



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

FINAL

November 4, 2020

Walpole Country Club
Attention: Kevin Whalley
233 Baker St
Walpole, MA 02301

City/Town: Walpole
Program: Water Management Act (WMA)
WMA Permit #: 9P-3-19-307.01
Action: Permit Renewal

Dear Mr. Whalley:

Please find the following attached:

- FINAL Findings of Fact in Support of the renewal of permit #9P-3-19-307.01; and,
- FINAL Water Management Act Permit #9P-3-19-307.01 for the Walpole Country Club.

The signature on this cover letter indicates formal issuance of the attached document. If you have any questions regarding this information, please contact Shi Chen at (617) 292-5532 or via e-mail at shi.chen@mass.gov.

Sincerely,

Duane LeVangie
Water Management Program Chief
Bureau of Water Resources

Ecc: Julia Blatt, Massachusetts Rivers Alliance
Ian Cooke, Neponset River Watershed Association

Y:\DWPArchive\NERO\Walpole-Walpole Country Club-WMA FINAL Permit-11-04-2020

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
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One Winter Street, Boston MA 02108 • Phone: 617-292-5751
Communication For Non-English Speaking Parties - 310
CMR 1.03(5)(a)



1 English:

This document is important and should be translated immediately. If you need this document translated, please contact MassDEP's Diversity Director at the telephone numbers listed below.



2 Español (Spanish):

Este documento es importante y debe ser traducido inmediatamente. Si necesita este documento traducido, por favor póngase en contacto con el Director de Diversidad MassDEP a los números de teléfono que aparecen más abajo.



3 Português (Portuguese):

Este documento é importante e deve ser traduzida imediatamente. Se você precisa deste documento traduzido, por favor, entre em contato com Diretor de Diversidade da MassDEP para os números de telefone listados abaixo.



4(a) 中國（傳統）(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與 MassDEP 的多樣性總監聯繫。



4(b) 中国（简体中文）(Chinese Simplified):

本文件非常重要，应立即翻译。如果您需要翻译这份文件，请用下面列出的电话号码与 MassDEP 的多样性总监联系。



5 Ayisyen (franse kreyòl) (Haitian) (French Creole):

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradui imedyatman. Si ou bezwen dokiman sa a tradui, tanpri kontakte Divèsite Direktè MassDEP a nan nimewo telefòn ki nan lis pi ba a.



6 Việt (Vietnamese):

Tài liệu này là rất quan trọng và cần được dịch ngay lập tức. Nếu bạn cần dịch tài liệu này, xin vui lòng liên hệ với Giám đốc MassDEP đa dạng tại các số điện thoại được liệt kê dưới đây.



7 ប្រទេសកម្ពុជា (Kmer (Cambodian):

ឯកសារនេះគឺមានសារៈសំខាន់នឹងការត្រូវបានបកប្រែភ្លាមៗ ប្រសិនបើអ្នកត្រូវបានបកប្រែឯកសារនេះសូមទំនាក់ទំនងឆ្នោតជានាយក MassDEP នៅលេខទូរស័ព្ទដែលបានរាយខាងក្រោម។



8 Kriolu Kabuverdianu (Cape Verdean):

Es documento é importante e deve ser traduzido imidiatamente. Se bo precisa des documento traduzido, por favor contacta Director de Diversidade na MassDEP's pa es numero indicode li d'boche.



9 Русский язык (Russian):

Этот документ является важным и должно быть переведено сразу. Если вам нужен этот документ переведенный, пожалуйста, свяжитесь с директором разнообразия MassDEP по адресу телефонных номеров, указанных ниже.



10 العربية (Arabic):

هذه الوثيقة الهامة وينبغي أن تترجم على الفور. إذا كنت بحاجة إلى هذه الوثيقة المترجمة، يرجى الاتصال مدير التنوع في PMassDE على أرقام الهواتف المدرجة أدناه.



11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야 합니다. 당신이 번역이 문서가 필요하다면 아래의 전화 번호로 MassDEP 의 다양성 감독에 문의하시기 바랍니다.



12 հայերեն (Armenian):

Այս փաստաթուղթը շատ կարևոր է եւ պետք է թարգմանել անմիջապես. Եթե Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանվել դիմել MassDEP բազմազանությունը տնօրեն է հեռախոսահամարների թվարկված են ստորեւ.



13 فارسی (Farsi (Persian):

این سند مهم است و باید فوراً ترجمه شده است. اگر شما نیاز به این سند ترجمه شده، لطفاً با ما تماس تنوع مدیر PMassDE در شماره تلفن های ذکر شده در زیر.



14 Français (French):

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



15 Deutsch (German):

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Wenn Sie dieses Dokument übersetzt benötigen, wenden Sie sich bitte Diversity Director MassDEP die in den unten aufgeführten Telefonnummern.



16 Ελληνική (Greek):

Το έγγραφο αυτό είναι σημαντικό και θα πρέπει να μεταφραστούν αμέσως. Αν χρειάζεστε αυτό το έγγραφο μεταφράζεται, παρακαλούμε επικοινωνήστε Diversity Director MassDEP κατά τους αριθμούς τηλεφώνου που αναγράφεται πιο κάτω.



17 Italiano (Italian):

Questo documento è importante e dovrebbe essere tradotto immediatamente. Se avete bisogno di questo documento tradotto, si prega di contattare la diversità Direttore di MassDEP ai numeri di telefono elencati di seguito.



18 Język Polski (Polish):

Dokument ten jest ważny i powinien być natychmiast przetłumaczone. Jeśli potrzebujesz tego dokumentu tłumaczone, prosimy o kontakt z Dyrektorem MassDEP w różnorodności na numery telefonów wymienionych poniżej.



19 हिन्दी (Hindi):

यह दस्तावेज महत्वपूर्ण है और तुरंत अनुवाद किया जाना चाहिए. आप अनुवाद इस दस्तावेज की जरूरत है, नीचे सूचीबद्ध फोन नंबरों पर MassDEP की विविधता निदेशक से संपर्क करें.



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Findings of Fact in Support of Water Management Permit #9P-3-19-307.01 Walpole Country Club

The Department of Environmental Protection (“MassDEP” or “the Department”) has completed its review of the Walpole Country Club Water Management Act (WMA) permit renewal application. This review was conducted in regard to the permit for Walpole Country Club to withdraw water from the Boston Harbor Basin. The Department hereby proposes to issue Water Management Permit #9P-3-19-307.01 (the “Permit”) in accordance with the Water Management Act (M.G.L.c.21G). The Department makes the following Findings of Fact in support of the attached FINAL Permit, and includes herewith its reasons for issuing the Final Permit and for conditions of approval imposed, as required by M.G.L. c.21G, s. 11, and 310 CMR 36.00. The Permit is being issued since such action is necessary for the promotion of the purposes of M.G.L.c.21G. The Department may modify, suspend or terminate the Permit, after notice and hearing, for violations of its conditions, of M.G.L.c.21G, or of regulations adopted or orders issued by the Department, and when deemed necessary for the promotion of the purposes of the Water Management Act.

The Department adopted revised Water Management Regulations at 310 CMR 36.00 on November 7, 2014, (described in greater detail below). Since that time, the Department has been working closely with each Water Management Act (WMA) permittee to fully consider all aspects of their individual situations and ensure thoughtful and implementable permits.

Walpole Country Club Water Withdrawal History

The Walpole Country Club is an 18-hole golf course located in Walpole, Massachusetts.

Walpole Country Club was first issued a Water Management Act permit on June 1, 1991 for its withdrawal from an irrigation pond in the Boston Harbor Basin at a rate of 21.0 million gallons over 210 days, or 0.10 million gallons per day (MGD).

The Permit Extensions

Walpole Country Club’s WMA permit was initially set to expire on February 28, 2010. The Department accepted a renewal application from Walpole Country Club in November 2009. Subsequently, the Permit Extension Act, Section 173 of Chapter 240 of the Acts of 2010, as amended by Sections 74 and 75 of Chapter 238 of the Acts of 2012, extended all existing permits by four years. The PEA also extended the interim permit issued to you on February 28, 2010 for

four additional years. Therefore, WMA permits for withdrawals in the Boston Harbor River basin were extended to February 28, 2015. Because the term of the interim permit extended beyond the term of the original permit, your interim permit is the controlling permit.

On January 9, 2015, the Department informed the Walpole Country Club that the Department would need additional time before making a determination on the application in order to ensure that all permit renewal applicants in the Boston Harbor Basin fully understood the new Water Management Regulations (discussed below), and to give proper consideration to all permit renewal applications within the basin. Pursuant to M.G.L. c. 30A, § 13, and 310 CMR 36.18(7), Walpole Country Club's permit continues in force and effect until the Department issues a final decision on the permit renewal application.

The Department published notice of the permit renewal application in the Environmental Monitor on March 21, 2018. No comments were received.

The expiration date for all permits going forward in the Boston Harbor Basin will be February 28, 2030, in order to restore the staggered permitting schedule set forth in the regulations.

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

The WMA requires the Department 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* (<https://www.mass.gov/doc/framework-november-2012/download>) was released.

On November 7, 2014, the Department 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, the Department 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 description that follows);
- Environmental protections developed through SWMI, including without limitation;
 - protection for coldwater fish resources;
 - minimization of withdrawal impacts in areas stressed by groundwater use;
 - mitigation of the impacts of increasing withdrawals.
- The special permit conditions in each Water Management Act permit.

Safe Yield in the Boston Harbor Basin

This permit is being issued under the safe yield methodology adopted by the Department 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 for the Boston Harbor Basin is 54.90 million gallons per day (MGD), and total registered and permitted withdrawals are 37.94 MGD. The maximum withdrawals that will be authorized in this permit, and all other permits currently under review by the Department within the Boston Harbor Basin, will be within the safe yield and may be further conditioned as outlined in the regulations.

Findings of Fact for Permit Conditions in Walpole Country Club's Water Management Act Permit

The following Findings of Fact for the special conditions include 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, reflects the permitted withdrawal volume of 0.10 million gallons per day (MGD) through February 28, 2030, for a total of 21.0 million gallons per year.

Special Condition 2, Maximum Authorized Daily Withdrawal From Withdrawal Points, reflects the maximum daily withdrawal rate for the Irrigation Pond. Based on a review of the Annual Reports submitted by the Walpole Country Club for the most recent 5 years, MassDEP determined that the maximum daily withdrawal rate for the Irrigation Pond would be 0.4 MGD. This daily withdrawal volume is not to be exceeded without prior approval from MassDEP.

Special Condition 3, Water Conservation Requirements

Walpole Country Club's response to the Order to Complete, has been combined with the Best Management Practices that Walpole Country Club indicated as being implemented (according to the attached Seasonal Demand Management Plan). This combination constitutes the water conservation requirements of the renewed permit.

Special Condition 4, Seasonal Demand Management Plan

Consistent with sound 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 Permits. 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 drought Level 1 (Mild Drought) or higher, Level 2 (Significant Drought), Level 3 (Critical Drought), Level 4 (Emergency Drought) 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) groundwater gage from May 1st through September 30th. At a minimum, restrictions shall commence when streamflow falls below the trigger for three consecutive days. The streamflow-triggered response actions shall be consistent with the drought-triggered response actions at the Mild Drought level. 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. The 7-day low-flow statistic is expected to respond more quickly to low-flow conditions than the Drought Management Task Force Drought Declaration.

Walpole Country Club has been assigned the USGS stream gage #01105000 – Neponset River at Norwood, MA. The 7-day low flow at this site is 6.4 cubic feet per second (cfs). Should the reliability of the flow measurement at the Neponset River at Norwood 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 groundwater trigger.

Walpole Country Club shall be responsible for tracking the Massachusetts Drought Management Task Force drought declarations and recording when drought-triggered restrictions are implemented. Walpole Country Club shall also be responsible for tracking streamflow and recording when streamflow-triggered restrictions are implemented. See the SDMP in Table 4 and attached USGS WaterAlert instructions for tracking information.

The SDMP is intended to address the necessary minimums of acceptable demand management required as dry conditions begin to impact the 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 and greens 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.

As part of the Order to Complete (OTC) responses, Walpole Country Club submitted an SDMP using the Time Table reductions. MassDEP has accepted Walpole Country Club's proposed SDMP and it is included as a condition of this renewed permit.

Walpole Country Club will also be responsible for notifying MassDEP within 14 days of implementing irrigation reductions for the first time in a calendar year. Notice that irrigation reductions have begun consistent with your SDMP shall be filed the first time restrictions are triggered each year to MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the form "Notification of Golf Course Water Use Restrictions" available on MassDEP's website.

Mitigation of Impacts for Withdrawals that Exceed Baseline Withdrawals 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 Walpole Country Club is 0.10 MGD or 21.0 MGY, the authorized volume during calendar year 2005. Mitigation is not required at this time because volumes greater than the baseline are not allocated by this permit. Should Walpole Country Club need more than 0.10 MGD they will need to file and obtain a new permit and provide the required mitigation if feasible.

Minimization of Groundwater Withdrawal Impacts in Stressed Subbasins, requires permittees with permitted groundwater sources in subbasins¹ with net groundwater depletion of 25% or more during August to minimize their withdrawal impacts on those subbasins to the greatest extent feasible.

Since Walpole Country Club's permitted source is surface water source it is not required to develop a minimization plan.

Coldwater Fish Resource Protection was incorporated into the Water Management Regulations in November 2014. Coldwater Fish Resource Protection is not a condition of this permit because Walpole Country Club's withdrawals do not impact any waters that MA Division of Fisheries and Wildlife has identified as supporting coldwater fish at this time.

¹ Subbasins used for WMA permitting are the 1,395 subbasins delineated by the U.S. Geological Survey in *Indicators of Streamflow Alteration, Habitat Fragmentation, Impervious Cover, and Water Quality for Massachusetts Stream Basins* (Weiskel *et al.*, 2010, USGS SIR 2009-5272).



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WATER WITHDRAWAL PERMIT RENEWAL #9P31930701 Walpole Country Club

This renewal of Permit #9P31930701 is approved 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.

PERMIT NUMBER: 9P-3-19-307.01

RIVER BASIN: Boston Harbor

PERMITTEE: Walpole Country Club

ISSUANCE DATE: November 4, 2020

EXPIRATION DATE: February 28, 2030

NUMBER OF WITHDRAWAL POINTS: 1
Surface Water: 1

USE: Golf Course Irrigation

DAYS OF OPERATION: 210

LOCATION(S):

Source	Latitude	Longitude	Location
Irrigation Pond	42° 08' 00	71° 14' 30	233 Baker St.

SPECIAL CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This Permit authorizes Walpole Country Club to withdraw water from the Boston Harbor Basin at the rate described below (Table 1). 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).

The Department of Environmental Protection (“MassDEP”) will use the water withdrawal volume from the authorized withdrawal point to assess compliance with the permitted withdrawal volume.

Table 1: Maximum Authorized Annual Withdrawal Volumes

Permit Periods	Total Water Withdrawal Volumes	
	Daily Average (MGD)	Total Annual (MGY)
11/04/2020 to 02/28/2025	0.10	21.00
03/01/2025 to 02/28/2030	0.10	21.00

2. Maximum Authorized Daily Withdrawals From Withdrawal Point

Withdrawals from the Irrigation Pond shall not exceed the approved maximum daily volume listed below (Table 2) without specific advance written approval from the Department.

Table 2: Maximum Daily Withdrawal Volume

Source	Maximum Daily Rate
Irrigation Pond	0.40 MGD

3. Water Conservation Requirements

Walpole Country Club shall implement the conservation measures outlined in Table 3. These conditions reflect the responses to the Order to Complete (OTC), and the Best Management Practices that Walpole Country Club indicated are implemented (according to the attached Seasonal Demand Management Plan).

Table 3. Water Conservation Requirements

a. Metering 100% of water use, and calibrating source meters annually.
b. Implementation of an irrigation system inspection and maintenance program that includes the following on a routine basis: <ul style="list-style-type: none">• Leak detection and repair: Daily monitoring of the golf course to insure no leaks throughout the system are present.• Weekly Sprinkler head maintenance and replacement to ensure proper trajectory, pressure, and rotation• Weekly cleaning or replacing clogged nozzles.
c. Use of a computerized-control irrigation system that allows for irrigation of only those areas in need.
d. Use of portable soil moisture sensors and golf weather apps to increase the efficiency of the irrigation system
e. Irrigating in the early morning or evening hours when evaporation rates are at their lowest, to extent practicable to maintain the turf
f. Regular aerating of turf to increase the percolation of water into the soil
g. Use of mulch materials in planting beds to improve water-holding capacity of the landscaping
h. Use of environmentally safe wetting agents to improve water infiltration and minimize evaporation
i. Use of low water use or native drought tolerant plants to the greatest extent practicable
j. Employee training in water conservation and management

4. Seasonal Demand Management Plan

Walpole Country Club shall limit nonessential outdoor water use through mandatory restrictions from May 1st through September 30th as outlined in the Seasonal Demand Management Plan (SDMP). At a minimum, restrictions shall commence when:

- a Drought Declaration of Mild, Significant or Critical by the Massachusetts Drought Management Task Force² (DMTF) for the Drought Region where the golf course is located (see <https://www.mass.gov/service-details/drought-regions>), or
- streamflow falls below the designated 7-day low-flow trigger measured at an assigned, web-based, real-time United States Geological Survey (USGS) stream gage.

Walpole Country Club has been assigned USGS stream gage #01105000-Neponset River at Norwood, MA. The 7-day low flow at this site is 6.4 cubic feet per second (cfs).

² See Massachusetts Drought Management Task Force at <https://www.mass.gov/orgs/drought-management-task-force>.

Walpole Country Club selected the Time-reduction approach, which requires that the club reduces irrigation by time (Table 4).

Table 4. Walpole Country Club Time-Reduction in its SDMP

Massachusetts Drought Levels	Irrigating for Shorter Durations as Drought Severity Increases Reduced Minutes in Irrigation Cycles							
	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	4	Full cycle	10	Full cycle	12	Full cycle	15
Level 1- Mild Drought or Streamflow Trigger (6.4 cfs at USGS stream gage # 01105000) is reached	Full cycle	4	80%†	8	50%†	6	0%	0
Level 2- Significant Drought	Full cycle	4	60%†	6	0%	0	0%	0
Level 3- Critical Drought	Full cycle	4	40%†	4	0%	0	0%	0
Level 4- Emergency Drought**	TBD	TBD	0%	0	0%	0	0%	0

+ Irrigation shall not occur between the hours of 9 am and 5 pm, except that hand-watering of hot spots may occur at any time

**Response actions to be determined by the Governor`s Emergency Proclamation.

Walpole County Club is also required to notify MassDEP that irrigation reductions have begun consistent with the SDMP the first-time restrictions are triggered each year within 14 days of the restriction`s effective date. Filing may be in writing on the form “Notification of Golf Course Water Use Restrictions” available on MassDEP`s website.

GENERAL PERMIT CONDITIONS (applicable to all Permittees)

No withdrawal in excess of 100,000 gallons per day over the registered volume (if any) shall be made following the expiration of this permit, unless before that date the Department has received a renewal permit application pursuant to and in compliance with 310 CMR 36.00.

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 water 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 the Department to enter and examine any property over which Permittee has authority, title or control, 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 the Department pursuant to M.G.L. c. 21G, §§ 15-17, M.G.L. c. 150, § 111, or any other enabling authority.
5. **Transfer of Permits** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department 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 a form provided by the Department, a certified statement of the withdrawal. Such report is to be received by the Department by the date specified by the Department. Such report must be submitted as specified on the report form.
6. **Duty to Maintain Records** The Permittee shall be responsible for maintaining withdrawal and all other records as specified by this permit.
7. **Metering** Withdrawal points shall be metered. Meters shall be calibrated annually. Meters shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.
8. **Right to Amend, Suspend or Terminate** The Department 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 the Department. Any person aggrieved by this decision may request an adjudicatory hearing as described herein and in accordance with the procedures described at 310 CMR 36.37. Any such request must be made in writing, by certified mail or hand delivered and received by the Department within twenty-one (21) days of the date of receipt of this permit. The hearing request, including proof of payment of the filing fee, must be mailed to:

Case Administrator
MassDEP Office of Appeals and Dispute Resolution
One Winter Street
Boston, MA 02108

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 the Department.

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 the Department 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 Department's fee transmittal form, 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

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department 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

11/4/2020

Date

Seasonal Limits on Nonessential Outdoor Water Use using 7-Day Low Flow Trigger

Walpole Country Club shall limit nonessential outdoor water use through mandatory restrictions from May 1st through September 30th as outlined in below. To the extent feasible, all summer outdoor water use should take place before 9 am and after 5 pm when evaporation and evapotranspiration rates are lower.

7-Day Low Flow Triggered Restrictions

Walpole Country Club should implement the “Advisory” level water use reductions outlined in its Acres-Reduction Seasonal Demand Management Plan (SDMP):

When USGS stream gage 01105000 –Neponset River at Norwood, MA falls below the 7-day low-flow statistic 6.4 cfs for three (3) consecutive days.

Once implemented, the restrictions shall remain in place until streamflow at the gage meets or exceeds the trigger streamflow for seven (7) consecutive days.

Instructions for Accessing Streamflow Website Information

Streamflow information is available at the USGS National Water Information System (NWIS): Web Interface. The USGS NWIS default shows Massachusetts streamflows in real time, i.e., the most recent, usually quarterly hourly, reading made at each USGS stream gage.

Seasonal Limits on Nonessential Outdoor Water Use are implemented when the mean daily streamflow falls below the designated trigger. 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, permittees must use the mean daily streamflow from the preceding day when tracking streamflows.

Mean daily streamflow gage readings are available at the USGS NWIS Web Interface at <http://waterdata.usgs.gov/ma/nwis/current/?type=flow>.

- Scroll down to 01105000 – Neponset River at Norwood, MA.
- Click on the gage number.
- 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.
- Compare the cubic feet per second (cfs) measurement shown on the table to the cfs shown under 7-Day Low Flow Triggered Restrictions above.

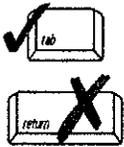


Massachusetts Department of Environmental Protection
 Bureau of Water Resources – Water Management Act Program
Seasonal Demand Management Plan
For Permitted Water Management Golf Courses

walpole CC
 Facility Name
 9P-3-19-307.01
 Permit #
 Walpole
 City or Town

Plan Requirements

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Golf courses permitted under the Water Management Act (WMA) are required to implement a Seasonal Demand Management Plan (SDMP) that, at a minimum, implements Best Management Practices throughout the season and reduces irrigation during dry periods based on the criteria below.

The SDMP irrigation reductions will go into effect from May 1st through September 30th when a Drought Advisory or greater (i.e., Watch, Warning or Emergency) is declared by the Massachusetts Drought Management Task Force¹ (MDMTF), or when the groundwater or streamflow trigger outlined in the WMA permit is reached.

During a Drought Advisory or greater, or when the WMA permit streamflow or groundwater trigger is reached, irrigation shall not occur between the hours of 9 a.m. and 5 p.m. when evapotranspiration rates are highest, except that hand-watering of hot spots may occur at any time as necessary.

During a Drought Advisory or greater, or when the WMA permit streamflow or groundwater trigger is reached, reductions are required in the irrigation of fairways and roughs as outlined in Section C of this document.

During a Drought Emergency, more stringent water use reductions may be required. At a minimum, irrigation of all fairways, roughs, and ornamentals must cease.

Water use reductions are based on the drought level for the MDMTF Drought Region where the golf course is located (see <https://www.mass.gov/service-details/drought-regions>), or by streamflow or groundwater levels measured at a United States Geological Survey (USGS) stream gage or groundwater monitoring well assigned in the WMA permit based on the golf course's location.

Golf course facility managers shall be responsible for tracking drought declarations and streamflow or groundwater levels. They shall also be responsible for recording when water use reductions are implemented. Each golf course permit will include instructions on tracking this information. Within 14 days of implementing water use reductions, golf course facility managers shall notify MassDEP of implementing reductions by submitting the MassDEP Notification of Water Use Reductions Form for Golf Courses (<https://www.mass.gov/service-details/outdoor-water-use-restrictions-for-cities-and-towns>).

If you have any questions, contact Duane LeVangie at 617-292-5706, or Shi Chen at 617-292-5532.

A. Golf Facility Information

Walpole CC
 Facility Name
 Walpole
 City/Town
 Kevin Whalley
 Course Manager
 4016261852
 Phone Number
 09/08/2019
 Date

kwhalley@walpolecc.com
 Email

¹ See Massachusetts Drought Management Task Force at <https://www.mass.gov/orgs/drought-management-task-force>.



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B. Best Management Practices (BMPs)

Check the following BMPs for water conservation and management that you implement.

- Yes No 1. Water use is 100% metered. (Required by WMA permit.)
- Yes No 2. Source meters are calibrated annually. (Required by WMA permit.)
- Yes No 3. New and existing irrigation ponds are lined with impervious material.
- Yes No 4. Implementation of an irrigation system inspection and maintenance program that includes leak detection and repair, sprinkler head maintenance and replacement on a weekly basis.
- Yes No 5. Irrigating in the early morning or evening hours, when evaporation is lowest.
- Yes No 6. Improving irrigation uniformity through evaluation of design criteria such as nozzle size, spacing, scheduling coefficient and pressure selection.
- Yes No 7. Use of soil sensors and/or soil samples to monitor soil moisture.
- Yes No 8. Use of a weather app or an onsite weather station combined with an automated sprinkler system governed by atmospheric conditions.
- Yes No 9. Use of a computerized irrigation management system equipped with flow management to increase irrigation efficiency.
- Yes No 10. Installation of rain shutoff switches on new and existing irrigation systems.
- Yes No 11. Use of environmentally-safe wetting agents to improve water infiltration and minimize evaporation.
- Yes No 12. Use of low water-use turf grass where applicable.
- Yes No 13. Raising turf height during dry weather and drought conditions.
- Yes No 14. Regular aeration of turf to increase the percolation of water into the soil.
- Yes No 15. Reduction of irrigation rates in secondary rough areas and, where possible, elimination of irrigation in non-play areas.
- Yes No 16. Use of mulch materials in planting beds to improve water-holding capacity.
- Yes No 17. Use of low water-use landscaping or native drought-tolerant plants around buildings, parking areas, or other appropriate places.
- Yes No 18. Employee training in water conservation and management.
- Yes No 19. Installation of low-pressure alarms on water pumps and variable-speed drives.
- Yes No 20. Installation of 3rd-party retrofit nozzles.
- Yes No 21. Reuse of wastewater and/or stormwater for irrigation.



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Comment:

C. Seasonal Demand Management Approach for Irrigation Reductions

Demand management protocols frequently require more stringent water use reductions as the water supply availability worsens and trrigers dictate when different responses are needed.

The two tables below reflect two approaches to water use reductions. You may choose to complete the Acres Table or the Time Table to reflect your water use reduction approach, or otherwise describe your specific water use reduction plan (Option 3). The Acres Table reduces water use by limiting the number of irrigated acres for fairways, roughs, and ornamentals. Notice the water use acreage percent reduction per unit area. The Time Table reduces irrigation by limiting the length of irrigation cycles.

Check and complete Option 1, 2 or 3.

Check box if choosing Option 1.

1. ACRES TABLE (Fill in number of acres in all blank cells)

Irrigating Less Acreage as Drought Severity Increases								
Watering allowed up to designated percent								
Massachusetts Drought Level	Irrigated Tees & Greens		Irrigated Fairways		Irrigated Roughs		Irrigated Landscape & Ornamentals	
	Percent	Acres	Percent	Acres	Percent	Acres	Percent	Acres
Normal	100%		100%		100%		100%	
Advisory or WMA Permit Trigger is reached	100%		80%†		50%†		0%	
Watch	100%		60%†		0%		0%	
Warning	100%		40%†		0%		0%	
Emergency **	TBD		0%		0%		0%	

† Irrigation 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

** Mitigation actions to be determined by the Governor's Emergency Proclamation.



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C. Seasonal Demand Management Approach for Irrigation Reductions

Check box if choosing Option 2.

2. TIME TABLE (Fill in time in minutes in all blank cells)

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	4	Full cycle	10	Full Cycle	12	100%	15
Advisory or WMA Permit Trigger is reached	Full cycle	4	80%†	8	50%†	6	0%	
Watch	Full cycle	4	60%†	6	0%	0	0%	
Warning	Full cycle	4	40%†	4	0%	0	0%	
Emergency **	TBD	4	0%	0	0%	0	0%	

† Irrigation 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

** Mitigation actions to be determined by the Governor's Emergency Proclamation.

Along with completing one of the tables, provide any additional description or narrative explanation as warranted on how your golf course plans to implement required irrigation reductions as drought conditions worsen. This could be through such practices as: limited rotation of sprinkler heads, limits on water pressure, limiting irrigation to hot spots, eliminating non-target watering, etc. (Attach additional pages as necessary.)

Check box if choosing Option 3.

3. Alternative Approach

MassDEP offers flexibility for equivalent irrigation reductions. Golf courses that have developed an equivalent plan that quantifies real water use reductions by other means that can relate to the Massachusetts Drought Management Task Force action levels, may submit their plan for MassDEP's review and approval.

(Attach additional pages as necessary.)



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Water usage 2019

	<u>Total</u>	<u>Total Year To Date</u>
March	55,000	55,000
April	945,212	1,000,212
May	2,217,278	3,217,490
June	3,478,214	6,695,704
July	5,756,458	12,452,162
August	4,249,258	16,701,420
September		
October		
November		
Total		16,701,420