



Overview of the North Appalachian Experimental Watershed (NAEW)

Coshocton, Ohio

An outdoor laboratory for land and water management research



NAEW Background & Facilities

The North Appalachian Experimental Watershed (NAEW) conducts research on ways to manage land to improve water quality, to reduce flood damages due to agricultural and urbanized areas, and to reduce sediment, nutrients, and pathogens and pesticides in water supplies. The NAEW helps develop tools to facilitate decision making for land managers, producers, and industry. The infrastructure, historic data, and expertise allow for investigation of new national land management priorities using existing scientific infrastructure.



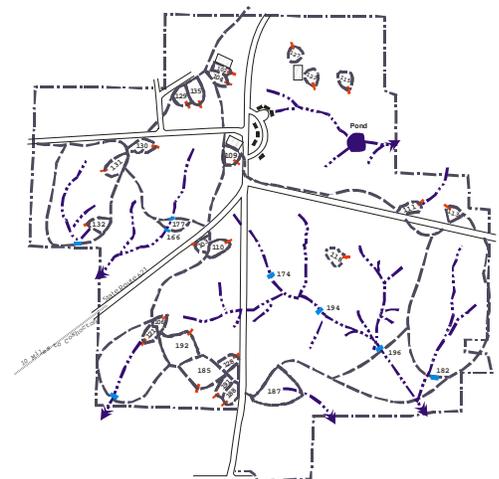
On-Site Laboratory



Flume and Coshocton Wheel

The NAEW consists of:

- ❖ A 1050-ac outdoor laboratory facility operated by the USDA-Agricultural Research Service (ARS) in cooperation with The Ohio State University/OARDC
- ❖ A network of instrumented watersheds, lysimeters, weather stations, and rain gauges for surface- and ground-water hydrology and water-quality studies
- ❖ A natural setting with experimental watersheds ranging in size from 1 to 300 acres
- ❖ A 70+ year computerized data base of runoff, erosion, climatic conditions, and soil properties
- ❖ Experienced, on-site staff of 12 including technicians, 3 PhD scientists, and 2 OSU/Ohio Research and Development center Employees



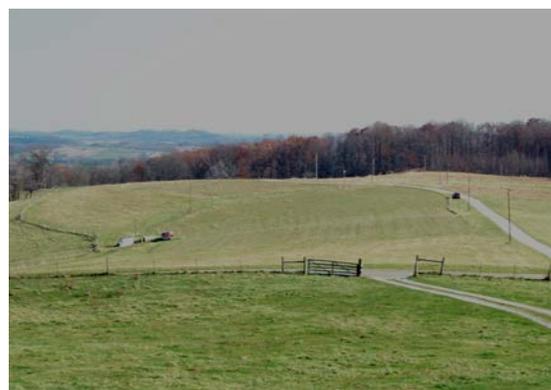
Map of NAEW



Impacts and Potential of NAEW Research

The experimental watershed facility at Coshocton has been addressing the agricultural, soil, and water resource needs of the nation, and is recognized nationally and internationally. Our recognized research has positioned us to investigate national areas of environmental concern such as:

- ❖ Energy
- ❖ Food safety and security by protecting the quality of water resources
- ❖ Beneficial uses of industrial byproducts
- ❖ Flooding
- ❖ Climate change
- ❖ Grazing systems
- ❖ Cropping systems
- ❖ Soil carbon & quality as affected by land management
- ❖ Educating future scientists
- ❖ Improving scientific understanding of natural watershed systems



Instrumented Watershed

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