

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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

Charles D. Baker Governor

Kathleen A. Theoharides

Martin Suuberg Commissioner

Secretary

Karyn E. Polito Lieutenant Governor

December 10, 2021

Mr. William Couto P.O. Box 17 East Taunton, Massachusetts 02718 RE: Taunton – WMA William Couto Permit No. 9P4-4-25-293.08 **FINAL WMA Permit Renewal**

Dear Mr. Couto:

Please find the following attached documents:

- Findings of Fact in Support of the FINAL Permit Decision.
- FINAL Water Management Act Permit for William Couto cranberry cultivation 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 Shi Chen at shi.chen@mass.gov or me at 617-292-5706 or duane.levangie@mass.gov.

Sincerely,

Onme hellaugie

Duane LeVangie Water Management Program Chief **Bureau of Water Resources**

Jim McLaughlin, DEP, SERO ecc: Julia Blatt and Sarah Bower, Mass Rivers Alliance Brian Wick, Cape Cod Cranberry Growers Association Y:\DWP Archive\SERO\2021\Taunton-9P4425293.08-Couto Cranberry-WMA-2021-12-10

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper



Massachusetts Department of Environmental Protection One Winter Street, Boston MA 02108 • Phone: 617-292-5751 Communication For Non-English Speaking Parties - 310 CMR 1.03(5)(a)

1 English:

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



2 Español (Spanish):

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



3 Português (Portuguese):

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



4(a) 中國(傳統)(Chinese (Traditional):

本文件非常重要、應立即翻譯。如果您需要翻譯這份文件,請用下面列出的電話號碼與

MassDEP的多樣性總監聯繫。



4(b) 中国(简体中文)(Chinese (Simplified):

本文件非常重要,应立即翻译。如果您需要翻译这份文件,请用下面列出的电话号码与

MassDEP的多样性总监联系。

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

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



6 Viêt (Vietnamese):

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



7 ប្រទេសកម្ពុជា (Kmer (Cambodian):

ឯកសារនេះគឺមានសារ:សំខាន់និងគួរត្រូវបានបកប្រែភ្លាម។ ប្រសិនបើអ្នកត្រូវបានបកប្រែ ឯកសារនេះសូមទំនាក់ទំនងឆ្នោតជានាយក MassDEP នៅលេខទូរស័ព្ទដែលបានរាយ ខាងក្រោម។



8 Kriolu Kabuverdianu (Cape Verdean):

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



9 Русский язык (Russian):

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

William Couto WMA FINAL Permit #9P4-4-25-293.08 Cover Letter



(Arabic): العربية 10

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

11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야합니다. 당신이 번역이 문서가 필요하면 아래의 전화 번호로 MassDEP의 다양성 감독에 문의하시기 바랍니다.



12 հայե**ր**են (Armenian)։

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



13 فارسى (Farsi (Persian):

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



14 Français (French):

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



15 Deutsch (German):

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

_

16 Ελληνική (Greek):

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



17 Italiano (Italian):

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



18 Język Polski (Polish):

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



19 हिन्दी (Hindi):

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

Department of Environmental Protection

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

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Kathleen A. Theoharides Secretary

> Martin Suuberg Commissioner

Findings of Fact in Support of Final Permit Decision Water Management Act Permit #9P4-4-25-293.08 William Couto

The Massachusetts Department of Environmental Protection (the Department) makes the following *Findings of Fact* in support of the attached Final Water Management Act (WMA) Permit #9P4-4-25-293.08 and includes herewith its reasons for issuing the Final 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 William Couto (the "applicant") for the purpose of cranberry cultivation at three (3) cranberry bog locations. The sites are located at Seekell & Kingman Streets, Taunton, Holloway Street, Taunton, and Myricks Street, Berkley. The permit was issued on September 13, 2004 and revised April 17, 2007, for the cultivation of one hundred and fourteen point one (114.1) acres of cranberry bogs withdrawing water from twelve (12) 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, 2010. William Couto 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 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

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

William Couto WMA FINAL Permit #9P4-4-25-293.08 Findings of Fact

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 will be February 28, 2030, in order to restore the staggered permitting schedule set forth in the regulations.

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

The 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;

- o 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 William Couto'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 William Couto's Permit Conditions

In the case of William Couto:

- 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 William Couto'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 William Couto 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 0.61 million gallons per day (MGD) for a total of 223.0 million gallons per year (MGY) over 365 days for the cultivation of 114.1 acres of cranberry bog located in Taunton and Berkley. 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-foot 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.

William Couto WMA FINAL Permit #9P4-4-25-293.08 Findings of Fact

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 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 can be greatly reduced by instituting the water conservation Best Management Practices (BMPs). Couto's registered acreage's water needs were calculated using the historical formula.

Special Condition 2, Authorized Cranberry Acreage, lists the applicant's 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.

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

<u>Special Condition 4, Mitigation of Withdrawals over 2003-2005 Baseline</u>, Cranberry Chart Book is required because William Couto increased over the baseline withdrawal. The permittee reported 86 acres cultivated in 2005 and obtained 10.3 acres of baseline acreage via transfer in 2007, for a total baseline acreage of 96.3. 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 Protection is not a condition of this permit because the

William Couto WMA FINAL Permit #9P4-4-25-293.08 Findings of Fact

applicant's withdrawals in subbasins #24077, #24078 and #24139 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 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.

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).

Department of Environmental Protection

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

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Kathleen A. Theoharides Secretary

> Martin Suuberg Commissioner

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:	9P4-4-25-293.08	WATERSHED:	Taunton
PERMITTEE:	William Couto P.O. Box 17 East Taunton, Massachusetts C	2718	
EFFECTIVE DATE:	December 10, 2021		
EXPIRATION DATE:	February 28, 2030		
USE:	Cranberry Cultivation		

DAYS OF OPERATION: 365

NUMBER OF WITHDRAWAL POINTS: 12 surface water Withdrawal Point Locations

HOME BOG, off Seekell & Kingman Streets, Taunton

	0	,	
Source	Latitude	Longitude	Location
Reservoir #1	41°51′34″	71°00'33″	Seekell & Kingman Streets, Taunton
Reservoir #2	41°51′36″	71°00'29"	Seekell & Kingman Streets, Taunton
Reservoir #3	41°51′40″	71°00'33″	Seekell & Kingman Streets, Taunton
Reservoir #4	41°51′27″	71°00'20"	Seekell & Kingman Streets, Taunton
Reservoir #5	41°51′30″	71°00'05″	Seekell & Kingman Streets, Taunton
Reservoir #6	41°51′39″	71°00'53"	Seekell & Kingman Streets, Taunton

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

Source	Latitude	Longitude	Location
Reservoir	41°50'42"	71°01′08″	Holloway Street, Taunton
Cotley River flume to reservoir	41°50'45"	71°01'05"	Holloway Street, Taunton
Cotley River flume to reservoir	41°50'48"	71°01'08"	Holloway Street, Taunton

HOLLOWAY BOG, off Holloway Street, Taunton

BERKLEY BOG, off Myricks Street, Berkley

Source	Latitude	Longitude	Location
Reservoir #1	41°49'20"	71°02'00″	Myricks Street, Berkley
Reservoir #2	41°49'26"	71°02'04"	Myricks Street, Berkley
Creek	41°49'20"	71°02'00"	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 6 acre-ft of water per acre of bog per year.

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)
12/10/2021 to 2/28/2030	0.61	223.0	0.61 + 0.30 = 0.91	223 + 111.2 = 334.2

The permitted volume is in addition to the volume authorized to William Couto by WMA Registration #4-25-293.03. Registration #4-25-293.03 authorizes an annual withdrawal volume of 111.2 MGY (million gallons/year), or an average daily withdrawal of 0.30 MGD (million gallons per day) based on 10 acre-ft of water per acre of bog per year.

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

This permit authorizes William Couto to withdraw water from the permitted withdrawal points listed above at the Home Bog, Holloway Bog, and Berkley Bog, for the cultivation of 114.1 acres of cranberry bog. The Home Bog includes 23 permitted acres obtained via transfer from the Four O's Realty Trust in 2007, of which, 10.3 acres were reported by Four O's Realty Trust to be in production in 2005. William Couto is authorized under the Water Management Act to withdraw water for the following:

Bog Name	Address	Municipality	Permitted Acreage	Registered Acreage	Total WMA Authorized Acreage
Home Bog	Seekell &	Taunton	74.4	4.6	79.0
	Kingman				
Holloway Bog	Holloway	Taunton	12.7	0	12.7
	Street				
Berkley Bog	Myricks St.	Berkley	27.0	0	27.0
Black Bog	Seekell St.	Taunton	0	17.4	17.4
North Main	North Main St.	Berkley	0	12.13	12.13
		TOTALS =	114.1	34.13	148.23

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

William Couto previously had Conservation Plans approved by certified USDA Natural Resources Conservation Service conservation planners. William Couto 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.

William Couto 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.

William Couto WMA FINAL Permit #9P4-4-25-293.08

- "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 plans shall document any exceptions from these BMPs.

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

The Permittee is required to mitigate for any increase in acreage above the 2005 baseline of 96.3 acres. Since William Couto has more 96.3 acres currently in production 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.

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. <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.
- <u>Operation and Maintenance</u> 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.
- 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.

APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing as described herein and in accordance with the procedures described at 310 CMR 36.37. Any such request must be made in writing, by certified mail or hand delivered and received by the Department within twenty-one (21) days of the date of receipt of this permit. The hearing request, including proof of payment of the filing fee, must be mailed to:

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

No request for an appeal of this permit shall be validly filed unless a copy of the request is sent by certified mail, or delivered by hand to the local water resources management official in the community in which the withdrawal point is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. In addition, the request must include a statement of the reasons why the decision of the Department is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, a clear and concise statement of how that person is aggrieved by the issuance of his permit.

William Couto WMA FINAL Permit #9P4-4-25-293.08

FILING FEE AND ADDRESS

The Department's fee transmittal form, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

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

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a municipality (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts which support the claim of undue hardship.

12/10/2021

Issuance Date: _____

Onane hellaugie

By: _

Duane LeVangie Water Management Program Chief Bureau of Water Resources