



SUSQUEHANNA RIVER BASIN COMMISSION

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Docket No. 20021023

Approval Date: October 10, 2002

YORK WATER COMPANY

Surface-Water Withdrawal of Up to 12.0 mgd, From the Susquehanna River, and the
Surface-Water Withdrawal of Up to 42.0 mgd, When Available,
From South Branch Codorus Creek, for Public Water Supply,
Lower Windsor and Spring Garden Townships, York County, Pennsylvania

Review Authority

This project is subject to review pursuant to Article 3, Section 3.10 of the Susquehanna River Basin Compact, P.L. 91-575, and Commission Regulations §803.4, relating to projects requiring review and approval, and §803.44, relating to surface-water withdrawals. The Commission received the application on June 27, 2001.

Description

Purpose. The purpose of the application is to request approval for surface-water withdrawals for distribution in a public water supply system.

Location. The project is located in the Lower Susquehanna Subbasin, HUC 02050306, Susquehanna River and Codorus Creek Watersheds, Lower Windsor and Spring Garden Townships, York County, Pennsylvania.

Project Features. The project sponsor has requested approval for a maximum daily withdrawal of up to 12.0 million gallons per day (mgd) from the Susquehanna River, as well as an increase in its approved withdrawal amount from South Branch Codorus Creek from 30.0 mgd to 42.0 mgd. Water would be withdrawn from the Susquehanna River in the vicinity of Long Level, Pa., from the Safe Harbor Pool (Lake Clarke), pumped a distance of approximately 13 miles, and discharged into Lake Redman. Water would be released from Lake Redman into Lake Williams and then into East Branch Codorus Creek, upstream from the confluence with South Branch Codorus Creek, and withdrawn at the existing intake (the Brillhart Pumping Station).

The project sponsor currently obtains all of its water from the Codorus Creek Watershed. The project sponsor is permitted to withdraw up to 30.0 mgd of water for public water supply from South Branch Codorus Creek (Pa. DEP Permit WA-62B, SRBC Docket No. 19920901). When the natural flow in South Branch Codorus Creek is not sufficient to meet the project

sponsor's needs, the project sponsor releases water from Lake Williams and Lake Redman into East Branch Codorus Creek upstream from the point of withdrawal. The addition of water from the Susquehanna River into Lake Redman would not change the project sponsor's current method of operation of making reservoir releases, when necessary, to supplement natural streamflow, withdrawing streamflow at the Brillhart Pumping Station, processing that water, and then pumping the treated water into its distribution system.

The two reservoirs have a combined storage of 2.231 billion gallons of water. The project sponsor has determined that to meet its future needs, it must secure an additional source of water to ensure an adequate supply for its expanding customer base. After extensive studies, the project sponsor determined that its most cost-effective alternative is to pump water from the Susquehanna River into Lake Redman in order to augment the existing supplies. The water would be piped a distance of approximately 13 miles.

Coordination. In accordance with a Memorandum of Understanding between the Commission and the Pennsylvania Department of Environmental Protection (Pa. DEP) regarding coordination of project review functions, the Pa. DEP submitted to the Commission for comment on March 6, 2001, a copy of the application filed by the project sponsor. Because the project has the potential to have significant impacts on other water users in the Lower Susquehanna Subbasin, as well as interstate impacts, the Commission, on April 25, 2001, notified Pa. DEP and the project sponsor that separate application, review, and approval by the Commission would be required. In addition to the separate Commission review, Commission staff provided comments to Pa. DEP on May 4, 2001, on the application submitted by the project sponsor to the Pa. DEP. The Pa. DEP Southcentral Region Office forwarded a draft allocation permit for the project on February 28, 2002, followed by revised draft permits on March 22, 2002, and on September 19, 2002, and intends to issue the permit pending final coordination.

As part of its efforts to obtain a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of the water from the Susquehanna River into Lake Redman, the project sponsor on April 16, 2002, submitted a petition to Pa. DEP's Environmental Quality Board (EQB) to redesignate as warm-water fishery (WWF) (25 Pa. Code Chapter 93) a portion of the East Branch Codorus Creek basin that includes Lake Redman and Lake Williams. A WWF designation for Lake Redman would allow the discharge of river water into Lake Redman to meet the temperature criteria without adversely affecting existing warm water conditions in the lake. The EQB accepted the project sponsor's petition for evaluation. Pa. DEP evaluated the petition and recommended to the EQB that the East Branch of the Codorus Creek basin be redesignated as a WWF, as requested by the project sponsor. On September 17, 2002, the EQB adopted DEP's recommendation as proposed rulemaking. Notice of the proposed redesignation was published in the October 5, 2002, edition of the Pennsylvania Bulletin with a 45-day public comment period.

Findings

The project is subject to Commission approval and reporting requirements, as per Commission Regulation §803.44, relating to surface-water withdrawals.

Commission staff, utilizing recent U.S. Geological Survey (USGS) data and determinations, has identified the 7-day 10-year (Q7-10) low flow at the USGS stream gage 01576000 on the Susquehanna River at Marietta, Pa., as 2,710 cfs (1,750 mgd). The project sponsor's proposed 12.0 mgd withdrawal (and rate of withdrawal) is less than 10 percent of the Q7-10. Therefore, Commission staff recommends that a passby flow at the Susquehanna River point of withdrawal will not be required to protect aquatic resources and downstream users. In making this determination, Commission staff also considered that, under the current service area configuration, from 80 percent (during peak summer months) to 90 percent (based on an annual average) of the water in the water distribution system would be returned to the Susquehanna River upstream of the point of withdrawal and upstream of the Marietta gage. During declared drought periods in the Lower Susquehanna Subbasin, voluntary and possibly mandatory restrictions on nonessential uses of water should reduce water use within the water system by 10 to 20 percent, depending on the time of year, so that there are no net reductions in flows at Marietta.

The current Pa. DEP water allocation permit and the current Commission approval for the withdrawal of up to 30.0 mgd from South Branch Codorus Creek require a passby flow equivalent to the 7-day 10-year low flow (Q7-10) at the point of withdrawal, equivalent to 12.051 cfs. During its review of the application, Commission staff consulted with the Pa. Fish and Boat Commission (PFBC) regarding the appropriate passby flow. The PFBC recommends that the passby flow equivalent to Q7-10 be continued as a part of this approval. The Q 7-10 passby flow rate, although less than optimal for the South Branch Codorus Creek, is the flow rate which best balances the needs of the South Branch Codorus Creek and the inflake fisheries of Lakes Williams and Redman. Commission staff and Pa. DEP concur with this recommendation.

Commission staff recommends the project sponsor not proceed with any interconnections, extensions of service lines, expansion of service areas, execution of bulk water sale agreements, or any similar project that may result in a diversion of the waters of the Susquehanna River Basin to areas outside the Susquehanna River Basin without prior approval of the Commission.

Analysis using a hydrologic computer simulation model shows that the proposed Susquehanna River withdrawal will not impact downstream users. However, in recognition of the limited resources of the Conowingo Pool and the entire lower Susquehanna River, and in recognition of the operating requirements contained in the Federal Energy Regulatory Commission (FERC) licensing agreement for the Susquehanna Electric Company at Conowingo Dam, Commission staff recommends that withdrawals by the project sponsor be operated during times when the daily flow in the Susquehanna River, as measured at the USGS Marietta gage is below certain trigger levels established by FERC so that total storage in the project sponsor's two reservoirs does not increase as a result of pumping water from the Susquehanna River and also that the York Water Company institute voluntary water conservation measures as outlined in its Drought Contingency Plan on all its customers and interconnected water systems.

For the period 1991-2000, based on data supplied by the project sponsor and also based on annual water supply reports submitted to Pa. DEP, average daily use of water in the project sponsor's water supply distribution area was 19.326 mgd, with a low in 1992 of 18.500 mgd and

a high of 20.686 mgd in 1999. Peak-day use averaged 23.806 mgd, and ranged between 23.600 mgd (1992) and 26.008 mgd (1999). The ratio of peak-day usage to average daily usage ranged between 1.17 (1992) and 1.35 (1997). The project sponsor estimates that the year 2030 average daily demand will be 32.43 mgd, and the peak daily demand will be approximately 41.7 mgd. Commission staff has reviewed the project sponsors projection methods and data and concurs with the projections of future need. Commission staff recommends the approval of the project sponsor's requested withdrawal of up to 12.0 mgd from the Susquehanna River and the requested withdrawal of up to 42.0 mgd from South Branch Codorus Creek.

The project is subject to water conservation requirements, as per Commission Regulation §804.20(a). All customer connections within the water system are currently metered. Current estimates of unaccounted-for water are 16.73 percent, which is below the 20 percent maximum allowed in Commission Regulation §804.20(a)(1).

In the course of its environmental review, Commission staff found recorded evidence of an environmentally sensitive riverbank plant in the vicinity of the proposed intake structure. Commission staff has informed the project sponsor of this finding and recommends that the project sponsor coordinate with the Pa. Department of Conservation and Natural Resources (Pa. DCNR) concerning this riverbank plant. Further, Commission staff recommends that the project sponsor comply with all Pa. DCNR requirements for investigation, mitigation, or remediation.

The Pa. DEP proposes to issue a water allocation permit with a 25-year duration, giving the project sponsor the right to withdraw up to 12.0 mgd from the Susquehanna River and up to 42.0 mgd from South Branch Codorus Creek. The following conditions of the pending Pa. DEP allocation permit require that the project sponsor, among other things:

- Within 12 months of the date of the permit, submit proof of the method and extent of its acquisition.
- Within two years of the date of the permit, obtain a Public Water Supply Permit from the Pa. DEP Southcentral Region Office.
- Begin construction of the works necessary for the development of water supply within two years of the date of the permit, with construction being completed within two years thereafter.
- Limit its maximum daily withdrawal from South Branch Codorus Creek to a maximum of 30.0 mgd until such time as the Susquehanna River is utilized as a source of supply.
- Limit its maximum daily withdrawal from South Branch Codorus Creek at the Brillhart Pumping Station to the maximum permitted operating capacity of the project sponsor's water filtration plant. At no time, shall withdrawals be made in excess of permitted withdrawal quantities.

- When the flow in the Susquehanna River, as measured at the USGS Marietta gage, drops below the FERC trigger levels, reduce its withdrawals from the Susquehanna River so that water levels in the project sponsor's reservoirs do not increase as a result of pumping water from the Susquehanna River. The project sponsor shall install measuring devices in the reservoirs and monitor said devices during these low flow periods.
- Install measuring and recording devices to determine the amount of water withdrawn from the Susquehanna River.
- Continue to operate accurate measuring and recording devices to determine the amount of water withdrawn at all of its intakes.
- Maintain a continuous flow of not less than 6.0 cubic feet per second (cfs) in the East Branch Codorus Creek immediately downstream of Lake Williams and shall maintain accurate measurement and recording devices to measure such flows.
- Maintain a continuous flow of not less than 12.051 cfs in the South Branch Codorus Creek immediately below the Brillhart Pumping Station and shall maintain accurate measurement and recording devices to measure such flows.
- Report monthly all surface-water withdrawal amounts, passby flow quantities, and Lake Williams flow releases.
- Within one year of the date of the permit, develop an updated operations and drought contingency plan and revise such a plan every three years thereafter.
- Continue to implement water conservation plans.
- Submit an annual permit compliance report to the Pa. DEP.
- Within two years of the date of the permit, obtain a NPDES permit for the discharge of the water from the Susquehanna River into Lake Redman.

Commission staff concurs with these requirements of the pending Pa. DEP water allocation permit.

The project sponsor has paid the appropriate application fee in accordance with Commission Regulation §803.28, and in accordance with Commission Resolution 98-19, as amended by Commission Resolution 2000-06. The project sponsor has provided all proofs of notification, as required in Commission Regulation §803.25.

The proposed project is physically feasible, does not conflict with or adversely affect the Commission's Comprehensive Plan, and does not adversely influence the present or future use and development of the water resources of the basin.

Decision

The project's surface-water withdrawal from the Susquehanna River of up to 12.0 mgd, and the project's surface-water withdrawal from the South Branch Codus Creek of up to 42.0 mgd, when available, is approved pursuant to Article 3, Section 3.10 of the Compact subject to the following conditions:

a. The project sponsor shall comply with all Commission regulations, including surface-water withdrawal reporting requirements, as per Commission Regulation §803.44.

b. The project sponsor shall keep daily records of the project's surface-water withdrawals from the Susquehanna River and South Branch Codus Creek and the amount of flow in South Branch Codus Creek downstream of the Brillhart Pumping Station and shall provide the results to the Commission quarterly, and as otherwise required. The project sponsor also shall keep records of daily streamflows for the USGS stream gage 01576000 on the Susquehanna River at Marietta, Pa., during any time period it is withdrawing water from the Susquehanna River, and shall provide the results to the Commission quarterly, and as otherwise required. The project sponsor shall install and maintain metering on the surface-water withdrawal from the Susquehanna River, accurate to within five (5) percent. The project sponsor shall maintain metering on the surface-water withdrawal from South Branch Codus Creek, accurate to within five (5) percent.

c. The project sponsor shall operate its withdrawal from the Susquehanna River when the daily flow in the Susquehanna River, as measured at the USGS stream gage 01576000 on the Susquehanna River at Marietta, Pa., is less than the FERC trigger levels, as set forth in the following table, so that storage in the project sponsor's two reservoirs does not increase as a direct result of pumping water from the Susquehanna River. Additionally, if the project sponsor is withdrawing water from the Susquehanna River when flows are below FERC trigger levels, the project sponsor shall institute voluntary water conservation practices, unless voluntary or mandatory restrictions are already in place, by all customers within the York Water Company distribution system and all public water supply systems obtaining water from the York Water Company through interconnections or by other means such as bulk sales. These voluntary water conservation measures shall be those contained and instituted in accordance with the Company's Drought Contingency Plan approved by the Commonwealth of Pennsylvania in accordance with 4 Pa. Code Chapter 118.

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

The project sponsor shall record daily the storage in each reservoir during these low flow periods and report these data to the Commission quarterly, and as otherwise required.

d. The project sponsor shall coordinate with Pa. DEP and obtain an NPDES permit prior to withdrawing water from the Susquehanna River and discharging that water into Lake Redman.

e. The project sponsor shall be limited to withdrawing up to 30.0 mgd from South Branch Codorus Creek until such time as the project sponsor obtains all necessary governmental approvals for the Susquehanna River withdrawal, transmission, and discharge into Lake Redman and construction of all facilities is complete and operative so it is able to fully utilize the water pumped from the Susquehanna River

f. The project sponsor shall coordinate with Pa. DCNR on endangered species issues and obtain any necessary project approvals from Pa. DCNR prior to withdrawing water from the Susquehanna River and discharging that water into Lake Redman.

g. The project sponsor shall not proceed with any interconnections, extensions of service lines, expansion of service areas, execution of bulk water sale agreements, or any project that may result in a diversion of the waters of the Susquehanna River Basin without prior approval of the Commission.

h. The project sponsor shall allow a flow of not less than 12.051 cfs (5,400 gpm) to pass its intake in South Branch Codorus Creek. The project sponsor shall reduce its withdrawals from South Branch Codorus Creek, as necessary, to allow this amount of flow to pass unless streamflow is equal to or less than this amount, at which times the project sponsor shall cease all withdrawals. The project sponsor shall continue to maintain flow measurement devices that measure the streamflow, keep daily records of streamflow, and report the data to the Commission quarterly, and as otherwise required.

i. The project sponsor shall comply with water conservation requirements, as per Commission Regulation §804.20(a).

j. The Commission reserves the right to inspect or investigate the project facility, and the project sponsor shall allow authorized employees or agents of the Commission, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated, or maintained. Such employees or agents shall be authorized to conduct tests or sampling, to take photographs, to perform measurements, surveys, and other tests, to inspect the methods of construction, operation, or maintenance, to inspect all measurement equipment, to audit, examine, and copy books, papers, and records pertinent to any matter under investigation, and to take any other action necessary to assure that the project is constructed, operated, or maintained in accordance with the terms and conditions of this approval or any other rule, regulation, or order of the Commission.

k. The project sponsor shall comply with all requirements and conditions of Pa. DEP Permit WA 67-62C, including any modifications or amendments thereto, which are hereby incorporated by reference.

l. Commission approval shall not be construed to exempt the project sponsor 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, including but not limited to any authorizations or approvals that might be required from Pa. DCNR related to threatened and endangered species. The Commission reserves the right to modify, suspend, or revoke this action if the project sponsor fails to obtain or maintain such approvals.

m. If the project sponsor fails to comply with any term or condition of this docket, the Commission may suspend, modify, or revoke its approval of same, and may impose appropriate fines and penalties. Upon written notice by the Commission, the project sponsor shall have thirty (30) days to correct such noncompliance, unless an alternate period is specified in the notice. Failure to comply within thirty (30) days, or within the alternate period identified in the notice, shall result in a ninety (90)-day suspension of approval of this docket. If the project sponsor fails to address the noncompliance to the satisfaction of the Commission within the suspension period, this approval may be revoked. Nothing herein shall preclude the Commission from exercising its authority to immediately modify, suspend, or revoke this approval where it determines exigent circumstances warrant such action, or from imposing fines and penalties, regardless of the period of noncompliance.

n. The Commission reserves the right to reopen any project docket and make additional orders that may be necessary to mitigate or avoid adverse impacts or otherwise to protect the public health, safety, welfare or the environment.

o. Commission approval confers no property rights upon the project sponsor. The securing of all rights necessary and incident to the project sponsor's development and operation of the project shall be the sole and exclusive responsibility of the project sponsor, and this approval shall be subject thereto.

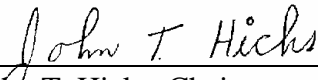
p. This approval is effective until October 10, 2027. The project sponsor shall submit a renewal application by April 10, 2027, and obtain Commission approval prior to continuing operation beyond October 10, 2027.

q. If the project is discontinued for such a period of time and under such circumstances that an abandonment of the project may reasonably be inferred, the Commission may rescind the approval of the project unless a renewal is requested by the project sponsor and approved by the Commission.

r. Commission Docket 19920901 is hereby rescinded.

By the Commission:

Dated: October 10, 2002



 John T. Hicks, Chairman
 New York Commissioner