

DELAWARE RIVER BASIN COMMISSION

MEETING OF SEPTEMBER 21, 2011

Minutes

The Commission met at the West Trenton Volunteer Fire Company in West Trenton, New Jersey.

Commissioners Present: Lieutenant Colonel Philip M. Secrist, United States, Chair
Kelly J. Heffner, Pennsylvania, Vice Chair
John Plonski, New Jersey, Second Vice Chair
Angus Eaton, New York
Kathleen M. Stiller, Delaware

DRBC Staff Participants: Carol R. Collier, Executive Director
Robert Tudor, Deputy Executive Director
Kenneth J. Warren, Hangley Aronchick Segal Pudlin & Schiller, DRBC General Counsel
Pamela M. Bush, Commission Secretary & Assistant General Counsel
Thomas J. Fikslin, Manager, Modeling, Monitoring & Assessment Branch
Richard C. Gore, Chief Administrative Officer
William J. Muszynski, Manager, Water Resources Management Branch
Jessica Rittler Sanchez, Basin Planner, Planning & Information Technology Branch
Amy Shallcross, Supervisor, Operations Section
Kenneth S. Stoller, Supervisor, Project Review Section

Commission Chairman Lieutenant Colonel Philip M. Secrist convened the business meeting at 1:30 p.m. He announced that each person who wished to speak during the Public Dialogue portion of the meeting would have two minutes to address the Commissioners.

Minutes. The Minutes for the Special Meeting by teleconference of June 28, 2011 and the Commission Meeting of July 13, 2011 were approved unanimously on separate motions by Ms. Stiller, both seconded by Ms. Heffner.

Announcements. Ms. Bush announced the following meetings and events:

- *Water Resources Association of the Delaware River Basin (WRA) Seminar.* On Wednesday, November 2, 2011 WRA will sponsor a seminar entitled “Sustainable Water Resources Management in the Delaware River Basin.” For more information please see the brochure provided by WRA’s Bob Molzahn.

- *DRBC Regulated Flow Advisory Committee Meeting.* Wednesday, October 5, 2011 at 10:00 a.m. in the Goddard Conference Room of the DRBC's West Trenton office building. Staff contact: Hernan Quinodoz, (609) 883-9500, extension 225.
- *DRBC Water Management Advisory Committee Meeting.* Tuesday, October 18, 2011 at 10:00 a.m. in the Goddard Conference Room of the DRBC's West Trenton office building. Staff contact: Donna Barnett, (609) 883-9500, extension 308.
- *DRBC Flood Advisory Committee Meeting.* Wednesday, October 19, 2011 at 10:00 a.m. in the Goddard Conference Room of the DRBC's West Trenton office building. Staff contact: Laura Tessieri, (609) 883-9500, extension 304.

Hydrologic Conditions. Ms. Shallcross reported on hydrologic conditions in the Basin:

The observed precipitation for the portion of the Basin above Montague, New Jersey for the period January 1 through September 19, 2011 was 53.43 inches or 22.12 inches above normal. The observed precipitation for the Basin above Trenton for the same period was 53.50 inches or 21.07 inches above normal and for the Basin above Wilmington, Delaware for this period, 42.66 inches or 10.99 inches above normal.

The average observed streamflow of the Delaware River at Montague in August 2011 was 11,130 cubic feet per second (cfs) or 523 percent of the long-term average for the month. For the same period, the average observed streamflow at Trenton was 24,999 cfs, or 493 percent of the long-term average for the month.

For the period of September 1 through September 19, the average observed streamflow at Montague was 28,154 cfs, or 1,300 percent of the long-term average for the month. The average streamflow at Trenton during the same period was 59,737 cfs, or 1,195 percent of the long-term average for the month.

In the Lower Basin, as of September 20, 2011, Beltzville Reservoir contained 13.98 billion gallons (bg) usable, or 100.4 percent of usable storage, and Blue Marsh contained 5.70 bg usable, or 101.6 percent of summer pool usable storage. As of September 19, Merrill Creek contained 15.45 bg usable, or 98.5 percent of usable storage.

In the Upper Basin, as of September 20, 2011, Pepacton Reservoir contained 139.951 bg usable or 99.8 percent of usable storage. Cannonsville contained 94.839 bg usable, or 99.1 percent of usable storage. Neversink contained 35.001 bg usable or 100.2 percent of usable storage. The total New York City Delaware Basin reservoir storage was 269.791 bg usable or 99.6 percent of usable storage.

During the month of August 2011, the location of the seven-day average of the 250-parts-per million (ppm) isochlor, also known as the "salt line," ranged from River Mile (RM) 65 to RM 72. The normal location of the salt line during August is RM 77, which is one mile downstream of the Delaware-Pennsylvania state line.

As of September 19, the salt line was located downstream of RM 54. The normal location of the salt front during September is RM 79.

Federal Emergency Management Agency (FEMA), Region 2, Report of the Response Division Director. Mr. Doug Salley of FEMA reported on the two major storm events – Hurricane Irene and Tropical Storm Lee – that came through the region during the month of September. FEMA Administrator Craig Fugate has emphasized that everyone in a community has a responsibility during storm events to take care of his or her family and check on a neighbor. In other words, storm response begins at the local level with citizens and local government. FEMA is just one part of the team. Emergency management in New Jersey is under the jurisdiction of the State Police. In New York this function falls to the New York State Emergency Management Agency. Mr. Salley said there were many successes in both New Jersey and New York during the two storm events, including multiple swift-water rescues in connection with the flooding by Irene.

FEMA Region 2 covers New York, New Jersey and the Caribbean. FEMA typically monitors a situation over a period of about five days and then sends in incident management teams. Federal agencies other than FEMA also play important roles. For example, in the case of Irene, FEMA assigned the U.S. Army Corps of Engineers emergency power and commodity support for the States of New York and New Jersey and also directed the Corps to provide wastewater facility and dam experts. The Department of Transportation and the U.S. Environmental Protection Agency were assigned responsibilities as well. To facilitate the federal response, a regional response coordination center was opened in New York City, and FEMA directed some 26 federal agencies that also furnished assistance. In striking back to back, Irene and Lee taxed all the federal agencies. The response was difficult to manage, Mr. Salley said, because it was spread out so widely up and down the east coast. He noted in particular that for Tropical Storm Lee, FEMA personnel were stationed over a vast area.

For Hurricane Irene, the entirety of New York and New Jersey were declared eligible for both individual and public assistance. Individual assistance is furnished to eligible property owners whose personal property – e.g., a basement -- has been flooded. Public assistance is available to repair such structures as roads and bridges damaged by a storm. Damage assessments are ongoing, and Mr. Salley encouraged all who need assistance to apply. He noted that the storm season does not end until December 1. Anyone seeking assistance after suffering storm damage may register for assistance on a government-sponsored web site, www.disasterassistance.gov.

Notably, FEMA takes an all-hazards approach. It needs to be prepared for everything – hurricanes, earthquakes, weapons of mass destruction – and the preparedness level must remain elevated. Between the two large storms, an earthquake struck that was felt from Martinsburg, West Virginia all the way to New York City. In the wake of the three events, FEMA tasked the U.S. Army Corps of Engineers with inspecting every dam in New Jersey and New York State. No breaches of significance were reported and nothing was damaged. Although one dam in New York State presented a problem, teams were dispatched within a 12-hour period and the Corps was able to quickly rectify the situation. Colonel Secrist noted that the Corps of Engineers was still performing dam assessments under Public Law 84-99. He said some levy damage occurred but none of it was significant. All of the Corps' dams held up well to the storms.

Executive Director's Report. Ms. Collier's remarks are summarized below:

- *Delaware River Basin Commission 50th Anniversary.* October 27, 2011 is the 50th Anniversary of the date on which President John F. Kennedy signed the Delaware River Basin Compact into law, thereby creating the Commission in 1961.
- *Senate Appropriation Item.* For the Senate bill appropriating funds for the National Oceanic and Atmospheric Administration (NOAA), Senator Barbara Mikulski of Maryland added \$2 million dollars to the amount requested by NOAA to support enhancements to the Advanced Hydrologic Prediction Service (AHPS). The dollars would support NOAA's work with the U.S. Geological Survey, the U.S. Army Corps of Engineers and river basin commissions across the country, for the purposes of leveraging stream and river data and information used in coordinating flood forecasts. Toward that end, the bill further provides for priority in the creation of inter-agency cooperation agreements to be accorded federal-interstate compact commissions such as DRBC. The river basin commissions provide critical data to the National Weather Service through a network of stream and rain gauges. These are used to create accurate and timely flood forecasts and warnings, thereby saving human lives. Ms. Collier asked those attending the meeting to ask their senators to support the extra \$2 million dollar appropriation.

Basin Plan Implementation 7th Annual Progress Report. In 2004 the DRBC adopted a direction-setting *Water Resources Plan for the Delaware River Basin* ("Basin Plan"), which was signed by the governors of the four basin states, General Bo Temple on behalf of the U.S. Army Corps of Engineers, and regional administrators from the U.S. EPA, National Park Service, U.S. Geological Survey, U.S. Fish & Wildlife Service and Natural Resource Conservation Service. The plan was developed by staff and a Watershed Advisory Council comprised of representatives from a broad range of interest groups, including watershed organizations, state and federal agencies, local authorities, and NGOs. The Basin Plan is intended to set directions for the Commission through 2034. Accordingly, staff annually provides Commissioners and the public with a report on progress toward the Basin Plan goals. Consistent with the resolution in support of the plan, a State of the Basin Report requested by the governors was completed in 2008. The intent is to update this report every five years; however, DRBC's annual budgets will determine whether this is possible.

The Basin Plan establishes five Key Result Areas (KRAs) with corresponding goals and implementation steps. A deliberate attempt was made by the authors *not* to treat water quantity and water quality as separate issues but to look at water as one element with three technical directions – sustainable use and supply, waterway corridor management, and linking land and water resource management. The last two of these technical directions require educational involvement, stewardship, and institutional coordination and cooperation. DRBC uses the directions established by the Basin Plan to drive changes to the Comprehensive Plan that is required by the Delaware River Basin Compact. The Comprehensive Plan in turn drives the Water Resources Plan, a six-year strategic action plan that is required by the Compact to be updated annually, thereby driving budget and work plan items. The Water Resources Plan includes an annual work plan for the entire Commission as well as plans for each of the branches and each individual staff member. Although these various plans are used to ensure that the

DRBC stays on course, the Basin Plan is above all about partnerships. It cannot be implemented entirely by the Commission but depends on the coordinated effort of many agencies and individuals. Just as it takes a village to raise a child, it takes all the citizens of a basin to protect a river.

Highlights of 2011 in implementation of the Basin Plan included the following: The Delaware River was named one of “America’s Greatest Waters” during this its 50th anniversary year, joining the ranks of the Colorado River and the New York-New Jersey Harbor. This “promotion” celebrates and focuses federal interest on waterways that are extremely important economic engines for their regions. The Delaware also was named “River of the Year” in Pennsylvania. DRBC this year co-hosted the first Source Water Forum, a large, interactive forum that relied on technical support from station WHYY in Philadelphia to link participants there with others, including EPA Administrator Lisa Jackson, in six remote sites. There were also major improvements to flood mapping and the new FFMP for operation of the New York City Delaware Basin reservoirs.

Major funding achievements in 2011 included the National Fish and Wildlife Foundation (NFWF) grant to The Nature Conservancy for almost half a million dollars to identify priority conservation areas; and sponsorship by Delaware’s Senator Carper of a new piece of proposed legislation, the Delaware River Conservation Act of 2011 with a potential \$5 million dollars to support water resource conservation projects in the Basin. September was the kick-off month for the USGS WaterSMART initiative, which includes \$1.5 million dollars over three years to focus on water supply and sustainability in the Delaware Basin. The Delaware River Basin is one of three basins nationwide to receive such funding. Almost \$2 million dollars was awarded by the U.S. Endowment for Forestry and Communities to the Pinchot Institute for Conservation for its Common Waters project, which will work primarily with private property owners in the Upper Basin on forest stewardship projects.

The member states as well as the federal agencies worked extremely hard to increase DRBC’s knowledge and management capacity in the area of natural gas drilling. Significant strides at the state and federal levels included a report by the Pennsylvania Governor’s Marcellus Shale Advisory Commission and recommendations by the Natural Gas Subcommittee of the Secretary of Energy Advisory Board.

Notable achievements within each of the KRAs are as follows:

Key Result Area 1: Sustainable Use & Supply. This area considers water quality and quantity together. Toxic criteria for the Delaware Estuary were updated and were for the first time extended into the Delaware Bay region. The Schuylkill River Restoration Fund has been in place for six years, with Exelon and the Philadelphia Water Department providing funding. The intention is to extend the existing funding and obtain additional corporate partnerships. This year \$400,000 was used for seven projects in the basin and to protect water quality in the Schuylkill Watershed. Projects include agricultural mitigation, abandoned mine drainage mitigation and stormwater mitigation programs. Silver Creek is an example of an abandoned mine drainage restoration project. Its cost – some \$800,000 – illustrates the expense involved. This project processes almost 2 million gallons of water per day, changing the pH so that metals can be filtered out and clean drinking water provided for downstream users.

KRA 2: Waterway Corridors. This key result area focuses on recreation, flooding, instream habitat and riparian corridor integrity. An example of invasive species management is a study undertaken by the Friends of the Wissahickon to determine what method is best for eradicating invasive plants – whether, for instance, yanking them out is better than using an herbicide or using goats to consume them. The report will take approximately two years to complete. There are many other invasive species eradication projects underway in the basin.

Flood mitigation is also addressed under this key result area, which includes as objectives improving flood forecasting and increasing the geographic coverage of flood inundation mapping. Delaware has authorized its communities to adopt new standards to minimize flood risk and has made model ordinances available to assist them. The National Weather Service Meteorological Model and Ensemble Forecast System (NWS-MMEFS) enhances forecasting with an automated and on-line planning tool for managers and the public.

Another waterway corridor project is the South Jersey Levee Inventory conducted by the Natural Resource Conservation Services (NRCS) and the New Jersey DEP's Bureau of Dam Safety and Flood Control. This project began in 2008; field work was completed by 2009; and the report was completed in December 2010. NRCS completed all the field surveys using the Army Corps' evaluation criteria. There were 70 levees in all, of which many, though not all, protect farm fields. There are some 3,000 structures behind these levees, none of which met FEMA safety standards or the U.S. Army Corps of Engineers' eligibility criteria for emergency assistance. Because many of the levees are privately owned, a concerted effort at the local level will be required to effect improvements. Inventory reports are available on the NRCS web site.

KRA 3: Linking Land & Water Resources. This area concerns management of the entire watershed rather than just the river corridor. Professor Gerard Kauffman of the University of Delaware Institute for Public Policy Administration has been leading a team in assessing the economic value to the Basin community of the natural capital associated with the Delaware Estuary. The State of the Basin Report published in 2008 stated that the present value of forest capital in the basin was then approximately \$258 billion dollars. The economic loss associated with loss of forest between 1995 and 2000 is estimated to equal almost \$2 billion dollars.

Urban revitalization projects are transforming Philadelphia's waterfront neighborhoods through multi-layered, multi-partner comprehensive planning initiatives. Eight or nine such initiatives, including greenways, parks and trails, are underway. Leading these efforts are the Philadelphia Water Department, the Philadelphia Horticultural Society, the Delaware River Waterfront Corporation, and the Pennsylvania Environmental Council, among others.

KRA 4: Institutional Coordination & Cooperation. DRBC provides a forum for negotiation, coordination and collaboration in the basin and is a national leader on issues involving development of regional-scale resource management frameworks. A \$4.3 million National Science Foundation grant will establish a Critical Zone Observatory in the Christina River Basin focusing on carbon sequestration and real-time reporting and monitoring. A collaborative study of the effects of climate change on marshlands is being performed by Delaware DNREC, the U.S. Fish & Wildlife Service and the Center for Inland Bays. A public-private partnership among the Philadelphia Water Department, DRBC, American Water Works Association, NJ American Water and Aqua Pennsylvania has produced a workshop on water loss audit and control

measures and management so that local plant operators will be prepared to meet mandatory requirements that go into effect in 2012.

KRA 5: Education & Outreach for Stewardship. This key result area focuses on establishing a basin-wide sense of place and increasing awareness, understanding and participation among youth, the private sector and public officials in matters relating to water resource management. The Partnership for the Delaware Estuary has an ongoing corporate and community environmental stewardship program, through which eleven companies participated in eight projects this year. The Pike County (PA) Conservation District published a Citizen's Guide to Clean Water, emphasizing how individuals can protect their economic, social and scenic quality of life through careful management of water resources. The Schuylkill River's history was the topic of a PBS documentary, *Our National Heritage, Episode One: The Revolutionary River*. Flood warning education and outreach workshops, drinking water scholastic awards, landowner outreach projects and education programs for children all are part of this key result area.

Finally, along with the 100th anniversary of the Shawnee Inn and the 50th anniversary of the Delaware River Basin Commission, 2011 marked the 70th anniversary of Kittatinny Canoes, a canoe livery that has been actively involved in Delaware River clean-up events.

General Counsel's Report. Mr. Warren reported on the status of litigation relating to natural gas development. Two lawsuits are pending in the District of New Jersey – one challenging the grandfathering provision of the Supplemental Executive Director's Determination and the other challenging the docket that was issued for a water withdrawal to Stone Energy. In both of those cases a motion to dismiss was filed based upon the absence of the drilling companies as indispensable parties. Judge Thompson ruled earlier in September that the plaintiffs must join the drilling companies in the litigation, so that will happen in due course. Three lawsuits have been consolidated in the Eastern District of New York, two of which involve the DRBC as a party, and one of which as of yet does not. The three lawsuits essentially contend that the National Environmental Policy Act (NEPA) procedures must be complied with before the DRBC issues natural gas regulations. The American Petroleum Institute and some related trade groups moved to intervene. The DRBC did not take a position with respect to that intervention, but both the plaintiffs and the federal defendants have opposed it. The briefing schedule as to the intervention is ongoing, and no decision on that issue is expected for several weeks, if not longer. The judge also issued a schedule regarding the briefing of motions to dismiss. The federal defendants as well as the DRBC defendants intend to file motions to dismiss by October 18 and the current briefing schedule extends until oral argument in January 2012.

Also pending is an appeal by Birdsboro Slag Products Company. Ms. Bush explained that staff informed the Commissioners in May of 2011 that DRBC had received a request for hearing on a determination by the Executive Director ending an entitlement issued to Birdsboro Slag on the basis of a stock transfer that changed ownership and control of that company in 2008. In May the Commissioners asked counsel to coordinate with Birdsboro's attorney to develop a stipulation as to the facts surrounding the 2008 stock transfer. Ms. Bush recounted that by July staff had had little cooperation from the company in reaching a stipulation. Accordingly, at the Commission's July 2011 meeting the Commissioners directed staff to inform the company that it must submit a statement of facts. It complied, and those facts essentially confirm that the

entitlement was appropriately terminated. DRBC asked Birdsboro's counsel prior to the September meeting to let staff know whether the company believes there are any facts in controversy over which a hearing is warranted. Birdsboro has not responded to that request. Birdsboro's attorney was also invited to come to this meeting to supplement his submissions with any comments to the Commissioners. Again, he did not respond. Counsel's recommendation to the Commissioners is that on the basis of the facts that the company itself has submitted, the request for hearing should be denied. Because the initial appeal was defective, the appeal could be denied on that basis as well. Given that the facts do not support the need for a hearing, the Commissioners are urged to deny the hearing by means of resolution to that effect. Mr. Plonski so moved, Ms. Stiller seconded his motion, and the motion to deny the request for a hearing by Birdsboro Slag Products Company was approved by unanimous vote.

Public Hearing: Project Review Applications. Mr. Stoller of DRBC presented for the Commissioners' consideration 22 of the 25 dockets listed in the public hearing notice, explaining that consideration of three of the noticed dockets – those for Lafarge North America, D-1974-189-2 (hearing item 21), Drexelbrook Associates, D-2005-028 CP-1 (hearing item 22), and Delaware Chenango Madison Otsego BOCES, D-2011-005 CP-1 (hearing item 25) – had been postponed to allow additional time for review. The remaining 22 dockets were presented in three groups: Category A, consisting of docket renewals involving no substantial changes (hearing items 1 through 9); Category B, consisting of renewals involving significant changes, such as an increase or decrease in an authorized withdrawal or discharge (hearing items 10 through 20); and Category C, consisting of projects not previously reviewed by the Commission (hearing items 23 and 24).

A. *Renewals with No Substantive Changes (hearing items 1 through 9).* The Commission received no comments on these projects.

1. Graterford State Correctional Institution, D-1965-112 CP-2. An application for the renewal of a groundwater withdrawal ("GWD") of up to 36.21 million gallons per minute (mgm) to supply the applicant's correctional facility from existing Wells Nos. 1 through 9 completed in the Brunswick Formation. The requested allocation involves no increase from the previous allocation. The wells are located within the Southeastern Pennsylvania Ground Water Protected Area ("GWPA") in the Perkiomen Creek Watershed in Skippack Township, Montgomery County, Pennsylvania.
2. Boyertown Borough, D-1973-199 CP-3. An application for the renewal of the existing 0.75 million gallon per day (mgd) Boyertown Borough Wastewater Treatment Plant ("WWTP"). The WWTP will continue to discharge to Swamp Creek, a tributary of the Perkiomen Creek, which is a tributary of the Schuylkill River, at River Mile 92.47 – 32.3 – 12.9 – 11.9 (Delaware River – Schuylkill River – Perkiomen River – Swamp Creek), in Douglass Township, Montgomery County, Pennsylvania.
3. Parkhouse Providence Pointe, D-2000-040 CP-2. An application for approval of an existing GWD project to continue to supply up to 8.06 mgm of water to the applicant's public water system from Wells Nos. 2, 3, and 4. The requested allocation is not an increase from the previous allocation. The wells are located within the Southeastern

Pennsylvania GWPA in the Brunswick Formation, within the Schuylkill River Watershed in Upper Providence Township, Montgomery County, Pennsylvania.

4. Kimberton Golf Club, D-2001-004 -2. An application for the renewal of a GWD of up to 4.34 mgm to supply the applicant's golf course from Well No. PW-1. The requested allocation is not an increase from the previous allocation. The well is located within the Southeastern Pennsylvania GWPA in the Stockton Formation in the French Creek Watershed in East Vincent Township, Chester County, Pennsylvania.
5. Little Washington Wastewater Company, D-2002-042 -3. An application for the renewal of the existing 0.60 mgd White Haven Borough WWTP. The WWTP will continue to discharge treated effluent. The discharge is located within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which the Commission has classified as Special Protection Waters. The WWTP will continue to discharge to the Lehigh River at River Mile 183.7 - 71.9 (Delaware River - Lehigh River) in White Haven Borough, Luzerne County, Pennsylvania.
6. Great Wolf Lodge, D-2003-025-3. An application for the renewal of the existing 0.09 mgd Great Wolf Lodge WWTP and seasonal spray irrigation discharge to 21 of its 96 acres. The WWTP will continue to discharge treated effluent. The discharge is located within the drainage area of the section of the non-tidal Delaware River known as the Middle Delaware, which the Commission has classified as Special Protection Waters. The WWTP will continue to discharge to River Mile 213.0 - 4.0 - 1.0 - 13.15 - 1.0 (Delaware River - Brodhead Creek - McMichael Creek - Pocono Creek - Scott Run) in Pocono Township, Monroe County, Pennsylvania.
7. Chadds Ford Township Sewer Authority, D-2005-022 CP-2. An application for approval to continue discharging 0.14 mgd of treated effluent from the existing Turner's Mill WWTP. The WWTP will continue to discharge to Harvey Run at River Mile 70.73 - 1.5 - 14.6 - 0.66 (Delaware River - Christiana River - Brandywine Creek - Harvey Run) in Chadds Ford Township, Delaware County, Pennsylvania.
8. Sussex County Municipal Utilities Authority, D-2006-006 CP-3. An application for the renewal of the existing 0.05 mgd Sussex County MUA Hampton Commons WWTP. The discharge is located in the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which the Commission has classified as Special Protection Waters. The WWTP will continue to discharge at River Mile 207 - 37.3 - 0.5 (Delaware River - Paulins Kill River - Marsh's Farm Creek) in Hampton Township, Sussex County, New Jersey.
9. Skytop Golf Lodge, D-2006-013-2. An application for the renewal of the existing 0.75 mgd Skytop Lodge WWTP. The WWTP will continue to discharge treated effluent. The discharge is located within the drainage area of the section of the non-tidal Delaware River known as the Middle Delaware, which the Commission has classified as Special Protection Waters. The WWTP will continue to discharge to River Mile 213 - 21.2 - 3.8

(Delaware River - Brodhead Creek - Leavitt Branch) in Barrett Township, Monroe County, Pennsylvania.

Mr. Stoller recommended that the Commissioners approve hearing items 1 through 9, consisting of docket renewals without substantive changes. Upon a request by the Chair, Mr. Eaton so moved, Mr. Plonski seconded his motion, and hearing items 1 through 9 were approved by unanimous vote.

B. Renewals with Substantive Changes (hearing items 10 through 20). Mr. Stoller presented the next category of dockets consisting of renewals involving significant changes.

10. Lafarge North America, D-1975-115-2. An application for the renewal of the existing 3.215 mgd non-contact cooling water (“NCCW”) discharge from the Whitehall Cement Manufacturing Facility. The discharge is located within the drainage area of the section of the non-tidal Delaware River known as the Lower Delaware, which the Commission has classified as Special Protection Waters. The facility will continue to discharge NCCW to the Lehigh River at River Mile 183.66 - 23.7 (Delaware River - Lehigh River), in Whitehall Township, Lehigh County, Pennsylvania.
11. Reading Alloys, Inc., D-1979-044-2. An application to modify the applicant’s existing docket to make it consistent with current operations at the facility. The applicant operates a high-purity metals and alloys facility that discharges up to 0.24 mgd of NCCW from three on-site ponds via Outfall No. 001. The applicant will continue to discharge NCCW to an unnamed tributary of Spring Creek at River Mile 92.47 - 76.8 - 6.65 - 5.9 - 3.9 - 1.5 (Delaware River - Schuylkill River - Tulpehocken Creek - Blue Marsh Reservoir - Spring Creek - Unnamed Tributary) in South Heidelberg Township, Berks County, Pennsylvania.
12. Kutztown Borough, D-1989-039 CP-2. An application for approval of upgrades to the Borough of Kutztown WWTP. The upgrades include the addition of phosphorous removal, UV disinfection facilities, and additional reed beds. The hydraulic design capacity of the WWTP will remain at 1.5 mgd. The WWTP will continue to discharge to the Sacony Creek, a tributary of the Maiden Creek, which is a tributary of the Schuylkill River, at River Mile 92.5 - 86.2 - 2.9 - 5.4 - 2.1 - 7.1 (Delaware River - Schuylkill River - Maiden Creek - Lake Ontelaunee - Maiden Creek - Sacony Creek) in Maxatawny Township, Berks County, Pennsylvania.
13. Wyomissing Valley Joint Municipal Authority, D-1991-009 CP-4. An application for approval of upgrades to the existing 4.0 mgd Joint Municipal Authority of Wyomissing Valley WWTP. The upgrades include replacement of the existing chlorine contact disinfection system with ultraviolet light (UV) disinfection. The WWTP will continue to discharge to River Mile 92.47 – 75.3 – 0.2 (Delaware River - Schuylkill River - Wyomissing Creek) in the City of Reading, Berks County, Pennsylvania.
14. Delaware County Regional Water Quality Control Authority (DELCORA), D-1992-018 CP-2. An application for approval to re-rate the DELCORA Western Regional WWTP

from 44 mgd to 50 mgd. The application includes the design and construction of a 455-foot extension to the existing outfall. The WWTP will continue to discharge to Water Quality Zone 4 of the tidal Delaware River at River Mile 80.7 in the City of Chester, Delaware County, Pennsylvania.

15. Newmanstown Water Authority, D-1997-040 CP-2. An application for the renewal of a GWD of up to 9.579 mgm to supply the Newmanstown Water Authority's (NWA's) potable water distribution system from existing Wells Nos. 1, 4, and 5 completed in the Millbach and Leithsville Formations. The requested allocation is not an increase from the previous allocation. The wells are located in the Mill Creek Watershed in Mill Creek Township, Lebanon County, Pennsylvania.
16. Limekiln Golf Course, D-2000-017-2. An application for the renewal of a GWD of up to 5.58 mgm to supply the applicant's golf course from existing Wells Nos. 1 through 4 in the Lockatong and Stockton Formations. The requested allocation is not an increase from the previous allocation. The wells are located within the Commission's designated GWPA in the Little Neshaminy Creek Watershed in Horsham Township, Montgomery County, Pennsylvania.
17. MC Resource Development Company, D-2000-065-2. An application for the renewal of a GWD of up to 7.13 mgm to supply the applicant's bulk water withdrawal and hauling operation from existing Wells Nos. PV-1 and PV-2, completed in the Bloomsburg Formation. The requested allocation is not an increase from the previous allocation. The wells are located in the Indian Run Watershed in East Brunswick Township, Schuylkill County, Pennsylvania.
18. Aqua Pennsylvania, Inc., D-2001-050 CP-2. An application for the renewal of a GWD of up to 18.8 mgm to supply the applicant's public water supply system from six existing wells and to approve the addition of a new well – Meyers Well A – in the Brunswick Formation. The requested allocation is not an increase from the previous system allocation, but will combine the allocations from Dockets Nos. D-1993-011 CP and D-2001-050 CP. The wells are located within the Commission's designated GWPA in the Perkiomen Creek Watershed in Perkiomen Township, Montgomery County, Pennsylvania.
19. Westfall Township, D-2002-023 CP-3. The Commission issued Docket No. D-2002-23 CP-2 on July 16, 2008, approving the Westfall Township Municipal Authority's request to expand its Westfall WWTP from 0.3 mgd to 0.82 mgd. Approved modifications included replacement of the sequencing batch reactor treatment system with a membrane bio-reactor system. The applicant currently seeks instead to re-rate the existing WWTP to 0.374 mgd. The WWTP will continue to discharge to the Delaware River in Water Quality Zone 1C at River Mile 252.5 within the section of the non-tidal Delaware River known as the Middle Delaware, which is classified as Special Protection Waters, in Westfall Township, Pike County, Pennsylvania.

20. North Coventry Water Authority, D-2002-047 CP-2. An application for the renewal of the approval of a water supply interconnection to receive up to 23.56 mgm of potable water via an interconnection with Pottstown Borough Authority and to withdraw up to 0.495 mgm of groundwater from existing Well No. 2 in the Brunswick Formation, to serve customers in North Coventry and a portion of East Coventry Townships. The total allocation of water from all sources is 24.055 mgm. The well is located within the Commission's designated GWPA in the Pigeon Creek Watershed in North Coventry Township, Chester County, Pennsylvania.

Mr. Stoller recommended that the Commission approve the eleven dockets consisting of renewals involving substantive changes. On a motion by Mr. Eaton, seconded by Ms. Stiller, hearing items 10 through 20 were approved by unanimous vote.

C. *New Projects (hearing items 23 and 24).* These two projects comprised new discharges or withdrawals or constituted projects new to the Commission.

23. Wallenpaupack School District, D-2009-026 CP-1. An application for the approval of the existing 0.04 mgd Wallenpaupack High School WWTP. The discharge is located within the drainage area of the section of the non-tidal Delaware River known as the Upper Delaware, which the Commission has classified as Special Protection Waters. The WWTP will continue to discharge to River Mile 277.7 - 15.8 - 1.4 - 0.2 (Delaware River - Lackawaxen River - Wallenpaupack Creek - Lake Wallenpaupack), in Palmyra Township, Pike County, Pennsylvania.

24. Arkema, Inc., D-2010-041-1. An application for the approval of a GWD to supply up to 5.58 mgm of water to the applicant's industrial processing facility from existing Well No. WS-1 in the Upper Raritan Sand Aquifer. The well is located in the Delaware River Watershed in Bristol Township, Bucks County, Pennsylvania.

Mr. Stoller recommended that the Commissioners approve hearing items 23 and 24, consisting of new projects and projects not previously reviewed by the Commission. Ms. Stiller so moved, Ms. Heffner seconded her motion, and hearing items 23 and 24 were approved by unanimous vote.

Public Hearing: Resolution Authorizing the Executive Director to Enter into a Contract with The Nature Conservancy for a Study of Instream Flow Needs to Protect Key Ecological Communities for the Range of Habitats in the Delaware Basin. Mr. Tudor explained that the proposed resolution would authorize the Executive Director to enter into a contract with The Nature Conservancy (TNC) for the purpose of studying instream flow needs in the basin. He said this resolution exemplified DRBC's planning and management functions in ensuring that there is sufficient water in basin streams to meet the needs of people and aquatic life ten, twenty and thirty years into the future. For critical low flow periods, the Commission currently imposes minimum pass-by requirements for withdrawals based on something called the Q7-10, which is a seven-day low flow with a ten-year recurrence, an extremely low level of water in a stream system. Based on improved understanding of ecological flows, however, DRBC has found that the Q7-10 flow is insufficient, and a better understanding of the flow needs for aquatic life is

needed. Staff is proposing over the next year to carefully examine different physiographic provinces throughout the basin to determine the seasonal needs of different aquatic communities, including critical low flows during times of drought, seasonal flows and high flows. The Nature Conservancy has a proven track record of performing this type of analysis around the country and specifically in our mid-Atlantic region. Their work has included basin-scale studies in the Ohio and Susquehanna river basins similar to that proposed for the Delaware. Staff has engaged in a conversation with TNC staff and has proposed a scope of work for a study by TNC over the course of the next year that would incorporate the knowledge TNC acquired from its other basin-scale initiatives. The proposed study will enable DRBC to make recommendations as to ecological flow needs and long-term water supply planning for the Commissioners' consideration one year from now. The Commissioners may at that time consider whether to use these recommendations in their permitting decisions. The resolution requests an amount of \$104,511 for a one-year study. The funding for this contract would consist in part of Pennsylvania Act 220 funds and in part of dollars drawn from the DRBC water supply storage facilities fund that have been reserved for basin planning purposes. Mr. Tudor recommended that the Commissioners' approve the resolution and authorize the proposed contract with The Nature Conservancy.

Mr. Plonski inquired as to whether changes to the draft resolution discussed by staff of the DRBC and the New Jersey DEP had been made. Mr. Tudor confirmed that amendments had been made to the resolution to clarify that the study is intended to support planning and management objectives, not permitting or other regulatory purposes. In addition, he noted that item 2 of the "Be it resolved" section of the resolution had been revised to replace a reference to specific taxonomic groups, species or communities with a reference to the general relationship between flows and ecological response. He reiterated that both recommendations by New Jersey were incorporated in the revised draft resolution as presented.

In response to inaudible comments or questions from members of the public, Mr. Tudor explained that the proposed one-year study would focus on the portion of the basin not comprising a part of the coastal plain. He reiterated that staff would take advantage of work completed previously in other states, noting that New Jersey has been working with the U.S. Geological Survey on a stream classification scheme and that Pennsylvania has completed work in the Susquehanna and Ohio river basins that relies on The Nature Conservancy methodology. He said the method would be applied on the main stem as well as on first- and second-order streams in an incremental fashion. The Commission's existing Q7-10 approach is outdated and more advanced thinking is now needed concerning the ecological flow needs of living resources and streams. The study will include recommendations for use in long-term water supply planning and allow the states time to analyze the fit with their regulatory framework.

Mr. Tudor said that the Commission initially relied on the Q7-10 approach in developing its water quality regulations, to determine the capacity of streams to assimilate wastewater. By default, it then applied the approach in establishing pass-by flow conditions, in essence determining how much water should be left in the stream during extremely low-flow periods. The proposed study would provide the basis for a more nuanced approach, with recommendations for example concerning seasonal high flows in the spring and low flows in the summer to approximate the natural variability.

Delaware Riverkeeper Maya van Rossum said her organization is pleased that the Commission is acknowledging that the Q7-10 approach is not protective enough. She said the Delaware Riverkeeper Network (DRN) has spoken to this issue many times over the years, for many dockets, and recently has provided substantial information in public comments filed on this issue. She said that more time and information are needed to establish more protective conditions, adding that in the view of DRN it is critical that the resolution be modified to postpone further issuance of withdrawal dockets pending completion of the study and revision of the Commission's regulatory standards. She noted that this call for suspension of withdrawal approvals included any proposed withdrawals associated with natural gas drilling that might be pending or filed before completion of the study and related regulatory changes. Mr. Tudor said the staff's recommendation was to proceed with the study while continuing to make decisions using the existing water withdrawal protocols.

Hearing no further comments or questions, Colonel Secrist requested a motion to approve the resolution authorizing the Executive Director to enter into a contract with The Nature Conservancy for a study of instream flow needs to protect key ecological communities for the range of habitats in the Delaware Basin. Mr. Plonski so moved, Mr. Eaton seconded his motion, and Resolution No. 2011-11 was adopted by unanimous vote.

Public Dialogue Session. Colonel Secrist explained that comments offered during the public dialogue session were not part of a public hearing and would not be included in any decision-making record. As to comments on the Commission's proposed natural gas development regulations, he said the Commission had received some 68,000 comments during its six-month public comment period, which closed in mid-April. He said that a special meeting had been scheduled for October 21st at The War Memorial in Trenton to consider action on the proposed regulations. Although a press release by the Commission indicated that the meeting on October 21st would run from 1:00 p.m. to 3:00 p.m., due to a conflicting use of the facility about which the Commission was advised only after it had issued the release, the time was being changed to 10:00 a.m. to 12:00 p.m. Col. Secrist said that a corrected announcement would be issued in the near future.

Some 70 individuals – as many as could speak during the available time – addressed the Commission, primarily on the subject of natural gas drilling. A recording of their comments is on file with the Commission Secretary. Like all public records of the Commission, this recording is available for inspection by appointment.

At 5:00 p.m., Lieutenant Colonel Secrist requested a motion to adjourn the meeting. Ms. Stiller so moved, Mr. Plonski seconded her motion, and the Commission Meeting of September 21, 2011 was adjourned.

/s/ Pamela M. Bush

Pamela M. Bush, Esquire
Commission Secretary