

# DOWNSTREAM ASSESSMENT SUBMITTAL CHECKLIST

**Stormwater Management Division**  
**c/o Development Services Department**  
 One Exchange Plaza, 4<sup>th</sup> Floor  
 Raleigh, NC 27601  
 Telephone (919) 996-3773

## I. PROJECT INFORMATION

Project Name: \_\_\_\_\_ Phase: \_\_\_\_\_  
 Project Address: \_\_\_\_\_ Disturbed Area (sf): \_\_\_\_\_  
 PIN: \_\_\_\_\_ Case #: \_\_\_\_\_ Submittal Date: \_\_\_\_\_  
 Previous Permit numbers (if applicable): \_\_\_\_\_  
 Zoning District: \_\_\_\_\_  
 Legal Name of Owner: \_\_\_\_\_  
 Owner Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Owner Address: \_\_\_\_\_  
 Design Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Design Contact Email: \_\_\_\_\_  
 The regulatory drainage basin in which the site is located: \_\_\_\_\_  
 The water supply watershed in which the site is located: \_\_\_\_\_

**II. SUBMITTAL REQUIREMENTS - See COR Stormwater Management Design Manual Section 2.8 for additional guidance. This completed checklist shall be submitted to the City of Raleigh with any Downstream Assessment. All files shall also be submitted electronically via CD or flash drive.**

Items to be included in Downstream Assessment:	
<input type="checkbox"/>	All Downstream Assessment materials shall be bound together in a three-ring notebook as a section of the Stormwater Development Analysis (SDA). Loose paper will not be accepted
<input type="checkbox"/>	Narrative including project description, selection of points of analysis within the zone of influence (outfalls, confluences, significant detention measures, structural flooding, 10% point), hydrologic modeling parameter selection and assumptions, and conclusions of the analysis
<input type="checkbox"/>	Summary of results table(s) including the following:
<input type="checkbox"/>	Peak flows (cfs) in the pre- and post-development condition in the 1-, 10-, and 100-year 24-hour storm events at each analysis point within the zone of influence
<input type="checkbox"/>	Reference material, including, but not limited to:

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<input type="checkbox"/>	<a href="#">Web Soil Survey Map</a> or a geotechnical exploration report with map, with the site boundary clearly delineated and labeled, if desired to show soil classification
<input type="checkbox"/>	<a href="#">Atlas 14</a> Point Precipitation Frequency Estimates with hydrographs, or future rainfall intensity data adopted by the City, whichever is more conservative
<input type="checkbox"/>	Hydrologic (and hydraulic, if necessary) calculations. Calculations shall be provided in an 8.5-inch by 11-inch format
<input type="checkbox"/>	Pre- and post-development drainage area exhibits including outfall location(s), site conditions, analysis points within the zone of influence. Drainage area maps shall be provided in a 24-inch by 36-inch format to a scale no less than 1 inch = 30 feet (unless approved otherwise on a case by case basis). Large developments or tracts of land, where a smaller scale can limit the number of sheets and break lines may provide adequate justification for utilizing a scale smaller than 1 inch = 30 feet
<input type="checkbox"/>	Results from modeling analyses
<input type="checkbox"/>	Hydrographs for the 1-, 10-, and 100-year 24-hour storm events
<input type="checkbox"/>	Zone of Influence identified through application of the 10% rule (SWMDM Section 2.8)
<b>Mitigation Actions (Check as appropriate):</b>	
<i>If post-development discharges are higher than pre-development discharges for the same frequency storm event, then check that one of the following has been completed:</i>	
<input type="checkbox"/>	Hydraulic analysis has been provided to demonstrate that peak discharge increase does not result in an increase in water surface elevations by more than 0.04 feet at any analysis point
<input type="checkbox"/>	An on-site green stormwater infrastructure volume control device or SCM has been provided such that the post-development discharges do not exceed the pre-development discharges at each analysis point
<input type="checkbox"/>	Development may propose offsite solutions to mitigate development impacts, pending City coordination and approval

### III. PROFESSIONAL CERTIFICATION

Name: \_\_\_\_\_

Contact Email: \_\_\_\_\_

Contact Phone Number: \_\_\_\_\_

Professional Seal: