Integrated Nutrient Management Program Work Group
MINUTES October 25, 2004


Tackling the Atlantic Basin from Both Sides
See RELU overview Power Point presentation.

Rural Economy and Land Use Program (RELU)
- 3 agencies in UK provide funding.
- Objectives:
  - Science – deliver interdisciplinary research
  - Capacity building
  - Knowledge transfer
- Grant of about $ 80,000 for 1 year.

Integrated River Basin Management

- Choice between carrot and stick in regulating water pollution, erosion.
- Westcounty Rivers Trust – founded by individuals, independent of government (NGO).
  - Objective is practical improvement in water quality.
  - Education programs
  - Watershed scale
  - Demonstration sites
- Ecosystem Management
  - Ecology
  - Technology & Economics
  - Human needs
- Ties in with animal welfare issues – pig mining?
- Benefits
  - Direct benefits to farmers – savings 2,300 pounds/farm/year
  - sustainable rural development benefits community, tourism
  - Increased salmon population in River Tamar

Water Quality Monitoring in the Cannonsville Reservoir Watershed – Pat Bishop
See Cannonsville PowerPoint Presentation.

- Europhobic soon after creation. Primarily used to increase flow to Delaware River.
  - Multiple monitoring sites.
  - Monitoring is fully automated
  - Can differentiate between snow and rain.
  - Emphasis on runoff events
- Range in days that runoff events occurred from 22 to 93 days/year.

- Use of data
  - Track changes and relate to watershed programs
  - Validate and calibrate hydrology models

- Point Source improvements have been costly but successful in improving water quality

- P loads
  - 69% Agriculture
  - 25% Forest
  - 3% Urban
  - 3% Septic

- Track BMP changes in manure spreading, dissolved P and N loads
  - Daily spreading, even season applications before implement BMPs. After BMPs – higher manure applications in spring and fall, lower in summer and winter.
  - Decrease in annual DP load.
  - Reduction in ammonia but increase in nitrate. This is an important finding for watersheds where N is limiting such as Susquehanna.