



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

Karyn E. Polito
Lieutenant Governor

Kathleen A. Theoharides
Secretary

Martin Suuberg
Commissioner

May 5, 2021

Attleboro Municipal Council

77 Park Street
City Hall
Attleboro, MA 02703

RE: Attleboro – BRP/WMA

Attleboro Water Department
PWS ID #4016000
Water Management Act Permit
Permit #9P425016.01

Dear Council Members:

Attached please find:

- Final Findings of Fact in support of the renewal of Permit #9P425016.01, and
- Final WMA Permit #9P425016.01 for the Attleboro Water Department.

The signature on this cover letter indicates formal issuance of the attached documents. If you have any questions regarding this information, please contact Jen D'Urso at (617) 654-6591 or via e-mail at jen.durso@state.ma.us.

Sincerely,

Duane LeVangie
Chief, Water Management Act Program
Bureau of Resource Protection

Y:\DWP Archive\SERO\2021\Attleboro-4016000-WMA Final Permit 9P42501601 – 5-5-2021

Ecc: Courtney Wunschel, Town of Attleboro
Bob Worthley, Foxborough
Julia Blatt, MA Rivers Alliance
Patti Kellogg, MassDEP SERO
Anne Carroll, DCR OWR

Jen Pederson, MWWA
Paul Howard, Tata and Howard, Inc.
Mary Waltuck, Friends of Lake Mirimichi
Richard Sims, Tata and Howard, Inc.
Dennis Morton, Plainville

Communication For Non-English Speaking Parties - 310 CMR 1.03(5)(a)

Contact Michelle Waters-Ekanem, Diversity Director/Civil Rights: 617-292-5751 TTY#
MassRelay Service 1-800-439-2370.

<http://www.mass.gov/eea/agencies/massdep/service/justice/>

(Version 3.30.15)



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，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 Việt (Vietnamese):

Tài liệu này là rất quan trọng và cần được dịch ngay lập tức. Nếu bạn 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)):

ឯកសារនេះគឺមានសារៈសំខាន់និងគួរត្រូវបានបកប្រែភ្លាមៗ ប្រសិនបើអ្នកត្រូវបានបកប្រែ ឯកសារនេះសូមទំនាក់ទំនងឆ្នោតជាតិ 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.

Communication For Non-English Speaking Parties - 310 CMR 1.03(5)(a)

Contact Michelle Waters-Ekanem, Diversity Director/Civil Rights: 617-292-5751 TTY#

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(Version 3.30.15)



10 العربية (Arabic):

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



11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야 합니다. 당신이 번역이 문서가 필요하다면 아래의 전화 번호로 MassDEP의 다양성 감독에 문의하시기 바랍니다.



12 հայերեն (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 فارسی (Farsi (Persian):

این سند مهم است و باید فوراً ترجمه شده است. اگر شما نیاز به این سند ترجمه شده، لطفاً 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 przetłumaczony. Jeśli potrzebujesz tego dokumentu tłumaczone, prosimy o kontakt z Dyrektorem MassDEP w różnorodności na numery telefonów wymienionych poniżej.



19 हिन्दी (Hindi):

यह दस्तावेज़ 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

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Findings of Fact in Support of Final Permit Issuance Water Management Permit #9P425016.01 City of Attleboro

The Department of Environmental Protection (the Department) makes the following Findings of Fact in support of the attached final Water Management Permit #9P425016.01, 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 permit renewal application by the City of Attleboro, Water Department, (Attleboro) for the purpose of public water supply in the Taunton River Basin.

Attleboro operates one source in the Taunton River Basin that is both registered and permitted. Attleboro is also registered and permitted to withdraw a total authorization of 3.85 MGD in the Ten Mile River Basin. Attleboro was issued its initial Taunton River Water Management Permit on June 1, 1991. On December 18, 2009, Attleboro applied to MassDEP for a permit renewal in the Taunton River Basin. In February 2010, Attleboro was issued an interim Water Management Act Permit that authorized the continued withdrawal of its previously permitted volume. On February 4, 2019, Attleboro was issued a Permit Renewal Order to Complete (OTC) outlining specific information that was required to renew Attleboro's permit. Attleboro responded in May and November of 2019.

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 been working closely with each Water Management Act (WMA) permittee to fully consider all aspects of their individual situations to ensure thoughtful and implementable draft permits.

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

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

- Impact of the withdrawal on other water sources;
- Water available within the safe yield of the water source;
- Reasonable protection of existing water uses, land values, investments and enterprises;
- Proposed use of the water and other existing or projected uses of water from the water source;
- Municipal and Massachusetts Water Resources Commission (WRC) water resource management plans;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

Water Management Regulation Revisions

In 2010 the Executive Office of Energy and Environmental Affairs (EEA) convened the Sustainable Water Management Initiative (SWMI) for the purpose of incorporating the best available science into the management of the Commonwealth's water resources. SWMI was a multi-year process that included a wide range of stakeholders and support from the Departments of Environmental Protection, Fish and Game, and Conservation and Recreation. In November 2012 the *Massachusetts Sustainable Water Management Initiative Framework Summary* (<http://www.mass.gov/eea/docs/eea/water/swmi-framework-nov-2012.pdf>) was released.

On November 7, 2014, the Department adopted revised Water Management Regulations at 310 CMR 36.00 that incorporate elements of the SWMI framework and the Water Conservation Standards adopted by the Massachusetts WRC. The regulations reflect a carefully developed balance to protect the health of Massachusetts' water bodies while meeting the needs of businesses and communities for water.

Without limitation, the Department has incorporated the following into Water Management permitting:

- Safe yield determinations for the major river basins based on a new methodology developed through SWMI (see the Safe Yield in the Taunton River Basin section of this document). For more information on the Safe Yield methodology, go to the November 28, 2012 SWMI Framework Summary and Appendices ;
- Water needs forecasts for public water suppliers developed by the Department of Conservation and Recreation, Office of Water Resources (DCR), using a methodology reviewed and approved by the Massachusetts WRC;
- Water supply protection measures for public water supplies including Zone II delineations for groundwater sources, and wellhead and surface water protection measures as required by Massachusetts Drinking Water Regulations (310 CMR 22.00);
- Water conservation and performance standards reviewed and approved by the WRC in July 2018 . ([Details on the 2018 Massachusetts Water Conservation Standards | Mass.gov](#)) including without limitation;
 - performance standard of 65 residential gallons per capita day or less;
 - performance standard of 10% or less unaccounted-for-water;
 - seasonal limits on nonessential outdoor water use;
 - a water conservation program that includes leak detection and repair, full metering of the system and proper maintenance of the meters, periodic review of pricing, and education and outreach to residents and industrial and commercial water users; and
- 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 the Department on November 7, 2014, and described in the regulations at 310 CMR 36.13. As of the date of issuance of this permit, the safe yield for the Taunton River Basin is 134.4 million gallons per day (MGD), and total registered and permitted 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 safe yield and may be further conditioned as outlined in the regulations.

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

The following Findings of Fact for the special conditions included in the permit generally describe the rationale and background for each special condition in the permit. This summary of permit special conditions is not intended to, and should not be construed as, modifying any of the permit special conditions. In the event of any ambiguity between this summary and the actual permit conditions, the permit language shall control.

Special Condition 1, Maximum Authorized Annual Average Withdrawal In April 2015, the Department of Conservation and Recreation's Office of Water Resources (DCR) determined that they could not develop final Water Needs Forecasts (WNF) for Attleboro and that an Interim Allocation would be appropriate. While the Department was prepared to hold Attleboro's allocation in the Taunton Basin at the previous allocation of 2.09 MGD to allow time for them to develop the data necessary to get a WNF, Attleboro requested to reduce their allocation to 2.00 MGD to avoid identifying additional mitigation. This permit reflects that reduction in total allocation in the Taunton Basin from 2.09 MGD to 2.00 MGD which also reduces Attleboro's total combined authorization in both basins to 5.86 MGD as outlined in the Table 1.

TABLE 1: Summary of Attleboro Water Department's WMA Authorizations	
WMA Authorization	Volume Authorized
WMA Permit #9P425016.01	0.38 MGD (138.70 MGY)
WMA Registration #42501601	1.62 MGD (591.30 MGY)
Total Taunton WMA Authorization	2.00 MGD (730.00 MGY)
Total Ten Mile WMA Authorization	3.85 MGD (1,405.25 MGY)
Total Attleboro Authorization	5.85 MGD (2,135.25 MGY)

In 2018, Attleboro's average daily withdrawal from the Taunton River Basin was 1.41 MGD and 3.11 MGD in the Ten Mile Basin, for a total of 4.52 MGD. The total withdrawals added together from both the Taunton Basin and the Ten Mile Basin cannot exceed 5.85 MGD. This is a temporary allocation; Attleborough will need to improve the accuracy of their data to get new WNF within 3- 5 years. If water needs are expected to exceed the maximum authorized in this permit and Attleboro is meeting all of its permit conditions, Attleboro may apply for additional volume at any time by submitting a new Water Management Permit application BRPWM03.

Special Condition 2, Maximum Daily Withdrawals from the Wading River, reflects the MassDEP-approved treatment capacity for the Wading River Treatment Plant. Withdrawals in excess of this maximum daily rate require approval from the Department. MassDEP review of pumping information submitted in Attleboro's Annual Statistical reports from 2013-2018 show that the maximum authorized withdrawal volume from the Wading River has not been exceeded.

Special Condition 3, Surface Water Protection, reflects that Attleboro has met the best effort requirement by contacting and meeting with the other communities into which their watersheds extend, or where their reservoirs exist in other communities, to encourage those communities to adopt a local land use control consistent with 310 CMR 22.20C. Attleboro has a DEP-approved surface water supply protection plan in compliance with 310 CMR 22.20C. However, Attleboro has not adopted a local land use control that meets 310 CMR 22.20C for their reservoir(s) Zone A protection areas that exist in the City. Attleboro should adopt a local land use control that meets 310 CMR 22.20C within one year of the date of this permit.

Special Condition 4, Residential Gallons per Capita Day (RGPCD) requires Attleboro to meet 65 RGPCD. From 2014 to 2018, Attleboro met the RGPCD requirement every year, with an average of 55 RGPCD.

Special Condition 5, Performance Standard for Unaccounted for Water. The UAW required for all PWS permittees is 10%. Attleboro will be required to meet the 10% standard for 2 out of every 3 years. Since Attleboro has not been able to meet this performance standard and currently has a permit with an interim allocation due to high UAW, MassDEP is requiring that Attleboro meet Step 1 of the Functional Equivalence requirements based on the AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36, which is Appendix B of this permit, by December 31, 2021. Attleboro should continue to meet the requirements of Appendix B until their UAW has been reduced to less than 10% for two out of three years.

Special Condition 6, Firm Yield Analysis requires Attleboro to submit a scope of work for the Department's review and approval for the Wading River source firm yield analysis within 6 months of this Permit being issued. A Firm Yield Analysis for the Wading River source shall be completed within one year of MassDEP's approval of the scope of work.

Special Condition 7, Seasonal Limits on Nonessential Outdoor Water Use, includes an outdoor water use restriction requirement. The streamflow-triggered restrictions will be determined based on flows measured at USGS streamflow gage, #01109403, Ten Mile River at E. Providence, RI. Both the calendar option and the streamflow triggered option will allow nonessential outdoor watering outside the hours of 9 am – 5 pm up to 2 days per week from May 1 to September 30. Under both the calendar and streamflow trigger options, watering must be reduced to one day per week when the annual 7-day low-flow trigger of 47 cfs occurs. Watering by hand-held hoses is allowed, as is watering necessary for the core function of a business, to grow food and fiber, and other specific allowances. The town can always impose restrictions that are more stringent than the permit requires. In addition, because of Attleboro's impact on Lake Mirimichi and Plainville's use of its own well, Attleboro will also be required to implement more stringent water conservation requirements based on conditions in Lake Mirimichi. This permit includes restrictions when the level of Lake Mirimichi is 1.5 feet or more below the spillway and Attleboro is releasing water downstream.

Special Condition 8, Communication Plan, requires Attleboro to follow the Standard Operating Procedures (SOP) for Lake Mirimichi included as Attachment E of this document, dated March 10, 2021. Attleboro is also required to develop, within 6 months of this permit being issued, an appropriate method of communication with the Friends of Lake Mirimichi regarding activities that may impact any of the City's other water supplies that could prompt operation of the Lake Mirimichi gate, the water conservation status of the City, and weekly water level measurements taken between May 1 and September 30 at all Attleboro sources.

Special Condition 9, General Water Conservation Requirements, incorporates the Water Conservation Standards for the Commonwealth of Massachusetts reviewed and approved by the WRC in July 2018. ([Details on the 2018 Massachusetts Water Conservation Standards | Mass.gov](#)).

Special Condition 10, Mitigation of Impacts for Withdrawals that Exceed Baseline¹, requires mitigation of the impacts of withdrawals above the permittee's baseline by direct and/or indirect mitigation activities. Attleboro's Baseline in the Taunton River Basin is (1.62 MGD), the registered withdrawal volume.

¹ Baseline is the volume of water withdrawn in 2005 plus 5%, or the average volume withdrawn from 2003 to 2005 plus 5%, which is greater. Baseline cannot be less than the registered volume, and cannot be more than the authorized volume

The mitigation volume calculation below assumes that Attleboro’s future withdrawals will be discharged to on-site septic systems at the same rate (30%) as current water withdrawals. A “wastewater adjustment” is calculated for water withdrawn that is returned to the ground as wastewater by major basin. Because Attleboro withdraws from sources in both the Taunton and Ten Mile basins and returns groundwater via septic systems to customers in both major basins. MassDEP will assume that 85% of the water delivered to customers with septic systems will be returned to the ground, thus reducing the amount of mitigation needed. After calculating the adjustment for authorized withdrawals over baseline that will be returned to groundwater through septic system discharge (Step 2 below), Attleboro’s total mitigation requirement will be up to 283,000 gallons per day (Step 3 below).

Attleboro’s Wastewater Adjustment Calculation for Mitigation	
1. Permitted amount above Baseline = 0.38 MGD	<ul style="list-style-type: none"> Permitted amount above Baseline: $2.00 - 1.62 = 0.38$ MGD
2. Adjustment for Wastewater Discharge to Local Groundwater = 0.0969 MGD	<ul style="list-style-type: none"> 30% of increased withdrawals are delivered to areas with on-site septic systems: $0.38 \text{ MGD} \times 0.30 (30\%) = 0.114$ MGD 85% of water delivered to areas with on-site septic systems returns to groundwater: $0.114 \text{ MGD} \times 0.85 (85\%) = 0.0969$ MGD
3. Amount to be Mitigated after Adjustment for Wastewater Discharge to Local Groundwater = 0.291 MGD	<ul style="list-style-type: none"> Permitted amount above baseline (0.38 MGD) – adjustment for wastewater discharge to local groundwater (0.0969 MGD) = 0.283 MGD or 283,000 gallons per day

Direct Mitigation, which will improve streamflow as a result of increased groundwater recharge, decreased stormwater runoff to streams, or surface water releases, must be considered first in mitigation planning. Attleboro received 0.0076 gallons for I/I credits. Please see Appendix C for more details.

Indirect Mitigation, activities that result in environmental improvements that will help to compensate for streamflow impacts, are required when a permittee has insufficient direct mitigation credit. Attleboro’s received 29 indirect mitigation credits as follows: Land Acquisition, (15 credits, of which 10 is for land protection for public water supply purposes and 5 is for non-water supply land protection); a Stormwater Management Ordinance, Local Wetlands Protection Ordinance, Rules, and Regulations (8 credits); and I/I Removal Program documentation (5 credits). Please see Appendix D for more details on Indirect Mitigation credits.

Special Condition 11, Reporting Requirements, ensures that the information necessary to evaluate compliance with the conditions included herein is accurately reported.

Special Condition 12, General Permit Requirements, contains conditions that pertain to all permittees.

Response to Comments

MassDEP received comments from The Friends of Lake Mirimichi, The Massachusetts Department of Conservation and Recreation, and the Massachusetts Water Works Association. As a result, a discrepancy between the Findings of Fact and Permit Condition 7 was resolved, and the words “and drought status” in Special Condition 7 were removed. In addition, Contact names were added to the Lake Mirimichi

during the 2003-2005 period. For suppliers with authorizations in multiple major basins, baseline is computed for each basin and for the entire system.

Communication Plan (appendix E), and the word “operated” under Notifications was changed to “opened, changed, or closed”.

MassDEP also noted an error in its calculation of Attleboro’s Mitigation Credit – 29 credits instead of 28 credits were calculated. Attleboro was notified, and decided to forego providing 1 additional credit. Therefore, the authorized volume in this permit was reduced from 0.39 MGD to 0.38 MGD.



Department of Environmental Protection

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Commissioner

FINAL WATER WITHDRAWAL PERMIT RENEWAL

Permit #9P425016.01

City of Attleboro

This renewal of Permit #9P425016.01 is approved pursuant to the Massachusetts Water Management Act (WMA) for the sole purpose of authorizing the withdrawal of a volume of water as stated below and subject to the following special and general conditions. This permit conveys no right in or to any property.

PERMIT NUMBER: 9P-4-25-016.01 **RIVER BASIN:** Taunton

PERMITTEE: Attleboro Municipal Council
77 Park Street
City Hall
Attleboro, MA 02703

EFFECTIVE DATE: May 5, 2021
EXPIRATION DATE: February 28, 2030

TYPE AND NUMBER OF WITHDRAWAL POINTS: Groundwater: Surface Water: 1
USE: Public Water Supply
DAYS OF OPERATION: 365

AUTHORIZED WITHDRAWAL POINTS:

Table 1: Withdrawal Point Identification	
Source Code	Source
4016000-05S	Wading River

1. Maximum Authorized Annual Average Withdrawal,

This permit authorizes the Town of Attleboro to withdraw water from the Taunton River Basin at the rate described in Table 2 below. The permitted volumes are expressed both as an average daily withdrawal rate (million gallons per day or MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each permit period outlined. The Department of Environmental Protection (MassDEP) will use the raw water withdrawal volume from all authorized withdrawal points to assess compliance with the registered and permitted withdrawal rates.

Special Condition 1 also identifies the maximum authorized annual system-wide withdrawals for Attleboro's combined withdrawals from the Taunton and Ten Mile River Basins. The authorized volumes are based on

Attleboro's current allocation volumes in each basin and require that Attleboro complete their Annual Statistical Reports in sufficient detail to allow the Department of Conservation and Recreation (DCR) to prepare a Water Needs Forecast.

Under this permit, Attleboro may withdraw up to 2.01 MGD from its sources in the Taunton Basin, provided that system-wide withdrawals do not exceed the system-wide maximums outlined below.

Table 2: Taunton River Authorized Withdrawal Rates

Permit Periods		Total Raw Water Withdrawal Volumes			
		Permit		Registration + Permit	
		Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
5/5/2021	2/28/2025	0.38	138.7	1.62 + 0.38 = 2.00	730.00
3/1/2025	2/28/2030	0.38	138.7	1.62 + 0.38 = 2.00	730.00

In addition to the limitations outlined above in Table 2 for the Taunton, MassDEP further limits system-wide withdrawals from all of Attleboro's sources to the volumes in Table 3.

Table 3: Combined Maximum Authorized Annual Withdrawal Volumes from the Taunton and Ten Mile River Basins

Permit Periods		Total Water Withdrawal Volumes	
		Daily Average (MGD)	Total Annual (MGY)
5/5/2021	2/28/2025	5.85	2,135.25
3/1/2025	2/28/2030	5.85	2,135.25

2. Maximum Daily Withdrawals from the Wading River

Withdrawals from permitted surface water sources are not to exceed the approved maximum daily rates listed in Table 4 below without advance approval from the Department.

Table 4: Maximum Daily Withdrawal Rates from Authorized Surface Water Withdrawal Points

Source Code	Source	Maximum Daily Withdrawal Rate (MGD)
4016000-05S	Wading River	2.9

3. Surface Water Protection

Attleboro has met its best effort requirements consistent with 310 CMR 22.20C and has a DEP-approved surface water supply protection plan in compliance with 310 CMR 22.20C. However, Attleboro has not adopted a local land use control that meets 310 CMR 22.20C for their reservoir(s) Zone A protection areas that exist in the City. Attleboro shall adopt a local land use control that meets 310 CMR 22.20C within two years of the date of this permit.

4. Performance Standard for Residential Gallons Per Capita Day Water Use

The Town of Attleboro's performance standard for residential gallons per capita day (RGPCD) is 65 gallons or less.

If Attleboro does not meet the standard, Attleboro shall be in compliance with the functional equivalence requirements in Appendix A.

5. Performance Standard for Unaccounted for Water

The Town of Attleboro's Performance Standard for Unaccounted for Water (UAW) is 10% or less of overall water withdrawal for 2 of the most recent years 3 throughout the permit period. Since Attleboro has not been able to meet this performance standard and currently has in interim allocation volume due to high UAW, MassDEP is requiring that Attleboro meet Step 1 of the Functional Equivalence requirements based on the AWWA/IWA Water Audits and Loss Control Programs, Manual of Water Supply Practices M36, which is Appendix B of this permit, by December 31, 2021. Attleboro shall continue to meet the requirements of Appendix B until their UAW has been reduced to less than 10% for two out of three years.

Nothing in the permit shall prevent a permittee who meets the 10% performance standard from demonstrating compliance with the UAW performance standard by developing and implementing a water loss control program following the *AWWA M36 Water Audits and Loss Control Programs*.

Permittees meeting the Performance Standard for Unaccounted for Water through implementation of a water loss control program based on AWWA M36 annual water audits and guidance shall continue to report UAW annually as required in the Annual Statistical Report for public water suppliers.

6. Firm Yield Analysis

Within 6 months of this permit being issued, MassDEP requires Attleboro submit for the Department's review and approval a scope of work for conducting a firm yield analysis of the Wading River source. This Draft Scope of Work shall be submitted to MassDEP for review and approval at: One Winter Street, Boston, MA 02108. The completed firm yield analysis for the Wading River source shall be completed within one year of MassDEP's approval of the Scope of Work.

7. Seasonal Limits on Nonessential Outdoor Water Use

Attleboro shall limit nonessential outdoor water use through mandatory restrictions from May 1st through September 30th as outlined in Table 5 below. Attleboro shall start implementing the seasonal limits on nonessential outdoor water use on May 1, 2021.

Attleboro shall be responsible for tracking steamflow gages and recording and reporting when restrictions are implemented. Attleboro shall also document compliance with the seasonal limits on nonessential outdoor water use annually in its Annual Statistical Report (ASR), and indicate whether it anticipates implementing calendar triggered restrictions or USGS monitoring well triggered restrictions during the next year.

Restricted Nonessential Outdoor Water Uses

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

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

The following uses may be allowed, before 9 am and after 5 pm, when mandatory restrictions are in place:

- irrigation to establish a new lawn and new plantings during the months of May and September;
- irrigation of public parks and recreational fields by means of automatic sprinklers outside the hours of 9 am to 5 pm;

- irrigation of gardens, flowers and ornamental plants by means of a hand-held hose or drip irrigation systems; and
- irrigation of lawns by means of a hand-held hose.

Water uses NOT subject to mandatory restrictions are those required:

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

Public Notice of Seasonal Nonessential Outdoor Water Use Restrictions

Attleboro shall notify its customers of the restrictions, including a detailed description of the restrictions and penalties for violating the restrictions. Notice that restrictions have been put in place shall be filed each year with the Department within 14 days of the restriction's effective date. Filing shall be in writing on the form "Notification of Water Use Restrictions" available on MassDEP website.

**TABLE 5: Attleboro Seasonal Limits on Nonessential Outdoor Water Use
May 1 to September 30**

For Permittees meeting the 65 RGPCD Standard for the preceding year RGPCD \leq 65 as reported in the ASR and accepted by MassDEP	
Calendar Triggered Restrictions	<p>Nonessential outdoor water use is allowed:</p> <ul style="list-style-type: none"> a) Seven (7) days per week before 9 am and after 5 pm; and b) one (1) day per week before 9 am and after 5 pm <p>when USGS stream gage 01109403 –Ten Mile River At Providence, RI falls below 17.43 cfs for three (3) consecutive days;</p> <p>Once streamflow triggered restrictions are implemented, they shall remain in place until streamflow at the triggered gage meets or exceeds its day low-flow trigger for seven (7) consecutive days.</p>
Streamflow Triggered Restrictions	<p>Nonessential outdoor water use is allowed:</p> <ul style="list-style-type: none"> a) Seven (7) days per week before 9 am and after 5 pm <p>when USGS stream gage 01109403 –Ten Mile River At Providence, RI falls below:</p> <ul style="list-style-type: none"> • May 1 – June 30: 53 cfs for three (3) consecutive days • July 1 – September 30: 22 cfs for three (3) consecutive days <ul style="list-style-type: none"> b) one (1) day per week before 9 am and after 5 pm <p>when USGS stream 01109403 –Ten Mile River At Providence, RI falls below 17.43 cfs for three (3) consecutive days;</p> <p>Once implemented, the restrictions shall remain in place until streamflow at the triggered gage meets or exceeds the trigger streamflow for seven (7) consecutive days.</p>
For Permittees NOT meeting the 65 RGPCD standard for the preceding year RGPCD > 65 as reported in the ASR and accepted by MassDEP	
Calendar Triggered Restrictions	<p>Nonessential outdoor water use is allowed two (2) days per week before 9 am and after 5pm;</p>

Streamflow Triggered Restrictions	<p>a) Nonessential outdoor water use is allowed two (2) days per week before 9 am and after 5 pm when USGS stream gage 01109403 –Ten Mile River At Providence, RI falls below:</p> <ul style="list-style-type: none">• May 1 – June 30: 53 cfs for three (3) consecutive days• July 1 – September 30: 22 cfs for three (3) consecutive days <p>b) one (1) day per week before 9 am and after 5 pm when USGS stream 01109403 –Ten Mile River At Providence, RI falls below 17.43 cfs for three (3) consecutive days;</p> <p>Once implemented, the restrictions shall remain in place until streamflow at the gage meets or exceeds the trigger streamflow for seven (7) consecutive days.</p>
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In addition, Attleboro's Taunton permit includes a condition that requires restrictions when the level of Lake Mirimichi is 1.5 feet or more below the spillway (elevation 156.5 feet or less) and Attleboro is releasing water downstream. Please see Table 6 below.

**TABLE 6: Attleboro Seasonal Limits on Nonessential Outdoor Water Use
May 1 to September 30
Taunton Permit**

Lake Mirimichi Elevation	<p>Nonessential outdoor water use is allowed no more than two (2) days per week before 9 am and after 5 pm when:</p> <ul style="list-style-type: none">• the level of Lake Mirimichi is 1.5 feet or more below the spillway (elevation 156.5 feet or less); And• Attleboro is releasing water downstream from Lake Mirimichi <p>Once implemented, the restrictions shall remain in place until the lake levels returns above the shutoff value (156.5 feet) for seven (7) consecutive days.</p>
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Attleboro must follow the more stringent restrictions (1 day) outlined in Table 5 above should both Table 5 and Table 6 restrictions be triggered.

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

8. Communication Plan

Attleboro is required to follow the Standard Operating Procedures (SOP) for Lake Mirimichi dated March 10, 2021 and included as Attachment E of this document. Attleboro is also required to develop, within 6 months of this permit being issued, an appropriate method of communication with the Friends of Lake Mirimichi regarding activities that may impact any of the City's other water supplies that could prompt operation of the Lake Mirimichi gate, the water conservation status of the City, and weekly water level measurements taken between May 1st and September 30th at all Attleboro sources.

9. Water Conservation Requirements

At a minimum, Attleboro shall implement the following conservation measures in Table 7. Compliance with the water conservation requirements shall be reported to the Department upon request, unless otherwise noted below.

Table 7: Minimum Water Conservation Requirements	
Leak Detection	
1.	At a minimum, conduct a full leak detection survey every three years.
2.	Conduct leak detection of the entire distribution system within one year whenever the percentage of UAW increases by 5% or more (for example an increase from 3% to 8%) over the percentage reported on the ASR for the prior calendar year. Within 60 days of completing the leak detection survey, submit to the Department a report detailing the survey, any leaks uncovered as a result of the survey or otherwise, dates of repair and the estimated water savings as a result of the repairs.
3.	Conduct field surveys for leaks and repair programs in accordance with the <u>AWWA Manual 36</u> .
4.	<p>Attleboro shall have repair reports available for inspection by the Department. Attleboro shall establish a schedule for repairing leaks that is at least as stringent as the following:</p> <ul style="list-style-type: none"> ○ Leaks of 3 gallons per minute or more shall be repaired within 3 months of detection. ○ Leaks of less than 3 gallons per minute at hydrants and appurtenances shall be repaired as soon as possible. ○ Leaks of less than 3 gallons per minute shall be repaired in a timely manner, but in no event more than 6 months from detection, except that leaks in freeway, arterial or collector roadways shall be repaired when other roadwork is being performed on the roadway. <p>Leaks shall be repaired in accordance with Attleboro's priority schedule including leaks up to the property line, curb stop or service meter, as applicable. Attleboro shall have water use regulations in place that require property owners to expeditiously repair leaks on their property.</p>
Metering	
1.	Calibrate all source and finished water meters at least annually and report date of calibration on the ASR.
2.	Attleboro reports its system is 100% metered. All water distribution system users shall have properly sized service lines and meters that meet AWWA calibration and accuracy performance standards as set forth in <u>AWWA Manual M6 – Water Meters</u> .
3.	Attleboro shall have an ongoing program to inspect individual service meters to ensure that all service meters accurately measure the volume of water used by its customers. The metering program shall include regular meter maintenance, including testing, calibration, repair, replacement and checks for tampering to identify and correct illegal connections. The plan shall continue to include placement of sufficient funds in the annual budget to calibrate, repair, or replace meters as necessary.
Pricing	
1.	Attleboro shall maintain a water pricing structure that includes the full cost of operating the water supply system. Attleboro shall evaluate rates at a minimum every three to five years and adjust costs as needed. Full cost pricing factors all costs - operations, maintenance, capital, and indirect costs (environmental impacts, watershed protection) - into prices.
2.	Attleboro shall not use decreasing block rates. Decreasing block rates which charge lower prices as water use increases during the billing period, are not allowed by M.G.L. Chapter 40 Section 39L.
Residential and Public Sector Conservation	
1.	Attleboro shall meet the standards set forth in the Federal Energy Policy Act, 1992 and the Massachusetts Plumbing Code.
2.	Meter or estimate water used by contractors using fire hydrants for pipe flushing and construction.
3.	Attleboro has reported that all municipally owned public buildings have been retrofitted with water saving devices (faucet aerators, low flow shower heads and low flow toilets). Attleboro shall continue to ensure that water savings devices are installed in all municipal buildings as they are renovated, and shall ensure

Table 7: Minimum Water Conservation Requirements	
water conserving fixtures and landscaping practices are incorporating into the design of new municipal capital projects.	
Industrial and Commercial Water Conservation	
1. Attleboro shall ensure water conservation practices in all development proposals, particularly low flow devices and water-wise landscaping practices.	
Public Education and Outreach	
1. Attleboro shall continue to implement its water conservation and education efforts designed to educate the Town's water customers on ways to conserve water. Without limitation, Attleboro's plan may include the following actions: <ul style="list-style-type: none"> ○ Include in bill stuffers and/or bills, a work sheet to enable customers to track water use and conservation efforts and estimate the dollar savings; ○ Public space advertising/media stories on successes (and failures); ○ Conservation information centers perhaps run jointly with electric or gas company; ○ Speakers for community organizations; ○ Public service announcements; radio/T.V./audio-visual presentations; ○ Joint advertising with hardware stores to promote conservation devices; ○ Use of civic and professional organization resources; ○ Special events such as Conservation Fairs; ○ Develop materials that are targeted to schools with media that appeals to children, including materials on water resource projects and field trips; and ○ Provide multilingual materials as needed. 	
2. Upon request of the Department, the Town of Attleboro shall report on its public education and outreach effort, including a summary of activities developed for specific target audiences, any events or activities sponsored to promote water conservation and copies of written materials.	

10. Mitigation of Impacts for Withdrawals that Exceed Baseline

Attleboro is required to mitigate 0.283 MGD for its renewed permitted withdrawals over baseline in the Taunton River Basin. The Taunton River mitigation requirement of 0.283 MGD will be met partially with 0.0076 gallons of direct mitigation for Infiltration and Removal. Please see Appendix C.

Attleboro's also received 28 indirect mitigation credits as follows: met by Land Acquisition (15 credits, of which 10 is for land protection for public water supply purposes and 5 is for non-water supply land protection), and a Stormwater Management Ordinance, Local Wetlands Protection Ordinance, Rules, and Regulations (8 credits), I/I Removal Program Documentation (5 credits). Please see Appendix D. Attleboro shall notify MassDEP should there be changes to the status of the mitigation measures.

Table 8: Attleboro Mitigation Credit	
Direct Mitigation	
Completed I/I Mitigation Projects - See Appendix C for I/I Mitigation Summary and Documentation Chart and Applicant Certification for Mitigation Credit	
Post 2005 Infiltration Removal	Volume Credit
7,604 gallons per day	0.0076
Indirect Mitigation - See Appendix D for Mitigation Summary and Documentation Chart and Applicant Certification for Mitigation Credit	
	Credit
Land Acquisition (public water supply and non-water supply land protection)	15
Stormwater Management and Local Wetlands Protection Ordinances, Rules, and Regulations	8

I/I Removal Program Documentation	5
Total Mitigation Credit	0.2876 MGD

11. Reporting Requirements

Attleboro shall report annually as required by completing the electronic Annual Statistical Report (eASR) for public water suppliers and shall provide other reporting as specified in the Special Conditions above.

12. General Permit Conditions (applicable to all Permittees)

- 1. Duty to Comply** The Permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
- 2. Operation and Maintenance** The Permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw up to the authorized volume so as not to impair the purposes and interests of the Act.
- 3. Entry and Inspections** The Permittee or the Permittee's agent shall allow personnel or authorized agents or employees of MassDEP to enter and examine any property, inspect and monitor the withdrawal, and inspect and copy any relevant records, for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
- 4. Water Emergency** Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by MassDEP pursuant to M.G.L. c. 21G, §§ 15-17, M.G.L. c. 111, § 160, or any other enabling authority.
- 5. Transfer of Permits** This permit shall not be transferred in whole or in part unless and until MassDEP approves such transfer in writing, pursuant to a transfer application on forms provided by MassDEP requesting such approval and received by MassDEP at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
- 6. Duty to Report** The Permittee shall submit annually, on a form provided by MassDEP, a certified statement of the withdrawal. Such report is to be received by MassDEP by the date specified by MassDEP. Such report must be mailed or hand delivered to the address specified on the report form.
- 7. Duty to Maintain Records** The Permittee shall be responsible for maintaining withdrawal records as specified by this permit.
- 8. Metering** Withdrawal points shall be metered. Meters shall be calibrated annually. Meter shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.
- 9. Amendment, Suspension or Termination** The Department may amend, suspend or terminate this permit in accordance with M.G.L. c. 21G or 310 CMR 36.29.

APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of MassDEP. Any person aggrieved by this decision may request an adjudicatory hearing. Any such request must be made in writing, by certified mail and received by MassDEP within twenty-one (21) days of the date of receipt of this permit.

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 MassDEP.

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 MassDEP 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.

FILING FEE AND ADDRESS

The hearing request, 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

MassDEP may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of MassDEP 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.



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

5/5/2021

Date

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

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

If the permittee fails to document compliance with the RGPCD performance standard in its 2021 Annual Statistical Report (ASR), or in any ASR thereafter, then the permittee must file with that ASR a Residential Gallons Per Capita Day Compliance Plan (RGPCD Plan) which shall include, at a minimum:

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

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

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

If a RGPCD plan is required, the permittee must:

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

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

MassDEP will consider PWS permittees who cannot meet the 10% UAW performance standard to be functionally equivalent, and in compliance with their permit, if they have an on-going program in place that ensures “best practices” for controlling water loss. The water loss control program will be based on annual water audits and guidance as described in the AWWA/IWA *Manual of Water Supply Practices – M36, Water Audits and Loss Control Programs* (AWWA M36).

If, as of December 31, 2022, the permittee fails to document compliance with the Unaccounted for Water performance standard (UAW of 10% or less for 2 of the 3 most recent years throughout the permit period), then the permittee shall develop and implement a water loss control program following the *AWWA M36 Water Audits and Loss Control Programs* within 5 full calendar years.

1. Conduct an annual “top down” water audit, calculate the data validity level/score using AWWA Water Loss Control Committee’s Free Water Audit Software, and submit the AWWA WLCC Free Water Audit Software: Reporting Worksheet and data validity score annually with its Annual Statistical Report (ASR).
 - If a PWS’s data validity level/score is less than Level III (51-70), steps recommended through the audit(s) shall be taken to improve the reliability of the data prior to developing a long-term program to reduce real and apparent water losses.
 - Data with a validity score of 50 or less are considered too weak to be used to develop a component analysis or for infrastructure planning and maintenance.
 - Developing data with an acceptably strong validity score can be a multi-year process.
2. When the data validity score meets the Level III (51-70) requirement, the permittee shall conduct a component analysis to identify causes of real and apparent water loss and develop a program to control losses based on the results of the component analysis. The Permittee shall submit the component analysis and water loss control program with a proposed implementation schedule to the Department.
3. Continued implementation will be a condition of the permit in place of meeting the 10% UAW performance standard.
4. Upon request of the Department, the permittee shall report on its implementation of the water loss control program.

A PWS permittee may choose to discontinue the water loss program implementation if UAW, as reported on the ASR and approved by DEP, is below 10% for four consecutive years, and the water audit data validity scores are at least Level III (51-70) for the same four years.

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

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

MassDEP UAW Water Loss Control Measures: Permittees who do not have MassDEP approved Water Loss Control Programs in place by 6th calendar year after 2019 will be required to implement the MassDEP UAW Water Loss Control Measures outlined below:

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

Hardship - A permittee may present an analysis of the cost effectiveness of implementing certain conservation measures included in the MassDEP UAW Water Loss Control Measures and offer alternative measures. Any analysis must explicitly consider environmental impacts and must produce equal or greater environmental benefits. Suppliers will be able to present:

- Reasons why specific measures are not cost effective because the cost would exceed the costs of alternative methods of achieving the appropriate standard;
- Alternative specific conservation measures that would result in equal or greater system-wide water savings or equal or greater environmental benefits than the conservation measures included in the MassDEP UAW Functional Equivalence Plan; and
- When applicable, an analysis demonstrating that implementation of specific measures will cause or exacerbate significant economic hardship.

Appendix C –Attleboro Direct Mitigation Credits

Attleboro received 0.0076 gallons of direct minimization for I/I Removal.

Attleboro I/I Volumes						
Direct/ Indirect	(inflow or infiltration)	Activity	Quantity	Data Sources	Notes	Volume (gpd)
Direct	inflow	disconnected sump pumps	58	2018 CMOM	86 gpd/sump pump	4,988
Direct	inflow	raised manholes	6	2018 CMOM	78 gpd/ponded manhole	468
Direct	inflow	replaced rims & covers	46	2018 CMOM	26 gpd/manhole	1,196
Direct	inflow	disconnected roof leaders	5	2018 NPDES I/I Summary	72 gpd/sump pump	360
Direct	inflow	disconnected floor drains	4	2018 NPDES I/I Summary	86 gpd/sump pump	344
Direct	inflow	disconnected outside drain	2	2018 NPDES I/I Summary	72 gpd/sump pump	144
Direct	inflow	replaced manhole frame&cover	4	2017 NPDES I/I Summary	26 gpd/manhole	104
Total gpd						7,604
Total gallons						0.0076

Applicant Certification for Infiltration and Inflow Removal Mitigation Credit

I hereby certify that:

1. I have compiled, evaluated and/or established all pertinent documents, instruments, records and information necessary to provide this certification, including the documents listed as attachments to this certification.
2. I have consulted with legal, technical and other qualified professionals, as necessary for me to make this certification, including Tata & Howard.
3. The following is true:
 - a. Tata & Howard has reviewed all the documents that have been submitted to MassDEP in support of the infiltration and inflow removal mitigation credit.
 - b. The City of Attleboro is in compliance with the requirements of 314 CMR 12.04(2) to develop and implement a MassDEP-approved plan to control infiltration and inflow to its sewer system ("I/I Plan").
 - c. The City of Attleboro has established a funding mechanism for the full implementation of its I/I Plan throughout the life of WMA Permit #9P425016.01 (the "Permit").
 - d. All removal work for which mitigation credit is sought occurred in or after 2005.
 - e. All removal work for which mitigation credit is sought has been or will be conducted in accordance with MassDEP's *Guidelines for Performing Infiltration/Inflow Analyses and Sewer System Evaluation Surveys*, May 2017 ("DEP's Guidelines").
 - f. All removal work for which mitigation credit is sought utilizes removal methods that are reasonable based on the professional judgment of [either Permit Consultant or MassDEP's regional wastewater staff]. Any estimates for which the estimation method and/or removal method is unknown or does not follow DEP's *Guidelines* have been clearly identified in the attached documents.
 - g. All removal work for which mitigation credit is sought is or will be adequately operated and maintained after construction is completed.
4. I shall maintain a copy of all records, regardless of form (e.g., both printed and electronic) upon which I rely in making this certification until a final decision on this application has been issued by the Department and, if this application is approved, will do so thereafter in accordance with the permit conditions. Such records shall include without limitation all documents described in paragraph 1, above, and any supporting documents provided to me by, or relied upon by, such qualified professionals as I may consult in certifying as to the information set forth in paragraph 2, above.
5. I attest under the pains and penalties of perjury that the information contained in this certification and its attachments is, to the best of my knowledge and belief, true, accurate and complete. I am authorized to make this attestation on behalf of the permit applicant. I am aware that there are significant penalties for submitting false, inaccurate or incomplete information, including, but not limited to, the possibility of fine and imprisonment for knowing violations.
6. I am aware that submitting a false and misleading certification could lead to modification, suspension or revocation of any permit granted pursuant to this certification, as set forth in 310 CMR 36.29 and 36.43.

Attachments:

- A. I/I Plan pursuant to 314 CMR 12.04 (2), or a copy of the permittee's extension request to MassDEP with a schedule for compliance
- B. I/I Analysis report (if applicable)
- C. SSES report(s) (if applicable)
- D. I/I Removal Summary Table (if applicable)
- E. Documentation of Post-Rehab Flow Monitoring (if applicable)

Signature of Applicant: 

Date: 3-22-21

Printed Name of Applicant: Kourtney J. Wanshel

Appendix D –Attleboro Indirect Mitigation Credits

Attleboro received 29 indirect mitigation credits met by Land Acquisition, (15 credits max, of which 10 is for land protection for public water supply purposes and 5 is for non-water supply land protection) and A Stormwater Management Ordinance, Local Wetlands Protection Ordinance, Rules, and Regulations, (8 credits), its I/I Removal Program documentation (5 credits), its Operations and Maintenance Plan (1 credit).

Attleboro Land Acquisition Credits							
Parcel Acres	Owner	Assessors Map/Lot Numbers	Purchase Date	Date of Conservation Restriction	Deed Book/ Page #	Priority Conservation Acres (public water supply)	Other Conservation Acres (non-water supply)
62.71	Attleboro	Plat #136A, Lot#1; Plat #136A, Lot #2; Plat #213, Lo#2	02/2018	02/2018	510/pg. 64	62.06	0.65
54.98	Attleboro	Plat #94, Lot#4; Plat #125A, Lot#1; Plat#125, Lot#3 and Lot#4	01/2018	01/2018	24270/pg.238, 24270/pg.241, 24270/pg.244	0	54.98
50.70	Attleboro	Plat #122, Lot#46; Plat#199, Lot#6	08/2016	08/2016	23613/pg.148	41.24	9.46
Total Acres						103.30	65.09
Total Credits						20.66	6.51
Total Credits Allowed						15	

Attleboro's Bylaw Credits		
Local Wetlands Protection Ordinance Updated 08/08	1 credit for enforceability of the bylaw. 1 credit for jurisdiction to resource areas " <i>whether or not they border surface waters</i> " 1 credit for Extending Riverfront status to intermittent streams. 1 credit for requiring a minimum 25-ft no-build or no-disturb setback in buffer zones.	4 credits
Stormwater Management Ordinance Updated 04/19	2 credits for the geographic extent of the Ordinance (entire municipality) 2 credits when required to infiltrate 1 inch of runoff	4 credits
Total Credits		8

Attleboro's I/I Removal Program Documentation				
Major Basin	Year Completed	Data Sources	Activity Type (Infiltration or Inflow)	Credit
Taunton and Ten Mile	2014	I/I Summary Report	Both	1
Taunton and Ten Mile	2015	I/I Summary Report	Both	1
Taunton and Ten Mile	2016	I/I Summary Report	Both	1
Taunton and Ten Mile	2017	I/I Summary Report	Both	1
Taunton and Ten Mile	2018	I/I Summary Report	Both	1
Total Credits				5

**Water Management Act Permit Guidance: Indirect Mitigation
Land Protection**

Applicant Certification for Land Protected for Mitigation Credit

I hereby certify that:

1. I have compiled, evaluated and/or established all pertinent documents, instruments, records and information necessary to provide this certification, including the documents listed as attachments to this certification;
2. I have consulted with legal, technical and other qualified professionals, as necessary for me to make this certification;
3. the following is true with respect to each of the parcels of water supply protection land or portions thereof for which mitigation credit is requested:
 - a. the land is under the control of the Board of Water Commissioners and will remain so until the MassDEP WMA Permit expiration date listed at the end of this form; and
 - b. all land acquisitions for which 0.2 credits/acre are sought have received MassDEP approval pursuant to M.G.L. c. 40 §§ 38 and 39B, as indicated on the MassDEP BRP WS 26 decision letter attached to this form.
4. the following is true with respect to each of the parcels of conservation land or portions thereof for which mitigation credit is requested:
 - a. the entire portion of land for which mitigation credit is requested is subject to a conservation restriction or easement, or it is held by the local Conservation Commission;
 - b. the conservation restriction, conservation easement, or Conservation Commission control took effect on or after January 1, 2005, and will remain in effect until the MassDEP WMA Permit expiration date listed at the end of this form;
 - c. the conservation restriction, conservation easement, or Conservation Commission control is recorded in the Registry of Deeds of the appropriate county or filed with the appropriate Registration District of the Land Court;
 - d. at a minimum, the conservation restriction, conservation easement, or Conservation Commission prohibits the following uses and activities except for the rights reserved by the grantor:
 - i. industrial, commercial or residential use;
 - ii. recreational activities that materially alter the landscape or potentially degrade water quality (e.g., playing fields, golf courses, swimming pools, play structures, downhill ski areas);
 - iii. motorized vehicles of any kind;
 - iv. disposal or discharge of hazardous materials or wastes;
 - v. storage of hazardous materials;
 - vi. storage or use of fertilizers, herbicides or pesticides; and
 - vii. installation or construction of structures and impervious surfaces.
 - e. the conservation restriction, conservation easement, or Conservation Commission control includes a reservation of rights by the grantor

7/07/2020

Water Management Act Permit Guidance: Indirect Mitigation Land Protection

notwithstanding the prohibited activities and uses for no more than the following:

- i. passive recreation such as walking, hiking, and cross-country skiing;
 - ii. maintenance mowing;
 - iii. selective cutting or pruning of trees, brush and other vegetation to prevent, control or remove hazards, disease, insect damage, fire damage, storm damage or invasive species;
 - iv. maintenance and repair of existing structures identified in the restriction or easement (e.g., fences, stone walls); and
 - v. installation of paths for passive recreational use.
- f. for land not owned by the permit applicant, the owner of the land has agreed to its use for mitigation credit for the MassDEP WMA Permit listed at the end of this form; and
- g. there are no encumbrances on the property that supersede the conservation restriction, conservation easement, or Conservation Commission control.
5. I shall maintain a copy of all records, regardless of form (e.g., both printed and electronic) upon which I rely in making this certification until a final decision on this application has been issued by the Department and, if this application is approved, will do so thereafter in accordance with the permit conditions. Such records shall include without limitation all documents described in paragraph 1, above, and any supporting documents provided to me by, or relied upon by, such qualified professionals as I may consult in certifying as to the information set forth in paragraph 2, above;
6. I attest under the pains and penalties of perjury that the information contained in this certification and its attachments is, to the best of my knowledge and belief, true, accurate and complete. I am authorized to make this attestation on behalf of the permit applicant. I am aware that there are significant penalties for submitting false, inaccurate or incomplete information, including, but not limited to, the possibility of fine and imprisonment for knowing violations; and
7. I am aware that submitting a false and misleading certification could lead to modification, suspension or revocation of any permit granted pursuant to this certification, as set forth in 310 CMR 36.29 and 36.43.

Attachments:

- A. A table containing the following information for each parcel of land subject to this certification: area of protected land in acres, name of owner(s), municipal assessor's map and lot numbers, date of land purchase, effective date and term of conservation restriction/easement, book and page numbers of deed, book and page numbers of conservation restriction/easement, area of water supply protected land in acres (only applicable for water supply protection land), and area of Priority Conservation Land² in acres.
- B. A copy of the MassDEP BRP WS 26 decision letter referred to in paragraph 3 above (only applicable for water supply protection land).

² Priority Conservation Lands, as defined in the WMA Permit Guidance Document, include NHESP-designated lands (namely BioMap2 Core Habitats and Critical Natural Landscapes, Certified Vernal Pools and abutting land, and Priority Habitats of Rare and Endangered Species), Areas of Critical Environmental Concern, aquatic buffers including buffer zones of DFW Coldwater Fishery Resources (CFRs), and Outstanding Resource Waters (ORWs).

Water Management Act Permit Guidance: Indirect Mitigation
Land Protection

- C. A colored map(s) at an appropriate scale that depicts each parcel of land subject to this certification and any Priority Conservation Land¹ for which 0.2 credits per acre is sought.
- D. If any parcel of land subject to this certification is not owned by the permit applicant, a Land Owner Agreement to Use of Land as Mitigation for Withdrawals in Accordance with a MassDEP Water Management Permit.

Signature of Applicant: 

Date: 3-22-21

Printed Name of Applicant: Karmey J. Wunschel

MassDEP WMA Permit # 9P425016.01

MassDEP WMA Permit Expiration Date: _____

LAND OWNER AGREEMENT TO USE OF LAND AS MITIGATION FOR WITHDRAWALS
IN ACCORDANCE WITH A MASSDEP WATER MANAGEMENT ACT (WMA) PERMIT

I, Paul Heroux, Mayor of the City of Attleboro, of 77 Park Street, hereby certify that:

1. I am the owner (fee simple) of a parcel of land located at Slater Street and Bolkum Lane, in the City of Attleboro, consisting of approximately 62.71± acres of land identified on a deed recorded with the Bristol County Registry of Deeds in book 510 / page 64.
2. Said parcel of land is subject to ~~(name of conservation restriction or easement)~~, signed on ~~(date)~~, by and between ~~(names of parties to restriction or easement)~~, consisting of approximately ~~(#)~~ acres of land, and recorded with the Bristol County Registry of Deeds in ~~(book/page)~~.
3. The parcel information in the following table is complete and accurate:

A	Size (acres)	62.71± acres
B	Location	Slater Street and Bolkum Lane
C	Assessors Map and Lot number	Plat #136A, Lot #1 Plat #136A, Lot #2 Plat #213, Lot #2
D	Owner(s)	City of Attleboro
E	Other parties contributing to purchase of land	None
F	Date of purchase	February 2018
G	Cost of purchase	Donation
H	Period of conservation restriction	Perpetuity
I	Outstanding lien or mortgage holders	None

I hereby agree:

1. To the use of said parcel as mitigation for withdrawals made by Attleboro Water Department in accordance with MassDEP WMA Permit permit #9P-4-25-016.01, issued pursuant to MGL Ch. 21G and 310CMR 36.00.
2. That in the event of any use of or activity on the property in violation of the terms of the February 2018 Municipal Council vote, I will notify the Massachusetts Department of Environmental Protection and the City of Attleboro in writing within 10 business days.

Signature of owner: Paul Heroux

Date: October 30, 2019

Printed Name of Owner: Paul Heroux, Mayor

LAND OWNER AGREEMENT TO USE OF LAND AS MITIGATION FOR WITHDRAWALS
IN ACCORDANCE WITH A MASSDEP WATER MANAGEMENT ACT (WMA) PERMIT

I, Paul Heroux, Mayor of the City of Attleboro, of 77 Park Street, hereby certify that:

1. I am the owner (fee simple) of a parcel of land located at Richardson Avenue and Division Street, in the City of Attleboro, consisting of approximately 54.98+ acres of land identified on a deed recorded with the Bristol County Registry of Deeds in book 24270 / page 238, book 24270 / page 241, book 24270 / page 244.
2. ~~Said parcel of land is subject to (name of conservation restriction or easement), signed on (date), by and between (names of parties to restriction or easement), consisting of approximately (#) acres of land, and recorded with the Bristol County Registry of Deeds in (book/page).~~
3. The parcel information in the following table is complete and accurate:

A	Size (acres)	54.98+ acres
B	Location	Richardson Avenue and Division Street
C	Assessors Map and Lot number	Plat #94, Lot #4 Plat #125A, Lot #1 Plat #125, Lot #3 and Lot #4
D	Owner(s)	City of Attleboro
E	Other parties contributing to purchase of land	None
F	Date of purchase	January 2018
G	Cost of purchase	Donation
H	Period of conservation restriction	Perpetuity
I	Outstanding lien or mortgage holders	None

I hereby agree:

1. To the use of said parcel as mitigation for withdrawals made by Attleboro Water Department in accordance with MassDEP WMA Permit permit #9P-4-25-016.01, issued pursuant to MGL CH. 21G and 310CMR 36.00.
2. That in the event of any use of or activity on the property in violation of the terms of the January 2018 Municipal Council vote, I will notify the Massachusetts Department of Environmental Protection and the City of Attleboro in writing within 10 business days.

Signature of owner: Paul Heroux

Date: October 30, 2019

Printed Name of Owner: Paul Heroux, Mayor

LAND OWNER AGREEMENT TO USE OF LAND AS MITIGATION FOR WITHDRAWALS
IN ACCORDANCE WITH A MASSDEP WATER MANAGEMENT ACT (WMA) PERMIT

I, Paul Heroux, Mayor of the City of Attleboro, of 77 Park Street, hereby certify that:

1. I am the owner (fee simple) of a parcel of land located at Springdale Avenue, in the City of Attleboro, consisting of approximately 50.7+ acres of land identified on a deed recorded with the Bristol County Registry of Deeds in book 23613 / page 148.
2. ~~Said parcel of land is subject to (name of conservation restriction or easement), signed on (date), by and between (names of parties to restriction or easement), consisting of approximately (#) acres of land, and recorded with the Bristol County Registry of Deeds in (book/page).~~
3. The parcel information in the following table is complete and accurate:

A	Size (acres)	50.7+ acres
B	Location	Springdale Avenue
C	Assessors Map and Lot number	Plat #112, Lot #46 Plat #199, Lot #6
D	Owner(s)	City of Attleboro
E	Other parties contributing to purchase of land	None
F	Date of purchase	August 2016
G	Cost of purchase	Donation
H	Period of conservation restriction	Perpetuity
I	Outstanding lien or mortgage holders	None

I hereby agree:

1. To the use of said parcel as mitigation for withdrawals made by Attleboro Water Department in accordance with MassDEP WMA Permit permit #9P-4-25-016.01, issued pursuant to MGL CH. 21G and 310CMR 36.00.
2. That in the event of any use of or activity on the property in violation of the terms of the August 2016 Municipal Council vote, I will notify the Massachusetts Department of Environmental Protection and the City of Attleboro in writing within 10 business days.

Signature of owner: Paul Heroux

Date: October 30, 2019

Printed Name of Owner: Paul Heroux, Mayor

Appendix E – Communication Plan

**CITY OF ATTLEBORO WATER DEPT
RUSSELL TENNANT WTP, WADING RIVER PUMPING STATION
Standard Operating Procedure
Title: Operational Procedures for Lake Mirimichi
Revision: March 10, 2021**

Frequency: NA

Safety Considerations: NA

Operation of the Valve:

- 1.) When the level of Blake's Pond is 6" down, notify operations. Based on the extended weather forecast and the production from Wading River, a decision may be made to open the valve.
- 2.) When the level of Blake's Pond is 10" down, the valve will be opened at Lake Mirimichi.
- 3.) Before opening the valve, record the level at both Lake Mirimichi and Blake's Pond. The valve will be opened 5 turns to start with. The valve is fully open at 112 turns.
- 4.) Based on levels and extended weather forecast, the valve may be opened more turns, closed slightly, or closed completely.

Notifications:

- 1.) Alert Peter Blais whenever operating the valve at Lake Mirimichi, or if you are unsure of what to do relative to present measurements and weather forecasts. PJ will pass the information to Bob Amadon, Greg O'Brien, and Kourtney Wunschel.
- 2.) Whenever the valve at Lake Mirimichi is opened, changed, or closed, notification must be made to MassDEP, the Plainville Water Department, the Foxborough Water Department, and the Friends of Lake Mirimichi.
- 3.) Kourtney or Greg will update the city website each time the valve is operated. A template for public notification for editing exists on the website for any future use.
- 4.) Notifications must include the date, time, number of turns operated, complete number of turns the valve is opened, and the levels in both Lake Mirimichi and Blake's Pond.
- 5.) Kourtney Wunschel or Greg O'Brien will email the notification to the following people: (if Kourtney or Greg is unavailable, the email will be sent out by Bob Amadon):
 - a.) DEP- Duane Levangie- duane.levangie@state.ma.us
 - b.) Plainville- Dennis Morton- dmorton@plainville.ma.us
 - c.) Mayor Heroux- paulheroux@cityofattleboro.us
 - d.) Bob Amadon- water5@cityofattleboro.us
 - e.) Kourtney Wunschel- water1@cityofattleboro.us
 - f.) Greg O'Brien- water4@cityofattleboro.us

- g.) Peter Blais- watermaintenance@cityofattleboro.us
- h.) Friends of Lake Mirimichi- lakemirimichi@gmail.com
- i.) Bob Worthley - BWorthley@foxboroughma.gov
- j.) Eileen Hurley – EHurley@foxboroughma.gov