# LOWER SUSQUEHANNA REGIONAL WATER RESOURCES COMMITTEE REGIONAL PRIORITIES (Revised 2/14/05)

#### Water Supply:

### Water Quantity

Inventory available sources of groundwater and surface water ID opportunities for conjunctive use of groundwater and surface water Mass Balance (USGS 'budget') of total water incoming in a watershed vs. outgoing Assess Current Storage capacity and ID alternative means to enhance supply Evaluate land use impacts on water quantity:

- •Reduce impacts on recharge
- •ID diversion of water out of watersheds by POTWs, etc.

Identify Source characteristics that affect quantity:

- •Geologic formations, sink holes
- •Seasonal variations

Identify instream flow needs

# Water Quality

Ensure minimum quality to protect designated uses Prevent pollution from non-point and point sources:

- •Ag, mining, land disposal of wastes, spills, etc.
- •POTWs and other point sources
- Stormwater

Evaluate land use impacts on water quality

Improve nutrient/pollutant reduction technology and alternative treatment options Identify sampling and testing programs and data availability on existing water sources Identify Source *quality* characteristics:

- •Geologic vulnerability to pollution (sink holes)
- •Natural physical & chemical characteristics and biological habitat Identify source water protection plans

#### Water Demand:

Identify current water needs and future water needs:

- Quantify minimum instream flow needs
- •Consumptive vs. non-consumptive use
- •Withdrawal uses vs. non-withdrawal uses

Identify uncertainties and assumptions of projected uses *Identify need for* Storage *capacity*:

•Understand and balance demand fluctuations

# Managing Supply vs. Demand:

Explore Water conservation strategies:

- •Reduce water loss
- •Improve efficiency of water use

Identify CWPAs and Shortfalls

Determine Safe-yields
ID and Assess alternative potable sources of supply
ID Alternative uses for, or re-use of, non-potable water
Promote Source Water Protection:

- •Educate and *promote* the implementation of source water protection plans
- •Assess and measure the effectiveness of the source water protection plans Evaluate inter-basin transfers and consumptive uses

  Identify and coordinate institutional and regulatory water agencies/authorities

  Coordinate land use planning with water resource planning

  Explore regional and watershed-based water resource planning