

Stormwater Management Program (SWMP) Plan

City of Manchester, New Hampshire

June 30, 2019

Updated October 26, 2020

Prepared For:

The City of Manchester

300 Winston Street

Manchester, NH 03103



Prepared by:

Comprehensive Environmental Inc.

21 Depot Street

Merrimack, NH 03054



Stormwater Management Program (SWMP) Plan Revision Log

Revision Date	Section Revised	Revisions Made	Revisions Made by
October 26, 2020	1. Section 1.5 2. Section 9 3. Section 10 4. Appendices	1. Section 1.5: Program Responsibilities updated with new EPD Environmental Permits Coordinator contact information. 2. Section 9.1, 9.2, and 9.3: Added reference to Appendix K (TMDL and Impaired Waters Progress). 3. Section 10: Changed reference from Appendix K to Appendix L. 4. Appendix C: Updated impaired waters table and map (changes highlighted in table). 5. Appendix E: Updated stormwater map (changes include the addition of interconnections and drainage ditches, correction of outfalls based on dry weather screening, and the assignment of ownership to catch basins). 6. Appendix F: Added inventory and map of City-owned property. 7. Appendix G: Added list and map of Stormwater BMPs. Added BMP inspection results. 8. Appendix H: Added SWPPP compliance memo. 9. Appendix I: Updated priority catch basin cleaning schedule for catchment areas to urban ponds. 10. Appendix K: Changed title to "TMDL and Impaired Waters Progress." Added Legal Analysis memo. 11. Appendix L: Previously Appendix K. Added 2019 and 2020 Annual Reports.	Emily DiFranco, CEI

Stormwater Management Program (SWMP) Plan

City of Manchester, New Hampshire

Prepared For:

City of Manchester

300 Winston Street
Manchester, NH 03103

Prepared By:

Comprehensive Environmental Inc.

21 Depot Street
Merrimack, NH 03054

Stormwater Management Program (SWMP) Plan 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 gathered and evaluated 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, 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: _____

Title: _____

Signature: _____

Date: _____

Table of Contents

Stormwater Management Program Plan – City of Manchester

1	Introduction	1
1.1	Regulatory Background	1
1.2	MS4 Program Requirements.....	1
1.3	Regulated Area.....	2
1.4	How to Use this Plan.....	3
1.5	Program Responsibilities	4
2	City Characteristics.....	6
2.1	Land Use	6
2.2	303(d)-Listed and Priority Waterbodies.....	6
2.3	Endangered Species Act Determination.....	9
2.4	National Historic Preservation Act Determination	9
3	MCM 1: Public Education and Outreach	10
3.1	Summary of Permit Requirements	10
3.1.1	Core Permit Requirements	10
3.1.2	TMDL & Impaired Waters Requirements	11
3.2	Past Public Education Program.....	12
3.3	Ongoing Public Education Program.....	13
4	MCM 2: Public Participation and Involvement.....	16
4.1	Summary of Permit Requirements	16
4.2	Past Public Participation and Involvement Opportunities.....	16
4.3	Ongoing Public Participation and Involvement Opportunities	16
5	MCM 3: Illicit Discharge, Detection, and Elimination	18
5.1	Summary of Permit Requirements	18
5.2	Past IDDE Program.....	19
5.3	Ongoing IDDE Program	19
6	MCM 4: Construction Site Stormwater Runoff Control.....	21
6.1	Summary of Permit Requirements	21

6.2	Past Construction Site Stormwater Runoff Control Program	22
6.3	Ongoing Construction Site Stormwater Runoff Control Program	23
7	MCM 5: Stormwater Management in New Development and Redevelopment	24
7.1	Summary of Permit Requirements	24
7.2	Past Post Construction Stormwater Management	25
7.3	Ongoing Post-Construction Stormwater Management Program.....	26
8	MCM 6: Good Housekeeping and Pollution Prevention	27
8.1	Summary of Permit Requirements	27
8.1.1	Facility Operations and Maintenance Plans	27
8.1.2	Infrastructure Operation and Maintenance Plans	28
8.1.3	Stormwater Pollution Prevention Plans	29
8.1.4	Stormwater BMP Inspections	29
8.1.5	Additional Requirements for Water Quality Limited Waters	29
8.2	Past Good Housekeeping and Pollution Prevention Program.....	30
8.3	Ongoing Good Housekeeping and Pollution Prevention Program.....	31
9	TMDL and Impaired Waters Controls	33
9.1	Permit Requirements.....	33
9.2	Discharges to Approved TMDL Waterbodies	33
9.2.1	Bacteria TMDL Requirements	33
9.2.2	Phosphorus TMDL Requirements	34
9.3	Discharges to Water Quality Limited Waterbodies	34
9.3.1	Bacteria	34
9.3.2	Phosphorus	34
9.3.3	Chloride.....	35
9.3.4	Metals.....	37
10	Annual Reporting	37
11	Implementation of Best Management Practices	39

Tables

Table 1-1. MS4 Responsible Personnel	4
Table 1-2. Program Responsibilities	5
Table 2-1. Land Use within the Urbanized Area	6
Table 2-2. Impaired Waters Based on the 2016 303(d) List	7
Table 3-1. Residential Outreach Program	13
Table 3-2. Businesses, Institutions, and Commercial Outreach Program	14
Table 3-3. Developers and Construction Outreach Program	14
Table 3-4. Industrial Outreach Program.....	15
Table 4-1. Public Participation and Involvement Program	17
Table 5-1. Illicit Discharge Detection and Elimination Program.....	20
Table 6-1. Construction Site Stormwater Runoff Control Program.....	23
Table 7-1. Post-Construction Site Stormwater Management Program	26
Table 8-1. Good Housekeeping and Pollution Prevention Program	31
Table 11-1. Proposed BMP Plan – Implementation of Phase II Activities.....	End of this Plan

Appendices

Appendix A. Notice of Intent and Authorization to Discharge

Appendix B. Relevant Maps

Land Use Map

Urbanized Area Map

Resource Waters Map

Appendix C. Impaired Waters Updates

Appendix D. Regulatory Review

Regulatory Review Matrix Outlining Written Procedures

Regulations

Street Design and Parking Lot Regulatory Review Assessment

Green Infrastructure Regulatory Review Assessment

Appendix E. Storm System Map

Appendix F. Inventory and Ranking of City-Owned Property

Appendix G. List of Stormwater BMPs

Appendix H. SWPPP Facilities

Appendix I. Catch Basin Cleaning Prioritization Plan

Appendix J. Street Sweeping SOP

Appendix K. TMDL and Impaired Waters Progress

LPCP Progress

Phosphorus Source Identification Report

Chloride Requirements Progress

Metals Requirements Progress

Appendix L. Annual Reports