Winfield Locks and Dam

Kanawha River, WV

Project Features

• Authorization: River and Harbors Acts of 1930 and 1935.

• Primary project purposes are navigation and recreation.

• The project was placed in operation in September 1935 and an additional lock was added November 1997.

• The project has a non-navigable gated dam, 676 ft. long with six roller gates, spanning 100 ft. between piers, a 110 ft. tainter gate, 56 x 360 ft. twin auxiliary locks, and a 110 x 800 ft. main lock.

• American Electric Power (AEP) operates a hydroelectric plant that has three turbines with total capacity of 14,760 kilowatts.

• Lock is staffed 24 hours a day, 7 days a week.

• The project has four recreation areas.

Consequences of Not Maintaining the Project

• Failure to maintain the project could result in a halt in the movement of commercial navigation. That stoppage would result in loss of rate savings to the shippers and delayed orders for essential commodities including fuel for power plants and raw materials for major industries. In addition to the loss of the navigation purpose, pool loss could jeopardize water supply for municipal and industrial users, loss of electrical energy produced by hydropower plants at the dams, and loss of habitat for aquatic species. Such a pool loss could affect both recreation users and water quality should there be a prolonged loss.

Regional Importance

• The project averages 227 thousand visitors annually, contributing $6.7 million to the local economy, supporting 70 jobs.

• In calendar year 2015, the volume of cargo transported exceeded 11.6 million tons, valued at over $1.6 billion.

• Natural and recreational resources at this project provide social, economic and environmental benefits. Project personnel conducted 2 recreational programs in FY16 that help strengthen family ties and friendships; provide opportunities for children to develop personal skills, social values, and self esteem; and increase water safety.

• The minimum fill time for the main lock is 6 minutes and 4 minutes for the auxiliary locks.

• It takes approximately 45 minutes for a commercial tugboat with a 9 barge tow and approximately 30 minutes for a pleasure craft to lock through.

• The most common cargo locking though are coal, petroleum products, gravel, rock, cement, scrap metal and chemicals.

Additional Information

- 2015 tonnage (in thousands) : 11,617

- National Rank: 59
- Current Miter Gate In Service Date:
  Main: 2000 Auxiliary: 2000

- Projected Year Lock Miter Gates Reach "F" Condition:
  Main: 2093 Auxiliary: 2116

- Projected Miter Gate Replacement:
  Main: 2100 Auxiliary: 2117

- Fee Lands: 21 acres

- Flowage Easement Lands: 388 acres

- Project Boundary Line Marked: 2.3 miles

Congressional Interests

Senator Joe Manchin III D-WV
Senator Shelley Moore Capito R-WV
Congressman Alex Mooney R-WV-02
Congressman Evan Jenkins, R-WV-03