

Bergen County Utilities Authority CSO Group

Supplemental CSO Team

BCUA Administration Building

April 10, 10:00 – 11:00 am

Minutes

1. Presentation of Sensitive Area Analysis
  - a. What Are Sensitive Areas
  - b. Sensitive Area Analysis for
    - i. Ridgefield Park
    - ii. Fort Lee
    - iii. Hackensack
2. Presentation/Update on Typical Year Analysis
3. Presentation/Update on Permit Schedule
4. Question and Answer Period:
  - a. BCUA Chairman Ron Phillips questioned as to what municipalities are doing to control wet weather flows from separate sanitary sewer areas into the BCUA System.

It was noted to Chairman Phillips that while there has been some partial sewer separation had been undertaken by Ridgefield Park and potentially others, in general only the roadway runoff has been diverted into municipal storm sewer systems and thus these areas are not truly separated.

It was also noted to Chairman Phillips that the NJDEP has issued permits to all municipalities that own and operate MS4s (municipal storm sewer systems) that will be requiring additional work in the future to control the amount of wet weather that is entering the sewer systems tributary to BCUA.

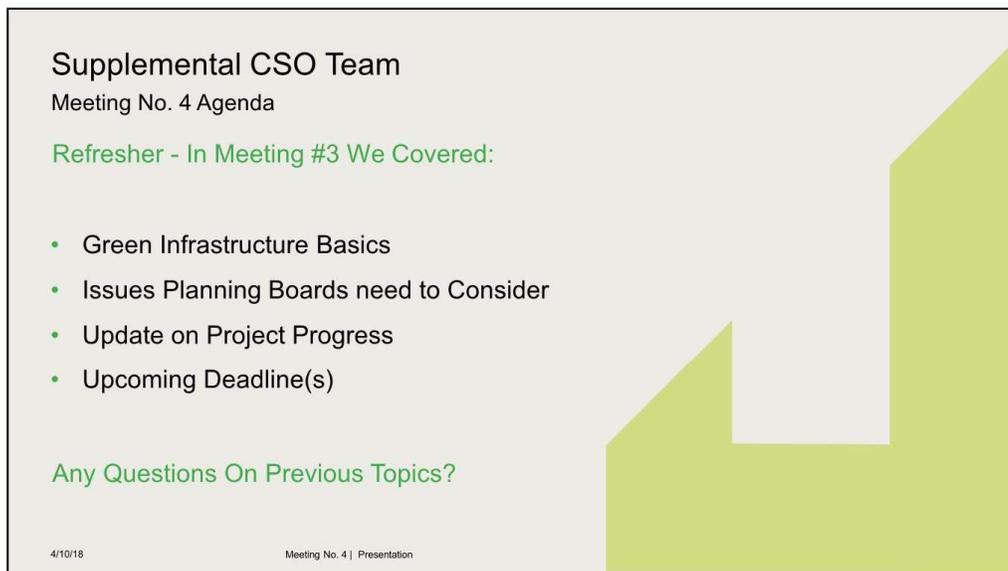
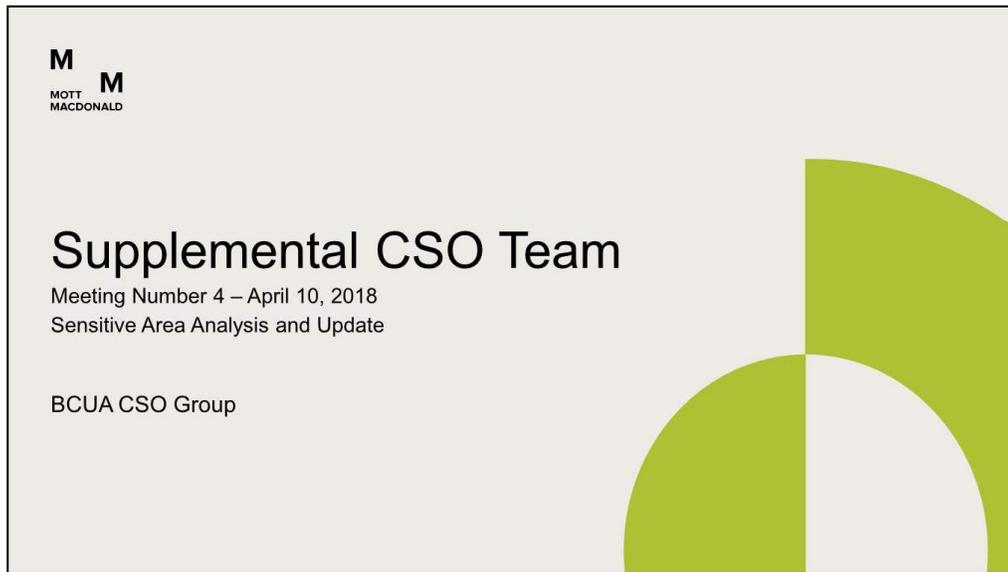
5. Meeting was adjourned at approximated 12:00 noon.

Bergen County Utilities Authority CSO Group  
Supplemental CSO Team  
BCUA Administration Building  
April 10, 10:00 – 11:00 am

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5/29/2018



## Supplemental CSO Team

Meeting No. 4 Agenda

Topics to Discuss Today:

- Consideration of Sensitive Areas
  - Village of Ridgefield Park
  - Borough of Fort Lee
  - City of Hackensack
- Update on Typical Year Analysis
- Update on BCUA Computer Model
- Update on Sewer System Characterization Report

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## Consideration of Sensitive Areas

Description

Required in Individual NJPDES Permits for Permittees with CSO Outfalls:

Borough of Fort Lee – NJPDES Permit No. NJ 0034517

City of Hackensack – NJPDES Permit No. NJ 0108766

Village of Ridgefield Park – NJPDES Permit No. NJ 0109118

Individual Permits can be found on NJDEP Website:  
<http://www.nj.gov/dep/dwq/cso.htm>

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**Consideration of Sensitive Areas**  
Description

Requirement:

- Evaluate the Existence and Location of Sensitive Areas in Relation to CSO Discharges (Source: NJ-GeoWeb)  
<http://www.nj.gov/dep/gis/geoweb splash.htm>
- The Long Term Control Plan (LTCP) shall:
  - ✓ Prohibit new or significantly increase CSOs in Sensitive Areas
  - ✓ Eliminate or relocate CSOs that discharge to sensitive areas, where possible and economically achievable.
  - ✓ Where overflows cannot be moved or eliminate – provide the level of treatment necessary to meet Water Quality Standards

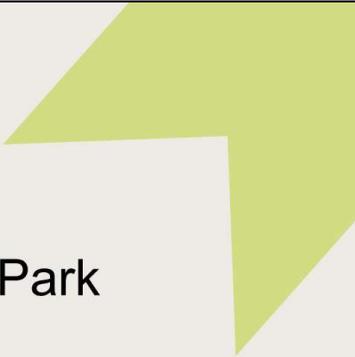
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**Consideration of Sensitive Areas**  
Description

What are Sensitive Areas?

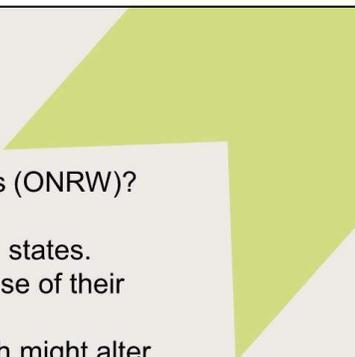
- Designated Outstanding National Resource Waters;
- National Marine Sanctuaries;
- Waters with Threatened or Endangered Species and their Habitat;
- Waters Used for Primary Contact Recreation;
- Public Drinking Water Intakes; and
- Shellfish Beds

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## Sensitive Areas For Village of Ridgefield Park

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### Consideration of Sensitive Areas

Outstanding National Resource Waters

What are Outstanding National Resource Waters (ONRW)?

- Designation of ONRW are made by individual states.
- Waters are to be set aside for posterity because of their unique significance.
- The NJDEP cannot approve any activity which might alter existing water quality in these waters.
- Include NJ surface waters designated as FW1 and PL.
- Includes approximately 67 river sections in New Jersey

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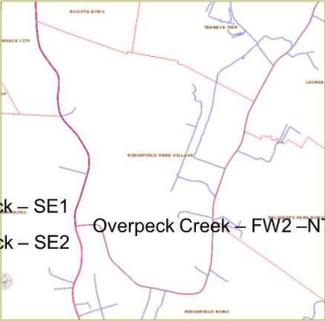
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### Consideration of Sensitive Areas

Outstanding National Resource Waters

#### Water Quality of Waters Surrounding Ridgefield Park

There are no Outstanding National Resource Waters in or around Ridgefield Park.



Hackensack - SE1  
Hackensack - SE2  
Overpeck Creek - FW2 -NT /SE2

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### Consideration of Sensitive Areas

National Marine Sanctuaries

The National Marine Sanctuaries Act (NMSA) was enacted in 1972 in order to protect significant marine habitats and special ocean areas

#### Northeast

Thunder Bay	Stellwagen Bank	Monitor
		
<a href="#">Atlas Map</a>	<a href="#">Atlas Map</a>	<a href="#">Atlas Map</a>
<a href="#">Information Sheet Download</a>	<a href="#">Information Sheet Download</a>	<a href="#">Information Sheet Download</a>

There are no National Marine Sanctuaries in the Region.  
The closest location is Stellwagen Bank, off the coast of Massachusetts.

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### Consideration of Sensitive Areas

#### Waters with Threatened or Endangered Species and Their Habitat



Waters Surrounding Ridgefield Park are ranked:  
Rank 4 – Bald Eagle  
Rank 3 – Yellow-Crowned Night Heron  
Rank 2 – Brown Thrasher, Glossy Ibis, Snowy Egret, and Blue Heron

According to NJDEP these species are not critically dependent on the water for survival.

SBH - Piedmont Plains - Landscape Project  
Rank 1 - Habitat specific requirements  
LNR  
Rank 2 - Special Concern  
Rank 3 - State Threatened  
Rank 4 - State Endangered  
Rank 5 - Federal Listed

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### Consideration of Sensitive Areas

#### Primary Contact Recreation Waters

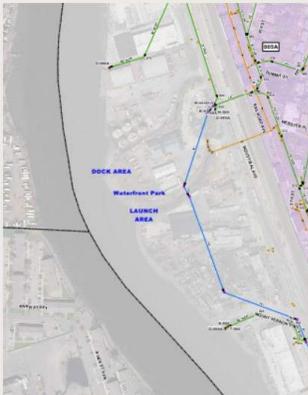
Primary Contact Recreation Waters includes, but may not be limited to those waters where the public under the following activities:

- Wading in Water
- Swimming
- Water Skiing
- Diving
- Tubing
- Surfing
- Kayaking
- Canoeing
- Rafting

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### Consideration of Sensitive Areas

#### Primary Contact Recreation Waters



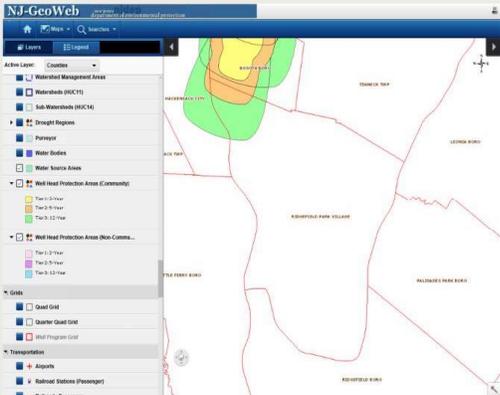
Waterfront Park is Used by the Wanda Canoe Club to launch Canoes and Kayaks

There are no other know Primary Contact Areas in and around Ridgefield Park.

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### Consideration of Sensitive Areas

#### Public Drinking Water Intakes or Their Designed Protection Areas



There are no Public Water Drinking Inlets in an around Ridgefield Park, however there is a public well in Bogota Boro, who's wellhead protection area extends into Ridgefield Park.

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### Consideration of Sensitive Areas

#### Shellfish Beds

There are no Shell Fish Beds in and around Ridgfield Park.

Applications/NJGW\_Environmental\_Monitoring  
Shellfish Classification

- Approved
- Prohibited
- Conditionally Approved (Nov)
- Conditionally Approved (Jan)
- Restricted
- Suspended

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### Sensitive Areas For Boro for Fort Lee

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### Data Sources Used or Sensitive Areas

- 1 Outstanding National Resource Waters  
No water supply  
Wetlands on map from NJDEP GIS database  
<http://www.nj.gov/dep/gis/listall.html>  
<https://www.fws.gov/wetlands/data/Mapper.html>
- 2 National Marine Sanctuaries  
<https://sanctuaries.noaa.gov/about/maps.html>
- 3 Threatened or Endangered Species and their Habitat  
<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>  
<https://ecos.fws.gov/ipac/>  
<https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7>
- 4 Shellfish Beds  
<http://www.nj.gov/dep/gis/listall.html>

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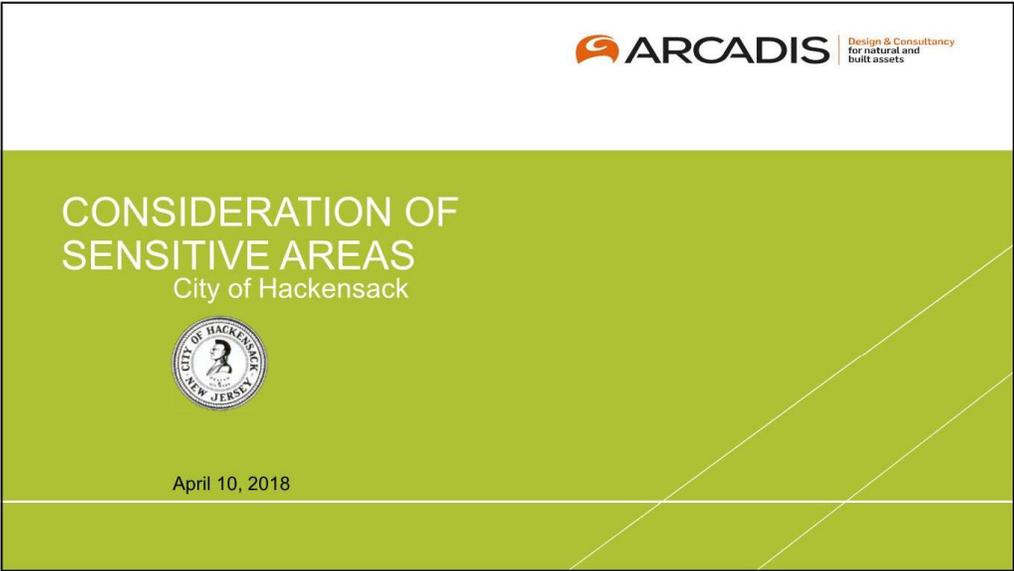
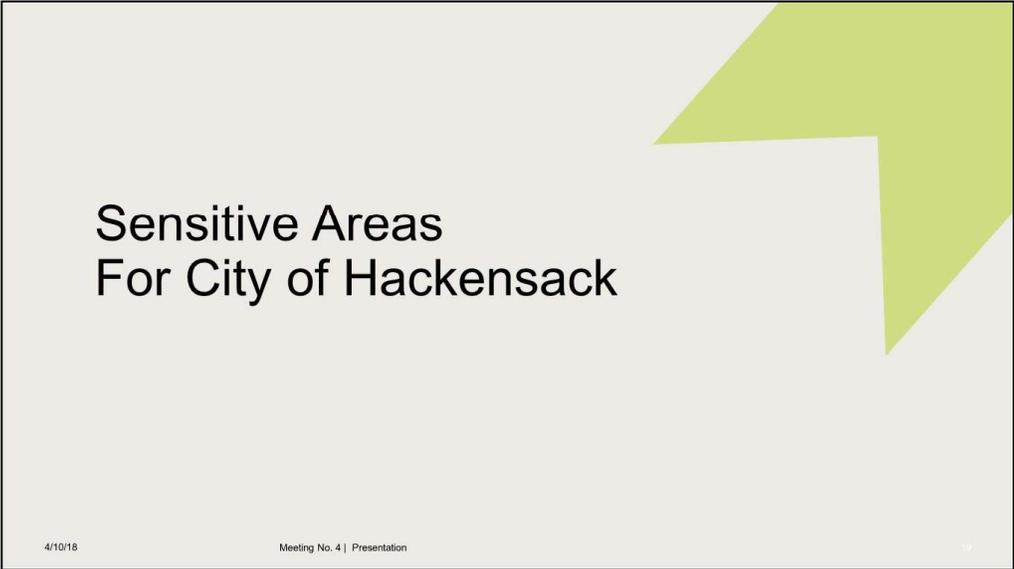
## Fort Lee Sensitive Areas



The map displays Fort Lee, New Jersey, with various sensitive areas overlaid on a satellite-style background. A red outline delineates the NJ municipality boundary. Blue circular icons with a sewer symbol indicate NJDEP Combined Sewer Overflows. Green hatched areas represent 2012 Land Use/Land Cover/Wetlands. A legend in the bottom right corner identifies these symbols. A scale bar (0 to 3 miles) and a north arrow are also present.

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## Goals/Requirements

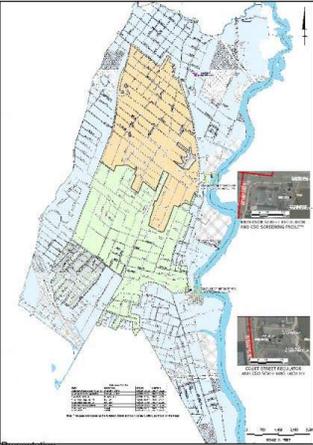
- Identify sensitive areas within the CSS:
  - Outstanding National Resource Waters
  - National Marine Sanctuaries
  - Waters with Threatened or Endangered Species
  - Primary Contact Recreational Waters
  - Drinking Water Intakes and their Protected Areas
  - Shellfish Beds
- Minimize overflows to sensitive areas and incorporate consideration of sensitive areas into city planning and development

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## Hackensack CSS



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### Outstanding National Resource Waters (ONRW)

- Surface Water Quality Standards (N.J.A.C. 7:9B) defined ONRW as Fresh Water 1 (FW1) or Pinelands (PL)
- No FW1 or PL in or near the City of Hackensack therefore further consideration is not necessary

### National Marine Sanctuaries

- 15 national marine sanctuaries in the United States
- No sanctuaries in the Hackensack River and therefore further consideration is not necessary

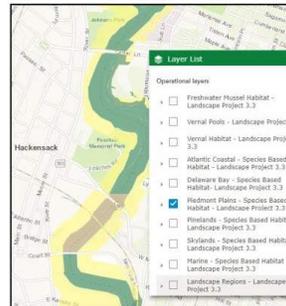
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### Threatened or Endangered Species

- Used Landscape Project Version 3.3 data for Piedmont Plains Region to identify habitats present in Hackensack
- Habitats ranked 1 – suitable habitat
- Habitats ranked 2 – one or more occurrences of special concern species: Snowy Egret
- Habitats ranked 4 – one or more occurrence of state endangered species: Bald Eagle, Snowy Egret



<https://9999.maps.arcgis.com/apps/webappviewer/index.html?id=54e444088a524aed987738853c84e427>

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### Primary Contact Recreational Waters

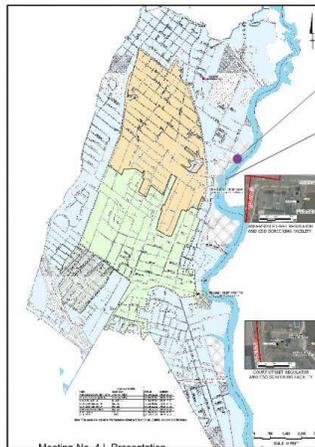
- According to NJAC 7:9B, Surface Water Quality Standards, Hackensack River and its tributaries near the City of Hackensack are classified as saline waters of estuaries, SE1
- SE1 is listed as a primary contact recreation water use
  - Primary contact recreation: water related recreational activities that involve significant ingestion risks and includes, but is not limited to wading, swimming, diving, surfing, and water skiing
- This will be further considered during the preparation of the LTCP.

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### Potential Boat Launch Location



Potential boat launch location in Johnson Park

Anderson Street outfall



Potential boat launch location is approximately 1,300 feet upstream of Anderson Street Outfall

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### Drinking Water Intakes

- 2004 NJ Source Water Assessment Program reveals no drinking water intakes in the City of Hackensack
- None present near City of Hackensack based on preliminary review
- Will review Surface-water Source Water Areas geographic information available on NJ-GeoWeb

Figure 3: Source Water Assessment Areas for Public Water Supply Intakes



[http://www.nj.gov/dpw/watersupply/water/sports/wr\\_sum200412.pdf](http://www.nj.gov/dpw/watersupply/water/sports/wr_sum200412.pdf)

### Shellfish Beds

- Preliminary review of the Shellfish Growing Water Classification regulations (N.J.A.C. 7:12) indicates shellfish growing is prohibited in all waters north and west of the Raritan Bay; including the Hackensack River
- Further consideration is not necessary

### Summary

Area	Summary
Outstanding National Resource Waters	No FW1 or PL waters near the City of Hackensack. No further consideration required
National Marine Sanctuaries	No marine sanctuaries present. No further consideration required
Waters with Threatened or Endangered Species	Rankings of 1, 2 and 4 exist in the City of Hackensack and will be considered during the LTCP preparation
Primary Contact Recreational Waters	Primary contact recreation (SE1) will be considered during the LTCP preparation
Drinking Water Intakes and their Protected Areas	No intakes present based on preliminary review
Shellfish Beds	Shellfish growing is prohibited. No further consideration required

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## Typical Hydraulic Year Analysis and Report Update

Table 2-3: Top 5 Ranked Years

Rank	Year	Score	Demonstration Approach				Presumption		Operational			
			Annual Rainfall (in)	Rainfall (in) May 15 - Sep 15	River Avg. Flow (cfs) May 15 - Sep 15	Ratio Rainfall / River, May 15 - Sep 15	5th Largest Storm (in)	Rainfall Volume for 85% Captured (in)	# of Events >0.2" Rainfall Depth	# of back-to-back events	Maximum Peak Intensity of 5th Largest & Smaller	# of Storms with Return Freq > 1-yr
1	2004	0.100	48.4	19.9	850	42.8	1.63	1.21	54	5	0.99	3
2	2008	0.130	48.8	18.5	504	27.3	1.84	1.37	49	6	0.77	3
3	2009	0.161	47.9	19.8	1,140	57.5	1.87	1.16	54	6	0.80	1
4	1996	0.165	58.1	18.6	770	41.4	2.00	1.32	63	7	1.09	3
5	2014	0.186	49.3	14.8	686	46.3	1.56	1.26	60	8	1.26	2
Average 1970-2015			46.3	16.7	779	43.7	1.72	1.38	51	5.6	0.90	2

NJCSCO Group picked 2004  
NJDEP wants us to use 2008

We are still working with NJDEP on the issue, but the group has decided to stay with 2004!

## BCUA CSO Group Project Schedule Update

5/29/2018

## BCUA CSO Group Project Status Report

### Reports with Deadline of July 1, 2018:

#### Submit Regional System Characterization Report

- Develop Template for Report (BCUA) (completed)
- Coordinate Model Integration (BCUA) (underway)
- Complete Model Dry Weather Calibration (completed)
- Complete Model Wet Weather Calibration (underway)
- Draft Report Being Prepared (underway)
- Final Report Review (Mid-May 2018)

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## BCUA CSO Group Project Status Report

### Reports with Deadline of July 1, 2018:

- Submit Public Participation Report  
CSO Supplemental Team Report  
(being drafted)
- Submit Compliance Monitoring Program Report\* \* New Jersey CSO Group Joint Effort  
(draft under review)
- Submit Consideration of Sensitive Areas Plan  
(To be included in Sewer System Characterization Report)

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