



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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

Maura T. Healey  
Governor

Kimberley Driscoll  
Lieutenant Governor

Rebecca L. Tepper  
Secretary

Bonnie Heiple  
Commissioner

July 31, 2023

Aquarion Water Company of Massachusetts  
Attention: John Walsh  
24 Providence Street  
Milbury, MA 01527

RE: Pinehills Water Company -WMA BRP WM01  
Pinehills Water Company  
WMA Permit #: 9P3-4-21-239.03  
Action: Permit Transfer

Dear Mr. Walsh:

In response to your request to transfer Water Management Act (WMA) Permit #9P3-4-21-239.03 from Pinehills Water Company LLC to Aquarion Water Company of Massachusetts, please find the enclosed documents:

- Water Management Act Permit **#9P3-4-21-239.03** and the MassDEP Findings of Fact in support of the permit decision, transferred from Pinehills Water Company to Aquarion Water Company of Massachusetts.

According to the transfer document (BRP WM 01), there will be no change in the use of the authorized water withdrawal volumes or the withdrawal points, in the discharge point of the water after use or in the number of days per year that the water will be withdrawn. The transfer is to take place on August 1, 2023, therefore this transferred permit's effective date is August 1, 2023.

If you have any questions regarding this information, please contact Elizabeth McCann by email at [elizabeth.mccann@mass.gov](mailto:elizabeth.mccann@mass.gov) (preferred) or at (857) 262-3205.

Sincerely,

Duane LeVangie  
Water Management Program Chief  
Bureau of Water Resources

Ecc: Jen Pederson, MWWA  
Julia Blatt and Sarah Bower, Mass Rivers Alliance  
Jim McLaughlin, MassDEP -SERO  
Meg Sheehan, Community Land and Water Coalition  
Mettie Whipple, Eel River Watershed Association

[mass.gov.sharepoint.com/sites/DEP-BWR/DWPArchive/SERO/2023/Plymouth-Aquarion Water Co-9P342123903 -WMA Permit Transfer-2023-8-1](https://mass.gov/sharepoint.com/sites/DEP-BWR/DWPArchive/SERO/2023/Plymouth-Aquarion%20Water%20Co-9P342123903-WMA%20Permit%20Transfer-2023-8-1)  
[mass.gov.sharepoint.com/sites/DEP-BWR/DWPWMA/PWSPermits/Plymouth-Aquarion Water Co-9P342123903 -WMA Permit Transfer-2023-8-1](https://mass.gov/sharepoint.com/sites/DEP-BWR/DWPWMA/PWSPermits/Plymouth-Aquarion%20Water%20Co-9P342123903-WMA%20Permit%20Transfer-2023-8-1)





## Communication for Non-English-Speaking Parties

***This document is important and should be translated immediately.***

If you need this document translated, please contact MassDEP's Director of EJ at the telephone number listed below.

### **Español Spanish**

Este documento es importante y debe ser traducido de inmediato. Si necesita este documento traducido, comuníquese con la Directora de Diversidad de MassDEP al número de teléfono que aparece más abajo.

### **Português Portuguese**

Este é um documento importante e deve ser traduzido imediatamente. Se precisar de uma tradução deste documento, entre em contato com o Diretor de Diversidade da MassDEP nos números de telefone listados abaixo.

### **繁體中文 Chinese Traditional**

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

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### **Ayisyen Kreyòl Haitian Creole**

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

### **Việt Vietnamese**

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

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ឯកសារនេះគឺសំខាន់ហើយត្រូវបានបកប្រែភ្លាមៗ។ ប្រសិនបើអ្នកត្រូវការការបកប្រែឯកសារនេះ សូមទាក់ទងមកនាយកដ្ឋានពិធីកម្មរបស់ MassDEP តាមលេខទូរស័ព្ទខាងក្រោម។

### **Kriolu Kabuverdianu Cape Verdean**

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



**Contact Deneen Simpson 857-406-0738**

**Massachusetts Department of Environmental Protection**

**100 Cambridge Street 9<sup>th</sup> Floor Boston, MA 02114**

TTY# MassRelay Service 1-800-439-2370 • <https://www.mass.gov/environmental-justice>

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



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

### **العربية Arabic**

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

### **한국어 Korean**

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

### **հայերէն Armenian**

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

### **فارسی Farsi Persian**

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

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### **Ελληνική Greek**

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

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

### **Język Polski Polish**

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

### **हिन्दी Hindi**

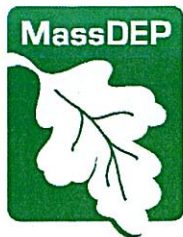
यह दस्तावेज़ महत्वपूर्ण है और इसका तुरंत अनुवाद किया जाना चाहिए. यदि आपको इस दस्तावेज़ का अनुवाद करने की आवश्यकता है, तो कृपया नीचे सूचीबद्ध टेलीफोन नंबरों पर मासडेप्स डाइवर्सिटी के निदेशक से संपर्क करें.

**Contact Deneen Simpson 857-406-0738**

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

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### **Findings of Fact in Support of Water Management Permit # 9P3-4-21-239.03 Transferred from Pinehills Water Company To Aquarion Water Company of Massachusetts**

In response to your Application to Transfer (BRP WM01) WMA Permit #9P3-4-21-239.03, located in the Town of Plymouth in the South Coastal Basin, from Pinehills Water Company (Pinehills) to Aquarion Water Company of Massachusetts (Aquarion) the Department of Environmental Protection hereby issues the attached transferred permit #9P3-4-21-239.03 ("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 Permit and includes herewith its reasons for issuing the Permit and for the conditions of approval imposed, as required by M.G.L. c. 21G, § 11, and 310 CMR 36.00. 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.

#### **Withdrawal Description and History**

Pinehills was issued WMA Permit #9P3-4-21-239.03 on May 20, 2021, to withdraw water from three groundwater wells in the South Coastal Basin. The authorized annual average withdrawal volume was for up to 237.35 million gallons per year (MGY), for an average daily withdrawal of up to 0.65 million gallons per day (MGD). Pinehills' largest withdrawal volume to date was 0.48 MGD in 2020. Pinehills' reported use between 2016 and 2022 ranged from 0.39 MGD to 0.48 MGD.

This permit authorizes withdrawals to accommodate anticipated demand of The Pinehills development through its full buildout. Since its original water-demand projections over 20 years ago, Pinehills' projected commercial sector has changed. Initial plans for the area included significant retail, office and commercial uses; however, actual development trends within The Pinehills featured a larger proportion of apartment complexes, which resulted in higher density residential water uses than originally anticipated. On May 14, 2020, Pinehills received New Source Approval (NSA) for the increased maximum daily withdrawal volume from their wells from the Department's Drinking Water Program following completion of a five-day pumping test and report submittal. Pinehills also received a Water Needs Forecast (WNF) from the Department of Conservation and Recreation (DCR), as described under Special Condition 1 below.

This permit replaced the permit originally issued to Pinehills on June 16, 1999, which authorized annual average withdrawals of up to 167.90 million gallons per year (MGY), for an average daily withdrawal of 0.46 million gallons per day (MGD).

As amended on July 8, 2004, Pinehills' permit included the performance standards of the WMA policy at the time (unaccounted-for-water (UAW) of 15% or less, and residential gallons per capita day water use (RGPCD) of 80 gallons or less).



The July 8, 2004 amendment also included the addition of four wells to be used for irrigation of common areas; no increase in volume was authorized by this amendment. On October 3, 2007, a separate WMA permit #9P4421239.11 was issued to Pinehills LLC and Pinehills Landowners Association for irrigation of common areas. The common area irrigation permit included these four wells. As a result, the permit was again modified on August 7, 2008 to remove the four irrigation wells.

On February 21, 2019, the permit was renewed and incorporated changes to meet requirements of the November 2014 Water Management Regulation Revisions described below (page 3). These changes included the following: updated performance standards pertaining to residential gallons per capita day (RGPCD) and unaccounted for water (UAW); enhanced water conservation standards and outdoor water use restrictions; and a mitigation plan.

### **Permit Expiration Date Amendment**

At issuance on May 20, 2021, the expiration date of this Permit was August 31, 2030. Pursuant to amendments to the Water Management Regulations (310 CMR 36.00), promulgated January 20, 2023, the expiration date for permits in the South Coastal Basin has been extended by 462 days to recognize the Governor's COVID-19 Order No. 42, "Order Resuming State Permitting Deadlines and Continuing to Extend the Validity of Certain State Permits," July 2, 2020. Moving forward, all permits in this basin will have a December 6, 2031, expiration date. The amended expiration date of this Permit reflects this regulatory change.

### **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* (<http://www.mass.gov/eea/docs/eea/water/swmi-framework-nov-2012.pdf>) 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);
- Water needs forecasts for public water suppliers developed by the Department of Conservation and Recreation, Office of Water Resources (DCR), using a methodology reviewed and approved by the Massachusetts WRC;
- Water supply protection measures for public water supplies including Zone II delineations for groundwater sources, and wellhead and surface water protection measures as required by Massachusetts Drinking Water Regulations (310 CMR 22.00);
- Water conservation and performance standards reviewed and approved by the WRC in July 2018 (<https://www.mass.gov/massachusetts-water-conservation-standards>), including without limitation:
  - Performance standard of 65 residential gallons per capita day or less;
  - Performance standard of 10% or less unaccounted-for-water;
  - Seasonal limits on nonessential outdoor water use;
  - A water conservation program that includes leak detection and repair, full metering of the system and proper maintenance of the meters, periodic review of pricing and education and outreach to residents and industrial and commercial water users;
- 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; and
- The special permit conditions in each Water Management Act permit.

#### **Safe Yield in the South Coastal 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 calculation for the South Coastal Basin is 70.1 million gallons per day (MGD), and total registered and permitted withdrawals are 45.48 MGD. The maximum withdrawals that are authorized in this permit, and all other permits currently under review by the Department within the South Coastal Basin, will be within the Safe Yield and conditioned as outlined in the regulations. Withdrawal authorizations are further limited by other factors, such as the impact to local resources, water quality constraints, pumping rate limits placed on individual sources, and the regulatory requirement that permit holders demonstrate a need for the water, which for public water systems is done through Water Needs Forecasts prepared by the Department of Conservation and Recreation.

#### **Findings of Fact for Special Permit Conditions**

The following Findings of Fact for the special conditions included in the Permit generally describe the rationale and background for each special condition in the Permit. This Findings of Fact also explain any changes to special conditions from prior permits, when applicable. 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**

Special Condition 1 authorizes an annual average withdrawal volume of 237.35 million gallons per year (MGY) or 0.65 million gallons per day (MGD) annually from the permitted sources in the South Coastal Basin. This volume



is an increase from the previously permitted volume of 167.90 MGY (0.46 MGD). As described above (see Withdrawal Description and History), this increase was requested by Pinehills to accommodate anticipated demand of The Pinehills development through its full buildout and was based on internal water demand projections.

The Department bases public water supplier (PWS) permit allocations on DCR Office of Water Resources water needs forecasts (WNFs). In an August 29, 2019, letter to Pinehills, DCR provided a WNF that was prepared based on two separate assumptions: 1) the Permittee meets the performance standards of 65 RGPCD and 10% UAW; and 2) the Permittee's RGPCD and UAW continue based on the trends of RGPCD and UAW at the time that DCR prepared the WNF. DCR's WNF is set forth in the table below.

DCR's August 2019 WNF for The Pinehills Development (MGD)

Period	Assuming 65 RGPCD/ 10% UAW	Assuming current trend RGPCD/UAW
2021-2025	0.58	0.60
2025-2030	0.65	0.68
5% Buffer	0.03	0.03

It is the Department's policy to issue permits that result in a total authorized volume that does not exceed the DCR WNF volumes based on the assumption that the PWS is in compliance with the RGPCD and UAW performance standards. As the table shows, the authorized volume of 0.65 MGD set forth in Special Condition 1 does not exceed that forecast.

#### **Special Condition 2, Maximum Daily Withdrawal Volume**

Special Condition 2 specifies the maximum daily volume that Aquarion is authorized to withdraw from its permitted wells. Pinehills had previously reported on its Annual Statistical Reports (ASRs) maximum daily withdrawal volumes in compliance with the combined rate for Wells 1, 2 and 3. This Permit authorizes an increase in the maximum daily volume from 1.41 mgd to 1.63 mgd. In its July 16, 2020 WMA permit application, Pinehills reported that the proposed maximum day pumping rate was calculated based on a peaking factor of 2.5 times the average daily demand, which in turn was based on the last five years of its actual water use data. This rate was approved by the Department as part of the New Source Approval that Pinehills received May 14, 2020, and it was the withdrawal rate during the November 2019 five-day pumping test that Pinehills conducted per NSA requirements.

#### **Special Condition 3, Zone II Delineation**

Wells 1, 2 and 3 have a MassDEP-approved Zone II. In February 2021 Pinehills supplied the Town of Plymouth with the appropriate GIS files for the updated Zone II (based on the November 2019 pumping test analysis) and requested that the revised Zone II be adopted as part of the Town's Aquifer Protection District.

#### **Special Condition 4, Wellhead Protection**

As of April 3, 2021, all Aquarion's wells are within Plymouth's approved Aquifer Protection District. MassDEP records indicate that Plymouth has adopted land use controls and water supply protection measures meeting the requirements of the Wellhead Protection Regulations at 310 CMR 22.21(2) for the Zone II of Aquarion's permitted wells.



**Special Condition 5, Performance Standard for Residential Gallons Per Capita Day (RGPCD) and Special Condition 6, Performance Standard to Unaccounted for Water (UAW)**, are part of the previously referenced *Water Conservation Standards for the Commonwealth of Massachusetts* adopted by the Massachusetts Water Resources Commission in July 2018.

The **Residential Gallons Per Capita Day** performance standard required of all PWS permittees is 65 RGPCD. Permittees that cannot meet the performance standard within the timeframe in the permit must meet Functional Equivalence requirements outlined in Appendix A. Pinehills' record for the previous 15-years shows that RGPCD has never exceeded the RGPCD standard. Its RGPCD values for the last five years are shown in the table below.

RGPCD, 2018-2022				
2018	2019	2020	2021	2022
52	49	55	51	51

The **Unaccounted-for-Water** performance standard required for all PWS permittees is 10% for 2 out of every 3 years. Permittees that cannot comply within the timeframe in the permit must meet the Functional Equivalence requirements based on the *AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36*, as outlined in Appendix B. Pinehills' has met the UAW performance standard. Its UAW values for 2017-2021 are shown in the table below.

UAW, 2017-2021				
2017	2018	2019	2020	2021
1%	2%	2%	3%	3%

#### **Special Condition 7, Water Conservation Requirements**

This condition incorporates the previously referenced *Water Conservation Standards for the Commonwealth of Massachusetts* reviewed and approved by the WRC in July 2018. They are provided in Table 4 of the Permit.

Pinehills completed the Water Conservation Questionnaire for Public Water Suppliers in December 2020 at the Department's request. The questionnaire did not reveal any non-compliance with the requirements but did indicate that the system was due for a full leak detection survey. Pinehills included the results of a full survey by Sarian Co., Inc. with its ASR in 2021. Sarian surveyed the entire distribution system and no leaks were found.

#### **Special Condition 8, Seasonal Limits on Nonessential Outdoor Water Use**

This condition requires Aquarion to implement nonessential outdoor water use restrictions annually from May 1 to September 30. Each year Aquarion can choose to implement restrictions based on the calendar (May 1-September 30) or when either of the following two conditions are in effect: 1) when the Massachusetts Drought Management Task Force declares a drought Level 1 ("Mild", formerly "Advisory") or higher (Level 2-Significant, Level 3-Critical, or Level 4-Emergency) for the Southeast Drought Region; or 2) when groundwater levels at an assigned USGS monitoring well fall below the groundwater trigger for 60 consecutive days.

In the event that Aquarion selects the latter approach, it has been assigned to USGS monitoring well #415453070434901 - MA-PWW 22 Plymouth, MA. The monthly groundwater trigger values are shown in Table 5 of the Permit. Aquarion shall be responsible for tracking groundwater levels and recording when groundwater-triggered restrictions are implemented. See the groundwater- and drought-tracking instructions in Table 5 for guidance. Aquarion shall also be responsible for tracking the Massachusetts Drought Management Task Force drought declarations and recording when drought-triggered restrictions are implemented.



### **Special Condition 9, Requirement to Report Raw and Finished Water Volumes**

This condition ensures that the information necessary to evaluate compliance with the permit conditions is accurately reported.

### **Special Condition 10, Mitigation Plan**

The Permit includes a condition that requires mitigation, if feasible, of 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.

The calculated baseline withdrawal volume for this Permit is 84.315 MGY (0.23 MGD) based on 2005 withdrawal volume plus 5%. Aquarion is required to mitigate 0.42 MGD, which is the difference between maximum permitted withdrawal of 0.65 MGD and the baseline of 0.23 MGD. An 85% adjustment is applied against the mitigation volume for systems with wastewater that is returned to the ground within the same major basin as the withdrawal because the Department assumes 85% of the water withdrawn will be returned to the subsurface. All of Aquarion's wastewater will be treated and discharged locally via an onsite wastewater treatment plant, the Pinehills Private Sewer Treatment Facility (PSTF) at 400 R Beaver Dam Road, Plymouth for which Pinehills LLC holds a MassDEP Groundwater Discharge Permit SE#1-680M. Therefore, Aquarion qualifies for the 85% adjustment and the resulting mitigation volume is 0.063 MGD.

Mitigating the impacts of increasing withdrawals can be through direct or indirect mitigation activities. Direct mitigation activities can be volumetrically quantified and compared to the permittee's mitigation volume, whereas indirect mitigation activities will improve streamflow and/or fluvial habitat but cannot be volumetrically quantified. Pursuant to 310 CMR 36.22(6), permittees shall first evaluate direct mitigation activities, which include, but are not limited to: surface water releases, stormwater recharge, or infiltration and inflow removal from sewer systems.

While the Permit includes an evaluation of the request over baseline specific to this permit for the Aquarion Water Company, at the time the Mitigation Plan was first developed in 2019 the Department and Pinehills LLC also evaluated the baselines and mitigation options available for the OS Golf Club permit (9P4-4-21-239.09) and the Pinehills Landowners Association Common Area Irrigation permit (9P4-4-21-239.11).

Pinehills LLC did not identify any direct mitigation options. All stormwater and wastewater infiltrate locally, and it does not have a reservoir from which to release surface water. Therefore, in consultation with the Department, Pinehills LLC selected indirect mitigation activities to fulfill its mitigation requirements. As outlined in the 2014 Water Management Act Permit Guidance, one indirect mitigation credit translates into 0.01 MGD of mitigation.

Pinehills LLC's indirect mitigation activities are summarized in Appendix C. They include land protection, stormwater standards, low-impact development (LID) practices, private well restrictions, and participation in the Audubon Cooperative Sanctuary Program (ACSP). Appendix C summarizes not only the mitigation credits needed for this permit but also for the OS Golf Club permit and the Pinehills Landowners Association Common Area Irrigation permit. Pinehills LLC identified 43.33 credits through its various mitigation activities for the entire property, and 6.3 of those credits are being applied to this permit.



Special conditions for four of the five mitigation activities (namely land protection, stormwater standards, LID practices, and private well restrictions) are included in WMA Permit 9P4-4-21-239.11, because the permit holder (collectively Pinehills LLC and Pinehills Landowners Association) is responsible for the implementation of those activities. Requirements specific to the fifth mitigation activity, ACSP participation, are included in the OS Golf permit, because OS Golf is responsible for implementation of that particular activity. In addition, appendices D and E contain certification forms pertaining to the mitigation activities. Appendix F contains the Landowner Agreement to Use of Land as Mitigation for Withdrawals authorizing use of 6.3 indirect mitigation credits by Aquarion for withdrawals authorized in this Permit. Pinehills LLC and the Pinehills Landowners Association certified that the Department's mitigation criteria have been and will continue to be met throughout the permit period.

**Minimization of Groundwater Withdrawal Impacts in Stressed Subbasins** requires permittees with permitted groundwater sources in subbasins<sup>1</sup> with net groundwater depletion of 25% or more during August to minimize their withdrawal impacts on those subbasins to the greatest extent feasible.

Because the Aquarion's permitted sources are located where August net depletion has not been established, minimization measures are not required.

**Coldwater Fish Resource Protection** was incorporated into the Water Management Regulations in November 2014. Coldwater Fish Resource (CFR) Protection is not a condition of this permit because the Aquarion withdrawals do not impact any waters that MA Division of Fisheries and Wildlife has identified as supporting coldwater fish (see item 1 below in "Response to Comments on the Draft Permit" for details).

#### **Response to Comments on the Draft Permit issued in 2021**

**Note: This section of the Findings of Fact has not been changed from the Final permit issued in May 2021 to Pinehills. The Department has left this response to comments in the transferred permit to memorialize issues considered with the 2021 permit's issuance.**

The Department received two comment letters on the draft permit prior to issuance in May 2021, one from the Eel River Watershed Association (ERWA) and one from the Community Land and Water Coalition (CLWC). Both letters noted that the Eel River is a CFR and recommended that the permit include CFR protection measures and streamflow monitoring. The Permit is for a single withdrawal source located 1.2 miles from the nearest tributary to the Eel River. The permit does not include a CFR condition for two reasons:

1. The permitted wellfield is located outside of the Eel River Watershed, which was delineated by Horsley Witten in 1998 using available groundwater-level data<sup>2</sup>. This delineation was submitted with Pinehill Water Company's original WMA permit application to illustrate that groundwater in the wellfield's vicinity does not naturally flow to the Eel River or its tributaries. It has since been used in the conditioning of the Pinehills Landowners Association permit (9P4-4-21-239.11), which does include withdrawal sources within the Eel River Watershed.
2. Typically a CFR optimization condition is included in a permit for withdrawals likely to impact a CFR if the permittee has the ability to shift withdrawals away from the CFR to some degree. In the case of this

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<sup>1</sup> 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).

<sup>2</sup> Horsley & Witten, Inc. Source Final Report for Large-Yield Water Supply Well, Pine Hills Community, Plymouth, Massachusetts. Volume 1. November 1998, 64p.



Permit, only one wellfield is permitted; therefore, even if the source was in the Eel River Watershed, the Permittee would not have the ability to shift withdrawals elsewhere.

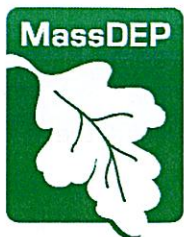
Regarding streamflow monitoring, an Eel River streamflow trigger condition was included in another permit issued to the Pinehills Landowners Association. In the Pinehills Landowners Association Permit #9P4-4-21-239.11 February 2019 renewal, the trigger for nonessential outdoor water-use restrictions was changed to groundwater levels in a local USGS monitoring well. The change was made for consistency with other permits in the South Coastal Basin and with The Pinehills' Development other permits (to avoid confusion in managing water use during a drought). As noted in the Findings of Fact (FOF) of that permit, Pinehills consulted with ERWA in August 2018 and both parties informed DEP that ERWA did not oppose the removal of the special condition. However, at the request of ERWA, Pinehills Landowners Association planned to continue its monitoring efforts. The proposed Eel River Watershed monitoring program would be in place June through October and is detailed in the permit's FOF.

The CLWC letter also recommended that the South Coastal Basin's safe yield be re-evaluated and that the Department provide method details and allow for public input on the methodology. The development of the safe yield methodology was a multi-year, multi-agency process that included many opportunities for public input. As part of the EEA Sustainable Water Management Initiative (SWMI), between 2009 and 2014 staff from EEA, DEP, DCR and the Department of Fish and Game worked together, along with the SWMI Technical Advisory Committee of stakeholders, to develop a methodology for determining the safe yield of Massachusetts' major river basins. Public comments were welcomed in writing and at meetings throughout the process. EEA and its agencies also met individually with several stakeholder groups and other interested entities to present and explain details of the SWMI Framework. There were two formal public comment periods in which comments were submitted on Safe Yield: after a draft of the SWMI Framework was issued in February 2012, public comments were accepted for two months; and after draft revised WMA regulations were released in April 2014, comments were accepted for three months and six public hearings were held. The comments were carefully reviewed and helped inform the final framework and regulations. DEP's 2012 response to comments and 2014 response to comments are available upon request.

The resulting safe yield values and the calculation components for all major basins are provided on DEP's website at <https://www.mass.gov/lists/massdep-water-management-act-laws-regulations-policies-and-guidance#safe-yield>. The South Coastal Basin was one of a few major basins in which a two-part approach was used due to the nature of the flow regime in Southeastern Massachusetts. Appendix B of the SWMI Framework details this approach (<https://www.mass.gov/service-details/sustainable-water-management-initiative>). Note that the Framework's safe yield values were part of draft calculations that were later finalized in the above-referenced 2016 table on DEP's website. Also note that land-use changes do not affect safe yield as implied in the CLWC comment letter. Although water quality does affect water availability, DEP addresses water-quality concerns through processes other than safe yield, such as the Drinking Water Program's New Source Approval process.

Lastly, the CLWC letter included comments on the Town of Plymouth WMA permit and the Town's recent water use. These comments are relevant to the Town of Plymouth's permit and will be taken into consideration in that permit renewal process.





Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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

Maura T. Healey  
Governor

Kimberley Driscoll  
Lieutenant Governor

Rebecca L. Tepper  
Secretary

Bonnie Heiple  
Commissioner

## WATER WITHDRAWAL PERMIT M.G.L. c. 21G

This issuance of Permit #9P3-4-21-239.03 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 beyond the right to withdraw the volume of water for which it is issued.

**PERMIT NUMBER:** 9P3-4-21-239.03

**RIVER BASIN:** South Coastal

**PERMITTEE:** Aquarion Water Company of Massachusetts  
24 Providence Street,  
Milbury, MA 01527

**ISSUANCE DATE:** May 20, 2021

**TRANSFERRED PERMIT EFFECTIVE DATE:**

Transferred from the Pinehills Water Company to the Aquarion Water Company, August 1, 2023

**AMENDED EXPIRATION DATE:** December 6, 2031

NOTE: At issuance on May 20, 2021, the expiration date of this Permit was August 31, 2030. Pursuant to amendments to the Water Management Regulations (310 CMR 36.00), promulgated January 20, 2023, the expiration date for permits in the South Coastal Basin has been extended by 462 days to recognize the Governor's COVID-19 Order No. 42, "Order Resuming State Permitting Deadlines and Continuing to Extend the Validity of Certain State Permits," July 2, 2020. The amended expiration date of this Permit reflects this regulatory change.

**TYPE AND NUMBER OF WITHDRAWAL POINTS:**

Groundwater: 3

Surface Water: 0

**USE:** Public Water Supply

**DAYS OF OPERATION:** 365

**LOCATIONS:**

**Table 1. Withdrawal Point Identification**

Source Well Name	Source Code
Well #1	4239055-01G
Well #2	4239055-02G
Well #3	4239055-03G



## **SPECIAL CONDITIONS**

### **1. Maximum Authorized Annual Average Withdrawal Volume**

This permit authorizes Aquarion Water Company (Aquarion) to withdraw water from the South Coastal Basin at the rate described in Table 2 below. The permitted volume is expressed both as an average daily withdrawal rate (million gallons per day or MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each period of the permit term.

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

**Table 2. Maximum Authorized Annual Average Withdrawal Volume per Permit Period**

Permit Periods	Permit	
	Daily Average (MGD)	Total Annual (MGY)
8/1/2023 to 12/6/2026	0.58*	211.70*
12/7/2026 to 12/6/2031	0.65	237.35

\* With specific advance written approval from MassDEP, Aquarion is authorized to increase the maximum authorized annual withdrawal volume to 0.65 MGD prior to December 7, 2026, provided that Aquarion is meeting the following Special Permit Conditions:

- Residential Gallons per Capita Day,
- Unaccounted-for water or all UAW functional equivalence requirements,
- Seasonal Limits on Nonessential Outdoor Water Use, and
- Water Conservation Requirements.

### **2. Maximum Authorized Daily Withdrawal Volume**

Withdrawals from Aquarion's permitted sources are not to exceed the approved maximum rates listed below without specific advance written approval from the Department.

**Table 3. Maximum Daily Withdrawal Rates**

Sources	Maximum Daily Rate (MGD) and Gallons per Minute (GPM)
Well #1, 4239055-01G Well #2, 4239055-02G Well #3, 4239055-03G	Combined Maximum Daily Rate of 1.63 MGD (1,132 gpm)

### **3. Zone II Delineation**

Department records show that Wells #1, 2 and 3 have an approved Zone II delineation; no further Zone II work is required.

### **4. Wellhead Protection**

Aquarion's wells are within Plymouth's approved Aquifer Protection District. MassDEP records indicate that Plymouth has adopted land use controls and water supply protection measures meeting the requirements of the Wellhead Protection Regulations at 310 CMR 22.21(2) for the Zone II of Aquarion's permitted wells. Therefore Aquarion meets wellhead protection requirements through controls implemented by the Town of Plymouth.



**5. Performance Standard for Residential Gallons per Capita Day Water Use**

Aquarion's performance standard for residential gallons per capita day (RGPCD) is 65 gallons or less. Aquarion shall be in compliance with this performance standard. If, at any time, Aquarion does not meet the RGPCD performance standard, it shall comply with the functional equivalence requirements set forth in Appendix A. Aquarion shall report its RGPCD water use annually in its Annual Statistical Report (ASR).

**6. Performance Standard for Unaccounted for Water**

Aquarion's performance standard for Unaccounted for Water (UAW) is 10% or less of overall water withdrawals for 2 of the most recent 3 years throughout the permit period. If Aquarion does not meet the standard, it shall be in compliance with the functional equivalence requirements based on the AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36, as outlined in Appendix B.

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.

Aquarion shall report its UAW percentage annually in its Annual Statistical Report (ASR). 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.

**7. Water Conservation Requirements**

At a minimum, Aquarion shall implement the water conservation measures listed in Table 4. Compliance with the water conservation requirements shall be reported to the Department upon request, unless otherwise noted below.

**Table 4. Minimum Water Conservation Requirements**

**Leak Detection**

1. At a minimum, conduct a full leak detection survey every three years. The Permittee shall conduct a full survey in 2021. The Permittee shall attach the survey results to its 2021 ASR.
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 the Department a report detailing the 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. Aquarion shall have repair reports available for inspection by the Department. Aquarion 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.
  - The 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.

#### **Metering**

1. Calibrate all source and finished water meters at least annually and report date of calibration on the ASR.
2. Aquarion reports its system is 100% metered. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards as set forth in AWWA Manual M6 – Water Meters.
3. Aquarion 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 to identify and correct illegal connections.
4. Ensure sufficient funds in the annual budget to calibrate, repair, or replace meters as necessary.

#### **Pricing**

1. Aquarion shall maintain a water pricing 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.

Note that Aquarion's pricing is subject to the rate-setting rules and regulations of the Department of Public Utilities (DPU).

2. Evaluate rates at a minimum every three to five years and adjust costs as needed.
3. Aquarion shall not use decreasing block rates. Decreasing block rates which charge lower prices as water use increases during the billing period are not allowed by M.G.L. c. 40, § 39L.

#### **Residential and Public Sector Conservation**

1. Aquarion shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2. Aquarion shall meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.

#### **Industrial and Commercial Water Conservation**

1. Aquarion shall ensure water conservation practices in all development proposals, particularly low flow devices and water-wise landscaping practices.

#### **Lawn and Landscape**

1. Develop and adopt or update as necessary, a water use restriction bylaw, ordinance or regulation that



authorizes enforcement of the seasonal limits on nonessential outdoor water use required by this permit.

MassDEP has developed the "DEP Model Outdoor Water Use Bylaw/Ordinance" to help municipalities and water districts implement seasonal water conservation requirements. The Model Bylaw also includes options for regulating private wells and in-ground irrigation systems. See

<http://www.mass.gov/eea/agencies/massdep/water/regulations/model-water-use-restriction-bylaw-ordinance.html>

#### **Public Education and Outreach**

1. Aquarion shall continue to implement its water conservation and education efforts designed to educate water customers on ways to conserve water. Without limitation, Aquarion's plan may include the following actions:
  - 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.
2. Upon request of the Department, the Aquarion shall report on its public education and outreach effort, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.



Aquarion shall limit nonessential outdoor water through mandatory restrictions from May 1<sup>st</sup> through September 30<sup>th</sup> as outlined in Table 5. 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.

**Permittee must at a minimum implement the following outdoor water use restrictions:**

**Groundwater level Triggered Restrictions**

Nonessential outdoor water use is allowed no more than TWO DAYS per week before **7 a.m. and after 7 p.m.** whenever:

- Groundwater levels at USGS Monitoring Well 415453070434901 (PWW 22) Plymouth, MA decline to or below the groundwater trigger for 60 consecutive days. The monthly trigger levels are listed below and are the period of record monthly 25<sup>th</sup> percentile depth to water level values, as determined and published by the USGS. Restrictions could start on May 1, so monitoring of PWW 22 begins on March 1 of each year.

March	April	May	June	July	Aug	Sept
24.46	24.1	24.06	24	24.44	24.97	25.25

\*As of 3/10/2016

Once implemented, the restrictions shall remain in place until the daily value of the groundwater levels at the assigned USGS monitoring well have recovered to less than the trigger for 30 consecutive days (when the water table elevation has risen above the trigger level);

Or

- A Drought Level 1 (Mild) or higher (Level 2-Significant, Level 3-Critical, or Level 4-Emergency) is declared by the Massachusetts Drought Management Task Force for Southeastern MA.



**Instructions for Accessing U.S. Geologic Survey Groundwater Level and Massachusetts Drought Advisory Website Information**

**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. Seasonal 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 depth to water becomes larger than the trigger value as the water table elevation declines). The daily water level is compared to the trigger for that month. To determine if restrictions must be implemented on May 1 it is necessary to monitor the daily water level in March and April.

**Mean daily groundwater level** readings are available at the USGS NWIS Web Interface at [http://waterdata.usgs.gov/ma/nwis/current/?type=gw&group\\_key=county\\_cd](http://waterdata.usgs.gov/ma/nwis/current/?type=gw&group_key=county_cd)

- Scroll down to 415453070434901 MA-PWW 22, Plymouth, MA.
- Click on the station number.
- On the pull-down menu "Available data for this site" choose "Daily data".
- Under "Available Parameters" click on "Water level, depth LSD (Mean)".
- Under "Output Format" click on "Table" and enter the number of days of records (the default is 7 days; entering 60 will give you 60 days of data) and hit "GO".
- The table provides the "Daily Mean Depth to water level, feet below land surface" for the most recent number of days chosen.
- Compare each day's value to its month's trigger value (25<sup>th</sup> percentile) in your permit. Outdoor water use restrictions must be implemented when the daily depth to water level is at or below the trigger for 60 consecutive days.

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

Aquarion shall document compliance with the Seasonal Limits on Nonessential Outdoor Water Use annually in its Annual Statistical Report (ASR), and indicate whether it anticipates implementing calendar triggered restrictions or streamflow triggered restrictions during the next year.

**Restricted Nonessential Outdoor Water Uses**

**Nonessential outdoor water uses that are subject to mandatory restrictions include:**

- irrigation of lawns via automatic irrigation system or sprinklers;
- filling swimming pools;
- washing of vehicles, except in a commercial car wash or as necessary for operator safety; and
- washing of exterior building surfaces, parking lots, driveways or sidewalks, except as necessary to apply surface treatments such as paint, preservatives, stucco, pavement or cement.

**The following uses may be allowed** when mandatory restrictions are in place:

- irrigation to establish a new lawn and new plantings during the months of May and September;
- irrigation of public parks and recreational fields by means of automatic sprinklers outside the hours of 9 a.m. to 5 p.m.; and
- watering lawns, gardens, flowers and ornamental plants by means of a hand-held hose or drip irrigation system; and
- irrigation of lawns by means of a hand-held hose.



**Water uses NOT subject to mandatory restrictions** are those required:

- for health or safety reasons;
- by regulation;
- for the production of food and fiber;
- for the maintenance of livestock; or
- to meet the core functions of a business (for example, irrigation by golf courses as necessary to maintain tees, greens, and limited fairway watering, or irrigation by plant nurseries as necessary to maintain stock).

#### **Public Notice of Seasonal Limits on Nonessential Outdoor Water Use Restrictions**

Aquarion shall notify its customers of the restrictions and the consequences of failing to adhere to the restrictions.

- For calendar-triggered restrictions, customers shall be notified by April 15<sup>th</sup> each year.
- For groundwater-triggered restrictions, when the water level at the assigned USGS monitoring well falls below a water-level trigger for 60 consecutive days, customers shall be notified as soon as possible, but within three days of implementing the restrictions.

Notice to customers shall include the following:

- A detailed description of the restrictions and penalties for violating the restrictions<sup>3</sup>;
- The need to limit water use, especially nonessential outdoor water use, to ensure a sustainable drinking water supply and to protect natural resources and streamflow for aquatic life; and
- Ways individual homeowners can limit water use, especially nonessential outdoor water use.

Notice that restrictions have been put in place shall be filed each year with MassDEP within 14 days of the restriction's effective date. Filing shall be in writing on the Water Use Restrictions Form at <http://www.mass.gov/eea/agencies/massdep/water/watersheds/municipal-water-use-restrictions.html>

In any one year, notice to customers and MassDEP need not be provided if Permittee has already implemented water use restrictions that conform to the applicable restrictions and those restrictions are still in force.

#### **9. Reporting Requirements**

Aquarion 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.

#### **10. Mitigation Plan**

Aquarion Water Company is required to mitigate 0.063 MGD for its renewed permitted withdrawals over its baseline volume. The requirement will be met with the indirect mitigation activities summarized in Appendix C. Pinehills LLC identified 43.33 credits through its mitigation activities, and 6.3 of those credits are being applied to this permit. Appendices D and E contain certification forms pertaining to the mitigation activities. Appendix F contains the "Land Owner Agreement to Use of Land as Mitigation for Withdrawals in Accordance with a MassDEP Water Management Act (WMA) Permit" authorizing use of 6.3 indirect mitigation credits for land protection to mitigate water withdrawals in this Permit.

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<sup>3</sup> Note that monetary penalties imposed by Aquarion require approval by DPU and must be included in an official rate tariff for the water utility.



Pinehills LLC and the Pinehills Landowners Association certified that the Department's mitigation criteria have been and will continue to be met throughout the permit period.

**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 up to the authorized volume so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The Permittee or the Permittee's agent shall allow personnel or authorized agents or employees of MassDEP to enter and examine any property, inspect and monitor the withdrawal, and 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 MassDEP 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 MassDEP approves such transfer in writing, pursuant to a transfer application on forms provided by MassDEP requesting such approval and received by MassDEP at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The Permittee shall submit annually, on a form provided by MassDEP, a certified statement of the withdrawal. Such report is to be received by MassDEP by the date specified by MassDEP. Such report must be mailed or hand delivered to the address specified on the report form.
7. **Duty to Maintain Records** The Permittee shall be responsible for maintaining withdrawal records as specified by this permit.
8. **Metering** Withdrawal points shall be metered. Meters shall be calibrated annually. Meter shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.
9. **Amendment, Suspension or Termination** The Department may amend, suspend or terminate this permit in accordance with M.G.L. c. 21G or 310 CMR 36.29.

**APPEALS**

Any person aggrieved by this decision may request an adjudicatory hearing on this Permit 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 its 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 a 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.

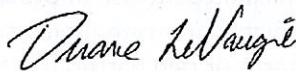
The Notice of Claim and supporting documentation must be sent by certified mail or hand delivered to:

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 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.



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Duane LeVangie  
Water Management Program  
Bureau of Water Resources

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August 1, 2023  
Date



## **Appendix A – Functional Equivalence with the 65 Residential Gallons Per Capita Day Performance Standard**

MassDEP will consider PWS permittees who cannot meet the 65 RGPCD performance standard to be functionally equivalent, and in compliance with their permit, if they have an on-going program in place that ensures “best practices” for controlling residential water use as described below.

If the permittee fails to document compliance with the RGPCD performance standard in its 2020 Annual Statistical Report (ASR), or in any ASR thereafter, then the permittee must file with that ASR a Residential Gallons Per Capita Day Compliance Plan (RGPCD Plan) which shall include, at a minimum:

1. A description of the actions taken during the prior calendar year to meet the performance standard;
2. An analysis of the cause of the failure to meet the performance standard;
3. A description of the actions that will be taken to meet the performance standard which must include, at a minimum, at least one of the following:
  - a) a program that provides water saving devices such as faucet aerators and low flow shower heads at cost;
  - b) a program that provides rebates or other incentives for the purchase of low water use appliances (washing machines, dishwashers, and toilets), or
  - c) the adoption and enforcement of an ordinance, by-law or regulation to require the installation of moisture sensors or similar climate-related control technology on all automatic irrigation systems;and may include, without limitation, the following:
  - d) the use of an increasing block water rate or a seasonal water rate structure as a tool to encourage water conservation;
  - e) a program that provides rebates or other incentives for the installation of moisture sensors or similar climate-related control technology on automatic irrigation systems;
  - f) the adoption and enforcement of an ordinance, by-law or regulation to require that all new construction include water saving devices and low water use appliances;
  - g) the adoption and enforcement of an ordinance, by-law or regulation to require that all new construction minimize lawn area and/or irrigated lawn area, maximize the use of drought resistant landscaping, and maximize the use of top soil with a high water retention rate;
  - h) the implementation of a program to encourage the use of cisterns or rain barrels for outside watering;
  - i) the implementation of monthly or quarterly billing.
4. A schedule for implementation; and
5. An analysis of how the planned actions will address the specific circumstances that resulted in the failure to meet the performance standard.

If the permittee is already implementing one or more of these programs, it must include in its RGPCD plan the continued implementation of such program(s), as well as implementation of at least one additional program. All programs must include a public information component designed to inform customers of the program and to encourage participation in the program.

RGPCD plans may be amended to revise the actions that will be taken to meet the performance standard. Amended RGPCD plans must include the information set forth above.

If a RGPCD plan is required, the permittee must:

1. submit information and supporting documentation sufficient to demonstrate compliance with its RGPCD plan annually at the time it files its ASR; and
2. continue to implement the RGPCD plan until it complies with the performance standard and such compliance is documented in the permittee’s ASR for the calendar year in which the standard is met.



### **Appendix B – Functional Equivalence with the 10% Unaccounted for Water Performance Standard**

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 program in place that ensures “best practices” for controlling water loss. The water loss control program will be based on annual water audits and guidance as described in the AWWA/IWA *Manual of Water Supply Practices – M36, Water Audits and Loss Control Programs* (AWWA M36).

If, as of December 31, 2020, the permittee fails to document compliance with the Unaccounted for Water performance standard (UAW of 10% or less for 2 of the 3 most recent years throughout the permit period), then the permittee shall develop and implement a water loss control program following the AWWA M36 *Water Audits and Loss Control Programs* within 5 full calendar years.

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 with its 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 long-term program to reduce real and apparent water losses.
  - 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.
  - 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, the permittee shall 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. The Permittee shall submit the component analysis and water loss control program with a proposed implementation schedule to the Department.
3. Continued implementation will be a condition of the permit in place of meeting the 10% UAW performance standard.
4. Upon request of the Department, the permittee shall report on its implementation of the water loss control program.

A PWS permittee may choose to discontinue the water loss program implementation if UAW, as reported on the ASR and approved by DEP, 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).



### **Appendix C – Pinehills LLC Indirect Mitigation Credit Summary for The Pinehills**

A mitigation plan is required for two of Pinehills LLC's (Pinehills) permits and the Aquarion Permit, as shown in Table C-1. Mitigating the impacts of increasing withdrawals can be through direct or indirect mitigation activities. Direct mitigation activities can be volumetrically quantified and compared to the permittee's mitigation volume, whereas indirect mitigation activities will improve streamflow and/or fluvial habitat but cannot be volumetrically quantified. Pursuant to 310 CMR 36.22(6), permittees shall first evaluate direct mitigation activities, which include, but are not limited to: surface water releases, stormwater recharge, or infiltration and inflow removal from sewer systems.

Pinehills was unable to identify any direct mitigation options at that time. All stormwater and wastewater infiltrate locally, and it does not have a reservoir from which to release surface water. Therefore, in consultation with the Department, Pinehills LLC selected indirect mitigation activities to fulfill mitigation requirements for the three permits. As outlined in the 2014 Water Management Act Permit Guidance, one indirect mitigation credit translates into 0.01 MGD of mitigation.

**Table C-1**  
**Mitigation required per Water Management Permits for The Pinehills and Aquarion Water Company**

WMA PERMIT NUMBER	PERMITTEE	REQUIRED CREDIT
9P3-4-21-239.03	Aquarion Water Company	6.3
9P4-4-21-239.04	Pinehills Golf Club	0.0
9P4-4-21-239.09	OS Golf Club LLC	1.5
9P4-4-21-239.11	Pinehills Landowners Association	33.0
TOTAL CREDIT REQUIRED:		40.8

Pinehills LLC has received indirect mitigation credit for the following mitigation activities:

- land protection;
- stormwater standards;
- LID practices;
- private well restrictions; and
- participation in the Audubon Cooperative Sanctuary Program.

The basis for the credit value per activity is detailed below, and the credits are summarized in Table C-3.

Land protection: Pinehills is receiving mitigation credit for the preservation of open space along its northern property boundary within the Eel River watershed, referred to in Pinehills' Development Plan as the "western portion of the Northerly Nature Preserve". In January 2005, Pinehills recorded an Open Space Covenant delineating 136 acres to be included in the western portion of the Northerly Nature Preserve, recorded in the Plymouth County Registry of Deeds on January 12, 2005, Book 29833, Page 203.

The Department awarded 15 credits for these efforts, which is the maximum allowable credit for land protection. Specifically, 0.2 credits per acre were awarded for the 46 acres meeting the Department's definition of Priority Conservation Land, and 0.1 credits per acre were awarded for the remaining acreage until the 15-credit limit was reached. Priority Conservation Land is land classified as one or more of the following:

- Core Habitat and Critical Natural Landscapes as mapped by the Natural Heritage and Endangered Species Program (NHESP) and The Nature Conservancy (TNC) as part of BioMap2<sup>4</sup>;
- Certified Vernal Pools and abutting land as designated by the NHESP;
- NHESP Priority Habitats of Rare and Endangered Species;
- Areas of Critical Environmental Concern (ACECs) as designated by the Secretary of Energy and Environmental Affairs; or
- aquatic buffers including buffer zones of Coldwater Fishery Resources (CFRs) and Outstanding Resource Waters (ORWs) as designated by the Massachusetts Department of Fish and Game.

The parcel includes approximately 46 acres of BioMap2 Core Habitat and Critical Natural Landscapes as show in Figure 1 of an April 26, 2017 memo provided by Pinehills to the Department (attached). Table C-2 shows the credit assignments by acreage. Special condition 8 of WMA Permit 9P4-4-21-239.11 details the documentation and certification of the land protection.

**Table C-2. Summary of credit for Pinehills land protection**

<b>Western portion of Northerly Nature Preserve</b>	<b>Map Parcel ID</b>	<b>Acres</b>	<b>Credits per acre</b>	<b>Total Credits</b>
Priority Conservation Land	077B-000-000S-158	46	0.2	9.2
Other Conservation Land	077B-000-000S-158	58	0.1	5.8
	079A-000-001A-017			
	079A-000-001A-018			

Stormwater standards: The Department awarded 7 credits for Pinehills' stormwater standards. Specifically, 2 credits were awarded for the standards applying to the entire Pinehills property, and 5 credits were awarded for the standards' minimum regulated project size of 5,000 square feet. Special conditions 9 and 12 of WMA Permit 9P4-4-21-239.11 detail the documentation and certification of these standards.

LID practices: The Department awarded 2.33 credits for Pinehills' LID practices. Specifically, 1 credit was awarded for the clearly defined and enforceable LID requirements included in Pinehills' governing documents; and 1.33 credits were assigned for performance standards including a large percentage of open space (70%) and direct infiltration of rooftop runoff in the Eel River Watershed. Special conditions 10 and 12 of WMA Permit 9P4-4-21-239.11 detail the documentation and certification of these requirements.

Private well restrictions: The Department awarded 10 credits for Pinehills' private well restrictions. Specifically, the Pinehills governing documents prohibit the installation of private wells (*i.e.*, water-supply wells that are not regulated by WMA). Pinehills has certified that no unregulated wells will be installed during the permit period except for a well previously authorized in 2006. Special conditions 11 and 12 of WMA Permit 9P4-4-21-239.11 detail the documentation and certification of these standards.

Audubon Cooperative Sanctuary Program participation: The Department will award 9 credits for Pinehills obtaining recognition in the Audubon Cooperative Sanctuary Program (ACSP) for Golf. Note that this activity pertains specifically to OS Golf Club LLC (OS Golf). As specified in WMA Permit 9P4-4-21-239.09, OS Golf is required to obtain recognition in the following five ACSP components: Environmental Planning, Water Conservation, Wildlife and Habitat Management, Chemical Use Reduction and Safety, and Water Quality Management.

OS Golf shall obtain the ACSP component recognitions within three years. Once the ACSP recognitions are obtained, OS Golf shall renew the recognitions every three years through the life of the Permit. OS Golf will submit proof of 1) its Audubon International membership payment with its Annual Report Form each year;

<sup>4</sup> <https://www.mass.gov/service-details/massgis-data-layers>



2) recognition in the five components within three years of permit issuance; and 3) the recognitions every three years thereafter.

**Table C-3. Indirect credits per Pinehills mitigation activity**

MITIGATION ACTIVITY	CREDITS
ACSP Participation	9.00
Land Protection	15.00
Stormwater Standards	7.00
LID Practices	2.33
Private Well Restrictions	10.00
TOTAL CREDITS:	43.33

## **MITIGATION PLAN DOCUMENTATION**

### **APPENDIX D: Applicant Certification for Land Protected for Mitigation Credit**

### **APPENDIX E: Applicant Certification for Stormwater Management, LID Practices, and Private Well Mitigation Credit**

### **APPENDIX F: Landowner Agreement to Use of Land as Mitigation for Withdrawals in Accordance with a MassDEP Water Management Act (WMA) Permit**





### **Applicant Certification for Land Protected for Mitigation Credit**

I hereby certify that:

1. I have compiled, evaluated and/or established all pertinent documents, instruments, records and information necessary to provide this certification, including the documents listed as attachments to this certification;
2. I have consulted with legal, technical and other qualified professionals, as necessary for me to make this certification;
3. the following is true with respect to each of the parcels of conservation land or portions thereof for which mitigation credit is requested:
  - a. the entire portion of land for which mitigation credit is requested is subject to a conservation restriction, easement, or covenant;
  - b. the conservation restriction, easement or covenant took effect on or after January 1, 2005, and will remain in effect until the MassDEP WMA Permit expiration date listed at the end of this form;
  - c. the conservation restriction, easement or covenant is recorded in the Registry of Deeds of the appropriate county or filed with the appropriate Registration District of the Land Court;
  - d. at a minimum, the conservation restriction, easement or covenant prohibits the following uses and activities except for the rights reserved by the grantor:
    - i. industrial, commercial or residential use;
    - ii. recreational activities that materially alter the landscape or potentially degrade water quality (e.g., playing fields, golf courses, swimming pools, play structures, downhill ski areas);
    - iii. motorized vehicles of any kind;
    - iv. disposal or discharge of hazardous materials or wastes;
    - v. storage of hazardous materials;
    - vi. storage or use of fertilizers, herbicides or pesticides; and
    - vii. installation or construction of structures and impervious surfaces.
  - e. the conservation restriction, easement or covenant includes a reservation of rights by the grantor notwithstanding the prohibited activities and uses for no more than the following:
    - i. passive recreation such as walking, hiking, horseback riding, non-motorized bicycle riding and cross-country skiing;
    - ii. maintenance mowing;
    - iii. selective cutting or pruning of trees, brush and other vegetation to prevent, control or remove hazards, disease, insect damage, fire damage, storm damage or invasive species;
    - iv. maintenance and repair of existing structures identified in the restriction or easement (e.g., fences, stone walls); and
    - v. installation of paths for passive recreational use.



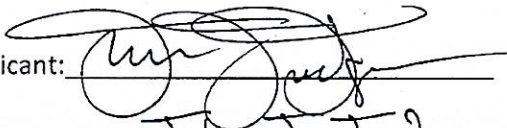
- f. for land not owned by the permit applicant or its affiliate, the owner of the land has agreed to its use for mitigation credit for the MassDEP WMA Permit listed at the end of this form; and
  - g. there are no encumbrances on the property that supersede the conservation restriction, easement or covenant.
- 4. I shall maintain a copy of all records, regardless of form (e.g., both printed and electronic) upon which I rely in making this certification until a final decision on this application has been issued by the Department and, if this application is approved, will do so thereafter in accordance with the permit conditions. Such records shall include without limitation all documents described in paragraph 1, above, and any supporting documents provided to me by, or relied upon by, such qualified professionals as I may consult in certifying as to the information set forth in paragraph 2, above;
- 5. I attest under the pains and penalties of perjury that the information contained in this certification and its attachments is, to the best of my knowledge and belief, true, accurate and complete. I am authorized to make this attestation on behalf of the permit applicant. I am aware that there are significant penalties for submitting false, inaccurate or incomplete information, including, but not limited to, the possibility or fine and imprisonment for knowing violations; and
- 6. I am aware that submitting a false and misleading certification could lead to modification, suspension or revocation of any permit granted pursuant to this certification, as set forth in 310 CMR 36.29 and 36.43.

Attachments:

- A. A table containing the following information for each parcel of land subject to this certification: area of protected land in acres, name of owner(s), municipal assessor's map and lot numbers, source(s) of funding for land purchase, date of land purchase, outstanding lien or mortgage holders, effective date of conservation restriction/easement/covenant, term of conservation restriction/easement/covenant, cost of land purchase or restriction/easement/covenant, and area of Priority Conservation Land<sup>1</sup> in acres.
- B. A copy of the deed to each parcel of land referred to in paragraph 3 above.
- D. A copy of each conservation restriction, easement or covenant referred to in paragraph 3.a. above.
- E. A colored map(s) at an appropriate scale that depicts each parcel of land subject to this certification and any Priority Conservation Land<sup>1</sup> for which 0.2 credits per acre is sought.
- F. If any parcel of land subject to this certification is not owned by the permit applicant or its affiliate, a Land Owner Agreement to Use of Land as Mitigation for Withdrawals in Accordance with a MassDEP Water Management Permit.

<sup>1</sup> Priority Conservation Lands, as defined in the WMA Permit Guidance Document, include NHESP-designated lands (namely BioMap2 Core Habitats and Critical Natural Landscapes, Certified Vernal Pools and abutting land, and Priority Habitats of Rare and Endangered Species), Areas of Critical Environmental Concern, aquatic buffers including buffer zones of DFW Coldwater Fishery Resources (CFRs), and Outstanding Resource Waters (ORWs).

July 13, 2018

Signature of Applicant: 

Date: 9/4/18

Printed Name of Applicant: John J. Judge

MassDEP WMA Permit # \_\_\_\_\_

MassDEP WMA Permit Expiration Date: \_\_\_\_\_





## **Applicant Certification for Stormwater Management, LID Practices, and Private Well Mitigation Credit**

I hereby certify that:

1. I have compiled, evaluated and/or established all pertinent documents, instruments, records and information necessary to provide this certification, including without limitation, the Declaration of Covenants, Conditions and Restrictions ("CCR") for The Pinehills (October 11, 2000, and as subsequently amended), the Master Plan for the Pinehills (July 2000, and as subsequently amended), the Use Restrictions and Rules set forth in Exhibit C of the CCR, and the Stormwater Design Guidelines adopted pursuant to Article V of the CCR (Section 2 of the Information Package for Developers, Builders and Contractors);
2. I have consulted with legal, technical and other qualified professionals, as necessary for me to make this certification;
3. the following is true:
  - a. construction projects greater than 5,000 square feet are subject to the stormwater management standards set forth in the documents described in paragraph 1, above;
  - b. all land subject to the Master Plan for the Pinehills (July 2000, and as subsequently amended) ("the Pinehills property") is subject to the stormwater management standards set forth in the documents described in paragraph 1, above;
  - c. the stormwater runoff infiltration requirements set forth in the documents described in paragraph 1, above, include a minimum runoff volume equal to 0.5 inches over the impervious surface areas; and
  - d. Pinehills LLC and the Pinehills Landowners Association have the authority to enforce the requirements described in paragraphs 3a through 3c.
4. the following is true:
  - a. at least 3000 acres of the Pinehills property is under common ownership and control, and at least 70% of the Pinehills property is common open space or utilized for common facilities;
  - b. all rooftop runoff from structures within the Eel River Watershed, which comprises one-third of the Pinehills is directly infiltrated within the Pinehills property;
  - c. a 200-foot vegetated road buffer is maintained along the entirety of Old Sandwich Road; and
  - d. Pinehills LLC and the Pinehills Landowners Association have the authority to enforce the requirements described in paragraphs 4a through 4c above, in accordance with the terms of the CCR.



October 9, 2018

5. the following is true:
- at the present time there are no wells on the Pinehills property that are not regulated by WMA permits 9P342123903, 9P442123904, 9P442123909, and 9P442123911 with the exception of the well authorized by the 5<sup>th</sup> Amendment to the CCR;
  - no one other than Pinehills LLC, Pine Springs LLC, the Pinehills Landowners Association or the owner of a Golf Course (as defined in the CCR) is authorized to construct or install a well within the Pinehills property; and
  - Pinehills LLC and the Pinehills Landowners Association have the authority to enforce the restriction described in paragraph 5b above, in accordance with the terms of the CCR.
6. I shall maintain a copy of all records, regardless of form (e.g., both printed and electronic) upon which I rely in making this certification until a final decision on this application has been issued by the Department and, if this application is approved, will do so thereafter in accordance with the permit conditions. Such records shall include without limitation all documents described in paragraph 1, above, and any supporting documents provided to me by, or relied upon by, such qualified professionals as I may consult in certifying as to the information set forth in paragraph 2, above;
7. I attest under the pains and penalties of perjury that the information contained in this certification is, to the best of my knowledge and belief, true, accurate and complete. I am authorized to make this attestation on behalf of the permit applicant. I am aware that there are significant penalties for submitting false, inaccurate or incomplete information, including, but not limited to, the possibility of fines and imprisonment for knowing violations; and
8. I am aware that submitting a false and misleading certification could lead to modification, suspension or revocation of any permit granted pursuant to this certification, as set forth in 310 CMR 36.29 and 36.43.

Signature of Applicant:



Date:

10/16/18

Printed Name of Applicant:

John J. Judge

MassDEP WMA Permit # \_\_\_\_\_

MassDEP WMA Permit Expiration Date: \_\_\_\_\_

**Landowner Agreement to Use of Land as Mitigation for Withdrawals  
in Accordance with a MassDEP Water Management Act (WMA) Permit**

I, Pinehills LLC, of 33 Summer Street, Plymouth, MA 02360, hereby certify that:

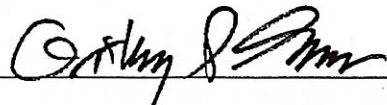
1. I am the owner of a parcel of land which is a portion of the western portion of the Northerly Nature Preserve, in the Town of Plymouth, consisting of approximately 110 acres of land identified on a deed recorded with the Plymouth County Registry of Deeds in Book 15867, Page 20 and Book 22790, Page 346.
2. Said parcel of land is subject to an Open Space Covenant, effective January 12, 2005, by and between Pinehills LLC and the Inhabitants of the Town of Plymouth and recorded with the Plymouth County Registry of Deeds in Book 29833/Page 203.
3. The parcel information in the following table is complete and accurate:

A	Size (acres)	110 acres
B	Location	A portion of the western portion of the Northerly Nature Preserve
C	Assessors Map and Lot number	Map 77B, parcel S-158
D	Owner(s)	Pinehills LLC
E	Date of Open Space Covenant and Restriction	January 12, 2005
F	Covenant Recorded	Plymouth County Registry of Deeds, Book 29833, Page 203
G	Period of conservation restriction	In perpetuity

I hereby agree:

1. To the use of a portion of said parcel equivalent to 6.3 indirect mitigation credits as mitigation for withdrawals made by Aquarion Water Company in accordance with MassDEP WMA Permit #9P3-4-21-239.03, issued pursuant to M.G.L. c. 21G and 310 CMR 36.00.
2. That in the event of any use of or activity on the property in violation of the terms of the Open Space Covenant and Restriction, I will notify the Massachusetts Department of Environmental Protection and Aquarion Water Company in writing within 10 business days of discovery of the violation.

Signature of owner:



Date:

7/26/23

Printed name of owner: Anthony D. Green, President, and Authorized Signatory, Pinehills LLC



