



# Williams Fork Reservoir

## FISH SURVEY AND MANAGEMENT DATA

Jon Ewert - Aquatic Biologist (Hot Sulphur Springs)

**General Information:** Williams Fork Reservoir, a 1600- acre storage reservoir, is owned and operated by the Denver Water Board. It provides good fishing for northern pike, lake trout, rainbow and brown trout, and kokanee salmon. Boats need to pass an Aquatic Nuisance Species inspection prior to launch. To expedite this process, be sure your boat is clean, drained and dry when you arrive. No overnight beaching of boats is allowed. In the winter, no motorized vehicles are allowed on the ice.

**Location:** Approximately 10 miles east of Kremmling, CO. Easiest access is off Grand County Road 3 near Parshall.

**Recreational Management:** Denver Water Board. For more information, see: <http://www.denverwater.org/Recreation/WilliamsFork/>

### Amenities and General Info.

- Boat Ramps (1)
- Picnic Areas
- Camping

### Regulations

- Standard harvest regulations for trout (4 fish daily bag/8 fish in possession) and kokanee salmon (10 fish).
- All northern pike between 26 and 34 inches in length must be returned to the water immediately.
- Snagging of kokanee salmon is permitted September 1 through December 31 except for in the area between the orange buoy line and the Grand County Road 330 bridge.
- Beginning in 2011, the bag limit was liberalized at 8 fish, separate from the normal daily bag of other trout. Only one lake trout may be over 30 inches long.

### Previous Stocking

#### 2011

Species	Size	Number
Rainbow	10"	17,450
Rainbow	4"	101,000
Kokanee	1.5"	350,000

#### 2010

Species	Size	Number
Rainbow	10"	10,000
Rainbow	5"	96,500
Kokanee	1.8"	335,000

#### 2009

Species	Size	Number
Rainbow	10"	4,250
Rainbow	4"	50,000
Kokanee	1.5"	350,000

#### 2008

Species	Size	Number
Rainbow	10"	23,000
Rainbow	5"	50,000
Kokanee	1.5"	308,000

### Sportfishing Notes

#### Rainbow trout

- Rainbows in Williams Fork can grow to surprisingly large size, but are not overly abundant due to the high density of predators in the reservoir.

#### Kokanee salmon

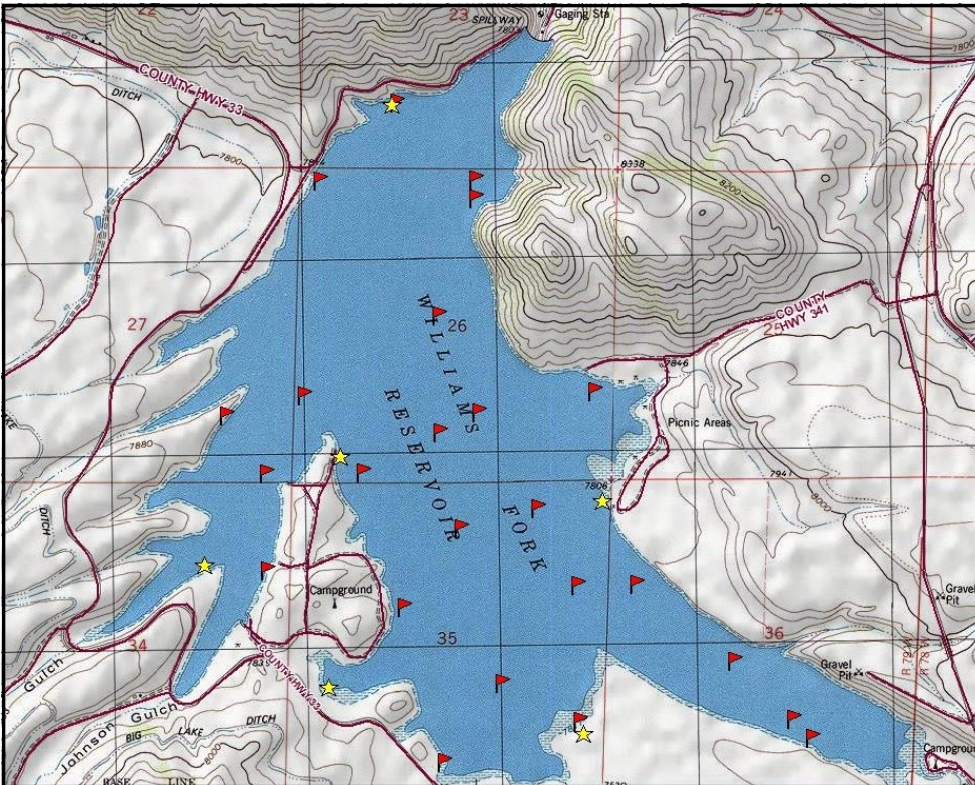
- Williams Fork supports good zooplankton densities, which in turn supports a productive kokanee fishery. The fish are some of the largest in the state currently, and can reward the angler who is versed in summer trolling methods.

#### Other species

- In addition to the stocked fish, Williams Fork supports wild, self-sustaining populations of lake trout, northern pike, and brown trout. Trophy specimens of each one of these species can be had in this lake. Each species requires skillful specialization for an angler to be successful. A large year-class of small lake trout was first observed in 2010, and harvest of these small lakers is encouraged in order to maintain the predator-prey balance.

# Williams Fork Reservoir

Fish survey information  
Jon Ewert, Aquatic Biologist



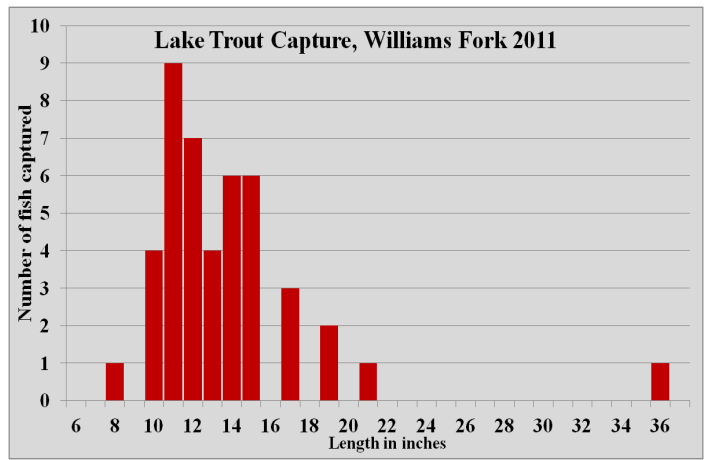
We conducted two types of fish sampling at Williams Fork in 2011. We set six gillnets overnight in traditional locations (left, yellow stars). These overnight sets are conducted every year in the same location and as close to the same date as possible. We also set gillnets in 24 random locations for six hours apiece (left, red flags). This is a new sampling scheme begun in 2010 designed to more accurately track population trends of reservoir fish such as lake trout.

## Northern pike capture, overnight gillnets

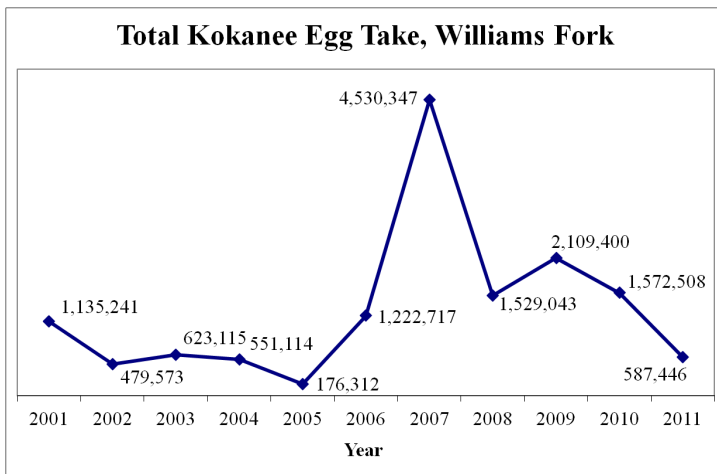
Year	# captured	Avg. length (inches)	Avg. relative weight	Largest pike length/weight	Catchable rainbow trout stocked
2005	19	25.8	107.4	37 in/13.7 lbs	16,469
2007	44	23	106.2	39/16.1	20,000
2008	41	26.7	107.4	46/20.6	23,000
2009	34	25.9	109	36/12.5	4,250
2010	23	24.9	99.2	39/16.4	10,000
2011	29	26.2	100.4	40/16.4	17,450

Northern pike experienced a decline in body condition (weight loss) in 2010 and 2011 compared to previous years. This can be seen in the relative weight column in the table above. Relative weight is a measurement of body condition based on a scale of 100. Stomach content analysis has shown that the pike in Williams Fork feed heavily on both 10" rainbow trout and kokanee salmon. Relative weight information can be interpreted as a gauge of the forage conditions in the lake over the year prior to the time the sampling takes place. It is interesting to note that the drop in body condition which the pike experienced in 2010 follows a major drop in the number of catchable rainbow trout stocked in the reservoir in 2009. Due to budget constraints within the agency, the number of catchable rainbow trout available for stocking was significantly reduced in 2009 and 2010.

Species	Number caught	Average length (range)	Average weight (range)
Brown trout	1	24	4.9
Kokanee	3	14 (10-16)	0.9 (0.4-1.3)
Rainbow	5	11 (10-12)	0.5 (0.4-0.5)
Lake trout	44	14 (8-36)	1.3 (0.1-23.3)
Northern Pike	47	27 (12-40)	6.1 (0.3-16.4)
White sucker	92	15.3 (7.2-19.3)	N/A



The table above contains all the fish captured in both the 6-hour random gillnet sets as well as the traditional overnight sets. The graph displays the size distribution of the 44 lake trout that were captured. This information confirms the observations of Williams Fork anglers over the past two years that there are a large number of small lake trout present. In 2011 the daily bag limit of lake trout was increased to 8 fish, separate from the normal daily bag of other trout. Only one lake trout may be over 30 inches. Anglers are encouraged to harvest the small lake trout currently in Williams Fork in order to maintain the predator-prey balance.



Williams Fork is also home to an important kokanee salmon spawning operation. Eggs obtained from the spawning fish at Williams Fork are used to stock other waters around the state. However, 2011 saw the poorest egg take in several years. It is important to maintain a kokanee population in the lake large enough to provide both a sport fishery and enough spawning adults in the fall for egg harvesting. This is the main reason why it is in our best interest that the northern pike or lake trout populations do not grow out of control. The current stocking rate for kokanee in Williams Fork is 350,000 1.5" fingerlings annually, in early summer.



A Williams Fork brown