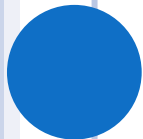




ITA FOLLOW-UP

Compliance with continuing conditions





REQUESTS FOR DETERMINATION OF APPLICABILITY AND INSIGNIFICANCE

Since 1994 (When I took over the program)

The WRC has received:

10 Formal Requests for Determinations of Applicability

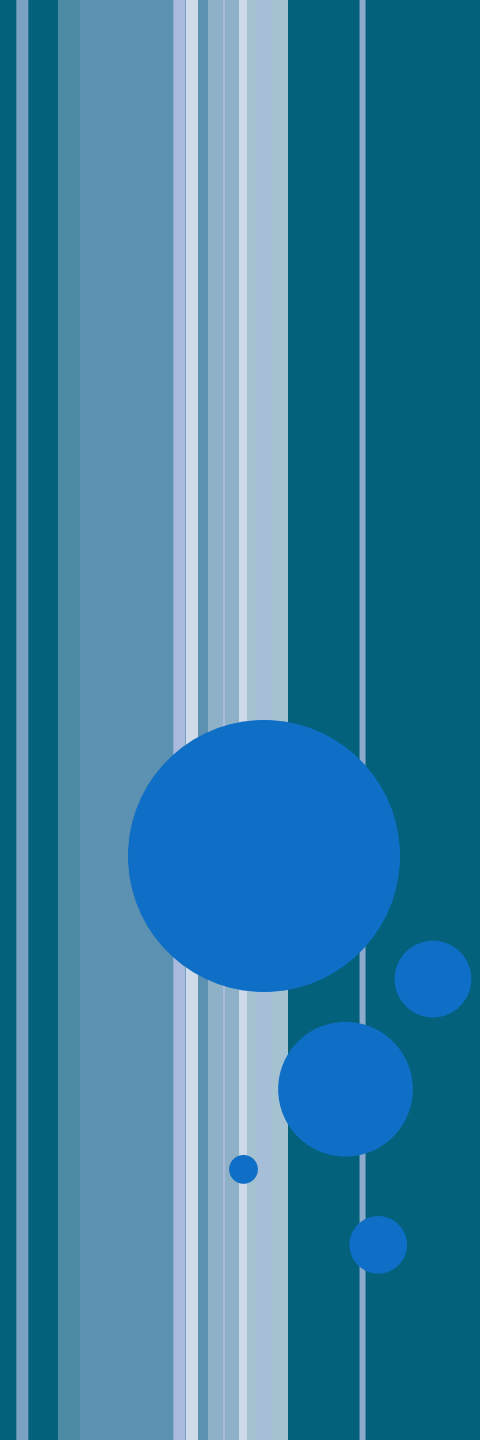
18 Requests for Determinations of Insignificance

**NOTE: IF THE ACT DOES NOT
APPLY TO A PROJECT, THE
WRC HAS NO JURISDICTION
TO IMPOSE CONDITIONS –
UNLESS THE PROPONENT
REQUESTS TO NEGATE
JURISDICTION THROUGH
OFFSETS!**



NOTE: IF PROJECT IS FOUND TO BE INSIGNIFICANT, THE WRC DOES NOT IMPOSE CONDITIONS – UNLESS THE PROPONENT HAS PROPOSED CONDITIONS IN ORDER TO MEET THE INSIGNIFICANCE CRITERIA!





OF THE REQUESTS FOR
DETERMINATION OF
APPLICABILITY, 3 INVOLVED
ONGOING OFFSETS



OFFSET PROJECTS:

Shrewsbury Home Farm Well #2 2004

Turner's Falls Hannegan Brook Well 2007

Hopkinton Alprilla Farm Well 2010

SHREWSBURY HOME FARM WELL #2

- 2002: Not in compliance with ITA or WMA
- Home Farm Well in Blackstone River basin
- Wastewater discharge to Concord River basin in Westborough
- Non-redundant use of Home Farm Well exceeded the “Grandfathered” ITA amount from Blackstone to Concord
- In order to come into compliance, Shrewsbury decommissioned 2 wells in the Blackstone Basin and set its SCADA system to limit the yield of Home Farm #1 & #2 to no more than 5.4 mgd



TURNER'S FALLS HANNEGAN BROOK WELL

- Hannegan Brook Well located in Montague, in the Connecticut River basin
- Wastewater discharged to the Millers River basin in the Town of Erving
- In order to offset the volume added by the Hannegan Brook Well, DEP reduced the safe yield volume of Well #1, by 50,000 gallons per day, to keep Turner's Falls within its "grandfathered" amount



HOPKINTON ALPRILLA WELL

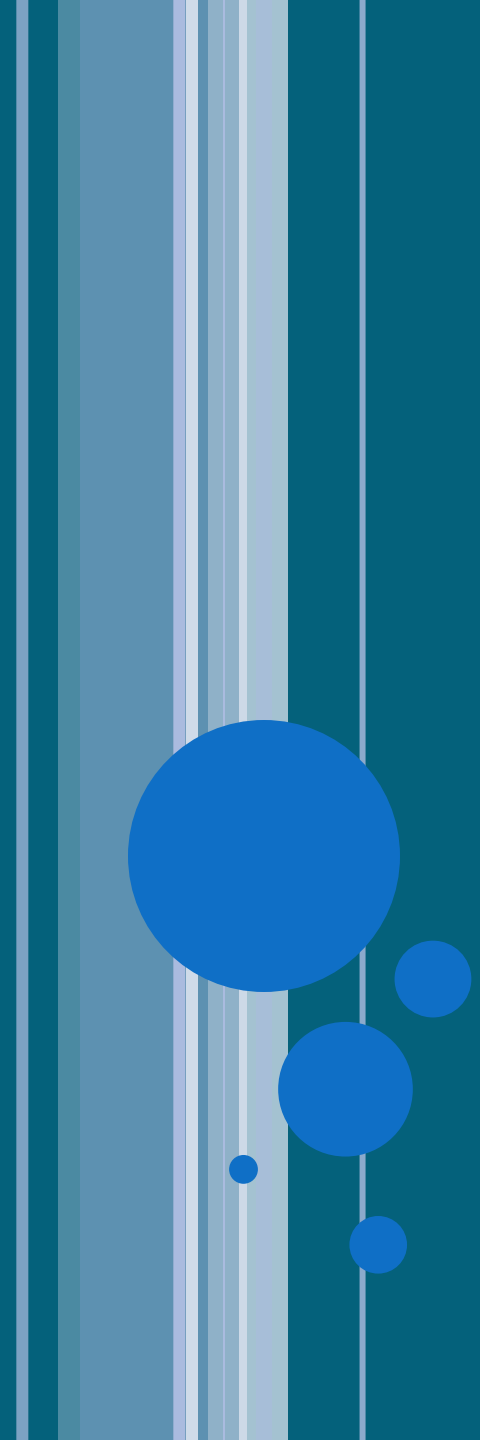
- Offset of wastewater flow generated from adding the Legacy Farms Alprilla Well to the Town's water supply system
- Hopkinton implemented flow control measures, via its SCADA system, to limit the existing water supply system capacity by that amount that could be transferred out of basin from the Alprilla Farm wells



FOLLOW-UP

- Staff reviews the Annual Statistical Reports filed with DEP to assure that these projects remain within the non-jurisdictional flow amounts
- This will continue for the life of these wells





OF THE REQUESTS FOR
DETERMINATION OF
INSIGNIFICANCE, 2 WERE
“PROJECTS AS PROPOSED”

i.e., the proposal would meet the criteria for
insignificance, if certain conditions were met



INSIGNIFICANT “PROJECTS AS PROPOSED”

Cohasset Water Sale to Erickson Retirement
Community (2004)

Groton Lost Lake Sewering (2012)

COHASSET WATER SALE TO ERICKSON RETIREMENT COMMUNITY

- Cohasset's water supply sources are Aaron River Reservoir, Lily Pond, and the Elim Street wells in the South Coastal basin
- The Erickson Retirement Community (Linden Pond) is located in Hingham, in the Weymouth/Weir basin
- Received prior to the policy and regulations concerning insignificance for lake or reservoir sources
- Cohasset committed to provide flow releases for fish passage for spring and fall migration and to implement a drought management plan in the event that targeted releases could not be met
- WRC Staff worked closely with DEP and DMF to determine the appropriate release amounts and timing



BOUND BROOK MONITORING POINT



GROTON LOST LAKE SEWERING

- Groton proposed to sewer an area of town where failing septic systems was causing lake eutrophication.
- Water Supply originates in the Merrimack River basin, but would be transferred to the Town of Ayer's wastewater treatment plant in the Nashua River basin
- Groton committed to implement a dam management plan to provide downstream releases to provide a more natural flow in Cow Brook and to implement a rigorous water conservation program
- Annual reports will be required



FOLLOW-UP

- Cohasset: DEP incorporated the conditions into Cohasset Water Management Act permit; WRC Staff has assisted in review of the annual reports
- Groton: As of 2019, the project has not been implemented. Conditions only apply if the project is initiated. However, once sewerage occurs in the Lost Lake area, Groton must abide by the terms of its Determination of Insignificance





APPROVED INTERBASIN TRANSFER REQUESTS WITH ACTIVE CONDITIONS

Natick Elm Bank Wells (1992)

Dedham-Westwood Water District Fowl Meadow Well
(1992)

Canton Well #9 (1998)

Foxborough Witch Pond Wells (2001/2013)

Aquaria Desalination Project (2003)

Plainville Lake Mirimichi Wellfield (2004)

AvalonBay Sharon Sewering (2007)

NATICK ELM BANK

- Natick lead town for water supply to be developed for use by Dover, Needham, Natick and Wellesley (Authorized by Chapter 624 of the Acts of 1986)
- Water supply developed in the Charles River basin, but discharged via the MWRA Wastewater system to the Massachusetts Coastal basin
- Wells to be shut off when streamflow in the Charles River reached seasonal thresholds as measured at the Dover gage



DEDHAM-WESTWOOD WATER DISTRICT

FOWL MEADOW WELL

- The Fowl Meadow Well is located in the Neponset River basin
- Wastewater is discharged via the MWRA Wastewater system to the Massachusetts Coastal basin
- Year-round streamflow threshold for well shut down on the Neponset River mainstem as measured at the Green Lodge gage
- Seasonal well shut off thresholds below the Milton Lower Falls Dam on the Neponset River



CANTON WELL #9

- Canton's Well #9 is located in the Neponset River basin
- Wastewater is discharged via the MWRA Wastewater system to the Massachusetts Coastal basin
- Year-round streamflow threshold for well shut down on the Neponset River mainstem as measured at the Green Lodge gage
- Seasonal well shut off thresholds below the Milton Lower Falls Dam on the Neponset River



FOXBOROUGH WITCH POND WELLS

- The Witch Pond Wells are located in the Ten Mile River basin section of Foxborough
- Foxborough discharges its wastewater to a Regional Wastewater Treatment plant in the Town of Norton, in the Taunton River basin
- The wells are located in the Witch Pond Swamp, which had some complicated hydrological issues
- As well as some rare and endangered species
- Throttle back and shut off thresholds for water levels in Bungay Brook, Witch Pond, the surrounding aquifer, and deep and shallow peat layers
- Staff worked closely with DEP and NHESP on this project



FOXBOROUGH WITCH POND WELLS: RARE AND ENDANGERED SPECIES



AQUARIA DESALINATION PROJECT

- The Aquaria Desalination Plant is located in Dighton and withdraws water from the Massachusetts Coastal basin
- Existing customer is the City of Brockton, in the Taunton River basin
- Original concerns: salinity (changes to the salt water wedge) and impacts to fisheries (entrainment and impingement)
- Water quality monitoring discontinued after no changes to the salt water wedge were seen
- Continued fishery monitoring for entrainment and impingement and performance of the fishery exclusion system (Gunderboom, deployed from March 1 to November 15 every year)
- Staff worked closely with DEP, DMF and CZM on this project



PLAINVILLE LAKE MIRIMICHI WELLFIELD

- The Lake Mirimichi Wellfield is located in the Town of Plainville, in the Taunton River basin
- Plainville discharges its wastewater to the North Attleboro wastewater treatment plant in the Ten Mile River basin
- The City of Attleboro controls levels in Lake Mirimichi
- The lake is also used for recreation
- Throttle back and shut off thresholds tied to lake levels



LAKE MIRIMICHI



AVALONBAY SHARON SEWERING

- AvalonBay Sharon constructed a new housing development within the Town of Sharon
- Water supply for the development originates in the Taunton and Neponset River basins
- Wastewater is discharged to the Massachusetts Coastal basin via the MWRA sewer system, through the town of Norwood
- Concerns were for impacts to streamflow near the Town of Sharon wellsites



FOLLOW-UP (STREAMFLOW/LAKE LEVEL MONITORING)

- Applies to Elm Bank, Fowl Meadow, Well #9 and Lake Mirimichi Wellfield
- Reports of daily streamflow or lake levels and daily pumping volumes are sent to WRC Staff annually
- Up until 2017, streamflow reports for Elm Bank, Fowl Meadow and Well #9 were also sent to DMF, which had originally expressed concerns about the transfers potential impacts on anadromous fish.
- In 2017, DMF determined that they no longer needed to review annual report
- Staff review to assure that pumping did not occur on days when thresholds were met



FOLLOW-UP (ENVIRONMENTAL MONITORING)

- Foxborough submits quarterly data reports which detail water levels in the Bungay Brook, Witch Pond, the surrounding aquifer, and deep and shallow peat layers, as well as an annual report detailing the environmental monitoring program (which includes wetland monitoring)
- Aquaria submits monthly data reports outlining the type, number, and condition of fish found in the intake structure and the Gunderboom impoundment, semiannual Gunderboom inspection reports, as well as an annual report detailing the environmental monitoring program and the Gunderboom performance



FOLLOW-UP WASTEWATER FLOWS

- AvalonBay submits annual reports of its wastewater flows to both the MWRA and WRC Staff
- WRC Staff review to assure that the flows are within the approved ITA limits



OTHER FOLLOW-UP

- A standard condition for all approved water supply transfer is to provide the DEP-required Annual Statistical Reports (ASRs) to WRC Staff for five years (WRC Staff now can obtain these reports directly from DEP)
- WRC Staff review to assure that the proponent meets 65 rgpcd and 10% unaccounted for water.
- All existing approved projects are older than five years, however, WRC Staff retain the right to spot check ASRs to assure continued compliance



MANSFIELD MORRISON WELL #10

- In same general area (Witch Pond Swamp) as Foxborough's wells
- Similar conditions as Foxborough
- After reviewing monitoring reports for 15 years, Staff determined that impacts to the wetlands, etc. were only occurring during the months of August through October
- Worked with Mansfield and came to agreement that the Town would cease pumping in these months in return for eliminating monitoring.
- WRC approved this in 2016
- Random spot checks through the ASRs occur

