



## Delaware River Basin Commission

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### **DRBC WATER MANAGEMENT ADVISORY COMMITTEE MEETING October 7, 2009**

#### **COMMITTEE MEMBERS PRESENT:**

|                    |  |
|--------------------|--|
| Mary Ellen Noble   | Delaware Riverkeeper Network, WMAC Chair   |
| Michael Bleicher*  | NJ Dept. of Environmental Protection       |
| Janet Bowers       | Chester County Water Resources Authority   |
| Paula Conolly*     | Philadelphia Water Department              |
| Thomas Denslinger* | PA Department of Environmental Protection  |
| Hank Gruber*       | US Army Corps of Engineers                 |
| Mike Holt          | NYS DEC (via telephone)                    |
| David Jostenski    | PA Department of Environmental Protection  |
| George Kunkel      | Philadelphia Water Department              |
| Senobar Lanigan    | NYC Department of Environmental Protection |
| Stewart Lovell     | Delaware DNREC                             |
| John Mello         | US EPA Region 2                            |
| Bruno Mercuri      | Mercuri and Associates, Inc.               |
| Bob Molzahn        | Water Resources Association                |
| Joanne Rufft*      | Artesian Water                             |
| Ron Sloto          | US Geological Survey                       |

\*Denotes alternate or non-official member.

#### **DRBC STAFF:**

Dr. Kenneth Najjar, Planning & Information Technology – Branch head  
David Sayers, Planning & Information Technology  
Jessica Sanchez, Planning & Information Technology  
Kent Barr, Planning & Information Technology

#### **REVIEW OF MINUTES / REVIEW AND APPROVAL OF AGENDA:**

The meeting was called to order at 10:10 am by Mr. Bob Molzahn, chair of the committee. The minutes from the May 2, 2008 meeting were reviewed and approved, noting a minor edit required to reflect a change in the DRBC Planning & Information Technology branch title. Today's agenda was also reviewed and approved by the committee.

#### **MEMBER CHANGES / ALTERNATES**

Ken Najjar discussed the following membership changes and issues with the committee:

- Philadelphia Water Department's official representative is now George Kunkel
- New York City representative Senobar Safafar is now Senobar Lanigan

- Dave Froelich is no longer with the Wissahickon Valley Watershed Association, Ken Najjar spoke to Randy Gray regarding an alternate designee.
- There has not been direct representation from water utilities, academia, recreation & fisheries, or agriculture on the WMAC in quite some time – the committee may want to look for alternate representation in these sectors and offered the following potential candidates:
  - Academia: Gerry Kauffman, Lehigh University, Temple, Jeff Featherstone, Richard Weissman, Mr. Ruggles
  - Fisheries: Trout Unlimited, non-profit anglers, The Nature Conservancy
  - Recreation: Jim Serio, Delaware River Foundation or someone outside of government
  - Agriculture: Determine Ferdow Ali’s commitment, NRCS, Conservation Districts, Rutgers
  - Water Utility (private): Joanne Rufft of Artesian Water has attended previously. The current representative for this sector has not attended for several years. DRBC will work with both to update the representation for this sector.
- Committee consensus was that a new member position should be proposed for the Power or Electric Utility sector.

Ken Najjar also discussed permanent appointed alternates with the WMAC. Currently, the procedures call for designees to be specifically designated for a specific meeting, by writing or email – but if the DRBC doesn’t hear from the member regarding a designee, that person can’t participate in any votes during that meeting. If there is a permanent designated alternate, that person would be considered a voting person, in the absence of the member. The committee agreed there should be permanent designees and the procedures should be drafted reflecting that change; also, if the designated alternate is not able to attend, a third person may be appointed, in advance, for that meeting. The designees will be confirmed via e-mail to Victoria Lawson of DRBC (Victoria.Lawson@drbc.state.nj.us).

The WMAC resolution, which is about 11 years old, was also discussed. Ken Najjar asked for consensus on the following topics:

- a) Timelines for members - Committee consensus was to continue as open-ended membership.
- b) Sunset of committee – No answer was given to this item.
- c) Appointment letters – No answer was given to this item.

According to the resolution, the WMAC shall also elect an individual to serve as liaison on the Flow Mgmt Technical Advisory committee and the Water Quality Advisory Committee, which hasn't been done. This may be something the group should consider doing. This issue will be revisited at the next WMAC meeting. Mary Ellen Noble suggested the next agenda of the WMAC include an item to update the future work outline for the committee.

#### **APPOINTMENT OF COMMITTEE CHAIR AND VICE-CHAIR**

The committee voted to approve a new Chair of the WMAC: Ms. Mary Ellen Noble was elected, Vice-Chair is Ms. Senobar Lanigan.

#### **WATER MANAGEMENT / SUPPLY PLANNING UPDATE**

***AWWA Water Accountability rule making process / implementation:*** David Sayers reported on this item noting that this committee, with the assistance of a subcommittee, was responsible for advancing the AWWA/IWA water accountability audit approach. Since the committee last met, the rule change process was completed, culminating in the adoption of the new rule by the DRBC Commissioners in March 2009. The rule change process involved a public informational meeting, a public hearing and a public comment period. A comment and response document was prepared which consisted of one set of comments from New Jersey American Water, generally in favor of adopting the new approach and explained how the phase-in of the new rules would be handled. The rule change updated an approach that was more than 20-years old. The final resolution (2009-1), as well as the comment and response document was distributed to committee members via email prior to the meeting. In April 2009, the AWWA Waterloss control subcommittee released the latest version of the AWWA Water Audit Software (v4.0) which is available on the AWWA website. The PA PUC made a similar ruling to DRBC's in that they are undertaking a pilot program to advance an audit approach using the same AWWA methodology.

George Kunkel, Philadelphia Water Dept., stated that the AWWA Guidance manual also became available in April 2009. Discussion ensued regarding a number of states that are also looking into this methodology. Most notably, within recent weeks, the California Urban Water Conservation Council has approved revisions to their Best Management Practices which embraces the new methodology with two notable initiatives: 1) utilities have to go through a four year period where they improve their audit data, and 2) after 4 years they will look at setting up indicators and targets for leakage control. Mr. Kunkel also noted that a few years ago, Texas did over 2,000 audits using the new format; their requirement for updates is every 5 years.

Now that the rule change has been adopted, there will be a voluntary period of three years, during which time DRBC staff can promote the methodology and educate the water purveyor community in the Basin. DRBC also needs to work with the member states to develop the process of data collection, which is still a charge to the WMAC. Any feedback from the states, in terms of direction, would be a good start. George Kunkel noted that the hope is that this software expands to nationwide use by all 50 states. This was a process to have water accountability computed the same way, in an effort to compare data on the same basis. In the next 3-5 years, the data needs to be collected and refined. At that point, utilities can be compared and meaningful targets established.

***State water supply planning efforts:*** The following section captures comments from State representatives on water supply planning efforts and the states' perspectives on implementation of the AWWA water loss audit approach

***New Jersey:***

Mike Bleicher reported that New Jersey is in the process of updating the State Water Supply Plan and the process of updating the water allocation rules. Recently, New Jersey was hoping to have the Water Supply Plan finalized and available, but a decision was made to go back and make the report more current by updating water use statistics. The state is currently reviewing the numbers and hopefully will complete the work within the next few months. There are currently rules in place that require water conservation plans be submitted by permittees. In this rule proposal, the hope is to follow suit with DRBC in terms of the AWWA audit software. New Jersey is going to move away from the water conservation forms that are currently in use and recommend use of the downloaded software. The problem is that there is a multi-million dollar NJ environmental management system in place which will not easily adapt the Excel spreadsheet required for the AWWA approach, so the state will have to ask permittees to complete an online form which will have the same numbers as the AWWA software. As of now, there is no way to work around the disconnect. Barring any unforeseen problems, the rule proposal should go out late this winter/early spring, and hopefully be adopted by August 2010, with 2011 being the first year of implementation. New Jersey also implemented an online water utilization form for purveyors to report what they deliver or receive from other systems to see where the water is moving in bulk sales and purchases. There is over 90% compliance thus far. Mr. Bleicher noted that web reporting is mandatory in New Jersey.

***New York:***

Participating via conference call, Mike Holt reported that New York has one comprehensive permitting program which is the public supply permit program of 1905. There is some overlap with DRBC in this program. Every new taking of water requires a permit; part of that permit application requires a water conservation form, which is set up now in the form of a water audit that uses the term of "unaccounted for water". Mr. Holt noted that he would be interested in following up with George Kunkel of PWD in order to get updated on the AWWA water loss accounting approach.

Until recently, there was not an annual water use reporting requirement. There is now an annual reporting requirement for not only public water supply but for any water system above capacity of 100,000 gpd. There is an online form for this reporting. In February, 2010, the state should start receiving annual reports for monthly water use, well information, category of use, maximum and average demands, etc. The next step is to get an annual water audit and update on conservation measures taken within the past year from our permittees.

This new requirement went into effect in May 2009, the first full year of compliance will be 2010. The legislation that came out tried to give exemptions to programs that already report. One of those is the DRBC docket process, but NY doesn't receive data from the DRBC. NY has authority over some facilities that are pre-jurisdictional for DRBC. NY is going to ask that the

data be reported to the state, the state will then forward the data to DRBC. Ken Najjar noted that this issue would have to be worked out between NY and DRBC. In the interim, New York is going to try to collect the data for 2009, as a test case.

***Delaware:***

Stewart Lovell noted that the Water Supply Coordinating Council, who was responsible for developing the Northern New Castle County water supply plan, has recently been authorized to continue its function until 2016 in order to give it sufficient time to complete water supply planning work in Kent and Sussex counties. DNREC also implemented an online water use reporting program for all permittees which has not been mandatory. It appears that the water conservation price structure has had an effect on the state's efforts, however it is difficult to separate these changes from the noted reduced demand experienced due to code changes and other factors. DNREC is not ready to require statewide use of the AWWA software or methodology.

***Pennsylvania:***

David Jostenski reported that in the last year all the final verification work on 30 watersheds had been completed in partnership with the river basin commissions and USGS. The current phase is public notice and comment before recommendations can be made on which watersheds should receive Critical Water Planning Area (CWPA) designation. Finding the necessary resources to develop a Critical Area Resource Plan for a CWPA would be a significant challenge, given current budget difficulties.

Tom Denslinger noted that Pennsylvania is not currently requiring the AWWA/IWA water audit approach to be applied. The state is looking into it; however there are many concerns and questions. A main concern is outreach; if there is not enough training up front, the end result will be invalid data. The smaller companies may not understand how to fill out these forms and perform the audit correctly. Under Act 220, Chapter 110, reports are already being received regarding basic information. The concern is that at some of the small systems will have difficulty coming up with information such as miles of main, length of customer service lines, etc. Particularly, biggest problem is expected to be municipal systems and small private owned systems.

At some point in time, the state is hoping to work out an agreement such that the DEP Greenport (online data entry portal) would be used to collect the information. In March 2009, a resolution was adopted which renders the process officially voluntary. In calendar year 2012 they have to be gathering information in a manner to be able to use the AWWA audit form, so that in 2013, which is when we will request a report for 2012, and it expected to resemble the AWWA format. In effect, any permitted water purveyor under DRBC regulations will have to comply with resolution 2009-1 in the year 2013. The water allocation program is working on a rule-making that would reference the AWWA standards.

***Groundwater Protected Area:*** David Sayers reported on progress that the DRBC is making with an evaluation of the status and administration of the southeastern Ground Water Protected Area (GWPA). Mr. Sayers noted that this committee (in one form or another) had played a large role in the development of the GWPA. The history of the GWPA goes back to 1980, but it's been

about 10 years since actual withdrawal limits were established for this area on a sub-basin basis, against which to measure water use. A potentially stressed limit, which is 75% of the withdrawal limit, serves as a management tool to control the amount of withdrawals in those sub-basins. DRBC thought 10 years from those established original limits was a good time to re-evaluate where we are from both an administrative point of view and technical point of view. Mr. Sayers reviewed a flow chart handout which contained three distinct sections:

***1) Program Status:***

DRBC compared its own listing of active docket to the data captured by PADEP through the Act 220 reporting program. Gaps were identified and efforts have been made to establish a complete inventory of GWPA projects / dockets. DRBC will work with PADEP to make sure information is shared and each agency has the most reliable dataset as possible. There is potential for the creation of number of new dockets for the protected area.

***2) Data Capture:***

In the groundwater regulations, it is required that an annual database or listing of net groundwater withdrawals is to be maintained and compared against groundwater withdrawal limits. In order to have an annual list, accurate and comprehensive data are needed on an annual basis. There is a need to work with PADEP to determine how this can be done, so when it is time to make docket decisions, we have the best information at hand for an approval or denial. The concept of issuing DRBC's own water user reports has been discussed, but there is an element of duplication because that information should be going directly to PA and DRBC should be getting that information from the state. However, Mr. Sayers noted that DRBC sees it as a priority to ensure it has necessary information to effectively run the GWPA program.

***3) Program Analysis & Review:***

This was the initial endeavor and end goal, but it is recognized that the first two steps were needed in order to do a genuine evaluation in step three. David Sayers noted that DRBC is currently involved in steps 1 and 2 with quite a bit of effort to make sure the data is in order. There is an expectation that the WMAC would become more involved as we get into step 3. It is likely DRBC will also require the expertise of USGS as part of a technical evaluation.

The project is likely to take a couple of years to complete in full.

***DRBC Integrated Database:*** Over the last year, DRBC has been integrating datasets together. Previously, water use data, water charging program information, contact information, etc. was all separate. DRBC has essentially created a data model that is much more readily able to integrate all the data together. There was insufficient time to run the demo that was planned. This will occur at a future meeting.

***Multijurisdictional Study:*** David Sayers reported that the last time the WMAC met was to discuss the findings of the DRBC/USACE multijurisdictional study. One of the key findings in this study was the future growth expected from the power generation sector. The power sector is the largest user in terms of withdrawals and consumptive use and this sector is projected to grow by 2030 by a significant increase. Consequently, DRBC set up meetings with the larger power utilities in the basin, PPL, Exelon and PSEG. Staff met individually with those groups to present

the findings of the study and discuss the utilities impression of future demand projections and plans for additional generating capacity and its impact on water demand. The utilities were interested in our findings, but did not see the magnitude of the increase that was projected as likely, especially using near term projections. Each utility cited deteriorating economic conditions as a significant constraint on growth which has scaled back any plans of increasing capacity. A second nuclear generating unit at Hope Creek, NJ is still planned although will not be operational before 2020. Another issue was the issue of sensitivity and how much the companies can and are willing to share. Another common theme was that any new facilities that are proposed would most likely be located within the footprint of existing facilities rather than trying to find sites and connect those sites to the grid. Another theme would be that any new facilities would be utilizing evaporative cooling towers.

**FUTURE DRBC/WMAC WORK PLAN:**

Due to a lack of time, this item was postponed until the next meeting.

**SUPPLY ENHANCEMENT OPPORTUNITIES**

Ms. Jessica Sanchez reported on her effort to track potential water supply enhancement options, a project which had it's evolution in Decree Party Work group discussions. Acknowledging that New York City has an allocation from a Supreme Court decree and that - although NYC is not using all of its allocation at present - in the event it should have to be used for some reason, there is a need to ensure sufficient flow in the river to meet all downstream needs. The objective is to look at large enhancement opportunities, usually facilities that have either been on our books or originally looked at during past planning exercises for this basin. This is of additional interest to help with renewal of the DRBC Comprehensive Plan with the inclusion of an up-to-date list of existing reservoirs and potential projects (Tocks Island, for example, is still classified in the Comprehensive Plan for re-evaluation in 2000).

This work is a way of doing some house-keeping, as well as looking at what larger projects might be out there should it be decided that we would want to go in that direction. It doesn't look at smaller projects or local sustainability - projects that might be more viable or more politically and environmentally easier to implement. It only looks at the larger projects that have been proposed in a former process. For example, the majority of these projects were included in a 1961 ACOE report that was adopted as House Document (HD) 522 in August of 1962. The referenced section is the first volume of an 11 volume set in the DRBC library.

The spreadsheet was started with a list of existing (built) reservoirs, and then supply enhancement opportunities were added. There are 3 different categories of enhancement opportunities:

- (1) Additional storage opportunities for existing facilities: including recommendations from the Good Faith Agreement or projects in DRBC resolutions.
- (2) Management opportunities: projects that are out there that aren't controlled by DRBC or the ACOE or NY but could figure into the flow management scenario.
- (3) New projects. These are generally from the HD522 document and include new facilities.

The Committee was advised that this is very much a work-in-progress.

Reference materials:

1. A DRAFT map and DRAFT spreadsheet were distributed to the committee. Note that the yellow highlighted projects on the spreadsheet represent the supply/flow enhancement opportunities.

2. The USACE 2008 Multijurisdictional Report was distributed to members that requested a copy.

**OTHER BUSINESS:**

Bob Molzahn briefly discussed the DiRenzo Reservoir Project in Blythe Township, PA. The project involves the mining of coal underneath the property; as a result, a reservoir would be created. Ken Najjar stated that anyone is welcome to speak at the WMAC meetings under the “Other Business” portion of the agenda. Tom Denslinger of PADEP noted that Blythe Township has filed a petition to declare the area unsuitable for mining.

The next meeting of the WMAC is scheduled for January 14, 2010 at 10:00 am at DRBC offices in West Trenton, New Jersey. A second WMAC meeting for calendar year 2010 has been set for April 22 at 10:00 am.