



## Stormwater Management Concepts

Overall Theme: Create an urban redevelopment area in close proximity to a high quality water resource in such a manner that it becomes a model for such redevelopment and a showplace for multiple stormwater management methods in one location.

### U.S. HIGHWAY 14 STORM SEWERS

#### Without Meandering:

- Construct first flush diversion and temperature attenuation beds providing for subsurface discharge to the Creek
- Replace existing storm sewers with perforated pipelines with clear stone bedding

#### With Meandering (NOTE: ONLY MEANDERING CREATES AREAS SUITABLE FOR TREATING EXISTING PIPED STORMWATER DISCHARGES, AS WELL AS CREATING MUCH BETTER TREATMENT AREAS FOR LAGOON STREET RUNOFF):

- Construct biofiltration/bioretention areas in strategic locations to treat first flush stormwater and to create subsurface discharges of these first flush waters
- Replace existing storm sewers with perforated pipelines with clear stone bedding

### REDEVELOPMENT AREA BETWEEN U.S. HIGHWAY 14 AND BLACK EARTH CREEK

- Create public parking lot with permeable pavement, using permeable paver systems or plastic grid systems
- Assist private parking lot owners in installing permeable concrete parking lots, permeable asphalt parking lots, or stone infiltration trenches around conventionally paved parking lots
- Create compact biofiltration/bioretention areas with vertical sides to handle roof runoff (where no basements exist)
- Create biofiltration/bioretention areas blending into landscaping for sheet runoff
- Collect Lagoon Street runoff by curb & gutter on stream side and convey to infiltration areas by overland flow or grated concrete trenches to preserve available head
- Utilize Green Roofs, if possible
- Utilize treebox filters where appropriate