



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

100 Cambridge Street Suite 900 Boston, MA 02114 • 617-292-5500

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

January 13, 2025

Michael Holton
The Ranch Golf Club
65 Sunnyside Rd
Southwick, MA 01077

RE: The Ranch Golf Club
Water Management Act Permit
WMA Permit: #9P-1-04-279.02
Action: Final Permit Renewal

Dear Mr. Holton,

Please find the attached documents:

- Findings of Fact in Support of the Water Management Act New Permit #9P-1-04-279.02; and
- Water Management Act New Permit #9P-1-04-279.02 (Westfield River Basin) for The Ranch Golf Club.

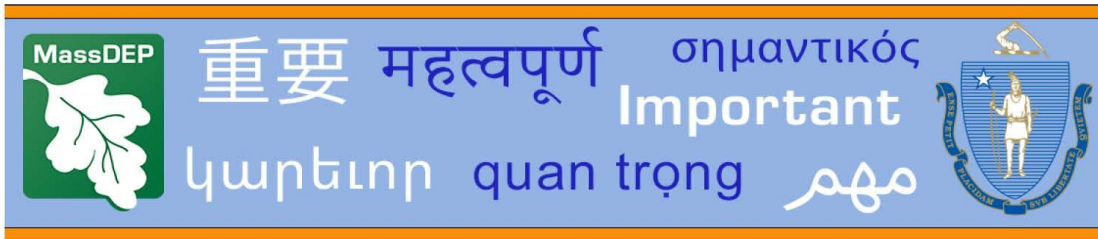
If you have any questions regarding this information, please contact Emily Wilcox at emily.wilcox@mass.gov or 857-276-5393.

Sincerely,

Duane LeVangie
Chief, Water Management Program
Bureau of Water Resources

Ecc: Lydia Olson, Massachusetts Rivers Alliance
Ron Rhodes, Connecticut River Conservancy
Andrea Donlon, Connecticut River Conservancy
Mike Gorski, Regional Director-MassDEP-Springfield

[massgov.sharepoint.com/DEP-BWR/DWPWMA/Permit Renewals/Southwick/Southwick-The Ranch WMA Permit_9P-1-04-279.02_1-13-25](https://massgov.sharepoint.com/DEP-BWR/DWPWMA/Permit%20Renewals/Southwick/Southwick-The%20Ranch%20WMA%20Permit_9P-1-04-279.02_1-13-25)



Communication for Non-English-Speaking Parties

This document is important and should be translated immediately.

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Español Spanish

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Português Portuguese

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繁體中文 Chinese Traditional

本文件非常重要，應立即翻譯。如果您需要翻譯這份文件，請用下面列出的電話號碼聯絡 MassDEP 多元化負責人。

简体中文 Chinese Simplified

本文件非常重要，應立即翻譯。如果您需要翻譯這份文件，請用下面列出的電話號碼與 MassDEP 的多元化主任聯繫。

Ayisyen Kreyòl Haitian Creole

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradwi l imedyatman. Si ou bezwen dokimar sa a tradwi, tanpri kontakte Direktè Divèsite MassDEP la nan nimewo telefòn endike anba.

Việt Vietnamese

Tài liệu này rất quan trọng và cần được dịch ngay lập tức. Nếu quý vị cần dịch tài liệu này, xin liên lạc với Giám đốc Đa dạng của MassDEP theo các số điện thoại ghi dưới đây.

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះគឺសំខាន់ហើយត្រូវបានបកប្រែភ្លាមៗ។ ប្រសិនបើអ្នកត្រូវការឱ្យគេបកប្រែឯកសារនេះ សូមទាក់ទងមកនាយកផ្នែកពិធីកម្មរបស់ MassDEP តាមលេខទូរស័ព្ទខាងក្រោម។

Kriolu Kabuverdianu Cape Verdean

Kel dokumentu li é inportáti y debe ser traduzidu imidiatamenti. Se bu meste di kel dokumentu traduzidu, pur favor kontakta Diretor di Diversidádi di MassDEP na numeru abaxu indikadu.



Contact Deneen Simpson 857-406-0738

**Massachusetts Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114**

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(Version revised 4.21.2023) 310 CMR 1.03(5)(a)

Русский Russian

Это важный документ, и он должен быть безотлагательно переведен. Если вам нужен перевод данного документа, пожалуйста, свяжитесь с директором по вопросам многообразия (Diversity Director) компании MassDEP по указанному ниже телефону.

العربية Arabic

هذه الوثيقة مهمة ويجب ترجمتها على الفور. إذا كنت بحاجة إلى هذه الوثيقة مترجمة، يرجى الاتصال بمدير التنوع PMassDE على أرقام الهواتف المدرجة أدناه.

한국어 Korean

이 문서는 중요하고 즉시 번역해야 합니다. 이 문서의 번역이 필요하시다면, 아래의 전화 번호로 MassDEP의 다양성 담당 이사에 문의하시기 바랍니다.

հայերէն Armenian

Այս փաստաթուղթը կարևոր է և պետք է անմիջապես թարգմանվի:
Եթե Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանել, դիմեք MassDEP-ի թարգմանության տնօրենին ստորև նշված հեռախոսահամարով:

فارسی Farsi Persian

این سند مهم است و باید فوراً ترجمه شود.
اگر به ترجمه این سند نیاز دارید، لطفاً با مدیر بخش تنوع نژادی MassDEP به شماره تلفن ذکر شده در زیر تماس بگیرید.

Français French

Ce document est important et devrait être traduit immédiatement. Si vous avez besoin de ce document traduit, veuillez communiquer avec le directeur de la diversité MassDEP aux numéros de téléphone indiqués ci-dessous.

Deutsch German

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Ελληνική Greek

Το παρόν έγγραφο είναι σημαντικό και θα πρέπει να μεταφραστεί αμέσως. Αν χρειάζεστε μετάφραση του παρόντος εγγράφου, παρακαλούμε επικοινωνήστε με τον Διευθυντή Διαφορετικότητας του MassDEP στους αριθμούς τηλεφώνου που αναγράφονται παρακάτω.

Italiano Italian

Comunicazione per parti che non parlano inglese. Questo documento è importante e dovrebbe essere tradotto immediatamente. Se avete bisogno di questo documento tradotto, potete contattare il Direttore di Diversità di MassDEP al numero di telefono elencato di seguito.

Język Polski Polish

Dokument ten jest ważny i powinien zostać natychmiast przetłumaczony. Jeśli potrzebujesz przetłumaczonej wersji dokumentu, prosimy o kontakt z dyrektorem ds. różnorodności MassDEP pod jednym z numerów telefonu wymienionych poniżej.

हिन्दी Hindi

यह दस्तावेज़ महत्वपूर्ण है और इसका तुरंत अनुवाद किया जाना चाहिए. यदि आपको इस दस्तावेज़ का अनुवाद करने की आवश्यकता है, तो कृपया नीचे सूचीबद्ध टेलीफोन नंबरों पर मासडेपस डाइवर्सिटी के निदेशक से संपर्क करें.

Contact Deneen Simpson 857-406-0738

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Findings of Fact in Support of Water Management Permit # 9P-1-04-279.02 The Ranch Golf Club

The Department of Environmental Protection (the Department or MassDEP) makes the following Findings of Fact in support of the attached Water Management Act (WMA) Permit #9P-1-04-279.02 and includes herewith its reasons for issuing the Permit and for conditions of approval imposed, as required by M.G.L. c. 21G, § 11. The issuance of the WMA permit is in response to the November 23, 2015 permit renewal application submitted by The Ranch Golf Club (The Ranch GC) in the Westfield River Basin.

The Ranch Golf Club's Withdrawal History

Original Permit:

On June 26, 2000, The Ranch GC (previously referred to as Olde Farm Golf Club) was issued a WMA Permit (9P-1-04-279.02) to withdraw an average volume of 0.146 million gallons per day (MGD) over a 150-day operating season through November 30, 2012. The Ranch GC is authorized to withdraw water for irrigation purposes from four sources, consisting of two wells (Well 2 and 4) and two lakes (Lake A and D) in the Westfield River Basin.

Modified Permit:

The Ranch GC's permit was modified on February 7, 2008, superseding the previously issued WMA Permit. The permit expiration date was corrected from the original permit, and the operating period was corrected from 180 days to **150 days** in the modified permit. The original permit erroneously referenced a 180-day operating period.

The original 2000 permit also required that The Ranch GC install a meter on Well 2. Note that Well 2 was not in operation between 2000-2006 and did not have an operable pump. Because

of this, the 2008 modified permit allowed The Ranch to defer metering until Well 2 was placed into service.

Permit Extension Act:

All Westfield River Basin water withdrawal permits were originally intended to expire on November 30, 2012. The expiration date in the Westfield River Basin for all Water Management Permits was extended for two years by Chapter 240 of the Acts of 2010 and further extended another two years by Chapter 238 of the Acts of 2012, collectively known as the Permit Extension Act. The expiration date for all permits going forward in the Westfield River Basin will be November 30, 2032, in accordance with the staggered permitting schedule set forth in the regulations.

Permit Renewal Application:

On November 23, 2015, MassDEP received a WMA 20-year permit renewal application from The Ranch GC for their withdrawal in the Westfield River Basin. The submitted application requested to maintain the permitted withdrawal volume of 0.146 MGD or 21.9 MGY. Pursuant to M.G.L. c. 30A, § 13, and 310 CMR 36.18(7), the Ranch GC's existing permit continues in force and effect until the Department issues a final decision on the permit renewal application.

The Water Management Act (M.G.L. c. 21G)

The Water Management Act (Act) requires MassDEP to issue permits that balance a variety of factors including without limitation:

- Impact of the withdrawal on other water sources;
- Water available within the safe yield of the water source;
- Reasonable protection of existing water uses, land values, investments and enterprises;
- Proposed use of the water and other existing or projected uses of water from the water source;
- Municipal and Massachusetts Water Resources Commission (WRC) water resource management plans;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

Water Management Regulation Revisions

In 2010 the Executive Office of Energy and Environmental Affairs (EEA) convened the Sustainable Water Management Initiative (SWMI) for the purpose of incorporating the best available science into the management of the Commonwealth's water resources. SWMI was a multi-year process that included a wide range of stakeholders and support from the Departments of Environmental Protection, Fish and Game, and Conservation and Recreation.

In November 2012 the *Massachusetts Sustainable Water Management Initiative Framework Summary* (<http://www.mass.gov/eea/docs/eea/water/swmi-framework-nov-2012.pdf>) was released.

On November 7, 2014, MassDEP adopted revised Water Management Regulations at 310 CMR 36.00 that incorporate elements of the SWMI framework and the Water Conservation Standards adopted by the Massachusetts WRC. The regulations reflect a carefully developed balance to protect the health of Massachusetts' water bodies while meeting the needs of businesses and communities for water.

Without limitation, MassDEP has incorporated the following into Water Management permitting:

- Safe yield determinations for the major river basins based on a new methodology developed through SWMI (see the Safe Yield in the Westfield River Basin section of this document or for more information on the Safe Yield methodology, go to the November 28, 2012 SWMI Framework Summary and Appendices); and
- Environmental protections developed through SWMI, including without limitation:
 - protection for coldwater fish resources;
 - minimization of withdrawal impacts in areas stressed by groundwater use; and
 - mitigation of the impacts of increasing withdrawals.

Safe Yield in the Westfield River Basin

This permit is being issued under the safe yield methodology adopted by MassDEP on November 7, 2014, and described in the regulations at 310 CMR 36.13. As of the date of issuance of this permit, the Safe Yield calculation for the Westfield River Basin is 98.8 MGD, and total registered and permitted withdrawals are 54.49 MGD as of July 19, 2024. The withdrawals authorized by this permit and all other permits within the Westfield River Basin, will be within the safe yield of the Westfield River Basin and may be further conditioned as outlined in the regulations.

Findings of Fact for Permit Conditions in The Ranch's Water Management Act Permit

The Findings of Fact for the special conditions included in the permit generally describe the rationale and background for each special condition in the permit. This summary of permit special conditions is not intended to, and should not be construed as, modifying any of the permit special conditions. In the event of any ambiguity between this summary and the actual permit conditions, the permit language shall control.

Special Condition 1, Maximum Authorized Annual Average Withdrawal Volume

This condition reduces the permitted volume from 21.9 MGY, or an average of 0.146 MGD to 18.75 MGY, or 0.125 MGD over a 150-day operating period, until November 30, 2032. This volume has been reduced to reflect the mitigation needs of the existing volume and the Ranch GC's decision to participate in the Audubon Cooperative Sanctuary Program (ACSP) and become fully certified with this Program, which is equivalent to 12 indirect mitigation credits. See Special Condition #5 discussion below.

Special Condition 2, Maximum Daily Withdrawal from Authorized Withdrawal Points

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volumes without specific advance written approval from the Department. The authorized daily volume is the approved rate of each source.

Special Condition 3, Water Conservation Requirements

Special Condition 3 incorporates the Water Conservation Standards for the Commonwealth of Massachusetts reviewed and approved by the Water Resources Commission in July 2018 (<https://www.mass.gov/doc/massachusetts-water-conservation-standards-2/>).

Special Condition 4, Seasonal Demand Management Plan

Consistent with good water conservation practices, permitted golf courses will be required to implement a drought triggered Seasonal Demand Management Plan (SDMP) as a condition of their Water Management Permit. The SDMP, at a minimum, restricts nonessential outdoor water use between May 1st and September 30th when the Massachusetts Drought Management Task Force declares a Level 1- “Mild Drought” or higher (“Significant, Critical, or Emergency”) for the region in which the golf course is located.

The SDMP shall also be implemented at times when streamflow falls below a designated flow trigger measured at an assigned, web-based, real-time U.S. Geologic Survey (USGS) stream gage from May 1st through September 30th. At a minimum, restrictions shall commence when streamflow falls below the trigger for three consecutive days. Once implemented, the restrictions shall remain in place until streamflow at the assigned USGS local stream gage meets or exceeds the trigger streamflow for seven consecutive days. The low-flow statistic being applied, referred to as the “7-day low-flow statistic,” is the median value of annual 7-day low flows for the period of record for the assigned gage. MassDEP uses both the 7-day low flow in addition to the Drought Management Task Force.

Special Condition 5, Mitigation

Requires mitigation of the impacts of withdrawals above the permittee’s baseline, which is based on withdrawals made during 2003-2005. The calculated baseline withdrawal volume for The Ranch GC is 0.05 MGD, their average withdrawals from 2003-2005 plus 5%. The renewed permit authorizes a reduced allocation (0.125 MGD) from the prior permit. See explanation below.

MassDEP assesses the impact of increased withdrawals over a permittee’s baseline on the subbasins from which the withdrawals will be taken, specifically on the Groundwater Withdrawal Category (GWC)¹ and the Biological Category (BC) of each subbasin as of 2004. MassDEP’s assessment assumes that the entire withdrawal increase over baseline could come from any subbasin with permitted withdrawal points.

¹ Information on the Groundwater Withdrawal Category (GWC), the Biological Category (BC), or August Net Groundwater Depletion (August NGD) of subbasins can be found in the Sustainable Water Management Initiative Framework at <https://www.mass.gov/service-details/sustainable-water-management-initiative>, Information on specific subbasins can be found in the WMA Permitting Access Tool at <https://www.mass.gov/guides/sustainable-water-management-initiative-swmi-technical-resources>.

| Ranch GC's Potential Impact to Each Subbasin's Groundwater Withdrawal and Biological Categories | | | | | |
|--|-----|----|--|---|--------|
| Maximum permitted withdrawal above Baseline = 0.096 MGD (0.146 total – 0.05 baseline) | | | | | |
| Subbasin | GWC | BC | Additional water over baseline available before GWC change (MGD) | Additional water over baseline available before BC change (MGD) | Wells |
| 19077 | 2 | 4 | 0.04 | 0.07 | Well 4 |
| 19070 | 2 | 4 | 0.03 | 0.13 | Well 2 |

MassDEP's assessment has shown that The Ranch GC's permitted withdrawal above baseline has the potential to change the Groundwater Withdrawal Category (GWC) of Subbasin 19070 when its withdrawals exceed 0.08 MGD (0.05 baseline withdrawal + an additional 0.03 MGD).

Permittees that request an increase above their baseline withdrawal rate and whose withdrawal would result in a change in GWC or BC are considered Tier 3 permittees. Tier 3 permittees may be required to provide additional feasible indirect mitigation (See 310 CMR 36.22(7)) and demonstrate that there is no feasible alternative source that is less environmentally harmful. As noted above, Subbasin 19070 would change from a GWC 2 to GWC 3 if pumping were to exceed 0.08 MGD. This means that if The Ranch GC's total allocation were more than 0.08 MGD, the Ranch would be required to provide up to twice the standard indirect mitigation for additional withdrawals above 0.08 MGD.

Water Management permits can include both direct and indirect mitigation activities.

- Direct mitigation—reflects activities which will improve streamflow as a result of increased groundwater recharge, decreased stormwater runoff to streams, or by surface water releases, must be considered first in mitigation planning.
- Indirect mitigation—must be evaluated when direct mitigation cannot be achieved. Indirect mitigation includes activities that will improve fluvial habitat, but which cannot be volumetrically quantified.
- Indirect mitigation activities are assessed on a credit system for the benefits of a particular action. Each indirect credit is equal to 10,000 GPD, and withdrawals that lower a GWC or BC of any subbasin require a higher ratio of indirect mitigation where feasible.

In The Ranch GC's May 1, 2024, response to the Order To Complete they included a mitigation plan. The Ranch GC decided to participate in the Audubon Cooperative Sanctuary Program (ACSP) and become fully certified with this Program. For the purposes of the Mitigation Plan the following timetable was established:

- December 1, 2024 Enroll in ACSP and complete Environmental Planning and Water Conservation
- December 1, 2025 complete Chemical Use Reduction and Safety

- December 1, 2026 complete Water Quality Management

Despite The Ranch GC's plan to mitigate their additional withdrawals through participation in the Audubon Cooperative Sanctuary Program (ACSP), this did not provide sufficient indirect mitigation for their full increase over baseline because of the Category change outlined in subbasin 19070 as they would have needed 16 mitigation credits. Therefore, the allocated volume has been reduced to 18.75 MGY, or 0.125 MGD over a 150-day operating period, which is equivalent to 12 mitigation points. When reviewing The Ranch GC's annual reports from the past five years, the highest average daily withdrawal was 0.1 MGD for the year 2022, which is within the proposed limit of 0.125 MGD. Notably, 2022 is considered a drought year, yet the Ranch GC remained within the new limit.

Within the timelines outlined above, The Ranch GC must complete the necessary Audubon certification to qualify for the full 12 indirect mitigation credits, which is equivalent to 120,000 gallons per day. The Department will confirm The Ranch GC's efforts to secure these certifications and maintain them during the term of the permit.

Other Water Management Act Considerations

Minimization

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. The Ranch GC's permitted groundwater sources are located in subbasins 19077 and 19070, which have August net groundwater depletions of 8.2% and 11.5%. Therefore, The Ranch GC does not need to prepare a Minimization Plan.

Coldwater Fish Resource (CFR) Protection

Permittees with withdrawals that impact streamflow of a CFR must evaluate reducing impacts to CFRs through feasible optimization. The Ranch GC's subbasins in the Westfield River Basin contain CFRs identified by the Department of Fish and Game (Kellog Brook and Ashley Brook). While the opportunity to minimize impacts to the CFRs appear limited, withdrawals from Lake A and Lake D would be preferable to withdrawals from the wells because of the potential impact of groundwater withdrawals from the wells on the CFR's temperature.

Historically, Lake A and D are The Ranch GC's primary sources. Well 4 is utilized when drought conditions occur or when lake levels reach a low threshold while Well 2 is only used in extreme drought conditions. If this should change, MassDEP may revisit this condition.



Department of Environmental Protection

100 Cambridge Street Suite 900 Boston, MA 02114 • 617-292-5500

Maura T. Healey
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Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

WATER WITHDRAWAL PERMIT #9P-1-04-279.02 THE RANCH GOLF CLUB

This permit is issued pursuant to the Massachusetts Water Management Act (WMA) for the sole purpose of authorizing the withdrawal of a volume of water as stated below and subject to the following special and general conditions. This permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

PERMIT NUMBER: 9P-1-04-279.02

RIVER BASIN: Westfield River

PERMITTEE: The Ranch Golf Club
65 Sunnyside Ranch Road
Southwick, MA 01077

EFFECTIVE DATE: January 13, 2025

EXPIRATION DATE: November 30, 2032

NUMBER OF WITHDRAWAL POINTS: 4

Groundwater: 2

Surface Water: 2

USE: Golf Course Irrigation

DAYS OF OPERATION: 150

LOCATIONS:

Table 1: Withdrawal Point Identification

| Source | WMA ID# | Latitude | Longitude | Location |
|--------|------------|-----------|-----------|------------------------------|
| Well 2 | WM4898-01G | 42°05'05" | 72°46'49" | West of Sunnyside Ranch Road |
| Well 4 | WM4898-02G | 42°05'29" | 72°46'36" | West of Sunnyside Ranch Road |
| Lake A | WM4898-01S | 42°05'29" | 72°46'36" | West of Sunnyside Ranch Road |
| Lake D | WM4898-02S | 42°05'00" | 72°46'19" | West of Sunnyside Ranch Road |

This information is available in alternate format. Please contact MassDEP at 617-292-5500.

TTY# MassRelay Service 1-800-439-2370

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SPECIAL PERMIT CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This permit authorizes The Ranch Golf Club (The Ranch GC) to withdraw water from the Westfield River Basin at the rate described below in Table 2. The permitted volume is expressed both as an annual average daily withdrawal rate (million gallons per day or MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each five-year period of the permit term. The Ranch GC does not have a WMA Registration.

Table 2: Maximum Authorized Withdrawal Rates

| Permit Periods | Total Raw Water Withdrawal Volumes | |
|--------------------------|------------------------------------|--------------------|
| | Daily Average (MGD) | Total Annual (MGY) |
| 1/13/25 to 11/29/2027 | 0.125 | 18.75 |
| 11/30/2027 to 11/30/2032 | 0.125 | 18.75 |

2. Maximum Daily Withdrawal from Authorized Withdrawal Points

Withdrawals from permitted withdrawal points are not to exceed the approved maximum daily volumes listed below without specific advance written approval from MassDEP (Table 3). The authorized maximum daily volume is the approved rate for each source. In no event shall the combined withdrawals from the individual withdrawal points exceed the withdrawal volumes authorized above in Special Condition 1. Maximum daily withdrawals for individual sources must be provided in annual reporting forms.

Table 3: Maximum Authorized Daily Withdrawal Volumes

| Source | Maximum Daily Rate (MGD) |
|--------|--------------------------|
| Well 2 | 0.02 |
| Well 4 | 0.10 |
| Lake A | 0.10* |
| Lake D | 0.10* |

*Represents the withdrawal rate based on pump capacity.

3. Water Conservation Requirements

At a minimum, The Ranch GC shall implement the following conservation measures forthwith. Compliance with the water conservation requirements shall be reported to MassDEP upon request, unless otherwise noted below.

Table 4: Water Conservation Requirements for Golf Courses

| |
|---|
| Employee training in water conservation and management |
| Metering <ul style="list-style-type: none">Water use is 100% metered.Source meters are calibrated annually |
| Irrigation System Inspection and Maintenance Program <ul style="list-style-type: none">Weekly leak detection and repair during the irrigation seasonWeekly sprinkler head maintenance/replacement during the irrigation seasonIrrigation ponds are lined with impervious material |

Implementation of a Turf Management Plan

- Regular inspection of course to determine irrigation needs
- Use of soil sensors or soil samples to determine soil moisture content
- Regulator aerating of turf to increase the percolation of water into the soil
- Use of drought tolerant grasses and shrubs
- Raising turf height during dry weather and drought conditions
- Eliminating of irrigation whenever possible, such as in rough areas
- Limited ornamental watering

Reuse, where feasible, wastewater and/or stormwater for irrigation

4. Seasonal Demand Management Plan

Consistent with good water conservation practices, permitted golf courses will be required to implement a drought triggered Seasonal Demand Management Plan (SDMP) as a condition of their Water Management Permit. The SDMP, at a minimum, restricts nonessential outdoor water use between May 1st and September 30th when the Massachusetts Drought Management Task Force declares a Level 1- “Mild Drought” or higher (“Significant, Critical, or Emergency”) for the region in which the golf course is located.

The SDMP shall also be implemented at times when streamflow falls below a designated flow trigger measured at an assigned, web-based, real-time U.S. Geologic Survey (USGS) stream gage from May 1st through September 30th. At a minimum, restrictions shall commence when streamflow falls below the trigger for three consecutive days. Once implemented, the restrictions shall remain in place until streamflow at the assigned USGS local stream gage meets or exceeds the trigger streamflow for seven consecutive days. The low-flow statistic being applied, referred to as the “7-day low-flow statistic,” is the median value of annual 7-day low flows for the period of record for the assigned gage. MassDEP uses both the 7-day low flow in addition to the Drought Management Task Force.

The Ranch GC has been assigned the USGS stream gage #01183500– Westfield River near Westfield, MA. The 7-day low flow at this site is 116 cubic feet per second (cfs). Should the reliability of the flow measurement at the Westfield River at Westfield gage be so impaired as to question its accuracy, the Permittee may request MassDEP’s review and approval to transfer to another gage to trigger restrictions. MassDEP reserves the right to require use of a different gage.

The Ranch GC shall be responsible for tracking the Massachusetts Drought Management Task Force drought declarations and recording when drought-triggered restrictions are implemented. The Ranch GC shall also be responsible for tracking streamflow and recording when streamflow-triggered restrictions are implemented. Streamflow information is available at the USGS National Water Information System (MWIS): Web Interface. The USGS NWIS default shows Massachusetts streamflow in real time, i.e., the most recent, usually quarterly hourly, reading made at each USGS stream gage. The mean daily flow is not calculated until after midnight each day when the USGS computes the hourly data into a mean daily streamflow. As a result, The Ranch GC must use the mean daily streamflow from the preceding day when tracking streamflow. See Table 5 below for the USGS WaterAlert instructions.

Table 5: Instructions for Accessing Streamflow and Drought Advisory Information

| |
|---|
| <p>Mean daily streamflow gage readings are available at the USGS NWIS Web Interface at</p> <p>http://waterdata.usgs.gov/ma/nwis/current/?type=flow.</p> |
| <ul style="list-style-type: none">• Scroll down to #01183500– Westfield River near Westfield, Mass.• Click on the gage number.• Click on “Real Time Legacy Page.”• Scroll down to “Provisional Date Subject to Revision – Available data for this site” and click on the drop-down menu.• Click on “Time-series: Daily data” and hit GO.• Scroll down to the “Available Parameters” box. Within the box, be sure “Discharge (mean)” is checked, then, under “Output Format” click “Table” and hit GO.• Scroll down to “Daily Mean Discharge, cubic feet per second” table and find the current date on the table. <p>Compare the cubic feet per second (cfs) measurement shown on the table to the cfs shown under Streamflow Triggered Restrictions above.</p> |
| <p>Drought Advisory information is available at the Massachusetts Department of Conservation and Recreation (DCR) Drought Status Website at</p> <p>http://www.mass.gov/dcr/waterSupply/rainfall/drought.htm.</p> |
| <ul style="list-style-type: none">• Under “Drought Status Reports”, click on “drought map” on the right-hand side of the page. The color-coded map displays the six drought regions in Massachusetts. Restrictions are implemented when a Drought Advisory, Watch, Warning or Emergency is announced through the DCR website. |

The SDMP is intended to address the necessary minimums of acceptable demand management required as dry conditions begin to impact our environment from May through September. Of particular importance in developing your SDMP and in evaluating its effect on your golf course’s irrigation, is the recognition of nonessential outside water uses. MassDEP considers the irrigation of tees as essential uses, but fairways and roughs less so.

Section C of the SDMP provides three options for water use reduction. Two options for water use reduction are in table format with the third option being an open-ended alternative approach. The Acres Table requires that you identify the number of acres you irrigate for tees and greens, fairways, roughs, landscaping, and ornamentals, along with a percent reduction per unit area with worsening drought. The Time-Table requires that you identify irrigation in timing reduction cycles.

The Ranch GC selected the Time-Table on their SDMP, which can be found below in Table 6.

Table 6: Seasonal Demand Management Plan for the Ranch Golf Course

| Irrigating for Shorter Durations as Drought Severity Increases Reduced Minutes in Irrigation Cycles | | | | | | | | |
|--|----------------------------|----------------|-----------------------|----------------|------------------|----------------|--------------------------------------|-------------|
| Massachusetts Drought Levels | Irrigated Tees & Greens | | Irrigated Fairways | | Irrigated Roughs | | Irrigated Landscape & Ornamentals | |
| | Percent | Time (min.) | Percent | Time (min.) | Percent | Time (min.) | Percent | Time (min.) |
| Normal | Full cycle | 10 | Full cycle | 20 | Full Cycle | 15 | 100% | 0 |
| Mild Drought or WMA Permit Trigger is reached | Full cycle | 10 | 80%† | 16 | 50%† | 7.5 | 0%** | |
| Significant Drought | Full cycle | 10 | 60%† | 12 | 0% | | | |
| Critical Drought | Full cycle | 10 | 40%† | 8 | | | | |
| Emergency * | TBD | | 0% | | | | 0% | |
| † Irrigation use shall not occur between the hours of 9 a.m. and 5 p.m., except that hand-watering of hot spots may occur at any time | | | | | | | | |
| * Additional actions to be determined by the Governor’s Emergency Proclamation. | | | | | | | | |
| ** Courses whose core business includes a special event venue may continue to irrigate gardens, flowers and ornamental plants by means of hand-held hose or drip irrigation during a Mild, Significant, or Critical Drought. | | | | | | | | |

5. Mitigation

MassDEP's assessment has shown that The Ranch GC's permitted withdrawal above baseline has the potential to downgrade the Groundwater Withdrawal Category (GWC) of Subbasin 19070 when its withdrawals exceed 0.08 MGD (0.05 MGD baseline withdrawal + an additional 0.03 MGD). Therefore, The Ranch GC has been required to provide twice the Indirect Mitigation required for withdrawals above 0.08 MGD.

In The Ranch GC's response to the Order To Complete submitted on May 1, 2024, they included a mitigation plan that included a plan for their full participation in the Audubon Cooperative Sanctuary Program (ACSP). The Ranch GC agreed to become fully certified within this ACSP Program and provided the following timetable:

- December 1, 2024 Enroll in ACSP and complete Environmental Planning and Water Conservation
- December 1, 2025 complete Chemical Use Reduction and Safety
- December 1, 2026 complete Water Quality Management

The Audubon certification does not provide sufficient indirect mitigation for their full increase over baseline because of the Category change outlined in subbasin 19070. Therefore, the

allocated volume has been reduced to 18.75 MGY, or 0.125 MGD over a 150-day operating period.

Within the timelines outlined above, The Ranch GC must complete the necessary Audubon certification to qualify for the full 12 indirect mitigation credits, which is equivalent to 120,000 gallons per day. The Department will confirm The Ranch GC's efforts to secure these certifications and maintain them during the term of the permit.

GENERAL CONDITIONS (applicable to all permittees)

1. Duty to Comply: The permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.

2. Operation and Maintenance: The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw up to the authorized volume so as not to impair the purposes and interests of the Act.

3. Entry and Inspections: The permittee or the permittee's agent shall allow personnel or authorized agents or employees of MassDEP at reasonable times to enter and examine any property or inspect and copy any records for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.

4. Water Emergency: Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by MassDEP pursuant to M.G.L. c. 21G, s. 15-17, M.G.L. c. 111, s. 160, or any other enabling authority.

5. Transfer of Permits: This permit shall not be transferred in whole or in part unless and until MassDEP approves such transfer in writing, pursuant to a transfer application on forms provided by MassDEP requesting such approval and received by MassDEP at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.33.

6. Duty to Report: The permittee shall submit annually, on the electronic Annual Statistical Report (eASR) accessed through MassDEP's eDEP website, a statement of the withdrawal. Such report must be submitted annually by the date identified on eDEP each year, unless the permittee has explicit permission from the MassDEP Drinking Water program for an extension of time.

7. Duty to Maintain Records: The permittee shall be responsible for maintaining withdrawal records in sufficient detail to assess compliance with the conditions of this permit.

8. Metering: All withdrawal points included within the permit shall be metered. Meters are to be calibrated annually.

9. Amendment, Suspension or Termination: MassDEP may amend, suspend or terminate the permit in accordance with M.G.L. c. 21G and 310 CMR 36.29.

APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of MassDEP. Any person aggrieved by this decision may request an adjudicatory hearing. Any such request must be made in writing, by certified mail and received by MassDEP within twenty-one (21) days of the date of receipt of this permit. No request for an appeal of this permit shall be validly filed unless a copy of the request is sent by certified mail, or delivered by hand to the local water resources management official in the community in which the withdrawal point is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to MassDEP.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. In addition, the request must include a statement of the reasons why the decision of MassDEP is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, a clear and concise statement of how that person is aggrieved by the issuance of his permit.

FILING FEE AND ADDRESS

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a municipality (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

MassDEP may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of MassDEP that the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts which support the claim of undue hardship.



Duane LeVangie
Water Management Program Chief
Bureau of Water Resources

January 13, 2025

Date