

# City of New Haven Long Term CSO Control Plan

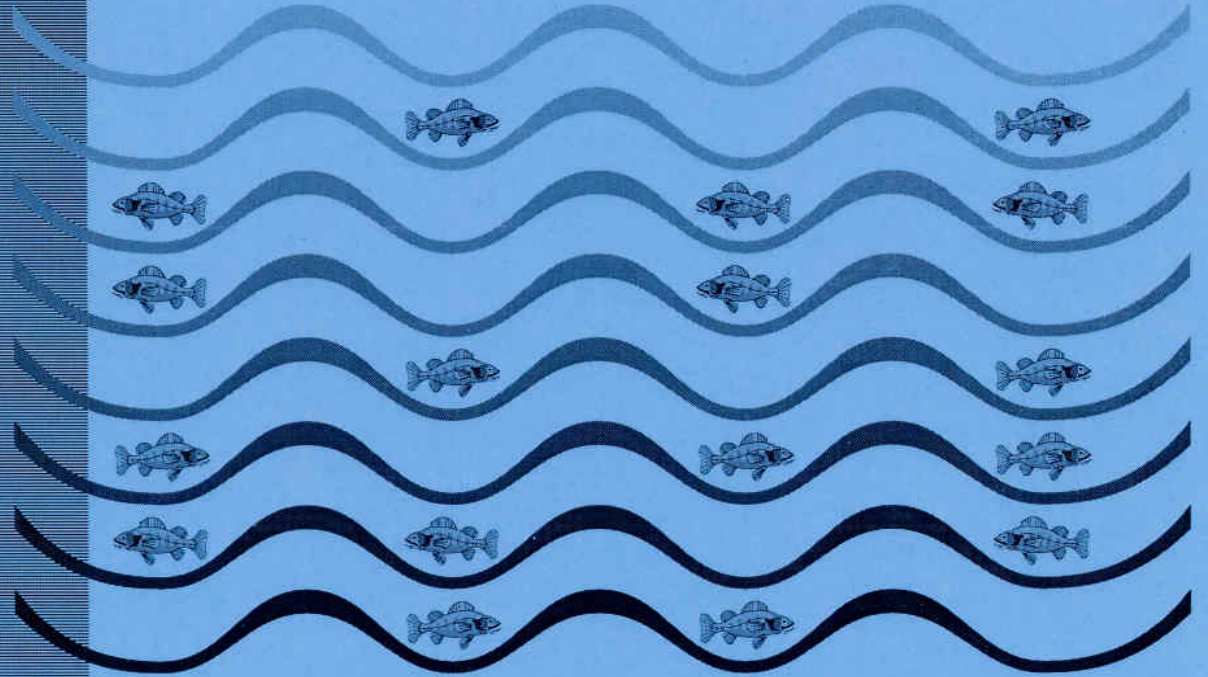


The City of New Haven



New Haven Water Pollution Control Authority

## Technical Memorandum #1 *PROJECT GOALS & APPROACH*



June, 1997





**CH2MHILL**

CH2M HILL  
50 Stanford Street  
10th Floor  
Boston, MA  
02114-2517  
Tel 617.523.2260  
Fax 617.723.9036

June 27, 1997

135807.BA.01

Mr. Richard Miller, P.E.  
City of New Haven  
City Engineer's Office  
200 Orange Street, 5th Floor  
New Haven, CT 06510

Mr. Raymond Smedberg, P.E.  
City of New Haven  
Water Pollution Control Authority  
East Shore Water Pollution Abatement Facility  
345 East Shore Parkway  
New Haven, CT 06512

Dear Sirs:

Subject: New Haven LTCP Project  
Task 1 - Project Goals and Approach

Attached for your review and comment is a draft of Technical Memorandum #1. This memorandum documents the presentation given at the Goals and Approach Workshop and the related discussion and consensus reached at the workshop. It also includes meeting minutes from the workshop and the initial kickoff meeting for the project and agendas for the recent and upcoming workshops. Since the format of this TM is slightly different from most and is not likely to require many changes, do you wish to use the draft submittal as the final product or have a revised document prepared and resubmitted? We would appreciate receiving your comments or suggestions by July 18<sup>th</sup>.

Sincerely,

CH2M HILL

James T. Maughan/BOS  
Task Manager

cc: Cliff Bowers/CH2M HILL

# CITY OF NEW HAVEN LONG-TERM CSO CONTROL PLAN

DRAFT TECHNICAL MEMORANDUM #1

Prepared for  
The City of New Haven  
The New Haven Water Pollution Control Authority

Prepared by  
CH2M HILL  
50 Staniford St, 10<sup>th</sup> floor  
Boston, MA 02114

June 1997

135807.BA.01

# TASK 1: Project Goals and Approach

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This technical memorandum presents the results of Task 1 for the Long-Term CSO Control Project in New Haven. It documents both the initial kickoff meeting on May 8, 1997 and the presentation given at a workshop on June 3, 1997 to the Steering Committee, which includes representatives of the City of New Haven, the Water Pollution Control Authority, Connecticut Department of Environmental Protection (DEP), and the Consulting Team.

This document contains:

- Introduction
- Meeting minutes from May 8 meeting (Appendix A)
- Revised presentation slides from June 3 workshop (Appendix B)
- Meeting minutes from June 3 workshop (Appendix C)
- Agenda for June 26 workshop on sewer separation (Appendix D)
- Draft agenda for August 6 workshop on regulations/water quality (Appendix E)

The Consulting Team's proposal for the approach to establishing specific project goals was highlighted in the presentation on June 3, and it included the following points:

- Establish issue groups with appropriate stakeholders
- Conduct workshops within groups to establish goals for issues
- Hold a workshop among issue group representatives to consolidate overall program goals
- Develop a plan that meets the program goals
- Present the plan to the general public

This approach was accepted by the Steering Committee members, who decided that issues that warrant workshops include regulations, quality of receiving water bodies, sewerage system performance, and status and prioritization of ongoing sewer separation projects. Potential agendas and participants for the workshops were identified, and target dates were set during the summer months. These lists are identified in the meeting minutes from the workshop (see Appendix C).

Since the June 3 workshop, the following items have been accomplished:

- A workshop was conducted on June 26 about ongoing sewer separation projects (see Appendix D).
- A date of August 6 was tentatively set and a draft agenda was prepared for the Regulations/Water Quality workshop (see Appendix E).

The original presentation from June 3 has been modified to reflect discussion and consensus reached during the workshop; these changes were made in an italicized font so they can be distinguished from the original presentation.



# Appendix A

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## Meeting Minutes from May 8, 1997 Kickoff Meeting

### MEETING MINUTES

**CH2MHILL**

**ATTENDEES:** Dick Miller/City of New Haven  
Richard Cleary/City of New Haven  
Cliff Bowers/CH2M HILL  
Bangalore Neelakantiah/UIC  
Chris Goz/CH2M HILL  
Ray Smedberg/WPCA  
Henry Goetz/WPCA  
Joe Cernola/Cardinal  
Peter von Zweck/CH2M HILL

**MEETING DATE:** May 8, 1997

**LOCATION:** City Hall

**MINUTES BY:** Chris Goz/CH2M HILL

**COPY:** Attendees  
Deborah Percival/Percival Communications

**DATE:** May 14, 1997

**SUBJECT:** New Haven LTCP Kickoff Meeting

The following represents a summary of the issues and action items discussed at the meeting.

- Rich Cleary was identified to help Dick with CSO program, and will serve as interim contact until someone is hired (in next fiscal year) to fill Bob's position.
- The project's Loan and Grant application has been referred to committee, and should be acted on soon.
- It was noted that a Web site is being setup to facilitate project communications. The City, the Mayor, CH2MHILL, United, and Percival have Email capabilities; Cardinal will soon.
- Dick noted that he would like to receive 1 page summaries/progress reports. The reports should be authored for distribution to a relatively broad audience within the City and possibly other interested parties.

- Invoice formats were discussed. Rich will provide comments on Cardinal's invoices and the modified format will be used as the standard for all team members.
- The Goals Workshop was scheduled for June 3<sup>rd</sup> at 9:30AM. The meeting will be held at the WPCA. It was agreed that the City, WPCA, consulting team, and DEP would attend.
- Key issues for the project were discussed. These included: neighborhood impacts, sidewalks, paving improvements, street flooding, costs, and water quality. It was agreed that community involvement was important. It was agreed to have a representative from the mayor's community relations office at the June 3<sup>rd</sup> meeting to discuss how community involvement should be addressed.
- Dick is able to attend the May 20<sup>th</sup> GIS/Modeling meeting with Donna Hall, Bill Brody. Joe may also attend to discuss base mapping issues.
- The City was flown during the 2<sup>nd</sup> week of April during ideal conditions. The City's GIS/Mapping consultant will produce maps with 2ft contours. The flight will support accuracy typical of 1"=100'.
- The GIS will be a planning level tool, and is not intended for design.
- Sewer separation in the City has reduced flow in some large diameter sewers. The City has concerns regarding whether or not scout velocities are being maintained. Flooding and other hydraulic problems with the collection system have been observed. This project should address each of these issues. It was noted that the project will not directly address structural deficiencies in the collection system (no video work is included in the scope-of-work).
- The GIS coverages created during this project should include date of sewer construction. The specific data requirements will be achieved at the May 20<sup>th</sup> GIS/Modeling meeting.
- Hydraulic issues were discussed. Hamden flows were not included in the sizing of New Haven's sewers. Henry expressed desire to eliminate as many pump stations as possible. Issues related to roof leaders were discussed. It was agreed that the project should address hydraulic issues, flushing, etc... related to roof leader disconnection.
- Henry agreed that the maps and plans can be removed from the City's office. It was agreed that pipe data should be added directly to the existing mylars (copies are not required). Cardinal is going to take mylar and strip maps to their office to work on them. Two concerns were raised regarding the revised approach: (i) coding consistency between Cardinal and United, (ii) Henry's input to resolve data conflict/confusion. The issues were resolved as: (i) Clear definition by CH2MHILL and continual communication between those performing the work should preclude transfer inconsistencies, (ii) Problem issues will be resolved with Henry on a weekly or bi-weekly basis.
- Schedule issues were discussed. Dick noted that he would like a wall-sized schedule to track progress on the project. It was noted that the Web site will include some schedule information. Dick noted that the flow monitoring period should not be dictated by project schedule. Perform monitoring when best data will be gathered; City would

rather let schedule slide. It was agreed that the NPDES permit issues should be addressed after the schedule is re-worked.

- Ray will provide CH2M HILL with the WPCA's "Confined Space Entry Plans and Regulations" for use in the field survey tasks.
- Future meetings will be held at WPCA offices because air conditioning at City Hall will not be working this summer.

If you have any comments or corrections related to these minutes, please contact Chris Goz at 617/523-2260.

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# Appendix B

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## Presentation Slides from June 3, 1997 Workshop

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# New Haven Long-Term CSO Control Plan

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Project Goals Workshop  
3 June 1997

City of New Haven  
John DeStefano, Jr. Mayor

Water Pollution Control Authority  
Alderman Matthew E. Naclerio, Chairman

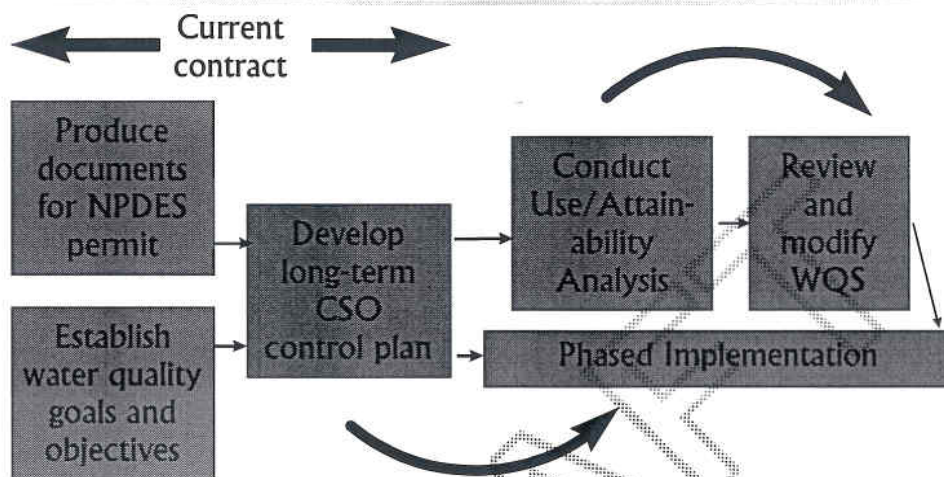
## **Purpose of Workshop**

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Establish and initiate process to Set Goals  
and Objectives for CSO Control Plan

- Present examples from other communities
- Identify areas where goals can help structure the New Haven CSO Plan
- Identify participants in goal-setting process

## Long-Term CSO Plan Overview



## Workshop Agenda

- Purpose of Workshop
- Regulations
- Introductions
- Receiving Waters
- Historical Perspective
- System Performance
- Goal Setting Process
- Lunch
- Break
- Costs
- Potential Project Issues
- Public Involvement
- Goal Setting Process

# Introductions and Roles

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NAME	ROLE
<ul style="list-style-type: none"><li>● Jamie Maughan</li><li>● CH2M HILL Team</li><li>● City and WPCA Officials</li><li>● State Officials</li><li>● Others</li></ul>	<ul style="list-style-type: none"><li>● Goal Setting, Surface Water Quality</li></ul>






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# Historical Perspective

# Historical Perspective

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- Background Information
- What are CSOs?
- Development of Abatement Alternatives
- Summary of Progress To-Date
- Why do this Project

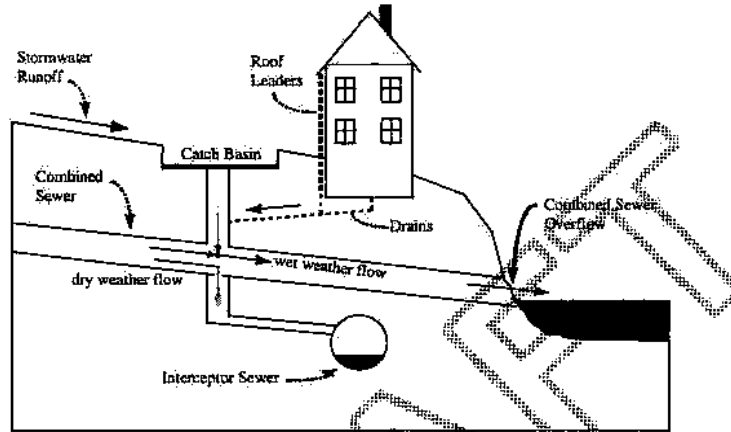
## Background Information

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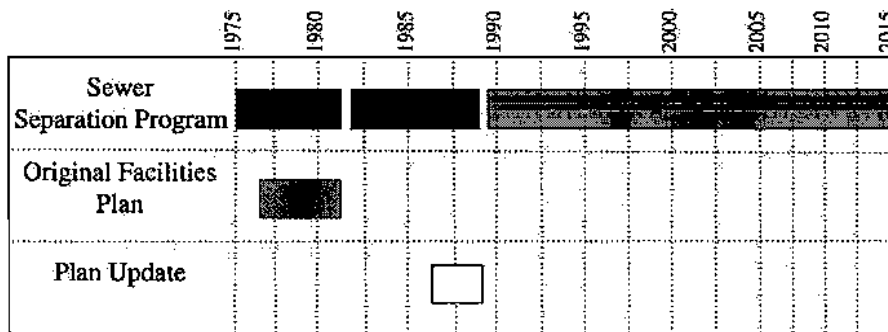
- Serves  
126,000  
Residents
- 600,000 feet  
of Combined  
Sewers
- 24 Active  
CSOs



# What are CSOs ?



## Development of Abatement Alternatives



## Summary of Progress To-date

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- CSO Facilities Plan 1981 & 1988
- Recommended Sewer Separation
- New Storm Sewers are Being Constructed
- Projected Cost - \$120M (1987 dollars)
- Currently 30% complete
- Cost to date - \$35-40M

## Why do this Project?

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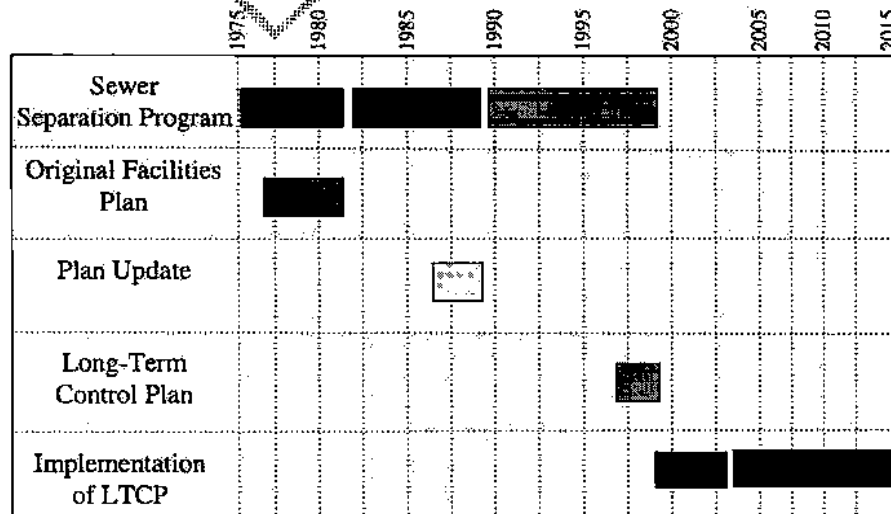
- Major changes in Federal and State CSO policies - 1992 & 1994
  - optimize use of existing facilities
  - new control technologies
  - balance controls with water quality objectives
- Complete separation no longer mandated
- Potential for significant cost savings
- Potential for increased benefits



# Scope of Work for this Project

- Identify Program Goals / Public Participation
- System Inventory & Model Development
- Flow Monitoring Program
- Hydraulic Characterization
- Identify short-term CSO Controls (NPDES Requirements)
- Identify long-term CSO Control Plan

## Development of Abatement Alternatives



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# Goal Setting Process

## Objectives of Goal-Setting Process

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- Establish Forum to Maximize Cost/Benefit and Lower Overall Cost
- Provide Focus in Developing Long-Term CSO Control Plan
- Provide Flexibility in Developing Plan
- Establish Support for Plan Implementation

## **Approach in Bangor Maine**

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- Evaluate Individual Areas
- Recommendations for Each Area to Meet Goals and Characteristics of Area
- Match Recommendations and Water Quality Goals

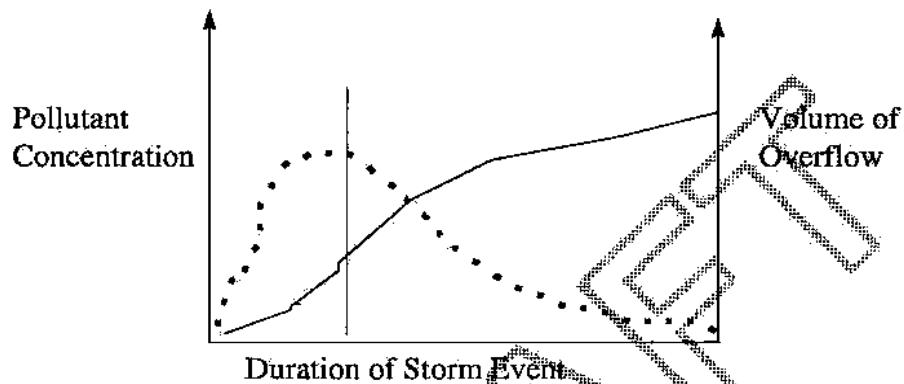
## **Upper Kenduskeag Region Recommendations**

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- On-Going Sewer Separation
- New Sanitary Sewers
- Disconnect Roof Drains
- Leave Cellar Drains

# Effect of First Flush

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## Lower Kenduskeag Region Recommendations

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- Increase System Capacity
  - New Harlow St. Conduit
  - Hammond St. Connection Pipe
- System Improvements
  - Interceptor Modifications: reduce solids in sewers
  - Regulator Modifications: increase capacity
- East Storage Facility & West Solids Trap

# Penobscot River Region Recommendations

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- Hancock Street Satellite Treatment Facility
- Davis Brook and Barkersville Storage Facilities

## Summary of Treatment & Storage

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	Existing Overflows	Long-Term Plan
Kenduskeag East	52	11
Davis Brook Storage	32	12
Barkersville Storage	29	12

## **General Recommendations**

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- **Wastewater Treatment Plant Expansion and Upgrade**
- **Best Management Practices**
- **Compliance Monitoring**
- **Data Base Management**
- **Public Participation**

## **Summary of Bangor Approach**

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- **Identify goals for area**
- **Identify existing conditions in area**
- **Match surface water goals and conditions**
- **Form recommendations that meet surface water goals**

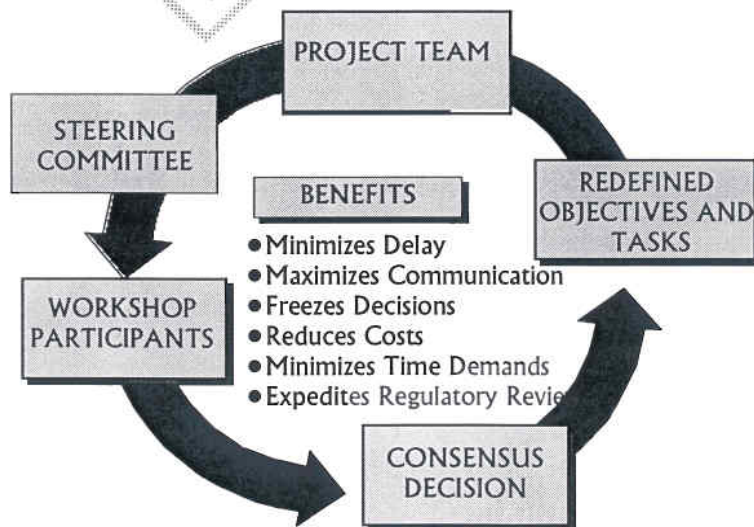
# Recommended New Haven Approach

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- Establish Issue Groups With Appropriate Stakeholders
- Workshop Within Groups to Establish Goals for Issues
- Workshop Among Group Representatives to Consolidate Program Goals
- Develop Plan That Meets Goals
- Present Plan to Public

## Recommended Approach

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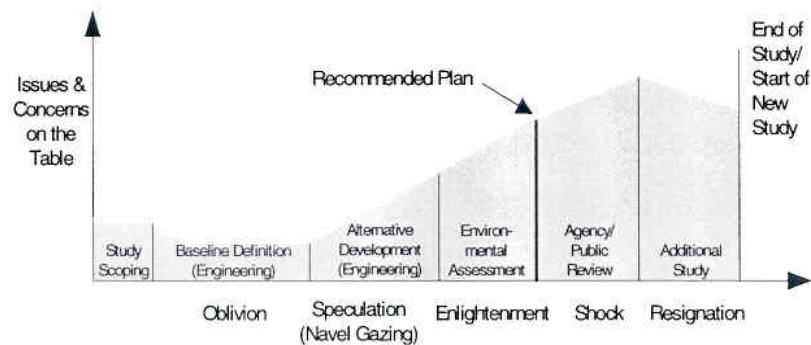
# Alternative Goal Setting Processes

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- Consultant Recommendations
- Representative Steering Committee
- Regulatory Driven
- Public Forum

## Traditional Planning Approach (After M. Domenica)

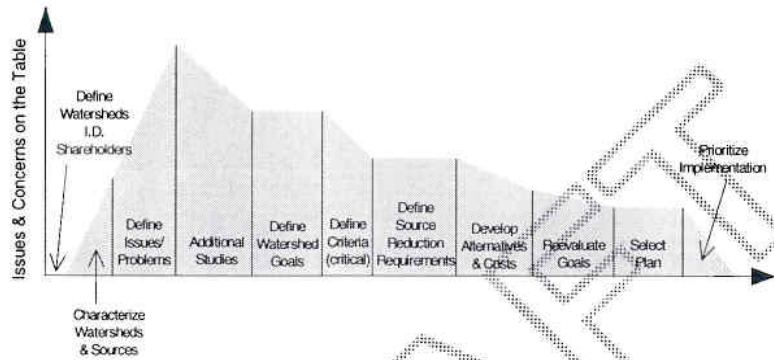
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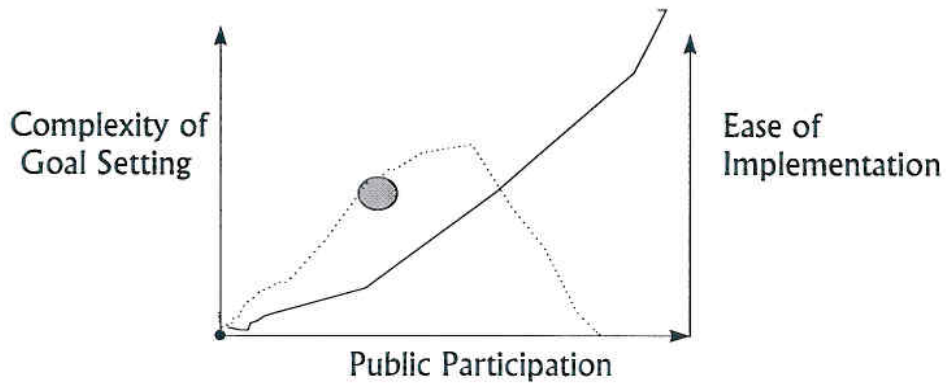


# Model for Recommendation

(After M. Domenica)



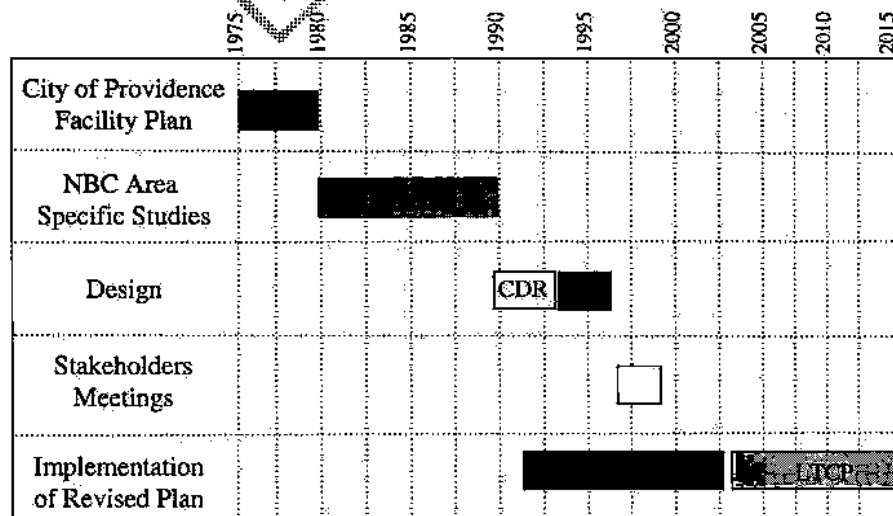
## Alternative Goal Setting Processes



# NBC Background

- RIDEM CSO Policy
  - Reduce TSS & BOD Loads
- CSO Program Goals
  - Meet Policy
  - Address Shellfishing Uses & Bacteria Impairments
- CSO Control Plan
  - NMCs
  - Surface Storage
  - Deep Tunnels
  - WWTf Improvements

## Narragansett Bay CSO Program



# Portland Maine CSO

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- Overall Plan
- Phased Implementation
- Multiple Issues for Capisic Brook Area
  - Extensive Stakeholder Meetings
  - Establish Goals
  - Integrated Plan
  - Consensus Plan

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# Potential Project Issues

## Potential Project Issues

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- **Costs**
- **Regulations**
- **Receiving Water Uses**
- **System Performance**
- **Public Involvement and Neighborhoods**
- *Continuing Separation*
- *Flooding*
- *Communication*

## Goal Setting Process

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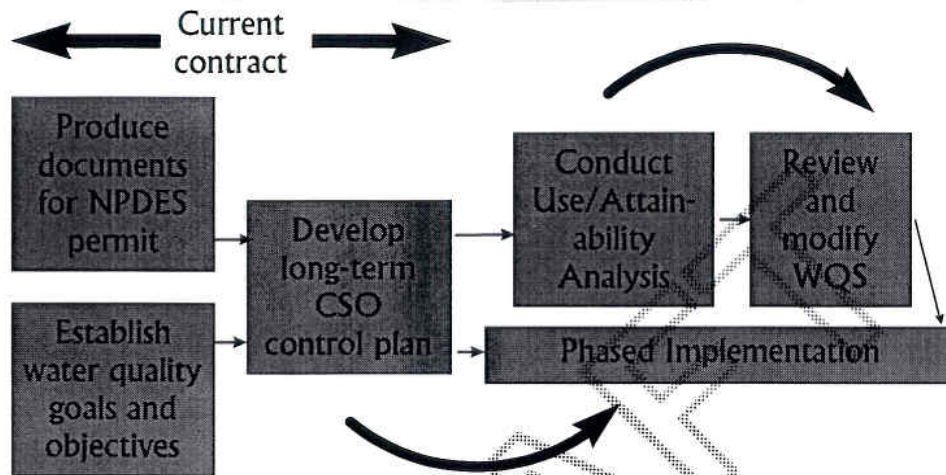
- Background on issue
- Potential goals
- Discussion on:
  - Need for workshop
  - Agenda for workshop
  - Workshop participants

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## Goals and Process for Meeting Regulations

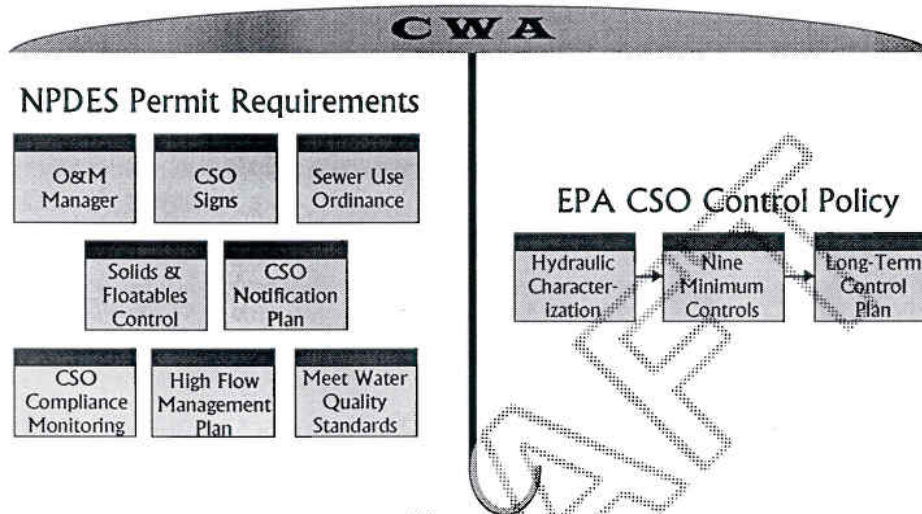
## Long-Term CSO Plan Overview



## Goals and Process: Regulations

- Current Regulations
- Constraints of Current Regulations
- Approaches to Addressing Regulations
- Goals Which Address Regulations

# Elements of Current Regulations



## EPA Policy As Guidance

- Provides flexibility (site-specific nature)
- Allows for implementation in phases
- Supports appropriate examination and modification of WQS
- Encourages innovation

# State Water Quality Standards

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- Protect (restore, maintain) existing and designated uses
- Classification goal of B/SB or higher
- Use/Attainability Analysis

## Water Quality Classifications

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Class	DO (mg/L)	FC (MPN/100 mL)	Designated Uses
A	> 5	100 (TC)	Potential drinking, fish habitat, recreation, ag/ind, navigation
B	> 5	200	Recreation, fish habitat, ag/ind, navigation
SA	> 6	14	Marine fish habitat, shellfish, recreation, navigation
SB	> 5	88	Same as SA except shellfish require purification



## Regulatory Constraints

### EXAMPLES...

- State Water Quality Standards
- Attainment of B/SB classification
- Restriction to a certain number of overflows
- End-of-Pipe vs. In-Stream standards

### Goals Which Address Regulations

- Work within existing regulations
- Adopt site-specific WQ criteria if designated use is protected
- Conduct Use/Attainability Analysis
- Modify regulations

## *Regulations Workshop Agenda*

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- *To include:*
  - *Better understanding of how existing regulations apply to CSOs*
  - *State perspective on Use-Attainability Analyses*
  - *Stormwater regulations*
  - *Two-tiered NPDES requirements for WWTP*

## *Regulations Workshop Participants*

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- *To include representatives of:*
  - *EPA*
  - *DEP*
  - *CT Fund for the Environment (CFE)*
  - *City's Environmental Advisory Council*
  - *Board of Aldermen*

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# Goals and Process for Receiving Waters

## West River

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Reach	CSO	Curr. Classif.	Fut. Goal	Future Designated Use
Lake Dawson to tidewater	004 005 006	B	A	Potential drinking, fish habitat, recreation, ag/ind, navigation
Tidewater	003	SC	SA	Marine fish, shellfish, recreation, navigation
Tidewater to mouth	002	SC	SB	Same as SA except shellfish requires purification

## Mill River

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Reach	CSO	Curr. Classif.	Fut. Goal	Future Designated Use
Lake Whitney to State St.	012 013	C	B	Recreation, fish habitat, ag/ind, navigation
State St. to mouth	009 010 011 014	SD	SB	Marine fish, recreation, navigation, shellfish with purification

## Quinnipiac River

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Reach	CSO	Curr. Classif.	Fut. Goal	Future Designated Use
Tidewater to mouth	015 016 017 018 019 020	SD	SB	Marine fish, recreation, navigation, shellfish with purification

# New Haven Harbor

Reach	CSO	Curr. Classif.	Fut. Goal	Future Designated Use
Inside line from Morse Park to Lighthouse Point	021 022 023 024 025	SD	SB	Marine fish, recreation, navigation, shellfish with purification

## Potential Receiving Water Goals

- Identification of Critical Areas
  - Higher Water Quality in Critical Areas
  - Partial Use Designation in Other Areas
- Differentiate Seasonal and Wet Weather Uses
- Prioritize Areas and Uses

## *Receiving Water Quality Workshop Agenda*

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● *To include:*

- *Nutrients (especially nitrogen)*
- *Shellfishing*
- *Bacteria*
- *Other impairments to water quality*
- *Desired uses for water bodies*
- *Gathering and disseminating existing information*

## *Receiving Water Quality Workshop Participants*

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● *To include representatives of:*

- *DEP Fisheries and Aquaculture Depts.*
- *Yale University*
- *Watershed Associations*
- *Parks Dept. River Keeper*
- *Long Island Sound Study*
- *Some participants of Regulations Workshop*

## *Combined Workshop*

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- *Many participants will attend both workshops*
- *Half day each, morning/afternoon*
- *Potential to have DEP host meeting in Hartford*
- *Target for mid to late July*

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## **Goals and Process for Public Involvement and Neighborhoods**

# Public Involvement/ Neighborhoods

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- Example Goals
- Benefits and Limitations
- Discussion of Goals

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*Suggestions/Ideas*

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- *Include PR representative from Mayor's office*
- *Expanded website audience*
- *Broader distribution of newsletter*
- *Video for local-access cable*
- *School programs*



## *Public Involvement*

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- *No workshop needed at this time*
- *Develop a flexible program that can be reassessed and readjusted.*
- *Produce White Paper, to be updated periodically, identifying public participation options*

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## **Goals and Process for System Performance**

# Goals and Process for Addressing System Performance

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- Identification of Goals for Improving System Performance
- Identify Process for Meeting Goals

## Short-Term Goals for Improving System Performance

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■ examples

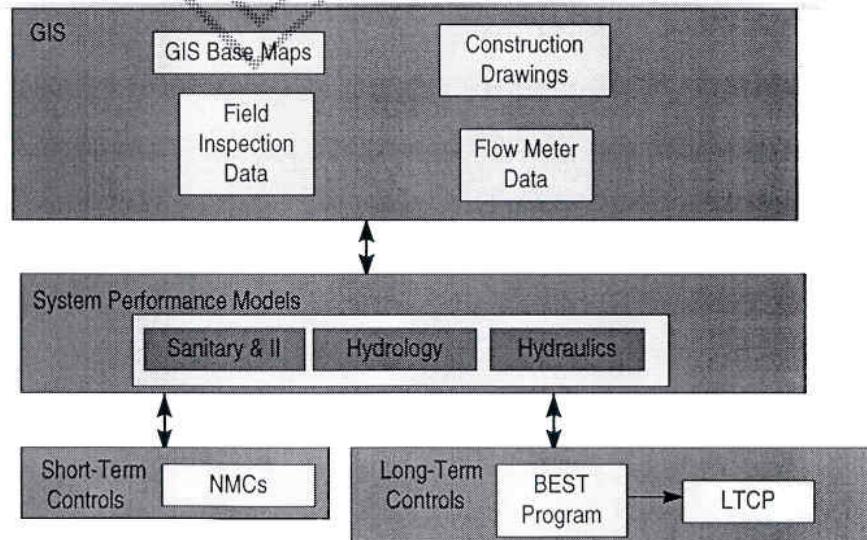
- Optimize Performance of Existing Facilities
- Minimize Hydraulic Bottlenecks
- Minimize Basement Flooding
- Minimize Street Flooding
- Evaluate Scour & Sedimentation Issues
- Implement NMCs
- Reduce Untreated Discharges

# Long-Term Goals for Improving System Performance

## ■ examples

- Eliminate bottlenecks & flooding
- Evaluate roof leader disconnection issues
- Eliminate sedimentation problems
- *Determine whether dry-weather overflows exist*
- *Coordinate with ongoing improvement programs*

## Tools for Addressing System Performance Goals



## *System Performance Workshops*

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- *June 26 Workshop*
  - *Ongoing sewer separation projects*
  - *Goals of model and software selection*
- *Second workshop if needed*
  - *Observed problems in system (bottlenecks/flooding)*
  - *Potential corrective measures*

## *Workshop Participants*

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- *June 26 Workshop*
  - *Steering Committee*
- *Second Workshop*
  - *Steering Committee*
  - *Field personnel*
  - *DEP inspector*

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# Goals and Process for Costs

## Goals and Process for Addressing Program Costs

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- Costs of Current Program
- Identification of Goals for Program Costs
- Identify Process for Meeting Goals

## Costs of Current Program

- Projected Cost - \$120M (1987 dollars)
- Currently 30% complete
- Cost to date - \$35-40M
- Funded through State loans and grants

## Goals Related to Program Costs

### ■ examples

- Identify a plan with a lower overall cost
- Identify funding sources
- Evaluate alternative funding mechanisms
- Develop an implementation schedule compatible with community resources
- *Examine cost sharing division between City & WPCA*
- *Stay within current scope of work*
- *Consider maintenance costs (e.g., street sweeping)*

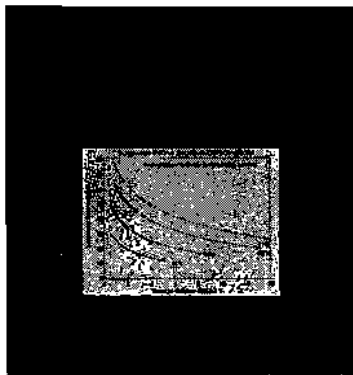
# Process for Addressing Cost Goals

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- Consider Broad Range of Alternative Technologies
- Balance Technologies, Levels of Control & Water Quality Objectives for Each Water Body

## Evaluation Tools Support a Systematic Approach to Technology Evaluations

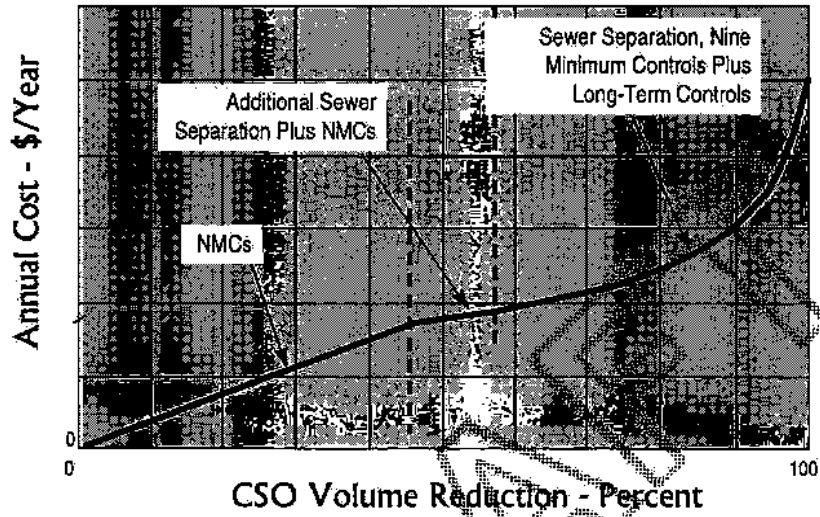
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### Example Technologies:

- Sewer Separation
- Street Sweeping
- Inflow Controls
- Catch Basin Cleaning
- In-Line Storage
- Off-Line Storage
- Treatment
- WPAF Modifications

# “BEST” Program Results



## Conceptual Goals and Goal-Setting Process



## Conceptual Goals and Process

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- Workshop Topics
- Workshop Participants
- Schedule

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*Workshops Needed*

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- *Regulations/Water Quality*
- *Ongoing Separation Projects*
- *System Performance*

## *No Workshop Required*

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- *Public Involvement*
- *Costs*

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### *Schedule*

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- *June 26 - Ongoing Separation Projects, some System Performance*
- *Early August - Regulations, Water Quality*
- *August - further System Performance, if needed*

# Appendix C

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## Meeting Minutes from June 3, 1997 Workshop

### MEETING MINUTES

CH2M HILL

**ATTENDEES:** Dick Miller/City of New Haven  
Rich Cleary/City of New Haven  
Ray Smedberg/WPCA  
Henry Goetz/WPCA  
Bill Hogan/DEP

Peter von Zwick/CH2M HILL  
Jamie Maughan/CH2M HILL  
Perrin Bowling/CH2M HILL  
Deb Ferrival/Percival Comm  
Bangalore Neelakantiah/UIC  
Sergio De Carli/Cardinal

**MEETING DATE:** June 3, 1997

**LOCATION:** WPCA

**MINUTES BY:** Perrin Bowling/CH2M HILL

**COPY:** Attendees  
Cliff Bowers/CH2M HILL

**DATE:** June 30, 1997

**SUBJECT:** New Haven Long Term CSO Plan (LTCP)- Initial Project Goals Workshop

Handouts including an agenda and hard-copies of the Powerpoint slides used to guide the workshop were distributed at the start of the meeting. A summary of the discussions and action items is presented below. The Powerpoint slides will be revised to reflect consensus reached at the workshop and posted on the project's web site at a later date.

#### Purpose of Workshop

Jamie described the purpose of the workshop. As a steering committee, we want to develop a plan for identifying goals of the CSO program and the LTCP. The recommended plan includes a series of workshops to address each area where goals were needed. If this recommendation is acceptable to the steering committee, this workshop will identify a list of needed workshops, their corresponding agendas, and participants.

#### Introductions

The attendees introduced themselves, giving a brief background and stating their interests and concerns for the project. In particular, Ray is concerned about the effects of wet weather flow on the WWTP and costs. Rich expressed interest in the effectiveness of the

plan, that it would be low-maintenance, and cost of the project. Bill mentioned the escalating costs of total separation and said that he is happy to see that New Haven is taking another look at the program and whether it is the most effective way to proceed. Bill also said that Mike O'Brien will be the DEP representative working on the New Haven project.

### **Historical Perspective**

Peter gave a brief background of the project to describe the project area and a summary of the separation program and its progress to date.

Henry noted that system performance is an issue which needs attention. He also stated that the sewer system serves near double the quoted 126,000 population of New Haven because of surrounding communities.

To clarify why sewer separation started before Cardinal's original facilities plan was made available in 1977, Henry said that some areas had funds to start separation because of urban redevelopment activities. Bill added that this early start was one of the main reasons that total separation was chosen as the method of controlling CSOs.

Henry stated that the original facilities plan did not focus well enough on system performance and reiterated his desire to review it. Peter replied that the CH2M HILL team is planning to examine system hydraulics as part of the project.

Ray brought up a concern about the on-going separation projects and whether they should be put on hold while the plan review/modification is in progress. This concern spurred a lengthy discussion on the current separation project which recurred several times throughout the meeting. Rich noted that some of the areas which are under design contracts right now have 60% design completion and could be finished within 3 months.

Henry added a concern about areas which have flooding problems such as Westville; he also pointed out that Westville and East Shore are thought to have infiltration problems.

Other potential issues that were identified:

- How will a re-done system be managed at the end of the program?
- Roof leaders cause basement flooding.
- Cross-connections need to be identified.
- The CH2M HILL team needs input about hot spots in the system.
- Undersized sewers
- Inflow and infiltration

### **Goal Setting Process**

Jamie gave an overview of the goal-setting process that included a brief description of the CSO project in Bangor, Maine. He described the effect of the first flush from a storm. He then presented the recommended approach in New Haven, which is as follows: (1) establish issue groups with appropriate stakeholders, (2) hold a workshop within issue groups to establish goals for the issues, (3) hold a workshop among group representatives to consolidate program goals, (4) develop a plan that meets the goals, and (5) present the plan to the public. Peter presented a brief description of the CSO program in Providence, Rhode Island, and described the difficulties in the public participation element of that program. Jamie described the CSO project in Portland, Maine, and how the long-term plan

was developed to meet the needs of the community (e.g. a nature path) while controlling CSOs.

### **Potential Project Issues**

Jamie identified some potential issues for consideration within the project: costs, regulations, receiving water uses, system performance, and public involvement. He then asked for input about other issues that need addressing. Bill brought up the status of the current separation program again and stated a concern that a hiatus in construction might cause a loss of momentum from which recovery could be difficult. He also reiterated Henry's earlier statements about flooding issues. Rich added communication as an issue.

### **Goals and Process for Meeting Regulations**

Perrin gave an overview of regulatory issues. Bill noted that he sees a disconnect in the crackdown on dry-weather overflows while allowing (wet-weather) CSOs to receiving waters and questioned such policies. He said that no one has done a Use/Attainability Analysis in Connecticut to date, and the State has not developed wet weather standards. He also indicated that the state stormwater policy is still under development and the City of Stamford was one of the first in the State to deal with the issue.

It was agreed that a workshop on regulatory issues is warranted. The agenda should include providing a better understanding of how existing regulations apply to CSOs (potentially having some DEP personnel make presentations), gaining the State's perspective on Use/Attainability Analyses, addressing the issue of stormwater regulations, and examining issues such as two-tiered NPDES requirements (dry weather vs. wet weather) for the WWTP. A list of potential participants was identified, including: an EPA representative, DEP representatives (Planning/Standards Dept., someone who works with stormwater issues), Connecticut Fund for the Environment (CFE), the City's environmental task force, and a Board of Aldermen representative.

### **Goals and Process for Receiving Waters**

Jamie spoke about current classifications of the receiving waters and potentially critical issues affecting water bodies. It was stated that a workshop was needed for receiving waters, and that it would include many of the same people who would likely attend a regulatory workshop; therefore, it was suggested that the two workshops be held on the same day (morning/afternoon). Some topics that need to be on the agenda are nutrients (especially nitrogen), shellfishing, bacteria, and the identification and discussion of other impairments to water quality. The list of potential participants would include some of those identified for the regulatory workshop; also DEP Fisheries and Aquaculture depts., a Yale University representative, watershed associations for the various catchments affected, and a Parks Dept. river keeper.

### **Goals and Process for Public Involvement and Neighborhoods**

Deb presented ideas for a range of public involvement, from extensive neighborhood interaction and many meetings to a focused approach with little public input. Dick suggested that Deb talk with Catherine Sullivan DeCarlo (PR for the mayor's office). Other ideas included using the website (potentially opening up to more than the immediate project team?), broader distribution of the newsletter, video for local-access cable, school programs. Deb suggested maintaining a flexible program that could be reassessed and

readjusted if there was too much/too little public involvement, and this suggestion was accepted as a general consensus. It was agreed that there is not a need to have a separate workshop on public involvement.

### **Goals and Process for System Performance**

Peter gave some examples of short and long-term goals for system performance. Dick stressed the need to coordinate with other improvement programs (e.g. Elmwood). It was felt that the current separation program is a topic of utmost importance that needs to be addressed as soon as possible. Dick requested that information about the areas currently under design and possible prioritizations be provided to him. He emphasized the fact that he has always said the CSO control program will continue while the short and a long-term control plans are developed. Bill's comment about the potential to lose momentum and funds if a hiatus were taken was reiterated. Jamie suggested that such funds could be reallocated to addressing the nine minimum controls while the long-term control plan is developed, thereby keeping the momentum going and not proceeding with separation work that might not be the most effective long-term solution. Bill felt that another necessary system performance topic is whether dry-weather overflows exist. It was agreed that a workshop should be held soon to discuss the 6 ongoing separation projects. A tentative date of June 26<sup>th</sup> was set for the workshop. It was also agreed that some modeling issues should be addressed at the workshop (goals of the model & software selection). It was agreed that a second workshop on system performance may need to be held later. The purpose of this workshop would be to discuss observed problems in the system (bottlenecks and areas prone to flooding) and potential corrective measures. Participants in the first workshop will include the steering committee (participants of today's meeting). At the second workshop, the participants would include field personnel and a DEP inspector whose name Bill will provide. Topics will include identifying as well as the current program status.

### **Goals and Process for Costs**

Peter provided some information and potential goals for costs. Ray stated a need to examine cost-sharing: is the 60/40 WPCA/City division still reasonable? Henry expressed concern at letting those in charge of the money decide about scaling back costs instead of the consultants (e.g. airport project). Dick's interpretation of Henry's concern was that the consultants in that case were not looking at the whole picture. Dick stressed a need to stay within the current scope of work. Henry requested that reports state certain items that will not be addressed by the CH2M HILL team's current contract (such as structural integrity of pipes) to help clarify the work that is being done. Dick identified the need to consider maintenance costs (such as that for street sweeping).

### **Summary**

Jamie provided a summary of the meeting.

- A **Regulations/Water Quality** workshop is needed. It will require a full day, with a half day each focused on regulations and receiving water quality. The possibility of holding the meeting at the DEP in Hartford was raised. The meeting is targeted for mid- to late-July. Objectives include understanding regulations, getting perspective on Use/Attainability Analyses, pinpointing desired uses for water bodies, gathering and disseminating existing information. The long list of possible participants was identified

previously. Bill will provide a list of names associated with the Long Island Sound studies who could be potential participants.

- **Public involvement** does not require a separate workshop. Internal contacts (such as the mayor's office) should be made to gather ideas. A "white paper" on the approach to public involvement will be drafted by the CH2M HILL team and then reviewed by the steering committee.
- The status and review of the **current 6 contracts for the separation program** and other ongoing improvement projects is of top priority. The CH2M HILL team will work with the City to document the status of the projects, identify pluses and minuses of alternative prioritizations for the work under design. (Rich added that of the 6 contracts, 3 are at 60% design and 2 have not yet provided 30% designs.) The meeting is tentatively schedule for June 26. Participants will be the steering committee plus technical resources as necessary.
- The topic of **system performance** warrants an internal workshop to define problems and provide information. The City will identify key participants (such as field workers who can provide insight into specific problem areas). Some issues that fall under system performance may be addressed at the June 26 meeting. A further meeting is targeted for August.
- **Cost issues** require data that cannot yet be provided. It was felt that a separate workshop on this topic was not needed at this time.

For the workshops, the CH2M HILL team will draft an agenda identifying products to be gleaned and questions to be answered by the individual workshops, as well as the attendance list. These agendas will be sent to the steering committee for review.

If you have any comments or corrections related to these minutes, please contact Perrin Bowling at 617/523-2260.

# Appendix D

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## Agenda: June 26, 1997

### Sewer Separation Status and Modeling Workshop

Topic	Presenter	Time
Purpose of Workshop	P. von Zweck	2:00 pm
Computer Modeling		
Modeling Goals	PvZ	2:10 pm
Model Requirements	PvZ	2:35 pm
Tools and Evaluation	PvZ	3:00 pm
Model Recommendation	PvZ	3:25 pm
Break		3:45
Sewer Separation		
Scope and Status	C. Goz	4:00 pm
Evaluation and Rating	CG	4:10 pm
Other Issues	All	4:30 pm
Set Baseline Conditions	All	4:40 pm
Summary and Adjournment	All	4:55 pm



# Appendix E

## Agenda: August 6, 1997

### Water Quality / Regulations Workshop

Topic	Presenter	Time
Welcome and Introductions	CH2M HILL	9:30 am
Purpose of Workshop	CH2M HILL	9:40 am
Project Background <ul style="list-style-type: none"><li>• New Haven Service Area</li><li>• Summary of Progress to Date</li></ul>	CH2M HILL	9:50 am
Surface Water Overview	CH2M HILL	10:00 am
Surface Water Quality Classifications and Regulations <ul style="list-style-type: none"><li>• Current and Future Classifications</li><li>• Water Quality Standards</li><li>• Impact of CSO and Stormwater Discharges</li><li>• Watershed Management Plan</li></ul>	DEP/EPA	10:10 am
Break		10:40 am
Water Quality Data <ul style="list-style-type: none"><li>• Parameters of Interest</li><li>• Data Sources</li><li>• Historic and Current Water Quality</li><li>• Discussion</li></ul>	CH2M HILL	10:55 am
Receiving Water Uses <ul style="list-style-type: none"><li>• Current Uses</li><li>• Future Uses</li></ul>	CH2M HILL	11:25 am
Receiving Water Impairments	CH2M HILL	11:45 am
Improvements Projects <ul style="list-style-type: none"><li>• CSO Projects</li><li>• Long Island Sound Study</li><li>• Others</li></ul>	CH2M HILL	11:55 am
Lunch		12:05 pm

Topic	Presenter	Time
CSO and Stormwater Regulations Introduction	CH2M HILL	12:50 pm
Stormwater Regulations <ul style="list-style-type: none"> <li>• EPA Policy</li> <li>• State Policy</li> <li>• Stamford Stormwater Management Plan</li> </ul>	EPA/DEP CH2M HILL	1:00 pm
CSO Regulations <ul style="list-style-type: none"> <li>• EPA Control Policy</li> <li>• State Policy</li> </ul>	EPA/DEP	1:30 pm
Current Regulatory Drivers	EPA	2:00 pm
Future Opportunities <ul style="list-style-type: none"> <li>• Use/Attainability Analysis</li> <li>• Wet Weather Standards</li> <li>• Partial User Designation</li> </ul>	CH2M HILL	2:15 pm
Regulations Discussion	ALL	2:30 pm
Summary and Adjournment	CH2M HILL	2:50 pm

DRAFT