

IDAHO DEPARTMENT
OF FISH AND GAME

STAFF CONTACT INFORMATION

- **Dan Garren, Regional Fisheries Manager**
dan.garren@idfg.idaho.gov
Follow @DanGarren
- **Brett High, Regional Fisheries Biologist**
brett.high@idfg.idaho.gov
- **Greg Schoby, Regional Fisheries Biologist**
greg.schoby@idfg.idaho.gov
- **Jessica Buelow, Regional Fisheries Habitat Biologist**
jessica.buelow@idfg.idaho.gov
- **Steve Schmidt, Regional Manager**
steve.schmidt@idfg.idaho.gov

INSIDE THIS ISSUE:

The Henrys Fork	2
South Fork Snake	3
Bait Fishing vs Fly Fishing	3
Sinks Drainages	4-6
Why Manage for Native Fish	5
Willow Creek	7
Teton River	8

Upper Snake Region Annual Fisheries Report



2013 EDITON

MARCH 1, 2013

Greetings!

Thanks for looking at the 2013 Idaho Department of Fish and Game's Upper Snake Region Newsletter. We hope that your 2012 fishing season was enjoyable, and look forward to providing you with another good year in 2013. We've decided to take a different approach to this year's newsletter, and instead of going over the projects we recently completed like we've done in the past, we're going to provide an overview of our management program and why we manage some

of our waters differently than others. What follows is a watershed by watershed look at our rivers and streams, the issues they face, and how we are addressing those issues as well as our management priorities for each drainage. We have also included information on managing for native or nonnative fish as well as the role anglers can play in our management program. This information should provide



the fundamental information for an understanding of our management, and hopefully be insightful for our anglers. We are hopeful that an increased understanding of how we do business will generate excitement in anglers and provide you the opportunity to engage and participate in management activities. For more information on all our waters or to learn more about our management program, please visit the IDFG website and look at our current Fisheries Management Plan or read our annual fisheries reports. You can also feel free to contact any of the regional staff with the contact information provided on the left of this page.

Want more information on what IDFG is doing in the Upper Snake Region?

[Subscribe to Idaho Department of Fish & Game Upper Snake Region Newsletters](#).

These newsletters come out about once a month, and have current information on our activities and accomplishments.

The Landscape

The Upper Snake Region and its fisheries are diverse. Big rivers such as the Main Snake and South Fork Snake are home to both large populations of trout as well as trophy fish, while some of our remote mountain lakes are found at elevations exceeding 10,000 feet. Small streams trickling through sagebrush desert can contain dense populations of trout often overlooked by anglers, while our more well known fisheries can harbor trout populations that approach 5,000 trout per mile. The map shown to the right is useful for orienting the Upper Snake's various drainages and may be helpful as you work through this document.



The Henrys Fork



*“...Managing
for rainbow
trout (is) our
number one
priority for
the Henrys
Fork.”*

The Henrys Fork drainage provides one of the most important rainbow trout fisheries in the state, and attracts anglers from across the globe. Important tributaries include the Buffalo, Warm, Fall and Teton rivers. Major still water fisheries in the drainage are Henrys Lake, Island Park

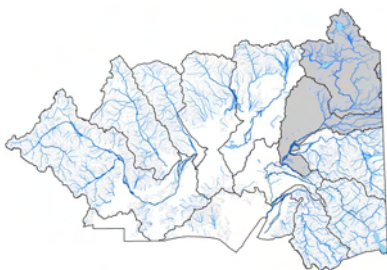
Reservoir and Ashton Reservoir. The Teton River is discussed on page 6. An economic survey conducted in 2011 estimated that anglers spent nearly 100,000 angler days in the Henrys Fork drainage and that the fishery generated nearly \$45 million to the Idaho economy. The relative absence of native trout in the Henrys Fork combined with the exceptional rainbow trout fishery that exists makes managing for wild rainbow trout our number one priority for the Henrys Fork. However, we will maintain native fish populations in the headwaters of the Henrys Fork, including Henrys Lake.

Although fish populations in the mainstem Henrys Fork are robust, they are impacted by altered flows from dam releases, entrainment into unscreened canals and degraded habitat. IDFG is working with the Henrys Fork Foundation and other partners to better understand impacts of altered flows on our trout, and to better manage water during critical times of the year. This approach has resulted in higher densities of trout than we would have seen 10 to 20 years ago. We're also working to

screen canals that have yet to be screened, and in conjunction with our partners, recently completed screens on the first three irrigation canals below Ashton Dam.

As far as reservoir management goes, Henrys Lake which is the highest lake/reservoir in the system is managed to produce angler catch rates of at least one fish per 1.5 hours of angling, and is renowned for its trophy fish potential. Henrys Lake is recognized as a stronghold for native Yellowstone cutthroat trout, which provide the bulk of anglers catch but sterile (non-reproducing) hybrid trout and sterile brook trout are stocked to diversify the catch and to meet angler expectations. Many habitat restoration projects have been completed over the past decade to improve spawning for cutthroat trout, and natural reproduction is now adding to the population. This increase in fish abundance is slowing trout growth, however. Henrys Lake is a prime example of where anglers can participate in our management program. The increased abundance of trout provides harvest opportunity, which if substantial enough, can improve growth rates on the trout that remain. We are also reducing our stocking rate to expedite getting that population back in balance and to im-

prove trout growth. Island Park is the next reservoir in the system, and is managed to provide slightly higher catch rates than Henrys, with fewer trophy fish than its upstream neighbor. Keeping a quality fishery established here is difficult in years where the reservoir level fluctuates drastically. As such, this is also a great place to harvest trout if desired. Rainbow trout are the dominant species here, although kokanee and a few cutthroat trout are present as well. Ashton Reservoir is the lowest reservoir in the system, and is not as well-known for its fishery as the other reservoirs are. However, Ashton has produced the current state record brown trout (over 27 pounds), and is largely overlooked compared to the other reservoirs on the Henrys Fork. IDFG stocks approximately 30,000 catchable trout here each year as mitigation for the creation of Ashton Dam. Anglers will also find wild rainbow and brown trout. As with the majority of the Henrys Fork, our reservoir management will focus on providing quality trout fisheries based primarily on nonnative trout.



South Fork Snake River

Major components of the South Fork watershed include Palisades Reservoir, the South Fork from Palisades Dam downstream to the confluence with the Henrys Fork, and the four major tributaries to the river – Burns, Pine, Palisades and Rainey creeks. The South Fork supports a world-renowned fishery and one of the most important Yellowstone cutthroat trout populations in their historical range. However, persistence of cutthroat trout is threatened by hybridization and competition with nonnative rainbow trout, by flow management that does not favor cutthroat, and by habitat alterations. The presence of rainbow trout is thought to be the single biggest threat to cutthroat trout in the South Fork. Though rainbow trout were a negligible component of the trout population until the mid-1990's, they have been increasing in abundance over the past decade and now are as abundant as cutthroat. The presence of high quality habitat and the relative strength of the Yellowstone cutthroat trout population, combined with input from our angling public make managing for native fish the highest priority for the

South Fork.

The Department is working on three fronts to protect and maintain an abundant cutthroat trout population in the South Fork. First, weirs and fish collection traps have been constructed on the four main tributaries to stop rainbow trout from invading these important spawning areas and hybridizing with cutthroat. By only allowing pure cutthroat to pass these weirs, we can ensure that cutthroat are always present. Second, IDFG has been working with the Bureau of Reclamation to implement flow releases from Palisades Dam that are beneficial to cutthroat trout and detrimental to rainbow trout. In short, flows that mimic a natural snowmelt runoff tend to benefit cutthroat and hinder rainbows. Finally, the Department is encouraging anglers to harvest rainbow trout. When implemented correctly, the first two components of our program will reduce rainbow trout reproduction. Angler harvest will help reduce the rainbows that do make it into the river. Beginning in 2010, IDFG partnered with Trout Unlimited and implemented an incentive program to encourage anglers to harvest rainbow trout. Small tags valued from \$50 to \$1,000, were placed in the snout of captured rainbows, which were then

released into the river. Anglers are encouraged to turn in the heads of their harvested rainbow trout to determine if they have a winner.

Although we have an aggressive program to keep cutthroat as the dominant species, we also realize it is impossible to completely remove rainbows from the South Fork. Appropriate flows are not applied every year, our weirs have varying degrees of effectiveness, and anglers don't always harvest every rainbow they catch. As such, we will always have rainbow trout present in the South Fork, and that's OK. Our goal for the river is to reduce overall rainbow trout abundance to levels lower than we currently see now and similar to abundances we saw in the mid-1990's. You can help us meet our objectives by harvesting all your rainbow trout.



Bait Fishing and Sustainable Fish Populations

On many of our waters, we still allow bait fishing – a practice that some anglers believe is counter to our conservative approach to native fish management. While bait fishing causes higher mortality than lures or flies, the science shows this mortality is not sufficient to negatively affect our populations in most waters. For instance, on the South Fork Snake River, bait anglers unintentionally kill about 2,300 cutthroat trout each year as a result of hooking mortality (about 20-25% of their catch). While this may seem like a lot of cutthroat, in actuality it is about 4 to 5% of the population. Conversely, 40 to 60% of the 50,000 cutthroat present in

the South Fork die each year through natural causes. Further, the mortality that results from bait fishing is not likely in addition to the underlying mortality rate (which would increase overall mortality to 44 to 64% annually). It's more likely that total mortality remains around 40 to 60%, as survival on the fish that remain in the system increases slightly thereby making bait fishing a sustainable use of our resource. Interestingly enough fly fishermen on the South Fork kill about the same number of cutthroat through hooking mortality, even though their mortality rate is much lower than bait anglers. The difference comes from the greater number of trout that fly anglers handle over the year.

It's important to remember that most anglers got their start fishing with bait as youngsters. It's a great way to introduce someone to the sport, and in many cases, requires less skill than presenting a dry fly for a rising trout. As such, we need to be vigilant about putting unnecessary restrictions on our waters that may unintentionally preclude anglers from enjoying the sport we all love. So while on the surface it may appear that bait fishing is not consistent with native fish conservation, the reality is different than perception. The South Fork (and many other area waters) are exceptional fisheries that allow participation by all anglers and as such are a unique addition to western trout fishing.

Sinks Drainages,

Including the Big Lost, Little Lost, Birch, Medicine Lodge and Beaver/Camas Drainages -

The Sinks drainages are isolated streams that do not connect to each other, and sink into the upper Snake River Plain aquifer at their terminus. Small rainbow trout are the predominant fish throughout these drainages, except for some headwaters and a few minor tributaries where brook trout and cutthroat trout are dominant. Bull trout are only found in the Little Lost River, while mountain

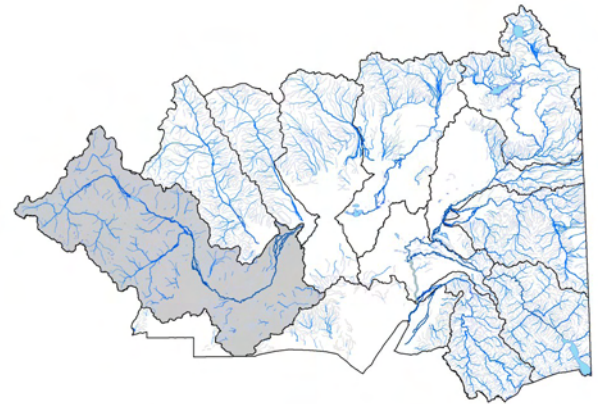
whitefish are found only in the Big Lost River drainage. Angler use is low in all of these watersheds, and as such, angler harvest is not sufficient enough to affect our populations. Substantial habitat degradation has occurred on most streams due to past and/or present grazing practices on private and public range land and dewatering. Given the abundance of nonnative trout through most of these drainages and the fact that cutthroat are not native to the Big Lost, Little Lost and Birch Creek, our management program will focus primarily on producing trout populations for sport fishing, although we will maintain and improve cutthroat populations in the Medicine Lodge drainage.



Big Lost River – The Big Lost above Mackay Reservoir contains robust populations of wild rainbow,

cutthroat, and brook trout, as well as mountain whitefish. Habitat in this area is in relatively good condition given its remote location. Fishing pressure is low during most of the year, with July through September capturing about 90% of the use. Thirty-six of the 46 actively managed alpine lakes in the Upper Snake Region are located in the Big Lost River drainage and are managed to produce high catch rates and provide a diversity of angling opportunities. These lakes are stocked with a variety of species including golden trout and arctic grayling among other species. Mackay Reservoir was built for irrigation storage but provides a quality fishery during most years, with the exception of years when the reservoir is drawn down substantially. Anglers can find kokanee and rainbow trout here. The Big Lost River downstream of Mackay Dam supports some of the highest densities of rainbow trout anywhere in the state. The entire river is managed under general regulations, and the abundant rainbow and brook trout make it an excellent place to take new or inexperienced anglers. Management emphasis will focus on working with partner agencies to address degraded habitat, and working with the irrigation community to improve flows during critical times as possible.

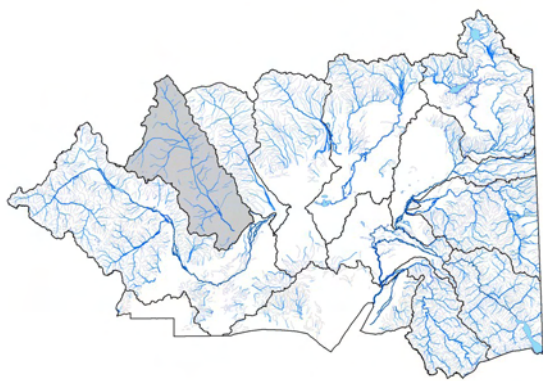
“The Big Lost River below Mackay Dam supports some of the highest densities of rainbow trout anywhere in the State.”



Sinks Drainages, continued

Little Lost River - The Little Lost River drainage contains primarily wild rainbow trout and bull trout, although brook trout are abundant in some of the headwater areas. Yellowstone cutthroat trout are also found in one stream in the Little Lost drainage. Highest densities of bull trout are present in Sawmill Creek and the upper Little Lost River. The watershed has been managed under wild trout regulations (two trout possession limit) since 1993. Bull trout harvest has been closed (concurrent with the statewide bull trout harvest closure) to protect this population. Management actions have emphasized increasing fish passage around barriers, improving connectivity among tributaries and minimizing brook trout impacts to bull trout populations. We will continue to monitor fish populations throughout the drainage, and will evaluate the effectiveness of the restricted possession limit that's been in place for the past 20 years. The presence of bull trout

will make managing for this species a priority in the Little Lost River, but providing quality small stream angling for wild trout will also be prioritized.



Why Native Fish? – In many instances, the main difference in how we manage specific drainages is if our management prioritizes native fish or introduced species. For the Upper Snake Region, native fish means Yellowstone cutthroat trout, the only trout species native to the region (with the exception of bull trout in the Little Lost drainage). We prioritize management of cutthroat for two main reasons, the first being that our cutthroat populations are not doing well in some areas and are a potential candidate for listing under the Endangered Species Act. The species were petitioned for listing in the early 2000's, but were found not warranted. Since that time, conditions across cutthroat trout range have remained similar or in some cases gotten worse. As such, it is likely that another petition for listing could occur at some point in the future, and we want our populations as robust as possible to avoid future listing. Although listing under the ESA is a threat, there is a more compelling reason for managing for native fish – that being, our angling public values native fish and has told us that should be a priority for our management program. Every six years, IDFG does an extensive survey of both resident and nonresident fishing license holders to determine what anglers' value in our fisheries and to help align our management program with angler expectations. One topic that has consistently been identified as very important has been and continues to be managing for native fish. To meet these two directives (the will of the anglers and to avoid ESA listing), we prioritize cutthroat management in some drainages. Cutthroat trout are native to six of our nine drainages, but only prioritized in five of their six native drainages. The Henrys Fork contains a very important fishery based on nonnative rainbow trout. That particular drainage contains very few cutthroat, so restoring it to a functioning native trout fishery is unrealistic. As such, we will continue to provide a healthy wild trout fishery in the Henrys Fork but will prioritize cutthroat management in the remaining five drainages where they are native.



Sinks Drainage, continued



Birch Creek - Birch Creek provides a high catch rate fishery supported primarily by hatchery rainbow trout, with some wild rainbow and brook trout adding to the anglers' catch. Birch Creek is a popular destination fishery for consumption oriented anglers, and

continues to be managed as a high catch rate destination for new and young anglers. No trout are native to Birch Creek, so management will focus on providing a desirable, high catch rate experience for anglers.

Medicine Lodge Creek –



Healthy populations of cutthroat trout and brook trout are present in some tributaries, although wild rainbow trout are the dominant species throughout the drainage. The watershed has been managed under the wild trout regulation (two trout possession limit) since

1998. Opportunities to restore native cutthroat to portions of the drainage

through eradication of non-native species will be identified and addressed as possible. Because of the abundance of nonnative fish and the inability to successfully remove nonnative fish and establish native fish combined with input from our angling public, this drainage will be managed for both native and introduced species.



**“Birch
Creek
provides
a high
catch
rate
fishery...”**

Beaver/Camas Creek - The Beaver/Camas Creek drainage includes Mud Lake, Beaver and Camas creeks as important waters. High density populations of wild cutthroat, rainbow and/or



brook trout exist in most streams, particularly in

the headwaters. Most populations contain a mix of native cutthroat and nonnative trout. The Department will work to restore native cutthroat trout populations where feasible and supported by the public. Lower down in the drainage, low flows and degraded habitat (primarily historical and ongoing grazing impacts and irrigation withdrawals) limit trout populations. IDFG will continue to manage this drainage to provide stream fishing opportunities for both native and nonnative trout.

Willow Creek Drainage

The Willow Creek drainage encompasses Ririe Reservoir and about 95 miles of streams above the reservoir. The area below the dam is dewatered during the winter to prevent flooding resulting from ice buildup in the channel, and as such, does not provide much of a recreational fishery. However, Ririe Reservoir supports a very popular sport fishery for kokanee, stocked rainbow and cutthroat trout, smallmouth bass and yellow perch. Walleye were recently found in the reservoir and are present in low numbers. Anglers have reported incidental catches of walleye, but a substantial fishery has not developed to date. Walleye have been



shown to forage on kokanee, and have the potential to reduce the kokanee population if they become sufficiently abundant. Our goal for the reservoir is to maintain angler catch rates of at least one fish per hour of angling and to provide harvest opportunity for anglers.

brown trout. As such, managing for native cutthroat is a high priority in this watershed.

We maintain seasonal closures on important spawning tributaries to help cutthroat reproduction, but the mainstem river is open year around. Despite these regulations, cutthroat populations are affected by habitat issues. Since as early as 1924, as much as 20,000 acre feet of water has been diverted out of the Willow Creek drainage and into the Blackfoot drainage for irrigation. The resulting lower flows raise summer water temperatures that impact coldwater species like trout. Streamside habitat is also in poor condition, with overgrazing, sedimentation and over widening of the stream contributing to depressed populations of trout. Our long term goals are to improve habitat conditions and stream flows in Willow Creek to improve our trout populations.



The 95 miles of streams above the reservoir contain relatively healthy populations of native Yellowstone cutthroat trout, and lesser populations of brook trout and the occasional





Teton River Drainage

The Teton River provides an important coldwater fishery to recreational anglers. It is one of the few remaining rivers in the Upper Snake Region that supports native Yellowstone cutthroat trout. Also pursued by anglers are rainbow trout and brook trout, and to a limited extent brown trout and mountain whitefish. The fishery enjoys regional, if not national, acclaim that supports a growing tourism economy in the local area. The presence of generally high quality habitat, relative abundance of native fish, and relative health of this drainage combined with input from our angling public make managing for native fish a high priority for this drainage, although a portion of the fish composition will always include nonnative trout. The trout in the Teton River face a number of threats including irrigation withdrawals, entrainment and habitat degradation.

The Teton River has been man-

aged as a wild trout fishery since the early 1990's. Prior to that date, the fishery was supplemented annually with both fingerling cutthroat trout and catchable rainbow trout. The cutthroat trout fishery has been managed with increasingly restrictive regulations since 1990. Beginning in 2006, cutthroat harvest was completely eliminated in the Teton River and its tributaries. All other game fish in the drainage are managed under general regu-

lations and provide harvest opportunity. In 2011, the river was opened to year around fishing, with catch and release from December through May. Tributaries are now managed with year around fishing with the exception of a spawning closure from April 1 through June 30. Our management program centers around working with partners including the Friends of the Teton River, Teton Regional Land Trust and others to improve connectivity between tributaries and mainstem reaches, improve physical habitat and protect existing quality habitat, improve fish passage at irrigation structures and protect key stronghold populations of native trout.



Angler Harvest as a Shaping Force on our Fishery Resources

Angler behaviors have changed over the past couple decades, with the biggest change being the increase in the "catch and release" ethic. While in many cases catch and release has allowed increased fishing opportunities for a limited resource, in other cases it has left fisheries managers in a difficult situation. Many of our regulations are only capable of shaping fish populations if angler harvest is substantial enough to cause increases in growth of the fish left behind. Today, it is rare to find anglers harvesting fish compared to the 1970's and 80's when fishermen routinely took fish home to eat. Many anglers recognize that a particular waterbody can only support a certain amount of fish biomass, or weight. In general, this weight can be distributed across a large number of fish that are smaller, or a lesser

number of fish that are heavier (for example, 1,000 trout that weigh 1 pound each or 200 trout that weight 5 pounds each). Many of the regulations in place today allow for angler harvest. In some instances, it would be beneficial for the fishery if anglers participated in harvest, and removed some of the trout they catch. For example, in Henrys Lake, our fish population is over abundant, resulting in smaller fish

(see Henrys Fork section). This situation provides a great opportunity for anglers to help our management program and engage in harvesting some fish. We're hopeful that the other articles in this newsletter help steer anglers towards waters that could benefit from selective harvest, and that fishermen adopt this new paradigm so we can continue to shape our fisheries to provide a more satisfying angling experience.

