

W A T E R R E S O U R C E S

IMPACT

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**RIVER BASIN
COORDINATION**

AWRA

Community, Conversation, Connections

AMERICAN WATER RESOURCES ASSOCIATION

RIVER BASIN COORDINATION

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This issue concerns the various methods used to coordinate work in the river basins of the nation. The Delaware River Basin Commission is a federal-state partnership under public law. In the Ohio River Basin, ORSANCO is one of the earliest efforts to coordinate planning and management for a region. The Tennessee Valley Authority is a unique federal agency with many responsibilities. The Missouri River Basin Association is a partnership of states and tribes for a large region. The Colorado River Basin Study is carried out by the Bureau of Reclamation for a large area. The Columbia River Gorge Commission operates under public law in a scenic region of the nation.

FEATURE ARTICLES

3 The Delaware River Basin Commission: A Unique Partnership ... Clarke D. Rupert

The history of the Delaware River Basin Commission since 1961 shows how it has coped with such water management problems as pollution, floods, and droughts.

7 ORSANCO: Sixty-Six Years of Collaborative Management of Water Quality ... Peter A. Tennant and Samuel A. Dinkins

The Ohio River Valley Water Sanitation Commission is one of the oldest such authorities in the nation. It has worked under a compact structure to address pollution and other forms of water quality impairment.

10 Tennessee Valley Authority's Innovative Management of the Tennessee River as an Integrated System ... Duncan J. Mansfield

The Tennessee River Authority is a unique government agency dating from the FDR era. In carrying out a mission of integration resource management, it operates hydroelectric power stations for a wide area.

13 History and Activities of the Missouri River Association of States and Tribes (MoRAST) ... J. Michael Hayden

The Missouri River Association of States and Tribes coordinates partner organizations to address a wide variety of problems, such as sediment control and water supply.

16 Moving Forward: The Future of the Colorado River Basin ... Carly Jerla and Pam Adams

The Colorado River Basin covers a large region and touches many states. Planning for the future will involve careful decisions to balance water supply and demand.

19 Columbia River Gorge National Scenic Area ... Darren J. Nichols and Michele M. Dailey

The Columbia River Gorge encompasses regional economic demands within a spectacular scenic environment. The challenge of balancing competing needs for resources continues to generate important public policy issues.

WATER RESOURCES

IMPACT

VOLUME 16 • NUMBER 5 • SEPTEMBER 2014

Other features in this issue ...

▲ AWRA BUSINESS

- 12 Advertising Opportunities in IMPACT
- 15 Highlights of August 2014 *Journal of the American Water Resources (JAWRA) Papers*
- 18 Scheduled AWRA Meetings to be Held in 2014 & 2015 ... Mark Your Calendars!
- 22 AWRA 2015 Summer Specialty Conference: A Review
- 27/ Herbert Scholarship Award Winners for
- 28 2014-2015 Announced
- 29 AWRA's 2014 Annual Spring Specialty Conference Student Presenter Competition Winners Announced
- 30 An Oversight Corrected
- 30 Send Us Your Feedback for This Issue
- 30 AWRA 2014 Executive Committee
- 30 Topic for November 2014 IMPACT
- 31 CALL FOR ABSTRACTS ... 2015 AWRA Spring Specialty Conference
- 32 REGISTRATION FORM ... 2014 AWRA Annual Water Resources Conference
- 33 PROGRAM-AT-A-GLANCE ... 2014 AWRA Annual Water Resources Conference
- 34 Why You Should Become a Member of AWRA Today

▲ OPINION/INFO COLUMNS

- 23 **The New Economy of Water ... Drought Intensity Highlights Importance of Market Transfers to California ... Clay J. Landry**
- 24 **What's Up With Water ... Water, Genghis Khan, and Lessons From Mongolia ... Eric J. Fitch**
- 25 **President's Message ... AWRA 2015 Spring Specialty Conference "Water for Urban Areas: Managing Risks and Building Resiliency" ... C. Mark Dunning**

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- ▲ WATER RESOURCES PUZZLER 26
- Answers 30

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**Cover photo: Columbia River Gorge, Multnomah Falls.
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THE DELAWARE RIVER BASIN COMMISSION: A UNIQUE PARTNERSHIP

CLARKE D. RUPERT

We are glad to join with Delaware, New Jersey, New York, and Pennsylvania in this bold venture. The task set for the Commission will not be easy to achieve, but we are confident that the cooperation that has brought forth this Compact will endure, and that working together real progress can be made for the people of the Basin. ...
President John F. Kennedy, November 2, 1961.



Figure 1. President Kennedy and the Basin State Governors Sign Ceremonial Compact Documents at the White House on November 2, 1961. Seated (from left to right) are New Jersey Governor Robert Meyner, Delaware Governor Elbert Carvel, Pennsylvania Governor David Lawrence, and President Kennedy.

Step back in time to 1961. When these words were spoken by President Kennedy at the ceremonial signing of the Delaware River Basin Compact, Rachel Carson's *Silent Spring* wouldn't be published until the following year and the first Earth Day was still nearly a decade away. Neither the federal Clean Water Act nor the U.S. Environmental Protection Agency existed. National attention was focused on issues like the Cold War, Cuba, and the Space Race, not the environment.

Yet, something truly remarkable was happening in 1961 thanks to visionary leaders in Pennsylvania, New Jersey, New York, Delaware, and the federal government. They chose to try what President Kennedy described as a "bold venture," a new governmental experiment to work together to manage the shared water resources of an interstate river basin.

A pioneer in environmental protection, the Delaware River Basin Commission (DRBC) was created on October 27, 1961, the day the Delaware River Basin Compact became law. The compact's signing by President Kennedy and the governors of the four basin states with land draining to the Delaware River marked the first time that the federal government and a group of states joined together as equal partners on a regional body with the force of law to oversee a unified approach to managing a river system without regard to political boundaries.

The DRBC's *ex officio* members are the four basin state governors and the commander of the U.S. Army Corps of Engineers North Atlantic Division who represents the federal government. Each member has one vote of equal power with a majority needed to decide most issues. The five members appoint alternate commissioners, with the governors traditionally selecting high ranking officials in their respective state environmental agencies. (Visit www.nj.gov/drbc/about/commissioners/ for the listing of current commissioners.)

A staff of 39 full-time employees carries out the policy directions established by the five members and is headed by an executive director. Steven J. Tambini became the DRBC's fourth executive director on August 1, 2014, succeeding Carol R. Collier who retired in March after 15 years of service. The commission's office building is located in West Trenton, New Jersey.

DRBC programs include water quality protection, water supply allocation, regulatory review (permitting), water conservation initiatives, watershed planning, drought management, flood loss reduction, and recreation.

WATER SUPPLY, POLLUTION, AND FLOODS

The establishment of a single agency to coordinate Federal interests in the Delaware River Basin is of as much importance as the joining together of the four States and the resultant coordination of their various State activities. In brief, there is one river, one basin, all water resources are functionally interrelated, and each use is dependent upon the other. Therefore, one comprehensive plan and one coordinating and integrating agency is essential for efficient development and operation. ... Senate Committee on the Judiciary Report No. 87-854, "Delaware River Basin Compact" (August 31, 1961).

When the DRBC was created in 1961, some 43 state agencies, 14 interstate agencies, and 19 federal agencies exercised a multiplicity of splintered powers and duties within the watershed. There was a lack of coordination and cooperation among these many agencies and it was realized that a regional organization was needed to properly and effectively manage the basin's water resources.

The commission was formed largely in response to three major water resource issues requiring regional so-

The Delaware River Basin Commission: A Unique Partnership . . . cont'd.

lutions. They included water supply shortages and disputes over the apportionment of the basin's waters, severe pollution in the tidal Delaware River (especially around its urban centers), and the devastating flood of August 1955.

The DRBC is the obvious vehicle for developing flood loss reduction and flood mitigation plans that cannot be accomplished by any single state or local government but that require a holistic, watershed approach.

Prior to the 1960s, the Delaware Valley was an arena of interstate conflict over water rights. Plans by New York City (NYC) to expand its reservoir system by exporting water out of the upper basin to the nation's largest city met with opposition from the three downstream states during the first half of the 20th Century. Efforts to resolve this interstate dispute through discussions and negotiations were unsuccessful, so the states sued each other. The U.S. Supreme Court had to resolve these disputes by issuing decrees on two occasions prior to the creation of the DRBC. The five compact signatories in 1961 agreed to manage their conflicts over the shared waters of the Delaware jointly through the DRBC rather than through costly litigation.

The compact creating the DRBC grants the commission broad powers to plan, develop, conserve, regulate, allocate, and manage water resources in the basin. However, the DRBC's power to allocate the waters of the basin is subject to an important limitation: the compact prohibits the commission (four states and the federal government) from adversely affecting the releases or diversions provided in the 1954 Supreme Court decree without the unanimous consent of the decree parties (four states and NYC).

It became obvious from the 1961-1967 "drought of record" that some adjustments to the decree were needed to manage the NYC-Delaware Basin reservoirs under the next prolonged drought and to address an issue not recognized by the Supreme Court in its 1954 decree – the need for minimum flows (or "conservation releases") to sustain aquatic life downstream from the reservoirs. There were two choices – resort to further litigation or test the value of the DRBC to develop an equitable solution. Luckily, the latter alternative was chosen.

In 1978, the DRBC called upon the decree parties to enter into "good faith negotiations" to work out a new formula for the equitable apportionment of the basin's water. These negotiations culminated five years later in the "Good Faith Agreement." Drought management aspects of the 1983 Good Faith Agreement were included in the DRBC regulations known collectively as the Water Code, and conservation releases from the NYC-Delaware Basin reservoirs for the protection of fisheries were established in a DRBC docket. The decree parties unanimously consented to each of these instruments – the docket and the regulations.

Today, the five decree parties (with facilitation and modeling support provided by DRBC) continue to be engaged in ongoing, complex negotiations to address the

multiple, sometimes competing uses of NYC's water supply reservoirs while recognizing the rights established by the 1954 decree. (Visit www.nj.gov/drbc/programs/flow/ for more information on flow and drought management.)

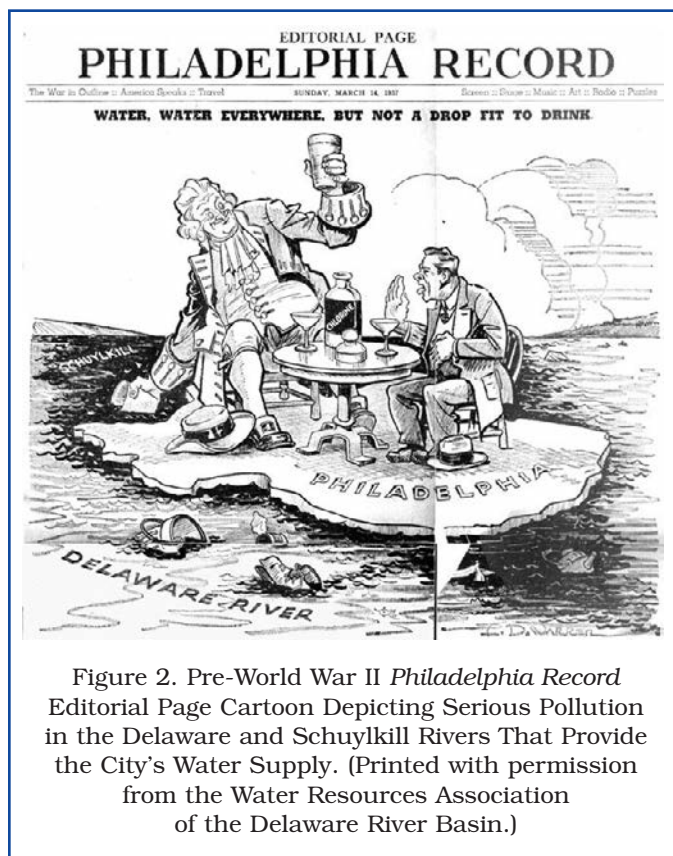


Figure 2. Pre-World War II *Philadelphia Record* Editorial Page Cartoon Depicting Serious Pollution in the Delaware and Schuylkill Rivers That Provide the City's Water Supply. (Printed with permission from the Water Resources Association of the Delaware River Basin.)

Another significant issue facing the newly formed commission in 1961 was severe pollution. The tidal Delaware River below Trenton, New Jersey, which flowed through a heavily urbanized area, was an open sewer at the height of World War II. Sadly, the fouled water along some reaches was devoid of the oxygen needed to support fish and other aquatic life. Pilots approaching Philadelphia International Airport reported they could smell the river from their cockpits. No state seemed able on its own to do anything about these conditions on a shared river that served as a political boundary and provided an important common highway of interstate and foreign commerce. Therefore, strong directives in the compact set the DRBC on a course of proactive involvement in water quality matters that began very soon after the commission was created and continues to this day. The river now supports year-round fish populations. However, it is important to note that the work is far from complete, as parts of the river still are not "fishable and swimmable," which is the stated goal of the federal Clean Water Act. New technology enhances the DRBC's ability to detect, monitor, track, and model pollution such as PCBs in the river. The commission's policies, programs, and abatement efforts must adapt and evolve in order to continually improve the basin's water quality for future generations.

The Delaware River Basin Commission: A Unique Partnership . . . cont'd.

Building on its record of accomplishments begun decades earlier, the DRBC in 1992 adopted the Special Protection Waters (SPW) “no measurable change” water quality program intended to preserve or improve the exceptional water quality of portions of the non-tidal river above Trenton, New Jersey, where existing water quality is better than the established stream quality objectives. Designed to “keep the clean water clean,” the SPW program prevents degradation in streams and rivers considered to have exceptionally high scenic, recreational, ecological, and/or water supply values through stricter control of wastewater discharges and reporting requirements. The DRBC’s five members unanimously voted in 2008 to expand the SPW-classified stretch of river. Accordingly, SPW designation now includes the entire 197-mile non-tidal Delaware River between Hancock, New York, and Trenton, which is believed to be the longest stretch of antidegradation policy on any river in the nation. (Visit www.nj.gov/drbc/programs/quality/ for more information on water quality programs.)

Serious flooding (particularly the record flood of 1955) was the third primary reason that led to the creation of the DRBC in 1961. However, over the next 40+ years the Delaware River and those living or working along its banks were much more familiar with droughts than floods. This hydrologic pattern would change beginning in 2004. Three major floods between September 2004 and June 2006 caused devastation along the main stem Delaware River, repeatedly damaging property and disrupting tens of thousands of lives. These were the worst floods to occur on the main stem since 1955.

Reducing flood loss is a responsibility shared by federal, interstate, state, and local governments throughout the basin. The basin state governors recognized this when they cosigned a September 2006 letter in which they wrote, *Individually, the Basin states can move forward with policies and regulations to reduce and mitigate the impacts of flooding, but we believe that through coordinated effort on a regional basis, we can do more to reduce flood loss within the Basin than we could accomplish acting separately, on our own. The Delaware River Basin Commission is the obvious vehicle for developing flood loss reduction and flood mitigation plans that cannot be accomplished by any single state or local government but that require a holistic, watershed approach. As much as any time since the Commission was created in 1961, now seems an appropriate moment for coordinated action through the DRBC.*

The September 2006 letter directed DRBC staff to convene a task force to develop a set of recommended measures for mitigating and alleviating flooding impacts along the Delaware River and its tributaries. In July 2007, the Delaware River Basin Interstate Flood Mitigation Task Force forwarded to the governors its action agenda for a more proactive, sustainable, and systematic approach to flood damage reduction. The final report with 45 consensus recommendations addressed six management areas: flood warning, reservoir operations, floodplain regulation, floodplain mapping, structural and non-structural mitigation, and stormwater management. Progress has been made since then to implement as

many of the recommendations as possible, but the availability of adequate resources remains a serious obstacle. (Visit www.nj.gov/drbc/programs/flood/ for more information on flood loss reduction efforts.)

THE NEXT CHAPTER

The year 2011 marked the 50th anniversary of the DRBC. In her executive director’s message, Carol R. Collier, who also served as AWRA’s president in 2013, noted the following in the commission’s annual report:

Times have changed since 1961, but I still firmly believe that river basin commissions are needed now more than ever. Holistic watershed management is the most environmentally and cost-effective way to manage water resources. We must now assess potential changes to the Delaware River Basin over the next 50 years and develop management strategies to increase resiliency and decrease risk. The emphasis must be on development of a sustainable water supply based on assessment of need (human and ecological), optimization of existing supply systems and instream flows, and non-structural and structural alternatives. Water management in the future will be different than we have experienced in the past. Drivers of change will include population growth and re-distribution, evolution in energy production technologies, natural gas development in the headwaters, developing science on ecological flow needs, changes in how point and non-point source pollution are managed, greater need for flood protection, and last, but not least, climate change including sea level rise, increasing temperature, and precipitation pattern changes. Our watershed must be prepared and planning, monitoring, assessment, and direction-setting are essential.

The DRBC looks forward to working with its many partners and stakeholders to meet the challenges facing the basin as, together, we preserve and protect the national treasure we call the Delaware River.

THE DELAWARE RIVER BASIN (Did You Know?)

- The Delaware River is the longest undammed river in the United States (U.S.) east of the Mississippi, extending 330 miles from the confluence of its East and West branches at Hancock, New York, to the mouth of the Delaware Bay where it meets the Atlantic Ocean.
- The river is an interstate boundary for its entire length – if you stand on one bank and look across the river, you are viewing another state.
- The 13,539-square-mile Delaware River Basin (DRB) provides water for the lives and economy of over 15 million people (approximately five percent of the nation’s population) while draining only four-tenths of one percent of the total continental U.S. land area.

The Delaware River Basin Commission: A Unique Partnership . . . cont'd.

• The population served by DRB water includes about 8.3 million residents as well as over seven million people in the New York City area and northern New Jersey who live outside the basin. New York City gets roughly half its water from three large reservoirs located on headwater tributaries feeding the main stem Delaware River.

• Three-quarters of the non-tidal Delaware River (upstream of Trenton, New Jersey) has been included in the National Wild and Scenic Rivers System by the action of two presidents and the U.S. Congress. It is reported on www.rivers.gov that as of April 2012 only 12,598 river miles (just over one-quarter of one percent of the nation's rivers) are included in this national system.

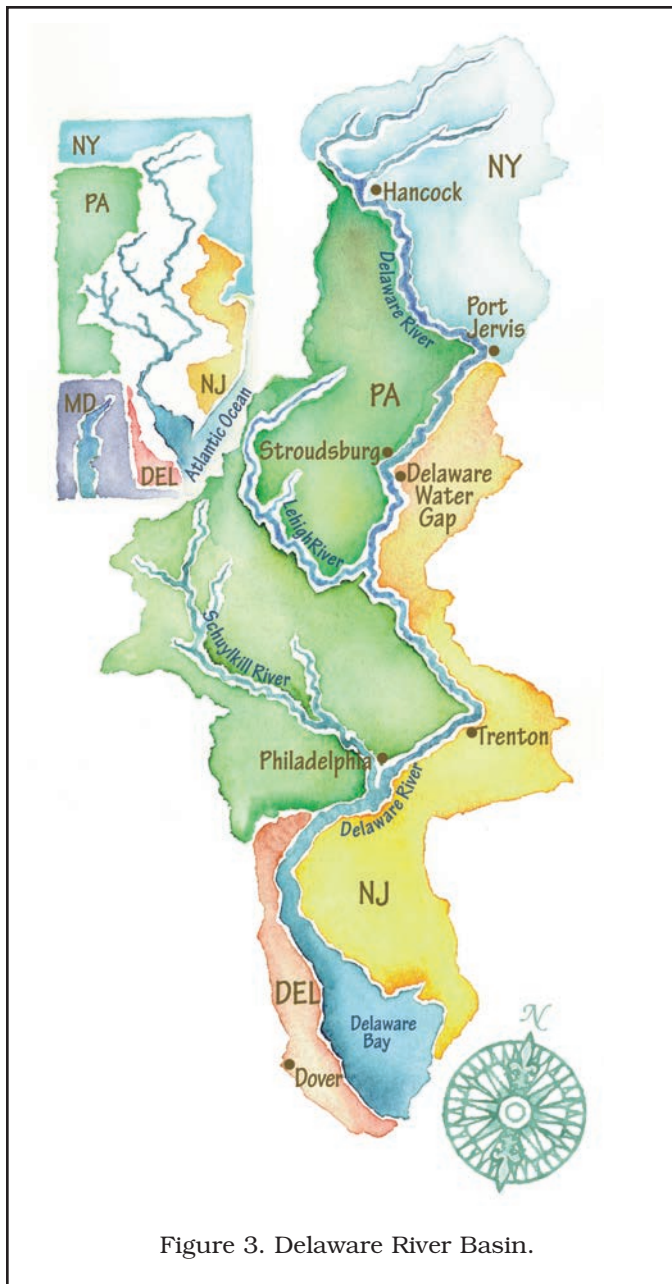


Figure 3. Delaware River Basin.

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