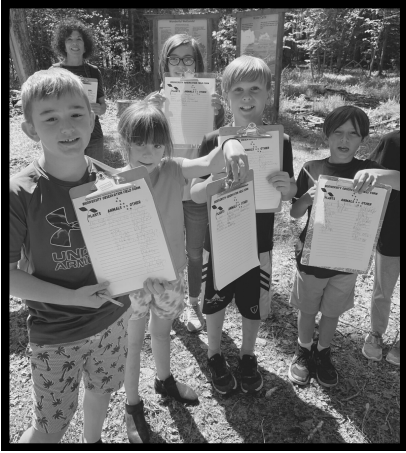
<https://drive.google.com/drive/folders/1F43ub47eV2bqhNJCT9gtkWntvMRbnrM7?usp=sharing>

A formal Public Hearing was held by IDL on September 6th in Sandpoint. This Public Hearing was truly a POWER TO THE PEOPLE moment! A packed auditorium of community members stood up to have their voices heard - a resounding NO to this proposed development! Accounts state that 100-200 individuals signed up to give public testimony, the vast majority opposed to development AND agency officials stated over 1,300 letters and emails were received by the public, again the vast majority opposed to this development. Further, Idaho Department of Lands (IDL), Idaho Fish & Game (IDFG), Panhandle Health District and the Dept. of Environmental Quality (DEQ) submitted strong concerns as well.

As this newsletter goes to print, we await a Final Order from IDL. The Final Order is due on 10/30. You can find the 10/19/2023 Recommended Order HERE!

<https://www.idl.idaho.gov/lakes-rivers/administrative-hearings/trestle-creek-public-hearing/>

## Education Program



It has been a great year for SCA environmental education (adults) and our “Living Classroom” field trips (1st-12th grade)! SCA was honored to speak to our community about water quality issues of concern and what we can do about it this spring and summer at the Priest Lake Kaniksu-Coolin Lions Club annual meeting, East & West Priest Lake Cabin Owners Associations annual meetings, Evans Brothers Coffee Roasters, the Pend Oreille Master Naturalists, Coeur d’Alene Earth Day, Coolin-Priest Lake Spring Festival and Priest River Timber Days!

SCA also had a great year of outdoor environmental education and was able to participate in and facilitate several hands-on, outdoor, “Living Classroom” field trips for area students. From the Bonner County Water Festival in May to SCA’s “Living Classroom” field trips to Trestle Creek in September, SCA’s staff and Board were out teaching and preaching about all things water quality, native fisheries conservation, wetlands, biodiversity, climate change AND MORE!

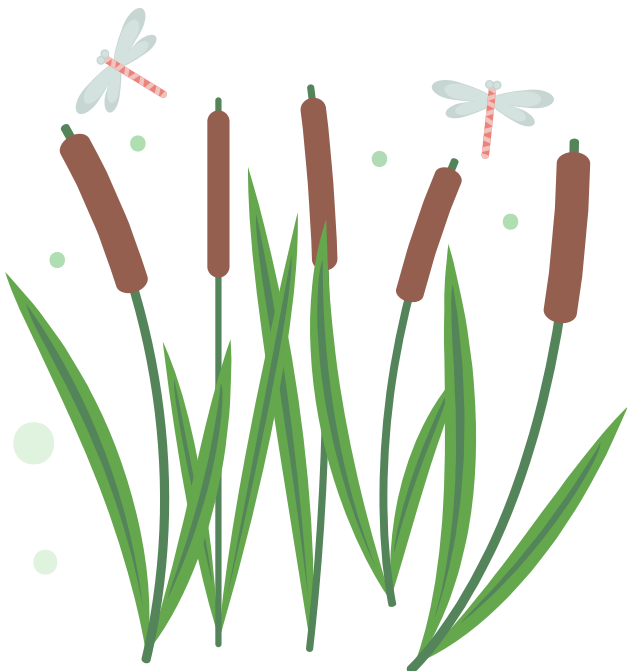


The “Living Classroom” program consists of busing local students to amazing outdoor learning sites where they are immersed in outdoor science teachings and hands on activities! The sites have many great habitat features that we use to educate the students like stream, river and wetland habitats. The students rotate through four primary stations; Native Fisheries, Wetland Walk, Water Quality/Stream Science and Aquatic macroinvertebrates (aka water bugs) which all focus on and emphasize the importance of environmental protection, conservation, & stewardship. Additional stations (depending on where we are at) have included some fabulous education/instruction on native conifer and plant identification, forest fires and management, bear awareness and conflict reduction, native fisheries- Bull Trout – water quality education AND a nature poetry station - nature inspired mindfulness! In addition we have hosted “Living Classroom” field trips at the Waterlife Discovery Center and the Trestle Creek Day Use area when the salmon are spawning!

# SACKETT V EPA RULING EXPLAINED!

## WHAT DOES THE SCOTUS DECISION MEAN FOR WETLANDS, CREEKS AND STREAMS?

BY JANIS HOUGHTON



— “ —  
**UNDOUBTEDLY MANY WETLANDS, CREEKS AND STREAMS THAT WERE ALWAYS PROTECTED (AND NO LONGER ARE UNDER THE CWA) WILL BE DESTROYED, FILLED IN WITH DIRT AND GRAVEL FOR HOUSING AND COMMERCIAL DEVELOPMENTS, POLLUTED AND OTHER.**

— ” —  
This past May the U.S. Supreme Court rendered a ruling on a 17 year old case involving a small parcel of private property near the west shore of Priest Lake. SCA’s spring 2023 Sightlines issue explained the history and jurisdictional vagueness of this landmark case; ‘Sackett v EPA’. This property is 0.64 acres of wetland located across Kalispell Road from a large fen, which is a peat producing bog.

To briefly sum up the case, the Sackett’s purchased the property in 2004, and in 2006 proceeded to dump fill on the wetland so they could build a house.



# SACKETT V EPA

CONTINUED FROM PAGE 14

The EPA showed up on the Sackett's property and told the owner's their property was a wetland connected to the adjacent fen and therefore under the jurisdiction of the EPA, and that they were in violation of the Clean Water Act (CWA) for dumping fill on the property. They were ordered to restore the property to its original state within 5 months, or be fined up to \$40,000 a day. The Sacketts refused to comply and in 2008 they sued the EPA, on the grounds that they believed their property was not under federal jurisdiction. In the years following the district court ruled in favor of the EPA and the 9th circuit court of appeals later upheld that ruling. The Sacketts then turned to the US Supreme Court (SCOTUS).

The Supreme Court was asked to review and rule on the lower court's decision that the Sackett's wetland property fell within the scope of federal jurisdiction by being connected to the fen which by definition is considered part of the Waters of the United States (WOTUS). Such waters are protected and regulated by the federal government (EPA), through the Clean Water Act.

The Supreme Court granted review and heard argument in October of 2022 which mostly focused on the parameters of the CWA, specifically the definition of WOTUS, and on May 25th, 2023 reversed the lower court's judgement and ruled in favor of the Sacketts.

For years, within the wording of the CWA, the courts have perceived and had to muddle through much ambiguity as to which wetlands were protected by the government. Ultimately this Supreme Court felt that the CWA should extend to "only those wetlands that are indistinguishable from the Waters of the United States", inferring that exceedingly clear language be used in determining the scope of WOTUS.

The majority of the regulations in the CWA have been there since 1977, and though sometimes worded vaguely, they were based in sound scientific research. Before this decision there existed two 'tests' for determining whether a wetland that is adjacent to a covered water, that is NOT a traditional navigable water, should be included in WOTUS and protected under the CWA. One test involved a 'continuous surface connection' to that covered water, and the other, a 'significant nexus'. The significant nexus definition could involve underground and/or ephemeral waters, (waters that exist for a short period of time following precipitation or snowmelt) that ultimately connect that particular wetland to a CWA covered water, and significantly affect the chemical, physical, or biological integrity of a navigable water.

Up until this most recent ruling, the significant nexus test was used in the majority of legal decisions over wetlands jurisdiction. Because the Sackett's property, in relation to the fen, is not considered by this Supreme Court to be adjacent, nor has a continuous surface connection, it was unanimously voted that the property was not subject to regulation under the CWA.

The court's sentiments describe the CWA as a 'potent weapon' with 'crushing consequences even for inadvertent violations'. It felt that the penal statutes were vaguely defined, leaving broad interpretations of the term "violation" and that it not only left private property owners vulnerable to unintentional violations but that the permitting process was arduous and expensive and penalties excessively severe. They cited a case where a farmer plowed on jurisdictional land and each of the 348 swaths was considered a separate violation. And then there are the Sacketts which were facing a \$40,000/day penalty until their land was reclaimed. In the court's words, "Facing severe criminal sanctions for even negligent violations, property owners are "left 'to feel their way on a case-by-case basis."

This case involving this tiny piece of private property right in our backyard is a landmark case that has pulled the rug out from the foundation of the Clean Water Act as it has existed since the 70's. The ruling strips federal protections from all ephemeral streams and leaves more wetlands unprotected, (more than half of the previously protected wetlands in the U.S.), than any definition put forth by the government since 1977, including the Trump administration's 2020 rule.

Undoubtedly many wetlands, creeks and streams that were always protected (and no longer are under the CWA) will be destroyed, filled in with dirt and gravel for housing and commercial developments, polluted and other. The many benefits that those wetlands provide nature and humans, such as filtration of pollutants, storage of water and biocarbon, flood control, biodiversity, and habitat for thousands of wildlife species will also cease to exist. These beautiful areas that are so rapidly disappearing from development and climate change are now left to the mercy of the states in which they lie.

The individual states can legislate protection of their waters, including those no longer under federal regulatory authority, with even more stringent environmental laws. New federal legislation could be created to protect the now excluded waters, and of course this would require congressional approval of amending the Clean Water Act. Unfortunately, given the current 'pro private property rights' legislative climate, this may be a long shot at this time. With the federal reach lessening on environmental statutes, the states are our biggest hope in helping to close this yawning legislative breach.





CONSERVATION ALLIANCE

THE LOG  
Presented to:  
The Salmon Conservation Alliance  
1525 1st St.  
Prineville, OR 97671  
Presented by: [Name]

WATER QUALITY DATA SHEET  
TEMPERATURE °F \_\_\_\_\_  
DISSOLVED OXYGEN (DO) ppm \_\_\_\_\_  
pH \_\_\_\_\_  
NITRATE ppm \_\_\_\_\_  
PHOSPHATE ppm \_\_\_\_\_  
TURBIDITY NTU \_\_\_\_\_