

TO: Dr. Nancy Kim – Working Group Chair
Craig Jackson – NYS Department of Health

FROM: Patrick J. Becher – MVWA

DATE: April 28, 2008

RE: Working Group Final Report

The Mohawk Valley Water Authority respectfully requests that the following information be included in the report and identified as a separate section.

MVWA Dissenting Opinions

1. 2007 Canal Withdrawals from Hinckley Reservoir

It is the opinion of the MVWA that the report as written falls short of fulfilling the Governor's charge "to better understand the factors that contributed to low reservoir conditions in the fall of 2007." We believe the abnormally high drawdown of Hinckley Reservoir for Canal use during the summer of 2007 has not been adequately explained. The communities of the Mohawk Valley region need a clearer understanding of the specific reasons why so much water was needed and whether or not we should expect that in the future. Responsible planning and water management decisions cannot be made confidently without this information.

The sheer magnitude of the departure from past practices requires a detailed analysis in order to fully understand the implications for all users moving forward. There were multiple periods during the summer months in which releases exceeded the Operating Diagram by as much as fifty percent. According to daily release records, the total over-releases drew the reservoir down by an extra 2.85 billion gallons, or roughly seven feet in elevation.

Repeated requests beginning at the end of August to reduce the releases below the Operating Diagram were likewise denied. These requests and Canals' denials of allowing reduced releases were a direct contributing factor to the water emergency, yet this information is buried on page 49 and in Appendix E (correspondence) of the Working Group report.

It was suggested that the Canal Corporation had been having difficulty maintaining the proper navigation depth due to dry weather conditions. However, it was widely noted that the water level was exceedingly high. There is documentation that the canal was overflowing spillways east of the Rome summit pool. This has not been questioned or explained, and the amount of water lost to spillage has not been quantified.

The Nine Mile feeder channel was also observed overflowing its banks for several weeks. As noted in the local newspaper, residents at adjacent properties could not recall ever seeing the feeder that full. The flow on the Nine Mile feeder was estimated to exceed 160 cfs for at least several weeks in late summer. In contrast, diversions at Morgan Dam into the feeder have averaged only 30-40 cfs during navigation season most of the past decade.

The only explanation offered thus far by the Canal Corporation is that the water was needed for "navigation purposes." There has been no detailed justification based on the amount of boat

traffic or number of lockings. In fact, the Canal Corporation eliminated locking fees in 2006 in an effort to encourage more recreational boating.

2. Relevance and Importance of Deviations from the Operating Diagram

The MVWA believes the existing practice of deviations during periods of reduced inflows should be thoroughly reviewed and refined, and continued when deemed appropriate and agreeable to all parties. We believe that deviating from the Operating Diagram when warranted remains the single most effective way to protect water availability for all purposes. Therefore, it warrants inclusion as a separate recommended practice, rather than as a component of the communications protocol. Without a more thorough consideration of this point, the report offers the communities of the Mohawk Valley region very little insight or assurance regarding what specific steps can be quickly undertaken should their drinking water supply be threatened again in the near future.

Based on 2007 data, adherence to the Operating Diagram during the summer months coupled with reductions in late summer (if necessary), would have maintained the reservoir within normal ranges. In late June and early August, over-releases were conducted while the reservoir was nearing historic lows for those times of the year. Consequently, reductions were requested by NYPA on August 28 and were denied by the Canal Corporation. The denial for reductions in outflows was the major contributing factor as the reservoir level declined nearly ten feet during the month of September. Based on information obtained as a result of litigation, this was the first time a request to reduce the outflows during dry weather was ever denied.

The MVWA, the Onelida County Executive, and the Onelida County Health Department have attempted to highlight the procedures used over many years that reduce the recommended release rate during dry periods. For example, in 1999, the rainfall total from June through October was similar to 2007. However, the reservoir outflows were reduced from 400 cfs to 300 cfs in late June of 1999, and remained at that level most of the summer. The outflow was further reduced in September. The resulting lowest recorded water level during that season was elevation 1205' - seventeen feet higher than what was experienced in 2007.

Minor and temporary reductions in release rates are the most effective approach to maintaining a reservoir level adequate for water supply, power production, and ample uninterrupted flows for downstream habitat. It requires no expenditures to implement. Accordingly, the MVWA is greatly concerned over the views expressed by some agencies within the Working Group that this resource management practice does not warrant careful study or consideration.

3. Additional Water Storage within the Hinckley Watershed

The MVWA believes that the two recommendations to study additional water storage are beyond the scope of the Working Group and should be removed from the report. A consensus had seemingly emerged supporting a DEC suggestion to eliminate both recommendations based on their costs and complexities. However, the second proposal was reinstated at the insistence of the Canal Corporation only.

Both proposals were deemed to have significant environmental impacts, complicated permitting processes, and would require extensive studies to determine their feasibility and operational

implications. It should be further noted that upstream storage has never been used, and that adequate reservoir levels have been maintained during dry years (1995 and 1999 most recently) without additional water storage by simply managing the releases more carefully.

The first proposal was to study the installation of flash boards to marginally increase the height of Hinckley Dam. It was estimated by a member of the Health Department that a one-foot increase in height would store an additional 0.9 billion gallons. This proposal could create federal licensing issues associated with the Jarvis power production plant.

The second recommendation was to study the feasibility of creating a separate water storage facility elsewhere in the watershed upstream from Hinckley Reservoir. This proposal would have exorbitant capital construction costs without necessarily providing any clearly quantified or consistent benefits. The 1921 Agreement that adopted the use of the Operating Diagram placed severe restrictions on the ability of Utica Gas & Electric to store water upstream of Hinckley Reservoir, and they could not store water at all during the summer months. The reasons for these restrictions must be thoroughly understood before any determinations can be made to hold back water that would naturally flow to the reservoir.

The reasons cited to eliminate the flash board proposal apply equally to both recommendations. More importantly, we view the second water storage proposal as even less worthy of consideration because other canal storage reservoirs already exist further north that are used on a minimal basis only. Moreover, the Canal Corporation abandoned and drained two of its northern reservoirs in 2006. By eliminating the Twin Lakes and Chub Pond Reservoirs, the Canal Corporation now has fewer alternative water sources and is likely more dependent on Hinckley Reservoir than was originally intended. Infrastructure improvements should be made to better utilize the remaining northern reservoirs before any consideration is given to creating new impoundments.