

Potomac Basin

REPORTER

Vol. 57, No. 2

Interstate Commission on the Potomac River Basin

March/April 2001



A volunteer wields a streamside tool to remove trash from Long Branch, a Sligo Creek tributary.

C. Dalpra

4,000 Volunteers Clean Watershed

The 13th Annual Potomac River Watershed Cleanup on April 7 was the largest ever, with about 4,000 volunteers spending a Saturday morning removing more than 70 tons of trash from the banks of the river and many of its tributary streams.

The event, coordinated by the Alice Ferguson Foundation and supported by ICPRB and many other government agencies and citizens groups, saw volunteers clean 110 sites throughout the watershed from Hampshire County, W.Va., to the river's mouth in St. Mary's County, Md. The ICPRB helped promote the event and coordinate media outreach.

"It was by far the largest turnout we have ever had," said Alice Ferguson Foundation Executive Director Tracy Bowen. "It takes careless people to create the problem and it takes a caring community to solve it. Today, the community was victorious," she said.

The trash removed included 2000 balls of all types, 35 pounds of golf balls, 679

tires, a 1955 Chevrolet, two wringer washing machines, a treadmill, a working cell phone, several sinks, lawnmowers, grills, refrigerators, bicycles, 55-gallon drums, electronic equipment, and untold numbers of foam cups, bottles, and car parts.

While the cleanup grows larger each year, its strength is that it remains a linkage of many community-based events. A typical site was the cleanup of a section of Long Branch, a tributary of Sligo Creek in the Anacostia watershed in Maryland. About 30 people participated in the cleanup, organized by Michelle Grace, an outreach coordinator for the Maryland National Capital Park and Planning Commission. A mixture of adults and children gathered at the site near an apartment complex, taking about 37 bags of trash from a quarter-mile stretch of the stream. Misha Enawayt, one of the younger volunteers, split her time between playing along the stream and collecting trash. Asked about her presence streamside on a Saturday morning, she

Our mission is to enhance, protect and conserve the water and associated land resources of the Potomac River and its tributaries through regional and interstate cooperation.

ICPRB COMMISSIONERS

DISTRICT OF COLUMBIA: **Theodore J. Gordon, Hamid Karimi**, Alternate; **Philip W. Ogilvie***, **James H. Hannaham**, Alternate; **Lloyd Preslar, Anne D. Snodgrass**, Alternate.

MARYLAND: **James H. Gilford***, **Minnie Pohlmann**, Alternate; **Gov. Parris N. Glendening, Robert M. Summers**, Alternate; **George H. Shoemaker, John Parran Bowling**, Alternate.

PENNSYLVANIA: **Irene B. Brooks***, **John T. Hines**, Alternate; **William I. Plank, Roger C. Steele**, Alternate.

VIRGINIA: **Gloria Taylor Fisher***, **Warren D. Fairchild**, Alternate; **Robert G. Marshall, Marian Van Landingham**, Alternate; **Dennis H. Treacy, Michael D. Clower**, Alternate.

WEST VIRGINIA: **Michael O. Callaghan, William D. Brannon**, Alternate; **Del. Harold K. Michael, Larry Smith**, Alternate; **F. Scott Rotruck*, Phyllis M. Cole**, Alternate.

UNITED STATES: **Jean R. Packard***, **Stella Koch**, Alternate; **Daniel J. Weiss; Yeni Wong**

*Executive Committee Member

The ICPRB Officers:
Philip W. Ogilvie, Chairman
James H. Gilford, Vice Chairman
Joseph K. Hoffman, Executive Director
Robert L. Bolle, General Counsel

Commissioners and their alternates are appointed by the state's governors, the mayor of the District of Columbia, and the President of the United States.



C. Dalpra
Young volunteers pause to check for life in Long Branch.

immediately responded, "Because it helps the world."

Many of the adults at the stream knew each other, but a number were becoming involved for the first time. "This is both stream cleanup and community building," Grace said. She also is working on a bilingual stream program to draw from the large Hispanic population in the area, noting that stream stewardship needs to grow if suburban areas are to protect their natural resources and quality of life. The ICPRB has assisted by providing some Spanish language environmental education and stewardship materials.

The theme for this year's cleanup, "From Our Streets to Our River," was evident in the types of trash removed from streams throughout the watershed. "Many people don't realize where neighborhood trash ends up," said Bowen. "Many people don't realize that trash they throw out in neighborhoods goes down storm drains and finds its way to local streams and rivers."

The Potomac River Watershed Cleanup was funded in part by grants from the Chesapeake Bay Trust and the National Park Service, both major partners in the event.

Future of Metro Water Supply Studied

An ICPRB study of future demands on the drinking water supply of the Washington metropolitan area out to the year 2020 estimates that even under a high-growth scenario, the current system of river use and reservoir storage can meet the region's needs. A recurrence of the drought of record could trigger voluntary or mandatory water use restrictions and tax supplies of stored water, however. A less-detailed assessment out to 2030 showed that severe drought could deplete the water supply if regional growth is high.

Throughout the past year, ICPRB's

Section for Cooperative Water Supply Operations on the Potomac (CO-OP) staff have been assessing future demands for drinking water in the Metropolitan Washington area. The recently released study, "Year 2000 Twenty-Year Water Demand Forecast and Resource Availability Analysis for the Washington Metropolitan Area," will help water resource managers assess the present water supply system's ability to meet future demands.

During droughts, the CO-OP Section is responsible for coordinating water supply operations among the area's three major water suppliers: the Washington Suburban Sanitary Commission, the Fairfax County Water Authority, and the U.S. Army Corps of Engineers Washington Aqueduct Division. The suppliers, which collectively provide water to about 3.6 million residents, rely on the Potomac river as their primary source of water. The Aqueduct, which serves the District of Columbia and some small sections of the suburbs, relies solely on the river.

One of the pacts brokered among the suppliers, the Low Flow Allocation Agreement, requires a review and evaluation of current water resources and a forecast of the system's ability to meet demand 20 years into the future. The review is performed every five years, and CO-OP was tasked with completing the demand study in 1990, 1995, and 2000.

The study has two main components, an estimate of water supply demands in the year 2020 and a study of how the current system of rivers and reservoirs functions while meeting estimated future demands. To assess water demand in 2020, staff used a range of growth projections for the region, which were fed into a water supply model for the basin. Model runs determined the current system's ability to meet future demands under different scenarios.

The study results revealed that under the most likely population growth scenario, demands for the metropolitan area served by the three major water suppliers will increase by approximately 100 million gallons per day (mgd), an increase of 21 percent. If high growth occurs in the region, demand is anticipated to increase by 126 mgd or 26 percent.

The CO-OP's Erik Hagen noted that studies such as this one are an important tool for water resource managers throughout the region. Long-term planning is necessary to ensure that the region maintains an adequate water supply system. If possible deficiencies can be identified early, comprehensive resource



USGS
A USGS engineer surveys September 1966 low flows with a 1930 picture of the "drought rock" near Great Falls. While pictures remain useful, today's hydrologists employ computer models to assess flow and demand.

planning and development can be pursued. "This latest demand study indicates that it's time for the region to begin developing a comprehensive water resources plan," noted ICPRB Executive Director Joseph Hoffman.

The study is available on ICPRB's website at:
www.potomacriver.org/metrostudy.html.

Metro Area Water Supply Prepared for Dry Summer; Use of Storage More Likely

Continued dry conditions throughout the Potomac basin are causing a steady drop in river flow. The lower flows are increasing the likelihood that releases of stored water will be needed to meet metropolitan area drinking water demands this summer and fall, according to the ICPRB Section for Cooperative Water Supply Operations on the Potomac (CO-OP).

Metropolitan Washington area water suppliers, which withdraw from the Potomac River, will be able to meet the region's demand for drinking water even if there is a repeat of the worst drought in the historical record this summer and fall. The probability of the need to use reservoir storage to meet those demands currently stands at 30 percent.

The CO-OP helps ensure uninterrupted water supplies by monitoring water resource conditions and managing withdrawals and stored water releases during times of low Potomac river flow. Its work is done in cooperation with the area's three major water suppliers—the Washington Aqueduct Division, the Washington Suburban Sanitary Commission, and the Fairfax County Water Authority. As water levels continue to fall, CO-OP staff monitor

conditions more frequently. In May of 1999, the first year that stored water was used to augment river flows for drinking water, there was a 19 percent probability that



Watching the River Flow

Flow of the Potomac River near Washington, D.C., in February was below normal, according to the U.S. Geological Survey. Flow measured at Little Falls was about 7.4 billion gallons per day (bgd) during the month, about 29 percent less than the long-term February average of 10.4 bgd. Daily flows during the month ranged from a high of about 17.8 bgd on February 2 to a low of about 5.0 bgd on February 12.

Diversions from the river for municipal drinking water supplies averaged about 369 million gallons per day (mgd), about five percent more than in February 2000. Total freshwater inflow to the Chesapeake Bay was about 41.7 bgd, or 39 percent less than the long-term average of 68.0 bgd. The Potomac contributed about 23 percent of the total.

March was again on the dry side. Daily flows averaged about 11.5 bgd, or 26 percent less than the long-term average of about 15.5 bgd. Flows varied from a low of about 4.8 bgd on March 4 to a high of about 42.1 bgd on March 23.

Municipal diversions averaged about 370 mgd during the month, about nine percent more than March 2000. Freshwater inflow to Chesapeake Bay averaged about 67.0 bgd, or 31 percent less than average. The Potomac contributed about 22 percent.

April saw a return to better river flows. The monthly average was about 10.7 bgd, or about 28 percent more than normal for the month. Daily extremes ranged from a high of about 26.7 bgd on April 1 to a low of about 5.0 bgd on April 30.

Diversions for drinking water averaged about 392 mgd which was about 13 percent more than April of last year. Freshwater inflow to the Chesapeake Bay averaged about 95.7 bgd during the month, or about 2 percent more than average. The Potomac contributed about 18 percent.

releases would be required.

Releases likely would be needed when flow in the Potomac drops below 700 million gallons per day (mgd). Releases are considered part of ordinary operations as they would be required in about 2 of every 10 years, on average.

Several things will influence the need for releases later in the season. Rainfall is predicted to be near normal for the near future. Reservoirs used to augment water supply currently are full. Soil moisture in the basin is near normal, while groundwater levels remain below normal. More detailed and timely information is available from the commission's website: www.potomacriver.org/status.htm or by calling the commission.

Groups Celebrate Five Years of Potomac, Arakawa Friendship



C. Dalpra

Hard Bargain Farm naturalist Karen Miles introduces club members to one of the farm's residents.

An icy wind put a chill on those attending a cherry tree planting ceremony in Washington's East Potomac Park commemorating the anniversary of the Arakawa-Potomac Sister River Agreement in March, but all were left with warm feelings for the project and its future.

Members of ICPRB and the Arakawa Sakura Club celebrated five years of cultural and environmental exchange between residents of the Potomac basin and the Arakawa, an important river in Japan that flows to Tokyo Bay. They were



C. Dalpra

Club members tour the John Brown Museum in Harpers Ferry, W.Va., guided by Mayor Walton "Kip" Stowell.

joined by representatives from the National Park Service, Japanese Embassy, Japan-America Society of Washington, National Cherry Blossom Festival, and National Conference of State Societies.

Addressing the crowd, ICPRB Executive Director Joseph Hoffman noted how the exchange project had benefited both watersheds in many ways over its five years. He said that the relationship had allowed residents of both basins to observe the other, revealing new ways of looking at the challenges that both face. The new views of both the Potomac and Arakawa continue to bring new ideas that help us preserve the values of both watersheds, he said. He urged all attendees to become more involved in this rewarding project.

The event also was a kick-off for the U.S.-Japan Friendship Trans-America Walk 2001, commemorating the 50th anniversary of the peace treaty signed in 1951 between the two countries in San Francisco. A group of 13 Japanese young people began walking to San Francisco from Washington shortly after the tree planting.

The Arakawa-Potomac Sister River Agreement, signed by ICPRB and the Arakawa Sakura Club (created to be a parent organization for the Japanese side of the relationship), set in motion efforts to actively develop international friendship between residents and communities of both watersheds, encourage information exchange on efforts to enhance and protect the rivers, and create a "new river basin cultural sphere." The symbolic tie between the two groups grows along the Tidal Basin in Washington, D.C., where cherry trees from the banks of the Arakawa were planted in 1912 as a gift of friendship from the mayor of Tokyo. Later in the century, cuttings of those trees were taken back to Japan to combat problems with disease and land development.

Seven representatives of the Arakawa Sakura Club visited the Potomac basin to

celebrate the anniversary. The group included two high school students and a teacher, who spent part of the time visiting Potomac basin high schools to learn about environmental education efforts and establish ongoing relationships between schools of the two watersheds. The meeting "was incredible," said Rebecca Beecroft, a science teacher at Brunswick High School, Brunswick, Md. "We had a great visit. The kids seemed to communicate so easily." In the future, Beecroft hopes to continue the exchange through communication on a regular basis through email and the internet, share science information, and



J. Caddick

Japanese students join Osbourn Pike High School students examining creatures collected from a stream survey.

exchange feelings and ideas about the environment and other subjects.

The students also met with Chris Branigan, the environmental studies director at Osbourn Park High School in Manassas, Va., and several students. The school has an advanced stream monitoring and laboratory program that was very impressive to the Japanese.

In addition to connecting with basin high schools, the group also participated in a short conference at ICPRB to learn about



J. Caddick

Students Nozomi Ikeya and Rina Aikyo recite their declaration at the tree planting.

pollution, efforts to protect water quality, and environmental education in the Potomac watershed. Both the Japanese and students and teachers from the two Potomac basin high schools used the conference to describe environmental education programs in their respective schools, and brainstorm on how a continuing relationship could be forged.

Later in the week, club members traveled to the Alice Ferguson Foundation's Hard Bargain Farm environmental education facility to learn first-hand about some of the opportunities available to students in the watershed. The group also visited Harpers Ferry, W.Va., where they were greeted by Mayor Kip Stowell and toured the historic Potomac River town and national park.

During the years of the program, a range of activities have helped to spread friendship and new ideas about river protection and other issues. Representatives of the Potomac basin have traveled to Japan to participate in seminars on environment and water supply issues. "Who Polluted the Potomac," an educational activity designed at Hard Bargain Farm, has been taught in Japan on several occasions, and has been adapted for use in some Arakawa basin public schools. Information on water quality, water supply, and other technical documents have been translated and exchanged. Just as importantly, the project has provided residents of both watersheds a new view of their home waters, a way to encourage thinking "outside the box" about the challenges facing each of the watersheds.

Perhaps this idea was best related by the two Japanese students who came as part of the club delegation. Ms. Rina Aikyo and Ms. Nozomi Ikeya recited a poem at the tree planting, entitled "Bridge of the Cherry Blossom:"

Now, we can see three streams; the pure

stream of the Arakawa, the passage of time since early times, and working of the human mind.

Now, we express our gratitude to the source of the beautiful stream Arakawa, to the rich gift of the Arakawa, and to what the Arakawa has fostered.

Now, we recall eighty-nine years ago today, the desire of Ms. Scidmore, and the foundation of the cherry trees planted at the banks of the Potomac.

Now, we pray that the trees we planted now bloom like time capsules in order for our thoughts to be inherited.

Now, we wish for the pure stream of the Arakawa to reach all the seas of the world carrying our today's desire.

Now, we dream of the cherry blossom's corridor of the upper and lower stream, of the bridge of the cherry blossom between the Arakawa and the Potomac, and of the petals flying over the sea.

Now, we declare that we, the youth, become ambassadors of the basin for the exchange between the upper and the lower streams for the better understanding of the whole basins of the Arakawa, in order to keep the sister river with the Potomac.

The commission thanks the many groups and individuals who participated in this year's exchange and helped to make it a success.

Japanese Walkers Enjoy Potomac Trek

Many people through-hike the beautiful Chesapeake and Ohio Canal towpath. Some traverse its 184 miles along the Potomac from Georgetown to Cumberland, Md., in sections and some hike it all at once. This spring, a very unusual group strode the path: a group of 13 young Japanese, who used it as the first leg of a walk across the United States. Their impressions serve as a reminder of what a valuable asset residents have in the Potomac River and the C&O Canal, even by international standards.

The U.S.-Japan Friendship Trans-America Walk 2001 commemorates two events—the signing of the peace treaty in 1951 between the two countries in San Francisco, and a cross-country walk in 1963 by five Japanese university students. Walkers for the current journey were selected from among thousands of applicants by the *Yomiuri Shimbun*, Japan's largest newspaper. The walkers are a diverse group, including students and professionals representing a wide range of interests and professions.

The March cherry tree planting ceremony that commemorated the Arakawa-Potomac Sister River Agreement also served as an

opening ceremony for the journey, which began at George Washington's Mount Vernon and included several days of walks in metropolitan Washington before hitting the towpath.

The group stopped for a day in Harpers Ferry, W.Va., on April 3, where they were able to give their impressions of the river and canal towpath. Junko Kamitani, who has traveled through Europe and Asia, thought that parts of the Potomac reminded her of areas of the Rhine River in Germany. "The scene is so beautiful as the river runs between the mountains," she said. Along with the others, she was entranced with the view of Great Falls. Fellow walker Maria Oguri felt that there were some similar river scenes in Japan, but smaller in size. "I am impressed with the space of the mountains, and with the nature along the river," she noted. "It grows more beautiful as the leaves from the



Members of the Trans-America 2001 Team at the tree planting.

J. Caddick

trees begin to turn the hillsides green."

The entire walking team was very impressed with the support and good wishes they have received along the way. "People have been so kind to us, and interested in our walk," said Shuhei Miyamoto. "Meeting the American public and exchanging our cultures is very rewarding."

The team is scheduled to arrive in San Francisco early in September.

POTOMAC CALENDAR

June 1 — Nation's River Bass Tournament

The Alexandria Seaport Foundation and Friends of the Potomac are hosting this 2nd annual tournament to benefit the further restoration of the Potomac River. At 7 a.m., bass boats will launch onto the Potomac from Columbia Island Marina on the George Washington Parkway. Come join the fishing groups at noon as they return to tell their tales of fishing on the Potomac at the weigh-in and celebrate with a picnic lunch and live music. For more information and to make reservations for the picnic lunch, contact the Alexandria Seaport Foundation at (703) 549-7078.

June 2 — Potomac River Swim for the Environment

— Fifteen brave swimmers will challenge the Potomac River as they swim 7.5 miles from Hull Neck, Va., to Point Lookout State Park, Md. Spectators will gather to cheer the swimmers on at Point Lookout for a picnic lunch sponsored by local environmental groups. If good weather prevails, swimmers should begin arriving at Point Lookout by 11:30 a.m. The event benefits several Potomac River environmental groups. For more information, contact the commission or Joe Stewart, (410) 243-4418.

June 9 — Potomac River Fish-In and River Celebration

— Join the Middle Potomac Tributary Team along with their many partners, including ICPRB, to celebrate the Potomac River. The day's events, which run from 9 a.m. to noon, includes opportunities for fishing on the river for kids (some rods provided), fishing demonstrations and contests, and river education and information booths. Bring a picnic lunch and meet at Fletcher's Boathouse along the Potomac in Washington, D.C. to learn about fishing and the health of the Potomac. For more information, call (410) 260-8768.



June 11-12 — ICPRB Commission Meeting — At Frostburg University, Frostburg, Md. The commission meeting will begin Monday at 1 p.m. and will include a continuation of ICPRB's year-long strategic planning process. Events will wrap up on Tuesday afternoon with a tour of the Frostburg University Appalachian Environmental Facilities. For information and to RSVP call ICPRB at (301) 984-1908.

Steiner Leaves ICPRB

Roland Steiner, ICPRB's Associate Director for Water Resources and Director of ICPRB's Section for Cooperative Water Supply Operations (CO-OP), resigned his position in March. He is continuing in a regional coordination role as the regional water and wastewater coordinator with the Washington Suburban Sanitary Commission.

Steiner began his work at the commission in 1983. During his tenure, he was influential in the growth of the CO-OP Section. "He worked hard to develop trust in the institution of CO-OP," commented Erik Hagen, an ICPRB staff member who worked closely with Steiner. The ICPRB's CO-OP Section facilitates agreements among the three major Metropolitan Washington area water suppliers. These agreements require water suppliers to share resources during time of low-flow and the CO-OP section coordinates the allocation of their water supplies during those times.

Although Steiner was involved in many projects at ICPRB, a major accomplishment was the successful management of the



1999 drought. The summer of 1999 was the first time the region's water suppliers faced water conditions that triggered management of water resources by the CO-OP section. Due to the trust and skills developed by Steiner, the drought was successfully navigated and the region did not face a water supply crisis.



Potomac Basin

REPORTER

**Editors: Curtis M. Dalpra
Jennifer J. Caddick**

(ISSN 1072-8627)

Published six times a year by the Interstate Commission on the Potomac River Basin, Suite 300, 6110 Executive Blvd., Rockville, MD 20852. (301) 984-1908.

**E-Mail: info@potomac-commission.org
Internet: <http://www.potomacriver.org>**

Joseph K. Hoffman, Executive Director

This publication does not necessarily reflect official Commission policies. Funds for the *Reporter* are provided by the U.S. Environmental Protection Agency and the signatory bodies to ICPRB: District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Non-Profit Org.
U.S. Postage
PAID
Rockville, MD
Permit No. 800

Interstate Commission on the Potomac River Basin
Suite 300
6110 Executive Blvd.
Rockville, Maryland 20852

Address Service Requested

Printed on recycled paper

March/April 2001