NEW JERSEY CLEAN WATER COUNCIL
January 10, 2005
Meeting Highlights

Location:
The offices of Saul Ewing, LLC, 750 College Road East, Suite 100, Princeton, NJ

Attendees
Members: Ferdows Ali, Jim Cosgrove, Russ Furnari, Amy Goldsmith, Pamela Goodwin, Ray Nichols, Pat Pittore, Jessica Sanchez, Dan Van Abs, Ray Zabihach

Others: Larry Baier, Jack Gibs, Helen Heinrich, Ken Klipstein, Rick Kropp, Pat Matarazzo, and Kerry Kirk-Pflugh.

Meeting convened by Pamela Goodwin, Chair.

RECOGNITION OF FORMER CHAIR:
After members and guests were treated to a continental breakfast repast provided by the Princeton office of Saul Ewing, LLC, Pamela Goodwin presented an engraved plaque to the former chair, Pat Matarrazo, for his ten years of service to the Council. The plaque was inscribed:

The Clean Water Council of New Jersey
Recognizes Pat Matarazzo
for Ten Years of Service to the Council
and Thanks Him for His Leadership as Chair

APPROVAL OF MEETING HIGHLIGHTS FROM DECEMBER 13, 2006:
The meeting highlights of the December 13 meeting were approved, subject to the following modifications:

On page 2, the later part of the third paragraph shall be corrected to read: "The municipalities along the Delaware River have been especially concerned about the increased development pressures they will face. Therefore, the Delaware River Basin Commission worked with them to secure a $35,000 planning grant from the National Fish and Wildlife Foundation. This grant will enable the Municipal Land Use Center at The College of New Jersey to work on behalf of those municipalities to address their concerns simultaneously with the planning efforts of the Highlands Council."

On page 2, the fifth paragraph shall be corrected to credit the New Jersey Meadowlands Commission (NJMC) (not the HMDC) as the organization that dealt with FEMA.

On page 3, the first paragraph was corrected to recognize that Carol Collier, not Jessica Sanchez, who presented testimony at the Public Hearing on behalf of the DRBC. Carol had asked that the Councils' members consider the Delaware River Basin Commission's *Water Resources Plan for the Delaware River Basin* as part of her testimony. Jessica Sanchez brought

additional copies of that plan to the November meeting so that each council member could have one.

Lastly, the meeting record shall be amended to note that the members discussed the desirability of insuring the public understands the positive aspects of environmental planning and planning for growth.

PRESENTATION BY LARRY BAIER, Director of the Division of Watershed Management, together with Ken Klipstein, Chief of the Bureau of Watershed Planning, and Kerry Kirk-Pflugh, Section Chief of the Watershed Education, Estuaries and Monitoring Group.

Larry Baier presented information about some of the Division's current activities and initiated discussion of ways by which the CWC might become more involved with some of those activities.

Section 319(h) Program

In previous years, this program was used to fund broad, large-scale watershed planning efforts. Current efforts are directed at putting together implementation of previously approved watershed management plans and restoration plans. The Division is trying to focus on smaller geographic watersheds, where it may be easier to implement a project that has a demonstrable effect on improving water quality. Such projects may take into account existing studies done in-house, as well as TMDL studies.

The Division is also trying to leverage 319 funds with other sources of funding for these implementation projects. For example, using programs sponsored by USDA to put Best Management Practices in place on existing agricultural lands. He described the existing and proposed rules that the Division has developed.

Beginning in State Fiscal Year (SFY) 2006, the Division has prioritized Watershed-Based Plan Implementation Projects for Section 319(h) Nonpoint Source Pollution Control Grant funding. Such projects include nonpoint source abatement projects or activities that have been specifically identified as integral components of a Department approved watershed-based plan. For the purpose of implementing these projects with 319(h) funds, the Division defines watershed-based plans as plans that:

- are regional/areawide in scope (i.e. not a study of one location);
- detail specific projects or management measures to be implemented in order to achieve the goals of the plan; and
- set forth a prioritization of the projects or management measures identified in the plan.

Plans **initiated** after June 30, 2007 must include the nine minimum components of a watershed plan set forth in the Environmental Protection Agency's "Handbook for Developing Watershed Plans to Restore and Protect Our Waters" (USEPA, 2005) in order to be considered for implementation funds through 319(h). These minimum components are also outlined in the New Jersey "Request for Proposals: SFY 2007 Section 319(h) Grants for Nonpoint Source Pollution

Control." Plans initiated prior to June 30, 2007 must meet the definition of a watershed-based plan noted above. However, they need not possess the nine minimum components in order to receive implementation funds, unless the plans were funded under 319(h) grants in which said minimum components are a requirement of the executed contracts.

Larry invited the CWC to consider ways in which the Council members could possibly become involved with the 319(h) Grant Program. One option would be if Council members would want to help to define the scope of work, and priorities for next year's Request for Proposals. Another option would be reviewing project proposals after they were submitted to the Division. A few of the Council members expressed concerns about potential conflict of interest if they were both submitting proposals and then reviewing them for possible funding.

Water Quality Management Plans (WQMPs)

Recently the Department of Environmental Protection (DEP) had proposed three statewide amendments to the rules regulating Water Quality Management Plans (WQMPs). They were subsequently subject to criticism from various stakeholders. The DEP has responded to the public's comments by modifying one and withdrawing the other two.

1. One amendment proposes to adopt a Statewide GIS Coverage of existing Sewer Service Areas. This proposal was viewed somewhat favorably and the DEP is moving forward with it. However, because of concerns about accuracy of the GIS coverage, DEP extended the Public Comment Period to Feb. 2, so people can examine the GIS coverage that is proposed and recommend any corrections to that coverage.

The following two rule proposals have been withdrawn. Larry did not know what the new administration would want to do about them. In one proposal, DEP had proposed to revoke approval of all Sewer Service Areas (SSAs) that had been identified in a WQMP that had not been kept up to date in accordance with the rules and that were located in Planning Areas 3, 4, or 5. The other amendment proposal would have essentially reinstated rules (previously known as "Subchapter 8") to enable DEP to examine subdivisions where septic systems were being proposed to treat the discharges of six or more dwellings. The goal was to require analysis of the effect of their density and their impact on ground water. These rules had been adopted several years ago as "Subchapter 8," but the courts subsequently overturned them on a technicality.

In a related development, on November 28, 2005, Governor Cody extended the chapter expiration date of the Water Quality Management Planning Rules (N.J.A.C. 7:15) from November 29, 2005 to May 25, 2006, thus enabling the next administration to determine how best to revise them. Larry noted that the goal of these proposed amendments was to improve the consistency between the WQMP Rules and the State Plan. This is still considered an admirable goal. The short amount of time remaining before May 25 does not allow DEP much time to develop a new rule proposal. Never the less, Larry encouraged the Council to make suggestions as to how the rules should be amended.

Stormwater Management Rules

The Division of Watershed Management has been concerned about how best to implement rules related to Nonpoint Source Pollution and providing for protection of riparian corridors. While it is recognized that there is a correlation between the amount of impervious cover in a watershed

and its impact on water quality, there has been a lack of approval standards for implementing E.O.109.

The Stormwater Management Rules require the implementation of nonstructural stormwater management strategies to the maximum extent practicable. Nonstructural strategies include preservation of natural vegetation, minimization of impervious surfaces, minimization of compaction, usage of natural drainage features, etc. There is no empirical threshold in the regulation that can be used to determine compliance. This has resulted in inconsistent implementation of nonstructural strategies. To address this issue, the Division of Watershed Management has recently developed a computational tool to assess compliance with the nonstructural strategies requirement.

This computational tool is based upon a points system. It is intended to be a "pass only" measuring tool. This means that projects that achieve passing values using this tool are presumed to comply with the nonstructural requirements without further analysis. Designers of projects that do not achieve passing values will be asked to do a rigorous alternatives analysis to demonstrate that nonstructural stormwater management techniques have been incorporated into the site design to the maximum extent practicable.

This new tool is an Excel spreadsheet that computes pre-development nonstructural points based on existing soil and vegetation types on the development site. The spreadsheet then computes post development nonstructural points. The loss of points then must be offset through the incorporation of nonstructural strategies in the site design. The percentage of points that must be retained is determined by the size of the site and the State Planning Area where the site is located. Larger sites have greater opportunity to incorporate nonstructural strategies into site design than smaller sites. Therefore, they are held to a higher threshold. Nonstructural strategies often reduce the intensity of development that can be accommodated on site. Therefore a smaller percentage of points must be retained in centers, and planning areas 1 and 2 and a higher percentage is required in planning areas 4 and 5.

The method was being unveiled in a short course at Rutgers and will be posted on the web soon. Larry offered to get a presentation on this subject for the council if they so desired.

Jim Cosgrove voiced approval of the new procedures, noting that if there was no target to shoot for, there was no incentive to try. He elaborated on the desirability of having a point system, noting that some engineers will just design projects the way they always have until they are required to do something differently. Secondly, some engineers have found that, when they have proposed non-structural designs (such as roadside swales) the local planning board objects and indicates a preference for curbs and inlets. This may occur because some people equate roadside swales with ditches, which are visually offensive.

Rick Kropp noted that if anyone wanted to see a site where nonstructural measures have been successfully implemented, they could look around the Princeton Forrestal Center, which was designed in the 1970s. Someone noted that nonstructural measures take up more land area than structural measures. Princeton University was willing to dedicate the necessary land area to non-structural measures when it developed the Forrestal Center. However, many developers want to

maximize the development potential of their site, and are unwilling to designate any more land area for stormwater management than is absolutely necessary.

It was also pointed out that there is a need to consider the concerns of the public works departments. These people are concerned about how much labor and equipment will be needed to maintain the stormwater management facilities, as well as the non-structural measures.

Russ commented the BMP Manual seems to be targeted to the typical engineers, with specifications for structural measures described in detail. This has led some consultants to say to their clients, "If we do these measures this way, then it will be approved, whereas if we try to rely upon non-structural measures, we are uncertain if they will be approved. He also, noted that the BMP Manual is mostly about methods that apply to new developments. It does not look at retrofits for existing developments.

Kerry Kirk Pflugh noted that the State is now requiring planning board members and municipal engineers to go through special training courses, which have been approved by the DCA. Several council members voiced support of the need for local planning board members to be educated. It was hoped that the DEP's goals for "greener" techniques would be built into these courses.

Several people talked about the need for planning board members and their engineers to be educated about the new Stormwater Rules. While the municipalities have had their consultants modify their master plan to incorporate the model ordinances that DEP requires, it seems that many local planning board members do not know what is contained in their own ordinances.

Ray Zabihach pointed out that the counties are working with archaic drainage rules established in 1956. The role of the county planning departments was overlooked when the rules were revised in 1981 and when the latest stormwater rules were adopted. He noted that the counties are required to review the municipal stormwater ordinances. However, when development plans are submitted to the county planning offices for review, they can only make recommendations to the municipalities about what should be on the plans. It will take legislative action to give them sufficient authority in this area.

Kerry Kirk Pflugh noted that stormwater retention on the ground surface is a multi-faceted issue. While we now advocate measures that facilitate stormwater infiltration to recharge groundwater aquifers as a good environmental practice, many more people are concerned that standing water represents a health issue. For the past several years, we have been educating the public to recognize areas of standing water as potential mosquito breeding habitat, which should be eliminated to prevent the spread of West Nile Virus. Since floods can damage property and take lives, there has been a big push for many years to get the water into pipes and drained away as quickly as possible. Pamela, acknowledging the complexities, suggested that this subject would be a good topic for another meeting.

Larry then informed the CWC of another problem. Back in July, the Passaic River Basin Alliance had filed an OPRA request for information about the TMDLs being proposed in the Passaic Basin, upstream of Wanaque Reservoir. DEP failed to respond to that request. The

Alliance then filed suit to require DEP to comply with the OPRA requirements. In response to that suit, the DEP will be making the requested information available. In addition, the decision has been made to reopen the comment period for that TMDL rule proposal.

In closing, Larry expressed his willingness to return to the CWC whenever the members desired a general update on "Hot Topics" in his Division. In addition, he is willing to send the appropriate DEP staff to brief them on specific topics, as requested. Kerry, noting that the managers of the Division meet weekly to exchange information about their respective programs, suggested that some of them could attend CWC meetings on a quarterly basis and act as conduits of information between the Division and the Council.

In response, Pamela expressed great appreciation for his coming to the meeting and having a dialogue with the CWC members. She also indicated that the Council members have expressed the desire to help DEP by conveying the concerns of the public, and their respective constituencies to the DEP. Furthermore, they wanted to do so in ways that ultimately benefit the state's residents and their water resources. She suggested that it would be good if Larry could attend a meeting every 6 months of so, just the way he did today, and lead a discussion of the various issues with which he is dealing.

OLD BUSINESS:

REPORT FROM THE PUBLIC HEARING COMMITTEE
(Members are Dan Van Abs, Russ Furnari, Jessica Sanchez, and Pamela Goodwin)
This committee met earlier on the morning of January 10, to review the work previously done by Dan Van Abs. He had taken the concepts expressed by the speakers at the hearing and the recommendations of the subcommittee and organized that information in a coherent format. During their meeting, they reworked the recommendations and did extensive wordsmithing. Copies of the draft that came out of their meeting were distributed to everyone present and then discussed. The first page consists of a description of how and why the report was produced and summarizes the key recommendations. The committee recognized the public's comments and the Councils' recommendations fell into several categories, or topics: Strategic Approaches, Water Supply, Management of Growth, Water Impacts of Existing Land Uses, and Wastewater Management: Existing and Emerging Issues.

The rest of the report consists of two columns for each of these topics. The left column contains a brief description of the issues raised at the hearing. The right column presents the related recommendations.

It was agreed that the complete transcript of the hearing would accompany the recommendations document. There was discussion about the possibility of also providing the list of comments that identified the person who originally expressed the comment at the public hearing.

Dan noted that he planned to take this draft document to next meeting of the Water Supply Advisory Council, which was scheduled to meet on January 20, so that its members could discuss it and make any changes they deemed necessary. (Note: That meeting was subsequently cancelled and re-scheduled for February 17.)

Therefore, while the CWC wanted to present the recommendation to the new Commissioner as soon as possible, final approval would be best tabled to the February Council meeting. It was further agreed that the Council members would review the document in detail and submit any comments for additions or changes to the committee by February 1.

Amy Goldsmith raised questions about the meaning and use of two inference-loaded terms. First, the use of "Regions" in the context of Water Supply Critical Areas on page two, and then the use of the term "Centers", as used in the context of Management of Growth on page three. It was noted that there needed to be additional clarification of how the Councils meant these terms to be used.

Dan offered to make the requested changes and then send Ray Nichols and Joe Mattle an electronic copy that they could then transmit to all of the members of their respective Councils, together with a request that everyone was to review the draft in detail and submit recommended changes by February 1. This would still enable the final version of the recommendations to be approved at next CWC meeting, on February 14.

Pamela expressed the desire to have the recommendations physically presented to Commissioner in the format of a newsworthy event. Kerry and Larry indicated willingness to work with Lisa Jackson and the DEP Press Office to set something up just as soon as people knew what the final version would be.

PRESENTATION ON MICROBIAL SOURCE TRACKING

As a follow-up to the discussion at the December meeting on Microbial Source Tracking (MST), Rick Kropp invited Jack Gibs, a Water Quality Specialist with the NJ office of USGS, to come to this meeting to describe how MST is being done.

Jack indicated that there are two approaches to doing MST. One technique uses antibiotics, because various strains of bacteria respond to an antibiotic differently. Using studies of these reactions, and some powerful statistics, it is possible to distinguish strains of bacteria (mostly *E. coli*) as having originated in feces of human origins, as differentiated from various species of livestock, or from various species of wildlife. The technique is very labor intensive and expensive, because of the need to analyze large number of samples.

This technique necessitates the establishment of extensive libraries of feces associated with the various species of interest in the local area. Some states (including Delaware and Virginia) have invested heavily in this technique. It has merit in places where streams are contaminated with fecal coliform and there is a need to determine if the source is of human or livestock origins.

When the source is livestock, then the farmers can be encouraged to apply Best Management Practices, such as fencing off streams and establishing riparian corridors. One problem with this technique is that the libraries do not transfer spatially. There are differences in bacteria from one county to an adjacent county. Furthermore, it appears that the DNA of the bacteria can mutate and change over time. So the libraries become obsolete. The USGS conducted a study comparing the methods used in West Virginia and Virginia. This study concluded that there are

limits to the accuracy of the methods, and it takes a lot of money to establish the libraries. Another cost factor is the need to cultivate multiple replicates for each sample in order to use the statistical analysis.

The second approach to MST involves techniques that are still in the research stage. They involve examining the molecular structure of DNA for the bacteria. This technique promises to provide much faster turnaround times because there is no need to cultivate the samples. However, the methods are still being developed.

After Jack's presentation, Ken Klipstein explained why DEP is interested in MST. DEP has established almost 200 fecal coliform TMDLs. In many cases, they have made assumptions about whether the source is failing septic systems or agricultural runoff. He asked if the CWC was interested in getting involved in evaluating the MST methods and advising the DEP. Consensus was to take a wait and see attitude depending upon what information the multi-agency MST Study Group developed. The topic was then tabled.

ADJOURNMENT