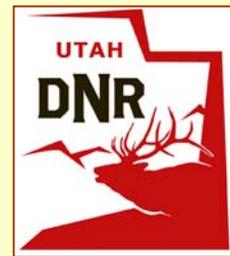


# Green River

## Summary of the 2010 Surveys

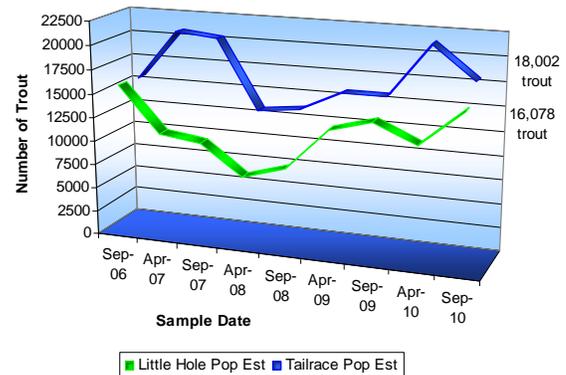
Matt McKell, Aquatics Biologist, Flaming Gorge Project



The following summary reflects sampling conducted on the Green River in the spring and fall of 2010. Boat electrofishing is used to sample a distance of one river mile at two standard sites, Tailrace (Spillway) and Little Hole. From year to year, sampling is consistent, conducted at night and at the same flow magnitude (1600 cfs). Captured fish are measured, weighed, checked for marks, and released back into the river. Stocked rainbow trout and wild brown trout dominate the fishery. Currently about 20K catchable rainbow trout are scatter-planted from the Spillway launch ramp downstream about 8 miles to just above Grasshopper Island. As a result of research to assess the influence of double peak flow regimes on over wintering trout, all captured trout are marked with an internal Passive Integrated Transponder (PIT) tag. Individual growth and mark-recapture population estimates are calculated based on PIT tag recaptures. After 4 years of tagging, there are currently about 8,900 trout tagged in the Green River.

This chart shows the population estimates (# trout/mile) for both the Little Hole and Tailrace sampling sites. Tailrace boasts just over 18K trout/mile and Little Hole has slightly fewer fish at 16K trout/mile. Trout densities remain very high in the Green River, a defining attribute of its national popularity.

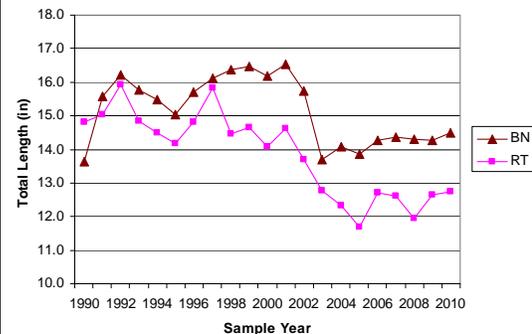
Green River Trout Population Estimates



These two charts show the changes in average total length across years for both sample sites and species. Currently mean total length is greatest for brown trout (15.0 in) at Tailrace and for rainbow trout (12.8 in) at Little Hole. Both species at both sample sites observed a dramatic decrease in mean total length after 2002. This is likely a result of changes in the invertebrate community due to both drainage-wide drought and the decrease in peak flow releases from Flaming Gorge Dam (Mark Vinson, 2009).

According to a recreational use survey completed by the US Forest Service in 1992, the Green River exhibits an annual economic value of over \$26 million. It's a highly utilized trout fishery, and based on fish density and size, it's no surprise the Green River attracts so many.

Average length (inches) for rainbow trout and brown trout by year at Little Hole, 1990-2010



Average length (inches) for rainbow trout and brown trout by year at Tailrace, 1990-2010

