The Tragedy of the Swan Lake Commons

by Wade Fredenberg

The tragedy of the commons is a 19th century theory describing how a common resource (e.g., the fishery of Swan Lake) that is owned by no one (and so, in practice, belongs to everyone) will eventually be destroyed as individuals exploit that resource for their own purpose and self-interest. In the Flathead Basin, selfish and foolish individuals continue to behave contrary to the public interest in spreading nonnative fish species throughout our streams and lakes. Lakes in the Flathead Basin evolved with some of the simplest fish species complexes on the planet. At most, 10 native fish species occupied these waters. Some two dozen of the largest and coldest Flathead Basin lakes were favored with individually unique, naturally-reproducing populations of native Bull Trout.

Between 1898 and 1916, along with settlers, a swarm of nonnative fish species were introduced. Included in the mix were Largemouth Bass, Sunfish, Perch, Bullheads, Lake Trout, Lake Whitefish, Brook Trout, Yellowstone Cutthroat Trout, Arctic Grayling, Rainbow Trout, Kokanee, and Chinook salmon. Some of these early introductions became established and widespread, others did not. These largely unplanned and often ill-considered introductions more than doubled the number of fish species found in the Flathead.

After World Wars I and II, as the human population growth of the Flathead Valley continued, a more scientific approach to fisheries management began to take root. New species introductions were less common (or at least, generally less successful). However, the planned introduction in the late 1960’s of a much lower profile organism, an invertebrate called Mysis shrimp, kicked a big rock off the hill causing a

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Officers

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“Somebody just back of you while you are fishing is as bad as someone looking over your shoulder while you write a letter to your girl.”
~ Ernest Hemingway

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Contact: 406-250-7473, flatheadtu@gmail.com, www.flatheadtu.org
We are particularly fortunate to be surrounded by public lands here in northwest Montana. For over 100 years these lands have provided public access for hunting, fishing and a wide range of recreation activities in addition to commercial activities like timber harvest, outfitter guiding, and winter sports.

We are also fortunate that numerous sportsman’s groups are speaking out to preserve our public land heritage in response to increasing calls for handing these treasured lands over to others for management. Trout Unlimited President Chris Wood expressed his support for public lands with his column in the summer issue of Trout Unlimited’s Trout Magazine titled “This Land is Your Land”.

“Public lands are the best idea America ever had. For those of us who want to fish and hunt, without having beg or buy permission, they are a godsend.”

While the opposition to transfer of public lands is strong, the proponents are tenacious and well-funded and each successive effort seems to gain a bit more traction. We could be as close as an election away from transferring public lands on an experimental or trial basis or something even more drastic. An important criteria to consider when voting for candidates for public office is their position on public lands management and transfer.

Can public land management be improved? Of course it can and it should be. Collaborative effort such as the one our Chapter participated in concerning management of the Whitefish Range is a step in the right direction. Federal land managers deal with a complex array of laws regulations that increase the cost and time for planning projects and open the door for lawsuits often based on process related issues. Simplifying the planning process while maintaining safeguards for the environment is a step in the right direction. Unfortunately, the opportunity for meaningful reform seems remote given the current grid-lock in Congress.

After serving for 35 years in National Forests across the west, I must admit I have a strong bias for public lands and their management. National Forests and National Parks were created often in the face of strong opposition from western states over loss of local control and more restrictions on resource extraction. But the public land idea has endured over time, and I too believe it is one of the best ideas our country has ever had. It’s an idea worth fighting for.

Good fishing this summer!

Larry Timchak,
President Flathead Valley Chapter Trout Unlimited
Getting Veterans on the Water

The Kalispell Vet Center at 690 North Meridian Ave. provides outreach and readjustment counseling services to Western Montana’s combat veterans.

The Vet Center has been trying to get Flathead veterans interested in fly fishing. The Flathead Valley Chapter of Trout Unlimited is proud to partner with the Kalispell Vet Center this summer in their efforts to promote fly fishing among local vets.

Earlier this spring, we donated a couple of L.L. Bean fly rod outfits and some fly-tying materials to the Center. Over the past couple of weeks, we have assisted with fly casting instruction for vets at Pine Grove Pond near Kalispell. The casting workshops were coordinated by Jim Borowski, our new Veterans Outreach coordinator.

We had a good turnout for all three workshop days and we appreciate the opportunity to support the Vet Center and all our local veterans.

We hope to continue our outreach efforts in the future and to provide further opportunities to introduce veterans to fun outdoor activities.

If you are a U.S. combat veteran and would like to get involved with Vet Center activities, contact the Kalispell Vet Center at, 406-257-7308. 

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Catch-and-Release Techniques for Trout

Don't Forget: Keep Them Wet!

- Land the fish quickly and do not play it to exhaustion.
- Wet your hands before handling the fish.
- Keep the fish in the water as much as possible.
- Minimize the time out of water for photos.
- Remove the hook gently. Use of umbilical lasso, simple and barbless hooks makes hook removal easier and easier.
- Let the fish recover before release. If the fish is hooked deeply or bleeding, you may have to snip the line or the fish may have to be removed if conditions allow.

Consider releasing your catch from a boat with careful and caution. Fish are stressed and some will die. To avoid harming the fish, keep it underwater as you release it.

Pine Grove Pond

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FVTU Calendar

- Aug. 19-21, 2016—Flathead Women on the Fly continues their excellent series of activities for women with the Big Creek Camp and Fish outing. They will be camping at the Big Creek campground Thur. night through Sun. afternoon and either wade or float fishing. If you are interested, contact Kim at; flatheadwotf@gmail.com

- August ?? - MFWP will once again be requesting volunteers to help out with the lake trout netting on Swan Lake. If you would like to volunteer for a few fun and informative hours, watch our website for information www.flatheadtu.org

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Flathead Valley Trout Unlimited holds monthly meetings on the third Tuesday of each month October through April. Meetings are held at the Montana Fish, Wildlife and Parks conference room at 490 N. Meridian in Kalispell beginning at 7pm. Please join us for our regular meetings and program offerings.

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Barbless Hooks, The Time is Now

Native trout in the Flathead River system are in trouble. Westslope Cutthroat trout currently occupy less than 5% of their historic habitat. They are considered a species of special concern by Montana. Native Bull Trout are listed as a Threatened Species under the Endangered Species Act. Our native trout continue to face adversity due to habitat loss, increasing urbanization, increased fishing pressure, warming waters, changing flow regimes, disease, invasive species and other threats. All cutthroat trout populations are now under catch and release protections and you are allowed to actively fish for bull trout in only two Montana waters.

Montana is surrounded by states and Canadian provinces that have instituted rules requiring the use of barbless hooks for their imperiled fish species. And yet, in Montana, anglers are still allowed to use dangerous barbed hooks and to fish for our native trout using tools such as barbed treble hooks and bait which are well known to increase fishing mortality. It is time for Montana to follow the lead of our neighbors to protect our native trout.

Barbless hooks increase the survival of juvenile and adult trout by reducing handling time, decreasing hook damage and limiting exposure to air. It has been found that the proper use of barbless hooks can significantly reduce hooking mortality.

Fisheries managers with Montana Fish, Wildlife and Parks have long required catch and release angling on many of our renowned waters. It was first required as a conservation tool on the Madison River in 1978. Today there are more than 120 waters in the Western and Central fishing districts that require anglers to practice catch and release. According to MFWP,

“These regulations protect fish populations from becoming depleted due to heavy fishing pressure, diseases such as whirling disease, or predators including other fish, and they help increase the number of bigger fish.”

The reduction in hook damage and fish mortality through barbless hooks combined with catch and release fishing may be slight per catch according to most studies, but even a small increase in survival of our treasured natives will be worthwhile if it results in healthier populations.

According to one study; “the mortality rate for fish caught with barbed flies or lures is almost double the mortality rate of fish caught with barbless flies or lures.”

MFWP recently began a media campaign to publicize the importance of catch and release fishing highlighting angler behaviors to maximize fish survival such as reducing your catch. Implicit in their message is a warning by MFWP that continued increases in angler pressure and fishing mortality may result in future statutory limits on numbers of fishermen. The use of barbless hooks in waters that already require catch and release fishing can go a long way toward insuring that our populations of threatened native fish don’t decline further. Please let Montana Fish, Wildlife and Parks know that you support the inclusion of barbless hooks in the toolbox to protect our valuable species.

You can learn more about the MFWP catch and release campaign at; http://fwp.mt.gov/news/newsReleases/fishing/nr_0992.html
The unplanned and unwelcome nonnative fish invasion that began in the 1970’s was led by northern pike, escalating into hundreds of “bucket biology” episodes that continue unabated to this day. These included not only new sport fish species such as Smallmouth Bass and Black Crappie, but also less well known introductions of “forage minnows” such as Central Mudminnow and Brook Stickleback. Very few anglers would recognize these species or even be aware of their presence, but they have the potential to reach high numbers with as of yet unknown implications.

The fishery chronology of one of our most outstanding waters, Swan Lake, was well documented in the yellowed and brittle pages of the Kalispell Daily Inter Lake. In 1900, the paper opined: “O. Denney and Fred Herrig (an early Forest Ranger and friend of Teddy Roosevelt) returned yesterday from the head of Swan Lake where they have been fishing. Mr. Denney brought back with him a fish story weighing 27 pounds. He also brought the fish, a salmon trout (known today as Bull Trout)…”

Over the course of the 20th century it became common knowledge that Swan Lake and the unique watershed upstream was one of the most productive and resilient fish and wildlife producing landscapes in the Flathead Basin; with ample groundwater contributing to sustainable flows of clean and cold water.

In the early 1990’s, when the U.S. Fish and Wildlife Service was first petitioned to list Bull Trout as a Threatened Species, we systematically examined the status of the species, watershed-by-watershed across Montana. Swan Lake stood out as an “ace” in a deck otherwise populated by a lot of low cards and jokers. Importantly, Swan Lake was - and still is - one of the few waters in the entire Northwest where anglers can legally fish for Bull Trout. In a 1996 scientific report that I coauthored for the Montana Bull Trout Restoration Team, we noted: “The greatest future threats to this population stem from illegal introductions and proliferation of introduced fish species”

Sadly, this 1996 invasion prophecy was perhaps already on its way to fulfillment. After several rumored reports, a Lake Trout caught by an angler was documented from Swan Lake in 1998. Coincidentally, that was the same year that Bull Trout were listed as a Threatened Species under the Endangered Species Act.

Between 1998 and 2005, a collaborative effort built, forming a strong consensus that Lake Trout suppression action was needed in Swan Lake. In 2005, a group of public and private partners, the Swan Valley Bull Trout Working Group (SVBTWG) signed a Memorandum of Understanding, with the goal to: “ensure the long-term, self-sustaining persistence of Bull Trout as the dominant piscivore in the Swan ecosystem.” Attaining the primary management goal was articulated as an avenue to: “… continuing the opportunity to sustain recreational fishing opportunities for Bull Trout.”

Beginning in 2005, researchers from Montana State University were enlisted to assist the coalition in monitoring and evaluating progress toward those goals. A decade later, the SVBTWG has been and remains, a strong coalition-based public and private partnership. Led by the financial contributions of the Forest Service and Montana FWP, over a million dollars of public and private funds have been spent to keep the Swan Lake fishery intact.

Since 2005, the SVBTWG has produced and distributed annual scientific reports that are designed to both update the status and inform the public of progress. In the past decade, the SVBTWG has had some successes and a few setbacks. To date, over 50,000 Lake Trout have been removed in that effort.

Relatively low bycatch of Bull Trout and other fish species has been achieved in the Swan Lake suppression program, and we are constantly working to further minimize that impact. Importantly, the nonnative Kokanee population that today forms the forage base that all predator fish feed upon has been maintained in Swan Lake. The SVBTWG has done everything within our power to engage and inform the public each step along the way. An impressive number of volunteers, rallied by Trout Unlimited from among the local sportfishing and citizen community, have partaken in the fieldwork. Thousands of pounds of Lake Trout have been distributed to the local Food Banks.

It is no coincidence that support for the Lake Trout suppression project among Swan Lake residents has been solid, as many of those living closest to the commons recognize the value of having a unique, strong, resilient Bull Trout fishery in their own back yard. So, that brings us to 2016, the planned final year of a five-year experiment to suppress Lake Trout in Swan Lake, with the verdict on ultimate success or failure still very much in play. While we have been increasingly encouraged by successful Lake Trout suppression programs implemented in Lake Pend Oreille in Idaho, Quartz Lake in Glacier National Park, and Upper Priest Lake in Idaho, the jury remains out on Swan Lake.

Last October, ten years into the Swan Lake project, we hoped to also celebrate success. Instead, after literally hundreds of miles of gillnet had been set and retrieved trying to reverse the rising tide of foreign trout...
that threaten to swamp one of our top three Bull Trout waters, the unthinkable happened. On October 14, 2015 those of us working on the project were uniformly shocked at the senseless act of stupefying ignorance that led someone to introduce Walleye into Swan Lake. The perpetrators are no doubt enjoying this reaction, much as a pyromaniac watches a conflagration. TU and other partners quickly offered a reward in excess of $30,000 for information on the illegal action—which more than six months later remains unclaimed.

This illegal Walleye introduction could be the act that kicks off the 3rd great wave of nonnative fish invasions—leading to the inevitable collapse of native trout fisheries across the Flathead ecosystem. Lake Trout introduction has already affected Holland and Lindbergh lakes upstream of Swan Lake, and spreading Walleye would also impact Flathead Lake, Glacier National Park, the lower Clark Fork, and most likely the Seeley-Clearwater chain of lakes F-O-R-E-V-E-R.

Second, this illegal Walleye transplant is highly unlikely to result in the type of spectacular Walleye fishery that fishing magazines write about and that some anglers may see as the Holy Grail. Skinny 12-14 inch Walleye might replace the fat 8-10 inch perch, but these clear, cold lakes in our commons are sterile systems. They are not capable of sustaining the dense populations of forage minnows and other food resources necessary to sustain trophy Walleye over the longer term.

Third, if this act of eco-sabotage was designed to show that native fish management can’t be rammed down the public’s throat; this is a sad and self-defeating approach. Despite all of the public involvement and expense over the last twenty years, this single criminal act may have ensured that Bull Trout will remain an ESA-listed species for perpetuity—perhaps with Westslope Cutthroat Trout to follow. As we once mourned the flocks of Passenger Pigeons and the loss of the Great Plains Bison, our descendants may lament the passing of the Bull Trout.

Perhaps this is an overreaction on my part, due to frustration with the eco-sabotage of a project I have personally invested in. Perhaps the handful of illegally introduced Walleye won’t reproduce in Swan Lake. Even more unlikely, if they thrive in Swan Lake, perhaps they won’t spread. But, even if all this were true, there probably have been and will continue to be similar illegal plants, some occurring where chances of establishment are greater. Any established Walleye population in the Flathead Valley virtually assures future widespread illegal dispersal. It’s like playing Russian roulette while progressively increasing the number of rounds in the revolver.

The take-home message is this: “…a common resource that is owned by no one (and so, in practice, belongs to everyone) will eventually be destroyed, as individuals exploit that resource for their own purpose(s) and self-interest.” The Swan Lake Commons and indeed the Flathead Basin, along with the greater Clark Fork Basin is at risk. It’s a modern tragedy. Like most tragedies, this one likely won’t have a happy ending.

*Fredenberg is the Bull Trout Recovery Coordinator for the Fish and Wildlife Service in Montana and has worked on Bull Trout ESA Listing and recovery issues for over 20 years. These opinions are his own and do not necessarily represent those of the U.S. Fish and Wildlife Service.

Montana Anglers Unite Against Illegal Fish Introductions

The Montana Wildlife Federation and Montana Trout Unlimited are working together to increase awareness and unite Montana anglers in opposition to the vastly harmful practice of illegal fish introductions.

“Illegal fish introductions displace existing sportfish and native fish; spread fish diseases; can ruin genetics, and can increase management costs through increases in hatchery plants, fisheries surveys, monitoring and treatments and increased enforcement. That takes funding away from fisheries improvements. “

The two organizations are circulating a sign-on letter calling for more law enforcement, stricter fines, and other efforts to stop the damage being done to our Montana fisheries and fishing opportunities.

Sign the pledge today at:

http://montanawildlife.org/bucketbiology/

ESA listed since 1990, fewer than 150 adult Pallid Sturgeon are left in the wild. They are likely the rarest fish in the country. Part of the reason for their decline is the Intake Irrigation Diversion on the Yellowstone River near Glendive which blocks all upstream migration of spawning fish. The proposed solution by USACE is to replace the current aging structure with a concrete dam across the river.

The overwhelming consensus of fishery professionals who have examined the proposal say the alternative is very likely to fail.

You can learn more about the proposal at MontanaTU.org. Comments can be submitted to the Corps by July 28, 2016. cenuwo-planning@usace.army.mil or US Army Corps of Engineers Omaha District ATTN: CENWO_PM_AA 1616 Capitol Avenue Omaha, NE 68102