

## Appendix M: References and Resources

### **M.1 References**

The following documents provide more detailed information on many aspects of BMP design than is found in this Manual. These resources may be useful for those looking to develop greater understanding of individual BMPs or stormwater design in general. Recommendations in these resources may be used to inform BMP designs; however, where conflicts occur between these resources and the Manual, the requirements of the Manual prevail.

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## **M.2 Resources for Natural Resources Survey**

<b>Resource Group</b>	<b>Resource Type</b>	<b>Sources for Information</b>
General Resources	<ul style="list-style-type: none"> <li>• Topography</li> <li>• Natural Drainage Divides</li> <li>• Natural Drainage Patterns</li> <li>• Natural Drainage Features (e.g., Swales, Basins, Depressional Areas)</li> <li>• Soils</li> <li>• Erodible Soils Comes with soil survey</li> <li>• Steep Slopes (e.g., Areas with Slopes Greater</li> </ul>	<p>LiDAR: <a href="https://coast.noaa.gov/dataviewer/index.html#/lidar/search/">https://coast.noaa.gov/dataviewer/index.html#/lidar/search/</a></p> <p>Major basin boundaries: <a href="https://apps.dhec.sc.gov/GIS/ClearingHouse/">https://apps.dhec.sc.gov/GIS/ClearingHouse/</a></p> <p>Soils: <a href="https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx">https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</a></p> <p>Land Cover (NLCD): <a href="https://www.mrlc.gov/data">https://www.mrlc.gov/data</a></p> <p>Land Cover (NOAA C-CAP): <a href="https://coast.noaa.gov/digitalcoast/data/ccapregional.html">https://coast.noaa.gov/digitalcoast/data/ccapregional.html</a></p>

	<p>Than 15%) Can determine from DEM or query soil types with steep slopes. Recommend the former for accuracy.</p> <ul style="list-style-type: none"> <li>•Trees and Other Existing Vegetation – Can use NLCD data to get forest land cover</li> <li>•Impervious surfaces</li> <li>•Protected Lands</li> </ul>	<p><u>County Level LIDAR</u>  <a href="http://www.dnr.sc.gov/GIS/lidarstatus.html">http://www.dnr.sc.gov/GIS/lidarstatus.html</a></p> <p><u>NLCD impervious surface -</u>  <a href="https://www.mrlc.gov/data/type/urban-imperviousness">https://www.mrlc.gov/data/type/urban-imperviousness</a></p> <p><u>Protected Lands (PAD-US) - LINK</u></p> <p><u>TNC</u></p>
<p>Freshwater Resources</p>	<ul style="list-style-type: none"> <li>•Rivers – NHD or state level data should be available</li> <li>•Perennial and Intermittent Streams – This distinction might not be available.</li> <li>•Freshwater Wetlands – National Wetland Inventory</li> </ul>	<p>NHD: <a href="https://www.usgs.gov/core-science-systems/ngp/national-hydrography">https://www.usgs.gov/core-science-systems/ngp/national-hydrography</a></p> <p>Water classifications (view only):  <a href="https://gis.dhec.sc.gov/watersheds/">https://gis.dhec.sc.gov/watersheds/</a></p> <p>NWI: <a href="https://www.fws.gov/wetlands/index.html">https://www.fws.gov/wetlands/index.html</a></p>
<p>Estuarine Resources</p>	<ul style="list-style-type: none"> <li>•Tidal Rivers and Streams I think we can get all of this from NWI. Tidal influence might not be denoted.</li> <li>•Tidal Creeks</li> <li>•Coastal Marshlands</li> <li>•Tidal Flats</li> <li>•Scrub-Shrub Wetlands</li> </ul>	<p>NOAA C-CAP classification scheme includes palustrine forested wetland, palustrine scrub/shrub wetland, palustrine emergent wetland, estuarine forested wetland, estuarine scrub/shrub wetland, estuarine emergent wetland, palustrine aquatic bed, and estuarine aquatic bed</p> <p><u>County Level LIDAR Breaklines (with terrain dataset)</u>  <a href="http://www.dnr.sc.gov/GIS/lidarstatus.html">http://www.dnr.sc.gov/GIS/lidarstatus.html</a></p>
<p>Marine Resources</p>	<ul style="list-style-type: none"> <li>•Near Coastal Waters</li> <li>•Beaches</li> <li>•Shoreline</li> </ul>	<p>NOAA C-CAP classification scheme includes unconsolidated shore</p> <p>DHEC OCRM - <a href="https://apps.dhec.sc.gov/GIS/ClearingHouse/">https://apps.dhec.sc.gov/GIS/ClearingHouse/</a>          ←look under OCRM from drop down “List GIS Layers by DHEC...”</p>

Groundwater Resources	<ul style="list-style-type: none"> <li>•Groundwater Recharge Areas</li> <li>•Wellhead Protection Areas</li> </ul>	<p><a href="https://scdhec.gov/environment/bureau-water/groundwater-use-reporting/groundwater-management-planning/groundwater-2">https://scdhec.gov/environment/bureau-water/groundwater-use-reporting/groundwater-management-planning/groundwater-2</a></p> <p><a href="http://hydrology.dnr.sc.gov/well-database.html">http://hydrology.dnr.sc.gov/well-database.html</a></p> <p>DHEC Watershed atlas - <a href="https://gis.dhec.sc.gov/watersheds/">https://gis.dhec.sc.gov/watersheds/</a> Check under Public Water supply tab in layer contents for protection areas</p>
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Resource Group	Resource Type	Sources for Information
Terrestrial Resources	<ul style="list-style-type: none"> <li>•Dunes</li> <li>•Maritime Forests</li> <li>•Marsh Hammocks</li> <li>•Evergreen Hammocks</li> <li>•Canebrakes</li> <li>•Bottomland Hardwood Forests</li> <li>•Beech-Magnolia Forests</li> <li>•Pine Flatwoods</li> <li>•Longleaf Pine-Wiregrass Savannas</li> <li>•Longleaf Pine-Scrub Oak Woodlands</li> </ul>	<ul style="list-style-type: none"> <li>• Forest inventory analysis (FIA). The SC Forestry Commission would have that data</li> <li>•Natural Communities of SC <a href="https://dc.statelibrary.sc.gov/handle/10827/30179">https://dc.statelibrary.sc.gov/handle/10827/30179</a></li> </ul>
Other Resources	<ul style="list-style-type: none"> <li>• Shellfish Harvesting Areas</li> <li>•Floodplains – FEMA data available nationally</li> <li>•Aquatic Buffers</li> <li>•Other High Priority Habitat Areas as described by South Carolina Department of Natural Resources</li> </ul>	<ul style="list-style-type: none"> <li>•FEMA: <a href="https://msc.fema.gov/portal/home">https://msc.fema.gov/portal/home</a></li> <li>•SCDHEC: <a href="https://apps.dhec.sc.gov/GIS/ClearingHouse/">https://apps.dhec.sc.gov/GIS/ClearingHouse/</a></li> <li>•GAP/species richness/habitat/etc. data <a href="http://www.dnr.sc.gov/GIS/gap/mapping.html">http://www.dnr.sc.gov/GIS/gap/mapping.html</a></li> <li>•Intertidal Oyster Reefs - <a href="http://www.dnr.sc.gov/GIS/descoysterbed.html">http://www.dnr.sc.gov/GIS/descoysterbed.html</a></li> <li>•Shellfish harvesting areas - <a href="#">Link</a></li> </ul>