

SWMP PLAN

**STORM WATER MANAGEMENT PROGRAM
NEW YORK STATE
MS4 SPDES PERMIT NO. NYR20A489**

**PUTNAM/NORTHERN WESTCHESTER BOCES
200 BOCES DRIVE
YORKTOWN HEIGHTS, NEW YORK 10598-4399**

NOVEMBER 2008

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SPDES PERMIT NO. NYR20A489**

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SECTION 1 – SWMP ORGANIZATION

1.1 PLAN OVERVIEW

This Stormwater Management Program Plan (SWMP Plan) was prepared by CFE Consulting Services, LLC on behalf of the Putnam/Northern Westchester Board of Cooperative Educational Services (BOCES), with input and assistance of the Offices of School Facilities and Operations. The report documents the various steps taken by BOCES during the first five-year permit term and includes ongoing and planned activities during the during the second two-year permit term.

The District is a sole supervisory public school District and a provider of regional educational services to eighteen local school Districts and their residents in Westchester and Putnam Counties (District). Services to the eighteen local school districts includes vocational education, curriculum services, special education, adult education, staff training, technology instruction, guidance and testing, human resources and management services, that would be too costly or ineffective to provide individually.

BOCES employs over 600 staff members and provides services to some 1,800 children and 5,000 adults (the school community) in local school buildings located on the BOCES property in Yorktown Heights, New York.

The SWMP Plan complies with the intent of the NYSDEC SPDES Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-0-08-002, issued pursuant to Article 17, Title 7, 8 and Article 70 of the Environmental Conservation Law.

This SWMP Plan is intended to be a guide to aid District in complying with the United States Environmental Protection Agency (EPA) Phase II Stormwater Regulations. The document does not constitute rule making nor does it substitute reading of the regulations and understanding all of its requirements as it applies to your facility. Additional information on Phase II rules, including a series of fact sheets and a full copy of the final rule, can be found on EPA's web pages at <http://www.epa.gov/owm/sw/phase> or at New York State Department of Environmental Conservation (NYSDEC) website:

www.dec.state.ny.us/website/dow/mainpage.htm .

The SWMP Plan includes a description of the following elements:

- Federal Stormwater Regulations
- Sensitive Waterbodies
- POCs and their impacts to Stormwater Runoff
- First Term Permit Implementation Program
- Proposed Actions for the Second Term Permit
- District's Staffing, Funding and Training for the second term

1.2 PLAN REVISIONS AND UPDATES

In accordance with Permit No.GP-0-08-002, the SWMP will be amended/updated whenever the Best Management Practices (BMPs) specified in this plan are ineffective in controlling the discharges of pollutants. These changes, if adopted, will be reflected in the Annual Report submitted to NYSDEC.

1.3 APPLICABILITY OF THE SWMP

The District property is located at 200 BOCES Drive, Yorktown Heights, New York. The land, on which the property is located, drains partially into the Town of Yorktown Heights and partially into the Town of Somers.

1.4 DOCUMENT ORGANIZATION

This document is organized into five (5) major sections as follows:

Section 1.0

- Introduces you to this guide
- Provides a program overview and the program's objectives

Section 2.0

- Provides background information of the federal stormwater regulations and its applicability
- Discusses New York State General Permit requirements under GP-0-08-002
- Lists some of applicable definitions used under the new regulations

Section 3.0

- Describes the Impacts of Diffuse Sources of Pollution
- Discusses the impact of POCs on receiving water bodies
- Describes the receiving watershed

Section 4.0

- Lists the District's program goals and objectives for the first term permit
- Includes first term permit implementation schedule
- Describes impacts of potential pollutants
- Describes the District's ongoing SWMP efforts
- Includes a detailed listing of completed measurable goals for each of the six minimum measures for the first term permit

Section 5.0

- Describes the additional requirements specified for the second term permit
- Lists Watershed Improvement Strategies for East of Hudson Communities

Section 6.0

- Provides a discussion on the District's Staffing Program
- Describes the District's Training Program
- Provides a discussion on the District's Program Funding

SECTION 2 – FEDERAL STORMWATER REGULATIONS

2.1 STATE’S FIRST TERM PERMIT REQUIREMENTS

In year 2003, under Phase II Stormwater EPA Regulations, the P/NW BOCES (BOCES) was granted a SPDES General Permit from the New York State Department of Environmental Conservation (NYSDEC) for the discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 Permit) under GP-02-02 (First Term Five-Year Permit). The SPDES Permit extended from January 8, 2003 and expired on January 8, 2008.

The permit required BOCES to develop, implement and enforce a stormwater management program (SWMP) designed to reduce the discharge of pollutants from stormwater runoff. Pursuant to the permit conditions, BOCES was required demonstrate compliance with the following six minimum control measures:

- MCM 1: Public Education And Outreach
- MCM 2: Public Involvement/Participation
- MCM3: Illicit Discharge Detection & Elimination
- MCM 4 Construction Site Stormwater Runoff Control
- MCM 5 Post-Construction Stormwater Management
- MCM 6: Pollution Prevention/Good Housekeeping

The SPDES Permit required BOCES to show steady progress towards achieving the above measurable goals with final completion by five years from the issuance date of the permit, by January 8, 2008.

2.2 STATE’S SECOND TERM PERMIT REQUIREMENTS

On May 1, 2008, NYSDEC issued the Second Term Permit for stormwater discharges from Municipal Separate Storm Sewer Systems. The new permit, issued under GP-0-08-002, will be effective for a two (2) year period, from May 1, 2008 through April 30, 2010. Coverage for permittees authorized under GP-02-02 will be automatically continued under permit GP-0-08-002.

2.3 PERMITTEES OUTSIDE OF THE NEW YORK CITY WATERSHED

For permittees located outside of the New York City Watershed, the new permit has been revised to include:

- Non-traditional MS4s such as school districts
- Education and Outreach Program addressing the POC
- Mapping of storm sewer watershed boundaries, and field verifications of outfalls
- An updated SWMP Plan
- Policy and procedures for IDDE
- Policy and procedures for Construction and Post-Construction Stormwater Controls, addressing review and preparation of SWPPPs, inventory and management of active construction sites, and post-construction SMPs
- Policy and procedures for Pollution Prevention and potential POCs

2.4 PERMITTEES INSIDE OF THE NEW YORK CITY WATERSHED

Permittees in the New York City East of the Hudson Watershed, include the most sensitive watersheds in New York State that supply drinking water to millions of people. For permittees located inside of the New York City Watershed, must develop the following additional Watershed Improvement Strategies:

- Education and Outreach Program addressing the impacts of Phosphorus as the POC and measures needed to reduce Phosphorus
- GIS Mapping of Entire Storm Sewer System, including a detailed description of Storm Sewer Network Components and Outfalls
- Retrofit Program of SMPs, incorporating an Enhanced Phosphorus Removal design Standards
- Policy and Procedures for Stormwater Conveyance System Inspection and Maintenance
- Full SWPPP for all construction projects of 1 to 5 acres
- E&SC for all construction projects of 5,000 sq. ft. to 1 acre
- Policy and Procedures for Inspection and Maintenance of SMPs
- Turf Management Program

2.5 DEFINITIONS

A listing of definitions used in this document follows:

Best Management Practice (BMP) – management practices to prevent or reduce pollution of the waters of the State. These practices include structural practices such as stormwater treatment devices (swales, retention basins, sediment traps) as well as non-structural practices such as policies and procedures, and other activities to reduce, and prevent stormwater pollution

Construction Activity(ies) – include clearing, grading, excavation, demolition, stockpiling or other activities that result in soil disturbance

Illicit Discharges – include non-stormwater discharges such as sanitary sewage overflows, oils and greases, chemicals and other pollutants that are conveyed to the storm conveyance system

Municipal Separate Storm Sewer System (MS4) – consists of a publicly-owned system of conveyances that discharges stormwater to waters of the U.S. The separate storm sewer conveyance system consists of the underground network of piping systems, as well as above ground catch basins, storm drainage inlets and manholes, including drainage ditches, swales, man-made channels and gullies. However, the separate storm sewer system excludes combined sewers and sewers within a Publicly Owned Treatment Works

Non-traditional MS4s – state and federal prisons, hospitals, transportation agencies, university campuses, public housing authorities, schools and other special districts

Outfall – any point where an MS4 discharges stormwater to either the surface waters of the State or to another MS4. Outfalls include discharges from pipes, ditches, swales and other points of concentrated flow. However, areas of non-concentrated (sheet) flow, which drain to surface waters of the State or another MS4's system, are not considered outfalls

Permittee – is a holder of a SPDES permit or any entity required to gain coverage under the general SPDES permit.

Pollutants of Concern (POC) – consists of 1) primary POCs (comprise the majority), such as nitrogen, phosphorus, silt and sediment, pathogens and floatables, typically found in urban runoff, erosion and on-site wastewater treatment systems and 2) secondary POCs (less likely), such as petroleum hydrocarbons, heavy metals, and polyaromatic hydrocarbons

Qualified Professional – may consist of 1) a licensed Professional Engineer 2) licensed Landscape Architect or 3) other Department endorsed individual, knowledgeable in the principles and practices of stormwater management and treatment. All stormwater management programs, treatment and practices shall be

prepared by, or under direct supervision of, a professional engineer licensed to practice in the State of New York

Retrofit – applies to modifying or adding to existing infrastructure for the purpose of reducing pollutant loadings to stormwater

State Pollutant Discharge Elimination System (SPDES) – System established for issuance of permits authorizing discharges to waters of the state

Storm Sewershed – a catchment area that drains into a storm sewer system based on the topography in the area served by the storm sewer

SWPPP – Stormwater Pollution Prevention Plan prepared by a licensed professional for stormwater discharges from construction activity

Stormwater – consists of precipitation that falls on the ground, which flows or will flow off the land by surface runoff to waters of the state

Stormwater Management Program (SWMP) – the program implemented by the permittee to address POCs and to reduce the discharge of pollutants to nearby surface waters of the state or another MS4

Surface Waters of the State – include lakes, bays, ponds, marshes, wetlands, rivers and streams, inland or coastal fresh or salt waterbodies, which are wholly or partially within or bordering the state or within its jurisdiction

SECTION 3 - IMPACTS OF STORMWATER POLLUTION

3.1 IMPACTS OF DIFFUSE SOURCES OF POLLUTION

Efforts to improve our nation's water quality have been focused on reducing pollutants from industrial process wastewater and municipal sewage treatment plant discharges (typically referred to Point Sources of Pollution).

Over time it has become evident that more pollution is caused by diffuse sources of pollution from overland runoff and construction sites. Sources of pollution, typically referred to as Non-Point Sources of Pollution, vary from location to location.

According to an inventory conducted by EPA, major sources of water pollution nationally, are as follows:

- 60% of total pollution results from overland runoff from diffuse sources
- 15% from urban stormwater channelized flow
- 25% from wastewater facilities (point sources or piped discharges)

According to Federal Clean Water Action Plan:

- 40% of nation waters, assessed by the States, are still unsafe for fishing and swimming
- 50% of approximately 1000 watersheds evaluated are experiencing "significant" levels of degradation under generally accepted methodologies.

3.2 EAST OF THE HUDSON POLLUTANTS OF CONCERN

The District property is located in a drainage basin that primarily discharges to East- of- Hudson (EOH) portion of New York City Watershed. Pollutants commonly discharged into these water bodies affect drinking water supplies in the Croton Watershed. The primary Pollutant of Concern (POC) in the Croton Watershed is phosphorus, which causes excessive algae blooms, leading to a reduction of dissolved oxygen. Accordingly, NYSDEC, under the new permit requirements, requires all MS4s within the New York City Croton Watershed to implement and enforce a Stormwater Management Program (SWMP) designed to achieve the Total Maximum Daily Load (TMDL) for phosphorus. i.e. the maximum amount of phosphorus the watershed can assimilate without exceeding

water quality standards. Hence, under the new permit requirements, the SWMP for all MS4s in the Croton watershed must:

- Identify potential sources of phosphorus in stormwater runoff, such as from septic systems, fertilizers, grass clippings, leaves, detergents and construction sites
- Describe the impacts of phosphorus on the watershed
- Take steps to reduce the concentration of phosphorus in stormwater runoff

3.3 THE CROTON WATERSHED

The Croton Watershed, located in Dutchess, Putnam and Westchester counties and a small part of Connecticut, is composed of ten (10) reservoirs and two (2) controlled lakes. The Croton Watershed covers about 380 square miles and supplies about 10% of the City’s water needs. The New Croton Reservoir is the terminal reservoir for the system. Summarized below is information on the Croton System:

THE CROTON WATERSHED RESERVOIRS*				
RESERVOIR OR CONTROLLED LAKE	COUNTY	TRIBUTARY TO	CAPACITY (billion gallons)	DATE IN SERVICE
1. Bog Brook	Putnam	Diverting	4.4	1892
2. East Branch	Putnam	Diverting	5.2	1891
3. Diverting	Putnam	Muscoot	0.9	1911
4. Middle Branch	Putnam	Croton Falls	4.1	1878
5. Croton Falls	Putnam	Muscoot	14.2	1911
6. Lake Gilead	Putnam	Croton Falls	0.4	1870
7. Kirk Lake	Putnam	Amawalk	0.6	1870
8. Amawalk	Westchester	Muscoot	6.7	1897
9. Titicus	Westchester	Muscoot	7.2	1893
10. Cross River	Westchester	Muscoot	10.3	1908
11. Muscoot	Westchester	New Croton	4.9	1905
12. New Croton	Westchester	Croton Aqueduct	19.0	1905

* Data obtained from: <http://www.newyorkwater.org/maps.cfm>

SECTION 4 – FIRST TERM PERMIT IMPLEMENTATION PROGRAM

4.1 INTRODUCTION

In year 2003, under Phase II Stormwater EPA Regulations, the P/NW BOCES (BOCES) was granted a SPDES General Permit from the New York State Department of Environmental Conservation (NYSDEC) for the discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 Permit). The SPDES Permit extended from January 8, 2003 and expired on January 8, 2008 (First Term Five-Year Permit).

The permit required BOCES to develop, implement and enforce a stormwater management program (SWMP) designed to reduce the discharge of pollutants from stormwater runoff. The SPDES Permit required BOCES to show steady progress towards achieving the above measurable goals with final completion by five years from the issuance date of the permit, by January 8, 2008.

4.2 SWMP IMPLEMENTATION SCHEDULE

To demonstrate BOCES's progress towards meeting their MS4 measurable goals under SPDES Permit # NYR20A489, BOCES selected a SWMP Coordinator, established a SWMP Steering Committee and hired a consultant to assist them in implementing the program. BOCES Health & Safety Committee was also established to assist BOCES in the implementation of the program.

The program implementation schedule, which references NYSDEC Permit Years and the corresponding Calendar Years, is summarized below:

- Year 1 = March 10, 2003 to June 1, 2004
- Year 2 = March 10, 2004 to June 1, 2005
- Year 3 = March 10, 2005 to June 1, 2006
- Year 4 = March 10, 2006 to June 1, 2007
- Year 5 = March 10, 2007 to June 1, 2008

4.3 SENSITIVE WATERBODIES

The P/NW BOCES Facility in Yorktown lies within the Hallocks Mill Drainage Basin, which discharges into the Hallocks Mill Brook, the Muscote River and ultimately New York City's Croton Watershed.

In the case of the Croton Watershed, the SPDES Permit for MS4 East of the Hudson MS4s requires that all MS4s comply with Total Maximum Daily Load (TMDL) limits for the listed pollutant of concern, phosphorus. Specifically, all MS4s in the in East of the Hudson Watershed, such as P/NW BOCES, must ensure that there are no increases in the amount of phosphorus associated with stormwater discharged to the Croton Watershed.

4.4 IMPACTS FROM POLLUTANTS OF CONCERN

Potential pollutants to stormwater runoff from the BOCES facility at Yorktown, may include :

- Litter and debris from paved driveways and parking lots
- Polycyclic aromatic hydrocarbons, oils and greases from paved areas and driveways
- Salt, sand and de-icing chemicals from winter road maintenance
- Fertilizers, pesticides and herbicides from lawns and gardens
- Pathogens from on-site individual septic systems septic system overflows from septic fields

4.5 DISTRICT'S SWMP EFFORTS

Under the State mandated program, BOCES initiated the following actions:

Stormwater Guidance Manual

In November 2003, a SWMP Guidance Manual was prepared. This document, which is available to the public for review at the District's Office, is intended to be a guide to the District in complying with the Phase II Regulations.

Stormwater Website

In 2004, a Stormwater Website was developed for inclusion of key documents such as newsletters and fact sheets. The Stormwater Website is also used to report storm water events such as public meetings, workshops and includes other relevant stormwater information.

Newsletters & Fact Sheets

Newsletters and Fact Sheets have been prepared by BOCES as part of the Public Education and Outreach Program on stormwater impacts. Newsletters and Fact Sheets have been posted on BOCES's Stormwater Website, published in the local papers, as well made available to the public for review at BOCES District's Office.

Stormwater Workshops

On February 13, 2007, a presentation was made to the school districts on the regulatory mechanisms for IDDE and Construction/Post-Construction stormwater runoff control. The presentation included discussions on Addendum #1 and #2 requirements and included a summary of components required for an E&SCP, a Basic SWPPP and a Full SWPPP. In 2008 a workshop was held on NYSDEC draft SPDES regulations for Permit GP-0-08-002 and on East of Hudson Watershed Improvement Strategies.

Stormwater Committees

Annual meetings are held with the Health and Safety Committee to discuss the ongoing stormwater program and progress made towards meeting the stormwater permit goals.

Student Participation

Under the guidance of the Environmental Science Teacher at BOCES, the Environmental Science Academy (ESA) conducted a site walk of the stream that runs north and discharges into the Town of Somers. Students took photographs and noted areas of the stream banks that were impacted by soil erosion and sedimentation from stormwater runoff and high stream flow. In addition, presentations are made to students annually on the ongoing stormwater program and initiatives taken by the District in complying with the State's stormwater program. Students also participated in storm drain marking program.

4.6 STORMWATER MANAGEMENT MEASURABLE GOALS

The SWMP adopted by BOCES included the six (6) minimum control measures (MCM) required by the NYSDEC Permit. For each of the six minimum measures, BOCES identified measurable goals and selected Best Management Practices (BMPs) to achieve these measurable goals. The BMPs for each of the six minimum measures adopted by BOCES are summarized below:

MCM 1: Public Education and Outreach

The Public Education and Outreach Program was established to develop public education programs on the impacts of stormwater discharges on receiving water bodies and to develop steps that the public can take to reduce pollutants to receiving water bodies. Summarized below are actions taken by the P/NW BOCES on Public Education and Outreach, program;

BMP ID	PUBLIC EDUCATION & OUTREACH PROGRAM – BMP ACTION	RESP. ENTITY	MEASURABLE GOAL
1-1	SWMP Guidance Manual on Phase II Stormwater Regulations, was prepared for BOCES	District	Completed Yr 1; Available to Public
1-2	Stormwater Website w/ contact names, newsletters and fact sheets, was developed for BOCES	District	Started in Yr 1, updated annually
1-3	Stormwater Steering Committee w/Contact Person, consisting of assistant Superintendent, SWMP Coordinator and Consultant, was established	District	Established in Yr 1
1-4	SWMP Committee consisting of members of the Health & Safety Committee, was established	District	Established in Yr 1
1-5	Fact Sheets on a variety of stormwater issues, were developed and published on BOCES's Stormwater Website	Consultant & District	Started in Yr 2 and issued annually
1-6	Stormwater Management Annual Reports (SWMPAR) on the current and ongoing stormwater program, were prepared annually and presented to the public and NYSDEC	Consultant	Started in Yr 2 and updated annually

MCM 2: Public Involvement/Participation

The public involvement/participation program included efforts to reach out and engage the District members a, staff and students in all aspects of the stormwater program. Summarized below are actions taken by the P/NW BOCES on Public Involvement/Participation.

BMP ID	PUBLIC INVOLVEMENT/PARTICIPATION – BMP ACTION	RESP. ENTITY	MEASURABLE GOAL
2-1	Access to Public Notices, Newsletters and Fact Sheets were made available to the District members at BOCES District Office, through newsletters and on BOCES’s Stormwater Website	Consultant	Updated annually
2-2	Public presentations were made on the annual reports and comments received from the public incorporated into the program and reports as appropriate	Consultant	Updated annually
2-3	BOCES solicited the Health and Safety Committee members to help develop the SWMP.	District	Meetings held annually
2-4	Public Workshops to District schools held on ongoing SWMP and initiatives taken by BOCES on the program	Consultant	Presentations held annually
2-7	Students from Environmental Science Group participated in local stream bank cleanup and stream bank stabilization. In addition, presentations are made to students annually on the ongoing stormwater program and initiatives taken by the District in complying with the State’s stormwater program. Students also participated in storm drain marking program.	District and Consultant	Presentations held annually
2-8	Public Meetings were held on current and ongoing SWMP	Consultant	Meetings held annually

MCM 3: Illicit Discharge Detection and Elimination

In accordance with the NYSDEC Permit requirements, BOCES must implement and enforce a program to detect and eliminate illicit discharges (non-stormwater discharges). Summarized below are actions taken by the P/NW BOCES on the elimination of illicit discharges.

BMP ID	ILLICIT DISCHARGE DETECTION & ELIMINATION– BMP ACTION	RESP. ENTITY	MEASURABLE GOAL
3-1	Public Workshop on Illicit Discharge Detection & Elimination, (IDDE) presented to school districts.	Consultant	Presented in Yr 3
3-2	A Guidance and Procedures Document on IDDE was developed and adopted by the District.	Consultant	Presented in Yr 5
3-3	Presentations were made to BOCES O & M Staff on non-stormwater discharges, the policy adopted by BOCES on IDDE and the impacts of pollutants on stormwater discharges.	Consultant	Presentations are held annually
3-4	Presentations (“After the Storm”)were made to BOCES students on non-stormwater discharges, the policy adopted by BOCES on IDDE and the impacts of pollutants on stormwater discharges.	Consultant	Presentations are held annually
3-5	The preliminary Storm Outfall and Sewer Mapping Document for the Yorktown Campus was initiated by and completed	Consultant	Initiated in Yr 5

MCM 4 & MCM 5: Construction Site Stormwater Runoff Control and Post-Construction Stormwater Management

In accordance with the NYSDEC Permit requirements, BOCES must implement and enforce a program to reduce pollutants in stormwater runoff from construction activities, and implement strategies which include a combination of structural and non-structural BMPs appropriate to the construction site to address post-construction runoff from the site. Summarized below are actions taken by the P/NW BOCES on Construction Site Stormwater Runoff Control, and Post-Construction Stormwater Management.

BMP ID	CONSTRUCTION & POST-CONSTRUCTION SITE STORMWATER RUNOFF – BMP ACTION	RESP. ENTITY	MEASURABLE GOAL
4,5 -1	Public Workshop on Construction-Related Activity, was presented to school districts.	Consultant	Presented in Yr 4
4,5 -2	A Guidance and Procedures Document on Construction Activities and Post-Construction Management was developed and adopted by the District.	Consultant	Presented in Yr 4
4,5 -3	Presentations were made to BOCES O & M Staff on the construction activity policy document, adopted by BOCES	Consultant	Presented in Yr 5
4,5 -4	Presentations were made to BOCES students on the policy adopted by BOCES on construction activity and post-construction management.	Consultant	Presented in Yr 5

MCM 6: Pollution Prevention/Good Housekeeping

This measure was set up to establish a framework for pollution prevention and good housekeeping for campus operations and facilities for BOCES. Summarized below are actions taken by the P/NW BOCES on Pollution Prevention/Good Housekeeping.

BMP ID	CONSTRUCTION & POST-CONSTRUCTION SITE STORMWATER RUNOFF – BMP ACTION	RESP. ENTITY	MEASURABLE GOAL
6 -1	O & M Staff Training was provided on potential sources of contamination and best management practices to control spills and reduce chemical contamination	Consultant	Presented annually
6-2	BOCES is currently investigating options for installing a covered structure for salt, sand and de-icing chemicals.	BOCES and Consultant	Initiated in Yr 5
6-3	BOCES is currently investigating options for drainage diversions from O & M Garage Facility and the Tech Center	BOCES and Consultant	Initiated in Yr 5

SECTION 5 – SECOND TERM PERMIT PROPOSED ACTIONS

5.1 SECOND TERM PERMIT

As part on the ongoing SWMP, new permits have been issued for another two (2) year term beginning on January 8, 2008 and extending to January 8, 2010. This section of the SWMP Plan describes proposed additional actions that the District will undertake to meet the second term permit requirements.

5.2 WATERSHED IMPROVEMENT STRATEGIES

The BOCES Yorktown Campus (District) lies within the Croton Watershed and hence, under the new permit, will comply with more rigorous practices “Watershed Improvement Strategies” specified for East of Hudson communities. As part of “Watershed Improvement Strategies”, the District will implement the additional requirements to specific minimum control measures as specified below.

5.3 PUBLIC EDUCATION AND OUTREACH PROGRAM

The District will develop an ongoing public education and outreach program designed to describe the impacts of phosphorus and aimed at reducing phosphorous contributions in the watershed from stormwater discharges. In addition, the program will also include steps that the District will be taking in reducing phosphorus from non-stormwater discharges i.e septic systems

5.4 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Under the illicit discharge and detection minimum measure, the District will develop a GIS Map of the entire stormwater conveyance system that contains:

- type of conveyance system – closed pipe or open drainage
- type of pipe material, shape and size - for closed pipe systems
- type of channel/ditch lining material, shape and dimensions - for open drainage systems
- location and dimensions of any culvert crossings
- drop inlet, catch basin, and manhole locations
- number and size of connections (inlets/outlets) to catch basins and manholes,
- direction of flow

In addition, the District will also locate non-stormwater discharges and illicit connections (hot spots), by:

- Opening of catch basins and manholes for visual dry weather flow observations of manholes and storm drain network
- Dye testing of catch basins, manholes and storm drain network
- Smoke testing of catch basins, manholes and storm drain network

Under this minimum measure, the District will also:

- Develop, implement and enforce a program to ensure that Septic Systems are inspected, maintained or rehabilitated at a minimum frequency of once every three years

5. 5 CONSTRUCTION SITE RUNOFF CONTROL

Under the construction site runoff control minimum measure, the District will:

- Develop, implement and enforce a program to reduce pollutants from a land disturbance in a construction site of greater than equal 5,000 sf.
- Develop, a regulatory mechanism or policy that requires erosion and sediment controls in accordance to New York Standards and Specifications for Erosion and Sediment Control
- Employ design professionals for developing and/or review of SWPPPs
- Include a process whereby the public can review and comment on the construction plans through use of postings on the stormwater website, local newspapers and or public hearings
- Develop policies and procedures for compliance inspections at construction sites of greater than equal 5,000 sf
- Provide training by a design professional to site contractors in proper erosion and sediment control practices

5. 6 POST-CONSTRUCTION RUNOFF CONTROL

Under the post-construction site runoff control minimum measure, the District will, for Post-Construction Projects greater than or equal to one acre:

- Include SMPs designed in accordance to the “Enhanced Phosphorus Removal Design Standards’
- Adopt policies and procedures for the inspections and maintenance of SMPs

- Establish procedures to identify existing sites with erosion and or phosphorus pollutant loading problems (Septic Systems)
- Undertake a stormwater retrofit program for existing sites with erosion and or phosphorus pollutant loading problems (Septic Systems) and establish policies and procedures for permitting, design, funding, construction and maintenance for selected projects
- Submit approvable plans with schedules for completing retrofit projects, including funding sources

5. 7 POLLUTION PREVENTION/GOOD HOUSEKEEPING

Under this minimum measure, the District will:

- Develop policies and procedures by December 31, 2009 for the inspection and maintenance of catch basins and manhole sumps and outfalls
- Undertake the inspection and maintenance, repairs and or replacement, by December 31, 2009 of catch basins and manhole sumps and outfalls(20% per year beginning in June 2008) in the early spring and late fall for removal of sediment and debris
- Develop a Corrective Action Plan for each conveyance system component and maintain a file of corrective actions
- Develop policies and procedures by December 31, 2009 for an inspection and maintenance program of SMPs installed by the permittee
- Undertake the inspection and maintenance, repairs and or replacement, by December 31, 2009 of SMPs installed by the permittee

In addition, the District will develop policies and procedures and implement a turf management program by December 31, 2010, to address:

- Application of phosphorus-containing fertilizer: only allowed following soil testing and analysis documenting soil phosphorus concentrations are inadequate.
- Grass Clippings: shall be disposed in a compost pile or proper containment device
- Leaves: shall be disposed in a compost pile or proper containment device
- Curbside lawn waste management policy: to ensure that lawn waste does not decay and release phosphorus into the storm sewer system
- Landscaping: planting of water gardens and shrubs to reduce mowing and application of chemicals

SECTION 6 – DISTRICT STAFFING, FUNDING & TRAINING

This section of the SWMP Plan describes proposed additional actions that the District will undertake to meet the second term permit requirements for staffing, funding and training requirements.

6.1 SWMP EXECUTIVE OFFICER

Since the inception of the SWMP in 2003, BOCES executive officer, authorized to execute the SWMP has been Dr. Thomas P. Higgins, Jr., Assistant Superintendent for Administrative Services. Dr. Higgins has been actively engaged in the following activities:

- Hiring of a consultant to assist BOCES in developing and implementing the SWMP
- Appointing the SWMP Coordinator
- Establishing the SWMP Steering Committee
- Scheduling of the program's implementation schedule
- Overseeing the execution of the SWMP
- Developing staffing needed to carry out the program
- Developing a budget for the implementation of the program

Dr. Higgins will continue to work closely with the District's Consultant, SWMP Coordinator and the SWMP Steering Committee in executing various components critical to the successful implementation of the program.

For further information on the ongoing SWMP, Dr Higgins may be contacted at the following address:

Dr. Thomas P. Higgins, Jr.
Assistant Superintendent for Administrative Services
P/NW BOCES
200 BOCES Drive
Yorktown Heights, NY 10598-4399
914-248-2304
E-mail address: thiggins@pnwboces.org

6.2 SWMP LOCAL PUBLIC CONTACT

Since the inception of the SWMP in 2003, Vincent Garnot, Director of School Facilities & Operations, has been the BOCES local stormwater public contact. Mr. Garnot will continue to be actively engaged in the following activities:

- Coordinating the SWMP implementation activities
- Scheduling of the program's implementation schedule
- Overseeing the execution of the consultant work
- Assisting in the coordination of staffing needed to carry out the program
- Assisting Dr. Higgins in the development of SWMP budget

For further information on the ongoing SWMP, Mr. Garnot may be contacted at the following address:

Mr. Vincent Garnot
Director of School Facilities & Operations
P/NW BOCES
200 BOCES Drive
Yorktown Heights, NY 10598-4399
914-248-2303
E-mail address: vgarnot@pnwboces.org

6.3 SWMP CONSULTANT

Since the inception of the SWMP in 2003, CFE Consulting Services, LLC, has been the BOCES stormwater consultant. Mr. Carvalho, P.E. of CFE Consulting Services, LLC will continue to be actively engaged in the following activities:

- Assisting BOCES in the execution of the SWMP implementation activities
- Preparation of newsletters, fact sheets, presentations of activities on the current and ongoing SWMP implementation activities
- Conducting of the annual public meeting
- Preparation of the Annual Report to NYSDEC

For further information on the ongoing SWMP, Mr. Carvalho may be contacted at the following address:

Mr. Wellington J. Carvalho, P.E.
CFE Consulting Services, LLC
638-2 Danbury Road
Ridgefield, CT 06877
203-431-2683
E-mail address: cfeconsulting@comcast.net

6.4 SWMP O & M STAFFING

The District's operations and facilities that contribute or potentially contribute POCs' are limited to the following operations:

- Winter Road Maintenance
- Lawn Equipment Maintenance
- Lawn Care
- Stormwater Drainage Maintenance

The District's O & M Staffing, comprised of a crew of eight (8) employees, will continue to be responsible for lawn care, grounds maintenance, winter road operations, carpentry, plumbing, HVAC and electrical work.

Purchase orders for specific construction and building projects, including street sweeping, and storm sewer catch basin cleaning will be issued to outside vendors, as needed, to perform this work on a contract basis.

6.5 SWMP PRESENTATIONS AND TRAINING PROGRAMS

The District will conduct public education and outreach presentations and training programs, on the implementation of the SWMP on an annual basis to include:

- P/NW BOCES School District representatives
- SWMP Steering Committee
- Students
- O & M Staff

The presentations will cover a wide array of stormwater issues from a review the status of the current and ongoing SWMP, initiatives undertaken and planned activities.

The District will also include a training program for their of O & M staff on stormwater pollution prevention and good housekeeping practices.

6.6 REGIONAL COOPERATION

The District is a sole supervisory public school District and a provider of regional educational services to eighteen local school Districts and their residents in Westchester and Putnam Counties (District). Services to the eighteen local school districts includes vocational education, curriculum services, special education, adult education, staff training, technology instruction, guidance and testing, human resources and management services, that would be too costly or ineffective to provide individually.

Since the inception of the SWMP in 2003, the eighteen local school Districts representatives have been involved in all issues related to the P/NW BOCES SWMP. Several members of the District are also in the Health & safety Committee, which has also undertaken the responsibility of the BOCES SWMP Steering Committee. The District will continue its role as a sole supervisory public school District and as a provider of regional educational services to eighteen local school Districts and their residents in Westchester and Putnam Counties (District).

BOCES executives will also continue to be involved in discussions with the Towns of Somers and Yorktown in trying to develop cooperative and/or shared programs in education and public participation.

6.7 FUNDING OF THE SWMP

The NYSDEC has mandated the development of a SWMP but has not provided any direct funding to the District for the Phase II program. Currently the District provides funding for the program from the District School Budget. The District will actively pursue other means of funding such as State Grants. However, primary funding will continue to be provided from the District School Budget.