

INFORMATION SHEET

Susquehanna River Basin Commission

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MANAGING THE BASIN'S WATER RESOURCES DURING DROUGHTS The 1995 Drought

"In the event of a drought which may cause an actual and immediate shortage of available water supply within the basin, or within any part thereof, the commission after public hearing, upon due notice given, may determine and delineate the area of the shortage and by unanimous vote declare a drought emergency therein."

--Section 11(4) of the Susquehanna River Basin Compact, P.L. 91-575; 84 Stat. 1509 et seq.

What conditions led to the drought of 1995?

The shortage of snow and rain during much of the period between Oct. 1994 through Aug. 1995 resulted in critically low ground and surface water supplies.

By the end of Aug. 1995, there were many undeniable drought indicators, including:

- Surface water flows were generally one-third the normal flows, or worse, for this time of the year;
- Ground water levels were significantly below normal in most of the basin (most wells were at levels only reached once in five to ten years);
- Thirty Pennsylvania water systems instituted voluntary or mandatory water restrictions (many more water systems followed suit in Sept.);
- There were incidences of localized fish kills, higher stream temperatures, lower dissolved oxygen levels, crop losses, and dry stream beds;
- The entire basin experienced precipitation deficits nine out of the 11 months between Sept. 1994 to Aug. 1995; and
- The Harrisburg, Pa. area recorded the driest month of August in history.

SRBC carefully monitors data coming from the U.S. Geological Survey's (U.S.G.S.'s) stream gages throughout the basin. The stream gages generate important water resources data that allow SRBC to determine exactly when the flows are at critically low levels (or high levels during times of flooding).

When was the 1995 basinwide drought warning declaration recommended?

As river levels continued to fall, the Susquehanna River Basin Commission (SRBC) convened members of its Drought Advisory Task Force on Aug. 29, 1995. The task force is comprised of representatives from SRBC's member states (New York, Pennsylvania, and Maryland) and several federal agencies, including the U.S. Army Corps of Engineers, U.S. Geological Survey, National Weather Service, and the Natural Resources Conservation Service.

During that meeting, task force members shared and exchanged important information about drought conditions in all three states. As a result, the task force recommended that SRBC declare a drought warning for the entire basin. SRBC immediately called for voluntary water conservation measures while SRBC staff prepared a written drought warning declaration. The declaration was formally approved on Sept. 14, 1995 at the commission's meeting in Havre de Grace, Md.

What are voluntary water conservation measures?

A drought warning calls for voluntary water conservation measures. Voluntary water use cutbacks of 10 to 15 percent during peak hours can have significant benefits if followed by everyone.

Water conservation measures include:

- Not watering lawns, unless just newly seeded. Grass often goes dormant and brown--not dead--under drought conditions;
- Using a bucket, not the hose, to wash vehicles;
- Using a broom to clean sidewalks and driveways;
- Taking shorter showers;
- Using laundry and dishwasher machines only when the loads are full;

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- Repairing leaking and dripping faucets immediately;
- Installing water saving devices in the home, such as low flow toilets and flow restrictors on showerheads; and
- Flushing toilets less often.

What else does the drought warning declaration contain?

In addition to calling for water conservation measures, the declaration directed SRBC staff to work closely with state and federal agencies to coordinate all actions leading up to a possible drought emergency declaration by the commission and any other separate drought-related actions taken by those agencies under their own authority.

The declaration also stressed the importance of adequate funding for: (1) the U.S.G.S. to operate the network of stream gages in the basin that provides the important water resource data; and (2) the National Weather Service for its forecasting services.

Finally, the declaration ratified SRBC staff action scheduling a public hearing to receive comments on a basinwide drought emergency declaration by the commission.

When and how does SRBC declare a drought emergency?

SRBC's compact requires the commission to hold a public hearing prior to issuing a drought emergency. Hearing notices must be published basinwide at least 20 days prior to the hearing. SRBC scheduled a public hearing for Sept. 28, 1995. Written notices were issued to various newspapers throughout the basin.

What are SRBC's water management authorities during a drought emergency?

During a drought emergency, SRBC's compact gives the commission additional powers that it normally can not exercise.

The compact gives the commission the authority to increase or decrease the amount of water for any water allocations, diversions or releases previously granted or required. During the drought emergency period, if a member state's laws on water withdrawal or diversion permits conflict with the commission's requirements, SRBC's authority supersedes the state's.

SRBC also may impose direct controls on the use of water. This can include making the voluntary water conservation measures mandatory and enforceable.

Did SRBC apply its consumptive water use regulations in 1995?

Yes. The consumptive water use regulations were adopted in 1976 to protect existing and downstream users. The regulation requires all new consumptive water users after 1971 using more than 20,000 gallons per day to replace the water during critical times or to cease drawing water from the Susquehanna River basin. Consumptive water use means the water will be used and not returned to the basin, usually because it evaporates or is incorporated into products such as concrete.

At this writing, SRBC has applied the consumptive use requirement to eight facilities located in Pennsylvania, and notified five facilities, including one in Maryland, to be on standby. Three of the eight facilities rely on waters from the Cowanesque Reservoir in Tioga County, Pa. for their replacement water. SRBC directed the U.S. Army Corps of Engineers to release the stored water for the three facilities.

What makes SRBC "uniquely" qualified to manage the basin's water resources, including during times of drought?

Among other reasons, SRBC is the only agency in the basin that:

- Can assume jurisdiction on interstate matters involving the Susquehanna River or tributaries. This provision is particularly helpful to downstream users. (Although New York is the basin's most northern state, it also is a downstream user because the Tioga River and the Main branch of the Susquehanna River curve upward and back into the state.)
- Is specifically authorized to review and approve water diversions into and out of the basin.
- Regulates consumptive water use to avoid conflicts between water users, protect public health, safety and welfare, control stream quality, promote recreation, protect fisheries and aquatic habitat, regulate flows and supplies of surface and ground waters, and dilute and abate pollution.
- Can allocate basin waters among the signatory states.