

## **Creation of a Stormwater Management Utility**

Staff Report, June 6, 2017

### **Current Stormwater Management Situation**

Carrboro has and continues to implement stormwater management activities to remain a leader in environmental health, comply with state and federal regulations on water quality and quantity, and respond to resident needs. Carrboro's Vision 2020 states *"Carrboro should be proactive in managing its stormwater, promoting active maintenance of facilities, reducing impacts of increased impervious surface, and minimizing impacts on waterways"*.

Since the creation of Vision 2020, the Town has seen an increase in the frequency and severity of storms, leading to higher levels of stormwater impact on residences and existing infrastructure. This time has also seen the creation of state and federal mandates on stormwater management requiring new and increased levels of stormwater management practices.

The two principal regulatory drivers for water quality are the Town's National Pollutant Discharge Elimination System (NPDES) Phase II permit and requirements under the Jordan Lake Rules. The Town's NPDES permit was reissued by the State in early 2017. The Jordan Lake requirements are driven by the identification of the lake as an impaired water body as too much nitrogen and phosphorus are being input into the lake. Actions to address the nutrient problems can be traced back to the North Carolina Environmental Management Commission designating the reservoir as Nutrient Sensitive Water the year of its impoundment (1983) and imposing phosphorus limits on wastewater dischargers. From 1997-2009, a progression of studies, stakeholder processes, and actions concluded that water quality standards were not being met in Jordan Lake. This finding resulted in statutes and regulations being put in place and requirements of the federal Clean Water Act being set in motion. The North Carolina General Assembly has delayed implementation of the new regulations, however, this delay does not supersede the federally recognized impairment. Cleaning up Jordan Lake is a federal mandate; a "no action" option does not exist when looking beyond a 1-2 year planning horizon. Studies pursued as part of the Town's Capital Improvement Program and mandatory reporting requirements to the State indicate that complying with the Jordan Lake Rules will be a multimillion dollar undertaking for Carrboro, with a preliminary estimate of about \$4M needed over the next decade.

Carrboro has seen an increase in the effect storms are having on existing properties and infrastructure in town. The primary method to control stormwater discharge for existing developments is through the use of stormwater control measures. These include construction of new stormwater management infrastructure and upgrades to existing infrastructure.

The Town's current stormwater responsibilities and activities act on behalf of the community's environmental values, react to state and federal requirements, and respond to

residents' needs. The need for stormwater management activities has increased to respond to these values, requirements, and needs. The current funding source for these activities comes from the General Fund and, therefore, can fluctuate based on competing projects as well as be subject to economic downturns. Implementing a stormwater management utility would allow for an effective and dedicated source of funding to pay for stormwater management and related infrastructure investments.

### **Potential Services Provided Through the Stormwater Management Utility**

Below is a list of services that the Town of Carrboro could provide through a stormwater management utility:

#### **A. Public Participation, Outreach, Education, Assistance**

1. Respond to stormwater-related citizen inquiries and requests-for-assistance associated with stormwater management, floodplain management, drainage, pollution.
2. Interpret the FEMA floodplain maps for citizens.
3. Provide technical and staff support to the Environmental Advisory Board.

#### **B. Technical Services**

1. Perform field classification of streams; identify and map breakpoints between perennial, intermittent, and ephemeral streams; update and maintain stream and water quality buffer mapping and related database/filing system; and assist the Town Zoning Administrator with investigation of buffer inquiries/violations.
2. Provide technical assistance concerning stormwater management practices, sediment and erosion control, and floodplain issues.
3. Compile mapping comments for submission to FEMA and the NC Division of Emergency Management; coordinate and maintain records of active and completed floodplain map revisions/amendments; and assist with investigation of floodplain inquiries/violations.
4. Conduct instream water quality sampling, confirm sampling sites and sampling procedures, and prepare quarterly reports.
5. Inspect public and private stormwater facilities.
6. Conduct stream repair and restoration projects.
7. Implement an illicit discharge detection and stormwater retrofit and elimination program.

#### **C. Planning Services**

1. Perform development reviews involving stormwater management, floodplain management, and buffer criteria and requirements. Review and make recommendations regarding buffer and stormwater compliance.
2. Regularly review and update provisions in the Land Use Ordinance to support the goals of the Town's stormwater management efforts.

#### **D. Public Infrastructure**

1. Conduct field inventory and data collection of all storm drainage infrastructure.

2. Maintain and repair stormwater system infrastructure.
3. Sweep streets routinely to remove pollutants and debris.

#### E. Management and Administration

1. Develop and implement activities to comply with the National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit, including the six minimum measures, and annual reporting requirements:
  - a. Public education and outreach;
  - b. Public involvement and participation;
  - c. Illicit discharge detection and elimination;
  - d. Construction site stormwater runoff control;
  - e. Post-construction stormwater management in new development and redevelopment; and
  - f. Pollution prevention/good housekeeping for municipal operations.
2. Manage the development and implementation of the Town's Stormwater Management Program and Plan, Jordan Lake compliance activities, and implementation of the Bolin Creek Watershed Restoration Plan.
3. Manage and update stormwater billing file; manage databases to track payment and fee review data; process applications for Stormwater Fee Assistance; respond to customer requests-for assistance regarding impervious surface data, billing, procedures, etc.
4. Develop and administer the stormwater related capital improvements projects (CIP).
5. Identify grant opportunities to fund drainage and water quality improvement projects and stream bank stabilization projects; prepare and submit grant applications; develop and monitor approved grant-funded projects.
6. Prepare contract documents and administer stormwater-related professional services and construction contracts.

#### **Description of an Enterprise Fund**

It is recommended the Town structure the Utility as an enterprise fund. An enterprise fund establishes a separate accounting and financial reporting mechanism for municipal services. Under enterprise accounting, the revenues and expenses of a service are placed into a separate fund, rather than commingled with all other government activities. Establishing an enterprise fund for stormwater activities would allow for a designated amount of resources to be allocated for stormwater management consistently, rather than competing for general fund dollars, as it currently does.

An enterprise fund typically generates revenues through fees or taxes for service. These revenues would fund the operation, construction, and maintenance of stormwater management devices, and for stormwater system planning and management. By creating an enterprise fund the town will be able to better maintain compliance with the Clean Water Acts and the Jordan Lake rules, and give the Town increased ability to act on the behalf of resident needs. It is planned that the fund will initially be allocated resources through the General Fund, with the plan to make the fund sustainable in the future through a stormwater utility fee or

earmarked property tax rate increase. The Board is scheduled to consider these options in fiscal year 2017-18 with the intention of implementing a permanent funding structure beginning in fiscal year 2018-19.

### **Service Delivery Options**

If a stormwater management utility is pursued, there will be certain decision points in the future on how a stormwater utility should be structured and operated. It is anticipated that hiring a Stormwater Utility Manager will be necessary to not only assist staff and the Board in making these decisions, but also managing the day to day operations and service implementation. Some factors that will need to be considered in the future are:

1. Revenue generation:
  - a. Anticipated to be a stormwater utility fee or an earmarked property tax rate increase
    - i. If it is a fee, how the fee will be assessed
2. Billing and collection methods and administration
  - a. Perform collections as part of town functions
  - b. Partner with the county or other entity
3. Service prioritization and implementation

It is anticipated that the service and revenue generation options will be presented to the Board in fiscal year 2017-18, with the intention of full implementation by fiscal year 2018-19.

### **Timeline of Creating a Stormwater Management Utility**

- a. Year 0 – November 2016 – June 30, 2017
  - i. Amend Town Code to include the Stormwater Utility
  - ii. Setup the Utility in the budget for fiscal year 2017-18
- b. Year 1 – July 2017 – June 30, 2018
  - i. Advertise and hire Stormwater Utility Manager. This is a new employee position for the Town.
  - ii. Create a permanent resident advisory commission - Stormwater Advisory Commission
  - iii. Current stormwater management activities are implemented into the Utility
  - iv. Present service delivery management and funding structure options to the Board of Aldermen
- c. Year 2 – July 2018
  - i. Implement permanent funding structure
  - ii. Implement permanent service delivery management method
  - iii. Increase stormwater management activities as new funding source is available