

Stephanie Mercandetti

From: Thomas Holder
Sent: Tuesday, May 03, 2016 7:53 AM
To: Stephanie Mercandetti
Subject: MADEP - WMA Compliance Statement

Hi Steph – Please see MADEP position below relative to Timber Crest Water Needs Proposal.

Thanks.
Tom

Thomas Holder | Director
Department of Public Services

Town of Medway
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508-533-3275

From: Connors, Susan (DEP) [mailto: Susan.Connors@MassMail.State.MA.US]
Sent: Friday, February 05, 2016 12:04 PM
To: Thomas Holder <tholder@townofmedway.org>
Cc: Stone, Marielle (DEP) <marielle.stone@state.ma.us>
Subject: RE: Medway Water

Hi Tom,

Thank you for your question on compliance with the Water Management Act (WMA) Program. Medway's WMA Permit issued June 7, 2011 limits the total volume of water Medway authorized to withdraw in the Charles River Basin and includes special conditions based on Water Conservation Standards adopted by the Massachusetts Water Resources Commission. These conditions include a requirement to meet the performance standards of 65 residential gallons per capita day (RGPCD) or less, 10% or less of unaccounted for water (UAW), and a baseline withdrawal volume that when exceeded requires efforts to offset the impacts of increasing withdrawal volumes. A number of other conservation measures are also included in the permit.

Medway is registered and permitted through the WMA Program to withdraw an annual average volume of 0.92 million gallons per day (MGD) through February 2019, 0.94 MGD through February 2024, and 0.95 MGD through February 2029. A buffer of 0.05 MGD is included to accommodate for growth in the community that was unforeseen during development of the 20 year water needs forecast prepared by the Massachusetts Department of Conservation and Recreation (DCR). The table below reflects Medway's actual withdrawal, residential use, and unaccounted for water percentage since 2010.

Medway	2014	2013	2012	2011	2010
Withdrawal	1.09	1.07	0.99	0.92	0.98
RGPCD	77	65	53	54	69
UAW %	34	31	29	16	27

Medway exceeded its total authorized withdrawal volume as well as the UAW performance standard in all years and in 2014 exceeded the RGPCD standard. MassDEP has not received an RGPCD compliance plan, please review Appendix A of the WMA permit and submit an RGPCD compliance plan if the 2015 RGPCD is also greater than 65. Medway submitted UAW compliance plans in 2008 and 2014 and has made significant efforts to control UAW and overall water usage which will be reflected in the 2015 withdrawal volumes due to be submitted in March 2016. You indicated that Medway's total withdrawal volume for 2015 was approximately 0.84 MGD and UAW is around 15%. Two future construction projects are permitted locally with proposed water needs of 17,000 and 56,000 gallons per day which could result in a future withdrawal of 0.91 MGD using 2015 as a base volume. The proposed Timber Crest development is seeking 62,040 GPD which would result in a total volume of 0.97 MGD and is greater than Medway's total authorized volume. The 0.05 MGD buffer can be applied upon MassDEP's review of Medway's compliance with all WMA permit conditions during a 5 Year Review of the permit or during a permit amendment application review. If approved, the total authorized volume for Medway could be 1.00 MGD. The Charles River Basin 5 Year Reviews are tentatively planned for 2017 or 2018.

In order to apply for a WMA permit with a larger authorized volume than 1.00 MGD, DCR would need to prepare another water needs forecast. DCR needs three years of unaccounted for water percentage less than 15% to adequately prepare a forecast. Therefore, the earliest that Medway might have data available for review would be 2018 – assuming that the UAW for calendar years 2015 through 2017 is less than 15%.

An additional permit condition that we want you to be familiar with is the requirement to mitigate water withdrawals that exceed the assigned baseline withdrawal volume. Medway's baseline volume is 0.99 MGD which was exceeded in 2013 and 2014. Per the existing WMA Permit, Medway is required to submit an Offset Feasibility Study, which is a written analysis of the cost effectiveness of Best Management Practices (BMPs) listed in the permit and any other BMPs selected by the Permittee to offset withdrawal increases. However, since the date of the permit, MassDEP adopted revised Water Management Regulations which forgo the study and instead require a mitigation plan based on projects implemented since 2005 and proposed future projects. Because of the recent large leak repairs in Medway and your indication that Medway's 2015 withdrawal is less than 0.99 MGD, a study and/or mitigation plan is not required at this time, pending MassDEP's review of the 2015 withdrawal volumes. It is recommended that Medway begin to research and compile a list of projects since 2005 that may qualify as mitigation for future withdrawals above the baseline volume. Mitigation projects are defined as direct and indirect. Examples of direct mitigation include surface water releases, storm water recharge, and infiltration and inflow removal. Examples of indirect mitigation include surface water habitat improvements such as dam removal, culvert replacement, and stream restoration projects. MassDEP's "Water Management Permit Guidance" document contains more information on mitigation. A copy of the document is available on MassDEP's website at <http://www.mass.gov/eea/agencies/massdep/water/watersheds/water-management-act-program.html#4>. Additionally, we suggest that Medway consider working with project proponents on mitigation efforts that can be achieved through future construction in town, especially those that will connect to the Medway water system.

Thank you for being proactive in communicating with MassDEP on your WMA permit compliance questions and we are happy to provide technical assistance on all aspects of the Drinking Water and Water Management regulations. If you have any other questions, feel free to contact me or Marielle Stone.

Regards,
Susan

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From: Thomas Holder [<mailto:tholder@townofmedway.org>]

Sent: Tuesday, February 02, 2016 10:16 AM

To: Connors, Susan (DEP)

Subject: Medway Water

Hi Susan – As discussed, I have attached a letter received yesterday which identifies water and sewer needs for a proposed development. With the recent Town approval of two developments (17,000 gpd and 56,000 gpd), I am concerned this new proposal will cause us to violate our current withdrawal threshold as outlined in our Water Management Act Permit.

Please review this issue and let me know of your thoughts.

Thanks.

Tom

Thomas Holder | Director
Department of Public Services

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