

SECTION 9

PRIORITIZATION AND RECOMMENDATIONS

As previously noted, the primary goal of this study is to make improvement recommendations to reduce flooding within the Buckhead Creek watershed. Currently, several conveyance systems do not meet the City hydraulic design requirements including sections with Buckhead Creek itself. WK Dickson has provided recommendations that help to reduce or eliminate the identified problems. Success criteria goals used to measure each proposed flood mitigation project included the following:

- Providing improved level of service for roadways and structures.
- Economic feasibility.
- Minimizing stream and wetland impacts.
- Confirming physical feasibility using available GIS and survey data.
- Minimizing easement acquisition.

Three different prioritization lists were developed for the proposed projects identified in Sections 3 and 4: Primary System Improvements, Secondary System Improvements, and Water Quality Projects. The Primary and Secondary System Improvements were prioritized based on the following factors:

- Reduction in frequency and/or severity of residential flooding.
- Reduction in frequency and/or severity of roadways.
- Required sequencing of projects.
- Stream and/or wetland impacts.
- Capital construction cost.
- Easement or land requirements.

In some instances project prioritization will be impacted by the required sequencing of projects to provide the highest possible flood reduction benefits and to reduce or negate any downstream impacts from the proposed projects. Tables 9-1 and 9-2 show the proposed prioritizations for the Primary System and Secondary System Improvements. The City should re-visit the prioritization lists annually to determine if the priorities should change.

Table 9-1: Primary System Improvements Prioritization

Prioritization	Project
1	Coventry Road Culvert and Floodplain Bench
2	Raeford Road Floodplain Bench
3	Devonshire Drive Floodplain Bench and Glenwick Drive Berm
4	Raeford Road Culvert
5	Ferncreek Floodplain Bench and Floodwall
6	Lake Francis Wetland Enhancement/Restoration

PRIORITIZATION AND RECOMMENDATIONS

Table 9-2: Secondary System Improvements Prioritization

Prioritization	Project
1	Roxie Avenue
2	Buckhead Kingsford
3	Raeford Faison
4	Montclair
5	Ashton Road Friar Avenue
6	Ashton Road
7	Ashton Road Ramblewood Drive
8	Kimberly Drive
9	Ferncreek Norwood
10	Coventry
11	Westwood
12	Broyhill

The Devonshire Drive Floodplain Bench and Glenwick Drive Berm should be constructed prior to the Raeford Road Culvert to reduce the impact of increasing the conveyance capacity under Raeford Road. If the City elects to use the Lake Francis Wetland project for mitigation instead of fee-in-lieu, then the wetland restoration would need to be completed prior to the Raeford Road Floodplain Bench or other projects that include significant impacts that require mitigation. The Lake Francis Wetland project may also provide stream credits which could be applied to the Buckhead Kingsford project. The Broyhill Secondary System project should not be completed unless the Raeford Road culvert improvements are completed.

Due to the size of the Roxie Avenue and Buckhead Kingsford projects, the City may choose to phase construction of those projects. If the projects are phased, improvements should generally be constructed downstream to upstream.

Table 9-3 shows the recommended priorities for the water quality projects. As noted in Section 4, the prioritization is based on treatment area, impervious area treated, land ownership and accessibility, and cost.

Table 9-3: Water Quality Improvements Prioritization

Prioritization	Project
1	Mary McCarthur Elementary School – Bioretention Pond and Grassed Swale
2	Douglas Byrd High School – Bioretention Pond
3	Douglas Byrd Middle School – Bioretention Pond
4	Intersection of Sandra Drive & Ireland Drive - Infiltration Basin
5	Ireland Drive Elementary School - Bioretention Pond or Infiltration Basin
6	William H. Owen Elementary School – Bioretention Pond
7	Ashton Road - Extended Detention Wetland