Stream and Wetland Mitigation

1586 Boonesborough Road | Richmond, Kentucky 40475 | Phone: 859-623-0499 | Fax: 859-623-2676 | www.jacksongroupco.com

Location:
Kentucky

Client:
East Kentucky Power Cooperative

Dates:
2009

Present Status:
Complete

Project Type:
Stream and Wetland Mitigation

Major Project Elements:
Site Assessment and Evaluation
Land Survey of Streams and Wetlands
Biological Data Collection
State and Federal Permit Submittals

J K Smith Station 404 Mitigation Plan

Jackson Group partnered with Palmer Engineering to provide land surveying, ecological services, and civil engineering for the mitigation of streams and wetlands at the 3,272 acre JK Smith Power Station in Clark County, Kentucky.

East Kentucky Power Cooperative (EKPC) proposes to build a 278-MW coal-fired unit at its existing J K Smith Power Station. The facilities for the proposed unit include two landfills, two beneficial reuse areas, a reservoir, and impacts including earthwork borrow areas. These facilities will impact existing streams and wetlands that will have to be mitigated.

The Jackson Group team was requested to mitigate the impacted areas including 4.783 acres of wetlands, 24,895 linear feet (LF) of ephemeral stream, 32,787 LF of intermittent stream, and 17,808 LF of perennial streams. The team proposed to restore existing streams and wetlands or create new streams and wetlands based on the standard US Army Corps of Engineers (USACE) requirements for compensation of replacing streams and wetlands based on their existing quality and stream type.

Services provided for this project include field survey of existing streams and wetlands along with topographic surveys of areas for new streams and wetlands to be created. Staff analyzed this information and existing information to provide designs for new streams and wetlands that would be better for the overall habitat. This design included providing engineered structures in these streams and wetlands that will restore the habitat as closely as possible to the existing streams and wetlands. Biologists also provided on-site benthics and fish sampling for the existing streams to incorporate or improve these features or new future water bodies. The Palmer Engineering team also coordinated activities through meetings with EKPC and USACE.

Construction management services and materials management services will also be required to coordinate with the contractor during construction of the new streams and wetlands.