



At Your Service

BUREAU OF WATER PROTECTION AND LAND REUSE
PLANNING & STANDARDS DIVISION

DEC 26 2013

December 19, 2013

Robert Hust
Department of Energy & Environmental Protection
Bureau of Water Protection and Land Reuse
79 Elm Street
Hartford, CT 06106-5127

Dear Mr. Hust

Groton Utilities has reviewed the latest streamflow designations as proffered by the DEEP and will work towards meeting those designations where feasible, prudent and required to do so. We do have some comments with regard to the designations and offer the following:

(1) Groton Utilities (GU) has had an operational procedure in place for several decades that we believe met and will continue to meet the goals of the new regulations in that we operate our releases in an upstream direction, based on both storage levels and water supply needs. That is to say, we lower reservoir levels starting at the terminal reservoir and then proceed to upstream reservoirs, thereby maintaining, to the extent possible, flow in Great Brook (the serial connection for our major impoundments) at all times. We intend to review this procedure within the next few years with respect to its compliance with the new regulations, as we have made changes as appropriate over past years (e.g., modifications were made and recorded in the last water supply plan update).

(2) GU has, as mandated by a diversion permit for the crest gate at Morgan Reservoir Dam (currently reissued as DIV-200402155), released flows at Ledyard Reservoir Dam according to the conditions of that permit. While some differences will be noted with respect to the new bioperiod designations, these releases have been - to date - in compliance with the Connecticut Aquatic Base Flow Methodology, as originally stipulated by the DEP, first in 1993 and then again in revised form in the 2006 permit. The required permit release numbers were in combination with GU's own calculated values for the November - December periods. In essence, the release numbers were a combined effort and early trial combination of regulatory and water utility data analyses.



(3) In addition to flows, GU has also monitored water quality within Great Brook over a period of 8 years, starting January 1, 2006 and running through the current month of December 2013. As required by the diversion permit, Groton issued a report to the DEP as to the results of the trial period stipulated in the permit, a 2-year period ending in 2008, but has to date received no final review as to the results noted therein. In addition to the trial flow releases, GU has kept a concurrent record of dissolved oxygen and water temperature to correlate with each flow date and monitoring points within Great Brook. We intend to continue monitoring of these stations and maintain data records for the foreseeable future, irrespective of permit requirements.

(4) Conditional and contingent upon future water needs, GU has plans to raise the elevation of Ledyard Dam and its storage capacity in the future. The added storage would facilitate required bioperiod releases during periods which might not currently be possible during drought periods. Also this project will modify outlet works allowing releases to be less labor intensive, and more accurate.

(5) Flow releases of 50,000 gallons per day from the Billings Avery Diversion to Billings Avery Brook have been strictly adhered to, according to original release requirements (Registration No. 3000-006-PWS-RI), since its initiation in 1968. Note that these flow releases to Billings Avery Brook supersede flows which are released to the Groton Reservoir System, which are allowed as excess and uncontrolled flows only.

(6) GU plans to exercise the following exemptions in the streamflow classification regulations:

A. Morgan Reservoir to Ledyard Reservoir – There is no stream associated with this section; flow is discharged from Morgan by either spillway discharge directly to Ledyard Reservoir, or by low level outlet directly to Ledyard Reservoir, in short sections of man-made channels.

B. Billings Avery to Billings Avery Brook – Because of the limited size of the watershed for Billings Avery Reservoir, outflow is normally minimal and is typically directed to Billings Avery Brook through the low level outlet pipe directing the required discharge to the brook. This pipe is in a normally open condition and diverted flow to the GU system occurs only during periods of excess rainfall.



C. Poquonnock Reservoir to Poquonnock River – Flow to the Poquonnock River is either by spillway overflow, by flow through stratified drift beneath the dam, or by supernatant discharge from settling lagoons. There is no outlet structure with either gate valve or sluice gate. In other words, flow is essentially uncontrolled.

Should Class 4 areas be designated in the future, we would be happy to work with the DEEP in establishing potential stream sections within our contributing watershed, where appropriate. In the meantime, should you have any questions, please let us know. In previous correspondence we have indicated that we intended to use our collected data to set up our own watershed management plan. Analysis of that data is currently in progress, as is a preliminary management plan based on empirical observations and past operational procedures for the reservoir system.

GROTON UTILITIES

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