

May 20, 2022

*Via email*

Shi Chen  
Massachusetts Department of Environmental Protection  
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Boston, MA 02108  
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**Re: Comments on Brae Burn Country Club's Application for a Water Management Act Permit**

Dear Shi:

Charles River Watershed Association (CRWA) submits the following comments on Brae Burn Country Club's application for a Water Management Act permit to increase its permitted withdrawal volume. Without conducting required monitoring or demonstrating compliance with any of its existing requirements to implement water conservation measures or document the effectiveness of such measures, Brae Burn is requesting an increase in its permitted withdrawal volume from 21 million gallons per year (MGY) to 24 MGY essentially because it is already exceeding its existing permitted limits.

The sources of Brae Burn's withdrawal are in the headwaters of Cheesecake Brook in Newton, Massachusetts, an important tributary to the Charles River. This subbasin is categorized by the Massachusetts Department of Environmental Protection (MassDEP) as groundwater depleted (groundwater withdrawal category 4) and biological category 5, indicating that the subbasin is stressed both hydrologically and biologically. For the reasons discussed below, we urge MassDEP to deny Brae Burn's permit request and better enforce existing permit conditions.

*Brae Burn's permitted withdrawal amount was already increased in 2010.*

In its 2010 permit application, Brae Burn requested an increase to 21 MGY for the period 2009-2029. Brae Burn projected its average water withdrawals at 21 MGY using MassDEP's 2000 Golf Course Water Use Policy to calculate withdrawal volumes; the requested increase was not based on actual water use. Brae Burn averaged 16.6 MGY over the five years preceding the 2010 permit, but based solely on a new method of calculating anticipated withdrawal volumes (the 2000 Golf Course Water Use Policy), they requested and were allowed a 25% increase in water. In approving the requested increase, MassDEP stated that

[a]nnual reports filed by the Brae Burn Country Club show that water use varies from year to year depending on the weather. Total annual water use over the past five years has varied from a high of 23.3 MGY in 2007 to a low of 11.17 MGY in 2004. Average total annual water use over the past five years has been 16.6 MGY. In the

permit application, Brae Burn Country Club seeks to increase the withdrawal volume to 0.10 MGD and 21.0 MGY using calculations based on MassDEP's Golf Course Water Use Policy (Policy #BRP/BWM/PeP-P00-5, June 8, 2000) rather than the conservative calculations used in the original permit application in 1990. MassDEP approves this increased permit volume because it is based on an estimate of water usage during a drought consistent with MassDEP's own policy, and it better reflects actual water use at the Brae Burn Country Club.

At the time, CRWA objected to the requested increase in withdrawal volume to 21 MGY, explaining in February 10, 2010 comments that

[a]ccording to MassDEP's Order to Complete, water use has not increased nor has there been an expansion of sprinkler coverage in recent years at Brae Burn CC. The year 2007 appears to be an outlier when the club used almost 1/3 as much water as it did the previous year. For the past three years the club has exceeded its total authorized annual withdrawal of 15 MGY. Since Brae Burn estimated that it decreased its water use by 15% from its original water use through the installation of a weather monitoring and prediction computer program and at its Club House/Pool, conservation efforts should be saving 0.5-1 MGY. Accordingly, it is not clear why an increase in Brae Burn's withdrawal volume is warranted. While the club's original calculations may have been conservative, they were until the last three years, accurate.

*Brae Burn's current request to increase its permitted withdrawal volume is not based on an actual need for more water.*

MassDEP noted in the 2020 Order to Complete issued to Brae Burn that "based upon a review of the 2014 to 2018 Annual Report Forms, the permitted sources exceeded their maximum authorized daily withdrawal volumes in most years."<sup>1</sup> Brae Burn is now seeking to increase its water withdrawal volume to 24 MGY because "individual wells may have exceeded daily thresholds likely due to inconsistent monitoring."<sup>2</sup>

The record clearly shows that Brae Burn's requested increase in volume is due to poor management—especially monitoring—on Brae Burn's part, not an actual need for more water. This is not a valid justification for increasing a permitted withdrawal. Instead of requesting more water, Brae Burn should increase its monitoring to ensure compliance with its current

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<sup>1</sup> This same data also showed that withdrawals at several of the wells would have exceeded Brae Burn's proposed threshold of 24 MGY in both 2017 and 2018.

<sup>2</sup> In its response to MassDEP's question in the Order to Complete regarding exceeding authorized volumes, Brae Burn stated that "[t]he Club has reviewed its records and offers the following discussion with regard to well use. While the Club has made a significant effort to comply with the overall annual authorized volume withdrawal, *individual wells may have exceeded daily thresholds likely due to inconsistent monitoring* while other projects were ongoing. The Superintendent acknowledges this and now has an assigned member of the management staff that monitors all wells daily to avoid future exceedances." (emphasis added).

permit limits. MassDEP should also increase its oversight and enforcement of Brae Burn's exceedances of its existing permitted withdrawal volume.

*Brae Burn has failed to submit at least a decades' worth of reports documenting implementation of required water conservation measures.*

Brae Burn is required by its current Water Management Act permit to submit a report documenting the work it has done to implement the water conservation program and estimating the amount of water saved as a result of that program with its Annual Report each year. According to MassDEP, as of 2020, it does not have any record of such reports being submitted during the first ten years of Brae Burn's permit term. Before *even considering* Brae Burn's request to increase its permitted withdrawal volume, MassDEP must require Brae Burn to submit those missing reports and show how much water (if any) they have saved through already-required conservation measures. Any permitting decision made without that documentation would be made without complete information, and would therefore be completely arbitrary.

*Before any increased withdrawal is even contemplated, Brae Burn must comply with, and MassDEP must enforce, the current permit.*

Brae Burn has not justified a need to increase its water withdrawals beyond its current permit limits and should focus its efforts on better monitoring water use in order to comply with its existing permit. This is critically important in a subbasin with 35.7% August NGD, a time of year when most streams are stressed from lack of streamflow. In each of its last two requests for increased withdrawals, Brae Burn has failed to demonstrate an actual need for more water. In 2010, its permitted withdrawal volume was increased by virtue of MassDEP policy, and now Brae Burn is requesting even more water simply because it is failing to meet the limit allowed by the prior increase. At the same time, Brae Burn has failed to submit any information about the implementation and effectiveness of required water conservation measures, which—if implemented correctly—may very well obviate the need for the requested increase in the first place.

Granting Brae Burn's requested increase would produce an absurd result, incentivizing permittees to exceed their existing limits in order to "justify" requested increases. **Failure to comply with an existing permit is not justification for increasing permitted limits. MassDEP therefore deny this permit request and better enforce current permit conditions, including submission of the required annual water conservation report.**

*If MassDEP decides to proceed with issuing a permit allowing the requested increase in permitted withdrawal volume, direct mitigation to help restore this subbasin should be required.*

Since Brae Burn's 2010 permit was issued, the Massachusetts Water Resources Management Program regulations at 310 CMR 36.00 were revised (November 2014). The regulations provide protections for minimization of withdrawal impacts in areas already stressed by groundwater uses, mitigation of withdrawals over a baseline volume, and avoidance of potential changes in biological category (BC) and groundwater withdrawal category (GWC). Permittees with groundwater sources in subbasins having August net groundwater depletion (August NGD) of 25% or greater are required to develop a plan to minimize the impacts of

their withdrawals. Brae Burn's wells are located in subbasin 20125, which has an August net groundwater depletion of 35.7%, meaning they must prepare a minimization plan.

As previously stated, CRWA urges MassDEP to deny Brae Burn's requested increase in permitted withdrawal volume. However, in the event MassDEP decides to issue the permit with the requested increases despite the major issues noted herein, MassDEP should require direct mitigation to help restore this subbasin, which is already heavily altered by groundwater withdrawals.

Brae Burn's response to the Order to Complete mentions direct mitigation that occurred in 2007-2008 (maintenance facility construction/upgrade, including stormwater management and infiltration system). While those measures were helpful at the time, they do not any provide current direct mitigation for increased withdrawals or benefits for recharging groundwater. Brae Burn is now requesting to meet the requirements for a minimization plan by obtaining certification through an Audubon Cooperative Sanctuary Program certification. The environmental planning, habitat management, and other measures that are part of an such certification would not qualify as direct mitigation and likely would not materially restore depleted flow or groundwater. This approach should not be allowed as a substitute for direct mitigation.

We appreciate your consideration of these comments. Please do not hesitate to reach out with any questions.

Sincerely,



Heather Miller, Esq.  
General Counsel and Policy Director