## Client Challenge

Cambria County, Pennsylvania has been subjected to aggressive underground and surface mining activities over the years. As a result, in many sections of the County, the groundwater obtained from domestic groundwater wells contains unacceptable and unhealthy levels of dissolved iron, manganese and hydrogen sulphide. Municipal government officials report that all the residents who obtain their water from domestic groundwater wells complain of laundry staining, taste, odor, and staining of bathroom fixtures. The tendency therefore has been the creation of "Water Cooperatives" by small communities for the explicit purpose of obtaining clean and reliable potable water from regional public water supply authorities.

The Cambria County Redevelopment Authority retained Multi-Lynx Companies, Inc. to conduct a public water supply feasibility study of the northwest region of Cambria County. The study involved an assessment and evaluation necessary for the preparation of a small water systems regionalization recommendation for interconnection of several small water systems to the Hastings Municipal Authority. The assessment and evaluation was based on, among others, interviews of affected municipal and local government personnel, a review of past engineering studies conducted for communities within the vicinity of the project, and an engineering site investigation conducted by Multi-Lynx Companies, Inc.

## Scope of Work

The objective of the assessment and evaluation was to investigate the feasibility of the physical, operational and administrative consolidation or regionalization of five small water systems with the Hastings Municipal Authority, HMA. Multi-Lynx analyzed several alternatives for achieving this objective, and, based on the results of the analysis, developed recommendations for implementation of the objective.



HMA Emergency Power Generator



## Multi-Lynx Value

The feasibility study included the following task items, among others.

- Survey and inventory of existing physical plant, and conditions of each small water system
- · Evaluation of existing physical plant relative to water distribution options and requirements
- Evaluation and analysis of the construction needs appropriate for correcting the existing problems and deficiencies for each of the small water systems, in the form of alternative solutions, and
- Determination of construction standards and cost estimates for the different alternative solutions



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