


Stormwater Wetland at Bessemer City County Park

Region ID: NC
Workspace ID: NC20220919163858352000
Clicked Point (Latitude, Longitude): 35.26873, -81.29657
Time: 2022-09-19 12:39:17 -0400



Delineation for stormwater wetland to treat runoff from Bessemer City Park and Bessemer City Middle School. Drainage area to the proposed wetland is approx. 37 acres

 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BASINPERIM	Perimeter of the drainage basin as defined in SIR 2004-5262	1.56	miles
BSLDEM30FT	Mean basin slope, based on slope percent grid	6.89	percent
CSL10_85fm	Change in elevation between points 10 and 85 percent of length along main channel to basin divide divided by length between points ft per mi	252.99	feet per mi
DRNAREA	Area that drains to a point on a stream	0.0579	square miles
ELEV	Mean Basin Elevation	870	feet
ELEVMAX	Maximum basin elevation	939	feet
I24H50Y	Maximum 24-hour precipitation that occurs on average once in 50 years	7	inches
LC01BARE	Percentage of area barren land, NLCD 2001 category 31	0	percent
LC01CRPHAY	Percentage of cultivated crops and hay, classes 81 and 82, from NLCD 2001	47.2	percent
LC01DEV	Percentage of land-use from NLCD 2001 classes 21-24	25.8	percent

Parameter Code	Parameter Description	Value	Unit
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	27	percent
LC01HERB	Percentage of herbaceous upland from NLCD 2001 class 71	0	percent
LC01IMP	Percent imperviousness of basin area 2001 NLCD	6.95	percent
LC01SHRUB	Percent of area covered by shrubland using 2001 NLCD	0	percent
LC01WATER	Percentage of open water, class 11, from NLCD 2001	0	percent
LC01WETLND	Percentage of wetlands, classes 90 and 95, from NLCD 2001	0	percent
LC06BARE	Percent of area covered by barren rock using 2006 NLCD	0	percent
LC06DEV	Percentage of land-use from NLCD 2006 classes 21-24	25.8	percent
LC06FOREST	Percentage of forest from NLCD 2006 classes 41-43	27	percent
LC06GRASS	Percent of area covered by grassland/herbaceous using 2006 NLCD	0	percent
LC06IMP	Percentage of impervious area determined from NLCD 2006 impervious dataset	6.95	percent
LC06PLANT	Percent of area in cultivation using 2006 NLCD	47.2	percent
LC06SHRUB	Percent of area covered by shrubland using 2006 NLCD	0	percent
LC06WATER	Percent of open water, class 11, from NLCD 2006	0	percent
LC06WETLND	Percent of area covered by wetland using 2006 NLCD	0	percent
LC11BARE	Percentage of barren from NLCD 2011 class 31	0	percent
LC11CRPHAY	Percentage of cultivated crops and hay, classes 81 and 82, from NLCD 2011	47.2	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	25.8	percent
LC11FOREST	Percentage of forest from NLCD 2011 classes 41-43	27	percent
LC11GRASS	Percent of area covered by grassland/herbaceous using 2011 NLCD	0	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	6.9	percent
LC11SHRUB	Percent of area covered by shrubland using 2011 NLCD	0	percent
LC11WATER	Percent of open water, class 11, from NLCD 2011	0	percent
LC11WETLND	Percentage of wetlands, classes 90 and 95, from NLCD 2011	0	percent
LC92FOREST	Percentage of forest from NLCD 1992 classes 41-43	44.1	percent
LFPLENGTH	Length of longest flow path	0.485	miles
LU92BARE	Percent of area covered by barren rock using 1992 NLCD	0.6	percent
LU92DEV	Percent of area covered by all densities of developed land using 1992 NLCD	12.3	percent
LU92PLANT	Percent of area in cultivation using 1992 NLCD	43	percent
LU92WATER	Percent of area covered by water using 1992 NLCD	0	percent
LU92WETLN	Percent of area covered by wetland using 1992 NLCD	0	percent
MINBELEV	Minimum basin elevation	821	feet
OUTLETELEV	Elevation of the stream outlet in feet above NAVD88	821	feet
PCTREG1	Percentage of drainage area located in Region 1 - Piedmont / Ridge and Valley	100	percent
PCTREG2	Percentage of drainage area located in Region 2 - Blue Ridge	0	percent
PCTREG3	Percentage of drainage area located in Region 3 - Sandhills	0	percent
PCTREG4	Percentage of drainage area located in Region 4 - Coastal Plains	0	percent

Parameter Code	Parameter Description	Value	Unit
PCTREG5	Percentage of drainage area located in Region 5 - Lower Tifton Uplands	0	percent
PRECIP	Mean Annual Precipitation	47.6	inches
PROTECTED	Percent of area of protected Federal and State owned land	0	percent
SSURGOA	Percentage of area of Hydrologic Soil Type A from SSURGO	0	percent
SSURGOB	Percentage of area of Hydrologic Soil Type B from SSURGO	88.1	percent
SSURGOC	Percentage of area of Hydrologic Soil Type C from SSURGO	0	percent
SSURGOD	Percentage of area of Hydrologic Soil Type D from SSURGO	11.9	percent

➤ Urban Peak-Flow Statistics

Urban Peak-Flow Statistics Parameters [Region 1 Piedmont Urban under 3 sqmi 2014 5030]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0579	square miles	0.1	3
LC06IMP	Percent Impervious NLCD2006	6.95	percent	0	47.9

Urban Peak-Flow Statistics Disclaimers [Region 1 Piedmont Urban under 3 sqmi 2014 5030]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Urban Peak-Flow Statistics Flow Report [Region 1 Piedmont Urban under 3 sqmi 2014 5030]

Statistic	Value	Unit
Urban 50-percent AEP flood	26.8	ft ³ /s
Urban 20-Percent AEP flood	40.8	ft ³ /s
Urban 10-percent AEP flood	50.3	ft ³ /s
Urban 4-percent AEP flood	61.9	ft ³ /s
Urban 2-percent AEP flood	70.6	ft ³ /s
Urban 1-percent AEP flood	79.2	ft ³ /s
Urban 0.5-percent AEP flood	87.5	ft ³ /s
Urban 0.2-percent AEP flood	102	ft ³ /s

Urban Peak-Flow Statistics Citations

Feaster, T.D., Gotvald, A.J., and Weaver, J.C., 2014, Methods for estimating the magnitude and frequency of floods for urban and small, rural streams in Georgia, South Carolina, and North Carolina, 2011 (ver. 1.1, March 2014): U.S. Geological Survey Scientific Investigations Report 2014–5030, 104 p. (<http://pubs.usgs.gov/sir/2014/5030/>)

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Application Version: 4.10.1

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1