

Rhode Island Stormwater Management Regulations

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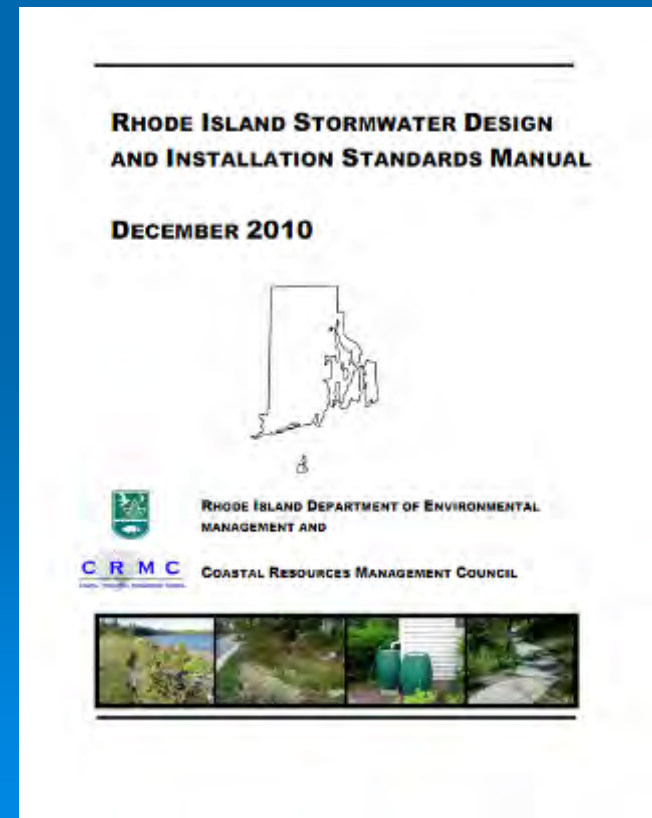
Statewide Stormwater Requirements

- The Smart Development for a Cleaner Bay Act of 2007 (RIGL Section 45 Chapter 61.2)
 - Requires RIDEM and CRMC to update stormwater standards for development
 - Requires update of RI Stormwater Design and Installation Standards (RISDIS) Manual
 - Requires LID as the primary method of stormwater management

The way that we manage stormwater is changing!

New RISDIS Manual

- LID site planning
- Smaller-scale, distributed practices for
- Water quality treatment
- Recharge / Infiltration



From this:



To this:



What does this mean?

- Any project that triggers DEM or CRMC stormwater requirements must comply with the new RISDIS Manual
 - Freshwater Wetlands Permits
 - Water Quality Certifications
 - UIC Permits
 - RIPDES Permits
 - Coastal projects (RICRMP 300.3)
 - Freshwater Wetlands in the Vicinity of the Coast

CRMC Stormwater Regulations

- Section 300.6 of the RI Coastal Resources Management Program (“Red Book”), Treatment of Sewage and Stormwater

<http://www.crmc.ri.gov/regulations.html>

Where Do Regulations Apply?

- Within CRMC jurisdiction
- To projects that meet the thresholds and definitions within the program



CRMC Jurisdiction

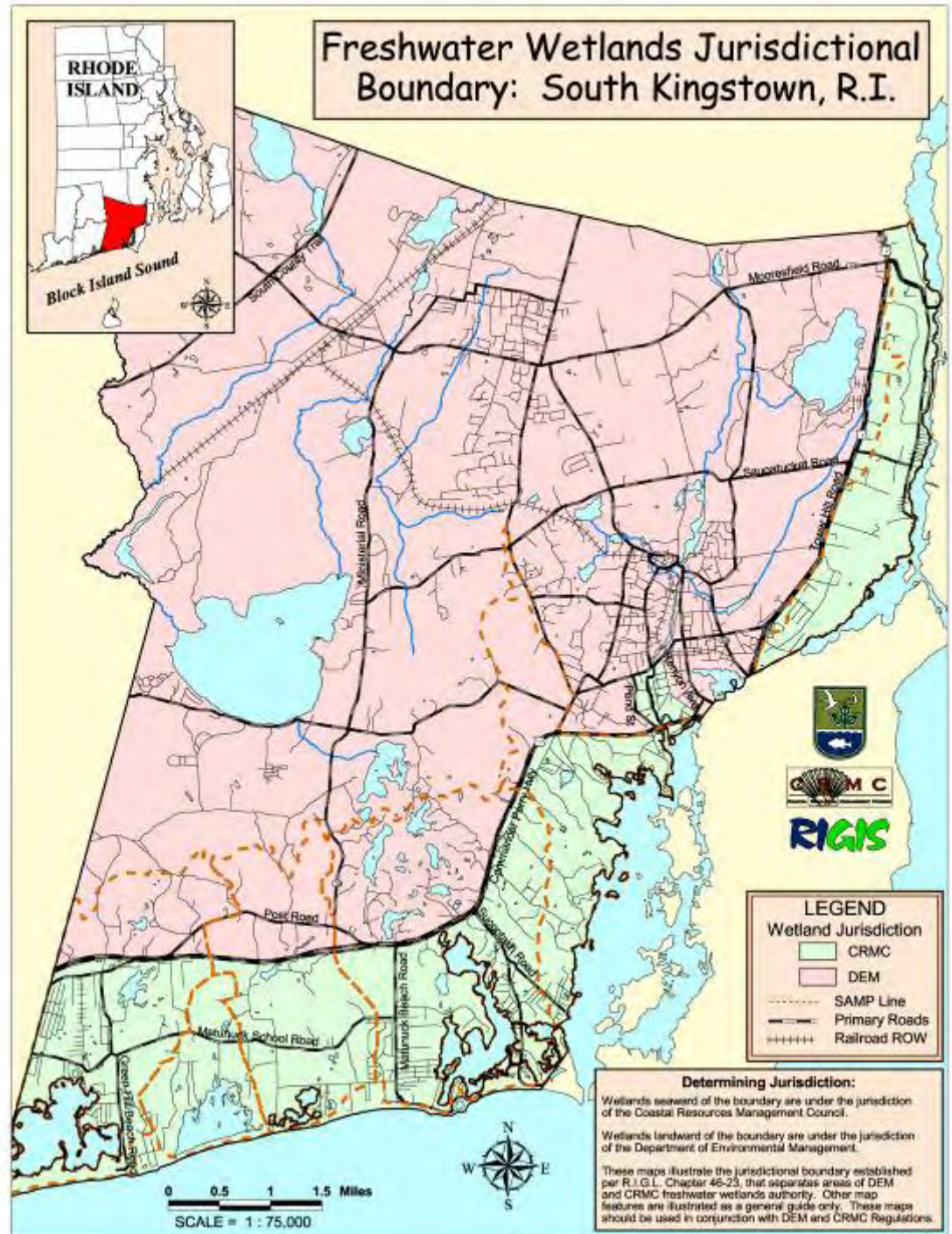
- Tidal waters
- Shoreline Features
- Areas contiguous to shoreline features
 - 200ft. from inland edge



Coastal Features

- Tidal and Coastal Pond Waters (§ 200)
- Beaches (§ 210.1)
- Barriers and Spits (§ 210.2)
- Coastal Wetlands (§ 210.3)
- Headlands, Bluffs, and Cliffs (§ 210.4)
- Rocky Shores (§ 210.5)
- Manmade Shorelines (§ 210.6)
- Dunes (§ 210.7)

Freshwater Wetlands in the Vicinity of the Coast



Thresholds (effective May 2011)

- For coastal projects
 - 600 square foot structural (rooftop) expansion
 - New driveways and parking areas
- For projects subject to Freshwater Wetlands in the Vicinity of the Coast rules and regs
 - Thresholds within FWWLVC rules apply
 - Specific exemptions for some activities and some additions / accessory structures related to single family residences

Larger Projects

Must comply with 11 Minimum Standards in RISDIS Manual by meeting specific performance criteria

- LID Site Planning
- Groundwater Recharge
- Water Quality
- Channel Protection
- Flood Protection
- Redevelopment
- Pollution Prevention
- High Potential Pollutant Loads
- Illicit Discharges
- Erosion and Sedimentation Control
- Operation and Maintenance

Redevelopment Projects

- Projects that disturb 5000 square feet or more of existing impervious surface
- Must comply with Standard 6 in the RISDIS manual

(maintenance activities are exempt)

Projects on Individual Residential Lots

- Must meet manual to “max extent practicable”
- Stormwater management not typically required under DEM regs
- CRMC will now require stormwater management for
 - New roof area of 600 ft² or more*
 - New driveways and parking areas
- Projects on individual residential lots can choose to comply with CRMC guidance

Individual Residential Lot Guidance

- Focuses on treating water quality volume
- CRMC has created guidance to assist applicants with siting and sizing residential stormwater management practices
- Includes required elements for each practice, as well as sizing tables
- Extremely simple, “cookbook” approach geared towards homeowners
- Cooperative extension sizing method (sizing factors based on soil texture)

Practices for Residential Application

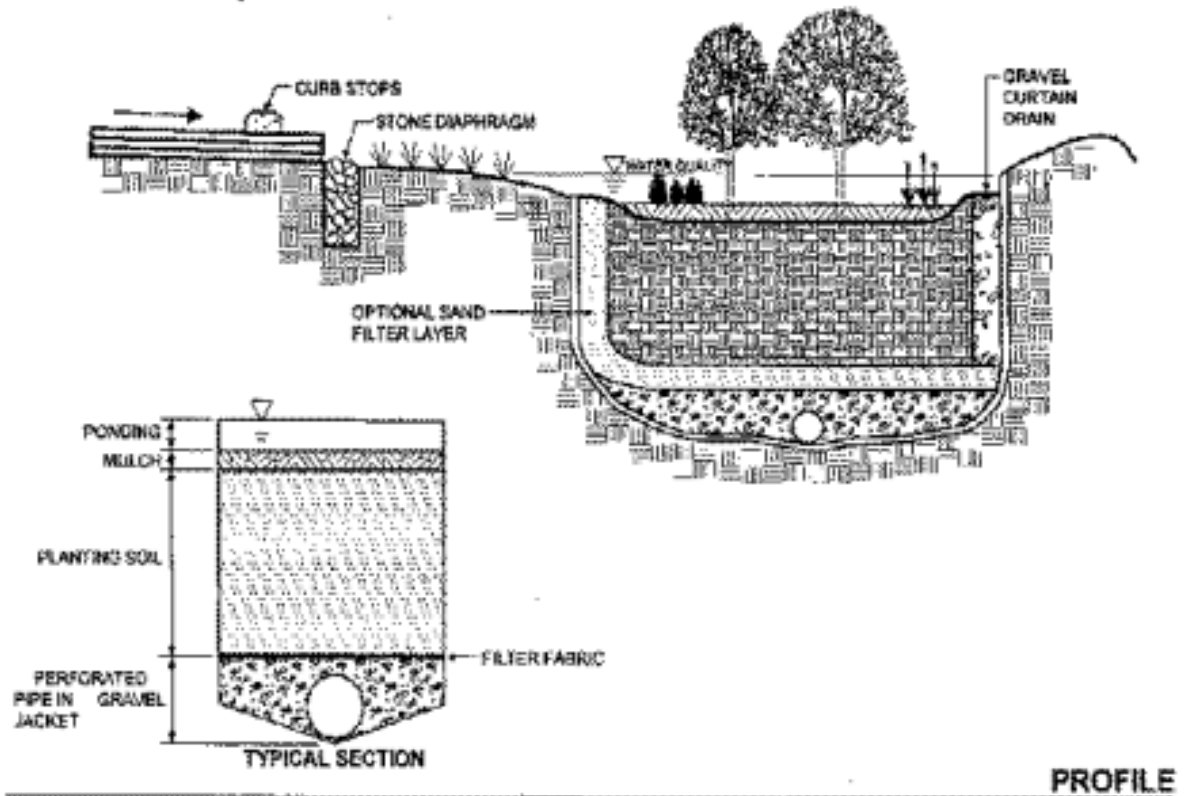
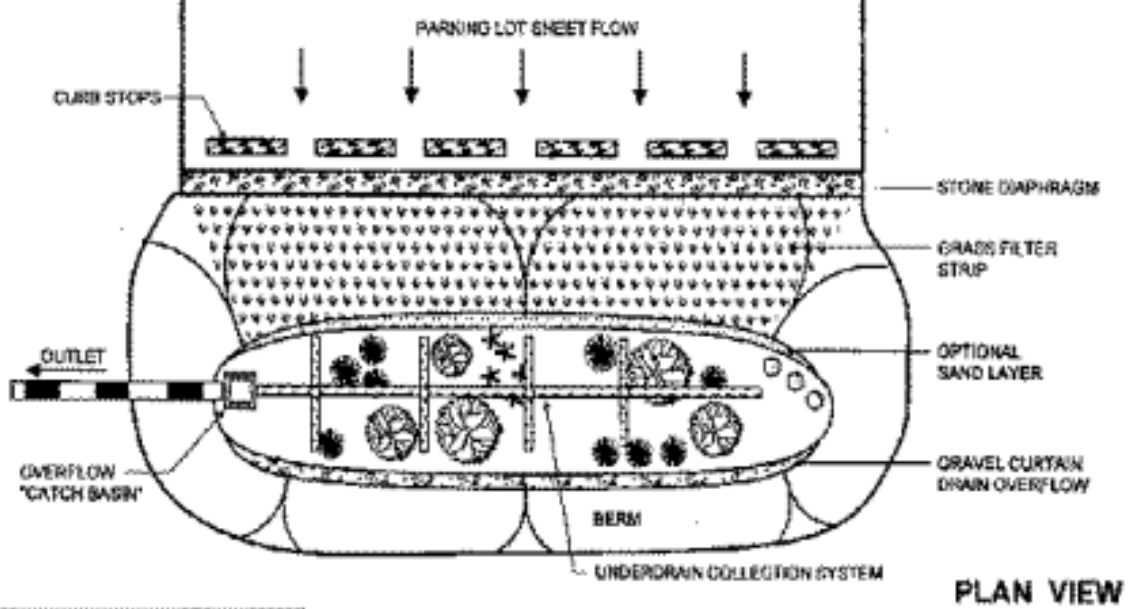
- Rain Gardens
- Infiltration Trenches
- Dry Wells
- Vegetated Swales
- Permeable Paving



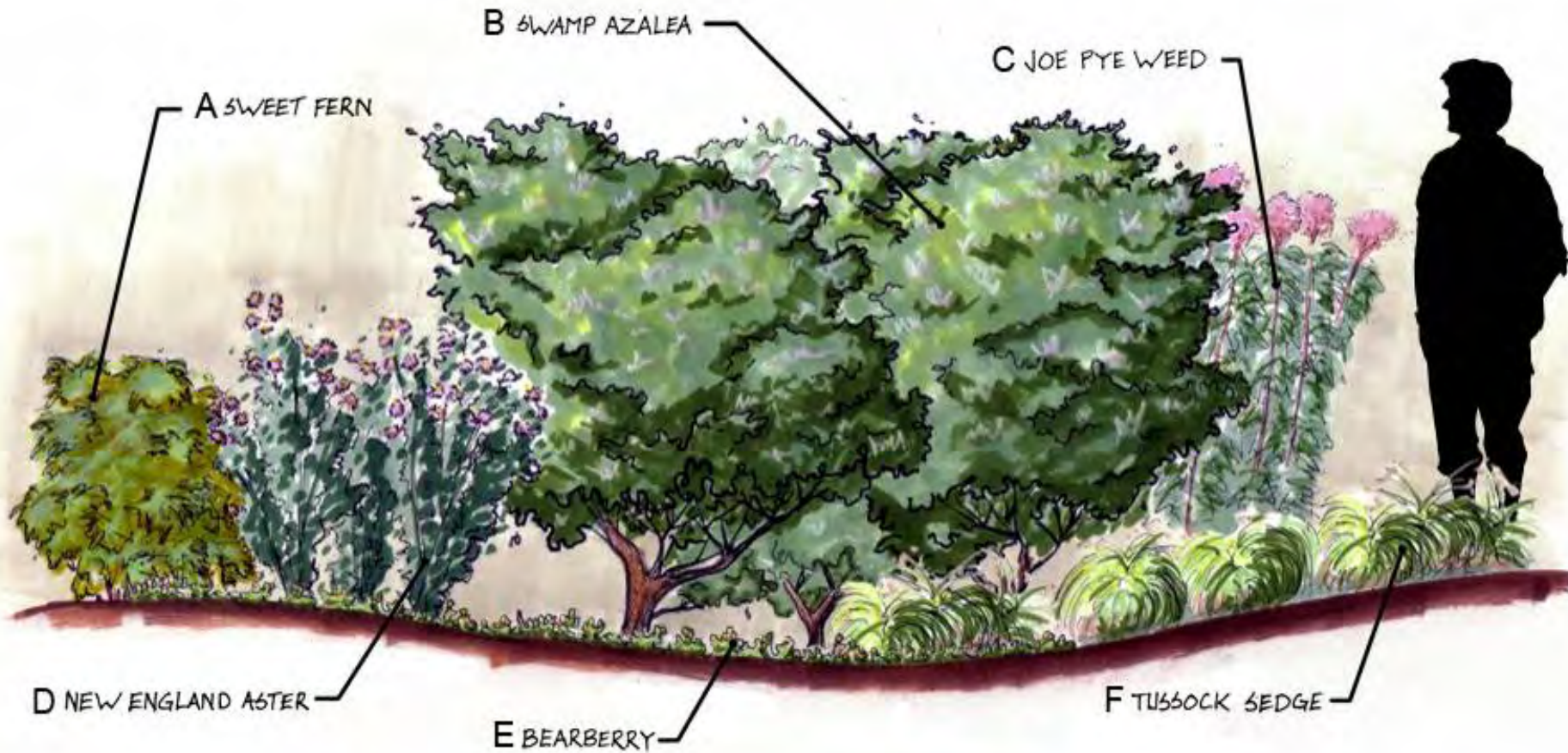
Similar But Not the Same!

- **Rain gardens** are simple, small-scale infiltration practices installed in native soils
- **Bioretention** cells are more highly engineered practices that include pre-treatment, a specific engineered soil mix, and are often have liners, underdrains and an overflow system

Bioretention

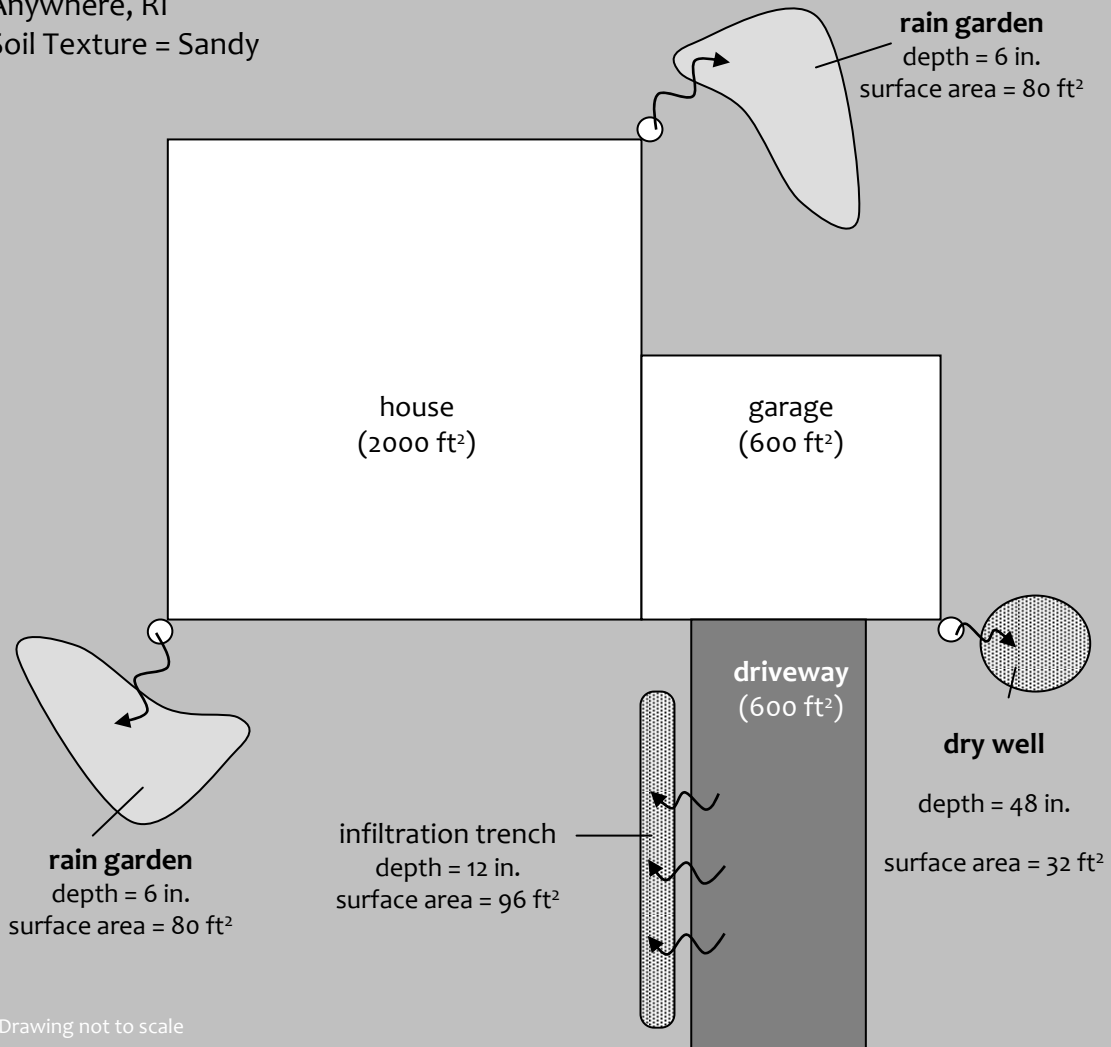


Rain Garden



Example Site Plan

Residential Lot
123 Main St.
Anywhere, RI
Soil Texture = Sandy



*Drawing not to scale

Additional Legislation

➤ **RIGL 5-51** State Board of Examiners of Landscape Architects

- Under “Definitions” states that:

(ii) [Non-decorative planting] Plans or designs intended or used at any time or in any manner for or in furtherance of the purpose of obtaining federal, state, or local building, construction, or related permits or like authorizations...

...fall under the profession of landscape architecture, which no person may engage in without a license (\$1000 fine)

Plant Selection: Native vs. Non-Native

- Native plants strongly recommended
- Non-natives or cultivars must be chosen from approved lists
 - Appendix B of RISDIS manual
 - CRMC Coastal Plant Guide
- To add a plant to the list, contact Caitlin or Kate