Part I: General Conditions **General Information** State: MA Name of Municipality or Organization: Town of Carver EPA NPDES Permit Number (if applicable): MAR041099 **Primary MS4 Program Manager Contact Information** Name: John Woods Title: Director of Operations & Maintenance Street Address Line 1: 108 Main Street Street Address Line 2: City: Carver 02330 State: MA Zip Code: John.Woods@carverma.org Phone Number: (508) 866-3425 Email: Fax Number: (508) 866-2393 Other Information Stormwater Management Program (SWMP) Location (web address or physical location, if already completed): **Eligibility Determination** Eligibility Criteria Endangered Species Act (ESA) Determination Complete? Yes \square A \square B \square C (check all that apply): Eligibility Criteria National Historic Preservation Act (NHPA) Determination Complete? Yes (check all that apply): Check the box if your municipality or organization was covered under the 2003 MS4 General Permit $\overline{}$ MS4 Infrastructure (if covered under the 2003 permit) 100% **Estimated Percent of Outfall Map Complete?** If 100% of 2003 requirements not met, enter an (Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit) estimated date of completion (MM/DD/YY): Web address where MS4 map is published: See Attached Maps If outfall map is unavailable on the internet an electronic or paper copy of the outfall map must be included with NOI submission (see section V for submission options) Regulatory Authorities (if covered under the 2003 permit) Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? Effective Date or Estimated Yes 06/01/12 (Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit) Date of Adoption (MM/DD/YY): Construction/Erosion and Sediment Control (ESC) Authority Adopted? Effective Date or Estimated 05/21/07 Yes (Part II,III,IV or V, Subpart B.4.(a.) of 2003 permit) Date of Adoption (MM/DD/YY): Post- Construction Stormwater Management Adopted? **Effective Date or Estimated** Yes 05/21/07 Date of Adoption (MM/DD/YY): (Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)

Part II: Summary of Receiving Waters

Please list the waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments.

Massachusetts list of impaired waters: Massachusetts 2014 List of Impaired Waters- http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf

Check off relevant pollutants for discharges to impaired waterbodies (see above 303(d) lists) without an approved TMDL in accordance with part 2.2.2.a of the permit. List any other pollutants in the last column, if applicable.

Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment	Chloride	Chlorophyll-a	Dissolved Oxygen/ DO Saturation	Nitrogen	Oil & Grease/ PAH	Phosphorus	Solids/TSS/ Turbidity	E. coli	Enterococcus	Other pollutant(s) causing impairments
Bates Pond (MA95007)	1										
Beaver Dam Brook	4										
Cedar Swamp	1										
Cranberry Bogs (see map for locations)	32										
Doten Brook	1										
Herring Brook	1										
Isolated Wetland Jowett Street	8										
Isolated Wetland Pleasant Street	2										
Muddy Pond Brook	1										
North Center Street Pond (MA62132)	2										
South Meadow Pond (MA95140)	1										
Weweantic River (MA95-04)	2										
Outside Receiving Waterbody	55										

Part III: Stormwater Management Program Summary

Identify the Best Management Practices (BMPs) that will be employed to address each of the six Minimum Control Measures (MCMS). For municipalities/organizations whose MS4 discharges into a receiving water with an approved Total Maximum Daily Load (TMDL) and applicable waste load allocation (WLA), identify any additional BMPs employed to specifically support the achievement of the WLA in the TMDL section at the end of Part III.

For each MCM list each existing or proposed BMP by category and provide a brief description, responsible parties/departments, measureable goals and the year the BMP will be employed (Public education and outreach BMPs also require a target audience).

MCM 1: Public Education and Outreach

BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department /Parties	Measurable Goal	Beginning Year of BMP Implementation
1A	Multi-media methods (including social media and print materials)	Education and outreach on stormwater management topics of significance in Carver, including proper use and disposal of grass clippings, proper use of slow-release, phosphorus-free fertilizers, proper pet waste management and proper disposal of leaf litter. Educational topics will include but are not limited to those in Part 2.3.2.d.i	Residents	Conservation Commission, Board of Health	Distribute a minimum of 2 educational messages spaced at least a year apart	FY 2019 (PY1)

BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department /Parties	Measurable Goal	Beginning Year of BMP Implementation
1B	Multi-media methods (including web and print materials)	Education and outreach on stormwater management topics of significance in Carver, including proper use and disposal of grass clippings, proper use of slow-release, phosphorus-free fertilizers, proper pet waste management and proper disposal of leaf litter. Educational topics will include but are not limited to those in Part 2.3.2.d.ii	Businesses, Institutions, and Commercial Facilities including Landscaping, Marine Services Golf Courses and Cranberry Farming	Conservation Commission, Board of Health	Distribute a minimum of 2 educational messages spaced at least a year apart	FY 2020 (PY2)

BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department /Parties	Measurable Goal	Beginning Year of BMP Implementation
1C	Multi-media methods (including web and print materials)	Education and outreach on stormwater management topics of significance in Carver, including proper use and disposal of grass clippings, proper use of slow-release, phosphorus-free fertilizers, proper pet waste management and proper disposal of leaf litter. Educational topics will include but are not limited to those in Part 2.3.2.d.iii	Developers (Construction)	Conservation Commission, Operation and Maintenance Department, Planning Board, Board of Health	Distribute a minimum of 2 educational messages spaced at least a year apart	FY 2019(PY1)

BMP ID	ВМР	BMP Description	Targeted	Responsible	Measurable Goal	Beginning Year of
	Media/Category		Audience	Department		BMP
				/Parties		Implementation
1D	Multi-media	Education and	Industrial Facilities	Conservation	Distribute a	FY 2020 (PY2)
	methods (including	outreach on		Commission,	minimum of 2	
	web and print	stormwater		Board of Health	educational	
	materials)	management topics			messages spaced	
		of significance in			at least a year	
		Carver, including			apart	
		proper use and				
		disposal of grass				
		clippings, proper				
		use of slow-release,				
		phosphorus-free				
		fertilizers, proper				
		pet waste				
		management and				
		proper disposal of				
		leaf litter.				
		Educational topics				
		will include but are				
		not limited to those				
		in Part 2.3.2.d.iv				
1E	Public Education	Educational goals	All	Conservation	Annually report	FY 2019 (PY1)
	Goals and Progress	(programmatic and		Commission,	methods/measures	,
	2 2 202 200 200	message specific)		Board of Health	to evaluate	
		will be defined in			effectiveness and	
		the SWMP.			progress to meet	
		CITE STATE .			meeting goals.	

Part III: Stormwater Management Program Summary

MCM 2: Public Involvement and Participation

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Measurable Goal	Beginning Year of BMP Implementation
2A	Public Review	SWMP Review	Operation and Maintenance Department	Annually provide the public with an opportunity to participate in the review and implementation of the SWMP	FY 2019 (PY1)
2B	Public Participation	Provide opportunities for public involvement and participation in Carver's stormwater program. Specific activities, schedule, and lead departments are included in the SWMP.	All Town Departments, Boards and Committees	Ongoing compliance	FY 2019 (PY1)
2C	Public Review	Stormwater Management Task Force (Town Administrator, Operations and Maintenance Dept, Conservation Commission, Planning and Community Development, Health Department)	Maintenance Department	At a minimum, the Stormwater Management Task Force will meet annually.	FY 2019 (PY1)

Part III: Stormwater Management Program Summary

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Measurable Goal	Beginning Year of BMP Implementation
3A	IDDE Ordinance/Bylaw	Complete. Continue to enforce and update if necessary.	Operation and Maintenance Department, Conservation Commission and Board of Health	Track illicit discharges identified and removed. Track permits issues with certification of no illicit connections.	FY 2019 (PY1)
3B	Storm Sewer System Map	Continue to update map and refine outfall inventory.	Operation and Maintenance Department	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	FY 2019 (PY1)
3C	Written IDDE program	Create written IDDE program.	Operation and Maintenance Department	Complete within 1 year of the effective date of permit and update as required	FY 2019 (PY1)
3D	Assessment and Priority Ranking of Outfalls & Interconnections	1. Complete Initial Catchment Delineation and Priority Ranking as part of BMP 3D for outfalls in the urbanized area.	Operation and Maintenance Department	Complete within 1 year of the effective date of permit and update as necessary	FY 2019 (PY1)

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Measurable Goal	Beginning Year of BMP Implementation
3D	Assessment and Priority Ranking of Outfalls & Interconnections	2. Complete Dry Weather Outfall Screening & Sampling in accordance with IDDE Plan and permit conditions for all outfalls with dry weather flow	Operation and Maintenance Department	Complete 3 years after effective date of permit. Track # illicit discharges identified & volume removed. Summarize screening/sampling results.	FY 2019 (PY1)
3D	Assessment and Priority Ranking of Outfalls & Interconnections	3. Catchment Investigations according to program and permit conditions	Operation and Maintenance Department	Complete 10 years after effective date of permit. Track # and percentage of MS4 catchments evaluated. Track # illicit discharges identified & volume removed. Summarize screening/sampling results.	FY 2020 (PY2)
3E	Employee Training	Train employees on IDDE implementation	Operation and Maintenance Department	Train annually. Track employees trained, training topic, date/time, and materials presented.	FY 2019 (PY1)

Town of Carver Page 10 of 18

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)

Part III: Stormwater Management Program Summary

MCM 4: Construction Site Stormwater Runoff Control

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Measurable Goal	Beginning Year of BMP Implementation
4A	Construction Bylaw and Regulations	Modify local bylaw and regulations, if necessary, to contain new MS4 provisions per section 2.3.5.	Planning Board	Review current procedures and modify if necessary within 1 year of permit effective date	FY 2019 (PY1)
4B	Construction Policy and Procedures	Develop and implement written procedures for site inspections and enforcement procedures per section 2.3.5.	Planning Board, Conservation Commission	Review current procedures and modify if necessary within 1 year of permit effective date	FY 2019 (PY1)

Part III: Stormwater Management Program Summary

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Measurable Goal	Beginning Year of BMP Implementation
5A	Post-Construction Bylaw and Regulations	Modify local bylaw and regulations to contain new MS4 provisions per section 2.3.6.a.	Planning Board, Operation and Maintenance Department	Modify existing bylaw and regulations within 2 years of permit effective date	FY 2019 (PY1)
5B	Assess street and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options.	Planning Board	Complete report no later than 4 years of permit effective date	FY 2021 (PY3)
5C	Assess allowing green infrastructure	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist	Planning Board	Complete report no later than 4 years of permit effective date	FY 2021 (PY3)

BMP ID Responsible **Beginning Year of BMP Category BMP Description Measurable Goal Department / Parties BMP Implementation** 5D **Retrofit Feasibility** Planning Board Complete report no Conduct detailed FY 2021 (PY3) Assessment inventory of Townlater than 4 years of permit effective owned properties. Rank Town-owned date, beginning in properties for retrofit year 5 keep running potential. list of at least 5 retrofit sites

Town of Carver Page 13 of 18

Notice of Intent (NOI) for coverage under Small MS4 General Permit (continued)

Part III: Stormwater Management Program Summary

MCM 6: Municipal Good Housekeeping and Pollution Prevention

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Additional Description/Measurable Goal	Beginning Year of BMP Implementation
6A	Operation & Maintenance Program	Complete inventory of all permittee-owned parks and open spaces, buildings and facilities (including their storm drains), and vehicles and equipment. Create O&M procedures for all properties in the inventory.	Operation and Maintenance Department	Complete 2 years after permit effective date, implement in following years	FY 2019 (PY1)
6B	Operation & Maintenance Program	Establish and implement program for repair and rehabilitation of MS4 infrastructure	Operation and Maintenance Department	Complete 2 years after permit effective date, implement in following years	FY 2019 (PY1)
6C	Stormwater Pollution Prevention Plans (SWPPP)	Develop and Implement SWPPP at DPW/Highway Facility.	Operation and Maintenance Department	Complete SWPPPs within 2 year of permit effective date, implement in following years	FY 2020 (PY2)

BMP ID BMP Category BMP Description Responsible Additional **Beginning Year of** Department / **Description/Measurable BMP Implementation Parties** Goal 1. Implement Track frequency and FY 2019 (PY1) 6D Operation & Operation and procedures to material quantity of catch Maintenance Maintenance optimize catch basin Department basin cleaning in town. Program cleaning developed In first Annual Report and under BMP 6B in SWMP, document plan for optimizing catch basin cleaning. 2. Implement Annually track number of FY 2019 (PY1) Operation & Operation and 6D procedures for street miles cleaned or the Maintenance Maintenance and parking lot Program Department volume or mass of sweeping developed material removed. under BMP 6B Operation & Operation and Implement program for FY 2019 (PY1) 6D 3. Implement Maintenance procedures for use Maintenance winter road maintenance and storage of Department throughout permit term. Program deicing materials developed under BMP 6B Operation and 6D Operation & 4. Implement Develop an inventory of FY 2019 (PY1) Maintenance procedures to inspect Maintenance Town-owned BMPs by and maintain Town-Department PY3. Report on Program owned structural inspection and stormwater BMPs maintenance conducted

annually.

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Total Maximum Daily Load (TMDL) Requirements

Use the drop-down menus to select the applicable TMDL, action description to meet the TMDL requirements, and the responsible department/parties. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

Applicable TMDL	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Requirements Related to Water Quality Limited Waters

Use the drop-down menus to select the pollutant causing the water quality limitation and enter the waterbody ID(s) experiencing excursions above water quality standards for that pollutant. Choose the action description from the dropdown menu and indicate the responsible party. If no options are applicable, or more than one, enter your own text to override drop-down menus.

Pollutant	Waterbody ID(s)	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
Nitrogen	Wankinco MA95-30 is tributary of Wareham River	Adhere to requirements in part I of Appendix H	DPW Operations
Phosphorus	Wankinco MA95-30 flows through Parker Mills Pond	Adhere to requirements in part II of Appendix H	DPW Operations
Nitrogen	Weweantic MNA95-04 drains to Buzzards Bay	Adhere to requirements in part I of Appendix H	DPW Operations

Part IV: Notes and additional information

Use the space below to indicate the part(s) of 2.2.1 and 2.2.2 that you have identified as not applicable to your MS4 because you do not discharge to the impaired water body or a tributary to an impaired water body due to nitrogen or phosphorus. Provide all supporting documentation below or attach additional documents if necessary. Also, provide any additional information about your MS4 program below.

- 1. BMPs identified in the 2003 General Permit NOI have evolved over the permit term due to staff changes and Stormwater Program modifications. The intent of the 2003 BMPs are being met under the proposed 2016 General Permit BMPs included in the Stormwater Management Plan. The Plan will describe how the BMPs under the 2003 permit fit into the new program, particularly where BMPs and/or measurable goals that are outdated or no longer appropriate have been replaced or updated.
- 2. The National Endangered Species Eligibility Determination screening process has been completed and the Town of Carver meets Criterion B. The Town's stormwater discharges and discharge related activities are not likely to affect listed species or critical habitat. The Town will consult with U.S. Fish and Wildlife as needed during the permit term.
- 3. The National Historic Preservation Act Eligibility Determination screening process has been completed and the Town of Carver meets Criterion A. The Town's stormwater discharges do not have the potential to cause effects on historic properties. The Town will consult with the State Historic Preservation Officer as needed during the permit term.
- 4. The outfalls and associated receiving waters in Part II are based on mapping as of September 2018 and are subject to change during implementation of the Stormwater Management Program as newly constructed outfalls are added to the map and inventory; locations are adjusted; or outfalls are removed if they are determined to be non-municipally owned/operated or reclassified as a BMP inlet, culvert, or other structure. Changes to the outfall inventory and mapping will be formalized in Annual Reports to EPA.
- 5. The Wankinco River is a tributary located along the Plymouth/Carver southern border that drains to Wareham River, which is listed as impaired due to nitrogen. The Wankinco River also flows through Parkers Mill Pond, which is listed as impaired due to phosphorus. The Wewantic River flows through south Carver, through Wareham and eventually discharges to Buzzards Bay which is also listed as impaired from both bacteria and nitrogen. Additionally, Crane Brook Bog Pond (MA95033) within Carver is impaired due to phosphorus. While these waterbodies to not receive direct discharges from the Town's MS4, and therefore Part 2.2.2 and Appendix H Parts I and II of the General Permit do not apply, the Town will keep these requirements in Part III of this NOI to maintain the current proactive approach to reduce nitrogen and phosphorus discharges within the entire MS4.
- 6. There is no sanitary sewer system in Carver and therefore Part 2.3.4.4 of the General Permit, Sanitary Sewer Overflows, does not apply to the Town.

Detailed explanations of the above notes will be included in the Town's Stormwater Management Plan.

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Part V: Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

RONALD E. CLARKE

Title:

VICE-CHAIR

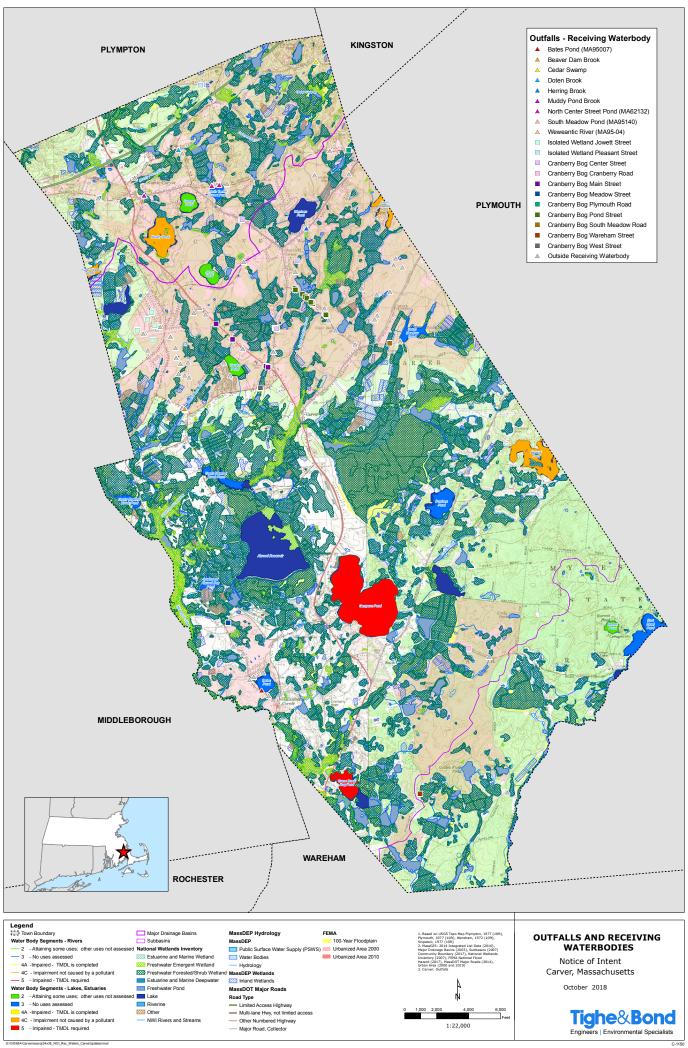
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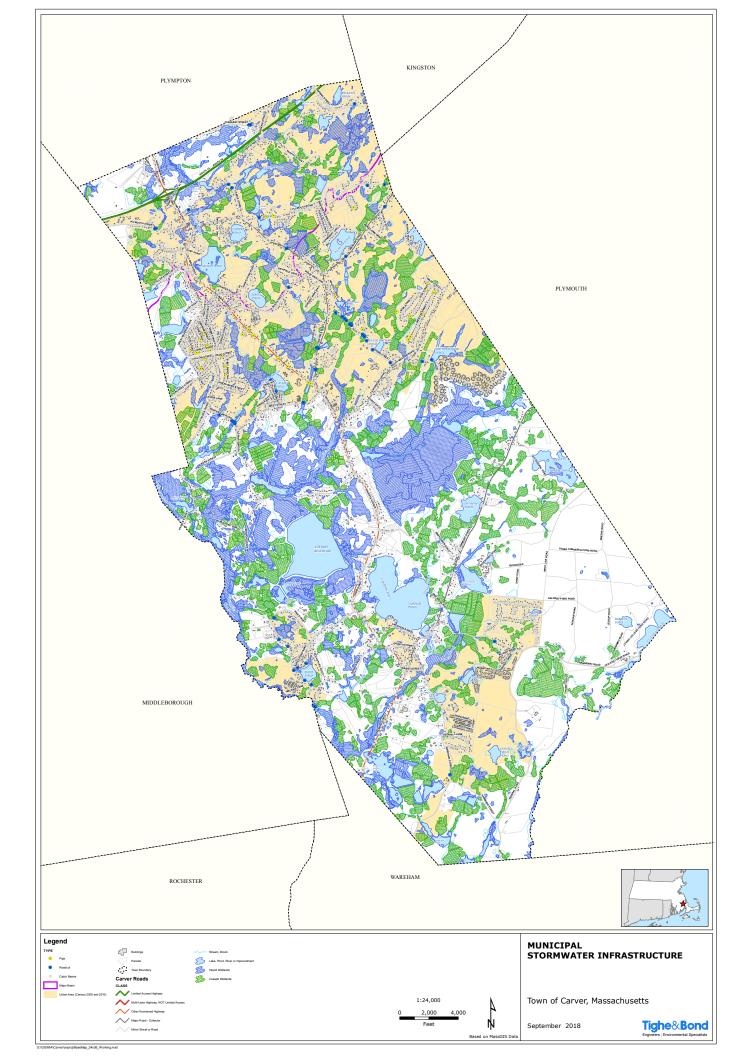
[To be signed according to Appendix B, Subparagraph B.11, Standard Conditions]

Date:

9-18-18

Note: When prompted during signing, save the document under a new file name







United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5087 http://www.fws.gov/newengland

August 15, 2017

John Woods Department of Public Works Director Town of Carver 108 Main Street Carver, MA 02330

Dear Mr. Woods:

REF: Carver MS4 NPDES Phase II USFWS Consultation

This responds to your letter, received in our office on May 15, 2017, regarding the Town of Carver (Town), Massachusetts, proposed coverage under the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Carver, Massachusetts (Project). You requested our concurrence with your determination that the Project may affect, but is not likely to adversely affect, the federally endangered northern redbellied cooter (*Pseudemys rubriventris*), also known as the Plymouth redbelly turtle, and the federally threatened northern long-eared bat (*Myotis septentrionalis*). In accordance with EPA's guidelines for MS4 permits, the Town is acting as a non-Federal representative of EPA. Your request and our response are provided in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended: 16 U.S.C. 1531, et seq.) (ESA).

The Town is currently authorized to discharge stormwater from its MS4 in accordance with the 2003 general permit, and the Notice of Intent submitted to EPA made the determination that the Town's stormwater discharges did not negatively impact any endangered species at that time. To reduce the discharge of pollutants to waterbodies and wetlands, the Town has implemented provisions of the 2003 MS4 general permit and will continue to manage stormwater runoff by implementing the provisions of the 2016 MS4 general permit. If, during the course of the permit term, the Town plans to install a structural BMP not identified in the current project plan, the Town or EPA will re-initiate consultation with the U.S. Fish and Wildlife Service as necessary.

Northern red-bellied cooter

The Project is located within the limited range of the Massachusetts population of the northern red-bellied cooter. Although no critical habitat for the northern red-bellied cooter has been designated in Carver, this species is known to be present at several locations within the Town and may be present elsewhere in the Town where suitable habitat exists.

The Town has historically taken measures to reduce the discharge of pollutants to waterbodies and wetlands by continuously implementing provisions of the 2003 MS4 general permit, and we are not aware of any adverse effects on northern red-bellied cooters from stormwater discharge in the Town. The Town will continue to reduce the discharge of pollutants, protect water quality of waterbodies and wetlands, and limit potential impacts to the northern red-bellied cooter by implementing the provisions of the 2016 MS4 general permit (e.g., Massachusetts MS4 General Permit Section 2.0. Non-Numeric Effluent Limitations). We anticipate similar insignificant impacts on the species under the 2016 MS4 general permit, and we concur with your determination that the proposed Project may affect, but is not likely to adversely affect the northern red-bellied cooter.

Northern long-eared bat

There are no known northern long-eared bat hibernacula within 0.25 mile, or known occupied maternity roost trees within a 150-foot radius of the project area. Although northern long-eared bats have not been documented as occurring in the project area, they could be present if suitable roost trees are present. The Project is near forested habitat that may provide suitable summer roosting and foraging habitat for northern long-eared bats; however, the Project will not involve tree removal and will not otherwise include activities that may affect the northern long-eared bat. For these reasons, we concur with your determination that the proposed Project may affect, but is not likely to adversely affect, the northern long-eared bat.

Further consultation with us under section 7 of the ESA is not required at this time. Should project plans change or if additional information on listed species becomes available, this determination may be reconsidered. Thank you for your cooperation, and please contact Ms. Eliese Dykstra of this office at (603) 227-6427 if you need any further assistance.

Sincerely yours,

🎢 Thomas R. Chapman

Supervisor

New England Field Office