

Delaware Water Resources Regional Committee
List of Issues and Data Gaps

Issues

1. Drinking water source
2. Land use planning
3. Tributary low flows (base), high flows (storm)
4. Lack of cohesive municipal planning as it relates to water supply and waste water treatment
5. Lack of understanding on the part of municipal officials regarding regional water supply issues
6. Providing for adequate industrial water supply
7. Basing plan on good science
8. Having free flowing water in sufficient quality and quantity to support wildlife
9. Maintaining groundwater at levels to recharge streams and provide for rural residential wells even in drought
10. Providing adequate water supply for ag silvaculture
11. New administrative and regulatory concerns for small businesses and farms, water use charges and credits are complicated and may ultimately lead to limitation of access to traditional water supplies for ag, including costs/fees (engineering, etc...) and volume restrictions and overhead expenses for reporting
12. Address all sector groups and how links apply to land use, economic impact with water planning
13. What is cost . . . care to use existing surveys, studies, etc...
14. Water for urban sprawl
15. Cooperation between municipalities
16. Stormwater management
17. Local and count planning being ignored
18. Continues and enhances suburban sprawl through gross expansion of water supply links
19. Water budgeting based on first order stream sub-basin under drought conditions
20. NPS discharges impact on water quality
21. TMDLs – where is DE Basin in this process and where are we headed
22. Inter-basin transfers
23. Groundwater shortages in areas of high growth/demand
24. Poor stormwater recharge, leading to stream damage and groundwater depletion
25. Impaired surface water quality due to toxics and nutrient pollution
26. Balancing multiplicity of uses
27. Adequate water supplies and infrastructure
28. Quality vs. Quantity
29. Water withdrawal
30. Water recharge/stormwater
31. Sprawl
32. Continued urban sprawl and increasing demands on water resources

33. Disconnect between land use planning at the local level and water use planning at the state/interstate levels
34. Limited stormwater management and lack of state funding (Act 167)
35. Lack of linkage between municipal land use zoning authority and water capacity issues
36. Lack of real local input into the withdrawal regulatory process
37. Lack of public acceptance/understanding of water budgeting
38. Water supply resources
39. Water need priorities
40. Quality/supply stewardship
41. Meet water supply needs during drought conditions
42. Maintain stream ecology during low-flow conditions
43. Stormwater management to address multiple objectives
44. Coordination of water withdrawals (outside DRBC jurisdiction) with Act 537 program – sewage facilities planning. (Keep water within watershed, especially in small first order headwater streams)
45. Sediment loadings to surface water and increased temps to baseflow
46. Land development and infrastructure going out to Non-Safe-Yield areas, reducing recharge opportunities
47. Sprawl – Land use
48. Capacity for economic development
 - Drinking water supply
 - Sewage treatment capacity
 All at the regular location/area
49. Periodic droughts – every 5 years or so, drought warnings
50. Use of, and sometimes reliance on, out-of-basin transfers. Has ecological impacts, destroys natural water budgets, more drought, and not sustainable
51. Failure to consider and regulate based on point source impacts and withdrawals on ecosystem, aquifers, streams, and all dependent on them
52. Failure to define strategies and put water back in the ground and use development and land use strategies that minimize increases in stormwater runoff and decrease of aquifer recharge
53. Look at state permit requirements and process that requires assessment of impacts, imposes limits and allowable withdrawals, that is enforceable and includes opportunities for public input; requirements should be for all withdrawals

Data Gaps

1. Detailed groundwater and surface water flow data
2. Land use/zoning data
3. Databases and GIS mapping of all water suppliers and water quality management facilities and service areas
4. Watershed based water quality data
5. Tributary flow data
6. Tributary water budgets

7. Need a way to quantify more accurately “losses” – it’s frequently taken that all withdrawals go to beneficial use, but a portion usually goes to various types of losses (leakage, meter errors, etc...). Reducing loss recovers water resources
8. Comprehensive quantity/quality data
9. Detailed water use data by sector: rec., commercial, industrial, . . .
10. Water supply (GW & SW) graphed on geographic basis in flush conditions and in drought conditions
11. Water demands – now and projected based on future land use
12. Legal authorities and constraints on allocation
13. Water chemistry by region
14. Water consumption by region
15. Map of basin/sub-basins
16. Amount of surface water and ground water in basin
17. Amount of water being extracted/used
18. Amount of recharge
19. Basin water balance and sub-basins water balance
20. Water quality – where are there concerns
21. Numbers on water supply and demand basin-wide and by smaller sub-basin areas/watersheds
22. Trend data showing use by sub-basin areas/watersheds (usage over time by category of user for each sub-basin)
23. Recharge data by watershed/sub-basin
24. Available water supply
25. Projected uses/demand
26. Condition of infrastructure
27. Vision of future (re)development and need
28. Amount of water available
29. Instream flow needs for warm water fisheries
30. Consumptive water usage (insufficient knowledge of)
31. Good maps of sub-basin and watersheds in the Delaware Basin
32. Instream flow data of waste water facilities
33. Latest mapping
34. Competitive withdrawal (groundwater) in formation
35. Historical low or no-flow stream
36. Identifying critical natural water resources for conservation protection
37. Identify critical water shortage areas
38. Identify existing public water facilities, lines, and service areas
39. Where is the water? 3-D perspective
40. Current shortages
41. Future shortages
42. Water use (current). Particularly for ag and quarries
43. Relevant county and municipal plans (land use) growth projections
44. Water use trends impact of policies and technology
45. MS4 – who has them, who doesn’t
46. Flood plain designation overlaid with PEMA/FEMA disaster areas
47. Infiltration standards in karst geology

48. Impacts of water withdrawal on ecological health of stream, aquifers, groundwater, wetlands, ecosystems
49. Impacts on waterways (ground and surface) from future development and community planning documents
50. Updated science on target flows that drive water withdrawals

