

*Hydropower Project License Summary*

**KANAWHA RIVER, WEST VIRGINIA**

LONDON-MARMET HYDROELECTRIC PROJECT (P-1175)

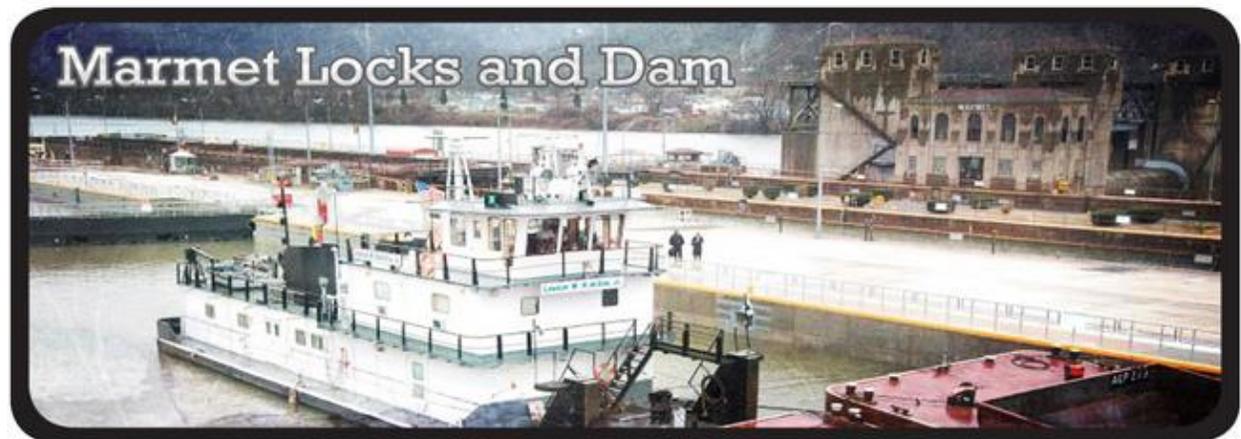
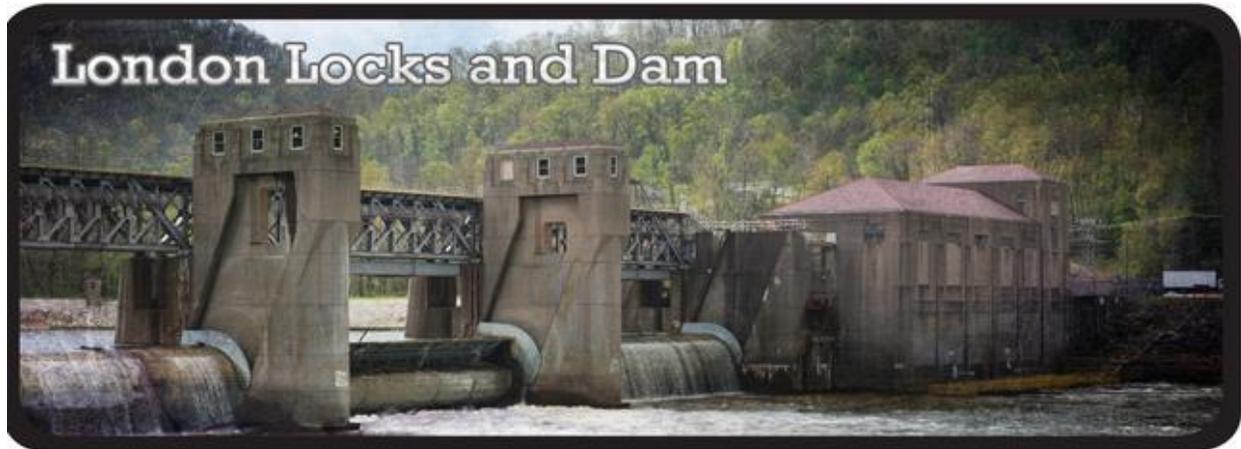


Photo: US Army Corps of Engineers

*This summary was produced by the*

Hydropower Reform Coalition

*and*

River Management Society

## **KANAWHA RIVER, WV**

### LONDON-MARMET HYDROELECTRIC PROJECT (P-1175)

#### ***DESCRIPTION:***

The London-Marmet Hydroelectric project is owned by the Appalachian Power Company and consists of two developments on London and Marmet dams, both of which are owned by the US Army Corps of Engineers.

#### **A. SUMMARY**

1. License application filed: January 31, 2012
2. License Issued: December 20, 2013
3. License expiration: January 31, 2063
4. Capacity: 28.8 MW
5. Waterway: Kanawha River
6. Counties: Kanawha and Fayette
7. Licensee: Appalachian Power Company (Appalachian)
8. Licensee Contact: Teresa P. Rogers  
Appalachian Power Company  
Hydro Generation Dept.  
P.O. Box 2021  
Roanoke, VA 24012  
Tel: 540-985-2441  
Email: tprogers@aep.com
9. Project Website: <http://www.kanawhahydro.com/>
10. Project area: The project occupies 11.51 acres of federal lands administered by the US Army Corps of Engineers.
11. Project Facilities:

The project uses the London dam located at River Mile 82.8 and the Marmet dam located at River Mile 67.7 on the Kanawha River. Each of the two developments is described in a little detail below:

- a. The London development consists of:
  - a 26-foot-high London dam gated with five roller gates
  - screened intake structures
  - a concrete powerhouse integral to the dam containing three turbine-generator units with a total installed capacity of 14.4 MW
  - a tailrace 420 feet long
  - a substation containing two, 3-phase transformers and two auxiliary transformers; and
  - two 46-kilovolt (kV) transmission lines within a 0.38-mile-long transmission line corridor.

- Recreation facilities at the London Development include a tailrace fishing pier and parking area.
- b. The Marmet development consists of:
- a 34-foot-high dam gated with five roller gates
  - screened intake structures
  - a concrete powerhouse integral to the dam containing three turbine-generator units with a total installed capacity of 14.4 MW
  - a tailrace 450 feet long
  - a substation containing two, 3-phase transformers and two auxiliary transformers;
  - and two, 46-kV transmission lines within a 0.78-mile-long transmission line corridor.
  - Project recreation facilities at the Marmet Development include a tailrace fishing pier and parking area.

## **B. IMPORTANT PROVISIONS AND REQUIREMENTS IN LICENSE**

The license requires the project to be operated in run-of-river mode in order to protect aquatic resources and water quality of the Kanawha River.

The license requires Appalachian to file the following plans for Commission approval:

- Operation Compliance Monitoring Plan
- Vegetation Maintenance Plan
- Aviation Protection Plan
- Recreation Plan, and
- Programmatic Agreement and Historic Properties Management Plan

The license includes the following conditions and provisions.

### **1. Operation** [Reference: License Articles 402 and 403]

The license requires Appalachian to operate the Winfield project in a run-of-river mode. To ensure the operation, the license requires Appalachian to file by August 1, 2014 an operation compliance monitoring plan prepared in consultation with the Army Corps of Engineers, US Fish and Wildlife Service, WE Division of Natural Resources, and WV Department of Environmental Protection. The Plan shall include the following:

- provisions to monitor compliance with the operational requirements of the license
- description of the steps the licensee will take to ensure run-of-river operation continues during planned and emergency shutdowns
- description of all gages or recording devices that will be used to monitor operation compliance

**2. Vegetation Maintenance** [Reference: License Article 404]

The license requires Appalachian to file a Vegetation Maintenance Plan by August 1, 2014, the purpose of which is to (1) clarify the vegetation maintenance methods used to maintain project lands, including primary transmission line corridors; (2) designate best management practices for maintenance activities that occur at or adjacent to wetlands; (3) provide a method to identify and manage invasive plant species that occur on project lands when they pose a direct risk to important wildlife habitat components (i.e., roost trees for federally or state-listed bat species) and rare plant communities including federally listed plants; and (4) identify criteria for preserving trees that offer suitable habitat for wildlife, particularly listed bat species.

**3. Aviation Protection** [Reference: License Article 405]

The license requires Appalachian to file an avian protection plan by August 1, 2014 in consultation with US Army Corps of Engineers, US Fish and Wildlife Service, and WV Division of Natural Resources. The avian protection plan shall include:

- training of the licensee's staff to adequately identify and document instances of avian mortality due to electrocution by or collision with the project's electrical facilities
- a framework for reporting avian mortality to the relevant resource agencies; and
- provisions for the development and implementation of site-specific measures and practices to reduce bird mortality

**4. Recreation** [Reference: License Article 406]

Appalachian is required to prepare and file a recreation plan by August 1, 2014 in consultation with WV Division of Natural Resources and Army Corps of Engineers. Plan shall include the following:

- a schedule for installing restroom and trashcan facilities at both developments and a 25-car graveled and lighted parking area at the London tailrace access area
- a schedule for maintenance of the new and existing facilities
- a provision to operate and maintain the facilities over the term of the license; and
- a discussion of how the needs of the disabled were considered in the planning and design of the facilities

**5. Programmatic Agreement and Historic Properties Management** [Reference: License Article 407]

The license requires Appalachian to implement the "*Programmatic Agreement Between the Federal Energy Regulatory Commission and the West Virginia Historic Preservation Officer for Managing Historic Properties that May be Affected by Issuing a New License to Appalachian Power Company for the Continued Operation of the London-Marmet Hydroelectric Project in Fayette and Kanawha Counties, West Virginia (FERC No. 1175-015)*," executed on July 18, 2013. Pursuant to the programmatic agreement,

Appalachian shall file a Historic Properties Management Plan (HPMP) by January 31, 2015.

**6. Water Quality** [Reference: Appendix A of the license, Water Quality Certification]

As part of its conditions for the water quality certification, WV Department of Environmental Protection requires Appalachian to monitor water quality for water entering the intakes and downstream of the project after mixing from May 1 to October 31. Appalachian shall monitor for dissolved oxygen (DO) and temperature. A report shall be provided each year by March 1.

**C. MAP**

There are two convenient ways to become familiar with this project on the Hydropower Reform Coalition website, [www.hydroreform.org](http://www.hydroreform.org).

- Go directly to the project <http://www.hydroreform.org/projects/london-marmet-p-1175>
- To understand the geographical context of the project, visit the *On Your River* section of the site. This link (<http://www.hydroreform.org/on-your-river/East>) will take you to the section for rivers in the East. Zoom in toward Southwest West Virginia until you see five markers. The London-Marmet project is the marker just southeast of Charleston.