



TABLE 6. CLASSIFICATION OF IMPACTS AND ACTIONS

Problems in existing or former salt marshes

Hydrologic modification:

- restriction of tides
- restriction of fresh water removal
- increased fresh water inputs to marsh
- ditching of marshes to drain mosquito breeding areas

Soil problems:

- improper (too high or too low) elevation
- pollutants/toxics
- disturbance

Plant problems:

- invasive species: purple loosestrife, *Phragmites*, and salt marsh cattail likely due to hydrology/soil problems

Animal problems:

- waterfowl declines
- mosquitoes
- loss of habitat or access to habitat by fish

Restoration solutions for problems in existing or former salt marshes

Restoration of proper salt marsh hydrology:

- removal of tide gates/obstructions
- enlargement of culverts, bridges
- routing of freshwater away from marsh

Restoration of soils:

- excavation of dredge spoils
- restrict tides to allow salt marsh peat deposits to build naturally
- removal of toxic sediments

Creation of surrogates for normal salt marsh hydrology:

- reconfigure tidal gates and culverts to create fresh marshes within diked areas
- reconfigure, plug and deepen parts of old drainage ditches to support fish habitat as the most effective means of mosquito control
- plug drainage ditches and create large pannes for water fowl

Preservation and conservation efforts/approaches

Restrictions on development:

- Wetlands regulations restricting development
- Mitigation for unavoidable impacts to wetlands
- Salt marsh regulations usually more restrictive than above
- Shoreline protection ordinances
 - along shores bordering salt marshes and salt marsh plants
 - along rivers and streams in coastal watersheds should include provisions for sea level rise of 10 cm (25 years)



APPENDIX A: VIEWS OF PHYSICAL ALTERATIONS







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