

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey Governor

Kimberley Driscoll Lieutenant Governor Rebecca L. Tepper Secretary

> Bonnie Heiple Commissioner

June 16, 2023

Mr. James Rezendes Rezendes Family Limited Partnership No. 1 P.O. Box 879 Assonet, MA 02702 RE: Assonet – WMA Permit No. 9P4-4-25-146.02 WMA Permit Renewal Final WMA Permit

Dear Mr. Rezendes:

Please find the following attached documents:

- Findings of Fact in Support of the renewal of Permit 9P4-4-25-146.02; and
- Water Management Act Permit for Rezendes Family Limited Partnership No. 1 for cranberry cultivation water withdrawals in the Taunton River Basin.

The signature on this cover letter indicates formal issuance of the attached document. If you have any questions regarding this matter, please contact Linjun Yao via e-mail at <u>linjun.yao@mass.gov</u>.

Sincerely,

Onane hellaugie

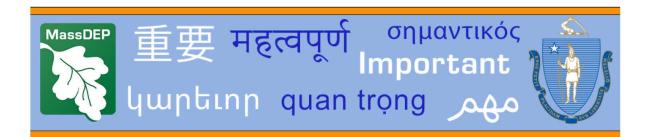
Duane LeVangie Chief, Water Management Program Bureau of Water Resources

ecc: Duane LeVangie, DEP, Boston Branden Costa, DEP, SERO Julia Blatt and Sarah Bower, Mass Rivers Alliance Brian Wick, CCCGA Steve Silva, Taunton River Watershed Alliance

https://massgov.sharepoint.com/:f:/r/sites/DEP-BWR/DWPArchive/SERO/2023/Assonet- Rezendes -Final Permit-9P4425146.02-WMA-2023-6-16

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

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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 Diversity Director 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。

简体中文 Chinese Simplified

本文件非常重要,应立即翻译。如果您需要翻译这份 文件,请用下面列出的电话号码与 MassDEP 的多元 化主任联系。

Ayisyen Kreyòl Haitian Creole

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

Việt Vietnamese

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

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះគឺសំខាន់ហើយគួរត្រូវបានបកប្រែ ភ្លាមៗ។ ប្រសិនបើអ្នកត្រូវការឲ្យគេបកប្រែ ឯកសារនេះ

សូមទាក់ទងមកនាយកផ្នែកពិពិធកម្មរបស់ MassDEP តាមលេខទូរស័ព្ទខាងក្រោម។

Kriolu Kabuverdianu Cape Verdean

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



Contact Glynis L. Bugg, 857-262-0606 Massachusetts Department of Environmental Protection 100 Cambridge Street 9th Floor Boston, MA 02114 TTY# MassRelay Service 1-800-439-2370 • <u>https://www.mass.gov/environmental-justice</u> (Version revised 1.5.2023) 310 CMR 1.03(5)(a)

Русский Russian

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

Arabic العربية

هذه الوثيقة مهمة ويجب ترجمتها على الفور. اذا كنت بحاجة الى 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.

hայերեն 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։

Farsi Persian فارسى

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

Français French

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

Deutsch German

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Sofern Sie eine Übersetzung dieses Dokuments benötigen, wenden Sie sich bitte an den Diversity Director MassDEP unter der unten aufgeführten Telefonnummer.

Ελληνική Greek

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

Italiano Italian

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

Język Polski Polish

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

हिन्दी Hindi

यह दस्तावेज 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 Glynis L. Bugg, 857-262-0606 Massachusetts Department of Environmental Protection 100 Cambridge Street 9th Floor Boston, MA 02114 TTY# MassRelay Service 1-800-439-2370 • <u>https://www.mass.gov/environmental-justice</u> (Version revised 1.5.2023) 310 CMR 1.03(5)(a)



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> Bonnie Heiple Commissioner

Findings of Fact in Support of Final Permit Decision Water Management Act Permit #9P4-4-25-146.02 Rezendes Family Limited Partnership No. 1

The Massachusetts Department of Environmental Protection (the Department) makes the following *Findings of Fact* in support of the attached Water Management Act (WMA) Permit #9P4-4-25-146.02 and includes herewith its reasons for issuing the permit and for conditions of approval imposed, as required by M.G.L. c. 21G, § 11.

The issuance of this permit is in response to a water withdrawal permit renewal application by Rezendes Family Limited Partnership No. 1 (the "applicant") for the purpose of cranberry cultivation at Cornell Bog, Lakeville, Lanz Bog, Freetown, and Lyons Bog in Berkley. The permit was issued on July 1, 1999 and revised on August 12, 2003, for the cultivation of 110.18 acres of cranberry bogs withdrawing water from 4 on-site reservoirs.

The Department adopted revised Water Management Regulations at 310 CMR 36.00 on November 7, 2014 (described in greater detail below). Since that time, the Department has worked closely with the cranberry industry to fully consider all aspects of the permit requirements to ensure thoughtful and implementable permits.

The Permit Extensions

WMA permits issued during the first 20-year permitting cycle for the Taunton River Basin expired on February 28, 2010. All permittees seeking to renew their Water Management permit were required to file a renewal application on or before November 30, 2010. Rezendes Family Limited Partnership No. 1 filed a timely renewal application and received a one-year Interim Permit, to February 28, 2011, to continue operations while the permit renewal review was ongoing. The Department published notice of the permit renewal application in the Environmental Monitor on January 27, 2010. (Note the Department re-noticed the application in the March 21, 2018 Environmental Monitor.) Subsequently, the expiration dates for all 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 January 9, 2015, the Department informed the applicant that the Department would need additional time before deciding on the application in order to ensure that all permit renewal applicants in the Taunton River Basin fully understood the new Water

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep Management Regulations (discussed below), and to give proper consideration to all permit renewal applications within the basin. Pursuant to M.G.L. c. 30A, § 13, and 310 CMR 36.18(7), the applicant's permit continues in force and effect until the Department issues a final decision on the permit renewal application.

The expiration date for all permits going forward in the Taunton Basin was further extended by 462 days due to COVID-19 Order No. 42, "Order Resuming State Permitting Deadlines and Continuing to Extend the Validity of Certain State Permits," issued on July 2, 2020. The expiration date for the permits going forward in the Taunton Basin will be June 5, 2031.

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

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

- Impact of the withdrawal on other sources of water;
- Time of year when the withdrawal will be made;
- Water available within the safe yield of the 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, floodplains; and
- Reasonable economic development and job creation.

Water Management Regulation Revisions

In 2010 the Executive Office of Energy and Environmental Affairs (EEA) convened the Sustainable Water Management Initiative (SWMI) for the purpose of incorporating the best available science into the management of the Commonwealth's water resources. SWMI was a multi-year process that included a wide range of stakeholders and support from the Departments of Environmental Protection, Fish and Game, and Conservation and Recreation. In November 2012 the Massachusetts Sustainable Water Management Initiative Framework Summary (https://www.mass.gov/files/documents/2016/08/wf/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 the Safe Yield in the Taunton River Basin section of this document);
- Water conservation and performance standards reviewed and approved by the WRC in July 2018 (<u>https://www.mass.gov/files/documents/2018/09/11/ma-water-conservation-standards-2018.pdf</u>), including without limitation;
- Environmental protections developed through SWMI, including without limitation;
 - \circ protection for coldwater fish resources;
 - o minimization of withdrawal impacts in areas stressed by groundwater use;
 - mitigation of the impacts of increasing withdrawals.

Safe Yield in the Taunton River Basin

This permit is being issued under the Safe Yield methodology adopted by MassDEP on November 7, 2014, and described in the Regulations at 310 CMR 36.13. As of the date of issuance of this permit, the safe yield for the Taunton River Basin water source is 134.40 million gallons per day (MGD), and total allocated withdrawals are 93.86 MGD. The maximum withdrawals that will be authorized in this permit, and all other permits currently under review by the Department within the Taunton River Basin, will be within the remaining safe yield and may be further conditioned as outlined in the regulations.

<u>Findings of Fact for Permit Conditions in Rezendes Family Limited Partnership No. 1's</u> <u>Water Management Permit</u>

The Department has developed a set of permit conditions at 310 CMR 36.28 that are considered for inclusion in each permit. Not all of the permit conditions apply to every permitted water withdrawal. In addition, some permits have unique permit conditions to address site-specific issues.

Findings of Fact for Rezendes Family Limited Partnership No. 1's Permit Conditions

In the case of Rezendes Family Limited Partnership No. 1:

- permit conditions specific to public water suppliers do not apply;
- there are no vernal pools or wetlands requiring monitoring to assess withdrawal impacts;
- there are no coldwater fish resources (CFR) identified at this time;
- minimization requirements do not apply because applicant's water withdrawals are from surface water sources;
- water conservation measures specific to cranberry production are required; and
- mitigation is required because this permit authorizes water withdrawals for cranberry production greater than the permittee's baseline withdrawal volume for 2005.

The following Findings of Fact are intended to describe the rationale, and to provide some additional detail, for each of the special conditions in the Rezendes Family Limited Partnership No. 1's permit. The summary of permit conditions, as part of MassDEP's findings of fact, is not intended to, and should not be construed as, modifying any of the Permit conditions. In the event of any ambiguity between the summary and the actual permit conditions, the Permit language shall be controlling.

<u>Special Condition 1, Authorized Annual Withdrawal Volume</u>, sets an annual average withdrawal volume of 0.518 million gallons per day (MGD) for a total of 189.07 million gallons per year (MGY) over 365 days for the cultivation of 110.18 acres of permitted cranberry bog located in Lakeville, Freetown and Berkley within the Taunton River Basin. The permitted average daily volume is based on the data provided in the permit application, as well as the data contained in the 1988 *Water Conservation and Utilization Study Southeastern Massachusetts*, by the U.S. Department of Agriculture, NRCS. A volume of 5.27 acre-feet of water per year for each acre of bog was used to calculate the permitted volume. The 5.27 acre-feet per year volume was chosen by comparing the bog's construction characteristics to similar bog construction presented in the 1988 Study (Table A-5R in the Study). The Water Management permit threshold of 0.10 MGD is based on the highest three consecutive months of water withdrawals.

The historical formula for calculating water needs for cranberry cultivation assumes an average water requirement of 10 acre-feet of water per year for each acre of "old-style" bog, or 3.26 MGY for each acre of bog. This formula and the thresholds established for WMA registration and permitting for cranberry bogs, were developed based on studies done by both the U.S. Department of Agriculture, Soil Conservation Service (now NRCS) and representatives of the Massachusetts cranberry industry. This average volume requirement was greatly reduced by instituting the water conservation Best Management Practices (BMPs) outlined in Special Condition 3.

<u>Special Condition 2, Authorized Cranberry Acreage</u>, lists the applicant's permitted acreage in the basin. Based on the Renewal Request Form from 2003 and confirmed with the permittee, Rezendes constructed and reported 29.21 acres at the Cornel Bog. Rezendes has reported a total combined harvested acreage of 82.72 as opposed to the total authorized acreage of 100.18 acres since 2010. The renewed permit reflects the actual acreage (29.21) at the Cornel Bog, and reduces the permitted acreage at the Lyons Bog by the corresponding amount of 4.78 acres to insure that no more than 110.18 acres is authorized.

<u>Special Condition 3, Water Conservation Requirements</u>, reflects the need to continue implementing the Conservation Plan developed and approved by the USDA Natural Resources Conservation Service (NRCS). Within 5 years of the issuance of this permit, the Permittee shall review its Conservation Plan with a certified conservation planner and update as needed. Thereafter, the Plan shall be reviewed every 5 years or if major changes are made to the farm or its operating practices, such as those defined under 310 CMR 10.04 "Normal Improvements of Land in Agricultural Use", then those plans shall be updated as soon as possible. The Department will be confirming your efforts to review and update your plan as necessary in the future, based on the timelines required or the changes made in the future.

The Conservation Plan shall assure that the permittee has implemented where applicable water conservation BMPs for all of its bogs, including:

- 1. annual flume and dike repair maintenance;
- 2. use of low-volume sprinkler heads;
- 3. on-site water supply/tailwater recovery system;
- 4. return of all unconsumed water back to the water supply/tailwater recovery system;

- 5. laser leveling of bog sections; and
- 6. sequential flooding of bog.

Special Condition 4, Mitigation of Withdrawals over 2003-2005 Baseline: Cranberry Chart Book is required because Rezendes Family Limited Partnership No. 1 increased over the baseline withdrawal and has the potential to further increase over that baseline withdrawal. The Permittee reported cultivating 76.72 acres of cranberry bog during the baseline period (2003-2005). In 2003 the permit authorized up to 110.18 acres of bog and the Permittee has reported cultivating 82.72 acres of cranberry bog since 2010. Mitigation for cranberry permittees that have or will increase the acreage in production above the volumes being irrigated in 2005 is to obtain and operate the bogs utilizing the recommendations and Best Management Practices outlined in the most recent Cranberry Chart Book to the extent feasible.

The Permittee is required to implement the recommendations of the most recent Cranberry Chart Book to reduce the impacts of the permitted water withdrawals and include cultivation best management practices that provide water quality benefits by:

- 1. optimizing the use of fertilizer per The Best Management Practice Guide and UMass Cranberry Chart Book recommendations for nutrient management;
- 2. retaining excess nutrients through an on-site water supply/tailwater recovery system; and reducing, whenever possible, nutrient and pesticide applications.

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 applicant's withdrawals in subbasins #24052 and #24130 do not impact any water that MA Division of Fisheries and Wildlife has identified as supporting coldwater fish at this time.

Minimization of Groundwater Withdrawal Impacts in Stressed Subbasins requires permittees with permitted groundwater sources in subbasins¹ with net groundwater depletion of 25% or more during August to minimize their withdrawal impacts on those subbasins to the greatest extent feasible. Minimization of Groundwater Withdrawal Impacts is not a condition of this permit at the present time since the permittee is withdrawing from surface water sources only.

General Conditions applicable to all WMA permits are included.

The Department utilized the following information during the review of the application: the Massachusetts Geographic Information System (GIS). The data layers used included: 1997 through 2017 aerial photography, water supply layers, wetlands-related layers, natural habitat layers, DFW Coldwater Fisheries layer, flood zones and USGS maps.

Please note annual reporting requirements, your renewal date, and any conditions that may apply. The regulations governing this statement can be found at 310 CMR 36.00-36.44. DEP's Timely

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

Action and Fee Provision, 310 CMR 4.00, authorizes an annual compliance fee for Water Management Act registrations and permits. Please also note that this permit is for cranberry cultivation only; any change in use is subject to Department review and may require a permit application.

Department of Environmental Protection

100 Cambridge Street 9th Floor Boston, MA 02114 • 617-292-5500

Maura T. Healey Governor

Kimberley Driscoll Lieutenant Governor Rebecca L. Tepper Secretary

> Bonnie Heiple Commissioner

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

This permit 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: 9P4-4-25-146.02

WATERSHED:

Taunton

- PERMITTEE: Rezendes Family Limited Partnership No. 1 P.O. Box 879 Assonet, Massachusetts 02702
- EFFECTIVE DATE: June 16, 2023
- EXPIRATION DATE: June 5, 2031
- USE: Cranberry Cultivation

DAYS OF OPERATION: 365

NUMBER OF WITHDRAWAL POINTS: 4 Surface Water

WITHDRAWAL POINT LOCATIONS:

ID	Source	Latitude	Longitude	Location
1	Cornell Bog	41° 49' 43"	71° 01' 04"	Pierce Avenue, Lakeville
2	Lanz Bog	41° 46' 53"	71° 01' 47"	Off Slab Bridge Rd, Freetown
3	Lyons Bog, Reservoir #1	41° 49' 06"	71° 02' 18"	Myricks Street, Berkley
4	Lyons Bog, Reservoir #2	41° 49' 23"	71° 02' 21"	Myricks Street, Berkley

SPECIAL CONDITIONS

1. <u>Authorized Annual Withdrawal Volume</u>

This permit authorizes the withdrawal of water from sources in the Taunton River Basin. The permitted volume is expressed in millions of gallons, both as an average daily volume that may be withdrawn, and as a total volume that may be withdrawn annually from this source for the permit term. The permitted withdrawal volume is based on 5.27 acre-ft of water per acre of bog per year.

Withdrawals are authorized as follows:

	Authorized P	ermit Volume	Total Volumes		
Permit Period	Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)	
6/16/2023 to 6/5/2031	0.518	189.07	0.518	189.07	

2. <u>Authorized Cranberry Acreage</u>

This permit authorizes Rezendes Family Limited Partnership No. 1 to withdraw water from the permitted withdrawal points listed below in Lakeville, Freetown and Berkley, for the cultivation of 110.18 acres of cranberry bog.

Bog Name	Address	Municipality	Permitted Acreage	Registered Acreage	Total WMA Authorized Acreage
Cornell Bog	Pierce Ave.	Lakeville	29.21	0	29.21
Lanz Bog	Slab Bridge Rd.	Freetown	37.25	0	37.25
Lyons Bog	Myricks St.	Berkley	43.72	0	43.72
			110.18	0	110.18

3. <u>Water Conservation Requirements</u>

Rezendes Family Limited Partnership No. 1 previously had Conservation Plans approved by certified USDA Natural Resources Conservation Service conservation planners. Rezendes Family Limited Partnership No. 1 shall review the Conservation Plans with a certified USDA Natural Resources Conservation Service conservation planner within 5 years of issuance of this permit. The Permittee shall review its Conservation Plans with a certified conservation planner, and update as needed, every 5 years thereafter, or if major changes are made to the farm or its operating practices, such as those defined under 310 CMR 10.04 "Normal Improvements of Land in Agricultural Use", then those plans shall be updated as soon as possible. The Department will be confirming your efforts to review and update your

plans as necessary in the future, based on the timelines outlined above or the major changes made to the farm.

Rezendes Family Limited Partnership No. 1 shall adhere to the following Water Conservation Best Management Practices (BMP's) as applicable. The BMPs will be defined as follows:

The BMPs are broken up into two categories: Structural BMPs and Operational BMPs. The BMPs are further defined as:

Structural BMPs

- Land Smoothing: bogs laser leveled (or equivalent) to 6 inches.
- Implementation of tail water recovery system or return of water to source of origin.
- Sprinkler Irrigation systems (in lieu of flood irrigation) including construction or replacement of main water lines, and water control structures (dike and flumes) in accordance with the recommendations contained in the "Irrigation Management" Best Management Practice Guidelines, published by the University of Massachusetts, Cranberry Experiment Station.
- Construction of interior dikes to divide bog parcels into sections that will conserve water.

Operational BMPs

Operational BMPs shall include the following BMPs published by the University of Massachusetts Cranberry Experiment Station.

- "Irrigation Management": Covering the use of tensiometers, water level float and irrigation system performance.
- "Frost Management": Covering the need for monitoring weather conditions, tolerance and irrigation system performance.
- "Flood Management": Covering the use of sequential harvesting, and winter flooding.
- "Water Resource Protection and Enhancement": Covering the definition of use of tailwater and laser leveling.
- Best Management Practices for Cranberry Growers with Anadromous Fish, Published by the Cape Cod Cranberry Growers' Association, 1998.

The NRCS Conservation Farm plan shall document any exceptions from these BMPs.

4. Mitigation of Withdrawals over 2003-2005 Baseline: Chart Book

The Permittee is required to mitigate the impacts of these permitted withdrawals because they are an increase over the Permittee's 2005 baseline withdrawal of 76.72 acres. Since the Permittee has more than 76.72 acres currently in production, with the ability to further increase this acreage, mitigation is required by this permit.

The Permittee shall review and implement, as applicable, guidance from the most recent update of the Cranberry Chart Book, published and distributed by the University of Massachusetts Cranberry Experiment Station. The Chart Book is provided free of charge and is freely available on the UMass

Cranberry Experiment Station's website. The Permittee shall register its contact information with the Experiment Station to receive the annual Chart Book editions.

Specific provisions of the Permittee's implementation of the Chart Book that mitigate the impacts of the permitted water withdrawals include cultivation best management practices that provide water quality benefits by:

- 1. optimizing the use of fertilizer per The Best Management Practice Guide and UMass Cranberry Chart Book recommendations for nutrient management;
- 2. retaining excess nutrients through an on-site water supply/tailwater recovery system; and
- 3. reducing, whenever possible, nutrient and pesticide applications.

Permittees will be required to attest to adherence to applicable Cranberry Chart Book guidance upon the Department's request and at the time of the next permit renewal.

<u>GENERAL CONDITIONS</u> (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. <u>Duty to Comply</u> The Permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
- 2. **Operation and Maintenance** The Permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw water so as not to impair the purposes and interests of the Act.
- 3. <u>Entry and Inspections</u> The Permittee or the Permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property over which Permittee has authority, title or control, for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
- 4. <u>Water Emergency</u> Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by the Department pursuant to M.G.L. c. 21G, §§ 15-17, M.G.L. c. 150, § 111, or any other enabling authority.
- 5. <u>**Transfer of Permits</u>** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.33.</u>

- 6. <u>Duty to Report</u> The Permittee shall submit annually, on a form provided by the Department, a certified statement of the withdrawal. Such report is to be received by the Department by the date specified by the Department. Such report must be submitted as specified on the report form.
- 7. <u>Duty to Maintain Records</u> The Permittee shall be responsible for maintaining withdrawal and all other records as specified by this permit.
- 8. <u>Metering</u> (If Applicable). Transferring cranberry withdrawals to another use requires the authorized volume be verified based on actual water use at the bog(s) to be transferred.
- 9. <u>Right to Amend, Suspend or Terminate</u> The Department may amend, suspend or terminate the permit in accordance with M.G.L. c. 21G and 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.

June 16, 2023

Issuance Date: _____

Vuane hellaugie

By:

Duane LeVangie Bureau of Water Resources Massachusetts Department of Environmental Protection