



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

May 3, 2024

Mr. Brendan D. Moquin
Morse Brothers, Inc.
3203 Cranberry Highway, Building A
East Wareham, MA 02538

RE: **Middleborough** – WMA
Permit No. 9P-4-25-123.02
WMA Permit Renewal
FINAL WMA Permit

Dear Mr. Moquin:

Please find the following attached documents:

- Findings of Fact in Support of the FINAL Permit Decision.
- Water Management Act Permit for Morse Brothers, Inc. for cranberry cultivation water withdrawals in the Taunton River Basin.

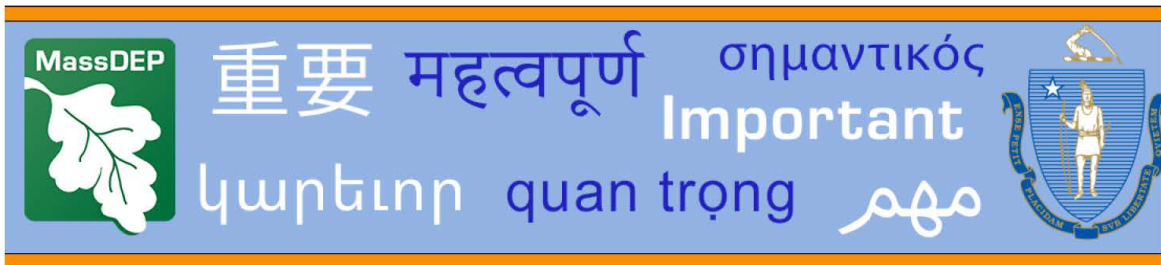
The signature on this cover letter indicates formal issuance of the attached document. If you have any questions regarding this matter, please contact Linjun Yao via e-mail at linjun.yao@mass.gov.

Sincerely,

Duane LeVangie
Chief, Water Management Program
Bureau of Water Resources

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

[https://massgov.sharepoint.com/:f:/r/sites/DEP-BWR/DWPArchive/SERO/2024/Middleborough- Morse Brothers -FINAL Permit-9P425123.02-WMA-2024-5-3](https://massgov.sharepoint.com/:f:/r/sites/DEP-BWR/DWPArchive/SERO/2024/Middleborough-Morse%20Brothers-FINAL%20Permit-9P425123.02-WMA-2024-5-3)



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 Environmental Justice at the telephone number listed below.

Español Spanish

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

Português Portuguese

Este documento é importante e deve ser traduzido imediatamente. Se você precisar traduzir este documento, entre em contato com o Diretor de Justiça Ambiental do MassDEP no número de telefone listado abaixo.

繁體中文 Chinese Traditional

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

简体中文 Chinese Simplified

这份文件非常重要，需要立即翻译。
如果您需要翻译这份文件，请通过下方电话与 MassDEP 环境司法主任联系。

Ayisyen Kreyòl Haitian Creole

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

Việt Vietnamese

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

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះមានសារៈសំខាន់
ហើយត្រូវបានចាត់ទុកថាជាឯកសារសំខាន់។
ប្រសិនបើអ្នកត្រូវការអោយឯកសារនេះបកប្រែ
សូមទាក់ទងនាយកផ្នែកយុត្តិធម៌បរិស្ថានរបស់
MassDEPតាមរយៈលេខទូរស័ព្ទដែលបានរាយនាមខាងក្រោម។

Kriolu Kabuverdianu Cape Verdean

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

Contact Deneen Simpson 857-406-0738

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

TTY# MassRelay Service 1-800-439-2370 • <https://www.mass.gov/environmental-justice>
(Version revised 8.2.2023) 310 CMR 1.03(5)(a)

Русский Russian

Это чрезвычайно важный документ, и он должен быть немедленно переведен. Если вам нужен перевод этого документа, обратитесь к директору Департамента экологического правосудия MassDEP (MassDEP's Director of Environmental Justice) по телефону, указанному ниже.

العربية Arabic

هذه الوثيقة مهمة وتجب ترجمتها على الفور.

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

한국어 Korean

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

հայերեն Armenian

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

فارسی Farsi Persian

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

Français French

Ce document est important et doit être traduit immédiatement. Si vous avez besoin d'une traduction de ce document, veuillez contacter le directeur de la justice environnementale du MassDEP au numéro de téléphone indiqué ci-dessous.

Deutsch German

Dieses Dokument ist wichtig und muss sofort übersetzt werden. Wenn Sie eine Übersetzung dieses Dokuments benötigen, wenden Sie sich bitte an MassDEP's Director of Environmental Justice (*Direktor für Umweltgerechtigkeit in Massachusetts*) unter der unten angegebenen Telefonnummer.

Ελληνική Greek

Το έγγραφο αυτό είναι πολύ σημαντικό και πρέπει να μεταφραστεί αμέσως. Αν χρειάζεστε μετάφραση του εγγράφου αυτού, παρακαλώ επικοινωνήστε με τον Διευθυντή του Τμήματος Περιβαλλοντικής Δικαιοσύνης της Μασαχουσέτης στον αριθμό τηλεφώνου που αναγράφεται παρακάτω

Italiano Italian

Questo documento è importante e deve essere tradotto immediatamente. Se hai bisogno di tradurre questo documento, contatta il Direttore della Giustizia Ambientale di MassDEP al numero di telefono sotto indicato.

Język Polski Polish

Ten dokument jest ważny i powinien zostać niezwłocznie przetłumaczony. Jeśli potrzebne jest tłumaczenie tego dokumentu, należy skontaktować się z dyrektorem ds. sprawiedliwości środowiskowej MassDEP pod numerem telefonu podanym poniżej.

हिन्दी Hindi

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

Contact Deneen Simpson 857-406-0738

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Findings of Fact in Support of Final Permit Decision Water Management Act Permit #9P-4-25-123.02 Morse Brothers, Inc.

The Massachusetts Department of Environmental Protection (the Department) makes the following *Findings of Fact* in support of the attached Water Management Act (WMA) Permit Renewal #9P-4-25-123.02 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 renewal application by Morse Brothers, Inc. (the “applicant”) for the purpose of cranberry cultivation at an existing cranberry bog. The sites are located off Maple Road in Middleborough, Hill Street in Hanson, and Staples Street in Taunton. The permit was issued on September 2, 1994 and revised July 22, 2014, for the cultivation of seventy-eight point four (78.4) acres of cranberry bogs withdrawing water from six (6) surface water withdrawal points.

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, 2009. Morse Brothers, Inc. 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 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 (<https://www.mass.gov/files/documents/2018/09/11/ma-water-conservation-standards-2018.pdf>), including without limitation;
- 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.

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.

Findings of Fact for Permit Conditions in Morse Brothers, Inc.'s Water Management Permit

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 Morse Brothers, Inc.'s Permit Conditions

In the case of Morse Brothers, Inc.:

- 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 not required because the permitted acreage has not changed since 2005 and no new permitted acres may be constructed.

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 Morse Brothers, Inc.'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.

Special Condition 1, Authorized Annual Withdrawal Volume, sets an annual average withdrawal volume of 0.42 million gallons per day (MGD) for a total of 153.3 million gallons per year (MGY) over 365 days for the cultivation of 78.4 acres of permitted cranberry bog located at Bog 19 off Hill Street in Hanson, Staples Street Bog off Staples Street in Taunton, and Maple Road bog off Maple Street in Middleboro within the Taunton River Basin. This is in addition to the 1.88 MGD that Morse Brothers is also registered (#4-25-211.01) to withdraw for their 298.93 acres registered cranberry bogs in Halifax (165.66 acres), Plympton (78.32 acres), Hanson (43.4 acres), and Bridgewater (11.55 acres, plus 6.67 certified acres) 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 6 acre-feet of water per year for each acre of bog was used to calculate the permitted volume. The 6 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.

Special Condition 2, Authorized Cranberry Acreage, lists the applicant's permitted acreage in the basin.

Special Condition 3, Water Conservation Requirements, 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.

Mitigation of Withdrawals over 2003-2005 Baseline will not be required. The permitted acreage has not changed since 2005 and no new permitted acres may be constructed.

While mitigation is not required, the Permittee is encouraged 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 #24022 (Bog 19 Reservoir) in Hanson, #24060 (Maple Road Reservoir 1-4) in Middleborough, and #24077 (Staples St. Bog) in Taunton 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's permitted withdrawal sources are 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 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.

Response to Comments

Email comments were provided on Morse Brothers Draft permit by a resident of Halifax. Concerns were expressed about water withdrawals being made at the Winebrook Bog to control

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).

bog flooding, sand & gravel mining at the property, and a recent diesel spill. While acknowledging these concerns, the Department notes that this property is not part of this permit renewal application. The Winebrook Bog acreage is registered only with the WMA Program for the cultivation of 148.33 acres (102.33 acres registered, 46.0 acres credit). Because no permitted acreage is authorized at this site, no changes were made to the permit in response to the comments received. The Department does note that sand & gravel mining operations are potentially subject to local controls and the Department's Emergency Response Team was notified of the diesel spill on the property.



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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: 9P-4-25-123.02 WATERSHED: Taunton

PERMITTEE: Morse Brothers, Inc.
50 Oliver Street, Suite 102
North Easton, Massachusetts 02356

EFFECTIVE DATE: May 3, 2024

EXPIRATION DATE: June 5, 2031

USE: Cranberry Cultivation

DAYS OF OPERATION: 365

NUMBER OF WITHDRAWAL POINTS: 6 Surface Water

WITHDRAWAL POINT LOCATIONS:

ID	Source	Latitude	Longitude	Location
WM4552-03S	Bog 19 Reservoir	42° 01' 52.6"	70° 51' 1.2"	Hill St, Hanson
WM4552-09S	Staples St. Bog	41° 51' 57.9"	71° 01' 3.3"	Staples & Caswell St, Taunton
WM4552-10S	Reservoir 1	41° 54' 8.9"	70° 55' 45.0"	Maple Road, Middleboro
WM4552-11S	Reservoir 2	41° 54' 13.8"	70° 55' 30.1"	Maple Road, Middleboro
WM4552-12S	Reservoir 3	41° 54' 1.0"	70° 55' 38.7"	Maple Road, Middleboro
WM4552-13S	Reservoir 4	41° 54' 1.6"	70° 55' 41.1"	Maple Road, Middleboro

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

Printed on Recycled Paper

SPECIAL CONDITIONS

1. Authorized Annual Withdrawal Volume

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 withdrawal volume is based on 6 acre-ft of water per acre of bog per year.

The volume reflected by this rate is in addition to the 1.88 MGD (686.0 MGY) previously authorized to Morse Brothers, Inc. under WMA Registration #4-25-211.01 for withdrawal from multiple sites within the Taunton River Basin.

Withdrawals are authorized as follows:

	Authorized Permit Volume		Total Volumes (permitted & registered)	
Permit Period	Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
5/3/2024 to 6/5/2031	0.42	153.3	2.30	839.3

2. Authorized Cranberry Acreage

This permit authorizes Morse Brothers, Inc. to withdraw water from the permitted withdrawal points listed below, for the cultivation of 78.4 acres of cranberry bog. Morse Brothers, Inc. is also registered to cultivate 43.4 acres at bog 19 in Hanson, giving a total registered and permitted acreage of 121.8 at these sites.

Bog Name	Address	Municipality	Permitted Acreage	Registered Acreage	Total WMA Authorized Acreage
Bog 19	Hill Street	Hanson	14.0	43.4	57.4
Staples St. Bog	Staples and Caswell	Taunton	35.0	0	35.0
Maple Rd. Bog	Maple Rd.	Middleboro	29.4	0	29.4
TOTALS			78.4	43.4	121.8

3. Water Conservation Requirements

Morse Brothers, Inc. previously had Conservation Plans approved by certified USDA Natural Resources Conservation Service conservation planners. Morse Brothers, Inc. 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.

Morse Brothers, Inc. shall continue to adhere to the Best Management Practices (BMP's) as defined on Page 5 in the Memorandum of Agreement for Implementation of Water Conservation BMP's at Cranberry Bogs signed by the Cape Cod Cranberry Growers' Association, the Commission for Conservation of Soil, Water and Related Resources and the Department of Environmental Protection, effective September 8, 2004.

Morse Brothers, Inc. 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.

GENERAL CONDITIONS (applicable to all permittees)

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

1. **Duty to Comply** The Permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The Permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw water so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The Permittee or the Permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property over which Permittee has authority, title or control, for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by the Department pursuant to M.G.L. c. 21G, §§ 15-17, M.G.L. c. 150, § 111, or any other enabling authority.
5. **Transfer of Permits** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.33.
6. **Duty to Report** The Permittee shall submit annually, on a form provided by the Department, a certified statement of the withdrawal. Such report is to be received by the Department by the date specified by the Department. Such report must be submitted as specified on the report form.
7. **Duty to Maintain Records** The Permittee shall be responsible for maintaining withdrawal and all other records as specified by this permit.
8. **Metering** (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. **Right to Amend, Suspend or Terminate** The Department may amend, suspend or terminate the permit in accordance with M.G.L. c. 21G and 310 CMR 36.29.

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.



Duane LeVangie
Water Management Program Chief
Bureau of Water Resources

May 3, 2024

Date

Morse Brothers, Inc.
WMA Final Permit #9P-4-25-123.02