According to a national survey conducted by the US Fish and Wildlife Service, angling participation in this country declined by nearly 16% between 1991 and 2006. Wyoming is not immune to this trend, as the survey showed an even greater decline of 16.5% for the cowboy state. There are probably many factors which contribute to a declining interest in fishing and hunting. Likely, one of the major factors is the lack of opportunity and exposure of children to the joys of fishing at an early age. Busy lifestyles of parents, single parent households, and other activities that compete for a kid’s time have all been suggested as reasons for declining participation in fishing by kids. Kids that don’t fish grow up to be adults that don’t fish. And, adults that don’t fish are likely to raise kids that don’t fish. It’s easy to understand that once put in motion, a declining trend in participation can be very difficult to arrest and/or reverse.

It has long been understood that anglers and hunters have been some of the strongest advocates for maintaining our nation’s, and our state’s, abundant fish and wildlife resources. It has been their passion and dollars that have been the driving force behind state wildlife agencies, conservation organizations, and political action groups. What will the future hold if the numbers of anglers and hunters continue to decline? Surely it won’t be good for fish and wildlife and for those few of us that continue to obtain extreme pleasure from wetting a line, taking our favorite hunting dogs to the field, or stalking a pronghorn.

So, if you have the opportunity, start a kid on the path of a lifetime of enjoying the outdoors. If you don’t have kids or grandkids of your own, take a neighbor. Teach him or her to fish and mentor them on proper etiquette and ethics. You’ll be doing them a tremendous service, and who knows, if enough sportsmen do the same we may be able to reverse the trend.
Build It and They Will Come

Over the past three years a lot of work has been done on the East Fork Wind River drainage near Dubois to assess Yellowstone cutthroat trout and habitat conditions. There have been movement studies, entainment studies, population monitoring, and habitat assessments completed, which have led to several projects aimed to improve aquatic habitat and ultimately fish populations. Below is a brief description of each project and how they will enhance our native trout.

Bear Creek Fish Passage:
Entrainment studies from 2007-2009 identified irrigation diversions where fish loss was occurring. The largest problem area was a diversion off Bear Creek where we even lost a radio tagged fish during the telemetry study (2008-2009). As a result, a new diversion structure with a fish screen was designed and construction began in October 2010 with completion scheduled for this fall. The new structure will improve fish passage in the stream channel, reduce maintenance for our irrigation practices, and return any fish that become entrained back to Bear Creek. This is an important project because Bear Creek is a major spawning area for fish that reside in the East Fork Wind River.

Dennison Meadow Irrigation Improvements:
Along Bear Creek on the Inberg/Roy WHMA irrigation has been done by ditches for decades to produce supplemental forage for wildlife. In fall of 2010, approximately 4,500 feet of transport ditch was converted to buried pipeline. The spreader ditches will be replaced with gated pipe. Pipeline installation will greatly increase water use efficiency, which will benefit Yellowstone cutthroat trout by leaving more water in the stream while still meeting our irrigation needs.

Bear Creek Conifer Removal:
In 2009, a conifer removal project began along Bear Creek on the Inberg/Roy WHMA to enhance deciduous vegetation, increase soil moisture and invertebrate biomass and thereby improve aquatic habitat. In 2010, over 80 trees were cut and hauled out of Bear Creek to 3 different locations along the East Fork Wind River for future use as woody debris jams in the East Fork Wind River habitat project. Additional cutting will be done in 2011 to complete the project area and provide more trees for in-stream habitat.
East Fork Wind River Habitat:
An assessment done in 2010 on the East Fork Wind River identified areas of unstable banks, excessive erosion, undercut banks, and suitable pools where adding a combination of tree and/or rock revetments would stabilize banks and enhance fish habitat. Ten sites were selected to work on over the next 2-3 years, and are all downstream of the Wiggins Fork confluence. Sites range from 200 – 350 ft in length and several have extensive erosion issues that will be addressed during project implementation. Work began in November 2010 with completion of a 250 ft long bank where a combination of rocks and trees were used to increase overhead cover for fish and provide bank protection during high flows. The project continued in April 2011 on 2 additional sites totaling nearly 600 feet of stream bank. Work will continue on this project over the next 2 years to stabilize eroding banks and provide more cover for fish.

Collectively, these projects will enhance habitat conditions for Yellowstone cutthroat trout and other aquatic species and provide some good areas to catch these beautiful fish.

Boysen Reservoir Update

Anglers continued to experience good walleye fishing at Boysen Reservoir in 2010. Creel survey data showed that angler catch rates increased from 0.33 walleye per hour of fishing time in 2009 to 0.43 walleye per hour in 2010. The majority of the harvested walleye in 2010 were in the 16- to 20-inch range. As was the case in 2009, 2010 catch rates for other fish species such as yellow perch and rainbow trout were somewhat lower than normal. Rainbow trout catch rates were particularly low at 0.19 fish per hour of fishing time. The average rainbow trout catch rate from 2002 to 2009 was 0.50 fish per hour of fishing time.

The 2010 angler catch rate of walleye was high despite lower than normal numbers of walleye in Boysen Reservoir. The average number of walleye captured per hour of gill netting time during WGFD standard walleye monitoring was only 0.42 in 2010, which was a significant decrease from the 0.99 walleye per hour of gill

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netting time obtained just two years ago (Figure 1). If you remember reading the angler newsletters from the past two years, the decline in walleye numbers was somewhat expected because of declines in yellow perch abundance. The high 2010 angler catch rate of walleye in Boysen was likely the result of low numbers of forage fish, mainly yellow perch, in the reservoir. Less forage in the reservoir results in more hungry walleye swimming around, which makes them more likely to strike an angler’s bait or lure. Relative weight data, which is a measure of fish body condition, showed that Boysen Reservoir walleye were slimmer than in previous years (Figure 2).

Yellow perch numbers were very low in Boysen Reservoir from 2008 to 2010. High walleye numbers, particularly in 2008, likely played a role in decreasing the yellow perch population. It is still early, but it appears that a successful yellow perch year class was produced in 2010, as young-of-the-year yellow perch were apparent in walleye stomachs during the fall. High reservoir water levels and low walleye numbers likely created good conditions for a strong year-class of yellow perch. Hopefully this is the beginning of an upsurge in the Boysen yellow perch population.

The low rainbow trout catch rates are undoubtedly the result of unavoidable changes in stocking for 2008 and 2009. The WGFD tries to stock approximately 50,000 8-inch rainbow trout annually in Boysen Reservoir. However, most of the trout stocked in 2008 were only 7 inches because we were unable to grow most trout up to the desired 8 inches. Past studies have shown that walleye under 20 inches cannot eat a trout that is 8 inches or larger but can eat trout less than 8 inches. Therefore, it is possible that many of the trout stocked in 2008 were consumed by walleye, both because they were smaller and because of the lower forage availability mentioned above. Stocking larger trout was not a problem in 2009; however, we were only able to stock 19,000 instead of the desired 50,000 rainbow trout because whirling disease infected some WGFD hatcheries and limited our production. The back-to-back years of altered rainbow trout stocking has had a negative effect on the fishery, as angler and WGFD gill net catch rates have been much lower than normal. The good news is that stocking returned to normal in 2010 through the stocking of approximately 50,000 8- to 9-inch rainbow trout. When we return to desired stocking practices, the Boysen rainbow trout fishery will improve.
New Three-Year Research Study on Burbot to Begin in the Upper Wind River Drainage

Burbot have long been a prized sport fish in the Wind River drainage, particularly for ice fishermen. These fish are beginning to receive more attention from natural resource agencies because of information regarding their population declines, particularly at the southern extent of their range. Interestingly, burbot in the Wind/Bighorn River drainage represent the most southwest portion of the species’ natural range in North America.

Much work has already been conducted over the past several years to better understand the life history of burbot in the Wind River drainage and to begin to determine what factors or mechanisms might be influencing our native burbot populations. Early in 2011 funding was approved to conduct additional research. Montana State University researcher Dr. Chris Guy will guide a graduate student through three years of research to determine overall population sizes and factors which influence mortality on three selected lake systems. The Torrey Creek system (Torrey, Ring, and Trail lakes), the Dinwoody lakes, and Bull Lake will be included in the study. As much of the work will be conducted within the Wind River Reservation, the Shoshone and Arapaho tribes and USFWS are partners in the research. Understanding the mechanisms that influence burbot in the Wind River drainage will assist in making sound management decisions to maintain sustainable populations into the future.

Specific objectives of the study will include estimating exploitation (mortality from angling), abundance, population growth rate, and large-scale movement patterns of burbot within the Wind River drainage. Burbot will be randomly sampled and tagged in each of the lakes from 2011 through 2013. Burbot will be sampled from October through December using trammel nets and cod traps. All burbot sampled will be measured for total length. Burbot greater than 12 inches will be tagged with a reward tag, and a small pelvic fin clip. An effort will be made to tag 200 burbot from the Trail, Ring, and Torrey system; 200 burbot from the Dinwoodo system, and 400 from Bull Lake per year. Each tag will be valued at $10. Tags will contain the reward amount, address to reclaim the reward, and an individual identification number. Anglers will be instructed to return the tags to Montana State University and return envelopes will be available at lake kiosks. Tag returns will be used to estimate exploitation. Population size, population growth rate, and exploitation rate will be integrated to quantify the effects of fishing mortality on the burbot population for each lake system. Previous data collected on age, length, weight, and fecundity may be used to model the effects of various harvest scenarios on population growth. The ability to evaluate large-scale movements is a supplementary benefit to this study. Sampling will occur throughout the Wind River drainage by Wyoming Game and Fish personnel and in a proposed entrainment research project; thus, burbot captured with tags used in this study may provide information on large-scale movements.

The study will improve our understanding of burbot ecology and management, particularly in the upper Wind River drainage, and provide a scientific foundation for management decisions. Outcomes from exploitation studies can result in refining creel limits, length limits, season closures, and prioritization of management actions such as canal screening and habitat improvements. We encourage all anglers who catch a tagged fish to return it to the

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address on the tag or contact the Game and Fish, USFWS office, or Tribal Fish and Game. Your cooperation will improve the accuracy of the study and allow us to manage burbot in a way that will insure quality fishing into the future.

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Fencing for Fish

If you have fished the 2nd street public access on the North Fork Popo Agie since last fall, you’ll have noticed changes have occurred. Approximately, 1.5 miles of fence were installed in 2010 along the easement boundary to reduce grazing pressure along the streambanks. This project was a partnership between Popo Agie Anglers, WGFD, Natural Resource Conservation Service, Bureau of Indian Affairs, Wyoming Wildlife and Natural Resource Trust, and the landowner to improve aquatic habitat and the fishery. In addition, 3 water gaps and 4 gates were installed as well as a new well and watering tank at the corrals to eliminate a water gap and decrease barnyard runoff to the river. Less grazing pressure along the banks will enhance riparian shrubs, reduce bank trampling, and improve water quality, which in turn should improve aquatic habitat. Stable stream banks with lush vegetation will decrease soil erosion into the stream and increase insect input benefitting trout. The fence with associated water gaps and gates will also improve cattle management for the landowner. Access to properties across the river will be eliminated while water gaps will drastically reduce cattle impacts to the streambank, and gates will allow periodic grazing of the easement area to occur. This was a great project that will benefit anglers for years to come and having it so close to Lander will allow many users to enjoy the improved habitat.

Water gap access for cattle.  Fence along the corrals.
For Wyoming anglers, a very unique opportunity and challenge is to catch all four native subspecies of cutthroat trout and receive a Cutt-Slam certificate from the Game and Fish. Some have even elevated the challenge even farther, and have set the goal to complete the Cutt-Slam in a single day. To receive a certificate for completing the Cutt-Slam, anglers need to catch all four subspecies of cutthroat trout native to Wyoming within their respective native drainage. Pictures are also needed to verify the catch of all four subspecies. The headwaters for streams where the Colorado River, Bonneville (Bear River) and Snake River cutthroat trout can be caught originate within very close proximity, allowing the opportunity for anglers to land three subspecies within part of a day. The Smiths Fork River, home to the Bonneville Cutthroat trout is just a short distance away from Labarge Creek and the Greys River, where the Colorado River and Snake River cutthroat trout live, respectively. After catching three of the four subspecies, anglers must travel several hours to reach the last subspecies, the Yellowstone cutthroat trout. Although the Yellowstone cutthroat trout can be caught in many locations in the Bighorn Basin, the travel distance is prohibitive for completing the challenge in a day. Getting late in the day most anglers opt for catching the last subspecies in the upper Wind River near Dubois. Pelham Lake, located just south of the headwaters of the Wind River, is a popular location and a great opportunity to catch Yellowstone cutthroat trout ranging up to 20 inches in length. For some that prefer fishing streams, the East Fork
of the Wind River, including the Wiggins Fork and Bear Creek also offer excellent opportunities to catch Yellowstone cutthroat trout. However, fish in these streams generally average only 12 to 16 inches, depending on the location and stream.

For those seeking a challenge, consider a day of fun trying for a Cutt-Slam. Think of it as the equivalent of the Iron-Man competition, but for anglers. You will need to rise before the sun, eat your meals on the run, and catch your last fish during the waning twilight of the day. But think of the sense of accomplishment you will feel by being one of a very select and limited number of anglers who can make the claim that they have completed their Cutt-Slam in a single day. Good luck!!