

Stormwater Control Measure	Streambank Protection	Stream Thermal Protection	Bacterial Removal	Nutrient Loading
Green Roof	Good	Good	Good	Poor
Bioretention Cell	Excellent	Good	Excellent	Good
Disconnected Impervious Surface	Good	Good	Good	Fair
Dry Pond	Poor	Poor	Poor	Poor
Filterra	Fair	Good	Good	Fair
Infiltration	Excellent	Excellent	Excellent	Excellent
Level Spreader - Filter Strip	Poor	Poor	Poor	Fair
Permeable Pavement (Detention)	Fair	Good	Good	Fair
Permeable Pavement (Infiltration)	Excellent	Excellent	Excellent	Excellent
Sand Filter	Poor	Fair	Good	Fair
Silva Cell	Excellent	Good	Excellent	Good
StormFilter	Poor	Fair	Fair	Good
Stormwater Wetland	Good	Fair	Good	Fair
Treatment Swale (Dry)	Poor	Fair	Poor	Poor
Treatment Swale (Wet)	Fair	Fair	Poor	Fair
Wet Pond	Fair	Poor	Fair	Poor

# Nutrient Loading in Nutrient Sensitive Waters (NSW)

- Waters subject to excessive vegetation growth that impairs stream usage
- Excess Vegetation can cause
  - Low O2 levels
  - Fish kills
  - Algal blooms
- NCDEQ has developed special stormwater programs to reduce nutrient loading
  - High Nitrogen and/or Phosphorous
    - Neuse
    - Tar - Pamlico
    - Jordan Lake
    - Falls Lake
  - For endangered Carolina heelsplitter
    - Goose, Sixmile, & Waxhaw Creeks



# Green Infrastructure @ Green Square Complex

NCDEQ HQ & Museum of Natural Sciences

Downtown Raleigh, NC

## Green Roof

- Reduces heat radiating from rooftop
- Filters and treats stormwater runoff

## Cistern

- Stores stormwater runoff
- Can be used for grey water applications
  - Flush toilets
  - Water green roof between storm events
- Reduces stormwater runoff volume



# Green Infrastructure @ Capitol Complex

Halifax Mall / Parking Deck 65

Downtown Raleigh, NC

Green Roof

- Underground parking deck
- Filters and treats stormwater runoff
- Reduces stormwater runoff volume
- Open greenspace for concerts, events, etc...





What are the benefits of Riparian Buffers: a) Filtering Stormwater Runoff, b) providing flood control (storage), c) stabilization of stream banks, d) adding scenic value to communities, e) absorbing excess nutrients, f) preventing erosion, g) providing fish and wildlife habitat, h) moderating temperatures of surface waters, or i) all of the above.