



**TOWN OF CARRBORO
STORMWATER ADVISORY COMMISSION**

AGENDA

June 13th, 2019; 6:30 pm
Town Hall Room 100

<u>Time</u>	<u>Item</u>	<u>Presenter</u>
6:30 pm	Administrative matters <ul style="list-style-type: none">• Adjustments to agenda• Approval of 4/29 minutes	Chair
6:40 pm	Land Use Ordinance Review	Chair, All
7:30 pm	Staff Update*	Staff
7:45 pm	Scheduling Future Meetings	Staff, All
7:55 pm	Announcements and adjourn	Chair

* see <https://bit.ly/2KvASA4>



TOWN OF CARRBORO STORMWATER ADVISORY COMMISSION – SUMMARY

Meeting on April 29, 2019, 6:30 pm, Public Works Conference Room

Board Members		Guests	Staff
John Cox	Tom Hoban (absent)		Randy Dodd
Robert Dickson	Jeanette O'Connor (absent)		Heather Holley
Randee Haven O'Donnell (Board Liaison)	Michael Paul		

Administrative Matters

The March 14, 2019 meeting minutes were approved.

Scheduling of Future Meetings

Schedule will remain the same, second Thursday of each month. Next meeting will be on Thursday, June 13, 2019.

Staff Update

Staff provided an update on recent efforts, with a focus on the Board of Alderman presentations, Stormwater Control Measures inspections, the urban forestry internship, website updates, the Residential Assistance Policy and Program, the FEMA Hazard Mitigation Grant Program projects/applications, and the FEMA Public Assistance application effort.

Board of Alderman Presentations

The SWAC was referred to two BOA April meeting discussions. At these meetings, recent rainfall/hydrology information was presented. Rainfall amounts were ~20" above average for 2018 and the ground water levels are about 12"+ higher than recorded since 2013. These above average trends are continuing into 2019 as well.

SCMs

The Town has over 200 SCMs that need to be inspected by the property owners, with oversight from Town. Some SCMs have not been inspected since the construction permit final was issued. In some cases this is over 10 years. If the neglected SCMs were to be brought up to date on maintenance there could be significant flood mitigation benefits. Currently staff is working to compile previous inspections, update inventory, create an SOP and schedule for inspections, and develop a SOP and forms for owners to submit inspections going forward.

Urban Forestry Internship

Luke Morin's internship has drawn to a close. The Tree Value Tags were well received and outreach events were successful. The website was updated to include information for the public. Staff anticipate making the tags an annual outreach experience for stormwater education.

Stormwater Website Updates

Staff is planning a website update to include an updated FAQ page. SWAC will be asked to review and comment. Additional information for homeowners will also be added.

Residential Assistance Policy and Program

Staff continues to work on and will present draft of the policy and pilot program to SWAC for review when ready.

FEMA Hazard Mitigation Grant Program

Chronological update of events to date was presented for 2 elevations and 2 new applications.

FEMA Public Assistance

Two categories of projects for reimbursal are due at end of May and remaining projects will be completed after those. RFQs for stream bank restoration at Public Works and culvert replacement at Broad Street are being drafted and reviewed by FEMA.

Land Use Ordinance Review

Land Use Ordinance Text Amendment Relating to Stormwater Volume Control Provisions

A public hearing for changes to Stormwater Volume provisions is set for May 28th. The SWAC reviewed the changes and recommended that the Board of Aldermen approve the draft ordinance.

Further Review

SWAC is asked in the longer term to look at sufficiency of current provisions/standards especially as they relate to climate resiliency, flood mitigation and management of stormwater in Section 15-263 and Appendix I.

- Section 15-263 a: applicability
- Section 15-263 b-f: water quality
- Section 15-263 g: peak flow, elevation, total annual volume
- Section 15-263: Maintenance of SCMs/BMPs

The SWAC discussed: intensity of storms; time of concentration; use of overlay zones/districts or watershed specific regulations for flood prone areas; going beyond the 25 year, 24 hour storm event (e.g., 50 and 100 year, possibly some configuration of 6/12/24 hour storms) which will increase SCM capacity, and potentially result in outlet designs that are more involved; perhaps a "forecasted" version of the NOAA precipitation intensity/duration/frequency curve to account for future climate change, if available.

Adjourn

The meeting was adjourned at 8:10 pm. The next meeting is set for June 13, 2019.



TOWN OF CARRBORO

NORTH CAROLINA

TRANSMITTAL: STORMWATER UTILITY

DELIVERED VIA: HAND MAIL FAX EMAIL

To: Stormwater Advisory Commission (SWAC)

From: Randy Dodd, Stormwater Utility Manager

Cc: Joe Guckavan, Public Works Director
Heather Holley, Stormwater Specialist
Patricia McGuire, Planning Director
Josh Dalton, Sungate Engineering

Date: June 6th, 2019

Subject: Land Use Ordinance Review

Summary

The purpose of this memo is to provide the Stormwater Advisory Commission (SWAC) with background information related to stormwater provisions in the Land Use Ordinance to assist with the SWAC's review.

Information

At the April 16th Board of Aldermen meeting, the Board referred further review of the stormwater provisions in the LUO to staff and the Stormwater Advisory Commission in consideration of the flooding and drainage impacts that have been experienced in recent years and risk for increasing impacts due to climate change. The SWAC initiated review of the provisions at the April meeting; relevant information is available in the minutes. A summary of current provisions in the LUO are provided in Table 1, with the most relevant items for this review indicated in bold. Note that it is beyond the scope to review all stormwater provisions; the Table presented is intended to help orient and focus the SWAC's understanding of the overall stormwater scope in the LUO and review of specific provisions. The complete LUO stormwater section can be found at this link:

<http://www.townofcarrboro.org/DocumentCenter/View/698/Article-XVI-Floodways-Floodplains-Drainage-and-Erosion-PDF> (pages 28-41).

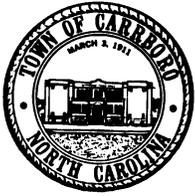
As a follow up to the April meetings, staff sent a message to the statewide stormwater listserve, inquiring about ordinance requirements that went beyond the 25 year storm, and received replies from Garner, Durham, and Statesville (also referencing Charlotte-Mecklenburg) that the 50 and 100 year are also regulated in certain situations. These situations are: for culverts under main thoroughfares, to insure 100 year flood elevation does not reach any finished floor elevation, and in areas with known flooding problems.

Summary of Selected Stormwater Provisions in Land Use Ordinance

LUO Stormwater Provision	Purpose	Notes
Section 15-261: Natural Drainage System Utilized to Extent Feasible	Minimize impacts of larger scale grading on natural drainage patterns.	
Section 15-262: Development Must Drain Properly	Prevent “undue retention of surface water on development site”	Drainage systems designed for 10 year storm; street crossings for 25 year storm
Section 15-263 Management of Stormwater (a): When Required	Applicability of provisions.	State legislation has been passed that provides constraints on local governments.
Section 15-263 Management of Stormwater (b-g): Requirements	Treat both water quality and quantity	Drawdown, TSS, nutrients and offsets, peak flow (1-25 year/24 hour) , annual volume
Section 15-263 Management of Stormwater (h): references Drainage Design Manual (App. I)	Refer to technical performance/presumptive standards.	Language provides flexibility in presumptive standards.
Section 15-263 Management of Stormwater (i-l): procedural details	Performance bond; as built required; public roads projects; variances	
Section 15-263.1: Maintenance of Structural BMPs.	Property owner responsibility with Town oversight	Town is reviewing/ramping up program.
Section 15-264: Sedimentation and Erosion Control	During construction.	Town has delegated program to Orange County.
Section 15 266-267: Impervious Surface Limitations and Additional Standards.	These apply in the University Lake (water supply) watershed.	
Appendix I: Storm Drainage Design Manual	Engineering standards for stormwater conveyance and detention.	Note the 25 year detention reference (#6), and Town engineer’s flexibility in administering.

Recommendation

It is recommended that SWAC members review this memo, contact staff with any questions, and plan to receive additional information and come prepared to further discuss and provide any desired recommendations for improvements to the Land Use Ordinance at the June meeting.



TOWN OF CARRBORO

Stormwater Advisory Commission

301 West Main Street, Carrboro, North Carolina 27510

R E C O M M E N D A T I O N

THURSDAY, JUNE 13, 2019

Land Use Ordinance Stormwater Provisions Review

Motion was made by _____ and seconded by _____ that the Stormwater Advisory Commission of the Town of Carrboro recommends that the following review comments be considered in updates to stormwater management provisions in the Land Use Ordinance.

.....

VOTE:

AYES: ()

ABSENT/EXCUSED: ()

NOES: ()

ABSTENTIONS: ()

(Date)