

2007 10 “Waters To Watch Updates



1. Moose Creek, Alaska: The Moose Creek Fish Passage Restoration Project resulted in a total of 3,400 lineal feet of restored river channel and adjacent floodplain characteristics and restored fish access to more than six miles of spawning and rearing habitats for Pacific salmon. This project increased available salmon habitats on Moose Creek by 200%, going from 3 miles to 9 miles of spawning and rearing habitats. Contact Jessica Dryden for more information at 907/745-0737.

- 2005: (Phase 1) From May to July 2005, reconstructed a meandering stream channel and floodplain to restore fish passage around an impassable man-made waterfall barrier. 2,100 lineal feet of stream channel were reconstructed in the creek's original alignment, which reduced the slope and increased the habitat value. Chinook salmon immediately began to move into and through the newly opened river channel. (Outcome: 0.4 miles of restored river channel, restored fish access to 6 miles of salmon spawning and rearing habitats)
- 2006: (Phase 2) From May to July 2006, the Mat-Su Basin Salmon Habitat Partnership supported the reconstruction of a complex channel and floodplain to provide quality salmon habitat and fish passage around partial barrier waterfalls. This project improved fish access to 6 miles of high quality spawning and rearing habitat for salmon. (Outcome: 0.25 miles of restored river channel, fish access improved to 6 miles of spawning and rearing habitats).
- 2007: (Phase 3) In May 2007, two large log jams were constructed to maintain fish passage. One was built in front of the Phase 1 diversion plug as bank protection and another was built upstream as a flood-flow deflection structure. These two logjams were built to strengthen the initial diversion plug and help maintain the restored channel alignment, which bypasses a barrier waterfall. The logjams also increase habitat diversity, especially during flood flow periods.

2. Bear Wallow Creek, Arizona: This project will enhance 1.8 miles in-stream habitat for Apache trout and speckled dance. Contact Mark Brouder for more information at 928/338-4288.

- The Bear Wallow barrier was constructed in May 2007. This barrier now protects endangered Apache trout in almost 2 miles from non-native fish invasion. (Outcome: 2 miles of protected stream)
- 2007: The barrier was constructed in May 2007 and took 25 days to build. Due to its remote location, over 97,000 lbs. of materials had to be flown in via helicopter over a five-day period.

3. Badger Creek, Idaho: Through removal of diversion fish passage barriers and riparian restoration, this project will restore 6.5 miles of stream habitat for Bull Trout and many other important species. Contact Kim Goodman for more information at 208/552-0891.

- The Badger Creek diversion structure was removed in May of 2007. Re-vegetation has occurred and the stream is no longer a impediment to native fish passage. (Outcome: 1 removed fish barrier, opening up 6.5 miles of stream)

- 2007: The stream reconstruction was completed in May, 2007. The old irrigation structure was removed, re-vegetation has occurred, and the stream is once again connected. This project is complete.

4. LaBarge Creek, Wyoming:

This project will restore 58 miles of in-stream habitat in the LaBarge drainage for Colorado cutthroat trout through the removal of non-native species and habitat restoration. For more information, contact Morgan Elmer at 303/236-4512.

- The barrier renovation on LaBarge Creek was completed in the summer of 2006 along with concurrent removal of non-native trout and restocking of native cutthroat trout. (Outcome: 58 restored miles of stream habitat).
- 2006: Removed non-native salmonids and restored cutthroat trout to 58 continuous stream miles. An integral part of LaBarge restoration and management effort was renovation of a fish barrier which was constructed in 2002 at the lower end of the project area to prevent the upstream movement of non-native salmonids. This renovation was completed in the summer of 2006.
- 2007: The Game and Fish will begin restocking the creek with Colorado River



- 2007: Improved water and substrate quality, as well as increased spawning and other in-stream habitat for brook trout, sculpin and aquatic invertebrates. Monitoring in place after project completion.

- South Pine is a quality brook trout stream nestled away in the Upper Iowa River watershed of northeast Iowa. It is one of only several Iowa streams that contain a self-supporting wild brook trout population. South Pine is a small 3-mile headwater stream,

utilized project area banks and has increased overhead cover for brook trout. Substrate quality has also improved, benefiting trout, sculpin and macroinvertebrates.

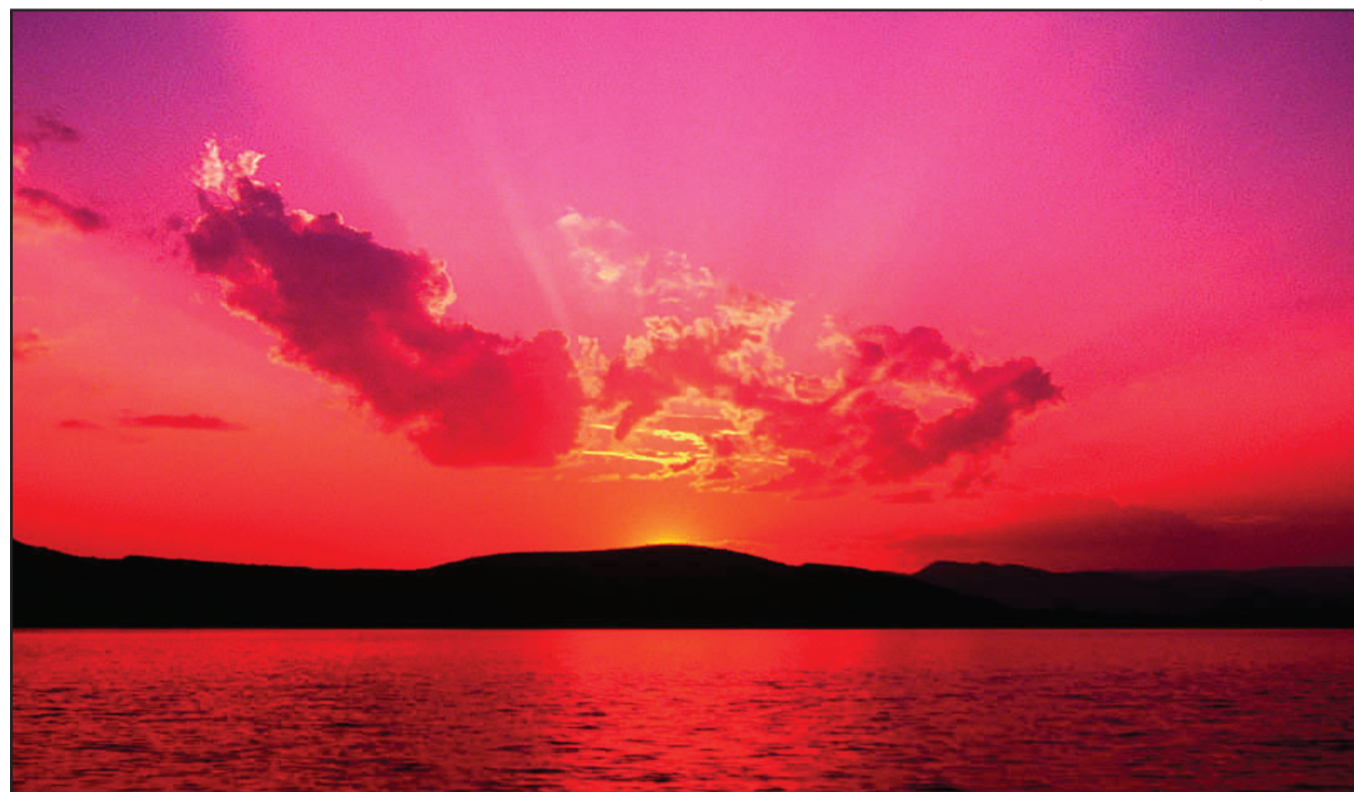
6. Pascagoula River, Mississippi:

Through restoration of 1 acre of tidal marsh habitat in the Bennett Bayou Marsh, which had been impacted by Hurricane Katrina and urban development, this project will benefit multiple Gulf species including red drum, brown and white shrimp, Gulf sturgeon, speckled trout, and Atlantic croaker among others. For more information contact Scott Robinson at 770/361-5639.

- The restoration of Bennett Bayou Marsh was completed in 2006 and plans to continue monitoring the area and leading educational programs of this work are on task. (Outcome: 1 acre of restored tidal wetland)

• 2006: In 2006, SARP led the effort to restore Bennett Bayou, protecting and restoring this gateway to the 11,000 acre Pascagoula River Marshes. Baseline quantitative data was gathered on plant species and elevations from a nearby intact reference wetland on which to model restoration planning. Invasive species were treated and removed. Riprap was removed from the area and appropriate native tidal marsh plants installed to stabilize the banks and re-vegetate the newly created marsh area.

- Planned for Bennett Bayou: A wildlife viewing station will be constructed, and additional native trees and shrubs will be planted in the bayhead swamp north of the canal. Monitoring protocols and success criteria will be established for the site to track survival of re-established native plants and control of invasive species. Audubon Mississippi will incorporate the site into future on-going environmental education programs focused on marsh restoration, including site monitoring. Project monitoring will be conducted for three years, with supplemental planting events and invasive species treatments conducted as necessary.



cutthroat trout and other native fish in 2007 with hopes of having a natural reproducing population of cutthroat trout established by 2010. This will be the longest section of connected stream miles in the state with a fishable native Colorado River cutthroat trout population.

5. South Pine Creek, Northeast Iowa:

This project seeks to reduce sediment input and restore riparian and in-stream habitat along South Pine and in order to improve brook trout and slimy sculpin habitat. For more information, contact Louise Mauldin at 608/783-8407.

- 2006: In August of 2006, 25 volunteers helped reslope 500 ft of bank on South Pine Creek. Bankhides were placed and topped with rock and dirt. Volunteers help lay down ralanka fabric and plant prairie cord grass plugs, native prairie grass and forb seed. Also, 7-acres of riparian zone were burned to stimulate prairie plant growth.

primarily surrounded by native prairie. Occasionally, maintenance is needed at South Pine to keep the stream healthy and brook trout population intact. The NFHAP project addressed two sections of eroding streambank that contributed an estimated 228 tons of soil to the stream during each high water event. Streamside vegetation at this site was dominated by non-native forbs, likely contributing to the instability of stream banks.

- Community involvement made this habitat improvement project a local success. After the banks were resloped and stabilized by the Iowa Department of Natural Resources (Iowa DNR), ralanka fabric was installed along the stream edge and prairie cord grass plugs, native grasses, forbs and oats were planted by the Driftless Chapter of Trout Unlimited, Hawkeye Fly Fishing Association, Friends of the Upper Mississippi Fishery Services, Iowa DNR, and U.S. Fish and Wildlife Service.

7. Upper Duck River, Tennessee: This joint project will restore over 3 miles of riparian habitat along Big Rock Creek within the Duck River Basin for Cumberland monkeyface. For more information contact Scott Robinson at 770/361-5639.

- In 2007, two miles of riparian habitat were restored by placement of livestock excluding fencing along Big Rock Creek. An additional 1.2 acres of habitat were also restored through the planting of a vegetative riparian buffer. (Outcome: 2 miles stream habitat restored, 1 acres re-vegetated)

- 2007: 2.2 miles of riparian habitat were restored by placement of livestock excluding fencing along Big Rock Creek, a subwatershed of the Duck River. An additional 1.2 acres of habitat were also restored through the planting of a vegetative riparian buffer. This project extends an initiative by The Nature Conservancy that has installed over 33,000 feet of exclusion fencing and 20 alternative water sources.

8. South Bog Stream, Maine: This project will restore 2.1 miles of in-stream habitat, completing restoration of the entire 6.3 miles of Sough Bog Stream. This restoration benefits brook trout, as well as many other important species.

- In 2007 the Eastern Brook Trout Joint Venture completed the final leg of a 6.3 mile restoration project in South Bog Stream. This two miles project included stream reconstruction for brook trout and other important species. (Outcome: 6.3 miles restored).

- Two phases of this project have been completed to date recreating riffle-pool complexes.

- 2007: In this final phase, a section of stream will be restored, completing restoration of the entire stream. The goal was to narrow the stream, construct pools through the construction of rock weirs, and to add root wads to capture sediment.

9. Smith Creek, Virginia: Through reconnection of 2 miles of intact habitat and restoration of 65 acres of upland and riparian habitat, this project will restore 6 miles of brook trout habitat in the headwaters of the creek. For more information, contact Maureen Gallagher at 276/376-4597.

- Slated to be completed in 2011, there has been considerable progress made in the Smith Creek headwater restoration which will restore riparian and upland pastures to bottomland and upland forests. So far, a total of four miles of stream have been restored along with 65 acres of riparian forest. Cattle fencing has also been installed to protect the creek.

- The Smith Creek headwaters restoration will restore riparian and upland pastures to bottomland and upland forests in an area with several spring habitats that provide critical spawning, rearing and late summer temperature refuge habitats for brook trout. The restored habitat will connect to a small

- 2007: Approximately 4 mi. stream restored, 65 ac. riparian forest restored (12,651 trees), 251 head of cattle fenced out of 3mi. of stream, Brook trout found using isolated brook trout population found upstream on protected National Forest land (Mountain Run).

- 2007: Approximately 4 mi. stream restored, 65 ac. riparian forest restored (12,651 trees), 251 head of cattle fenced out of 3mi. of stream, Brook trout found using stream year-round, Natural reproduction of brook trout identified the first year, Tagged fish identified to have moved 2.5 miles upstream connecting Smith Creek to Mountain Run.

10. Upper Browns River, Vermont: This project will focus on riparian restoration, including two miles of stream frontage for the brook trout and other species. For more information, contact Chris Smith at 802/872-0629.

- More than 2.8 miles and 12.4 acres of stream frontage was restored at two sites in the Upper Browns River in 2007 through fencing livestock, establishing alternative waters systems, and by planting native trees and shrubs. (Outcome: 2.8 miles stream restored, 12.4 acres of riparian habitat restored)

- 2007: The project was completed with the implementation of habitat restoration activities at two sites. Restoration techniques included livestock fencing, establishment of an alternative water system and the establishment of native trees and shrubs. More than 14,800 feet (2.8 miles) of riparian frontage and 12.4 acres of riparian habitat were restored at the two sites.



NATIONAL
FISH HABITAT
ACTION PLAN

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Moose Creek, Alaska

Bear Wallow Creek, Arizona

Badger Creek, Idaho

LaBarge Creek, Wyoming

South Pine Creek, Northeast Iowa

Pascagoula River, Mississippi

Upper Duck River, Tennessee

South Bog Stream, Maine

Smith Creek, Virginia

Upper Browns River, Vermont