

**New Jersey Highlands Council
Water Resource Management
Technical Advisory Committee
Meeting Summary
15 July 2005**

Summary:

On July 15, 2005, the Water Resource Management Technical Advisory Committee (TAC) held a meeting at the New Jersey Highlands Council office in Chester, New Jersey. Notice of the meeting was provided to the public on the Highlands Council's web site. Adam Zellner, Executive Director of the Highlands Council, welcomed the members of the Technical Advisory Committee and thanked them for their willingness to offer their expertise to the Council in preparation of the Regional Master Plan. Council staff members present at the meeting were: Steve Balzano, Tom Borden, and Maryjude Haddock-Weiler. Dan Van Abs from the New Jersey Water Supply Authority, consultant to the Highlands Council, facilitated the session. Technical advisors present at the meeting included: Kirk Barrett, Doug Beal, Maria Coler, Peter Demicco, Don Einhorn, Ron Farr, Ella Filippone, Gabi Grunstein, Skip Jonas, James Kurtenbach, Ross Kushner, Virginia Michelin, Matthew Mulhall, Donald Rice, Glenn Schweizer, Michael Sebetich, Matt Sprung and Otto Zapecza.

The discussion began with an overview of the purpose of this particular Committee. The Committee will focus on three (3) areas of consideration: management and protection of drinking water supplies; restoration opportunities of water resources; and long term programs.

Dan Van Abs explained that the TAC would be creating an initial list of critical issues for the Highlands Council to consider in regards to water resources, both long-term and short-term. The group identified to following list of key issues.

Key Issues:

- Maintaining stream flow
- Strong protective stream buffers
- Identify headwaters and other critical resources.
- Maintain ground water quality and quantity.
- Determine if we are over allocating water (*depletive and consumptive uses*)
- Well head protection and critical recharge areas.
- Identifying and inventorying pollutant discharges.
- Maintaining aquatic biological integrity and diversity of our watersheds.
- Identify streams with available pollutant capacity, which can accommodate population.
- Identify available water supply.
- Storm water management for existing and new development.

- Defining the availability and sustainability of water resources.
- Determining sewerage needs (*Determine where current “septic” systems are failing, and where new/alternate sewerage systems are needed*).
- Impacts of impoundments on downstream water quantity and quality.
- Maintaining safe yield and reservoir quality.
- Identify existing water impairments and determining resulting restoration and improvement needs.
- Controlling the nutrient loads of surface waters.
- Identify the number and age of residential and industrial fuel storage tanks.
- Clear definitions and understanding of stream “impairment.”
- Future water supply for growth areas.
- Water conservation opportunities.
- Redevelopment opportunities for water quality benefits.
- How to educate public as to “why” of decisions – need for public outreach & education.
- Exploring innovative wastewater treatment systems and Department of Environmental Protection acceptance of them.
- Historical understanding of past land uses (e.g. mining).
- Water quality impacts of water supply operations/transfers from non-Highlands water sources (e.g. pumping stations from rivers to reservoirs).
- Monitoring network- water status and trends.
- Inventory/impact of inter-basin transfers.
- Future watershed needs for Highlands agriculture.
- Field verifications of site conditions - pre-permit issuance.
- Relationship between water quality and land use – disaggregating impacts and drawing correlations.
- Detailed methods for watershed estimations of water availability (standardization of aquifer testing, pump-tests, etc. to avoid corner-cutting).
- Recommendations on septic management (New York v. New Jersey).
- TMDLs based on realistic loading rates and current info. – NJ
- Identify critical data gaps (e.g. dated TMDLs).
- Sedimentation and filling of Highlands lakes.
- Determine scale of watershed analysis for appropriate purposes.
- Effects of impervious cover and other land cover changes (e.g. grouting of sink holes) on water resources.
- Carbonate aquifers.
- Recreational resources.
- Promoting environmentally friendly development practices.
- NY border effects.

Next Steps:

Dan Van Abs asked the TAC members to think of names of other experts in the field of water resource management who should be asked to serve on the TAC. It was suggested that representatives of the DEP be asked to participate, specifically Jeff Hoffman, NJGS, scientists from the Bureau of Fresh Water Monitoring, and biologists from NJ Division of

Fish and Wildlife. Jack Rabin from Rutgers University and Dr. Richard Pardi from William Paterson University were also recommended. Dr. Tavit Najarian of Najarian Associates, Mark Tompeck of Hatch Mott MacDonald, and government representatives or officials from New York State should also be contacted to join the TAC.

The TAC members were also asked to identify the key databases, reports and related documents that should be consulted in the preparation of the Regional Master Plan. The following list was produced.

- Watershed Characterization and Assessment reports – Passaic, Raritan, etc. (available from county planning boards, www.raritanbasin.org).
- USGS's stream gauging and water quality surveys.
- DEP - AMNET (*Ambient Biological Monitoring Network*)
- Integrated List of Water Bodies (*303(D) List*)
- STSWA???? biological data
- Volunteer monitoring network data
- Scientific papers and reports (*e.g. theses, etc. which TAC members are aware of – TAC members should notify Council of their existence and how to access them*).
- Center for Watershed Protection reports (Ellicott City, MD)
(<http://www.cwp.org/index.html>)
- Reports, surveys, etc. on storm water.
- County agencies – planning boards, utilities, health departments
- e.g. Morris Co. water supply master plan.
- Environmental Commissions – tech studies, projects, reports
- Passaic TP study (TRC Omni Environmental Corp.) for NJDEP – DWM
(<http://www.omnienvironmental.com/>)
- TMDL and utility phosphorus studies data.
- Urban Land Institute – work on watersheds
(<http://www.uli.org//AM/Template.cfm?Section=Home>)
- Trout Unlimited Chapters monitoring
- USACE (*US Army Corps of Engineers*) - Rockaway basin studies.
- STORET – USEPA database
- Lake Commissions, Lakes Studies (*e.g. Upper Greenwood Lake, Lake Hopatcong- various phases*).
- USGS studies: e.g. monitoring well network, Long Valley study, etc.
- DRBC (*Delaware River Basin Commission*) –
(<http://www.state.nj.us/drbc/drbc.htm>)
- Musconetcong River Basin Study (Wild & Scenic River Program)
- DEP – Division of Watershed Management – Priority Stream Initiatives (some have been completed, some are in the works).
- Fisheries Inventory – New Jersey Division of Fish & Wildlife.
- Populations in wild trout streams
- New Jersey endangered species program data.
- Local GIS (*Geographic Information Systems*) data.
- e.g. utility maps, zoning, etc.

- Rutgers University - New Jersey Environmental Digital Library (<http://njenv.rutgers.edu/njdlib/>) – Source of further information and studies

Finally, TAC members will be asked to consider a reformatted list of the key issues (see above) and which of these issues can reasonably be addressed in the next six to eight months, which can be started in that time period but will require more time for completion, and which should be started after the June 2006 Regional Master Plan, as part of an ongoing work effort.