



Delaware River Basin Commission

WATER MANAGEMENT ADVISORY COMMITTEE

January 4, 2001

MEETING SUMMARY

The Water Management Advisory Committee meeting began at 9:30 a.m. at the Commission (DRBC) office in West Trenton, NJ. The meeting agenda is attached [[see Attachment 1](#)].

MINUTES AND PROCEDURAL ISSUES

Mr. Gast noted that "agriculture category" should be changed to "agricultural irrigation category" on page 3, 2nd paragraph of the draft minutes of the September 12, 2000 meeting. Upon motion by Mr. Lovell, seconded by Dr. Miri, the minutes were approved unanimously with this modification.

Mr. Palmer's tenure as chair is ending in February. Dr. Mercuri, currently serving as vice chair, would replace him as chair. Since Dr. Mercuri cannot attend the February Committee meeting, it was agreed that Mr. Palmer would continue to serve as Chair for the February meeting. Mr. Palmer suggested that members begin to consider nominations for Vice Chair.

DATA NEEDS SUBCOMMITTEE REPORT

Proposed Data Needs Resolution

Presentation

Dr. Mercuri reported that a draft Response to Comments has been completed and the only recommended change to the resolution is the addition of data on water reuse. He also noted that Mr. Bradbury of the North Wales Water Authority had commented that aggregating data by county would be difficult. Dr. Mercuri disagreed noting that the data could be obtained easily by utilizing customers' delivery addresses/zip codes. Dr. Mercuri continued that a new issue was brought to his attention that the draft resolution did not cover water users withdrawing between 10,000 gpd and 100,000 gpd who are subject to the Ground Water Protected Area Regulations for Southeastern Pennsylvania (GWPA). He stated that these additional data from smaller users may not make a large difference in the overall numbers.

Discussion/Issues Raised

Including Additional Users Subject to the GWPA Regulations

There was discussion on what additional information reporting by smaller users (10,000 to 100,000 gpd) would provide. Mr. Gast asked whether the Commission needed these data. He noted that the additional users would be largely non-public water suppliers, because most public water suppliers would fall into the greater than 100,000 gpd category. Mr. Palmer questioned whether these additional data would make a difference or whether it would be realistic to acknowledge that DRBC can't get all the information.

Mr. Sloto noted that the GWPA is different from other areas because there are withdrawal limits in place. DRBC would need these data to monitor the withdrawals amounts. When a subbasin nears its limit, these data would be important.

Mr. Gast noted that Pennsylvania was already getting monthly withdrawal amounts and much of the other data required by the resolution from these smaller users. However, for data other than monthly withdrawal amounts, the data are collected through administrative code and there is no legal requirement that mandates users to submit it. While they have been successful in getting the data, these users should be included in the resolution to provide an enforcement mechanism.

Ms. Bowers asked whether DRBC was currently getting sufficient and appropriate data to maintain the databases needed to monitor ground water balances in the subbasin and whether there are any improvements that should be made through the resolution. She asked whether Greg Cavallo had reviewed the resolution.

Ms. Siskind replied that Greg Cavallo had reviewed the resolution, but did not know if he reviewed it with these specific questions in mind. He would not be returning to the office until late in the afternoon. She noted that for the smaller users in the GWPA, Pennsylvania was getting all data specified in the resolution for public water suppliers but she wasn't sure about the self-supplied. Mr. Gast clarified that Pennsylvania collects all the data for the smaller public water suppliers except water usage categories by county; instead they receive customer breakdowns by municipality.

Ms. Bowers asked whether Pennsylvania receives wastewater data. Mr. Gast replied that every water use survey requests withdrawal, use, and discharge information for self-supplied users. He noted that the information would be difficult to obtain for public water suppliers because the water supply and wastewater discharge service areas are often different and public suppliers may not know where the wastewater is discharged. Ms. Siskind noted that the resolution requests this information of public water suppliers only "if known." Mr. Palmer commented that it wouldn't take public water suppliers a lot of effort to find out where the wastewater is discharged.

Mr. Sloto said the resolution provides a wonderful opportunity to develop a database with consistent categories over multiple years. It would serve the needs of a variety of users. Having all the data in one database including the GWPA data would provide one stop shopping; it wouldn't be necessary to access different databases.

Mr. Palmer said, that while it would be preferable to have a perfect document for next week's Commission meeting, the Commissioners should pass the current resolution and then amend it by adding the smaller GWPA users.

Ms. Bowers asked how much additional time it would take to incorporate the GWPA users and renote. Ms. Siskind responded that it could not be done by the February Commission meeting, but it could probably be ready for the April Commission meeting. The renoticing would include an additional public comment period and public hearing. Mr. Gast stated that in January the Commissioners could approve notification of a revised resolution. Publishing and a 30 day comment period could be completed by mid-March which would give the Committee a month to review comments. Dr. Mercuri commented that his preference would be to adopt the current resolution with a subsequent amendment.

Ms. Noble expressed concern about Mr. Sloto's earlier comment on the need to go to multiple databases. Mr. Gast commented that Pennsylvania sends all the data to DRBC. Mr. Sloto stated that as long as the data were contained in one database, it isn't a problem. Ms. Bowers stated that DRBC may have the data but they aren't in their databases. She continued that DRBC's database contains part of the data and the rest are in other places. When one tries to piece together the databases, there are inconsistencies and missing and mismatched data. Including the smaller GWPA users in the resolution offers an opportunity to get a consistent data management process set up.

Mr. Gast suggested that if the Committee wants a regulatory basis to collect the GWPA data with enforcement behind it, the additional users should be included. Pennsylvania's preference would be to include

the GWPA users in the current version, particularly if Mr. Goldberg determines that the resolution wouldn't require renoticing. If the change would require renoticing, the Commission could adopt it in its current form, with the understanding that they would modify it.

Ms. Siskind noted that the resolution requests 2000 year data and that may be a reason to adopt the resolution sooner rather than later. Ms. Bowers replied that the year 2000 is over and therefore there is no time pressure to move more quickly. Mr. Gast added that Pennsylvania would not be collecting the data before April because they are automating their forms.

Mr. Liebold asked how many additional GWPA users would be covered and what percentage of water use they represent. Ms. Bowers responded that on a basin-wide basis they represent a relatively small percentage, but for an individual subbasin, the usage becomes much more important.

Mr. Palmer commented that there is clear agreement among Committee members that the additional GWPA users should be included in the resolution. He suggested tabling, until after lunch and a possible call from Mr. Goldberg, the Committee's decision on whether to recommend that the resolution be renoticed or the GWPA users be added through an amendment.

Including Requirements for Reporting Water Reuse

Ms. Siskind stated that a commentor suggested that the resolution request information relating to water reuse. Ms. Siskind suggested adding two questions for self-supplied users to distinguish between internal recycle at a plant and reclaimed wastewater: (1) Is water reused? (Y/N) (2) Is wastewater reclaimed? (Y/N). Mr. Gast and Ms. Bowers suggested also asking for percent reused and percent recycled. The information would be requested "if known." Ms. Siskind noted that some water users (withdrawals) don't have information on wastewater. Mr. Palmer stated that the resolution wouldn't get 100% of the information. Ms. Siskind noted that if additional information was needed, a list of water reusers could be generated and contacted. The Committee agreed that this information on water reuse should be added to the resolution.

Ms. Noble raised the issue of natural gas generators' use of treated wastewater effluent. Dr. Miri stated that nobody allocates wastewater. Mr. Gast agreed noting that power plants, a highly consumptive use, have started to look toward wastewater to meet their water supply needs.

Water Use data by County

Ms. Siskind asked whether everyone agreed with the response to Mr. Bradbury's comment that aggregating data by county would be difficult. There was general agreement that the response was satisfactory. Mr. Gast noted that water companies have been providing Pennsylvania with numbers of customers by use category by municipality. If water companies can provide this information, they should be able to report water use by county. Mr. Palmer agreed noting that customers can be sorted by zip code.

The Committee had no other comments on the Response to Comments document.

Other

Mr. Gast noted that "If the withdrawal or purchased water serves more than one county" be deleted from all applicable sections because it implied that if a withdrawal did not serve more than one county, the information need not be reported. There was general agreement that this change should be made.

Mr. Lovell asked for clarification on the meaning of "Bulk Supplier's Source Name" and whether it was referring to system name or water source. Ms. Siskind replied that it referred to water source and was consistent with language in other sections of the resolution. There was general agreement not to make a change to this language.

Mr. Ali suggested that all units in the resolution be changed from "mg" to "MG." There was general

agreement that this change should be made.

Mr. Gast noticed a major loophole. Under the section, *Annual Reporting Requirements for Subsequent Years*, it states that commencing with the year 2001 only a small subset of data need be reported unless there are changes to information initially reported under Section A. The way the regulations read, new withdrawals would not be required to submit information required under Section A. Therefore, he suggested adding a new sentence to the section, "All information required under Section A above shall be completed for new withdrawals." There was general agreement that this change should be made.

Including Additional Users Subject to the GWPA Regulations (continued)

After lunch, the discussion on including additional GWPA users continued. Mr. Palmer summarized that there was agreement that the additional GWPA users be included and that he believed there was a preference to renote the resolution rather than adopt it in its current form and amend it.

Mr. Palmer asked whether the comments submitted to date would be included if the resolution was renoted. Ms. Bowers asked whether those testifying at the Commission meeting would need to return for the second hearing. Ms. Siskind said that DRBC would respond to all comments. Mr. Palmer said that if the Committee recommends renoting and if the public hearing needs to be postponed, DRBC staff should notify the four commentors and Jan Phillips.

Dr. Miri stated that it should be up to Pennsylvania to decide whether to renote or issue an amendment since the GWPA is in their state. Mr. Gast replied that he didn't feel strongly either way, but that the Commissioners should be informed that the Committee does not see a problem if they prefer to delay adoption. Dr. Miri agreed that the decision should be left to the Commissioners and they should be informed that the Committee wants to include the additional GWPA users, but the Committee doesn't have a strong preference if that is done through renoting or an amendment. Ms. Bowers agreed that the decision should be left to the Commissioners. Ms. Siskind noted that the Response to Comments would be forwarded to the Commissioners tomorrow. The Committee could send a memorandum with that document informing the Commissioners that the Committee recommends including the additional GWPA users and of the pros and cons of the two procedural options.

IRP SUBCOMMITTEE REPORT

Presentation

Ms. Bowers distributed the Draft IRP Guidance Document (dated 12/20/00) to the Committee along with a memorandum from the IRP subcommittee to Bill Palmer. The memorandum stated that the guidance document was designed to provide guidance both to municipalities interested in applying to DRBC to lower their subbasin's ground water withdrawal limit and to others interested in applying the IRP approach for developing water supply plans. She noted that there were still several outstanding questions raised by PADEP and that Mr. Gast would be responding to them. Ms. Bowers reviewed the questions in the memo:

1. Must it be mandatory for all municipalities within a subbasin to adopt the IRP, or can municipalities with minor land areas within the subbasin be excluded from adopting the IRP?
2. Will DRBC require that all municipalities in the subbasin "implement" their designated roles as identified in the IRP prior to DRBC adopting the revised ground water withdrawal limit (i.e., must the municipalities complete and promulgate revised comprehensive plans and/or ordinances if so called for in the IRP prior to DRBC adopting the revised ground water limit)?
3. Is PA-DEP willing to provide (through DRBC's adoption of lower ground water limit based on preservation needs identified in an IRP) a higher level of protection to stream resources than what the state currently provides under existing laws of the Commonwealth?
4. If yes to #3, then what is required to be included in the IRP in terms of implementation by the

municipalities and scientific basis to achieve that protection?

She stated that when responses to these questions are given by PADEP, the guidance will likely need to be revised. However, whatever the responses may be, the DRBC regulations exist and necessitate a guidance document. Ms. Bowers asked the Committee to review the guidance and provide comments to Ms. Siskind by January 31st and suggested that the Committee discuss the document at its mid-February meeting.

Discussion/Issues Raised

Mr. Palmer asked whether the guidelines would be approved or adopted by the Commission. Mr. Pollison responded that they should be acceptable to the Commission but may not require formal approval.

Dr. Mercuri asked whether the guidance would require an expanded Ground Water Protected Area administrative agreement between Pennsylvania and DRBC. Mr. Gast replied that Pennsylvania provides the funding to support the GWPA efforts and he did not know whether, once IRPs started being submitted, it would require additional support. Ms. Bowers stated that the guidance would streamline, not expand, the work effort for both DRBC staff and applicants and suggested that any additional work effort could be reflected in the annual budget review.

Mr. Palmer asked who within DRBC would be reviewing the IRPs and answering applicants questions. Mr. Pollison and Ms. Siskind replied that applications would be forwarded initially to the Planning and Implementation Branch and would be reviewed by both the planning and technical staff. Questions should be directed to Ms. Siskind since she is the staff member most familiar with the guidance.

Ms. Bowers commented that to her knowledge there are no other documents on how to do an IRP that address ground water and surface water, quality, quantity, instream uses and land use altogether. There is an increasing desire for this approach and the guidance may encourage others to apply it to areas outside the GWPA.

Ms. Bowers concluded the discussion by presenting a memorandum from the IRP Subcommittee to Mr. Palmer asking the Committee to consider recommending to the Commission that the Comprehensive Plan embrace the concepts of integrated resources planning and to extend these concepts to a much larger scale.

UNACCOUNTED-FOR-WATER (UAW)

Dr. Miri presented draft results of UAW trends for purveyors over 1 mgd in New Jersey. The data are for 1989, 1993, and 1999 and all data are based on unmetered ratio. There was a reasonable response rate from purveyors. The trends are encouraging; more systems showed a decline in their unmetered ratio than an increase. The survey raised awareness and concern about the issue. One purveyor, Willingboro MUA, had a ratio over 30%. NJDEP will be taking a closer look at all purveyors with a declining trend.

Mr. Neukrug asked what the response rate was and whether those that did not respond would have affected the overall trend. Dr. Miri responded that he didn't have the percent responding, but that based on previous data, those that did not respond were not skewed towards high unmetered ratios and would follow the same overall pattern. Mr. Palmer asked whether New Jersey had any data between 1993 and 1999. Dr. Miri responded that New Jersey has some data from 1996 but the data have not been compiled.

Mr. Lovell presented UAW trends for purveyors in Delaware. Delaware has received data for all purveyors for all years from 1990 to 1999 with the exception of United Water and Dover. He noted a few anomalies in the data. Dover Air Force Base (AFB) has a negative unaccounted for water ratio because the ratio is based on a comparison of withdrawals to sewer flows. The AFB does not have all their connections metered. The negative ratio is indicative of an I/I problem that they are focusing on correcting. Smyrna has seen a distinct decline in UAW due to an increase in the number of service meters over the years. Wilmington, which is in

year 4 to 5 of a 10 year program to repair all their service connections, will see a decline in UAW. Earlier UAW ratios for Wilmington are not as reliable as the 1999 numbers. Overall, there isn't an apparent discernible, nor is there an obvious change in UAW as a result of the Leak Detection and Repair Program.

Ms. Noble asked why there were two columns in the spreadsheet for each of the years 1989, 1992 and 1993 and why the columns didn't agree. Ms. Siskind explained that discrepancy was due to there being two different sources of data. Delaware collected data in 1989, 1992 and 1993 at the request of DRBC. The new data that Delaware collected for 1990-1999 is different. It is not clear why; one explanation is that different formulas may have been used.

Mr. Palmer questioned whether the data were meaningful if they couldn't be used to show a statistical trend. Mr. Lovell commented that it is difficult to get a side by side comparison. Ms. Siskind said the data needs resolution would address this because it would provide a consistent formula for unaccounted for water and would also require reporting on an annual basis which will provide much more reliable trends. Dr. Miri noted that the advantage of unmetered ratio is that it provides an easily defined number that can be used for comparison.

Dr. Ali asked for an explanation of the large fluctuations in the Wilmington numbers. Mr. Lovell replied that the City's method of calculating UAW has changed and was previously based on a small sample that was interpolated. The 1999 numbers are more reliable.

Mr. Liebold commented that the information is meaningful if one purveyor has a 10% unmetered ratio and another has 25%. Mr. Neukrug noted that the cost per thousand gallons is higher with higher UAW. The information reveals who is doing a better job and encourages utilities to introduce best management practices to reduce UAW. He continued that the goal should be to get utilities to recognize the importance of best management practices. These would be different in the city than in the suburbs. There are many different contributing factors such as the age of the system. Each utility must judge itself against its own record rather other utilities. UAW can change from year to year based on weather and precipitation; unmetered use may stay the same, while metered use may fluctuate widely. Mr. Gast noted that major fires can also change the unmetered ratio.

Dr. Miri stated that it is important to have a long record. Mr. Neukrug concurred stating that Philadelphia uses a five year running average which reflects a more steady trend.

Mr. Gast stated that he updated the 1999 UAW tables he previously distributed to include data from 1989, 1992 and 1993. The data included all purveyors over 100,000 gpd. Of the total use of 613 million, 122 million, or approximately 20%, is UAW. In 1989, UAW was 21.9%;, in 1992, 21.1%; and in 1993, 18.9%. Philadelphia accounts for approximately 45% of the usage (281 million of the 613 million) and approximately 70% of the UAW (87 million of the 122 million). Without Philadelphia, UAW is 11%. He noted that Philadelphia has shown significant improvement over the years. UAW is now 31%, while in 1989 it was 41%; in 1992, 41% ;and in 1993, 37%.

Mr. Neukrug commented that all of Philadelphia's UAW is returned to the Estuary.

Ms. Siskind stated that the States were asked to collect the data in order to determine the next steps DRBC should take. The Leak Detection and Repair (LDR) regulations require plans to be submitted every three years and this has not occurred since 1993. Possible next steps include asking for a new set of LDR Plans from purveyors; focusing on those with UAW over 15%; or going to a five year cycle. Ms. Siskind asked whether this issue should be an agenda item at a future meeting.

Mr. Palmer suggested that DRBC should get more consistent reporting and develop better trends before deciding what to do. Dr. Miri stated that although the Committee had a lot on its plate, the Committee should

pursue it. Mr. Gast agreed. Ms. Siskind noted that during a previous discussion on reclaimed water, it was commented that UAW and reclaimed water should be looked at together. Ms. Bowers suggested having a discussion on spray irrigation and then bringing the two issues together. Mr. Palmer agreed that this should be the next issue the Committee would tackle after either the data needs resolution or guidance was completed.

COMPREHENSIVE PLANNING PROCESS

Presentation

Ms. Siskind reported that Commission has initiated a comprehensive planning process to develop a water resources plan for the Delaware River Basin. The new Comprehensive Plan will address to some degree all the areas covered in the compact including: ground water and surface water, water supply and flow management, water quality, water resource protection, flood protection, recreation and power. The Plan will take an integrated approach and will address the interrelationship of these issues. The initial phase of the project involves 2 efforts: (1) reorganizing the existing comprehensive plan and (2) kicking off the new comprehensive plan. With regard to existing Comprehensive Plan, the Commission hired Dave Everett to update and reorganize it. Mr. Everett has completed his review and the changes are being word processed.

A Watershed Advisory Council has been formed to guide the new comprehensive planning process. The Council consists of 32 members representing a broad range of interests - state and county representatives, the cities of New York and Philadelphia, business and utility representatives, and environmental and fisheries organizations. The first meeting of the Council will take place on January 17th. Mike Personett, a consultant hired by the Commission, is interviewing Commissioners' alternates and Council members to determine what issues should be addressed in the Plan. From these interviews, an interests assessment will be developed that will present the potential issues to be addressed in the Comprehensive Plan, stakeholder perspectives on these issues and areas on which there is consensus and disagreement. Another important effort will be the development of a scope of work that will lay out key tasks and milestones. The established advisory committees will be an important part of the process and the Commission will be looking to them for technical input and guidance. Each advisory committee has been invited to send a representative, the Chair or other member, to the Council meetings. It is very important that this be a consensus-building process to ensure that the plan is accepted and successfully implemented. She asked the Committee to consider the key issues that should be addressed in the Plan and its role in the process.

Discussion/Issues Raised

Dr. Ali asked whether the Council included a representative from the agricultural community. Ms. Noble responded that Robert Baker of Baker Farms was a member. Mr. Young asked who are the fisheries representatives. Ms. Noble replied that New Jersey Fish Game and Wildlife and Delaware River Foundation were members. Ms. Bowers asked if there were any action items for the Committee. Ms. Noble commented that the Committee hadn't acted on the memorandum from the IRP subcommittee asking the Committee to consider recommending to the Commission that the Comprehensive Plan embrace the concepts of integrated resources planning. She stated that it is important that the Committee make the statement. Ms. Siskind noted that she is asking committees to provide feedback on the plan and this would be an appropriate action for the Committee. The recommendation could be presented to the Commission on Tuesday by Mr. Palmer and then to the Council on January 17th .

Mr. Young asked, how would you not approach the comprehensive plan this way? Ms. Bowers replied that it is not widely recognized that water quality and quantity need to be woven together. Mr. Gast added that as you go farther down the list it becomes less obvious; there is some acknowledgment of the interrelationship with aquatics issues, and less with instream uses, land use and community values. Mr. Pollison suggested informing the Commissioners that the Committee discussed the recommendation and believes it is important that the principles be maintained in the process. Ms. Bowers commented that it was important to get the

concept out early in process. Mr. Palmer agreed to present it to the Commission at the next meeting.

RECLAIMED WATER USE AT GOLF COURSES

Ms. Siskind reported that she received several good contacts from Ms. Bowers for people that could speak to the Committee on reclaimed water use at golf courses. She contacted an individual golf course using reclaimed water, the USGA and Audobon International which certifies golf courses that have implemented environmentally sound practices. All expressed significant interest in speaking with the Committee. Ms. Siskind suggested setting up a Brown Bag Lunch with 3 speakers and inviting golf courses and other interested parties to attend. The Committee could meet separately with the speakers after the Brown Bag lunch. The Committee agreed. Committee members expressed interest in all three proposed speakers. Ms. Bowers suggested asking speakers to discuss the cons, as well as the pros, and the areas of agreement and disagreement. The Brown Bag Lunch will be scheduled as part of the Committee's regular business meeting in April.

NEXT MEETING

The next meeting was scheduled for February 13th at 9:30 a.m. at the DRBC office in West Trenton. The following meeting was scheduled for April 19th at 9:30 a.m. at the DRBC office in West Trenton and will include a Brown Bag lunch on reclaimed water use at golf courses.

WATER MANAGEMENT ADVISORY COMMITTEE ATTENDANCE January 4, 2001

Members Present

1. Ferdows Ali (designee) New Jersey Dept. of Agriculture
2. Janet Bowers Chester County Water Resources Authority
3. William Gast Pennsylvania DEP
4. Warren Lavery New York State DEC
5. Stewart Lovell Delaware DNREC
6. Bruno Mercuri Mercuri & Associates
7. David Milan Superior Water Company
8. Joseph Miri New Jersey DEP
9. Howard Neukrug Philadelphia Water Department
10. Mary Ellen Noble Delaware Riverkeeper Network
11. William Palmer Water Resources Association
12. Frank Schaefer U.S. Army Corps of Engineers
13. Ron Sloto U.S. Geological Survey

14. Leroy Young PA Fish and Boat Commission

DRBC Staff Present

1. David Pollison

2. Esther Siskind

Others In Attendance

1. Diane Zalaskus New Jersey DEP

Attachment 1

**AGENDA
WATER MANAGEMENT ADVISORY COMMITTEE**

Delaware River Basin Commission

January 4, 2001 - 9:30 A.M.

- 1. Minutes and Procedural Issues**
- 2. Proposed Data Needs Resolution (Mercuri)**
 - Response to Comments**
- 3. IRP Draft Guidance (Bowers)**
- 4. Unaccounted-for-Water**
 - States to present 1999 data and trends**
- 5. Comprehensive Plan (Siskind)**
- 6. Planning for Discussion on Reclaimed Water Use at Golf Courses (Siskind)**
- 7. Next Meetings**

[Hydrologic Info](#) | [News Releases](#) | [Next DRBC Meeting](#) | [Other Meetings](#) | [Publications](#) | [Basin Facts](#) | [Contact Info](#) | [Your Comments Welcomed](#)

Commission Member Links: [Delaware](#) | [New Jersey](#) | [Pennsylvania](#) | [New York](#) | [United States](#) |



[DRBC Home Page](#)

P.O. BOX 7360, West Trenton, NJ 08628-0360

● Voice (609) 883 - 9500 ● FAX (609) 883 - 9522



croberts@drbc.state.nj.us