



# Western Pennsylvania Stream & Wetland Mitigation Banking

## Wetland Mitigation

### Challenge

A stream and wetland mitigation banking system is proposed in western Pennsylvania to provide compensatory mitigation for unavoidable impacts to streams and wetlands resulting from permitted activities associated with the energy industry. The project site is comprised of a 552 acre tract of land containing approximately 8 acres of wetlands and 143,000 linear feet of stream. Historically, the site has been subject to significant land use alterations, which include clear cutting and logging, agricultural use, and longwall mining. These activities have resulted in stream instability, loss of habitat quality and diversity, and disconnection of the floodplain from the stream and groundwater complex. Project goals include restoring and preserving self-sustaining, functional streams, wetlands, and riparian corridors on a watershed scale basis.

### Solution

LandStudies, Inc. designed a watershed scale stream and floodplain restoration project that includes restoring approximately 47,497 linear feet, enhancing 41,890 linear feet, and preserving 53,508 linear feet of stream that will optimize the functional uplift to the existing on-site resources. The restoration approach will include the removal of legacy sediment from the valley bottom and full relocation of the stream channel to provide stability and ecological uplift. The aquatic resource improvements will re-establish a high quality, ecologically dynamic stream and wetland complex while reconnecting the floodplain to the groundwater and restoring localized groundwater aquifers.

### Services

Engineering | Geomorphic Assessment | Permitting



Existing Conditions



Existing Conditions

Client: Energy Industry  
Location: Western Pennsylvania



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