October 18, 2001

Lower Susquehanna Comprehensive Water Resources Study
Regional Workshops

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Adams, Franklin and York Counties

GENERAL COMMENTS

1. For those counties that have prepared or finalized county water supply reports, how will these county reports be integrated into this Lower Susquehanna plan? How will you collect and analyze the data from county reports?

2. This study will utilize these county water supply reports, and they will serve as an excellent baseline data. They will also need to be supplemented with information collected since the completion of these reports and will be further supplemented with other sources, especially relating to private enterprises.

3. There need to be some standards on ground water. It would help if this study addressed this.

4. Other states, like Connecticut, have laws for protecting ground-water supplies. We do need to look into ground-water protection.

5. It's important that there be more local government involvement in projects and planning studies like this. If you start talking about LAND USE, that is when local governments get involved.

6. Shouldn't we be focusing on counties, rather than local governments when it comes to planning? Counties could do that job, using Chester County as a model. Trying to reach out to the locals could be done through associations, as well.

7. Possible solution and alternatives in the study could be through conservation legislation. Reuse of water. Credit for this water conservation. Identify conservation efforts in place now. Credit program for industries that conserve.

8. Mandating the recycling of wastewater isn't acceptable, yet. We don't know enough about what the impacts may be from wastes in the water.

9. The public perception is that "industry" is the big problem or big source of pollution.

10. Yes. That is a perception even though industry has done a lot.

ADAMS COUNTY

1. Need to get a handle on large water-use projects like large animal feeding operations and power plants. Need to get handle on the impacts on rural areas. There is a perception that if we can contain sprawl, we have preserved landscape and water supplies. Let's look at changing agricultural and other large water using practices.

2. All water flows out of the county, none into the county—Adams County is a headwaters county.

3. Communities using ground water is a big concern—some of them are running out of water.

4. River basin commissions can regulate some areas that states cannot, like consumptive use. This study should not be constrained by existing laws. This study could propose additional studies or institutional changes, if necessary. It would be the responsibility of others to implement any changes.

5. Adams County's planning has all along been based on Smart Growth. We need to see this kind of continued planning. Higher density housing areas are an example of Smart Growth. We have to provide water for these communities. We need to know where the aquifers are and the recharge areas are. This study needs to identify aquifer recharge areas and develop recommendations to protect and preserve these areas.

6. We expect a doubling of population in this area due to doubling of sewer capacity.

7. If you're going to have dense, designated areas, we need to bring them up to standards. We must get public to understand how interrelated all this is.

8. There's a lot of money and time spent collecting data in this state. Is there a plan to update the data that's collected for this study once this initial project is over? This study could become a warehouse for data. Other studies could use this data and enhance their efforts—not start from scratch.

9. Who will keep this data warehouse maintained? Need to address.

10. How can we present groundwater data into a study like this?

11. PASDA (Penn State University's GIS center) is funded by DEP to be a data warehouse for PA and river basin data. Future partnership discussions need to occur to determine how to integrate PASDA's mission into the future longevity of GIS data collection efforts for this investigation. Potential for PASDA to maintain the envisioned GIS data for the study in perpetuity.

12. DEP is developing an action plan to pull all these data sources together.

13. Does anyone have groundwater resources data included?

14. PASDA probably has a lot of ground-water data.

15. Conjunctive use of water. For example, Marsh Creek doesn't have a lot of water, so it's using ground water to supplement surface water from Marsh Creek. Ground water is hard water and it is harder to treat and more costly.

16. A 1972 plan projected the construction of 11 water supply reservoirs. They were never built. Should water supply reservoirs be built? Reservoirs versus ground-water sources. We've asked people to evaluate potential sites for reservoirs and protecting these potential sites? Do we need to build reservoirs?

17. It's getting harder and harder to establish reservoirs.

18. Ground water doesn't have the same filtration requirements as surface water.

19. Surface water treatment is much more costly. Adams County doesn't have as much surface water. Have to ensure existing water supplies will be protected.

20. Increasing tourism in Gettysburg. National Park project is going to continue increasing tourism. Two million visitors to Gettysburg battlefield annually. Tourism isn't identified in the county study as much as it should have been. This study should consider the water demands associated with Tourism and other recreational activities.

21. Adams County has greater water supply needs than Franklin. Nine community water supplies that are planned in Adams weren't identified in the Adams County water supply plan.

22. A huge golf course is planned with resort and hotel.

23. Growth areas will stress supplies. Is the county prepared for this?

24. Did Adams County water supply plan identify these big projects?

25. North of Shrivers Corner. It is largely industrial agriculture. It's all under agricultural zoning, but we need to re-look at concentrating these CAFOs into an area. What are the effects of these concentrated operations?

26. Water supply plan was developed over a 2-year process. All these big projects weren't on the radar screen at that point.

27. With three food processing plans in Adams Co., county water supply plan would not have addressed them due to having private water supplies. If Corps is going to use county water supply plan, it won't capture these private supply uses.

28. In assessing Nonpoint impacts, you should look at which acres have implementing manure management and nutrient management plans.

29. On farms with land application, we should document which farms apply sewage.

30. On a site that's receiving sludge, would have a nutrient management plan, which will ensure that impacts are minimized. So breaking out just sludge won't help identify impacts.

31. Need to look at industrial water use, consumptive use, use by recreation, tourism, etc.

32. Adams County went from 10 to 17 golf courses. We're going to be the Myrtle Beach of tomorrow. The county is prime for these golf course retirement areas.

33. Zoning can change, depending on market demands. Zoning can be altered, so the best way is to procure the development rights or buy out the land.

34. We're asking local governments to get involved in planning, but we can't get them to our meetings.

FRANKLIN COUNTY

1. More surface water is available in Franklin.
2. There are seven large surface water supplies, going mostly to the Potomac River basin. Chambersburg, sooner or later, will be selling water to Gilford twp., which is heavily reliant on ground water sources. Ground water has iron and manganese treatment issues.

3. Municipalities, such as the Greencastle area, are experiencing industrial farm issues. Chicken and swine farms. People don't want them there. We don't know if we're having water supply problems due to these industrial farms. Is the ground-water resource there and what impact will these CAFOs have on ground water? Nutrient Management Act doesn't address impacts on ground water.

4. Industrial farms. Are they really farms or are they industries and should they be treated as industries?

5. The future study effort should look at agricultural issues (CAFOs) and determine their potential impact on ground-water resources.

6. Do CAFOs have point discharges? [RESPONSE: Yes. The larger one must have point discharges.]

7. SRBC and USGS did a ground-water study of the basin some time ago. We studied 14 major water-producing areas and looked at large areas—1 square mile areas. We did yield analysis, recharge, etc. The study did put some limits on ground-water resource availability in the lower Susquehanna region.

8. In Franklin County, a group wanted to develop a new housing living concept (100 Fold Farm), but didn't look at the availability of water and there is no ground water in that area.

9. Pennsylvania has no law regulating water quantity. Should this study consider whether the state should ask SRBC to establish ground water protected areas in Franklin and Adams County?

10. We need to look at opportunities for protection, as well, in this study. Looking at areas worth protecting is good for this study.

11. Should we consider ground-water recharge as an opportunity?

YORK COUNTY

1. There are seven surface water supplies. The rest is ground water. There are lots of surface water supplies in York County, and three take directly from the Susquehanna River: Wrightsville, Red Lion and a Power Plant. Plus, the York Water Company has a proposal to take from the Susquehanna River.

2. From the South, the county is getting the outflow from Baltimore and other regions to areas like Stewartstown. From the north, there is flow coming from Harrisburg. You can't put limits on community supplies and so how can you deal with potential impact on ground water?

3. No regulation on private home well use. This development went from the community supply to individual wells, which DEP nor others regulate.

4. York Water Company has absorbed 20-25 systems. It's main source is the south branch Codorus Creek, and now it must supplement with Susquehanna River supply. York Water Company covers about 50% of county water supply needs. When Jefferson Borough gave up water supply and went to York Water Co., the York planning commission was concerned about increased development, but that has not yet happened.

5. When municipalities have problems, they should interconnect to a viable water supply. When interconnection is necessary, they need to do that.

6. York Water Company to Stewartstown Borough interconnected. The borough took control over the line to manage it to prevent increasing development. The borough is managing it only as a transmission line.

7. Ebaugh's creek is too small to serve as a supply.

8. The problem of water supply decisions and conflicts are becoming surrogates for land use management.

9. Everything outside of the York Water Company's supply is well water. DEP doesn't get many calls regarding well supply problems in this county. We have some ground-water supplies on monitoring. The biggest problem is nitrate, particularly in agricultural areas.

10. There are no controls over private wells. In permitted projects, we're looking at impacts on wetlands, etc. How much is too much? We have drought-affected areas in York County.

11. There are large trucking terminals, particularly in York County. Are you seeing impacts from runoff?

12. It will ultimately be a storm water problem to be addressed under NPDES.

13. Several terminals in the county in the past did get involved in water quality treatment issues. There are several trucking terminals in Shrewsbury area, but we haven't documented impacts on ground water. If there are problems, it will show up in the Shrewsbury area because it's on the other side of 83. The problems that we had were resolved. Problems in drinking water were resolved by shifting to York Water Company source.

14. If there is a problem in water quality data, it's in background water quality.

15. The indicators that have shown up during DEP watershed meetings is there is no unified set of ground water wells that are monitored on a routine basis so you can get a handle on the pattern of ground-water areas. Long-term monitoring is needed to make management decisions.

Additional Written Comments Submitted by York County Via E-Mail

1. Encourage development to occur in designated "growth areas" where amenities to accommodate growth and development are available.

2. Need to stress the clean-up and reuse of brownfields and discourage development of greenfields

3. There is a serious need to educate the public and local officials with regard to best management practices that relate to water. It is important to reach the youth; more programs need to be integrated into the school curriculum. Planners and other persons in the water field should offer to make presentations to school age children and other organizations.

4. Municipalities need to consider alternative and innovative stormwater management designs that minimize the undesirable effects of stormwater run-off. Are current stormwater management plans being implemented and enforced?

5. Reevaluate impervious surface provisions in local ordinances; recent studies have made recommendations regarding impervious surface requirements and regulations.

6. Encourage the adoption of wellhead protection ordinances.

7. Encourage multi-municipal planning and cooperation.

8. Nutrient management is important on farms of all sizes.

9. Municipalities should consider requiring developers to conduct hydrological studies to determine the impact of new developments on groundwater supplies.

10. Identify water-based protections projects that are occurring throughout the County, as well as those that are proposed. What is their overall effect?

11. Do DEP and other State agencies seriously consider County comments provided relative to permit application, grant applications, etc.? Are applicants required to address County concerns?

12. Municipalities should be encouraged to adopt and enforce regulations that protect sensitive natural features and recharge areas.

Cumberland, Dauphin and Perry Counties

GENERAL COMMENTS

1. Consider partnering with DCNR to get funds to do a rivers conservation plan in tandem with this study.

2. This study should consider addressing or incorporating the revised goals of the Chesapeake Bay Program into the overall study effort.

CUMBERLAND COUNTY

1. Conodoguinet Creek Watershed Association received a DCNR grant to do a rivers conservation plan.

2. County has ground-water recharge concerns indicative of a significant limestone area. The county has many spring streams. The geology of the area lends itself to water quality issues.

3. A quarry operation in the area also is a concern. It is dewatering ground-water sources.

4. Pennsy Supply's quarry uses a settlement pond, which doesn't affect ground water.

5. Given their use of new technology, are golf courses consuming as much water and aren't they acting as a cleaner for ground-water recharge?

6. What about the impact of fertilizers that golf courses use? This can't be helping in the recharge cleansing.

7. To help replenish water table, local municipalities should go to minimum 2-acre zoning in their municipal planning, instead of the 1-acre restriction. If Pennsylvania had allowable 2-acre zoning, we could zone open spaces into larger lots, which protects the water table.

8. The 1-acre restriction may have more to do with case law than DEP's 537 planning. Large lot zoning case law established the 1-acre law, unless you can document the need for larger lots.

9. Eastern part of Cumberland County is impacted by sprawl. Cluster housing is smarter to maintain open spaces than having the 1- or 2-acre lots.

10. Cluster housing requires public sewer and water.

11. Tri-County Planning Commission is looking into zoning for such cluster housing.

12. Route 15 used to farmland. Now it's all impervious paving with trucking terminals and other operations.

13. Growth and sprawl is the reason for the increased impervious paving. Developers are doing better at storm water management, but much more needs to be done. Shouldn't this study make recommendations that funds be directed to better research pervious paving materials?

14. Transportation system and trucking terminals are a big issue for Cumberland County.

15. This area is a transportation hub for eastern US.

16. A federal mandate may be requiring the utilization of technology like pervious paving for federal facilities—sustainability requirements or "greening" of facilities.

17. Act 67 calls for retention ponds, and maybe things like pervious paving could be addressed.

18. It would help to get a handle on ground-water recharge needs.

19. Many new shopping centers in Cumberland County. Much of the run off from the shopping centers doesn't go into retention, but directly into creeks. Commercial areas, like shopping centers, are booming.

20. PENNDOT is reacting to increased demand for transportation needs. Also, some municipal ordinances restrict storm water limits because of mandatory paving needs for emergency, fire, etc.

21. The counties limestone terrain creates more sensitive terrain.

22. Should use existing development instead of creating new developed areas.

23. Need to protect sensitive recharge areas.

24. Considering storm water and development, if locals would work more closely with DEP and watershed groups, they could be looking at retention potential. Need to look at the region as a whole.

25. When addressing storm water run off, we need to look at broad geographical areas, even beyond watershed boundaries. Do what zoning currently allows and identify other ways.

26. Need to look at water balance, and need to preserve the special protected areas.

27. Does anyone have an assessment of what counties are doing to implement storm water requirements? Should we evaluate several municipalities and determine if they're following recommended zoning and ordinances, as a way to gauge what's happening across the board?

28. Municipalities are required to update their comprehensive plans every 10 years. In addition to the update, shouldn't there be milestones during that 10-year period to ensure that they're implementing the provisions of the comprehensive plan?

29. Municipal comprehensive plans in the past have been "pie in the sky" documents that sit on shelves. Tri-County Planning Commission is hoping to set an example by setting certain milestones in it's county plan and is working to make the plan more fluid so it doesn't just sit on the shelf.

30. How do you evaluate the ground-water impact? Do we need to assess infrastructure? Should we make determination of preferred uses of either ground water or surface water?

31. State does not have water quantity laws. SRBC can, and does, regulate water quantity. In Delaware basin, they're setting up ground-water conservation zones. Should we do that for this study in this region?

32. This study process requires participation by municipalities. This plan should clearly identify problems and recommendations and let municipalities know what they are. Let them know which recommendations affect their areas.

33. Comprehensive planning is an advisory tool, not regulatory. Municipalities aren't going to do anything unless it's legislated and mandated. Act 67 and 68 did put a regulatory flavor to how this interfaces with municipalities.

34. Act 67 and 68 require DEP to look at the counties and municipalities and afford them opportunities to review and comment on applications. DEP must consider local or county or regional plans. If the county or local officials voice an objection, DEP must hold up permit.

35. Unless the local or county plans specifically identify and list specific limits or restrictions, they are toothless documents because they can't stop something if it's not already in the plan.

36. DEP planning functions are not integrated with what's going on at the county levels. There are many different planning activities, but they're not interfaced. There is a need to integrate DEP planning with county comprehensive plans. Are we getting to a point where we need to make comprehensive planning into regulatory tools?

37. In the past municipalities have voiced their lack of expertise and staff to implement water resources requirements.

38. Many of the smaller municipalities don't have the ability or tools to implement requirements. They may have good intentions, but they need tools and templates to work from.

39. Pennsylvania has so many municipalities. If we're going to look at municipalities as businesses, they may try to work collectively. They need to look at things economically.

40. Strengthen counties for planning and work toward multi-municipal efforts.

DAUPHIN COUNTY

1. Dauphin County also has many concerns associated with sprawl and development.

2. The county has some multi-municipal projects. The municipalities are beginning to talk.

3. Middletown has water quality problems due to old infrastructure. The federal infiltration act pushed many surface water source utilities, like Middletown, to ground-water sources.

4. The demand for ground water is outweighing supplies.

5. Out dated infrastructure leads to infiltration influence. This is a big problem for urban areas.

6. Harrisburg has a lot of combined sewers, which contribute to water quality concerns. This is a huge problem and has huge fiscal implications for the city. City would like to separate sewer from water, but the costs would be prohibitive. To change the current system, it could potentially impact every individual homeowner.

7. Philadelphia is trying some innovative things with roof top collection, storm water basins, open spaces, etc. to do something about combined sewer problems.

8. Philadelphia is under a court order. Maybe Harrisburg could learn from what Philadelphia is doing.

9. The 40% nutrient reduction goal wasn't met, but another big issue is maintaining that goal once met. How do we maintain that cap in the face of such projected growth?

10. Is there scientific data to show that the 40% nutrient reduction is needed?

11. Living resources are down. The bay grasses are down.

PERRY COUNTY

1. Steep, long, unpaved driveways in Perry County are contributing to sediment problem. Shouldn't subdivision planning require paved driveways.

2. Longer driveways result from larger tracks of land.

3. There are lots of township roads and the townships' practice of keeping roadsides clear cut results in additional sediment.

4. Cleaning up road ditches is the most abusive practice at any level of government. They don't need to do so much.

5. The larger issue is public education. Educate people on the dangers of dumping their used oil. Can this study look into this issue? Cumberland County has a great composting program. I wonder how many other counties could be encouraged and educated to do this and other things like used oil collection.

6. Also need to do the same for land application of pesticides, nutrients, etc. Need public education. If we're infiltrating polluted water, maybe it's better that it stays in surface water

rather than ground water because you can't clean up ground water. Nitrogen and petroleum products get into ground water.

Lancaster and Lebanon Counties

GENERAL COMMENTS

1. Accurate water budgets for localities, counties and subbasin are lacking.

2. A water budget is good for determining who is using the water. We also need to know how much water there is, especially ground water.

3. DEP is looking into developing legislation to address water resources, such as updating the state water plan, etc.

4. If we're calculating who's using the water [water budget], how do we determine how much water there is?

5. In some areas, there could be a lot of water there, but not accessible. DEP requires pump tests to test the volume of water to determine if there is water to sustain what's needed. We don't test for how much water there is, it's only to test for the amount of water the contractor needs.

6. We need to stress water conservation and education.

7. If the county planning agencies don't have the resources to promote water conservation and education, could that be a role for the county conservation districts?

8. Impervious surfaces. Increasing sedimentation and nutrients from impervious surfaces.

9. 70-80% of impervious surfaces are related to transportation, truck terminals, etc. We need to have PENNDOT participating in this project. We need to have planning.

10. Highway interchanges create enormous impervious surfaces. The interchanges also attract new development, which, again, lead to increased impervious surfaces.

11. We need to protect aquatic resources [instream flow needs]. Delaware has established ground-water withdrawal limits, but they didn't link those withdrawals to surface water. We think there are areas where surface water is seriously being impacted by ground-water withdrawals. Is a 48-hour pump test really adequate to determine the potential impact of ground-water withdrawals on other water sources, including surface water?

12. Make a recommendation that the IFIM study that was done for the Susquehanna basin for cold water trout streams be expanded to warm water streams.

Additional General Comments Submitted in Writing by the PA Environmental Council.

PEC is working with NLT and DCNR on promoting conservation design through "Growing Greener: Conservation By Design." The focus of this effort extends beyond the Capital Region,

but much of it lies within the Susquehanna basin. Education is the key. One concern is the outcome of this planning study. Will the study include recommendations for ordinances/comprehensive planning/Act 537 updates and educational tools to implement the study findings? You need ordinances with an implementation program to connect sprawl with water management. Need to identify specific actions for each group of stakeholders (state/local/federal agencies.)

LANCASTER COUNTY

1. Do we have statistics on the amount of water we have? We'd have a better chance of educating people on the importance of water resources management in the county if we had the data on water budgets and water availability. We should conduct studies of certain watersheds and try to establish patterns in water use, consumption, etc. so we can make some logical and informed management decisions.

2. About 2 years ago, DEP started a strategic planning process (Environmental Futures) with watershed planning teams, starting with a pilot project in the Swatara watershed. There are 34 planning teams statewide, with four of those in the Harrisburg DEP region. One of the things that struck us after some of the watershed team meetings was the lack of usable and compatible data. We need to look at how governments and the private sector collect data and make them usable.

3. In East Petersburg, we record ground water withdrawals. In our municipality, we've been withdrawing from the same aquifer, so we do record withdrawals.

4. SRBC is the only entity that regulates ground-water withdrawals in this watershed. Should we establish ground-water protection zones?

5. The source water assessment and protection program data should be incorporated into this study. Lancaster City intakes and Ephrata intakes are being studied by SRBC.

6. There is definitely a connection between water quality and ground water—relating to wellhead protection.

7. Since 1942, East Petersburg has been using ground water, and the quality has been good. In the past, we had nitrate problems, so we put in nitrate treatment systems, and also the farms disappeared. So now, we don't have these same nitrate problems.

8. For the City of Lancaster, we have experienced water shortages on the Conestoga, we've had agricultural diversions and damning that have caused shortages to the City. City uses only surface waters from Conestoga—about 24 million gallons per day now. We project that use to increase significantly. City has two plants that meet the current needs and have extra capacity to meet the projected growth for 8-10 years. City serves 10-11 municipalities. City has water quality issues, including the new regulations for surface water. We're looking a new treatment to address those concerns. Turbidity is high. We need additional treatment to deal with turbidity. We think agricultural and construction activities combine add to the

turbidity problem. We also have algae problems from nutrients in the Conestoga. Algae has been very bad this year with the drought.

9. County has about 40% of the population on wells, but there's no required testing on wells. I'm concerned about the incidents of Blue Babies (from high nitrates). We should have laws requiring well water testing as part of house sales.

10. A lot of lending institutions require testing for bacteria as a condition of loan, but these tests aren't very detailed.

11. When you look at ground water, you shouldn't look at just quantity, but also quality.

12. EPA's filtration rules have shifted users from surface water to ground water sources. This significant increased use of ground-water sources has been an unintended consequence of the EPA rule.

13. While no one seems to like sprawl, we need to expand our population base to pay for the bond for the treatment upgrades.

14. How about promoting condensed sprawl? This is being applied in Allentown and in Montgomery county and other areas faced with increasing populations.

15. Infiltration influence. Treatment plant capacity is limited by the infiltration of water from stressed infrastructure. That's a huge issue and problem with a big price tag—it's an economic issue.

16. Lancaster City has combined sewer overflow (CSO) problems, but we've been proactive in capturing storm water runoff. We're up to 80% in capture, and we've been able to do it within current budget.

17. Collected runoff should be treated before it goes directly into the river. Also collected runoff also represents a loss of recharge.

18. Lancaster & Lebanon. DEP recently gave approval to install a sewage treatment site that would discharge into Furnace Run, after DEP disapproved discharge into another nearby high quality stream. A few years ago, a stream restoration program for children was started on Furnace Run. As part of that, the children took samples and we found that the water quality was as good in Furnace Run as the original stream high quality stream that DEP disapproved. Are there other methods such, as spray methods, instead of discharging into streams?

19. Land application of sludge. (Also, if you have streams that shouldn't have any effluent, we need to work upfront to get that data to protect these streams, as has been done for the mining program.)

20. Steam generation is another alternative method of disposal. Alternative disposal methods are more expensive, but they need to be looked at. With money made available, we could look at this.

21. Large power plants are proposed for Lancaster County.

22. In Lancaster, poultry farming is significant. Nutrient Management is important in this county.

23. Consider the socio-economics of the situation, not only with respect to any system recommendations (to include the construction, operation and maintenance costs) but also the reality that in order for systems to have the financial resources to operate, it is almost necessary for them to expand service areas, and therefore encourage growth.

Opportunities for Protection in Lancaster County

1. The river corridor itself needs to be protected. Lancaster and York counties are involved in a Heritage Parks program. Greenways, River Trails, etc. There are lots of natural areas and features that are really exceptional along the corridor.

2. Is there any thought to tying the Chesapeake 2000 agreement into this plan? This plan could be a broad framework to tie in other plans like the bay 2000 and data collected by others. As well as broaden the investigation to investigate implications of upstream practices.

3. Various rivers conservation plan should be considered for protection.

4. Boating access and other recreational access should be protected, particularly as they relate to the Conowingo Pool. During dry periods, as we're experiencing this year, the water level in the Conowingo Pool drops so much that access becomes limited.

5. Increased consumptive uses are affecting river flows.

6. This plan should incorporate the 3-year Susquehanna River Greenway plan that's under development.

7. There are already a lot of water-based protection projects taking place. We should identify them and keep those existing projects in mind.

8. Consider not only low-flow impacts, but also the full range of flows on aquatic life and habitat. Consider the link between ground-water withdraw impacts to surface water, stormwater runoff impacts to surface or groundwater and its impacts on aquatic life. Possibility to consider expanding on the IFIM requirements from cold waters to warm waters.

LEBANON COUNTY
(Since there is a separate, comprehensive study underway for the Swatara Creek Watershed, workshop participants did not go into significant details for Lebanon County.)

1. Concerns about the flow of the Swatara Creek and tributaries and at what point they reach drought watch levels [the local watershed group has related data].

2. Lebanon County needs nutrient management. In northern Lebanon County, there are issues related to intensive agriculture.

3. The Nutrient Management Act, however, looks at individual lots.

4. Act 67 & 68. How many permits has DEP actually held up because they took into consideration the county comprehensive plan?

5. Act 67 & 68 doesn't affect many counties because most counties don't have comprehensive plans. To effectively be considered, as envisioned by Acts 67 & 68, there must be three planning initiatives in effect, and they are county comprehensive planning, zoning and municipal planning.

6. Acts 67 & 68 do not <u>mandate</u> that DEP withhold permits.

7. Comprehensive Planning is extremely important.

8. There aren't a lot of storm water issues in Lebanon County, but a few hotspots.

9. There are acid mine drainage issues in the upper part of the county, and there is active mining in the upper watershed.

10. Other mining-related problems include bootleg mines and subsidence.

11. TMDL issues.

12. In the northern part of the county, there were some water quality problems due to timbering. There's a very large saw mill operation between Colebrook and Lebanon and it consumes a lot of logs. Just the presence of that company could encourage other logging operations to come into the area.

13. Through the DEP Environmental Futures Planning process, we're identifying local problems and we're identifying objectives at the local level with the ultimate goal of establishing environmental action plans. We need maximum amount of local input, and DEP hasn't been getting good local participation.

14. For the different recommendations that are made related to this project, we should identify who needs to implement these water-related recommendations.

<u>Opportunities for Protection in Lebanon County</u>

1. The following relates to the Swatara Creek Watershed and was submitted by Jo Ellen Litz with the Swatara Creek Watershed Association. The association has been compiling a wish-list of land acquisitions, including:
   - Union Canal Canoe Rentals, East Hanover Township
   - Lickdale Camp Grounds, Union Township

- The Sonny May or Lee Farm easement next to the Union Canal tunnel, North Lebanon Township
- The Vassil junk yard at the "Gateway" to the Swatara State Park, Swatara Township

2. There is another protection opportunity. During the permitting process for the AES Ironwood facility, one of the things the company agreed to do is to take control of the pumping from the quarry. As such, the company is stabilizing the flows in the Tolpehocken Creek. Also, the company is putting $24,000 annually into a fund to be used for environmental restoration work in the Tolpehocken watershed. The PA Fish & Boat Commission foresees establishing a local committee to evaluate grant proposals for the use of those funds.

3. One participant suggested that since much of the water for the Tolpehocken Creek originates from the Swatara watershed, shouldn't the AES Ironwood funds be available for restoration projects in the entire watershed?

4. It's important to preserve public lands like game lands, state parks, etc. State should buy more lands to protect them—great for recreational access and ground-water recharge.

5. Protect the greenway along the Union Canal. There is a new river trail and we have a rivers conservation plan.

Comments on Draft Phase II Scope of Work from the PA Fish & Boat Commission Submitted Via E-mail from Leroy Young:

From: Young, Leroy [leyoung@state.pa.us]
Sent: Thursday, September 13, 2001 10:48 AM
To: Obleski, Susan
Subject: Draft Scope of Work, Lower Susquehanna River Basin
Comprehensive Watershed Management Plan

1. This study appears to be a huge undertaking. There should be more specificity included as to how impacts to aquatic resources from various environmental perturbations will be measured. Identifying the effect of one perturbation on an ecosystem can be a difficult task, not to mention all the many perturbations/variables mentioned in the study plan (e.g., land use, water quality, geology, etc.). What will be the specific measure(s) used to define the health of the vast aquatic, riparian and terrestrial resources in the study area?

2. Page 2, Task 1, "Review Lower Susquehanna River Basin Data" – In what way is a fish barrier a natural resource? There is no mention here of the fisheries and other aquatic life resources of the study area. Is this an oversight or will it be included in some way?

3. As mentioned in the September 5 meeting, we believe a major need not only in the Susquehanna River Basin but throughout PA is a better understanding of how surface water flows are affected by groundwater withdrawals. This is poorly understood, but a critical issue with respect to watershed management planning.

4. There is no mention of Page 5, 1st sentence - This sentence says "Aquatic resources will focus on the condition of the instream habitat from the perspective of water chemistry and biological assessments." It would seem that since this study focuses on water supply needs in the study area, that the effect of reduced flows from ground and surface water withdrawals should be an important component of the study. However, instream flow needs/assessments are not mentioned in the Aquatic Resources section.

5. Page 6, Products for Task 2B - The focus here is on describing cause and effect relationships between the water quality and biological data and the various categories of natural resources. Please again note comments 1 and 4 above as they relate to this section.

6. Page 6, Task 3 Plan Formulation - Alternatives to address existing problems or avoid or minimize future impacts include "habitat creation/restoration." We recommend that this be changed to "habitat protection, creation restoration." Hear again, instream flow protection can play a vital role.

7. Another critical need for not only the study area but throughout PA is how flows affect habitat on warmwater streams. Instream flow studies analogous to the one conducted on wild trout streams in PA are recommended to address these needs. We would be willing to work together with you in the planning, design and conduct of such a study.