Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
Address: 100 Cambridge Street, Suite 900, Boston MA 02114 | **Phone**: 617-292-5500

Maura T. Healey Governor | **Kim Driscoll** Lieutenant Governor | **Rebecca Tepper** Secretary | **Bonnie Heiple** Commissioner

October 23, 2026

Mr. Mark Willet, Director
Water Department
One Milestone Road
Nantucket, MA 02554

RE: Town of Nantucket Water Department Nantucket
PWS ID: 4197000
Water Management Act Permit Amendment:
#9P2-4-23-197.01

Dear Mr. Willet:

Please find attached the following documents:

- Findings of Fact in Support of the Permit Decision, and
- Water Management Act Permit Amendment #9P2-4-23-197.01 adding mitigation credit for the Nantucket Water Department (formerly Wannacomet Water Company), Nantucket, Massachusetts and authorizing withdrawal of up to 2.42 million gallons per day (MGD).

If you have any questions regarding this information, please contact Beth McCann via e-mail at elizabeth.mccann@mass.gov.

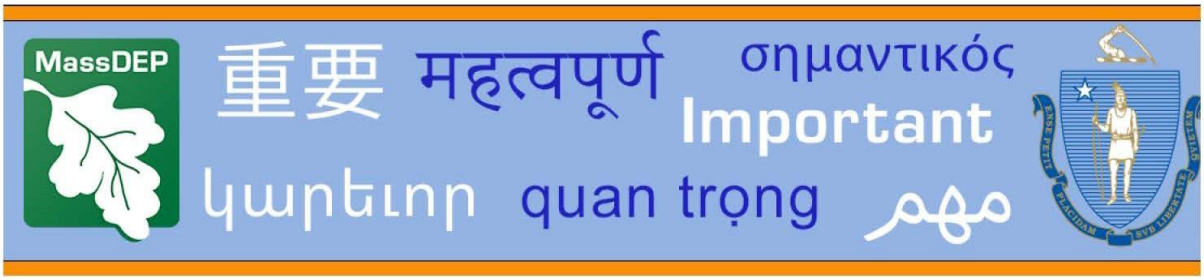
Very truly yours,

Duane LeVangie
Chief, Water Management Program
Bureau of Water Resources

Ecc: J. McLaughlin, MassDEP SERO
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W. Willauer, Nantucket Tipping Point
J. Schnitzer
L. Carroll Fuller

L. Dench
K. Gertner

Sharepoint:\DWPWMA\Permit(New) Applications\Nantucket\Nantucket-4197000- Permit Amendment-9P242319701-2026-10-23.doc



Communication for Non-English-Speaking Parties

This document is important and should be translated immediately.

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Español Spanish

Este documento es importante y debe ser traducido inmediatamente. Si necesita traducir este documento, póngase en contacto con el Director de Justicia Ambiental de MassDEP (*MassDEP's Director of Environmental Justice*) en el número de teléfono que figura más abajo.

Português Portuguese

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本文檔很重要，需要即刻進行翻譯。
如需對本文檔進行翻譯，請透過如下列示電話號碼與 MassDEP 的環境司法總監聯絡。

简体中文 Chinese Simplified

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Ayisyen Kreyòl Haitian Creole

Dokiman sa a enpòtan epi yo ta dwe tradui l imedyatman. Si w bezwen tradui dokiman sa a, tanpri kontakte Direktè. Jistis Anviwònmantal MassDEP a nan nimewo telefòn ki endike anba a.

Việt Vietnamese

Tài liệu này và quan trọng và phải được dịch ngay. Nếu quý vị cần bản dịch của tài liệu này, vui lòng liên hệ với Giám Đốc Phòng Công Lý Môi Trường của MassDEP theo số điện thoại được liệt kê bên dưới.

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះមានសារៈសំខាន់
ហើយគប្បីតួរត្រូវបានបកប្រែភ្លាមៗ។.
ប្រសិនបើអ្នកត្រូវការអោយឯកសារនេះបកប្រែ
សូមទាក់ទងនាយកផ្នែកយុត្តិធម៌បរិស្ថានរបស់
MassDEPតាមរយៈលេខទូរស័ព្ទដែលបានរាយដូចខាងក្រោម។

Kriolu Kabuverdianu Cape Verdean

Es dokumentu sta important i tenki ser tradusidu immediatamenti. Se nho ta presisa ke es dokumentu sta tradisidu, por favor kontata O Diretor di Justisia di Environman di DEP ku es numero di telifoni menxionadu di baixo.

Contact Deneen Simpson 857-406-0738
Massachusetts Department of Environmental Protection
100 Cambridge Street 9th Floor Boston, MA 02114
TTY# MassRelay Service 1-800-439-2370 • https://www.mass.gov/environmental-justice
(Version revised 8.2.2023) 310 CMR 1.03(5)(a)

Русский Russian

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العربية Arabic

هذه الوثيقة مهمة وتجب ترجمتها على الفور.

إذا كنت بحاجة إلى ترجمة هذه الوثيقة، فيرجى الاتصال بمدير العدالة البيئية في MassDEP على رقم الهاتف المذكور أدناه.

한국어 Korean

이 문서는 중대하므로 즉시 번역되어야 합니다.
본 문서 번역이 필요하신 경우, 매사추세츠 환경보호부의 "환경정의" 담당자 분께 문의하십시오. 전화번호는 아래와 같습니다.

հայերեն Armenian

Այս փաստաթուղթը կարևոր է, և պետք է անհապաղ թարգմանել այն:
Եթե Ձեզ անհրաժեշտ է թարգմանել այս փաստաթուղթը, դիմեք Մասաչուսեթսի շրջակա միջավայրի պահպանության նախարարության (MassDEP) Բնապահպանական հարցերով արդարադատության ղեկավարին (Director of Environmental Justice)՝ ստորև նշված հեռախոսահամարով

فارسی Farsi Persian

این نوشتار بسیار مهمی است و باید فوراً ترجمه شود.
اگر نیاز به ترجمه این نوشتار دارید لطفاً با مدیر عدالت محیط زیستی MassDEP در شماره تلفن ذکر شده زیر تماس بگیرید.

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Deutsch German

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Italiano Italian

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हिन्दी Hindi

यह दस्तावेज महत्वपूर्ण है और इसका अनुवाद तुरंत किया जाना चाहिए। यदि आपको इस दस्तावेज का अनुवाद कराने की जरूरत है, तो कृपया नीचे दिए गए टेलीफोन नंबर पर MassDEP के पर्यावरणीय न्याय निदेशक से संपर्क करें।

Contact Deneen Simpson 857-406-0738
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Findings of Fact in Support of
Water Management Permit Amendment #9P2-4-23-197.01
Town of Nantucket Water Department
(formerly Wannacomet Water Company)

The Department of Environmental Protection (MassDEP) makes the following Findings of Fact in support of the attached Water Management Permit #9P2-4-23-197.01 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 June 12, 2026, permit was in response to the Town of Nantucket Water Department's (Nantucket) water withdrawal permit application submitted October 21, 2025, for the purpose of public water supply. The permit application requested a new withdrawal point (North Pasture Well #17) and sought to increase the total authorized withdrawal volume to 2.42 million gallons per day (MGD), the full amount identified by the Massachusetts Water Resources Commission (WRC) on March 9, 2017.

The June 12, 2026, Permit included North Pasture Well #17 and held authorized withdrawals at 2.06 MGD pending Nantucket's completion of the mitigation planning process. This Permit Amendment recognizes the mitigation credit for a conservation restriction on 29.7 acres of priority conservation land at 74 Milestone Road and authorizes withdrawal volumes up to 2.42 MGD.

Nantucket's Withdrawal History

Registered Sources: The Wannacomet Water Company (Wannacomet) registered its 1981-1985 average water withdrawals of 0.61 MGD from 2 sources, Wyers's Valley Tubular Wellfield (4197000-01G), and Wyer's Valley Gravel Packed Well (aka Milestone Road Well #2, 4197000-02G), through the Water Management Act's Registration process. Milestone Road Wells #15 and #16 have been added to the Registration Statement as replacement wells for the Wyers Valley Tubular Wellfield (01G) which is no longer an active source. The Wyers Valley Tubular Wellfield (4197000-01G) has been removed from the permit.

Original Permit, February 1, 1992**:** Wannacomet's original permit authorized additional withdrawals of 0.62 MGD beyond the 0.61 MGD previously registered volume, for a total authorized volume of up to 1.23 MGD through February 28, 2011.

New Permit, November 4, 2004: Wannacomet applied to increase withdrawals and was issued a new permit. The permit increased the permitted withdrawals to 1.07 MGD in addition to the 0.61 MGD previously registered volume, for a total authorized volume of up to 1.68 MGD through February 11, 2011, and added a new well, the Nantucket State Forest Well (4197000-03G). In addition, the permit introduced a performance standard for unaccounted-for-water of 15% UAW and required that Wannacomet ensure that the Nantucket municipal bylaw restricting outdoor water use was fully implemented.

Permit Renewal Application: All WMA permits issued during the first 20-year permitting cycle for the Islands Basin expired on February 28, 2011. Permittees seeking to renew their Water Management permit were required to file a renewal application on or before November 30, 2010. Wannacomet filed a timely renewal application and received a one-year Interim Permit, to February 29, 2012, to continue operations while the permit renewal review was ongoing.

Amended Permit, May 8, 2012: The North Pasture Well (4197000-04G), was added as a new source. The authorized volume and permit conditions remained the same.

Permit Extension Act: The expiration dates for Water Management permits were extended for four years by Chapter 240 of the Acts of 2010 as amended by Chapter 238 of the Acts of 2012, collectively known as the Permit Extension Act.

In addition, in a letter of April 15, 2016, MassDEP informed Wannacomet that MassDEP would need additional time before making a determination on the permit renewal application in order to ensure that all permit renewal applicants on the Islands fully understood the new Water Management Regulations revisions (discussed below), and to give proper consideration to all permit renewal applications within the basin. In the interim, pursuant to M.G.L. c. 30A, § 13, and 310 CMR 36.18(7), Wannacomet's current permit would continue in force and effect until the Department issued a decision on the renewal application.

Renewed Permit and New Permit for Increased Water Withdrawals, May 5, 2021: Wannacomet applied on February 29, 2016, to increase permitted withdrawals. The new permit, issued on May 5, 2021, increased the permitted withdrawals to 1.45 MGD, with the potential to increase that to 1.70 MGD with additional mitigation, either volume would be in addition to the 0.61 MGD previously registered, for a total authorized volume of up to 2.06 MGD, or 2.31 MGD with additional mitigation, through February 28, 2031, and included new conditions on Nonessential Outdoor Water Use Restrictions.

Mass Leads Act: The expiration dates for Water Management permits were extended for two years by Chapter 238 of the Acts of 2024, known as the Mass Leads Act. The expiration date for Nantucket's May 5, 2021, permit is therefore extended to February 28, 2033.

New Permit for Increased Withdrawal and New Withdrawal Point, June 12, 2026: The permit was issued in response to Nantucket's October 21, 2025, application to add North Pasture Well #17 and to increase its permitted withdrawal volume to 2.42 MGD, the full amount authorized by the

WRC on March 9, 2017. The permit included the new well but held withdrawals at 2.06 MGD pending Nantucket's authorization to receive mitigation credit for priority conservation land owned by the Nantucket Land Bank.

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 (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.

Safe Yield of the Islands 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 for the Islands Basin is 104.4 MGD, and total registered and permitted withdrawals remains 8.38 MGD, which reflects the increase in l allocation of 0.11 MGD authorized by the permit issued on June 12. 2026 to Nantucket. The maximum withdrawals that will be authorized in this permit, and all other permits currently under review by MassDEP within the Islands Basin, will be within the safe yield and may be further conditioned as outlined in the regulations.

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

The following Findings of Fact for the special conditions included in the permit generally describe the rationale and background for each special condition. This summary of permit special conditions is not intended to, and should not be construed to, modify 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 total authorized (registered + permitted) annual average withdrawal volume based on the the Massachusetts WRC's March 9, 2017, decision that *"for communities with significant seasonal populations (Cape Cod and Islands), a 10% buffer may be added to the projected average day demand for the final five-year period of the water needs forecast"*. This changed the

buffer built into DCR projections for Nantucket from 5% to 10%. The change to the buffer results in a demand forecast of up to 2.20 MGD + 0.22 (10% buffer) = 2.42 MGD.

Table 1: Nantucket's Water Needs Forecasts (MGD)

Permit Period	DCR Water Needs Forecast
2016-2021	1.90
2021-2026	2.06
2026-2031	2.20 + 10% buffer of 0.22 = 2.42

Special Condition 2, Maximum Authorized Daily Withdrawal Rate reflects the MassDEP-approved Zone II maximum daily pumping rate, expressed in MGD, for each of the permitted wells based on prolonged pumping tests. Withdrawals in excess of these maximum daily rates require prior approval from MassDEP.

Wells #15 (05G) and #16 (06G) are replacement wells for the Wyers Valley Tubular Wellfield which is no longer an active source and has been removed from the permit. North Pasture Well #17 (07G) is a new well being added to the permit.

Special Condition 3, Zone of Contribution Delineations notes MassDEP approval of Nantucket's Zone II delineations for each of the permitted wells. No further action is required as a condition of this permit.

Special Condition 4, Wellhead Protection requires Public Water Supply (PWS) permittees to implement appropriate wellhead protection zoning and non-zoning controls in accordance with Wellhead Protection Regulations at 310 CMR 22.21(2). Nantucket is currently in compliance with the Wellhead Protection requirement and no further action is required as a condition of this permit.

Special Condition 5, Performance Standard for Unaccounted for Water for PWS permittees is 10% for 2 out of every 3 years. Permittees that cannot comply within the timeframe in the permit must meet Functional Equivalence requirements based on the AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36, as outlined in Appendix A.

Table 2: Nantucket's Annual Unaccounted-for-Water

2024	2023	2022	2021	2020
7%	9%	9%	7%	11%

Special Condition 6, Water Conservation Requirements reflects the Water Conservation Standards for the Commonwealth of Massachusetts adopted by the Massachusetts Water Resources Commission in July 2018 (https://www.mass.gov/files/documents/2018/09/11/ma-water-conservation-standards-2018.pdf).

MassDEP notes that Nantucket has a water conservation program that incorporates elements that go beyond the Massachusetts Water Conservation Standards that include:

- Distributing water-saving faucet aerators and shower heads, toilet leak detection kits, and toilet tank displacement kits at no cost to consumers;
- Providing bonuses for installation of ultra low-flush toilets;
- Implementing water restrictions during periods of drought as determined by the Massachusetts Drought Management Taks Force, and implementing an emergency water use ban restricting all non-essential water use during summer 2025 due to a combination of drought conditions and mechanical concerns;
- A targeted indoor/outdoor water use survey for potential leakage and water conservation measures; and
- installing electronic metering and monitoring system using smart water meters equipped with ultrasonic technology. The meters will provide full-time 24-hour live leak monitoring data for the entire system when fully built out across Nantucket. (flex-net radio read system) that flags higher than expected water use and notifies the water department of unusual water consumption. Full system installation across the Town of Nantucket water distribution system is expected to be complete by 2027.

A tiered-rate schedule was implemented in 2026 with base monthly rates based on water meter size and recorded water use volume, promoting water conservation.

Special Condition 7, Limits on Nonessential Outdoor Water Use requires Nantucket to implement nonessential outdoor water use restrictions from May 1 to September 30 when:

- groundwater levels fall to the monthly 25th percentile for 60 consecutive days at the assigned groundwater monitoring well; and
- a Level 1 - Mild Drought, or greater, is declared by the Massachusetts Drought Management Task Force for the Island Drought Region or Nantucket County.

As part of the 2021 permit review, MassDEP reviewed information provided by Wannacomet on the aquifer formation on Nantucket and reviewed Wannacomet's proposed alternative drought management plan (i.e. limiting pumping from the upper aquifer to 1 MGD, taking more water from the lower aquifer and requiring no nonessential outdoor water use restrictions of customers). MassDEP found that the proposal did not meet the underlying goals of nonessential water use restrictions. The summer water use restrictions are intended, in part, to increase awareness of the potential environmental impacts of nonessential water use during dry periods.

As part of the 2026 permit review, MassDEP reviewed information provided by Nantucket on using Monitoring Well NBW 107 as an alternative to Monitoring Well NBW 228 for triggering nonessential outdoor water use restrictions. Well NBW 107 is a shallower well than Well NBW 228 and responds more quickly to precipitation events and dry periods. Nantucket proposed triggering restrictions when groundwater levels in NBW 107 fell to the 10th percentile rather than the 25th percentile trigger at Well NBW 228.

MassDEP found that the proposal did not meet the goal of regional consistency in nonessential water use restriction triggers for the southeastern part of Massachusetts. The restrictions in all permits on the Cape and Islands are triggered when groundwater levels in selected USGS wells are below the monthly 25th percentile for 60 consecutive days (which provides a measure of long-term hydrologic conditions) *and* when the Massachusetts Drought Management Task Force declares a Level 1- Mild Drought or higher for Cape Cod or the Islands (which provides a measure of current hydrologic conditions). The 25th percentile is the low end of the USGS definition of the normal range for groundwater levels (25th to 75th percentile). Modifying the trigger to a shallower monitoring well and to the 10th percentile for any individual system would be inconsistent with MassDEP' regional approach for the Cape/Islands/parts of SE Mass.

Nantucket may choose to implement limits on nonessential outdoor water use that are stricter than those required by the permit. MassDEP encourages all public water suppliers to adopt the Massachusetts Drought Management Task Force's recommendations during all times when a drought is declared by the Secretary of Energy and Environmental Affairs. The recommended nonessential outdoor water use restrictions are:

- **Level 1 (Mild Drought): All nonessential outdoor water use is restricted to one day per week, before 9 a.m. and after 5 p.m.**, except that watering ornamentals and flower gardens with drip irrigation, a hand-held hose or watering cans may be permitted.

- **Level 2 (Significant Drought): All nonessential outdoor water use is banned**, except that watering ornamentals and flower gardens with drip irrigation, a hand-hold hose or watering cans may be permitted.

- **Level 3 (Critical Drought) or Level 4 (Drought Emergency): All nonessential outdoor water use is banned.**

The current drought status across Massachusetts can be found at https://www.mass.gov/info-details/drought-status. The map is updated monthly during drought declarations.

To the extent feasible all summer outdoor water use should take place before 9 a.m. and after 5 p.m. when evaporation and evapotranspiration rates are lower.

Note that if the permittee also holds a Water Management Act registration, then the nonessential outdoor water use restrictions in this permit supersede restrictions in the permittee's registration.

Special Condition 8, Mitigation of Impacts for Withdrawals that Exceed Baseline Withdrawals requires mitigation, where feasible, for withdrawals over a baseline volume. Baseline withdrawal means the volume of water withdrawn during calendar year 2005 plus 5%, or the average annual volume withdrawn from 2003 through 2005 plus 5%, whichever is greater provided that:

a) baseline cannot be less than a permittee's registered volume;
b) baseline cannot be greater than the permittee's authorized volume for 2005; and
c) if during the period from 2003 to 2005, the permittee's withdrawals from the water source were interrupted due to contamination of the source or construction of a treatment plant, the Department will use best available data to establish a baseline volume from the water source.

Baseline Withdrawal and Mitigation Calculation: Nantucket's baseline is 1.50 MGD based on the Wannacomet Water Company's 2005 authorized withdrawal volume. Wannacomet's 2021 permit included 8.5 indirect mitigation credits that allowed withdrawals up to 2.06 MGD. Nantucket's water withdrawals in recent years have approached 2.06 MGD.

Table 3: Nantucket's Annual Water Withdrawals (MGD)

2024	2023	2022	2021	2020
2.01	2.02	1.92	1.85	1.69

The summary below outlines Nantucket's mitigation requirement for withdrawals over the 1.50 MGD baseline. The mitigation calculation assumes that Nantucket's future withdrawals will be discharged to local groundwater at the Nantucket Surfside Wastewater Treatment Plan and at on-site septic systems at the same rate (100%) as current water withdrawals. A "wastewater adjustment" of 85% is calculated for water withdrawn that is returned to the ground as wastewater within the same major basin (in this case, on the island), thus reducing the amount of mitigation needed.

After calculating the adjustment for authorized withdrawals over baseline that will be returned through local groundwater discharge, Nantucket's total mitigation requirement for withdrawals over 1.50 MGD is up to 138,000 gallons per day.

Table 4: Nantucket's Mitigation Volume Calculation

Permitted amount above Baseline = 0.92 MGD • Permitted amount above Baseline: 2.42 – 1.50 = 0.92 MGD
Adjustment for Wastewater Discharge to Local Groundwater = 0.782 MGD • 100% of increased withdrawals are delivered to areas where wastewater is discharged to groundwater after treatment: 0.92 MGD x 1.0 (100%) = 0.92 MGD • 85% of water delivered to areas with local groundwater discharge returns to groundwater: 0.92 MGD x 0.85 (85%) = 0.782 MGD
Mitigation Required after Adjusting for Wastewater Discharge to Local Groundwater = 0.138 MGD • Permitted amount above baseline (0.920 MGD) – adjustment for wastewater discharge to local groundwater (0.782 MGD) = 0.138 MGD or 138,000 gallons per day

Mitigation measures that have been put into place since January 1, 2005, and that are still operable or effective, are eligible components of a Mitigation Plan. Additional mitigation activities

may be phased in over the life of this permit provided that any volumes withdrawn over the 1.50 MGD baseline are mitigated prior to when those volumes are withdrawn.

Direct Mitigation, measures which will improve streamflow as a result of increased groundwater recharge, decreased stormwater runoff to streams, or surface water releases, must be considered first in mitigation planning.

Nantucket's public sewer system infrastructure and discharge point at the Nantucket Surfside Wastewater Treatment Plant are within a single watershed, therefore, infiltration/inflow removal does not provide a net volume benefit to in-basin groundwater recharge.

Nantucket has no eligible stormwater projects completed since 2005, and has no surface water sources from which to make releases to improve streamflow. Therefore, Nantucket has no direct mitigation credit at this time.

Indirect Mitigation, activities that result in environmental improvements that will help to compensate for streamflow impacts, is required when a permittee has insufficient direct mitigation credit. All Nantucket's mitigation credit is for indirect mitigation measures.

The 8.5 indirect mitigation credits included in the 2021 permit provided 85,000 gpd of mitigation credit, leaving 53,000 gpd of additional mitigation required for withdrawals from 2.06 MGD to 2.42 MGD. The additional mitigation requirement is now fulfilled by mitigation credit available to Nantucket via the Nantucket Land Bank for the conservation restriction on 29.7 acres of priority conservation land at 74 Milestone Road.

Indirect Mitigation Credit included in this permit = 0.145 MGD
Each indirect mitigation credit = 10,000 gallons per day of mitigation = 14.5 credits = 0.145 MGD

- Town of Nantucket Board of Health Local Regulation 75.00 = 1 credit
- Nantucket Wetlands Bylaw, Chapter 136 and accompanying regulations = 3.5 credits
- Nantucket Zoning Bylaw Chapter 139-12 B- Public Wellhead Recharge District = 4 credits
- Conservation Restriction over priority conservation land within the Zone 2 = 6 credits

Special Condition 9, Requirement to Report Raw and Finished Water Volumes ensures that the information necessary to evaluate compliance with the conditions included herein is accurately reported.

Other Considerations

Performance Standard for Residential Gallons Per Capita Day Water Use (RGPCD) is typically a requirement of Water Management permits for public water suppliers. However, MassDEP recognizes the difficulties inherent in calculating an accurate rate of residential per capita use in any town where the population varies seasonally, as significantly as it does in Nantucket. Therefore, MassDEP has not included this condition in this permit.

Minimization of Groundwater Withdrawal Impacts in subbasins having August net groundwater depletion of 25% or greater was incorporated into the Water Management Regulations in November 2014. Minimization is not required because there are no delineated subbasins in coastal areas, including on the Islands, and therefore no delineation of net groundwater depletion.

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 Nantucket's withdrawals do not impact any waters that the MA Division of Fisheries and Wildlife has identified as supporting coldwater fish at this time.

Response to Comment
On September 9, 2026, MassDEP issued this permit as a draft for a 30-day public comment period from September 9, 2026, through October 9, 2026. Comments were received on October 9, 2026, from:

W. Willauer of Nantucket Tipping Point
J. Schnitzer
L. Carroll Fuller
L. D'Oench
K. Gentner

Nantucket Tipping Point and supporters note that Nantucket depends on a sole source aquifer with no reasonably available alternative capable of meeting the island's water needs and request that MassDEP consider whether growth could exceed the island's water supply. The commenters request a number of measures to protect Nantucket's water supply.

In response to the comments, MassDEP notes that this permit amendment:

- includes mitigation through long-term conservation protection on Parcel 53-1 at 74 Milestone Road, land within the contributing watershed of Well #17;
- includes Nantucket's new Well #17 which is added to the water supply system to provide needed capacity to meet existing demand and summer peaks;
- includes Nantucket's Wells #15 and #16 which are replacement wells for the now retired Wyers Valley Tubular Wellfield;
- authorizes withdrawals up to the full 2.42 MGD withdrawal rate that the DCR Office of Water Resources Water Needs Forecast projects for Nantucket through 2033. Nantucket's water use in 2025 was 2.05 MGD.

Should the mitigation provided through the Nantucket Land Bank's conservation protection of Parcel 53-1 at 74 Milestone Road be withdrawn, or any other mitigation documented in the permit be discontinued, alternative mitigation would need to be identified by Nantucket and added to the permit through a permit amendment or withdrawals would need to be reduced.

Commenters questioned the use of USGS Groundwater Monitoring Well NBW228 for triggering nonessential outdoor water use restrictions. This issue is addressed above in the Findings of Fact for Special Condition 7, Limits on Nonessential Outdoor Water Use.

Commenters requested that the same regulations and restrictions be applied to all water withdrawals, whether from town water or private wells. MassDEP notes that the Water Management Act (M.G.L. c. 21G) applies to water withdrawals of 100,000 gallons per day or more. Private wells are regulated at the local level.

Commenters requested development limits which are beyond the scope of Water Management permitting.

Review and renewal of this permit, which will include development of updated water needs forecasts by DCR Office of Water Resources, is scheduled for 2032.

In addition, Nantucket's annual Consumer Confidence Report is publicly available at **https://www.nantucket-ma.gov/DocumentCenter/View/47808/Water-Quality-Report-Siasconset-Water-Department-2025-PDF** and provides information on water quality, includes PFAS levels.

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
Address: 100 Cambridge Street, Suite 900, Boston MA 02114 | **Phone**: 617-292-5500

Maura T. Healey Governor | **Kim Driscoll** Lieutenant Governor | **Rebecca Tepper** Secretary | **Bonnie Heiple** Commissioner

WATER WITHDRAWAL PERMIT 9P2-4-23-197.01
Town of Nantucket Water Department (formerly Wannacomet Water Company)

This amendment of Permit 9P2-4-23-197.01 is issued pursuant to the Massachusetts Water Management Act 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: 9P2-4-23-197.01 **RIVER BASIN**: Islands

PERMITTEE: Town of Nantucket Water Department
One Milestone Road
Nantucket, MA 02554

EFFECTIVE DATE: October 23, 2026
EXPIRATION DATE: February 28, 2033
The prior permit expiration date has been extended by 24 months by Chapter 238 of the Acts of 2024, the Mass Leads Act

USE: Public Water Supply
DAYS OF OPERATION: 365

TYPE AND NUMBER OF AUTHORIZED WITHDRAWAL POINTS: Groundwater: 6 Surface Water: 0

Table 1: Withdrawal Point Identification

Source	Source Code
Milestone Road Well #2	4197000-02G
State Forest Well #3	4197000-03G
North Pasture Well #4	4197000-04G
Milestone Road Well #15*	4197000-05G
Milestone Road Well #16*	4197000-06G
North Pasture Well #17	4197000-07G

*Wells #15 and #16 are replacement wells for the Wyers Valley Tubular Wellfield (01G) which is no longer an active source and has been removed from the permit.

SPECIAL CONDITIONS

1. **Authorized Annual Average Withdrawal Volume**
   This permit authorizes the Town of Nantucket Water Department (Nantucket) to withdraw water from the Islands Basin at the rate described in Table 2 below. The permitted withdrawal is in addition to the 0.61 million gallons per day (MGD) previously authorized under WMA Registration #423197.03. The permitted volume is expressed both as an average daily withdrawal (MGD), and as a total annual withdrawal in million gallons per year (MGY).

   The Department of Environmental Protection (MassDEP) will use the raw water withdrawal volume from all authorized withdrawal points to assess compliance with the registered and permitted withdrawal volumes.

Table 2: Authorized Daily Average Withdrawal (MGD) and Total Annual Withdrawal (MGY)

Permit Periods	Daily Average Permit (MGD)	Total Annual Permit (MGY)	Daily Average Registration + Permit (MGD)	Total Annual Registration + Permit (MGY)
10/23/2026 through 2/28/2033	1.59 + 0.22 buffer = 1.81	660.65	0.61 + 1.81 =2.42	883.3

2. **Maximum Authorized Daily Withdrawals from Groundwater Withdrawal Points**
   Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volumes listed in Table 3 without specific advance written approval.

   Table 3: Maximum Daily Withdrawal Volume

Source	PWS Source ID	Maximum Daily Rate
Milestone Road Well #2	4197000-02G	1.01 MGD
Nantucket State Forest Well #13	4197000-03G	1.44 MGD
North Pasture Well #14	4197000-04G	1.44 MGD
Milestone Road Well #15*	4197000-05G	1.09 MGD*
Milestone Road Well #16*	4197000-06G	1.03 MGD*
North Pasture Well #17	4197000-07G	1.49 MGD

   * In addition to their individual Maximum Daily Rates, Milestone Road Wells #15 and #16 have a combined maximum capacity of 2.16 MGD.

3. **Zone of Contribution Delineations**
   MassDEP records show that Nantucket's sources have approved Zone of Contribution (Zone II) delineations, therefore, no further Zone II work is required as a condition of this permit.

4. **Wellhead Protection**
   MassDEP records indicate that the Town of Nantucket Zoning By-Law 139-12 meets the requirements of 310 CMR 22.21(2), therefore, no further wellhead protection work is required as a condition of this permit.

5. Performance Standard for Unaccounted-for-Water (UAW)

Nantucket's Performance Standard for Unaccounted for Water (UAW) is 10% or less of overall water withdrawal for 2 of the most recent 3 years throughout the permit period. If Nantucket does not meet the standard, it shall be in compliance with the functional equivalence requirements (Appendix A).

Nothing in the permit shall prevent a permittee who meets the 10% performance standard from demonstrating compliance with the UAW performance standard by developing and implementing a water loss control program following the AWWA M36 Water Audits and Loss Control Programs. Permittees meeting the Performance Standard for Unaccounted for Water through implementation of a water loss control program based on AWWA M36 annual water audits and guidance shall continue to report UAW annually as required in the Annual Statistical Report for public water suppliers.

6. Water Conservation Requirements

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

Table 4: Minimum Water Conservation Requirements

Leak Detection
1. At a minimum, conduct a full leak detection survey, or comparable remote-instrument monitoring and reporting, every three years. The first full leak detection survey shall be completed no later than 3 years from the date of the last documented leak detection survey. As of 5/22/2026 Nantucket is fulfilling this requirement through its program to install smart meters equipped with ultrasonic technology to provide live leak monitoring and detection. Completion is anticipated in 2027.
2. Conduct leak detection of the entire distribution system within one year whenever the percentage of UAW increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on the ASR for the prior calendar year. Within 60 days of completing the leak detection survey, submit to MassDEP a report detailing the leak detection survey, any leaks uncovered as a result of the survey or otherwise, dates of repair and the estimated water savings as a result of the repairs.
3. Conduct field surveys for leaks and repair programs in accordance with the AWWA Manual 36.
4. Repair reports shall be kept available for inspection by MassDEP. The permittee shall establish a schedule for repairing leaks that is at least as stringent as the following: • Leaks of 3 gallons per minute or more shall be repaired within 3 months of detection. • Leaks of less than 3 gallons per minute at hydrants and appurtenances shall be repaired as soon as possible. • Leaks of less than 3 gallons per minute shall be repaired in a timely manner, but in no event more than 6 months from detection, except that leaks in freeway, arterial or

collector roadways shall be repaired when other roadwork is being performed on the roadway.
- Leaks shall be repaired in accordance with the permittee's priority schedule including leaks up to the property line, curb stop or service meter, as applicable.
- Permittee shall have water use regulations in place that require property owners to expeditiously repair leaks on their property.

The following exceptions may be considered:
- Repair of leakage detected during winter months can be delayed until weather conditions become favorable for conducting repairs;* and
- Leaks in freeway, arterial or collector roadways may be coordinated with other scheduled projects being performed on the roadway.**

*Reference: MWRA regulations 360 CMR 12.09
**Mass Highway or local regulations may regulate the timing of tearing up pavement to repair leaks.

5. Ensure placement of sufficient funds in the annual water budget to conduct water audits and leak detection and repair leaks as necessary.

Metering

1. Calibrate all source, treatment and finished water meters at least annually and report date of calibration on the ASR.
2. One hundred percent (100%) metering of the system is required.
3. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards.
   AWWA References: AWWA Manual M22 – Sizing Water Service Lines and Meters, AWWA Manual M6 – Water Meters, or as amended
4. The permittee shall have an ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by its customers. The metering program shall include regular meter maintenance, including testing, calibration, repair, replacement and checks for tampering and sealing meters where possible, to identify and correct illegal connections.
5. Ensure sufficient funds in the annual budget to calibrate, repair, or replace meters as necessary.

Pricing

1. Establish a water revenue structure that includes the full cost of operating the water supply system. Full cost pricing recovers all costs as applicable, including:
   - pumping and distribution equipment cost, repair and maintenance;
   - water treatment;
   - electricity;
   - capital investment, including planning, design and construction;
   - land purchase and protection;
   - debt service;

- administrative costs including systems management, billing, accounting, customer service, service studies, rate analyses and long-range planning;
- conservation program including audits, leak detection equipment, service and repair, meter replacement program, automated meter reading installation and maintenance, conservation devices, rebate program, public education program;
- regulatory compliance; and
- staff salaries, benefits training and professional development.

AWWA References: AWWA Manual 1- Principals of Water Rates, Fees and Charges, AWWA Manual 29- Fundamentals of Water Utility Financing

2. Evaluate rates at a minimum every three to five years and adjust rates as needed.
3. Evaluate water rate structures, such as an increasing block rate or seasonal rate, that recognizes increased summer water use.
   - In 2026 Nantucket introduced a tiered base monthly rated based on water meter size and recorded water use volume to promote conservation.
4. Permittee shall not use decreasing block rates. Decreasing block rates which charge lower prices as water use increases during the billing period, are prohibited by M.G.L. Chapter 40 Section 39L.
5. Implement quarterly or more frequent meter reading and billing.

Residential and Public Sector Conservation

1. Permittee shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2. Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.
3. Permittee reports that water saving devices (faucet aerators, low flow shower heads and low flow toilets) have been installed in the Airport buildings, all public schools, the town building, the public safety facility and public restrooms.

   Permittee shall continue to ensure that water savings devices are installed in all municipal buildings as they are renovated, and shall ensure water conserving fixtures and landscaping practices are incorporated into the design of new municipal capital projects.

Industrial and Commercial Water Conservation

1. Permittee reports that 85% of all water distributed is for residential use, 13% of all water distributed is for commercial use, and the permittee has no industrial water users.
   Permittee shall ensure water conservation practices, including the installation of WaterSense compliant low flow plumbing fixtures where applicable, and low water use landscaping, in all development proposals.

Lawn and Landscape

1. Permittee has adopted a local bylaw (Chapter 114) that restricts outdoor water use and authorizes enforcement of limits on nonessential outdoor water use based on MassDEP's model bylaw. MassDEP notes that Nantucket's bylaw was adopted in 1999. Since 1999, MassDEP's

guidance on outdoor restrictions has been updated, and the restrictions in this permit are not completely aligned with Nantucket's bylaw. Please submit confirmation that Nantucket's by-law allows implementation of the restrictions in this permit within 3 months of permit issuance, or submit a plan to adopt such authority within one year of permit issuance. MassDEP's "DEP Model Outdoor Water Use Bylaw/Ordinance" was updated in May 2018 to help municipalities and water districts implement seasonal water conservation requirements in WMA permits. The Model Bylaw also includes options for regulating private wells and in-ground irrigation systems. See Model Water Use Restriction Bylaw/Ordinance Update | Mass.gov.
Public Education and Outreach
1. Develop and implement an education plan, including elements in the following list, as applicable: • Billing that helps customers track, compare, and make sense of their use. • Target outreach to customers who may have a leak or who are using significantly more water than similar customers. • Offer indoor low-flow retrofit/rebate programs. • Provide information on "water-wise landscaping" and efficient irrigation and lawn care practices on-line and through model landscapes, workshops, local garden clubs, retailers, and environmental organizations. • Partner with local schools to develop age-appropriate curricula on the local water system and water conservation. • Use social media, online tools, public service announcements, and local events to promote water conservation and alerts. • Develop multilingual materials as needed. • Partner with garden clubs, farmers' markets, environmental organizations, energy utilities, and others on campaigns promoting wise water use. References and additional information available through the USEPA Water Sense Program http://www.www.epa.gov/watersense
2. Upon request of MassDEP, permittee shall report on its public education and outreach efforts, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.

7. Limits on Nonessential Outdoor Water Use

Nantucket shall limit nonessential outdoor water use through mandatory restrictions from May 1 through September 30, as outlined in Table 5 below. Nantucket shall be responsible for tracking groundwater levels and drought advisories and recording and reporting when restrictions are implemented (see Table 6 for *Instructions for Accessing U.S. Geologic Survey Groundwater Level* and *Massachusetts Drought Advisory Website Information)*.

The permittee shall document compliance with the limits on nonessential outdoor water use annually in its Annual Statistical Report (ASR).

Table 5: Limits on Nonessential Outdoor Water Use (May 1 - September 30)

Nonessential Outdoor Water Use
is allowed before 9 a.m. and after 5 p.m. to two (2) days per week whenever both:

a) Groundwater levels at **USGS Monitoring Well 411555070021901(NBW-228)** on Nantucket, MA, is at or below the monthly groundwater triggers listed below for 60 consecutive days. The monthly trigger levels are the monthly 25th percentile depth to water level values for the period of record as determined and published by the USGS.

Monitoring of **NBW 228** shall begin on March 1 of each year to establish 60 days of groundwater levels prior to the May 1 start date for seasonal restrictions.

March: **25.9** feet below land surface
April: **25.5** feet below land surface
May: **25.4** feet below land surface
June: **25.0** feet below land surface
July: **24.9** feet below land surface
Aug.: **25.0** feet below land surface
Sept.: **25.3** feet below land surface

and;

b) A **Level 1-Mild Drought** or more severe is declared by the Secretary of Energy and Environmental Affairs for the Islands Drought Region or for Nantucket County.

Once implemented, the restrictions shall remain in place until either:

- the daily value of the ground water level at the assigned USGS monitoring well has recovered to less than the trigger for 30 consecutive days (until the water table elevation has risen above the trigger level); or
- the Drought assessment has returned to normal for the Islands Drought Region / Nantucket County.

Should the reliability of groundwater measurement at the **USGS Monitoring Well 411555070021901(NBW-228)** in Nantucket, MA be so impaired as to question its accuracy, Nantucket may request MassDEP's review and approval to transfer to another groundwater monitoring well to trigger restrictions.

MassDEP reserves the right to require use of a different groundwater monitoring well.

Table 6: Tracking USGS Groundwater Monitoring and Massachusetts Droughts

Groundwater level information is available at the USGS National Water Information System (NWIS): Web Interface. The USGS NWIS default shows Massachusetts groundwater levels in real time, i.e., the most recent, usually hourly, water level measured and recorded at each USGS monitoring well. Limits on Nonessential Outdoor Water Use are implemented when the daily mean depth to water level exceeds the designated trigger for 60 consecutive days (*i.e.*, when the water table falls below the trigger value). To determine if restrictions must be implemented on May 1, it is necessary to monitor the daily water level during March and April. **Mean daily groundwater level** readings for MA-NBW-228 are available at https://waterdata.usgs.gov/monitoring-location/USGS-411555070021901 or USGS Stream gage and Well Monitoring Data webpage..
Massachusetts Drought Status information is available at: https://www.mass.gov/info-details/drought-status. The color-coded map displays the drought status across Massachusetts. Restrictions are implemented when a Level 1 (Mild Drought) or more severe is declared by the Secretary of Energy and Environmental Affairs.

Nonessential Outdoor Water Use means a use that is not required:

(a) for health or safety reasons, including public facilities used for cooling such as splash pads and swimming pools, and for washing of boats, engines, or marine equipment to prevent negative saltwater impacts or the transfer of invasive aquatic species;
(b) by permit, license, statute or regulation;
(c) for the production of food, including vegetable gardens, and fiber;
(d) for the maintenance of livestock;
(e) to meet the core functions (those functions essential to the commercial operations) of a business, including but not limited to:
    1. plant nurseries as necessary to maintain stock;
    2. golf courses as necessary to maintain greens and tees, and limited fairway watering per 310 CMR 36.07(2)(c)2.a. through c.;
    3. venues used for weddings or similar special events that limit watering to hand-held hose or drip irrigation as necessary to maintain gardens, flowers and ornamental plants;
    4. professional washing of exterior building surfaces, parking lots, driveways and/or sidewalks as necessary to apply surface treatments such as paint, preservatives, stucco, pavement, or cement in the course of construction, reconstruction or renovation work;
(f) for irrigation of public parks before 9:00 a.m. and after 5:00 p.m.,
(g) for irrigation of public and private recreation fields, including those operated by schools, colleges, universities and athletic associations, before 9:00 a.m. and after 5:00 p.m.,

(h) for irrigation of publicly funded shade trees and trees in the public right-of-way; or
(i) to establish a new lawn as necessary to stabilize soil in response to new construction or following the repair or replacement of a Title 5 system.

Public Notice of Water Use Restrictions
The Permittee shall notify its customers of the restrictions and the consequences of failing to adhere to the restrictions, as soon as possible, but within three days of implementing the restrictions.

Notice that restrictions have been put in place shall be filed with MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the form "Notification of Water Use Restrictions" available on MassDEP's website (Outdoor Water Use Restrictions for Cities, Towns, and Golf Courses | Mass.gov.)

Enforcement Authority
This permit condition does not confer enforcement authority to the permittee. If Nantucket does not have appropriate enforcement authority, then beginning as soon as possible, but no later than 24 months after issuance of the permit, Nantucket shall establish enforceable restrictions limiting nonessential outdoor water use.

Nothing in the permit shall prevent the Permittee from implementing water use restrictions that are more stringent than those set forth in this permit.

8. **Mitigation of Impacts for Withdrawals that Exceed Baseline Withdrawals**
Nantucket is required to mitigate up to 0.138 MGD (138,000 gpd) for its permitted withdrawals above its 1.50 MGD baseline withdrawal rate up to the maximum 2.42 MGD authorized by this permit. The mitigation requirement has been met through the following indirect mitigation measures.

Table 7: Indirect Mitigation Credit

Town of Nantucket Board of Health Local Regulation 75.00	1 credit for performance standards that are equal to or exceed the Department of Agricultural Resources requirements	1 credit: 10,000 gpd
Nantucket Wetlands Bylaw, Chapter 136 and accompanying regulations	1 credit for enforceability of the bylaw 1 credit for jurisdiction to resource areas "*whether or not they border surface waters"* 1.5 credit for performance standards tailored to specific resource areas • 25 foot setback in buffer zones • Nantucket driveway permits require on-site stormwater management • Zoning (139-13) requires environmentally sensitive design and can require clustering	3.5 credits: 35,000 gpd

Nantucket Zoning Bylaw Chapter 139-12 B- Public Wellhead Recharge District	1 credit for jurisdiction throughout to Public Well Recharge District 2 credits for regulating all projects that render impervious more than 15% or 2,500 square feet of any lot, whichever is greater (approximately 0.50 acres)(Section (1)(q)) 1 credit for requiring infiltration in accordance with the Massachusetts Stormwater Handbook (Section (3)[a][2](b))	4 credits: 40,000 gpd
Land Protection	Conservation Restriction over 29.7 acres of priority conservation land at 74 Milestone Road, Nantucket See Appendix B	6 credits 60,000 gpd
Total Credits		**14.5 credits: 145,000 gpd**

Nantucket shall notify MassDEP should there be any changes to the status of the mitigation measures.

9. Requirement to Report Raw and Finished Water Volumes

Nantucket shall report annually on its ASR the raw water volumes and finished water volumes for the entire water system. Monthly raw water volumes for individual water withdrawal points shall be reported annually in the ASR.

GENERAL PERMIT CONDITIONS (applicable to all permittees except Cranberry permits)

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 the Department has received a timely permit renewal application pursuant to 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, the Water Management Act regulations at 310 CMR 36.00, and all other 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 at reasonable times any property, facility, operation, equipment or activity involving the withdrawal of water, and to inspect and copy any relevant 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 the Department pursuant to M.G.L. c. 21G, §§ 15-17, M.G.L. c. 111, §§ 160, 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 the submittal of a transfer application in accordance with 310 CMR 36.33 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 as set forth in 310 CMR 4.00.

6. **Duty to Report:** The permittee shall complete and submit annually, on a form provided by the Department, all of the information required by said form including, without limitation, a certified statement of the withdrawal. Such report shall be received by the Department by the date specified on the form each year. For public water supplier permittees, the report form is the MassDEP Drinking Water Program Public Water Supply Annual Statistical Report.
7. **Annual Compliance Fee:** The permittee shall submit any applicable annual compliance fee as established in 310 CMR 4.00.
8. **Duty to Maintain Records:** The permittee shall maintain withdrawal records and other information in sufficient detail to demonstrate compliance with this permit.
9. **Metering:** All withdrawal points included within the permit shall be metered. Meters are to be calibrated annually. Meters shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.
10. **Amendment, Suspension or Termination:** The Department may amend, suspend or terminate the permit in accordance with M.G.L. c. 21G and 310 CMR 36.29.

NOTICE OF APPEAL RIGHTS

Any person aggrieved by this decision may request an adjudicatory hearing by timely filing a Notice of Claim for an Adjudicatory Appeal ("Notice of Claim") in accordance with 310 CMR 36.37 and 310 CMR 1.01 within twenty-one (21) days of receipt of this Permit. The Notice of Claim shall state specifically, clearly, and concisely the facts that are grounds for the appeal, the relief sought, and any additional information required by applicable law or regulation. A copy of this Permit shall be included with the Notice of Claim. No request for an appeal of this permit shall be validly filed unless a copy of the request is sent at the same time 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 Permittee, unless such person notifies the Permittee of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

The Notice of Claim and supporting documentation, including a copy of the fee transmittal form and a copy of the check, must be sent by certified mail or hand delivered to:

Case Administrator
Office of Appeals and Dispute Resolution
Department of Environmental Protection
100 Cambridge Street, Suite 900
Boston, MA 02114

In addition, the Department's fee transmittal form, together with a valid check or money order made payable to the Commonwealth of Massachusetts in the amount of $100 for the appeal filing fee, if required, must be mailed to:

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

The Notice of Claim may be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver. The filing fee is not required if the appellant is a city, town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority. The Department may waive the adjudicatory filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, along with the hearing request, an affidavit setting forth the facts believed to support the claim of undue financial hardship.



_____ October 23, 2026

Duane LeVangie Date
Chief, Water Management Program
Bureau of Water Resources

Appendix A – Functional Equivalence with the 10% Unaccounted for Water (UAW) Performance Standard

Water Loss Control Program: MassDEP will consider PWS permittees who cannot meet the 10% UAW performance standard to be functionally equivalent, and in compliance with their permit, if they have an on-going Water Loss Control Program in place that ensures best practices for controlling water loss.

Developing a Municipal Water Loss Control Program: A permittee who fails to document compliance with the 10% UAW performance standard for 2 out of the 3 years during the permit period, shall develop a Municipal Water Loss Control Program in accordance with the *AWWA M36 Water Audits and Loss Control Program*.

Within 5 full calendar years of failing to meet the standard, the permittee shall:

1. Conduct an annual "top down" water audit, calculate the data validity level/score using AWWA Water Loss Control Committee's Free Water Audit Software, and submit the AWWA WLCC Free Water Audit Software Reporting Worksheet and data validity score annually as an attachment to the Annual Statistical Report (ASR).
    - If a PWS's data validity level/score is less than Level III (51-70), steps recommended through the audit(s) shall be taken to improve the reliability of the data prior to developing a component analysis and long-term program to reduce real and apparent water losses.
        i. Data with a validity score of 50 or less are considered too weak to be used to develop a component analysis or for infrastructure planning and maintenance.
        ii. Developing data with an acceptably strong validity score can be a multi-year process.

2. When the data validity score meets the Level III (51-70) requirement, conduct a component analysis to identify causes of real and apparent water loss and develop a program to control losses based on the results of the component analysis.

3. Submit the Municipal Water Loss Control Program that includes an M36 component analysis and implementation schedule, and identifies implementation funding to the Department.

4. Upon request of the Department, the permittee shall report on its implementation of the water loss control program.

5. Continued implementation of the Program will be required in order for the permittee to be considered functionally equivalent with the 10% UAW performance standard and in compliance with their permit.

A PWS permittee may choose to discontinue the Municipal Water Loss Control Program implementation if UAW, as reported on the ASR and approved by the Department, is below 10%

for four consecutive years, and the water audit data validity scores are at least Level III (51-70) for the same four years.

NOTE FOR SMALL SYSTEMS: For small systems with less than 3,000 service connections or a service connection density of less than 16 connections per mile of pipeline, the Unavoidable Annual Real Loss (UARL) calculation and the Infrastructure Leak Index (ILI) developed as the final steps of the top down water audit may not result in valid performance indicators, and may not be comparable to the UARL and ILI calculations for larger systems.

However, these small systems can benefit from developing reliable data and conducting an annual top down water audit. Small systems can rely on the real losses (gallons per mile of main per day) performance indicator developed in the water audit as a measure of real water loss when developing a water loss control program. The M36 Manual discusses the audit process for small systems, and includes a chapter to guide small systems in understanding the results of their audits and in developing a water loss control program (*Manual of Water Supply Practices – M36, Fourth Edition, Chapter 9: Considerations for Small Systems*, pp. 293-305).

MassDEP Water Loss Control Program: If the permittee is required to develop a Water Loss Control Program in order to be to functionally equivalent with the 10% Unaccounted for Water Performance Standard, and the permittee has not developed a Municipal Water Loss Control Program that includes a component analysis and identifies implementation funding after 5 full calendar years of failing to meet the standard, the permittee will be required to implement the MassDEP UAW Water Loss Control Program measures outlined below:

- Complete an annual water audit and leak detection survey, as described in the AWWA M36 Manual, for the entire system.
  - Within one year, repair 75% (by water volume) of all leaks detected in the survey that are under the control of the public water system;
  - Thereafter, repair leaks as necessary to reduce permittee's UAW to 10% or the minimum level possible.
- Meter inspection and, as appropriate, repair, replace and calibrate water meters:
  - Large Meters (2" or greater) – within one year
  - Medium Meters (1" or greater and less than 2") – within 2 years
  - Small Meters (less than 1") - within three years
  - Thereafter, calibrate and or replace all meters according to type and specification.
- Bill at least quarterly within three years.
- Review the permittee's water pricing structure and ensure revenues are sufficient to pay the full cost of operating the system.

Hardship: A permittee may present an analysis of the cost-effectiveness of implementing certain conservation measures included in the MassDEP Water Loss Control Program and offer

alternative measures. Any analysis must explicitly consider environmental impacts and must produce equal or greater environmental benefits.

A permittee's hardship analysis shall:

- Document economic hardship and present an analysis demonstrating that implementation of specific measures will cause or exacerbate significant economic hardship;
- Present reasons why specific measures are not cost-effective because the cost would exceed the costs of alternative methods of achieving the appropriate standard; and
- Propose specific conservation measures that would result in equal or greater system-wide water savings or equal or greater environmental benefits than the conservation measures included in the MassDEP UAW Water Loss Control Program.

MassDEP will review a permittee's detailed, written analysis to determine whether unique circumstances make specific water loss control measures less cost-effective than alternatives, or infeasible for the permittee.

Appendix B – Mitigation Credit for Protection of Priority Conservation Land

Indirect Mitigation Credit for Land Protected within Zone II Boundaries

Acres	Owner	Assessors Map/Parcel	Date of Restriction	Location	Deed Book & Page
29.7	Nantucket Island Land Bank	53-1	6/25/2013	74 Milestone Rd.	Land Bank Title Book 01138, Page 0009 Conservation Restriction Book 01412, Page 80

Total Indirect Mitigation Credit = 29.7 acres x 0.2 credits = 5.94 Credits
Source Water Protection Credit is capped at 10 credits for 100,000 gpd indirect mitigation credit

Map Showing the Well #17 Site and Parcel 53-1, 29.7 Acres

