



EPA is responding to current and future climate change impacts on coastal salt marshes by helping develop a Climate-change Adaptation Strategy.

Partners, stakeholders, and decision-makers

Stakeholders	Roles of Partners
US Fish and Wildlife Service. Lead organization	Leadership and oversight; monitoring and assessment
RI Dept. Environmental Management.	Water quality and marine fisheries; Permitting
Coastal Resource Management Council	Permitting & legal responsibility; Policy questions
Army Corp Engineers	Technical expertise on marsh restoration and dredging actions
US EPA	Provide technical support on multiple stressor impacts, marsh ecology, and marsh monitoring
The Nature Conservancy	Conduct and monitor living shoreline work; Provide Narrow River results of SLAMM (version 6.1)
Narragansett Bay Estuarine Reserve	Sponsor for dredging program, monitoring
The Norman Bird Sanctuary	Land surveys for birds
University of Rhode Island	Assist in developing monitoring and evaluation of techniques
Save the Bay	Runnel development, monitoring salt marsh conditions (vegetation, soil, landscape)
Audubon Society of Rhode Island	Monitoring, habitat restoration expertise
NOAA	Restoration actions; Protection of essential fish habitat
Local Towns	General assistance, equipment use, permitting
Center for Ecosystem Restoration	Facilitator and organizer of stakeholder meetings

Symptoms of Sea Level Rise:
Eroding shorelines, interior ponding,
marsh plain dieback & tidal channel expansion





Narrow River, RI marsh



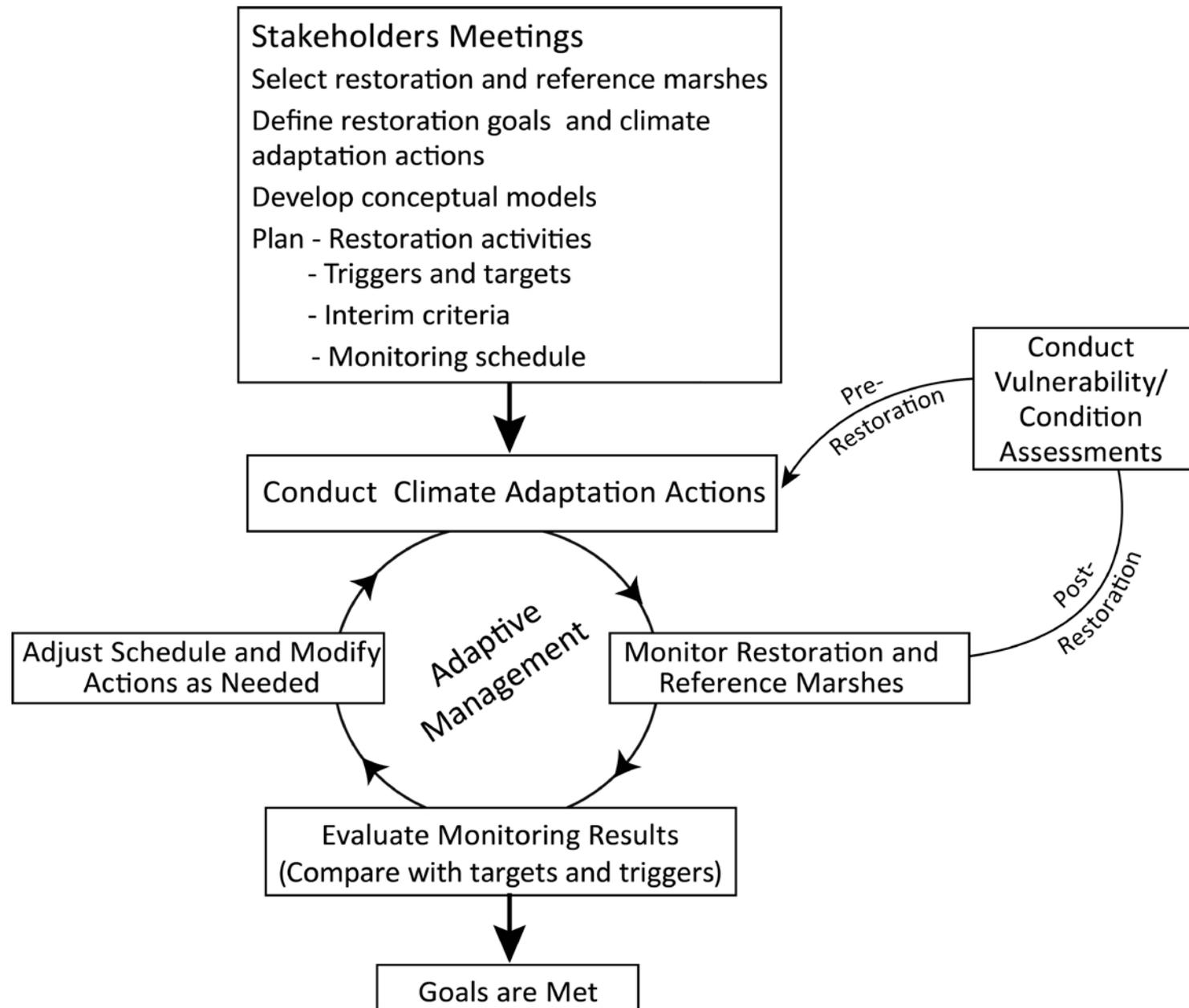


Stakeholders were concerned about :

1. Salt marsh sparrow nesting habitat
2. Flood abatement
3. Water quality maintenance



Climate-change Adaptation Strategy



Build shoreline resistance:

Install coir logs and oyster shell bags (led by TNC)





Increase system resilience:
Restore hydrology and drainage
with creation of sinuous creeks
(led by Prudence Island NERR)



Increase system resilience: Restore hydrology and drainage of the high marsh by hand digging small creeks (runnels), (led by Save the Bay)



Increase system resilience: Thin layer sediment application to increase high marsh elevation, (plans under development, US FWS and CRMC)



Enable marsh transition: facilitate upland migration of marsh; removal of barriers, acquisition of lands (led by US FWS, TNC, & Save the Bay)

