

# Tygart Lake

Authorized by the Rivers and Harbors Act of 1935, Tygart Dam was the first of 16 flood control projects in the Pittsburgh District. The project provides flood protection for the Tygart River Valley as well as for the Monongahela and upper Ohio Rivers.

Tygart has the capability to store the equivalent run-off of 4.56 inches of precipitation from its 1,184 square mile drainage area. The project's flood control benefits were dramatically demonstrated during the November 1985 floods when Tygart alone prevented an amazing \$195.8 million in damages and lowered flood crests along the Monongahela River by as much as 6.8 feet. Since its completion in 1938, Tygart has prevented flood damages estimated to be nearly \$1.2 billion. When compared to the flood control benefits which have resulted, the \$18.5 million construction costs are greatly overshadowed.

In addition to flood control, the Tygart project was also authorized for navigation and water supply purposes. During the summer and fall low-water season, Tygart releases additional water downstream to meet navigation water supply requirements on the Monongahela and upper Ohio River for commercial navigation. The increased flow also improves water quality and quantity for domestic and industrial use, recreation, esthetics and aquatic life.

## Lake & Dam Statistics

<b>Location:</b> On Tygart River in Taylor County, West Virginia, about 2.25 miles above Grafton. The lake is located in Taylor and Barbour Counties.	
<b>Project area, acres:</b>	5,962
<b>Drainage area above dam, square miles:</b>	1,184
<b>Construction cost:</b>	\$18,432,000

## Dam

<b>Type of structure:</b>	Concrete gravity type with an uncontrolled spillway
<b>Height above streambed, feet:</b>	230
<b>Length, feet (concrete section):</b>	1,921
<b>Width at base, feet:</b>	207
<b>Volume of concrete, cubic yards:</b>	1,251,550
<b>Outlet Works:</b> Discharge is regulated by ten sluices, eight sluices controlled by 5.67' x 10' slide gates and two sluices controlled by 54" ring jet valves	

## Lake

<b>Length at normal pool, miles:</b>	10
<b>Area, acres:</b>	
<b>Maximum (reservoir full):</b>	3,440
<b>Normal (summer pool):</b>	1,750
<b>Elevation, feet above sea level:</b>	
<b>Maximum (reservoir full):</b>	1,167
<b>Normal (summer pool):</b>	1,094
<b>Streambed at dam:</b>	960