Analysis and Assessment of Thirty Years of Wetland Restoration within the NY/NJ Harbor Estuary

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Salt Marsh/Brackish Marsh

Freshwater Wetlands

Upland Habitat
  Forest
  scrub/Shrub
  Grassland

Stream Restoration

Oyster Habitat
Avian Reintroduction
Fish Passage
  and other species
  specific restoration

Stormwater Structures

Biohabitats
SURVEY:

1. Were performance criteria developed for the project?

2. What project phases were undertaken?

3. Is the project self-sustainable? Or does the project require regular management and maintenance, whether planned or not?

4. Did the project meet the stated objectives? If so, what worked? If not, at what phase did the problem occur?
Common Elements:

Administration
Design
Construction
Oversight

Not so Common:
Feasibility Analysis
Pre- and Post-Monitoring
Management & Maintenance
What we found:

- Diversity of species
- Predominance of Invasive Species
- Lack of Management or Maintenance
- Adjacent Properties - Changing Land Use
Salt Marsh/Brackish Marsh

Randalls Island, Manhattan

Met native plant requirements
Created species diversity
Variety of soil types

Focus stages:
Construction
Feasibility
Management

Jamaica Bay, Queens
Freshwater Wetland
More complicated
Fewer implemented

Keys to Meeting Objectives –
Site selection
Locational attributes –
soils, hydrology
Management &
maintenance

Focus stages:
Feasibility
Management & Maintenance
Upland - Forest

Five year canopy closure

All sites require maintenance due to urban environment

Inwood Park, Manhattan

Focus Stages:
Design
Management & Maintenance
Upland - Grassland

Idlewild Park Preserve, Queens

Met project objectives
Managed and maintained

Focus stages:
Feasibility
Management

Mount Loretto, Staten Island
Stream Restoration

Limited Opportunities
Riparian Corridor

Focus Stages:
Feasibility
Design
SUMMARY:

More attention and budget for Feasibility Management & Maintenance

Integrate Stream and Wetland Restoration together with stormwater attenuation

Baseline Assessment
ID Root Causes of Degradation
Layout Restoration Goals & Endpoints
Tie together with M&M Plan
Landscape Approach
    focused on connectivity
Focus on Soils & Hydrology
Thank You!