

## Types of environmental work

- Assessments
- Conservation
- Protection
- Remediation/Restoration/Reclamation

## Remediation/Reclamation/Restoration

- Reversing or stopping environmental damage or getting environment back to a certain point.
  - Example: Abandoned Mine Reclamation
  - PA has the worst Abandoned Mine problems of any state.
  - One of the biggest sources of non point source pollution.

**Abandoned Mine Reclamation** 

#### Who does this?

- Watershed Groups
- State Agencies
- Local Municipalities
- Regional Agencies/Non Profits
- Industry

#### **Abandoned Mine Reclamation**

## **Funding**

- Much of the work is funded through grants
  - State (eg. Growing Greener)
  - Federal (grants directly to State or non profits)
  - Private foundations

Industry working cooperatively

Funding can leverage other funding sources

Local sources of funding (memberships, etc)

**Abandoned Mine Reclamation** 

## What kind of work gets done?

- Designing treatment systems
- Construction of treatment systems
- Remediation of waste coal piles
- Operation and maintenance of treatment systems.
- Rehabilitating treatment systems.



#### **Positive Effects**

- Positive effects on the environment directly. (Restored land/surface water quality/drinking water quality).
- Job creation directly related to project (construction, contractual, etc).
- Job creation indirectly related to project
   (local businesses benefit, material supply, retail, etc)
- Recreational spending increases, local businesses and tax revenue increases.
- Continued revenue/job creation due to operation, maintenance, and rehabilitation of remediation systems once initial project is completed.
- Potential for new sources of water to be considered for consumptive uses.
- Involvement of residents to take ownership of their local environment.

#### **Positive Effects**

For example.
 For Abandoned Mine Drainage (AMD) projects:

According to a Trout Unlimited economic study of the West Branch Susquehanna from 2008

"Depending on which technologies are ultimately chosen at each AMD source, remediation expenditures will generate local benefits of up to \$616 million for capital expenditures, up to \$23 million per year for operation and maintenance. Even greater economic gains would accrue to the state as a whole".

#### **Positive Effects**

Trout Unlimited study 2008 continued:

"Based on an analysis of parcels in Clearfield County, property values near AMD-impacted streams are reduced and are projected to increase with AMD remediation. In Clearfield County alone, the total value lost by owners of the 2,734 parcels within 200 feet of AMD-impacted streams is \$4,077,682, for an average of \$2,587 per acre or \$1,491 per parcel".

### Positive effects

According to the Somerset Conservation
 District, "Several miles of restored whitewater
 rafting on the Stonycreek River, is valued at
 1.2 million dollars of economic value to the
 local economy each year.

# Abandoned Mine Reclamation stimulates the local economy

- Increased business tax revenue from sales
- Increased tourism from improved environment.
- Increased property values leading to increased tax revenue.
- Encourages more growth
- Encourages more restoration/reclamation
- Better quality of life
- Instills pride in community



Thank You!

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