

# Susquehanna River Basin Commission

*a water management agency serving the Susquehanna River Watershed*



**Docket No. 20010801**

**Approval Date: August 9, 2001**

## **THE MAYOR AND CITY COUNCIL OF BALTIMORE, MARYLAND, WATER SUPPLY SYSTEM**

Surface-Water Withdrawal and Diversion of up to 250 mgd  
from the Susquehanna River for Public Water Supply,  
Harford County, Maryland

### **Review Authority**

The SRBC is authorized to review this project pursuant to Article 3, Section 3.10 of the Susquehanna River Basin Compact, P.L. 91-575 and SRBC Regulation 18 CFR §§803.42 and 44.

### **Description/Procedural History**

**Purpose.** The purpose this docket is to grant approval to the Mayor and City Council of Baltimore, Maryland (“City” or “Baltimore”) for the withdrawal and diversion (hereinafter referred to collectively as “withdrawal”) of surface water for distribution in a public water supply system.

**Location.** The project is located on the Conowingo Pool, an impoundment created by the damming of the Susquehanna River, in Harford County, Maryland. Though the project itself is located in the State of Maryland, the Conowingo Pool straddles the Pennsylvania-Maryland border.

**Project Features.** In 1966, the City of Baltimore completed the construction of an intake structure on the Conowingo Pool with intake pipeline capacity capable of withdrawing 500 million gallons per day (mgd), a 35-mile long conduit from Conowingo to Montebello with pipeline sizing capable of transporting 250 mgd, and sufficient pump and motor capacity to withdraw and convey up to 137 mgd of Susquehanna River water through the conduit. The City also obtained the right of way for a parallel conduit of equal size. These features remain essentially unchanged to the present time.

**Procedural History.** Although the above-described infrastructure has been in place since 1966, the City has only used water from the Susquehanna intermittently. In 1993, the City

announced its intention to sell up to 30 mgd of water pumped from the Susquehanna River to Harford County, Maryland. At approximately the same time, the City began to consider the expanded and regular use of water pumped from the Susquehanna River to supplement water drawn from its three primary water supply reservoirs.

The SRBC notified the City that, pursuant to Section 3.10 of the Susquehanna Compact, SRBC approval would be required for any such alterations in the existing intermittent usage of the Susquehanna River by the City of Baltimore. The City responded that SRBC approval was not necessary under the so-called Maryland Reservation to the Susquehanna River Basin Compact.

In July 1994, the SRBC and the City conditionally agreed to set aside the legal issues and attempt to reach a resolution that would address the impacts of large withdrawals during river low flows. By the fall of 1997, the City completed a study of its water system's ability to adjust to reduced river withdrawals during low flow. The City then indicated the need for a second study on the water quality impacts of withdrawing more river water during high flows. The SRBC and the City were unable to reach agreement on a set of interim requirements to govern withdrawals pending completion of the second study and execution of a final agreement.

The SRBC therefore announced at its regular meeting on January 15, 1998 that it would conduct a hearing on the potential impact of future withdrawals or diversions of water from the Susquehanna River by the City of Baltimore to meet the City's municipal water needs. The hearing was held on April 14, 1998 at which the City, as well as numerous other parties, presented comments and other information on the potential impacts of increased withdrawals by the City of Baltimore.

The SRBC issued a Determination on June 19, 1998 officially listing 6 specific actions on the part of the City that would be considered "projects" subject to the review and approval of the SRBC including:

1. The construction of a new water treatment facility at Fullerton or at another location to treat water withdrawn from the Susquehanna River prior to distribution to users within the Baltimore water supply system (or other areas).
2. The installation of additional, new, or upgraded pumps, motors, or other improvements to the City's Conowingo Pool intake and pumping facilities, for the purposes of increasing the City's withdrawal or diversion capacity.
3. A change in the City's historic method of operation, from use of the Susquehanna River as a backup source to a constant rate of withdrawal or diversion (such as a constant withdrawal or diversion of 50 mgd).
4. A change in the City's historic method of operation which would involve new or increased withdrawals or diversions during periods when the flow of the Susquehanna River as measured at the Marietta gage is less than the FERC trigger flow.

5. The sale of Susquehanna River water by the City of Baltimore to Harford County, including the execution and implementation of the Agreement Between Baltimore City and Harford County for Raw Water Supply.

6. The sale of Susquehanna River water by the City of Baltimore to any other county or entity not presently served by the City's Central System.

On September 16, 1998, the City filed an appeal of the SRBC's Determination in the United States District Court for the District of Maryland asking the Court to declare the Determination null and void. In an opinion and order dated March 30, 2000, the Court ruled that the SRBC was acting within its authority in issuing its June 19, 1998 Determination. The City appealed the District Court decision to the United States Court of Appeals for the 4<sup>th</sup> Circuit. That Court agreed to temporarily suspend the litigation between the SRBC and the City to allow the parties to pursue a possible settlement agreement. The parties have reached a proposed settlement agreement which SRBC is approving concurrent with the adoption of this docket decision, a copy of which is attached and the terms of which are hereby incorporated in this docket decision; and the provisions of the attached settlement agreement may be considered in the interpretation of this docket.

### **Findings**

1. Pursuant to the SRBC's Determination of June 19, 1998 as confirmed by the U.S. District Court opinion and order of March 30, 2000, Civil Action WMN-98-3135, the withdrawal of water from the Susquehanna River by the City of Baltimore is subject to review and approval by the SRBC under the Susquehanna River Basin Compact, Section 3.10 (2) & (3) and SRBC Regulations 18 CFR §§803.42 & 44.

2. If carried out in accordance with the conditions set forth herein, the project does not conflict with or adversely affect the SRBC's Comprehensive Plan, is physically feasible, and does not adversely influence the present or future use and development of the water resources of the basin and Chesapeake Bay.

3. The SRBC recognizes and acknowledges that the City has provided sufficient evidence demonstrating the eventual need (based on projections) of anticipated water demand by the year 2025 for the City to withdraw up to 84 mgd on a 30-day average (with a stated peak value on any one day of 142 mgd during Trigger Low Flow Events. The SRBC will be prepared to approve an adjustment of the flow limitations during Trigger Low Flow Events established under Condition ¶D.1 below from 64 mgd (30-day average) and 107 mgd (on any one day), as set forth in item d. of the decision below, to 84 mgd (30-day average) and 142 mgd (on any one day) following the completion and review of impact studies and a determination by SRBC, based on all available evidence submitted to SRBC, that either (i) such higher withdrawals during Trigger Low Flow Events would not have a significant adverse impact on other water users or the resource in or downstream of the Conowingo Pool, or (ii) any such significant adverse impacts can be avoided or adequately mitigated with the approval and implementation of such operating plans and constraints governing the Baltimore withdrawals as Baltimore may propose and SRBC approves, and/or Conowingo Pool operating adjustments (including adjustments to

Q<sub>FERC</sub> flows, adjustments to the operations of other Pool uses, or other actions by Baltimore or other users).

4. In further recognition of evidence demonstrating the Baltimore's projected needs, and concurrent with this docket approval, SRBC will propose and adopt a resolution convoking the stakeholders for the process of developing a Conowingo Pool Operating Plan under which the impact studies mentioned in item e. may be conducted. One of the stated goals of that effort will be to find an acceptable method of accommodating Baltimore's need for a higher withdrawal rate during Trigger Low Flow Events, while balancing the needs of other uses in and downstream of the Pool. (Separately, Baltimore may conduct its own impact studies at any time, and submit such documentation for consideration and review by SRBC.)

### **Decision/Settlement Agreement**

Pursuant to Compact Section 3.10 (2) & (3) and SRBC Regulations 18 CFR §§ 803.42 & 44, the project is approved for the withdrawal and diversion by the City of Baltimore of up to 250 mgd on any day, for use within the service area defined below subject to the below listed conditions. Provided that the City complies with the said conditions, the SRBC will not require further project approvals for: (i) improvements or upgrades to the Deer Creek Pumping Station or to other pumping stations within the existing Baltimore raw water conveyance system where such improvements or upgrades do not involve increasing the total cumulative capacity to withdraw and divert water from the Susquehanna River to more than 250 mgd; (ii) construction of or improvements to the Fullerton Water Treatment Plant or other facilities to treat, pump or convey water that do not involve increasing the total cumulative capacity to withdraw and divert water from the Susquehanna River to more than 250 mgd; or (iii) the extension of lines, connection of new customers (including new consumptive uses) to the Baltimore water system, or bulk water sales from the Baltimore water system for service within the defined Service Area. The provision of water beyond the defined service area, either through extension of lines or bulk water sales, would require a further Section 3.10 approval. The conditions are as follows:

a. **Other Withdrawals** – Water withdrawals from the Susquehanna Basin, and projects involving Susquehanna Basin waters, which do not involve the withdrawal of water through the existing Baltimore City intake in the Conowingo Pool and the conveyance of water through the Baltimore City system are not authorized by this decision and will be required to obtain their own §3.10 project approvals. Such water withdrawals and projects will be subject to all appropriate SRBC regulations and conditions.

b. **Term of Docket Approval** – This docket approval shall have a term of 50 years from the date of SRBC approval. This docket will be renewable at the end of its term. The material terms of the Settlement Agreement to be executed in conjunction with this docket shall be continued in the future renewals of the docket, unless such terms are otherwise modified with the mutual agreement of the parties. Nothing in the Settlement Agreement shall limit the SRBC's authority, consistent with the Compact, and lawful regulations adopted thereunder, and the material terms of the Settlement Agreement, to impose such other reasonable conditions not inconsistent with the material terms of the Settlement Agreement, as required to implement the Susquehanna River Basin Comprehensive Plan and assure compliance with applicable SRBC current or future standards and regulations.

c. **Service Area** – For purposes of this docket approval the SRBC recognizes a service area for the City of Baltimore water system defined as the territory within the City of Baltimore and Baltimore, Carroll, Anne Arundel, Howard and Harford Counties (the “Baltimore Service Area”).

d. **Withdrawal Limitations During Low Flow Events** – During Trigger Low Flow Events, Baltimore withdrawals and diversions shall be limited as set forth below, unless and until Baltimore acquires either separately or through the SRBC additional storage sufficient to provide flow augmentation releases to compensate for additional diversions/consumptive uses during such Trigger Low Flow Events, otherwise obtains permission from SRBC (through approval under the SRBC’s emergency powers, a §3.10 docket approval, or other SRBC action) to alter or exceed such limitations on either a temporary or permanent basis, or otherwise obtains a final legal ruling from a court of competent jurisdiction (for example, via an appeal of an SRBC action) establishing a legal right to diversions in a higher amount.

- i. Baltimore’s withdrawal shall be limited to 64 mgd (measured as a maximum 30-day average) and 107 mgd (equivalent to 2 pumps at Deer Creek Pumping Station) on any one day.
- ii. Trigger Low Flow Events are defined as times when Susquehanna River flows, as measured at the USGS Marietta Gage, not counting flow augmentation releases from upstream reservoirs designed to compensate for consumptive uses in the Conowingo Pool (other than Baltimore’s use), are less than  $Q_{FERC}$  (as specifically defined in the following table).

Time Period	$Q_{FERC}$
April 1 – April 30	10,000 cfs
May 1 – May 30	7,500 cfs
June 1 – September 15	5,000 cfs
September 16 – November 30	3,500 cfs
December 1 – February 28/29	1,600 cfs
March 1 – March 31	3,500 cfs

e. **Application of the SRBC Consumptive Use Standard** – The SRBC hereby determines that the City of Baltimore’s commitment to operate its withdrawals during Trigger Low Flow Events in compliance with the limitations set forth in item d. above [i.e. a stated 30-day average rate of 64 mgd (and potentially 84 mgd) and a stated peak day rate of 107 mgd (and potentially 142 mgd)] complies with and satisfies the consumptive use standard set forth in 18 CFR §803.42. This determination is based upon: (i) the demonstrated maximum average quantity of water diverted over any consecutive 30-day period prior to January 23, 1971, and (ii) the calculation that the maximum amount of water withdrawn by Baltimore in any consecutive 30-day period prior to 1971 was 107 mgd (which, according to the information provided by Baltimore, occurred during the year 1966). Based on this determination, Baltimore is not required to provide or pay compensation pursuant to the SRBC consumptive use regulation for withdrawals made from the Susquehanna River pursuant to this docket approval.

f. **Drought Period Use Restrictions** – During any periods in which Baltimore is withdrawing from the Susquehanna River or in periods where, based on prevailing hydrologic and Baltimore system reservoir and demand conditions, and the provisions of the Baltimore system operating plan and drought management plan, it is probable that Baltimore will need to divert from the Susquehanna River during the Water Year, if SRBC has declared a drought emergency for the Susquehanna Basin as a whole or for the lower Susquehanna River subbasin, Baltimore shall implement water use restrictions by customers within the Baltimore Service Area consistent with the Maryland Drought Monitoring and Response Plan. For these purposes, the “Water Year” would be defined as October 1 to September 30 of each year, or another suitable timeframe based on the drawdown/refill cycle of the Baltimore reservoir system.) If Baltimore develops a reservoir operating plan and drought management plan that indicates that it will avoid withdrawing water from the Susquehanna River in a specific Water Year, the requirements of this condition F shall not be applicable during such Water Year.

g. **Water Conservation Requirements** – Baltimore shall conduct and complete within 18 months of the effective date of the Settlement Agreement a review of the water conservation measures in effect throughout the Baltimore Service Area to assess whether such measures are consistent with the requirements. Within 48 months of the effective date of the Settlement Agreement, Baltimore shall implement within the City of Baltimore, and shall use the full extent of its authority and its best efforts to implement in cooperation with other governmental jurisdictions within the remainder of the Service Area, one of the following: (i) water conservation measures consistent with the SRBC water conservation standards codified at 18 CFR §804.20(a); (ii) if Maryland adopts water conservation program requirements consistent with the SRBC water conservation standards, conservation measures that comply with such Maryland water conservation requirements; or (iii) alternative water conservation measures as set forth in a plan submitted to and approved by SRBC that are reasonably designed to achieve levels of water conservation equivalent to the SRBC water conservation standards.

h. **SRBC Emergency Powers** – Nothing in this docket approval shall modify or restrict the powers or authority of SRBC pursuant to Article 11 of the Compact, or the powers and authority of any signatory party agencies with respect to water shortages, droughts or other emergencies.

i. **Monitoring and Recordkeeping, Access to Documents**

- i. Baltimore shall install and maintain meters capable of measuring the quantity of water diverted from the Susquehanna River within an accuracy of  $\pm 5\%$  over the flow range of 50–250 mgd. Calibration and repair records of meters shall be maintained and made available to SRBC on request. Baltimore shall maintain accurate records of the daily quantities of water diverted from the Susquehanna River, and shall provide copies of such records to SRBC annually, and more frequently as requested during periods of declared drought warning or drought emergency. Baltimore shall provide copies of any such records to SRBC at any time in response to a written request from SRBC.

ii. SRBC shall confer with the U.S. Geological Survey, the Safe Harbor Water Power Corporation to assure that the Marietta stream gage is calibrated and maintained in accordance with applicable specifications.

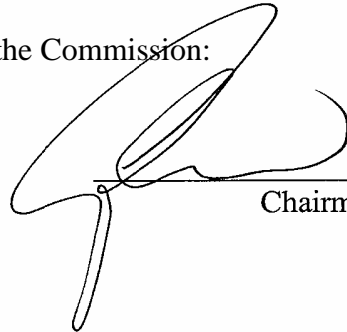
j. **Effective Date** – This docket approval shall not become effective unless and until the accompanying Settlement Agreement is duly approved and executed by the City of Baltimore and its appeal of the U.S. District Court’s decision in the matter of Mayor and City Council of Baltimore, Maryland v. Susquehanna River Basin Commission, Civil Action WMN-98-3135, is withdrawn.

k. **Binding Upon Successors** – This docket approval shall be binding upon the City of Baltimore, its successors and assigns.

l. **Other Approvals** – This action shall not be construed to exempt Baltimore from obtaining all necessary permits and/or approvals required for the project from other federal, state or local government agencies having jurisdiction over the project.

m. **Waiver of Notice of Application** – Pursuant to SRBC Regulation 18 CFR §803.7, the Commission hereby waives the notice of application requirements of SRBC Regulation 18 CFR §803.25.

By the Commission:



Chairman

Date: August 9, 2001