

The future of our waterways is in your hands.

## Citizen Advisory Committee Explores Options Related to Combined Sewer Systems

# NJ CSO Group

The NJ CSO Group invites all individuals and groups to participate in a Citizen Advisory Committee (CAC) to explore issues and options related to Combined Sewer Systems.

The New Jersey Department of Environmental Protection (NJDEP) has modified the General New Jersey Pollutant Discharge Elimination System (NJPDES) Permit for Combined Sewer Systems, which requires that all municipalities with combined sewer systems undertake a Combined Sewer Overflow (CSO) Long-term Control Plan (LTCP). The CAC is the first step in this endeavor.

The CAC will provide input and recommendations to the NJ CSO Group as the LTCP is being developed. The CAC will hear presentations, offer feedback, learn about alternative controls and their estimated project costs and benefits, and ultimately, will offer recommendations on what types of controls, if any, should be implemented under the LTCP.

The CAC held its first meeting in October and will meet approximately every three months. In addition, the CAC will hold workshops and meet once for a field trip to tour some of the facilities. The CAC will conclude in January 2007, and a Public Participation Program Report will be submitted to the NJ Department of Environmental Protection, summarizing the CAC's findings.

Anyone interested in participating on the CAC should contact Donna Gregory of Hatch Mott MacDonald immediately:  
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F 973.912.2632

Provide the following information to receive our notifications:

- Name
- Organization & Title (if any)
- Address
- Phone (organization, work or home)
- Fax
- Email address

## What is a CSO?

In the latter 1800s Combined Sewer Systems (CSS) were constructed in urban areas. They were used to convey dry weather sanitary and industrial flows, combined with wet weather storm flows, to the nearest water body. As the urban areas grew larger, the water bodies grew more polluted. In the early 1900s pollution in the waterways was so extensive that it caused the end of recreational uses, such as fishing, swimming and boating.

In response, interceptors sewers were built to convey the sanitary and industrial flows to newly built wastewater treatment plants located downstream of the cities. The interceptor sewers and treatment plants were sized to treat all of the dry weather flows and a portion of the wet weather flows. Regulators were installed on the outfalls. These regulators were designed to divert all the dry weather flows to the interceptor sewer. During a rainfall event the regulators would divert the combined dry weather sanitary and wet weather storm flows to the interceptor up to its capacity. If flows exceeded the capacity of the interceptor sewer, the regulator would then divert the excess flow to the river. These discharges were called combined sewer overflows (CSO).

**NJ CSO Group:**  
Passaic Valley Sewerage Commissioners  
Borough of East Newark  
Town of Harrison  
Town of Kearny  
North Bergen MUA  
Bayonne MUA  
City of Paterson  
Town of Guttenberg  
Jersey City MUA

The Federal Water Pollution Control Act Amendments of 1972 and 1977, known as the Clean Water Act, established the goal of making all rivers fishable and swimmable. The Act established water quality criteria for receiving waters as well as a permit system regulating the discharges to the receiving waters. The primary goal of the Clean Water Act was directed at upgrading wastewater treatment plants. As existing treatment plants were upgraded and new treatment plants built, the quality of the receiving waters began improving.

While the quality of receiving waters was improving, they still were not meeting water quality standards. In 1995, all CSO discharges were also brought into the discharge permit system under

the General NJPDES Permit for Combined Sewer Systems. The purpose of this permit was to reduce the pollutant loadings of CSOs on the receiving waters.

In 2004, the NJDEP mandated that all municipalities with CSS, undertake a Combined Sewer Overflow Long Term Control Plan (LTCP). The LTCP is a feasibility study to evaluate the means, costs and effectiveness of control alternatives for reducing the frequency and volume of CSO discharges.

The requirements of the CSO LTCP include:

- A Public Participation Program, where Citizen Advisory Committees are formed to understand the issues, explore options and offer comments for consideration by the NJDEP.

- Evaluate pre-treatment and disinfection alternatives for CSO for various discharge objectives.
- Evaluate various control alternatives to reduce the frequency of overflows to zero, three, seven, twelve and twenty overflow events per year.
- Evaluate controls needed to increase the transportation of additional flow to the Wastewater Treatment Plants, to two, four, six and eight times dry weather flow.

The LTCPs must be completed and submitted to the NJDEP by January 2007. Once the LTCPs for all the CSO communities are received, the NJDEP/EPA will determine what controls will be mandated. The process may take decades to complete.

## For more information on CSOs:

Combined Sewer Overflow: General Permit  
[www.state.nj.us/dep/dwq/gp\\_cso.htm](http://www.state.nj.us/dep/dwq/gp_cso.htm)

Surface Water Quality Standards  
[www.state.nj.us/dep/wmm/sgwqt/2004swqs.pdf](http://www.state.nj.us/dep/wmm/sgwqt/2004swqs.pdf)

Manufacturers of CSO Equipment:

[www.johnmeunier.com](http://www.johnmeunier.com)

This site includes information on Fluid-sep Vortex Separators and Actiflo Ballasted Flocculation.

[www.cdstech.com](http://www.cdstech.com)

This site includes information on Mechanically raked screens, San-sep and Flocc-sep.

### TOPICS FOR THE CAC MEETINGS:

Introduction.

Water Quality issues.

Alternatives & progress of consultants.

Review of recommendations.

Feedback & suggestions from the CAC.

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