### A RESOLUTION RECEIVING STAFF REPORT ON STORMWATER PERMIT Resolution No. 120/2008-09

WHEREAS, Carrboro entered into a 5 year NPDES stormwater permit on July 1, 2005 with the State of North Carolina; and

WHEREAS, Carrboro maintains a municipal separate storm sewer system (MS4); and

WHEREAS, Carrboro is committed to the ongoing high quality management of stormwater runoff within the Town's jurisdiction;

NOW THEREFORE, the Carrboro Board of Alderman does hereby:

- 1. Accept Staff report summarizing Year 4 NPDES stormwater permit activities.
- 2. Direct staff to continue to pursue NPDES permit requirements, to prepare for permit reissuance, and to report back as soon as practical regarding the final disposition of Jordan Lake rules.

ATTACHMENT B-1



# TOWN OF CARRBORO

NORTH CAROLINA

## TRANSMITTAL PLANNING DEPARTMENT

DELIVERED VIA: 🛛 HAND 🗌 MAIL 🗌 FAX 🔲 EMAIL

To:Steve Stewart, Town Manager<br/>Mayor and Board of AldermenFrom:Randy Dodd, Environmental PlannerDate:June 2nd, 2009Subject:Year 4 Report for NPDES Stormwater Permit

### Background and Summary

Carrboro is nearing completion of year 4 of its Phase II NPDES stormwater permit. Carrboro will need to report to NCDENR by the end of June on progress made towards permit requirements. Implementation generally requires the development and implementation of measurable goals to satisfy each of six minimum control measures, as discussed below. The following report is an update to the report provided by staff to the BOA on May 20<sup>th</sup>, 2008

### Information

The North Carolina Environmental Management Commission issued Carrboro a stormwater management permit effective July 1, 2005. The permit requires the Town to develop and implement a comprehensive stormwater management program that includes six minimum measures:

- (1) Public education and outreach (PEO) on stormwater impacts,
- (2) Public involvement/participation (PIP),
- (3) Illicit discharge detection and elimination (IDDE),
- (4) Construction site stormwater runoff control (CRC),

(5) Post-construction stormwater management (PCRC) for new development and redevelopment, and

(6) Pollution prevention/good housekeeping (PPGH) for municipal operations.

Details regarding the Town's implementation of the permit are provided in Appendix 1 (the

#### Planning Department Planning Division

301 West Main Street, Carrboro, NC 27510 • (919) 918-7327 • FAX (919) 918-4454 • TDD 1-800-826-7653 AN EQUAL OPPORTUNITY EMPLOYER abbreviations above refer to the first column of the Table in Appendix 1).

Town staff have focused on the following new requirements for Year 4, while continuing efforts initiated in previous years:

- II.D.2.a: Implement an Illicit Discharge Detection and Elimination Program. The program was established in Year 3; in Year 4 implementation has been initiated. This program is designed to detect and remove significant non-stormwater pollution sources being conveyed through the stormwater system. Staff have focused on an outfall inventory, training for illicit discharge detection, and stormwater system mapping.
- II.F.2.b: Provide a mechanism to require long term operation and maintenance of structural BMPs. Require annual inspection reports of permitted structural BMPs performed by a qualified professional. Staff have focused on setting up the structure for establishing a stormwater BMP operation and maintenance program.
- II.F.2.d: Since the Town's creeks drain to Nutrient Sensitive Waters (i.e., Jordan Lake), develop and include a nutrient application (fertilizer and organic nutrients) management program in the Post-construction Stormwater Management Program (this is a carryover from Year 3 requirements). This topic is included as a separate agenda item.

Staff wish to thank two interns, Stephen Hess and Farrah Sangooskwow, who have provided considerable assistance to staff particularly in database development and management for stormwater system data, as well as watershed restoration and benthic monitoring data management.

#### Staff Recommendation

Staff recommends that the Board of Aldermen adopt the attached resolution (Attachment A) accepting this memo.

ĺ			0005	0000	0007	0000	0000
Sec	Item Title	Description	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
PEO	Establish a Public Education and Outreach Program	Develop a public education program and implement within 12 months of the permit issue date. Incorporate outreach elements for significant minority and disadvantaged communities.		x	x	x	×
PEO	Comments	Distributed brochures to town government offices and at events.					
PEO	Informational Web Site	Develop and maintain internet web site. Post newsletter articles on stormwater, information on water quality, stormwater projects and activities, and ways to contact stormwater management program staff.	x	x	x	x	x
PEO	Comments	Town has established web site. Town also participates in Clean Water Education Partnership (CWEP) which also maintains a website. Carrboro's CWEP cost share for FY 2008-09 was \$3,117. CWEP FY 2008-09 programs included radio and TV campaigns (with a focus on fertilizer), and print outreach (primarily a riparian landowner postcard campaign). Additional information available at http://www.nccwep.org. Update to Town website planned for June 2009.					
PEO	Public education materials for schools, homeowners, and/or businesses	Develop general stormwater educational material to appropriate target groups as likely to have a significant stormwater impact. Instead of developing its own materials, the permittee may rely on state-supplied Public Education and Outreach materials, as available, when implementing its own program.				x	x
PEO	Comments	The Town relies on the CWEP for this element					
PEO	Public education material dissemination	Distribute written educational material to a broad public audience. Possibilities include, but are not limited to utility mailouts and at special events.		x	x	x	x
PEO	Comments	The Town relies on the CWEP for this element					
PIP	Administer a Public Involvement Program	Develop and implement a Public Involvement and Participation Program.	х	х	х	х	х
PIP	Comments	The Town of Carrboro Environmental Advisory Board serves as a primary public involvment mechanism.					
PIP	Allow the public an opportunity to review and comment on the stormwater plan	Conduct at least one public meeting to allow the public an opportunity to review and comment on the Stormwater Plan.	x				
PIP	Comments	A public Hearing was held on 11 Feb 2003 to receive public input. Public comments were included in the draft permit that was submitted to DENR					
PIP	Organize a volunteer community involvement program	Organize and implement a volunteer stormwater related program designed to promote ongoing citizen participation.	х	x	x	x	x
PIP	Comments	Significant progress has been achieved on Stormdrain labeling project.					
PIP	Establish a Citizens Group(s)	Develop a citizens' group(s) for input on stormwater issues and the stormwater program.	х	х	х	х	х
PIP	Comments	The Town of Carrboro Environmental Advisory Board serves as a primary public avenue for input on the Town's stormwater program.					
1	Develop/Implement Illicit Discharge Detection and Elimination Program	Develop and implement an Illicit Discharge Detection and Elimination Program. Include provisions for program assessment and evaluation.			×X	x	x
IDDE	Comments	Program established in FY 2007-8					

Sec	Item Title	Description	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
IDDE	Establish and maintain appropriate legal authorities	Establish and maintain adequate legal authorities to prohibit illicit discharges and enforce the approved Illicit Discharge Detection and Elimination Program.			x	x	x
IDDE	Comments	Town Code provision adopted in FY 2007-8					
IDDE	Develop a Storm Sewer System Base Map	Complete identification, locations of and mapping of stormwater drainage system components. At a minimum, mapping components includes outfalls, drainage areas, and receiving streams.				х	×
IDDE	Comments	Town completed a major update to stream data in FY2008-2009 that improved the accuracy and classification of perennial, intermittent, and ephemeral streams. The Town also completed a major update to the mapped stormwater system that included drainage areas, outfalls, ditches, and new system features subsequent to the original mapping.					
IDDE	Implement illicit discharge detection procedures	Implement inspection program to detect dry weather flows at system outfalls. Establish procedures for tracing the sources of illicit discharges and for removing the sources. Develop procedures for identification of priority areas likely to have illicit discharges. Continue to identify, locate, and update map of drainage system components on a priority basis per approved Illicit Discharge Program.				x	×
IDDE	Comments	Town identified priority areas for detecting dry weather flows and completed outfall inventory for these areas in FY2008-2009. The area focused on during this period includes much of downtown and adjacent areas draining to Tanbark Branch, Tom's Creek, and an unnamed tributary flowing south from downtown.					
IDDE	Conduct employee cross- training	Conduct training for municipal staff on detecting and reporting illicit discharges.				x	x
IDDE	Comments	With assistance from Cooperative Extension Service, Town completed training of 19 Town staff in illicit discharge detection. 14 employees of adjacent jurisdictions also received the training.					
	Provide public education	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.				х	x
IDDE	Comments	Will be pursued via public outreach and website update in June 2009.					<u> </u>
IDDE	Establish a public reporting mechanism	Establish and publicize a reporting mechanism for the public to report illicit discharges.				x	×
IDDE	Comments	Will be pursued via public outreach and website update in June 2009.					
	Implement a program and establish a regulatory mechanism for erosion and sediment control	Develop a regulatory mechanism and implement a program requiring erosion and sediment controls at construction sites and providing for sanctions to ensure compliance. Instead of originating a new program, the permittee may elect to comply by relying on the NCDENR Division of Land Resources (DLR) Erosion and Sediment Control Program, either as administered by the DLR, or as delegated by the Sedimentation Control Commission (SCC) to another entity with appropriate jurisdiction, including the permittee. The permittee may rely on the DLR program only to the extent that that program satisfies all of the following BMPs.	x	x	x	x	x
CRC	Comments	The Town of Carrboro has authorized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					

CRC = Construction Runoff Control IDDE = Illicit Discharge Detection Elimination PCRC = Post-Construction Runoff Control PEO = Public Education Outreach PIP = Public Involvement Participation PPGH = Pollution Prevention Good Housekeeping

B-4

-	 	 	· _ · • • • • · · ·	

Sec	ltem Title	Description	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
CRC	Develop requirements on construction site operators	Require construction site operators to implement erosion and sediment control BMPs and to control construction site wastes that may cause adverse water quality impacts.	x	х	x	x	x
CRC	Comments	The Town of Carrboro has authorized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					
CRC	Provide educational and training materials for construction site operators	New materials may be developed by the permittee, or the permittee may use materials adopted from other programs and adapted to the permittee's construction runoff controls program.	×	x	x	x	x
CRC	Comments	The Town of Carrboro has authorized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					
CRC	Institute plan reviews	Review construction plans and establish procedures that incorporate water quality considerations in construction site plan reviews.	х	х	х	х	x
CRC	Comments	The Town of Carrboro has authorized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					
CRC	Establish public information procedures	Establish procedures for receipt and consideration of erosion and sedimentation information submitted by the public. Publicize the procedures and contact information. The procedures must lead directly to a site inspection or other timely follow-up action.	x	x	x	x	x
CRC	Comments	The Town of Carrboro has authonized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					
CRC	Establish inspection and enforcement procedures	Establish procedures for site inspection and enforcement of control measure requirements. The procedures should include prioritizing areas of inspections based on local criteria.	x	x	x	х	х
CRC	Comments	The Town of Carrboro has authorized Orange County Erosion Control office to address this item for projects within the Town's planning jurisdiction. Local citizens have received training from the Muddy Water Watch Program which will provide additional volunteer support					
and the second se	Establish a Post Construction Stormwater Management Program	Develop, adopt by ordinance (or similar regulatory mechanism), implement, and enforce a program to address post- construction runoff controls for new development and redevelopment. The ordinance must be reviewed and approved by the Department prior to implementation. Ensure that controls are in place to prevent or minimize water quality impacts.		x	x	×	x
PCRC	Comments	LUO updates have satisfied this requirement					
PCRC	Establish strategies which include BMPs appropriate for the MS4	Develop and implement strategies that include a combination of structural and/or non-structural BMPs. Provide a mechanism to require long term operation and maintenance of structural BMPs. Require annual inspection reports of permitted structural BMPs performed by a qualified professional.			x	x	x
PCRC	Comments	Town initiated a maintenance and inspection program in FY2008-09					
	· · ·						

Sec	Item Title	Description	2005 to 2006	2006 to 2007	2007 to 2008	2008 to 2009	2009 to 2010
	Establish a program to control sources of fecal coliform to the maximum extent practicable	Control the sources of fecal coliform to the maximum extent practicable. Develop and implement an oversight program to ensure proper operation and maintenance of on-site wastewater treatment systems for domestic wastewater and conduct an O&M awareness program for on-site wastewater treatment treatment system owners. Municipalities must coordinate this program with the county health department.				x	x
PCRC	Comments	Town has initiated an oversight program in cooperation with Orange County in FY2008-09. The Town has worked with Orange County to inventory unpermitted systems in the Town's jurisdiction. The Town will initiate a program to improve maintenance for these systems in FY2009-10.					
PCRC	waters (NSW) protection measures (for programs with development or	For projects draining to NSW waters, develop, adopt, and implement an ordinance (or similar regulatory mechanism) to ensure that the best management practice for reducing nutrient loading is selected. In areas where the Environmental Management Commission has approved a Nutrient Management Water Urban Stormwater Management Program, the provisions of that program fulfill the nutrient loading reduction requirement. Develop and include a nutrient application (fertilizer and organic nutrients) management program in the Post-construction Stormwater Management Program.			×	×	×
PCRC	Comments	Town is working with Cooperative Extension Service and citizens to implement a nutrient management program. Town adopted a Town Code amendment in FY2008-09					
PPGH		Develop an operation and maintenance program that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.		x	x	x	x
PPGH	Comments	The Town's Public Works Department has an operation and maintenance program for street and storm system maintenance.					
DDCH	facilities, operations, and the MS4 system and associated structural BMPs	Develop an inventory of all facilities and operations owned and operated by the permittee with the potential for generating polluted stormwater runoff, including the MS4 system and assocaited structural BMPs. Inspect potential sources of polluted runoff, the stormwater controls, and conveyance systems. Evaluate the sources, document deficiencies, plan corrective actions, and document the accomplishment of corrective actions.		x	x	×	×
PPGH	Comments	Town has inventoried facilities, including MS4 and BMPs. A large majority of BMPs within the jurisdiciton are not owned and operated by the Town. In FY 2008-09, the Town mapped BMP catchments.					
PPGH	Conduct staff training	Conduct staff training specific for pollution prevention and good housekeeping procedures.		x	x	x	x
PPGH	Lomments	In cooperation with the Cooperative Extension Service, the Town provided good housekeeping training to 19 Town employees in FY2008-09. 14 employees of adjacent jurisdictions also received the					
PPGH	or operated regulated	Conduct annual review of the industrial activities with a Phase I NPDES stormwater permit owned and operated by the permittee. Review the following aspects: the Stormwater Pollution Prevention Plan where one is required, the timeliness of any monitoring reports required by the Phase I permit, and the results of inspections and subsequent follow-up actions at the facilities.	x	x	x	x	×
PPGH	Comments	The Town's Public Works facility has a separate permit					

CRC = Construction Runoff Control IDDE = Illicit Discharge Detection Elimination PCRC = Post-Construction Runoff Control B·6