

**Upper Susquehanna Water Resources Regional Committee**  
**List of Issues and Data Gaps**

*Issues*

1. Define “measures” of performance
2. Integration of TMDL’s in water quality management requirement
3. Data analysis and review mechanism between DEP and Committees
4. Interbasin transfers
5. Lack of statutory authority to disapprove subdivision and land development plans due to known or anticipated groundwater resource problems; or even require sufficient testing to confirm adequacy for the scale of development proposed
6. Consistency of DEP population projections with county/municipal projections and impact on DEP permitting where inconsistent
7. Instream needs
8. Groundwater safe yield
9. New storage reservoirs/supply enhancement
10. Resolve impaired waters
11. No local water supply planning at the municipal level
12. Lack of adequate regulation governing construction of private water supply wells
13. Water mining – use of groundwater/surface waters by bottled water companies generate significant public response due to lack of adequate education on this issue
14. Lack of controls (regulatory) on groundwater withdrawals less than 100,000 gpd
15. Sprawl/sustainable yield
16. Stormwater management as it relates to groundwater recharge/infiltration
17. Critical Water Planning Area – State College area
18. Stormwater management
19. Critical water areas
20. Groundwater recharge
21. Protection of Water sources from encroaching development
22. Development, new water supply sources
23. Land use planning and its ties to water resources use
24. Lack of state regulatory authority over large sector of water use
  - a. Groundwater; re-use/recycle
  - b. Users other than municipalities
25. Lack of general public/senior official knowledge on water resource issues/science
26. Headwater assessments
27. Cumulative quality/quantity impacts analysis
28. Knowledge/water data management
  - a. System
  - b. Operators
29. Assessment of headwaters’ water resources to insure growth in region
30. Water quality protection (e.g., EV streams vs. Restoration of degraded streams [AMD])

31. What are trends of consumptive water uses: surface vs. ground water
32. Understanding of current water use and trends, and how this fits with sustainable supply (a *process* need)
33. Groundwater consumption and planning to address sustainable yield (where are we; what is suggested)
34. Implications of agriculture use (consumptive and non-consumptive), and projected changes over X years – recommendations to address water supply and water quality
35. Issue of stormwater management to address both peak flow management and groundwater recharge
36. Issue of public water supply and interactions (policy, regulation, etc...) with groundwater sustainable supply
37. Acid mine drainage – while a water quality issue, it *is the* water planning issue in much of Upper Susquehanna, so what could we do within Act 220 requirements to HELP with this issue, e.g.
  - a. Use/treatment of acid mine water
  - b. Combined peak flow/AMD management solutions
  - c. Priority records (i.e., identify “fix” AMD before spending money on some lower priority water resource needs)
38. Water quality
39. Groundwater contaminants from old natural gas wells
40. Ability to interconnect to create better water usage
41. Insured recreational use of river and streams
42. Environmental Management, especially acid mine drainage and combined sewer overflows
43. Land use management – protection of water quality and quantity
44. Effective drought management
45. How will we protect surface and groundwater resources (including wetlands) from water withdrawals, diversions, and other impacts related to the use of water?
46. What additional protections will be applied to the best (i.e., high quality waters and EV water and EV wetlands) waters from water withdrawals, diversions and other impacts related to use of water?
47. How will we integrate water quality protection with water use planning?
48. Incentives for citizens to use less water and procure equipment that reduces water use (reduce, reuse, recycle)
49. Same as 1 for industry and commercial ag
50. Review scientific information regarding nutrient impact on Chesapeake Bay from Susquehanna River
51. If water is plentiful and well managed in PA, how is the state marketing this resource to those industries that require this resource

### ***Data Gaps***

1. Water use of all user groups

2. Groundwater availability
3. Knowledge management of existing studies and other state programs relative to water resources planning
4. Future land use plans
5. What is current budget as known today – need to evaluate it now for region
6. What are projected changes and impacts of use (surface, ground, etc...) on picture of budget
7. Accurate water use data (with emphasis on several sectors such as agricultural use, consumptive use, etc.)
8. Recharge rate data (empirical) and critical aquifer recharge areas.
9. Warm water ecosystem flow methodology:
  - a. Assessing aquatic viability/impacts under low flows
  - b. Something beyond 20% ADF Q7-10
10. Groundwater resources/recharge for Upper/Middle Susquehanna
11. Water use trend data per capita by municipalities/townships/watersheds (changes over past 20-30 years) relative to water availability data for same criteria
12. Realistic agricultural data
13. Relationship of data between areas
14. Pre-registration data vs. registration resulting from “mandatory” regulation may present a data gap
15. Timely data analysis and accessibility of data for review
16. Land use information
17. Full-time GIS mapping/database support for this planning process
18. Groundwater drawdown/demand
19. Instream needs
20. Groundwater safe yield
21. Need to identify number of private wells by watershed – could be done by GIS coverages in counties
22. Inventory of facilities/businesses should be reviewed by local groups or DEP regional personnel for accuracy as existing information in WUDS has some inaccurate information
23. Map of HQ and EV waters and EV wetlands in Upper Susquehanna basin
24. Map/data of largest water withdrawals in the basin and a separate map with withdrawals plotted on areas at risk (i.e., on HQ/EV watersheds, on streams with small drainage areas, on EV wetlands and impacting other wetlands)
25. Critical Water Planning Area criteria developed by other regional committees
26. Map/data identifying NPDES dischargers in the region
27. Legal information pertaining to water rights, groundwater law, and surface water allocation
28. Nutrient impact of Susquehanna River on Chesapeake Bay
29. What are recharge credits?
30. The water cycle showing percentage recharge vs. use
31. What are the greatest economic and other impacts during drought periods?
32. Glossary defining technical terms