AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§ 1251 et seq; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§ 26-53),

Springfield Water and Sewer Commission
P.O. Box 995
Springfield, MA 01101-0995

is authorized to discharge from 23 Combined Sewer Overflows (CSOs) (discharge serial numbers: **007, 008, 010-019, 024, 025, 034-037, 045, 046, 048, and 049)** (see **Attachment A** of this permit for individual outfall locations).

In accordance with the effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on November 1, 2009.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on June 17, 2003**.**

This permit consists of 12 pages in Part I including effluent limitations, monitoring requirements, **Attachment A (CSO Outfall Names and Locations), Attachment B (Publicly Owned Treatment Works (POTW) Discharges), and Attachment C (Summary of Reports Required by Permit No. MA0103331)** and Part II Standard Conditions.

Signed this September 30th day of 2009

/s/ SIGNATURE ON FILE

Lynne Hamjian, Acting Director
Office of Environmental Protection
Environmental Protection Agency
Boston, MA

Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

Part I.

A. COMBINED SEWER OVERFLOWS (CSOs)

1. Effluent Limitations:

   During wet weather, the permittee is authorized to discharge storm water/wastewater from the combined sewer outfalls described in **Attachment A** of this permit, subject to the following effluent limitations.

   a. The discharges shall receive treatment at a level providing Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT) to control and abate conventional pollutants and Best Available Technology Economically Achievable (BAT) to control and abate non-conventional and toxic pollutants. The EPA has made a Best Professional Judgment (BPJ) determination that BPT, BCT, and BAT for combined sewer overflows (CSOs) include the implementation of the Nine Minimum Controls (NMC) specified below and detailed further in Part I.A.2. ("Nine Minimum Controls, Minimum Implementation Levels") of this permit:

      1. Proper operation and regular maintenance programs for the sewer system and the combined sewer overflows.

      2. Maximum use of the collection system for storage.

      3. Review and modification of the pretreatment program to assure CSO impacts are minimized.

      4. Maximization of flow to the publicly owned treatment works (POTW) for treatment.

      5. Prohibition of dry weather overflows from CSOs.

      6. Control of solid and floatable materials in CSOs.

      7. Pollution prevention programs that focus on contaminant reduction activities.

      8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.

      9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

      Implementation of these controls is required by the effective date of the permit. Documentation of the implementation of these controls has been submitted and is currently under review by EPA and the state. EPA and the state consider that approvable documentation must include the minimum requirements set forth in

Part I.A.1. of this permit and additional activities the permittee can reasonably undertake (also see **Attachment C**). The permittee may modify its NMC program to enhance its effectiveness, but the NMC program shall at all times include the minimum controls and implementation levels listed in Part I.A.2. of this permit.

Within 180 days of the effective date of the permit, the permittee shall review and update (as needed) its NMC program in its entirety and shall submit to EPA and MassDEP a report which documents that the review has been performed and describes any revisions made to the program following the review.

An annual status report covering the previous calendar year is due annually by **March 31st**. This report shall describe the NMC activities conducted during the previous calendar year and any changes made to the permittee's NMC program. The report shall include a summary of modifications to the approved NMC program which have been evaluated, and a description of those which will be implemented during the upcoming year.

Because the Springfield Water and Sewer Commission currently is the permittee for both the POTW and the CSOs, this permit does not attempt to differentiate those NMC activities which are appropriate for the POTW versus those for the collection system. However, if different permittees hold these permits in the future, responsibilities for implementing individual components of the NMC program may have to be identified through a permit modification.

b. The discharges shall not cause or contribute to a violation of the water quality standards of the receiving waters.

2. Nine Minimum Controls, Minimum Implementation Levels:

a. Each CSO structure/regulator, pumping station, and/or flood-gate shall be routinely inspected, at a minimum of twice per week, to insure that they are in good working condition and adjusted to minimize combined sewer discharges (NMC #1, 2, and 4).

The following inspection results shall be recorded: the date and time of the inspection, the general condition of the facility, and whether the facility is operating satisfactorily. If maintenance is necessary, the permittee shall record: a description of the necessary maintenance, the date the necessary maintenance was performed, and whether the observed problem was corrected. The permittee shall maintain all records of inspections for at least five years.

Annually, no later than **March 31st**, the permittee shall submit a certification to the state and EPA which states that the previous calendar year's inspections were conducted, results recorded, and records maintained.

The EPA and the state have the right to inspect any CSO-related structure or outfall at any time without prior notification to the permittee.

Any request(s) for the granting of a reduction(s) in the required inspection frequency of any CSO structure/regulator, pumping station, and/or flood-gate may be considered following approval of the revised CSO monitoring plan required in Part I.A.2.d. of this permit.

b. Discharges to the combined system of septage, holding tank wastes or other material which may cause a visible oil sheen or contain floatable material are prohibited during wet weather when CSO discharges may be active (NMC # 3, 6, and 7).

c. Dry weather overflows (DWOs) are prohibited (NMC # 5). Dry weather is defined as any calendar day on which there is less than 0.1 inch of rain and no snow melt. All dry weather sanitary and/or industrial discharges from CSOs must be reported to EPA and the state within 24 hours and a written report provided within five days of the overflow in accordance with the reporting requirements for plant bypass (Paragraph D.1.e. of Part II of this permit and 40 CFR § 122.41(l)(6)).

d. The permittee shall quantify and record all discharges from combined sewer outfalls (NMC # 9). The following information must be recorded for each combined sewer outfall for each discharge event:

- Estimated duration (hours) of discharge;
- Estimated volume (gallons) of discharge; and
- National Weather Service precipitation data from the nearest gage where precipitation data is available at daily (24-hour) intervals, and the nearest gage where precipitation data is available at one-hour intervals. Cumulative precipitation per discharge event shall be calculated.

The permittee shall maintain all records of discharges for at least six years after the effective date of this permit.

The permittee shall continue to implement their current CSO monitoring program. Within **180 days of the effective date of the permit**, the SWSC shall submit a revised CSO monitoring plan which reflects any changes in the combined collection system since the submittal of a CSO monitoring plan in 2003, for review and approval to EPA and MassDEP.

Discharge monitoring data collected during the previous year and certification to EPA and MassDEP which states that all discharges from combined sewer outfalls were recorded and records maintained for the previous calendar year shall be submitted along with the annual report required by Part I.A.3 of this permit.

The permittee shall also submit CSO monitoring data electronically (via diskette, CD, or other media) to the addresses in Parts I.D.1. and 2. of this permit. Activation frequencies and discharge volumes required to be submitted in the annual report shall be reported in accordance with the methods identified in the CSO monitoring plan.

e. The permittee shall maintain identification signs for all combined sewer outfall structures. These signs shall be located at or near the combined sewer outfall structure and be easily readable by the public from both the land and the water. These signs shall be a minimum of twelve by eighteen (12 X 18) inches in size, with white lettering against a green background, and shall contain the following information:

SPRINGFIELD WATER AND SEWER COMMISSION
WET WEATHER
SEWAGE DISCHARGE
OUTFALL (discharge serial number)

The permittee, to the extent feasible, shall place additional signs in languages other than English or add a universal wet weather sewage discharge symbol to existing signs based on a consideration of the primary language(s) of the residents and users of the water resources in the vicinity of the CSOs.

3. Annual Report

By **March 31st** of each year, the permittee shall submit a report to EPA and MassDEP which includes the following information:

a. Activation frequency and discharge volume for each CSO during the previous calendar year (see Part I.A.2.d). This information shall be included in the report for each of the authorized CSOs listed in **Attachment A** of this permit. Activation frequencies and discharge volumes required to be submitted in the annual report shall be reported in accordance with the methods identified in the monitoring plan. The permittee shall also submit monitoring data electronically (via diskette CD, or other media device) to the addresses in Parts I.D.1. and 2. of this permit

b. Precipitation for each day of the previous calendar year, including total rainfall (expressed in inches), peak rainfall intensity (highest fifteen minute sample multiplied by four to convert to inches per hour), and average intensity (the total rainfall for the storm event divided by the duration of the storm, expressed in inches per hour).

c. A certification which states that the twice per week inspections required in Part I.A.2.a. were conducted, results recorded, and records maintained.

d. A summary of modifications to the NMC program which have been evaluated, and a description of those which will be implemented during the upcoming year.

In the first annual report submitted in accordance with this permit, the permittee shall submit/update a public notification plan describing the measures actively being taken to meet NMC # 8 in Part I.A.1.a. of this permit, and an evaluation of further measures to enhance the public notification program, including the following:

(i.) Outfall signs visible from both water and land.

(ii.) Signs/notices at areas where people might be using CSO-impacted waters for recreational activities such as swimming, boating, and fishing, and in places where the public might gain access to the water (e.g., boat put-in areas). Such notices would include information on the health risks posed by CSOs and sources of additional information on CSOs and water quality.

(iii.) Review of the sewer system model to determine the threshold rain events which normally will cause overflows.

(iv.) Quarterly postings on the permittee's website and links to other relevant websites which would give the locations of the CSOs, associated health risks, and estimates of CSO activations and volumes.

(v.) Annual press release and notification to interested individuals and groups on the progress of CSO abatement work, also noting contacts for additional information on CSOs and water quality.

(vi.) Notice to health agents and other public officials of any downstream communities with uses that could be adversely affected by CSO discharges, including drinking water treatment plants, shellfish wardens, and harbormasters. Notification shall be given as soon as practicable, but in any event no later than, within twenty-four hours of activation of CSOs.

B. UNAUTHORIZED DISCHARGES

1. The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from those outfalls listed in **Attachment A** of this permit. Discharges of wastewater from any other point source, including the pumping stations listed in **Attachment B** of this permit, are not authorized unless in accordance with the requirements of Part II.B.4. of the General Requirements of this permit (Bypasses). Sanitary Sewer Overflows (SSOs) are also not authorized by this permit and must be reported to EPA and MassDEP in accordance with the requirements of Part II.D.1.e.(1). of the General Requirements of this permit (Twenty-four Hour Reporting).

2. Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes MassDEP Regional Office telephone numbers). The reporting form and instructions for its completion can be found on-line at http://www.mass.gov/dep/water/approvals/surffms.htm#sso.

C. ALTERNATIVE POWER SOURCE

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR § 122.2).

D. MONITORING AND REPORTING

1. Signed and dated originals of all reports required herein, shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

2. One copy of all reports required herein shall be submitted to the State at each of the following addresses:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

Massachusetts Department of Environmental Protection
Western Regional Office – Bureau of Resource Protection
436 Dwight Street
Springfield, MA 01103

E. NOTICE OF NONCOMPLIANCE

The permittee shall give notice of noncompliance with the terms and conditions of this permit pursuant to Section D.(1). of Part II of this permit.

F. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, § 43.

Each Agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension, or revocation of this permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension, or revocation. In

the event any portion of this permit is declared, invalid, illegal, or otherwise issued in violation of state law, such permit shall remain in full force and effect under federal law as an NPDES permit issued by the U.S. Environmental Protection Agency. In the event that this permit is declared, invalid, illegal, or otherwise issued in violation of federal law, such permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

Attachment A

Springfield Water and Sewer Commission
Combined Sewer Overflow (CSO) Discharge Outfalls

Discharge Outfall Serial No.	CSO Outfall Location[1]	Latitude	Longitude
Connecticut River			
007	Rowland St.	42º 12’	72º 62’
008	Washburn St.	42º 11’	72º 62’
010	Clinton St.	42º 10’	72º 60’
011	Liberty St.	42º 10’	72º 59’
012	Worthington St.	42º 10’	72º 59’
013	Bridge St.	42º 10’	72º 59’
014	Elm St.	42º 10’	72º 59’
015A	Union St.	42º 10’	72º 59’
015B	Union St.	42º 10’	72º 59’
016	York St.	42º 09’	72º 59’
018	Longhill St.	42º 06’	72º 58’
049	Springfield St.	42º 10’	72º 62’
Chicopee River			
034	Main St.	42º 16’	72º 51’
035	Front & Oak Sts.	42º 16’	72º 50’
036	Pinevale & Water Sts.	42º 16’	72º 50’
037	Cedar St.	42º 16’	72º 50’
043[2]	Banner St.	42º 16’	72º 49’
044[3]	Rogers Ave.	42º 16’	72º 49’
Mill River			
017	Fort Pleasant (Blake Hill)	42º 09’	72º 58’
019	Mill, Orange, & Locust Sts.	42º 09’	72º 57’
024	Rifle & Central Sts.	42º 10’	72º 56’
025	Allen & Oakland Sts.	42º 10’	72º 56’
045	Fort Pleasant Ave.	42º 06’	72º 58’
046	Belmont St.	42º 06’	72º 58’
048	Allen & Rifle Sts.	42º 10’	72º 56’

[1]All CSOs are located in Springfield, MA (Hampden County)
[2]CSO 043 eliminated as CSO and converted to stormwater only outfall
[3]CSO 044 eliminated as CSO and converted to stormwater only outfall

Attachment B

POTW Discharges

Discharge Serial No.	Location
030	Liberty Street Pumping Station
031	Canton Circle Pumping Station
032	Carew Street Pumping Station
040	Tiffany Street Pumping Station
050	Indian Orchard Pumping Station

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from those outfalls listed in **Appendix A** of the permit. Discharges of wastewater from any other point source, including the pumping stations listed above (**Attachment B**) are not authorized by this permit and must be reported in accordance with Part II.B.4. (General Requirements – Bypasses) of this permit.

Attachment C

Summary of Reports Required by NPDES Permit No. MA0103331[1]

Annual Report which shall include the following (Part I.A.3.): • **Nine Minimum Controls (NMC) Status Report** • **Inspection Certification** • **CSO Activation Frequency and Discharge Volume Report**	**Due annually, by March 31st**	**Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114**	**Massachusetts Department of Environmental Protection Western Regional Office-Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103 Massachusetts Department of Environmental Protection Division of Watershed Management 627 Main Street, 2nd Floor Worcester, MA 01608**
Report documenting review of NMC program and any revisions made to the program as a result of the review (Part I.A.1.a.)	**Due within 180 days of the effective date of the permit**	**Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114**	**Massachusetts Department of Environmental Protection Western Regional Office-Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103 Massachusetts Department of Environmental Protection Division of Watershed Management 627 Main Street, 2nd Floor Worcester, MA 01608**

Attachment C

Summary of Reports Required by NPDES Permit No. MA0103331[1]

Revised CSO Monitoring Plan (Part I.A.2.d.)	**Due within 180 days of the effective date of the permit**	**Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114**	**Massachusetts Department of Environmental Protection Western Regional Office-Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103 Massachusetts Department of Environmental Protection Division of Watershed Management 627 Main Street, 2nd Floor Worcester, MA 01608**

[1]This table is a summary of the reports required to be submitted under this NPDES permit, and is included in the permit to serve as an aide to the permittee. If there are any discrepancies between the permit and this summary, the permittee shall follow the permit requirements.

RESPONSE TO PUBLIC COMMENTS

From May 29, 2009 through June 27, 2009. the United States Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) solicited public comments on the draft National Pollutant Discharge Elimination System (NPDES) permit developed pursuant to an application submitted by the Springfield Water and Sewer Commission (SWSC) for the reissuance of their NPDES permit to discharge from 23 combined sewer overflows (CSOs) to the designated receiving waters, the Connecticut, Mill, and Chicopee Rivers.

Following a review of the comments received, EPA has made a final decision to issue the permit authorizing this discharge. In accordance with the provisions of 40 CFR § 124.17, this document briefly describes and responds to the comments received on the draft permit, and explains any provisions of the final permit which have been changed from the draft as well as the reasoning supporting those changes. Any clarifications that EPA considers necessary are also included in this document. A copy of the final permit may be obtained by calling or writing Meridith Timony, United States Environmental Protection Agency, One Congress Street, Suite 1100 (Mail code: CMP), Boston, Massachusetts 02114-2023; Telephone: (617) 918-1533. Copies of the final permit and the response to comments may also be obtained from the EPA Region I website at http://www.epa.gov/region1/npdes/index.html.

(Note: the numbering used below does not reflect any particular numbering in the commenter's letter, but rather incorporates the comments into the numbering system used in the overall response to comments in such a way that each issue raised within the comments is addressed in a more effective manner)

Comments submitted by Andrea Donlon, Connecticut River Watershed Council, dated June 24, 2009.

Opening Comment:

I am submitting comments on the draft National Pollutant Discharge Elimination System (NPDES) permit for Springfield's Combined Sewer Overflows (CSOs) on behalf of the Connecticut River Watershed Council (CRWC). The Connecticut River, an American Heritage River, is a regional resource that merits the highest level of protection. The Connecticut River downstream of the Holyoke Dam is listed as an impaired water body due to priority organics, pathogens, and total suspended solids. CRWC is particularly interested in improving water quality in the Connecticut River so that it can support existing primary and secondary contact uses, even during wet weather. CRWC believes that the Connecticut River can meet Class B water quality during wet weather and be made safe for swimming, if state and federal regulators work aggressively with other stakeholders to ensure compliance with Clean Water Act goals. We are pleased that Springfield is the recipient of $26.5 million in stimulus funding to complete work on their CSO 007/049 separation project. We are also glad that Springfield is now required to

finalize their Long Term Control Plan in a schedule laid out in Administrative Order 08-037.

Response to Opening Comment:

EPA acknowledges the comment. EPA has made CSO control a very high priority. CSOs are often a leading cause of water quality impairments, especially in urban waters, and we require the elimination of CSOs wherever that is feasible. Where CSOs cannot be eliminated, we seek to minimize any remaining discharges

Comment 1:

The protection of existing uses is required under 40 CFR § 131.12(a)(1). A finding by the Region that this permit does not cause or contribute to violations of the applicable water quality standards (WQSs) seems like to be "clearly erroneous" and thus subject to review. See id. At 40 CFR § 124.19(a); In re City of Marlborough, Massachusetts, NPDES Appeal 04-13 (E.A.B. 2005). Below is our understanding of the Connecticut River's existing uses and those of its tributaries in and around Springfield. Following that description we list our concerns with the Draft Permit.

Connecticut River

Four boat launches near Springfield provide public access to people in motor boats, canoes, kayaks, and row boats in the section of the river affected by Springfield's CSOs: Jones Ferry in Holyoke, Medina Street state boat ramp in Chicopee, Bondis Island in Agawam, and the Thompsonville boat launch in Connecticut. The Jones Ferry dock is the launching point for a group called Holyoke Rows (http://www.holyokerows.org/), which offers rowing, kayaking, and canoeing programs for children and adults. The general public uses this site as a launching point, mainly for canoes and kayaks. In addition, anglers use the wooden docks at this access point as a fishing spot. The Medina Street boat ramp is extremely busy with motor boat launching on most weekend days in the spring, summer, and fall. This is especially true during the height of the spring fish migration period. For example, during a canoe trip on June 9, 2007, I witnessed 16 motor boats lined up along the shore near the boat ramp waiting for their turn to get access to the paved ramp (photo available upon request).

Two private boating clubs operate downstream of Springfield's CSOs: the Pioneer Valley Yacht Club in Longmeadow and the Springfield Yacht Club in Agawam. Club members use motor boats, sailboats, and rowing shells in the section of the river just downstream of Springfield's CSOs.

The Pioneer Valley Riverfront Club offers rowing programs and a rowing regatta in Springfield. See http://www.pvrowing.com/ for more information.

Families in Springfield picnic along the Connecticut River near CSOs.

Chicopee River

The Chicopee River doesn't have many public access areas downstream of Springfield's CSOs, but the section that is near the confluence with the Connecticut River is heavily used during the spring for fishing. Boaters and riverbank anglers who walk to the confluence from the Medina Street boat ramp use this area to catch striped bass and other migratory fish.

Mill River

The Mill River downstream of the CSOs is very urbanized and doesn't offer much in the way of recreational uses. The tail end of the river is channelized underground. However, people do fish at the location where the channelized Mill River empties into the Connecticut River, as shown below in the photo taken by myself in 2004.

Response 1:

EPA acknowledges the recreational value of the Connecticut, Chicopee, and Mill Rivers to the community. Each of the water bodies identified in the comment is a Class B water under the Massachusetts Surface Water Quality Standards (314 CMR § 4.06, Tables 6 and 8). Among the designated uses for Class B waters is primary and secondary contact recreation. The Class B standard also includes narrative and numeric criteria that must be achieved to protect the designated uses.

It is not clear which aspect(s) of the draft permit the commenter believes are not protective of water quality standards. The draft permit includes the appropriate technology and water quality-based limitations and conditions which are applicable to Phase I CSO permits[1] and are consistent with the National CSO Control Policy published by EPA in 1994 (*CSO Control Policy* 59 Fed. Reg. 18688, April 1994). In accordance with the recommended approach found in the National CSO Control Policy, EPA has established the nine minimum controls found in Part I.A.1.a. of the draft permit as the best available technology economically achievable and best conventional technology (BAT/BCT) on a best professional judgment[2] (BPJ) basis (*CSO Control Policy*, Part IV.A., 59 Fed. Reg. 18688, April 1994). NPDES permits are required to include water quality-based limitations for all pollutants "which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality (see 40 CFR Part 122.44(d)(1)(i)). Water quality-based requirements in CSO permits are established based on the applicable water quality standards (*CSO Control Policy*, Part IV.A., 59 Fed. Reg. 18688, April 1994). The

[1] As a Long Term Control Plan has not been finalized for the SWSC's CSOs, this is considered a Phase I permit (*CSO Control Policy* 59 FR 18688, April 1994**)**

[2] Section 402(a)(1)(B) of the CWA provides the authority to establish case-by case technology–based limitations. The requirements and factors to be considered in establishing case-by-case technology-based effluent limitations using best professional judgment (BPJ) are established at 40 CFR § 125.3 (see specifically § 125.3 (c)(2) and § 125.3(d)).

Massachusetts Water Quality Standards do not identify CSOs as a designated use for the Connecticut, Chicopee, or the Mill Rivers (314 CMR§ 4.06, Tables 6 and 8). An adjustment in the water quality standards in the receiving waters in the vicinity of the discharges would only be allowed following the completion of a use attainability analysis (UAA) which demonstrates the infeasibility of eliminating CSOs (see 40 CFR § 131.10(g) and the *Policy for the Abatement of Pollution from Combined Sewer Overflows* (MassDEP 1997)). In the absence of a UAA, NPDES permits must either prohibit discharges from CSOs or authorize the discharges subject to narrative limits requiring the achievement of existing water quality standards. Since a UAA has not been completed for the receiving waters, Part I.A.1.b. of the draft permit includes a narrative water quality-based effluent limitation which prohibits the discharges from causing or contributing to violations of the water quality standards in the receiving waters. This limitation is sufficiently stringent to meet the requirements of 40 CFR §122.44(d)(1)(i). We understand that the designated uses are sometimes not attained in the receiving waters due to discharges from CSOs, but this is because the limitations in the permit have not been attained, not that the limitations are insufficiently stringent. As described in the fact sheet, and acknowledged in the first comment, EPA has issued enforcement orders for violations of the permit's limits requiring the permittee to plan, design and construct CSO abatement facilities.

Regarding the requirements of 40 CFR § 131.12, this regulation sets forth the minimum requirements that states must include in the antidegradation policies they develop and incorporate into their water quality standards, as required by 40 CFR § 131.6. Any permit issued must meet the provisions of the State's antidegradation policy, found in the Massachusetts Surface Water Quality Standards at 314 Code of Massachusetts Regulations (CMR) § 4.04, which generally requires the protection of existing uses and the level of water quality necessary to sustain these uses, as required by 40 CFR § 131.12(a)(1). All existing uses of the Connecticut, Mill, and Chicopee Rivers must be protected. No lowering of water quality is allowed, except in accordance with the state's antidegradation policy. Because none of the exceptions found at 314 CMR § 4.04 apply in this case, the limitations and conditions in the draft permit were developed in accordance with all applicable state and federal regulations to ensure that discharges of wastewater *in accordance* with the terms and conditions in the permit will not cause or contribute to violations of water quality standards in the receiving waters.

For the reasons stated above, EPA does not believe that any condition of the permit is "based on a finding of fact or conclusion of law which is clearly erroneous" (40 CFR § 124.19(a)(1)) and that a petitioner seeking review by the Environmental Appeals Board on these grounds would be denied.

Comment 2.

This section of the river, though urbanized, also contains important fish and wildlife habitat. As the Holyoke Dam is the first substantial barrier to migratory fish between Long Island Sound and sites upstream, many fish congregate in the section of the River

below the dam and either never make it upstream or wait for passage via the fish lifts and eel ladder. These fish include the endangered shortnose sturgeon.

A bald eagle's nest built by Holyoke Gas & Electric (HG&E) as part of their energy licensing requirement for the Holyoke Dam, is located in West Springfield, just upstream of the Massachusetts Turnpike bridge, which is a bit upstream of the Springfield CSOs.

Response 2.

EPA is aware of the importance of the receiving waters to the many resident species of birds, fish, and other forms life. In particular, a population of shortnose sturgeon, which is federally-listed as an endangered species, is known to occur in the area of the Connecticut River which flows through this section of Massachusetts.

Pursuant to the requirements of Section 7(a) of the Endangered Species Act (ESA), as amended, EPA initiated an informal consultation through written correspondence with the National Marine Fisheries Service (NMFS) regarding the proposed reissuance of the SWSC's CSO NPDES permit. EPA provided NMFS with the justification described in Part IX of the fact sheet which accompanied the draft permit in support of its finding that that the conditions and narrative limitations included in the draft permit were developed to be protective of all forms of life which depend upon the receiving waters, including the endangered shortnose sturgeon. To date, NMFS has not communicated to EPA that they do not concur with our finding. Should EPA receive information which suggests that shortnose sturgeon are being negatively affected by this permit action, or if we receive new information which changes the basis of our conclusion, NMFS will be notified and an ESA consultation will be re-initiated.

Comment 3.a.

CRWC is baffled as to why Springfield still has a separate NPDES permit for its CSOs, while Holyoke and Chicopee do not. What is EPA's rationale for having the two permits, and why not update the two permits (wastewater treatment plant and CSO permits at the same time? The entire system is connected, is managed by the same entity, and should be treated by regulators as a single problem. With two permits and staggered permit renewal, however, this is next to impossible. For example, verifying compliance with industrial pretreatment requirements typically required in a wastewater treatment plant (WWTP) NPDES permit would also mean there would be fewer industrial pollutants discharged into the receiving waters during CSO discharge events. Given the large industrial discharges in Springfield, including the Solutia facility in Indian Orchard and Baystate Medical Center, it is doubly important that pretreatment minimums be observed.

Response 3.a.

The commenter is correct in that both the wastewater treatment plant and the combined wastewater collection system are currently owned and operated by the same entity, the SWSC. It is EPA's understanding that the SWSC had originally requested separate

permit coverage for the wastewater treatment plant and the CSO discharges in the event of another entity taking ownership of the operation of the wastewater treatment plant, but not the collection system. There is nothing in the NPDES permit regulations that precludes EPA from issuing more than one individual permit to the same entity.

We do not agree that having separate NPDES permits is a significant problem. Several of the technology-based requirements for CSOs (the nine minimum controls (NMCs)) are not strictly confined to the wastewater collection system, and require some degree of involvement at the treatment plant, including the review and modification of pretreatment programs to ensure CSO impacts are minimized (NMC #3), maximization of flow to the POTW for treatment (NMC #4), and pollution prevention and public notification programs (NMC #5). Because the SWSC remains the permittee for both permits, neither the CSO permit nor the permit authorizing discharges from the wastewater treatment plant (NPDES permit No. MA0101613) attempt to distinguish the NMCs that are to be implemented at the wastewater treatment plant from those that are to be implemented throughout the collection system. Therefore, both permits require the implementation of the NMC program.

In the future, should an entity other than the SWSC assume ownership of either the collection system or the wastewater treatment plant's NPDES permits, the responsibilities for implementing individual components of the NMC program may need to be identified and the permits modified.

Comment 3.b.

The outfall for the wastewater treatment plant (042) also acts as a CSO when the hydraulic capacity is exceeded. This outfall is not covered in the CSO permit, and without seeing the NPDES permit for the WWTP, the public cannot be assured that this is an approved bypass under EPA rules.

Response 3.b.

Outfall # 042 is one of two discharge outfalls located at the wastewater treatment plant (the other outfall, outfall #041, is authorized by NPDES permit No. MA0101613). Outfall #042 has historically been treated as an unauthorized bypass of the wastewater treatment plant. As such, any discharge of untreated wastewater through this outfall must be reported in accordance with the requirements of Part II.B.4. (General Requirements – Bypass) of the permit issued to the wastewater treatment plant (NPDES Permit No. MA0101613).

Comment 4.

Part I.A(2)c must define "dry weather". Without a working definition, there is no way to determine if the permittee is in compliance with the requirement that there be no dry weather discharges. Indeed, depending on the definition of "wet weather", a Clean Water § 401 certification will be all but foreclosed in this case.

Response 4.

The following definition for dry weather has been added to Part I.A.2.c. of the final permit:

> *Dry weather is defined as any calendar day on which there is less than 0.1 inch of rain and no snow melt.*

Therefore, any precipitation/snow melt that exceeds 0.1 inch on any given calendar day constitutes wet weather.

Comment 5.

Part I.A(1)b in the permit states that the CSO discharges "shall not cause or contribute to violations of Federal or State Water Quality Standards". The fact is that CSO's ***are*** *causing or contributing violations of the State Water Quality standard for bacteria. EPA has acknowledged this most recently in Administrative Order 08-037. The permittee is in violation of the existing and draft permit. Moreover, the permittee has failed to meet the CSO Control Policy and the Nine Minimum Controls as to monitoring, documentation, public notice, and the Long Term Control Plan, putting it in violation of Clean Water Act Section 402(q). See U.S.C. § 1342(q). Most importantly, the Long Term Control Plan, which is EPA's core "technology-based effluent limitation" for this type of NPDES permit, is not included in this Draft Permit and is, therefore, being placed outside the scope of the "public hearing" required by Clean Water Act Section 402(a), 33 U.S.C. §1342(a)(1); 40 C.F.R. § 124.71(b). This is a potential violation of the Act and of EPA's own rules on permit hearing.*

Furthermore, the Connecticut River Clean-Up Committee and the Springfield Water and Sewer Commission published results in September 2006 of dry weather and wet weather sampling conducted during 2001 and 2002. The study, titled "Summary Report Connecticut River Bacterial Monitoring Report," concluded that water quality standards for fecal coliform and E. coli were being met during dry weather, but they were being consistently exceeded during wet weather. The study estimated that during wet weather, 25% of bacteria came from stormwater, 25% came from bacteria sources upstream, and 50% came from CSOs. Sample location RIV-6 was located at Memorial Bridge, sample location RIV-7 was located at the South End Bridge, and RIV-8 is the most downstream site. Samples collected on the east bank of the river at RIV-6, RIV-7, and RIV-8 during three wet weather events had combined geometric mean E. coli levels of 140; 1,984; and 297 cfu/100mL, respectively. RIV-10 was located on the Mill River. The Mill River site had geometric average of E. coli levels at 476 cfu/100 mL during dry weather and 1,749 cfu/100 mL of combined events during wet weather. The Mill River site had the highest combined wet weather geometric mean of all the sites sampled as part of the study. RIV-11 and RIV-12 sites were along the Chicopee River. Site RIV-12 had geometric average of E. coli levels at 299 cfu/100 mL during dry weather and 513 cfu/100 mL of combined events during wet weather.

The TriState Connecticut River Targeted Watershed Initiative showed consistently high E. coli bacteria levels during both dry and wet weather last year at Bassett Marina in Springfield, with levels during dry weather reaching as high as 6,700, and 13,286 cfu/100mL during wet weather. This study is being funded using EPA grant money, and the monitoring is being done under an EPA-approved Quality Assurance Project Plan (QAPP). See http://www.umass.edu/tei/mwwp/ctrivermonitoring_ archivedresults1.html and http://www.umass.edu/tei/mwwp/ctrivermonitoring_archivedresults.html for 2008 data. Unfortunately, this site has not been monitored in 2009. Bassett Marina is located just downstream of the Route 20 bridge, downstream of CSOs 007 and 008.

Response 5.

EPA acknowledges that the SWSC's CSOs do cause and contribute to violations of water quality standards and that immediate compliance with the final permit will not be achieved. Wet weather discharges from the SWSC's CSOs have caused or contributed to violations of water quality standards, in violation of the conditions of the SWSC's NPDES permit issued in 2003 and the CWA, resulting in enforcement actions being taken against the SWSC. As with the permit issued to the SWSC in 2003, EPA anticipates that the enforcement mechanism used to achieve compliance with the final permit will be through the issuance of Administrative Order(s), such as the one under which the SWSC is currently operating, which establishes schedules for the development of a final Long Term Control Plan and for the completion of various stages of CSO abatement. Such orders will ultimately bring the CSOs into compliance with their NPDES permit and the CWA. This approach is consistent with the guidance provided in the National CSO Control Policy (59 FR 18688, April 1994).

It is unclear from the above comment what is meant by the statement "*the permittee has "failed to meet the CSO Control Policy and the Nine Minimum Controls as to monitoring, documentation, public notice, and the Long Term Control Plan, putting it in violation of Clean Water Act Section 402(q). See U.S.C. § 1342.(q)(1); 40 CFR § 124.71(b).* The National CSO Control Policy sets forth the recommended approach to controlling CSOs by providing guidance to EPA, CSO permittees, and state water pollution control authorities on the planning and implementation of CSO controls aimed at achieving compliance with the CWA (*CSO Control Policy*, 59 Fed. Reg. 18688, April 1994). In 2001, Congress added Section 402(q) to the CWA to specifically address CSOs by stating that "*Each permit, order, or decree issued pursuant to this Act after the date of enactment of this subsection for a discharge from a municipal combined storm and sanitary sewer shall conform to the Combined Sewer Overflow Control Policy signed by the Administrator on April 11, 1994*." The permit issued in 2003 as well as the draft permit include conditions and requirements which are consistent with the National CSO Control Policy (*CSO Control Policy*, 59 Fed. Reg. 18688, April 1994). Further, the requirements in the draft permit are also consistent with 33 USC § 1342(q), which requires the conformance of permits, decrees, and orders with the National CSO Control Policy, imposes requirements upon the Administrator of EPA for the issuance of guidance on the review of state water quality standards and designated uses, and imposes a deadline upon EPA's Administrator for the submission of a report documenting the

progress made by EPA, states, and CSO communities in implementing and enforcing the National CSO Control Policy.

The SWSC conducts monitoring of CSO activation frequencies and volumes as part of their Nine Minimum Control Program, as required by the permit issued in 2003. This information is submitted to EPA and MassDEP as part of an annual report of activities related to the implementation of their Nine Minimum Control Program. This report is available for review at the EPA-Region I office in Boston.

The intent of the following statement, taken from the above comment, is also not entirely clear:

> "*Most importantly, the Long Term Control Plan, which is EPA's core "technology-based effluent limitation" for this type of NPDES permit, is not included in this Draft Permit and is, therefore, being placed outside the scope of the "public hearing" required by Clean Water Act Section 402(a), 33 U.S.C. §1342(a)(1); 40 C.F.R. § 124.71(b). This is a potential violation of the Act and of EPA's own rules on permit hearings"*.

EPA has established the nine minimum controls included in Part I.A.1. of the draft permit as the best available technology economically achievable and best conventional technology (BAT/BCT) based on best professional judgment (BPJ) (i.e., the technology-based controls), consistent with the National CSO Control Policy (*CSO Control Policy*, 59 Fed. Reg. 18688, April 1994). The National CSO Control Policy does not identify a Long Term CSO Control Plan as a technology-based effluent limitation. The National CSO Control Policy does recommend that permitting authorities require permittees to "develop and submit, consistent with this Policy and based on a schedule in an appropriate enforceable mechanism, a Long Term CSO Control Plan" (see *CSO Control Policy*, Part IV.B.1., 49 Fed. Reg. 18688, April 1994). "Appropriate enforcement mechanisms" include both NPDES permits *and* enforcement orders (emphasis added). The SWSC was required to develop a final Long Term Control Plan according to the schedule contained in the Administrative Order (i.e., enforcement order) issued in September 2008. Although enforcement orders are not open to public participation, the state provides for the opportunity for public participation during the development of Long Term Control Plans during the facilities planning process, in accordance with the requirements of the State Revolving Fund (SRF) program.

Section 402(a) of the CWA authorizes EPA to issue NPDES permits after an opportunity for a hearing. In accordance with the current regulations pertaining to holding public hearings on NPDES permits (40 CFR § 124.71(b) has been removed from the NPDES program regulations), EPA holds public hearings on draft NPDES permits whenever the Regional Administrator finds that response to the public notice of a draft NPDES permit indicates significant public interest or when the Regional Administrator determines that such a hearing might clarify one or more issues in the permit decision (40 CFR § 124.12(a)(1) and (2)). A public hearing on the draft permit was not held because EPA did not receive any requests for one during the public comment period, nor did the

Regional Administrator determine that one was needed to clarify any issues in the permit decision.

Comment 6.

We agree with the permit requirement that the permittee must submit a revised CSO monitoring plan that will quantify CSO activations and volumes. After all, U.S. Environmental Protection Agency, Combined Sewer Overflow (CSO) Control Policy, 59 Fed. Reg. 18688, 18688 (1994) states that, "CSO permittees should immediately undertake a process to accurately characterize their CSS and CSO discharges, demonstrate implementation of minimum technology-based controls identified in the Policy, and develop long-term CSO control plans which evaluate alternatives for attaining compliance with the CWA, including compliance with water quality standards and protection of designated uses."

Response 6.

EPA acknowledges the comment.

Comment 7.

We agree with the requirement in I.A.(2)e that CSO identification signs be visible by land and water, and that additional signage be placed in other languages such as Spanish. Our members and staff have canoed this stretch of the river and verified that there are multiple outfalls that are either difficult or impossible to identify as such—even if one is familiar with the CSO map.

Response 7.

EPA acknowledges the comment.

Comment 8.

CRWC supports the new requirement in Part I.A.(3)d of the permit that the permittee submit a public notification plan to describe the measures actively being taken to meet the ninth minimum control measure. Springfield Water and Sewer Commission should be responsible for signs/notices as outlined in (ii.) to be placed at Bondis Island and multiple locations along the bike path where people go down to the river and spend time fishing or picnicking. We like the idea of postings on the permittee's website, but think that during the recreation season, postings should be after every overflow event, not just quarterly. We wonder about requirement (6) – how far downstream are you asking that local health agents be notified? All the way to Long Island Sound, or some specific number of miles downstream? We also recommend that the Springfield Water and Sewer Commission's web site contain the annual report on implementation of the Nine Minimum Controls.

Response 8.

Part I.A.3. of the draft and final permits requires the first annual report submitted under the final permit to include an updated public notification plan. The SWSC is encouraged to consider the feasibility of incorporating all or some of the commenter's suggestions with respect to additional signs, notices, and web postings of CSOs into their public notification plan when conducting an evaluation of the plan under the reissued permit.

In conducting this evaluation for the purpose of updating and enhancing its public notification program, the SWSC must examine their current practice of notifying health agents or other public officials of any downstream communities with uses that could be adversely affected by CSO discharges. Since downstream notification would occur on a case-by-case basis depending on such factors as the time of year in which the overflow occurred, the magnitude of the overflow event, etc, these factors should be considered in the evaluation of the downstream notification plan and should be discussed in the first annual report prepared and submitted in accordance with the final permit. The annual report, which is a public record, is available for review upon request.

Comment 9.

We recommend that the following section and language be added to the permit: "G. Retention of Records. The permittee shall retain all records of all monitoring information, copies of all reports required by this permit and records of all other data required by or used to demonstrate compliance with this permit, for at least eight years. This period may be modified by alternative provisions of this permit or extended by request of the Director at any time."

Response 9.

With the exception of sludge and stormwater records, Part II.C.1.b of the Standard Conditions, which apply to all NPDES permits, requires the maintenance of all records, data and reports for at least three years. The requirement in Part I.A.2.a. of the draft permit for the maintenance of inspection records for a period of five years exceeds the requirement found in Part II.C.1.b., and shall remain in the final permit. However, the discharge records retention period of five years found in Part I.A.2.d. of the draft permit has been changed to six years in the final permit, to be consistent with the NPDES permits issued to the upstream communities of Chicopee, Holyoke, and South Hadley.

Comment 10.

Given that, over the next five (5) years of the permit's life, there will be multiple "sewer-sheds" in Springfield that contribute to CSO volumes, it would be good if the permit set certain limits for new sewer hookups in these areas. We recommend that in CSO sewersheds, the following language be adopted: "Increased flows from new commercial and residential development or facilities currently connected to the sewer system shall be

offset, to the extent feasible, in order to minimize any net increase of flow to the WWTP during CSO discharge events."

Response 10.

EPA does not typically incorporate conditions related to individual sewer connections into NPDES permits, unless there is sufficient information available which indicates that planned connections would significantly impact CSOs or result in violations at the wastewater treatment plant. The state, however, does regulate sewer system extensions and connections through its Sewer System Extension and Connection Permit Program (see 314 CMR § 7.00).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND-REGION I
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT No.: **MA0103331**

NAME AND ADDRESS OF APPLICANT:

Springfield Water and Sewer Commission
P.O. Box 995
Springfield, MA 01101-0995

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

All combined sewer overflow (CSO) outfalls are located in Springfield, MA (Hampden County). The CSO outfall serial numbers are: 007, 008, 010-019, 024, 025, 034-037, 045, 046, 048, and 049 (see **Appendix A).**

RECEIVING WATERS: **Connecticut River**
Chicopee River
Mill River

CLASSIFICATION: **B (Warm Water Fishery)**

Table of Contents

I. PROPOSED ACTION, TYPE OF FACILITY, AND DISCHARGE LOCATION

The above named applicant (permittee) has applied to the U.S. Environmental Protection Agency (EPA) for re-issuance of its National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving waters. The existing permit expired on September 30, 2005. A complete and timely application for the re-issuance of their NPDES permit was submitted to EPA and the existing permit was administratively continued pursuant to 40 CFR § 122.6. Upon becoming effective, this permit and the authorization to discharge will expire five years from the last day of the month preceding the effective date.

The discharges authorized by the draft permit are from 23 combined sewer overflow discharge outfalls (CSOs) which discharge to the Connecticut, Chicopee, and Mill Rivers (see **Figure 1** and **Appendix A)**.

The discharge of treated municipal wastewater from the SWSC's Regional Wastewater Treatment Facility into the Connecticut River is covered under NPDES Permit No. MA0101613. The discharge of untreated wastewater from CSO outfall number 042 to the Connecticut River, which occurs when incoming flows to the wastewater treatment facility exceed the plant's hydraulic capacity, is also covered under NPDES Permit No. MA0101613.

In October of 2000, the Springfield Water and Sewer Commission (SWSC) contracted all work related to the operation and maintenance of both its wastewater treatment facility and the combined collection system to United Water Springfield, L.L.C. This contract is for a twenty year period.

II. RECENT PERMITTING HISTORY

- Current Permit Administratively Continued
- Reapplication received by EPA – March 2005
- Current Permit Expired – September 30, 2005
- Current Permit Issued – June 17, 2003 (Became effective August 17, 2003)
- Previous Permit Issued September 29, 1995, and expired September 29, 2000

III. DESCRIPTION OF THE DISCHARGE

A description of the SWSC's CSO discharges, in terms of their locations and the receiving waters into which each CSO outfall discharges, as well as estimated annual CSO discharge volumes based on past monitoring data may be found in **Appendices A and C** of this fact sheet. The geographic locations of the CSO outfalls are shown in **Figure 1**.

IV. LIMITATIONS AND CONDITIONS

The effluent limitations and monitoring requirements may be found in the draft NPDES permit.

V. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATION DERIVATION

A. Process Description

The SWSC's combined sewer system is subdivided into three interceptor sub-systems: the Connecticut River Interceptor System, the Main Interceptor System (including the Mill River Interceptor, which is tributary to the Main Interceptor), and the Chicopee River Interceptor System (see **Figure 2**). These interceptor sewers convey stormwater and sanitary wastewater to the Springfield Regional Wastewater Treatment Facility under normal flow conditions. However, during storm events which cause the combined sewer collection system to become hydraulically overloaded, there are discharges from combined sewer overflow relief points (CSOs) within the collection system which discharge untreated sanitary wastewater and stormwater into the Connecticut River, the Mill River, and the Chicopee River (see **Appendix A** and **Figure 1**). These permitted CSOs provide hydraulic relief to the wastewater collection system and/or the wastewater treatment facility during wet weather events. **Appendix C** of this Fact Sheet provides a table with the estimated number of annual overflow occurrences and volumes based on available hydraulic modeling information. The hydraulic model is periodically updated with new information based on the SWSC's CSO Program development and CSO abatement projects.

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The SWSC is the governing body which oversees both the Springfield Regional Wastewater Treatment Facility and the Springfield wastewater collection system. The discharges authorized by the draft permit are from 23 combined sewer outfalls (CSOs) within the SWSC's combined wastewater collection system to the receiving water indicated above (also see **Figure 1** and **Appendix A**). The discharge of treated municipal and industrial wastewater from the SWSC's Regional Wastewater Treatment Facility as well as the discharge of untreated wastewater through CSO 042 into the Connecticut River are authorized under NPDES Permit No. MA0101613. Work related to the operation and maintenance of pump stations and CSO monitoring has been contracted out to United Water Springfield, L.L.C. This contract is for a twenty-year period.

Since November of 2000, the SWSC has been issued four Administrative Orders (AOs) concerning abatement measures for CSOs. Since that time, the SWSC has spent over $53,000,000 on abatement of CSOs. The SWSC will be spending up to an additional $26,000,000 in the next two years to satisfy the most recent Administrative Order. In that time, the SWSC has satisfied all requirements of the various Orders. The following is a brief description of the primary requirements of each of the aforementioned Administrative Orders and the actions taken by the SWSC:

Administrative Order Docket No. 00-118, November 2000

AO Docket No. 00-118 required the development of abatement measures for CSOs tributary to the Mill River. The AO also required a plan and implementation schedule for Stormwater Best Management Practices (BMPs) for Watershops Pond.

SWSC Actions:

The SWSC completed construction of the Mill River CSO Project in 2004 in compliance with all requirements of the Order. The SWSC also submitted a Stormwater BMP Plan in April of 2001 and has implemented many of the recommendations of the plan.

Administrative Order Docket No. 02-11, May 2002

AO Docket No. 02-11 required the development of abatement measures for CSOs tributary to the Chicopee River.

SWSC Actions:

Construction of two CSO abatement projects designed to meet CSO control objectives for the Chicopee River is currently underway. This work included elimination of two CSO outfalls from the Chicopee River. The areas tributary to CSOs 043 and 044 have been separated into stormwater and sanitary sewage systems, with the CSO outfalls being converted to stormwater-only outfalls. The two construction projects are nearing substantial completion and it is anticipated that construction will be complete by the required completion date of May 31, 2009

Administrative Order Docket No. 04-13, July 2004

AO Docket No. 04-13 required the development of abatement measures for the Clinton Street CSO which is tributary to the Connecticut River.

SWSC Actions:

The SWSC, with concurrence from EPA and the Massachusetts Department of Environmental Protection (MassDEP), submitted an alternate CSO abatement plan for CSO 007 and CSO 049 that provided an equal level of CSO control as the Clinton Street project. The alternate project has satisfied all requirements of the Order, and is currently being bid as two construction projects. It is anticipated that construction of these projects will begin on schedule pursuant to the requirements of the Order.

Administrative Order Docket No. 08-037, September 2008

AO Docket No. 08-037 focuses on the development of abatement measures for the Washburn Street Street CSO, developing a Final Long Term CSO Control Plan and Environmental Impact Report, and development of a Capacity, Management, Operation, and Maintenance Program (CMOM). The SWSC has already met recent

submittal requirements of the Order, and is currently procuring engineering services to satisfy all requirements of the Order.

B. Waterbody Classification and Designated Uses

The segments of the Connecticut (segment MA34-05) and Mill Rivers (segment MA34-29) at the points of discharge are located within the Connecticut River Basin. The segment of the Chicopee River into which several of the SWSC's CSO outfalls discharge (segment MA36-25) is located within the Chicopee River Basin. The Massachusetts Surface Water Quality Standards, found at 314 Code of Massachusetts Regulations (CMR) 4.06 Tables 6 and 8, classifies these river segments as Class B - Warm Water Fisheries. The Massachusetts Surface Water Quality Standards designates Class B Waters as having the following uses: (1) a habitat for fish, other aquatic life, and wildlife; (2) primary and secondary contact recreation; (3) a source of public water supply (i.e., where designated and with appropriate treatment); (4) suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses; and (5) shall have consistently good aesthetic value (314 CMR § 4.05(3)(b)).

A warm water fishery is defined in the Massachusetts Surface Water Quality Standards (314 CMR § 4.02) as waters in which the maximum mean monthly temperature generally exceeds 20°C during the summer months and are not capable of supporting a year-round population of cold-water stenothermal aquatic life.

Sections 303(d) and 305(b) of the Clean Water Act "CWA" require that states complete a water quality inventory and develop a list of impaired waters. Specifically, section 303(d) requires states to identify those waterbodies that are not expected to meet water quality standards following the implementation of technology-based controls and, as such, require the development of a total maximum daily load (TMDL). In Massachusetts, these two evaluations have been combined into an Integrated List of Waters. The integrated list format provides the status of all assessed waters in a single, multi-part list. The Massachusetts Year 2008 Integrated List of Waters (303(d) list) lists the segment of the Connecticut River into which twelve of the combined sewer outfalls discharge (discharge serial numbers 007-008; 010-016; 018, and 049; Segment MA 34-05) as a Category 5 water (waters requiring a TMDL for pollutants identified as causing impairment(s)). The pollutants listed as causing the impairment(s) and requiring a TMDL are *E. coli*, total suspended solids, and PCBs in fish tissue (Massachusetts Year 2008 Integrated List of Waters (MassDEP 2008). The segment of the Mill River into which four of the combined sewer overflow outfalls discharge (discharge serial numbers 034-037; segment MA34-29) is listed as a category 5 water due to impairment(s) caused by *E. coli* in the Massachusetts Year 2008 Integrated List of Waters (MassDEP 2008). The segment of the Chicopee River into which seven of the combined sewer outfalls discharge (discharge serial numbers 017, 019, 024-025; 045-046; and 048; segment MA36-25) is listed as a Category 5 water due to impairment(s) caused by pathogens in the Massachusetts Year 2008 Integrated List of Waters (MassDEP 2008).

C. Combined Sewer Overflow Policy

1. General

Combined Sewer Overflows (CSOs) are overflows from a combined sewer system that are discharged into receiving waters without going to the headworks of a publicly owned treatment works (POTW). CSOs occur when the flow in the combined sewer system exceeds interceptor or regulator capacity. CSOs are distinguished from bypasses which are "intentional diversions of waste streams from any portion of a treatment facility" (40 CFR § 122.41(m)). Flows in combined sewers can be classified into two categories: wet weather flow and dry weather flow. Wet weather flow is a combination of domestic and industrial sewage, infiltration from groundwater, and storm water flow including snow melt. Dry weather flow is the flow in a combined sewer that results from domestic sewage, groundwater infiltration, and industrial wastes with no contribution from storm water runoff or storm water-induced infiltration. Dry weather overflows from CSOs are illegal. Occurrences of dry weather overflows must be reported immediately to EPA and MassDEP and eliminated as expeditiously as possible.

The objectives of the National CSO Control Policy are:

(1) To ensure that if the CSO discharges occur, they are only as a result of wet weather,

(2) To bring all wet weather CSO discharge points into compliance with the technology-based requirements of the Clean Water Act (CWA) and applicable federal and state water quality standards, and

(3) To minimize water quality, aquatic biota, and human health impacts from wet weather flows.

2. Effluent Standards

CSOs are point sources subject to NPDES permit requirements for both water quality-based and technology-based requirements but are not subject to secondary treatment regulations applicable to publicly owned treatment works.

Section 301(b)(1)(C) of the CWA of 1977 mandated compliance water quality standards by July 1, 1977. Technology-based permit limits must be established for best conventional pollutant control technology (BCT) and best available technology economically achievable (BAT) based on best professional judgment (BPJ) in accordance with Section 301(b) and Section 402(a) of the Water Quality Act Amendments of 1987 (WQA).

3. Conditions for Discharge

The draft permit prohibits dry weather discharges from the CSO outfalls listed in **Appendix A** of this fact sheet. During wet weather events, the discharges must not cause an exceedance of any state water quality standard. Dry weather discharges must be reported immediately to EPA and MassDEP. Wet weather discharges must be monitored and reported as specified in the draft permit.

Discharges from any other point source, including any of the POTW pump stations listed in **Appendix B**, are not authorized by the draft permit and shall be reported in accordance with Part II. B.4. (Bypasses) of the draft permit.

4. Nine Minimum Controls (NMC)

Consistent with EPA National Guidance, the permittee must comply with BPJ-derived BCT/BAT controls, which at a minimum include the following: (1) proper operation and maintenance of the sewer system and outfalls; (2) maximum use of the collection systems for storage; (3) review and modification of pretreatment programs to assure CSO impacts are minimized; (4) maximization of flow to the POTW for treatment; (5) prohibition of dry weather overflows; (6) control of solid and floatable materials in the discharge; (7) pollution prevention programs which focus on contaminant reduction activities; (8) public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and (9) monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

5. Documentation

The permittee submitted its Nine Minimum Control Program (NMC) in April 1997. The draft permit requires that the permittee continue to implement its NMC program and to submit an annual status report on its NMC activities by **March 31st** of each year. While the draft permit allows the permittee to modify its NMC program to enhance its effectiveness, changes must be documented in the annual report and the minimum implementation levels included in the draft permit must always be maintained.

The draft permit includes a requirement for the permittee to review its entire NMC program and to revise it as necessary. A report shall be submitted to EPA and MassDEP **within 180 days of the effective date of the permit** which documents that the review has been performed and describes any resultant revisions made to the NMC program.

6. Reopener/Additional CSO Control Measures

The draft permit requires the submission of an annual certification to EPA and MassDEP no later than **March 31st** which states that the inspections required by the draft permit were conducted, results recorded, and appropriate records and reports were maintained for the previous calendar year.

The permit may be modified or reissued upon the completion of a long-term CSO control plan. Such modification may include performance standards for the selected controls, a post construction water quality assessment program, monitoring for compliance with water quality standards, and a reopener clause to be used in the event that the selected CSO controls fail to meet water quality standards.

7. Required Treatment

EPA's national CSO policy ("CSO Policy"), which was published in the Federal Register on April 19, 1994, (59 Fed. Reg. 18688), states:

> *Permittees with CSOs are responsible for developing and implementing long-term CSO control Plans that will ultimately result in compliance with the requirements of the CWA. The long-term control plans should consider the site-specific nature of CSOs and evaluate the cost-effectiveness of a range of control options/ strategies. The development of a long-term CSO control plan and its subsequent implementation should also be coordinated with the NPDES authority and State authority responsible for reviewing and revising the State's Water Quality Standards.*
>
> *The selected controls should be designed to allow cost-effective expansion or cost-effective retrofitting if additional controls are subsequently determined necessary to meet water quality standards, including designated uses.*

The SWSC submitted a draft long-term CSO control plan to EPA in March of 2000. The SWSC is currently operating under a federal administrative order (Administrative Order Docket No. 08-37) which includes schedules for the completion of design for a Washburn Street CSO Abatement Project, developing a Final Long Term CSO Control Plan and Environmental Impact Report, and development of a Capacity, Management, Operation, and Maintenance Program (CMOM).

VI. ANTIBACKSLIDING

Section 402(o) of the CWA generally provides that the effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the previous permit. EPA has also promulgated anti-backsliding regulations that are found at 40 C.F.R. § 122.44(l). Unless the criteria allowing for an exception to the anti-backsliding requirements apply, the limits and conditions in the reissued permit must be at least as stringent as those in the previous permit. The limitations and conditions in the draft permit satisfy the antibacksliding requirements of 40 CFR § 122.44(l).

VII. ANTIDEGRADATION

It is the goal of EPA and the CWA to achieve and maintain water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water. Federal regulations found at 40 CFR § 131.12 require

states to develop and adopt an antidegradation policy which will assure that once a use is achieved it will be maintained. The antidegradation provisions in the Massachusetts Surface Water Quality Standards, found at 314 CMR § 4.04, require the protection of existing uses and the level of water quality necessary to sustain these uses. All existing uses of the Connecticut, Mill, and Chicopee Rivers must be protected. No lowering of water quality is allowed, except in accordance with the provisions of the state's antidegradation policy. The terms and conditions of the draft permit are sufficiently stringent so as to ensure that the provisions of 314 CMR § 4.04 are met.

VIII. ESSENTIAL FISH HABITAT (EFH) DETERMINATION

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, may adversely impact any essential fish habitat (16 U.S.C. § 1802(10)).

The Amendments broadly define "essential fish habitat" (EFH) as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (16 U.S.C. § 1802(10)). "Adverse impact" means any impact which reduces the quality and/or quantity of EFH (50 CFR § 600.910(a)). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences or actions.

Essential fish habitat is only designated for species for which federal fisheries management plans exist (16 U.S.C. § 1855(b)(a)(A)). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

The Atlantic salmon (*Salmo salar)* is the only managed species believed to be present during one or more life stages in the area where the SWSC's CSOs are located in the Connecticut River, the Chicopee River, and possibly the mouth of the Mill River.

Although the last remnant stock of Atlantic salmon (*Salmo salar*) indigenous to the Connecticut River and its tributaries is believed to have been extirpated over 200 years ago, an active effort has been underway throughout the Connecticut River System since 1967 to restore this historic run (HG&E/MMWEC, 1997).

Early Life Stages

While some natural spawning does take place in the Connecticut River System, resulting in the presence of eggs in the system, restoration programs have removed nine of every ten salmon from the fishway at Holyoke Dam for hatchery spawning efforts. Hatchery spawning produces fertilized eggs that are reared and hatched under controlled conditions. The resulting fry are placed in the tributaries of the Connecticut River once they reach a late larval stage (FERC, 1999). This process precludes the majority of eggs

and larvae produced by the spawning population from being effected by CSO wet weather discharges.

Fry introduced into the Connecticut River System as a result of the hatchery program are placed in suitable habitat in upstream tributaries of the river. Fry occupy stream habitats and generally live near the bottom of the water column. The SWSC's CSO outfalls are located in the main stem of the Connecticut, Chicopee, and Mill Rivers, where juvenile salmon are not expected to be found.

Juveniles

Individuals are thought to first emigrate out of the Connecticut River System at age one or two. Downstream migration of smolts begins when water temperatures increase to about 10ºC (50ºF). Smolts stocked upstream of the SWSC's CSOs must pass in the vicinity of these outfalls during their out-migration. Out-migration is usually associated with high spring river flows in April and May. High springtime flow in the river correlates with an increase in the current velocity of the river. This increase in flow provides additional dilution of any wastewater discharged from CSOs, minimizing any potential negative impacts to the salmon should wet weather discharges from the CSOs occur in the spring.

Adults

Stocking efforts have been successful in establishing a small population of in-migrating adult Atlantic salmon. A fish passage structure located at the Holyoke Hydroelectric Project Dam on the Connecticut River, approximately ten river miles upstream of the SWSC's CSOs, serves to document passage of in-migrating adult Atlantic salmon past the CSO outfalls. Adult salmon return to the Connecticut River primarily in May and June (CRSA, 1999). Salmon counts in past years have been documented at the Holyoke Dam as follows: year 1998, 197 salmon; year 1999, 91 salmon; year 2000, 52 salmon; year 2001, 24 salmon; year 2003, 28 salmon (USFWS, 2003). This information demonstrates that the aquatic habitat in the vicinity of the SWSC's CSOs does allow for passage upstream.

Many factors affect the magnitude of the in-migration of stocked Atlantic salmon into the Connecticut River in any given year. Among these factors are water quality conditions in Long Island Sound, the number of individuals stocked in past years, the tributary of the river into which they were introduced, river flow during the spring period, and the mortality suffered by the population from predation. The decrease in the number of in-migrating salmon recorded at the Holyoke Dam does not coincide with any pronounced change in the operation of the CSOs which may have resulted in an increase in the size or intensity of wet weather discharges. In fact, the development and implementation of CSO abatement measures will minimize impacts from wet weather CSO discharges (see Part V.A. of this fact sheet). The subsequent effect on the river has been a diminished negative impact in this stretch of the river from discharges from the SWSC's CSOs.

Adult Spawning Stage
The gravel or cobble riffle above or below a pool, described as suitable habitat for Atlantic salmon spawning (NEFMC, 1998), is absent from the Connecticut River reach at Springfield as well as the habitat in the Chicopee River in the vicinity of the SWSC's CSOs. A waterfall near the mouth of the Mill River halts any upstream movement of Atlantic salmon into that tributary. Therefore, the area of the river where the SWSC's CSOs discharge under wet weather conditions is judged to have little value as a suitable habitat for Atlantic salmon spawning.

EPA has made the determination that any adverse effects to Atlantic salmon EFH will be minimized based on the following:

- This permit action is a reissuance of an existing NPDES permit.
- The requirements of the draft permit were developed to be protective of all aquatic life, including those with designated EFH.
- The discharges authorized by the draft permit are intermittent.
- Since November of 2000, the SWSC has been issued four AOs concerning abatement measures for CSOs and has spent over $53,000,000 on abatement of CSOs. The SWSC will be spending up to an additional $26,000,000 in the next two years to satisfy the most recent AOs. These improvements are detailed in Part V. A. of this fact sheet.
- Consistent with EPA National Guidance, the permittee must comply with BPJ-derived BCT/BAT controls, which include but are not limited to the Nine Minimum Controls detailed in Part I.A.1.a. of the draft permit and in Part V.C.4 of this fact sheet.
- The movement of Atlantic salmon past the river reach influenced by the wet weather CSO discharges is expected to occur during high river flows, further diluting the discharge.

For the reasons sated above, EPA finds that the limitations and conditions contained within the draft permit are adequately protective of Atlantic salmon EFH, and therefore additional mitigation is not warranted. If any adverse impacts to Atlantic salmon EFH are suspected or detected as a result of this permit action or if new information is received which changes the basis for EPA's finding, NMFS will be notified and an EFH consultation will be initiated. EPA has submitted this fact sheet and the draft permit to the NMFS Northeast Region Habitat Division for their review and comment.

IX. ENDANGERED SPECIES ACT (ESA)

Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended (the "Act"), grants authority to and imposes requirements upon federal agencies regarding endangered

or threatened species of fish, wildlife, or plants ("listed species") and the habitat of such species that has been designated as critical ("critical habitat").
Section 7(a)(2) of the Act requires every federal agency in consultation with and with the assistance of the Secretary of the Interior, to ensure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine species and anadromous fish. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species.

Based on EPA's assessment, the only endangered species potentially influenced by the reissuance of this permit is the shortnose sturgeon (*Acipenser brevirostrum*). This species is under the jurisdiction of NMFS. It is EPA's preliminary determination that the regulation of the SWSC's CSOs, as governed by this permit action, is not likely to adversely affect the species of concern. EPA has concluded that the conditions in the draft permit will minimize any potential adverse effects to any federally listed species and their habitat in the vicinity of the outfalls for the reasons listed below. EPA is seeking concurrence with this finding from NMFS through the informal ESA consultation process.

Shortnose Sturgeon in the Connecticut River

Information used in this section was taken from the Draft Endangered Species Act Section 7 Consultation Biological Opinion (BO) for the Holyoke Hydroelectric Project (Federal Energy Regulatory Commission (FERC) Permit #2004), issued to FERC by National Oceanic Atmospheric Administration (NOAA) Fisheries on September 1, 2004. Additional information was taken from Connecticut River shortnose sturgeon analysis provided by NMFS in previous correspondence, including a letter dated August 9, 2007, from NMFS to EPA regarding the Easthampton Wastewater Treatment Facility, as well as a letter from NMFS to EPA concerning the Montague Water Pollution Control Facility NPDES Permit, dated September 10, 2008.

As reported above, a population of endangered shortnose sturgeon occurs in the Connecticut River. The population is largely divided by the Holyoke Dam, although limited successful downstream passage does occur. Modifications to the Holyoke Dam are currently ongoing to ensure the safe and successful upstream and downstream passage of fish, including shortnose sturgeon, at the Dam.

The Holyoke Dam separates shortnose sturgeon in the Connecticut River into an upriver group (above the Dam) and a lower river group that occurs below the Dam to Long Island Sound. The abundance of the upriver group has been estimated by mark-recapture techniques using Carlin tagging (Taubert 1980) and PIT tagging (Kynard unpublished data). Estimates of total adult abundance calculated in the early 1980s range from 297 to 516 in the upriver population to 800 in the lower river population. Population estimates conducted in the l990s indicated populations in the same range. The total upriver population estimates ranged from 297 to 714 adult shortnose sturgeon, and the size of the

spawning population was estimated at 47 and 98 for the years 1992 and 1993 respectively. The lower Connecticut River population estimate for shortnose sturgeon >50 centimeters in total length (TL) was based on a Carlin and PIT tag study from 1991 to 1993. A mean value of 875 adult shortnose sturgeon was estimated by these studies. Savoy estimated that the lower river population may be as high as 1000 individuals, based on tagging studies from 1988-2002 (Savoy 2008). It has been cautioned that these numbers may overestimate the abundance of the lower river group because the sampled area is not completely closed to downstream migration of upriver fish (Kynard 1997). Other estimates of the total adult population in the Connecticut River have reached 1200 (Kynard 1998), and based on Savoy's recent numbers, the total population may be as high as 1400 fish.

Several areas of the river have been identified as concentration areas. In the downriver segment, a concentration area is located in Agawam, MA which is thought to provide summer feeding and over-wintering habitat. Other concentration areas for foraging and over-wintering are located in Hartford, Connecticut, at the Head of Tide (Buckley and Kynard 1985) and in the vicinity of Portland, Connecticut (CTDEP 1992). Shortnose sturgeon also make seasonal movements into the estuary, presumably to forage (Buckley and Kynard 1985; Savoy in press). Above the Dam, there are also several concentration areas. During summer, shortnose sturgeon congregate near Deerfield, MA. Many over-winter in Whitmore, MA. Successful spawning has been documented at two sites in Montague, MA, which is thought to be the primary spawning site for shortnose sturgeon in the Connecticut River. Limited shortnose sturgeon spawning is thought to occur downstream of the Dam. Successful spawning at the downstream site has been documented in 1985 and with limited sampling effort, one egg was collected in Holyoke in 1998 and seven eggs were collected in 1999 (Kynard et al.1999).

While one shortnose sturgeon larvae was collected in the mainstem of the Connecticut River near the West Springfield Generating Station on May 24, 2005, this was thought to be an anomaly. Shortnose sturgeon eggs and larvae are not expected to be present in the vicinity of the SWSC's CSO outfalls in the Connecticut River.

No shortnose sturgeon spawning activity is thought to occur in the Mill River or the Chicopee River. EPA recognizes that a concentration area of shortnose sturgeon is located in Agawam, MA in the Connecticut River. This part of the river is thought to provide summer feeding and over-wintering habitat for the species. This area is approximately 5.5 miles downstream of the confluence of the Chicopee and Connecticut Rivers. While no part of the Chicopee River has been characterized as a concentration area for shortnose sturgeon, these fish have been documented in the Chicopee River.

EPA has made the determination that the CSO controls included in the draft permit will ensure that any adverse effects of wet weather discharges from the SWSC's CSOs on shortnose sturgeon will be insignificant or discountable. The discharges are not likely to have negative impacts on shortnose sturgeon based on the following:

- This permit action is a reissuance of an existing NPDES permit.

- The requirements of the draft permit were developed to be protective of all aquatic life, including those with designated EFH.
- The discharges authorized by the draft permit are intermittent.

- Since November of 2000, the SWSC has been issued four administrative orders (AOs) concerning abatement measures for CSOs and has spent over $53,000,000 on abatement of CSOs. The SWSC will be spending up to an additional $26,000,000 in the next two years to satisfy the most recent AOs. These improvements are detailed in Part V. A. of this fact sheet.

- Consistent with EPA National Guidance, the permittee must comply with BPJ-derived BCT/BAT controls, which include but are not limited to the Nine Minimum Controls (effluent limits) contained within Part I.A.1.a. of the draft permit and described in Part V.C.4. of this fact sheet.

- Information for the species in the Connecticut River indicates that shortnose sturgeon will travel in the deeper, channelized portion of the river, and would not be expected to come in direct contact with the CSO discharges during wet weather events.

Finding

Based on the above analysis of the permit action, EPA has made the preliminary determination that the proposed reissuance of the NPDES permit for the SWSC's CSO outfalls is not likely to adversely affect shortnose sturgeon. Through the submission of this fact sheet, the draft permit, and a direct correspondence, EPA is seeking concurrence from NMFS regarding this determination.

X. MONITORING AND REPORTING

The permittee is obligated to monitor and report sampling results to EPA and MassDEP within the time specified within the permit. Timely reporting is essential for the regulatory agencies to expeditiously assess compliance with permit conditions.

XI. STATE PERMIT CONDITIONS

The NPDES permit is issued jointly by the U.S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of the permit are, therefore, incorporated into and constitute a discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection pursuant to M.G.L. Chap. 21, § 43.

XII. GENERAL CONDITIONS

The general conditions of the permit are based on 40 CFR Parts 122, Parts 122, Subparts A and D and 40 CFR § 124, Subparts A, D, E, and F and are consistent with management requirements common to other permits.

XIII. STATE CERTIFICATION REQUIREMENTS

The staff of the MassDEP has reviewed the draft permit. EPA has requested permit certification by the State pursuant to 40 CFR § 124.53 and expects that the draft permit will be certified.

XIV. PUBLIC COMMENT PERIOD, PUBLIC HEARING, AND PROCEDURES FOR FINAL DECISION

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period to Meridith Timony, U.S. EPA, Office of Ecosystem Protection, Municipal Permits Branch (CMP), One Congress St., Suite 1100, Boston, MA 02114-2023. Any person, prior to such a date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. Public hearings may be held after thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period and after a public hearing, if such a hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Permits may be appealed to the Environmental Appeals Board in the manner described at 40 CFR § 124.19.

XV. EPA AND MASSDEP CONTACTS

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays, from the EPA and MassDEP contacts below:

Meridith Timony
U.S. Environmental Protection Agency
Office of Ecosystem Protection
Municipal Permits Branch (CMP)
One Congress Street, Suite 1100
Boston, MA 02114-2023
Telephone: 617-918-1533
Fax: 617-918-1505
e-mail: timony.meridith@epa.gov

or

Paul Hogan
Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, MA 01608
Telephone: 508-767-2796
Fax: 508-791-4131
e-mail: Paul.Hogan@state.ma.us

_____
Date

Ken Moraff, Acting Director
Office of Environmental Protection
U.S. Environmental Protection Agency

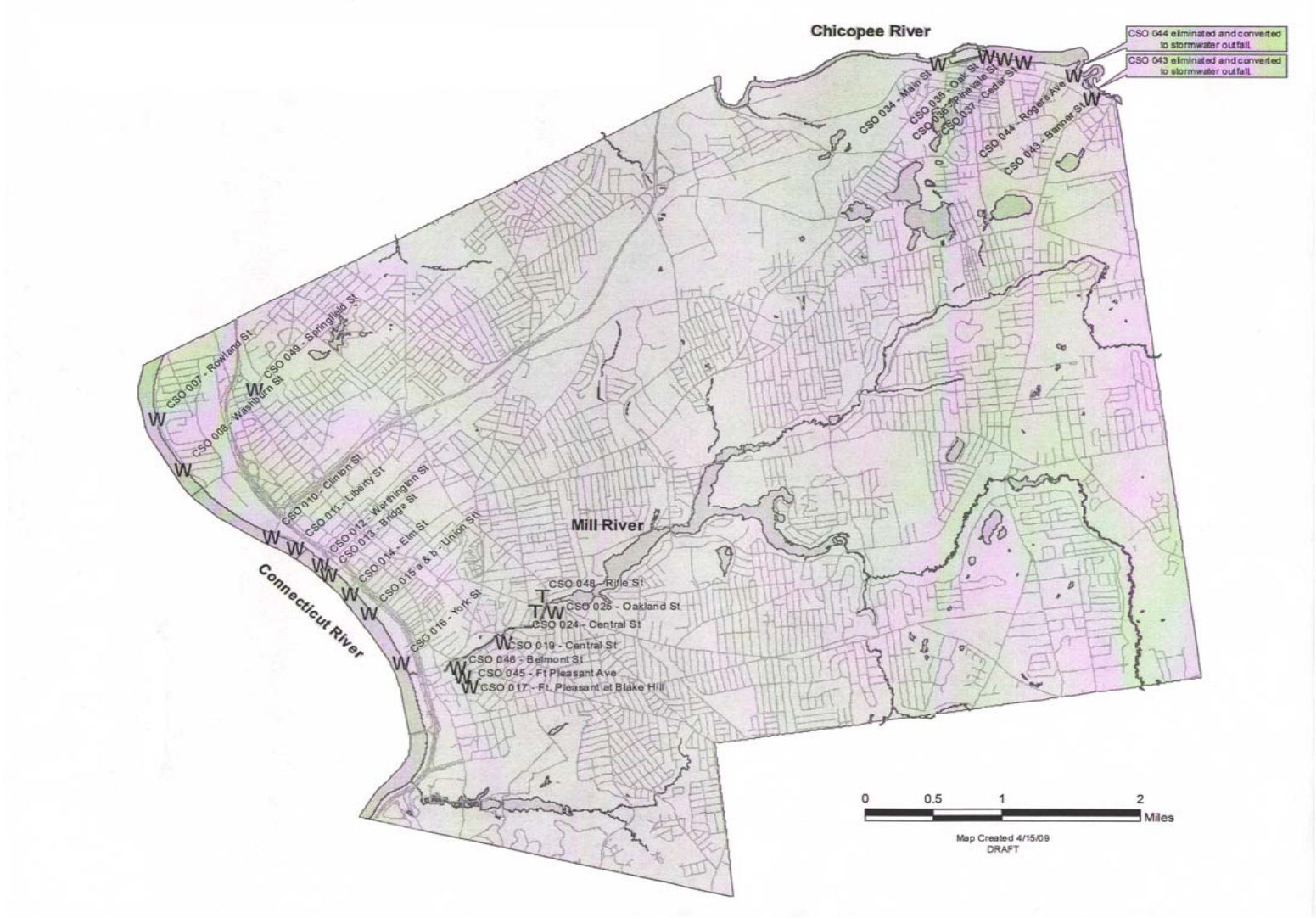

Figure 1: Map of Combined Sewer Overflow Outfalls (CSOs)

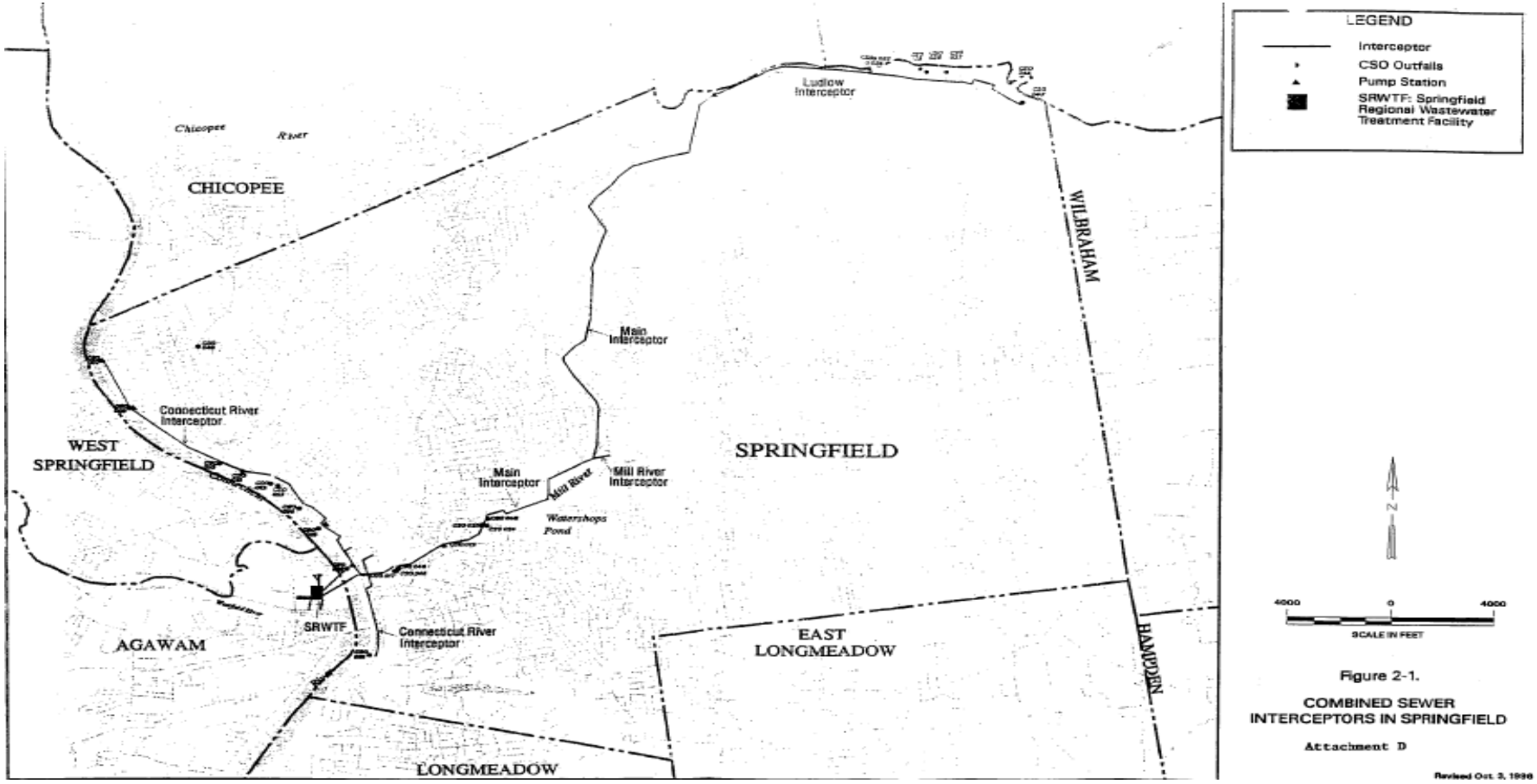

Figure 2: Combined Interceptor Sewers

Note: CSO #'s 43 and 44 have been converted to stormwater-only discharge outfalls.

Appendix A
Springfield Water and Sewer Commission Combined Sewer Overflow (CSO) Discharge Outfalls

Discharge Outfall Serial No.	CSO Outfall Location[1]
Connecticut River	
007	Rowland St.
008	Washburn St.
010	Clinton St.
011	Liberty St.
012	Worthington St.
013	Bridge St.
014	Elm St.
015 A	Union St.
015 B	Union St.
016	York St.
018	Longhill St.
049	Springfield St.
Chicopee River	
034	Main St.
035	Front & Oak Sts.
036	Pinevale & Water Sts.
037	Cedar St.
043[2]	Banner St.
044[3]	Rogers Ave.
Mill River	
017	Fort Pleasant (Blake Hill)
019	Mill, Orange, & Locust Sts.
024	Rifle & Central Sts.
025	Allen & Oakland Sts.
045	Fort Pleasant Ave.
046	Belmont St.
048	Allen & Rifle Sts.

[1]All CSOs are located in Springfield, MA (Hampden County
[2]CSO 043 eliminated and converted to stormwater only outfall
[3]CSO 044 eliminated and converted to stormwater only outfall

Appendix B
POTW DISCHARGES

Discharge Serial No.	Location
030	Liberty Street Pumping Station
031	Canton Circle Pumping Station
032	Carew Street Pumping Station
040	Tiffany Street Pumping Station
050	Indian Orchard Pumping Station

The permittee is authorized to discharge only in accordance with the terms and conditions of the draft permit and only from those outfalls listed in **Appendix A** of the draft permit. Discharges of wastewater from any other point source, including the pumping stations listed above (**Attachment B**) are not authorized by the draft permit and must be reported in accordance with Part II.B.4. (General Requirements – Bypasses) of this permit.

Appendix C
Rankings of CSOs by Estimated Annual CSO Volumes*

CSO	Location	Tributary Area	Activations	Overflow Volume (Million Gallons)	Percent Total CSO Overflow Volume
007	Roland Street	Connecticut River	37	25.90	6.826%
008	Washburn Street	Connecticut River	85	55.00	14.495%
010	Clinton Street	Connecticut River	36	60.70	15.997%
011	Liberty Street	Connecticut River	7	8.68	2.288%
012	Worthington Street	Connecticut River	39	96.90	25.538%
013	Bridge Street	Connecticut River	3	4.33	1.141%
014	Elm Street	Connecticut River	75	45.00	11.860%
015A	Union Street	Connecticut River	68	13.40	3.532%
015B	Union Street	Connecticut River	11	3.63	0.957%
016	York Street	Connecticut River	42	61.00	16.076%
017	Fort Pleasant Street	Mill River	1	0.01	0.003%
018	Longhill Street	Connecticut River	6	0.63	0.166%
019	Mill, Orange, and Locust Streets	Mill River	1	0.23	0.061%
024	Central Street	Mill River	1	0.06	0.016%
025	Allen and Oakland Street	Mill River	1	0.09	0.024%
034	Main Street, Indian Orchard	Chicopee River	1	0.14	0.037%
035	Oak Street, Indian Orchard	Chicopee River	1	0.03	0.008%
036	Pinevale Street, Indian Orchard	Chicopee River	1	0.06	0.016%
037	Cedar Street, Indian Orchard	Chicopee River	1	0.02	0.005%

Appendix C
Rankings of CSOs by Estimated Annual CSO Volumes*

CSO	Location	Tributary Area	Activations	Overflow Volume (Million Gallons)	Percent Total CSO Overflow Volume
043[2]	Rogers Avenue, Indian Orchard	Chicopee River	0	0.00	0.000%
044[3]	Banner Street, Indian Orchard	Chicopee River	0	0.00	0.000%
045	Fort Pleasant Street	Mill River	0	0.00	0.000%
046	Belmont Avenue	Mill River	0	0.00	0.000%
048	Allen and Rifle Streets	Mill River	1	0.40	0.105%
049	Springfield Street	Connecticut River	19	3.23	0.851%
TOTALS			**437**	**379.44**	**100.000%**

[2]CSO 043 eliminated and converted to stormwater only outfall

[3]CSO 044 eliminated and converted to stormwater only outfall

*Typical Year is based on average values for total annual rainfall, number of storms occurring on a yearly basis, volume per storm, and rainfall intensity across the 42-year period of record. It was determined that 1976 may be used as a typical year in terms of precipitation for the subsequent CSO hydraulic and water quality modeling. This finding is consistent with the 1988 CSO study which also found 1976 to be a typical year in terms of precipitation. Estimated activations based on hydraulic model.