

Today's CHARRM Session

Moderator: Bill Shadel

Presenters:

- Jessie Murray
- Danielle McCulloch
- Brian Marsh

Panel:

- Jim Feaga
- Brian Marsh
- Kaity Ripple

Facilitators:

- Terry Doss
- Junetta Dix
- Martha Maxwell-Doyle
- Ella Rothermel

Part I

Introduction to CHARRM

by Danielle McCulloch and Jessie Murray

Q&A

Part II

Presentation and Panel Discussion

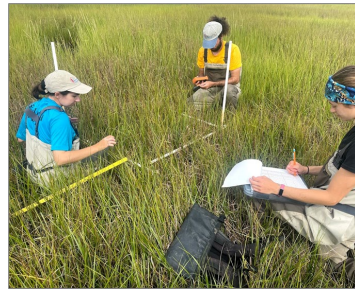
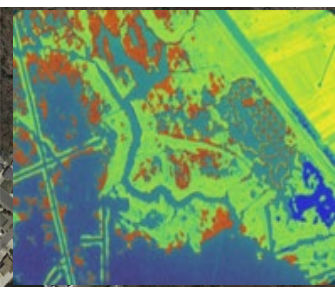
Programmatic approach for assessing salt marsh in Delaware and New Jersey utilizing low-cost, low-disturbance methods for enhancing resilience by Brian Marsh

Q&A and Panel Discussion

Part III

Streamlining the Regulatory Review of Coastal Habitat Projects

Breakout session Facilitated by CHARRM members



Introduction to the Mid-Atlantic Coastal Habitat and Aquatic Resource Research & Monitoring (CHARRM) Workgroup



Danielle McCulloch
Coastal Program Biologist
U.S. Fish and Wildlife Service



Jessie Murray
Marine Habitat Resource Specialist
NOAA Fisheries



Outline

- Who are we?
- How did we get here?
- What have we accomplished?
- What are we doing next?
- How can you get involved?

CHARRM Workgroup

Coastal Habitat and Aquatic Resource Research and Monitoring Workgroup

Regulatory Agencies & Resource Managers
Restoration Practitioners
Research Scientists

Tackle issues related to coastal habitat restoration
and the resources impacted by restoration



US Army Corps
of Engineers®



DELAWARE CENTER FOR THE
INLAND BAYS
Research. Educate. Restore.



How we got here:

- **Step 1:** Got folks from 3 target groups together
- **Step 2:** Created an open forum for collaboration
- **Step 3:** Held Listening Sessions to:
 - ID research/ data collection needs
 - ID hurdles
 - ID opportunities for efficiencies
 - ID learning opportunities
 - ID action items
- **Step 4:** Informed Action and developed a plan
- **Step 5:** Repeat!*

*Members inform CHARRM action items

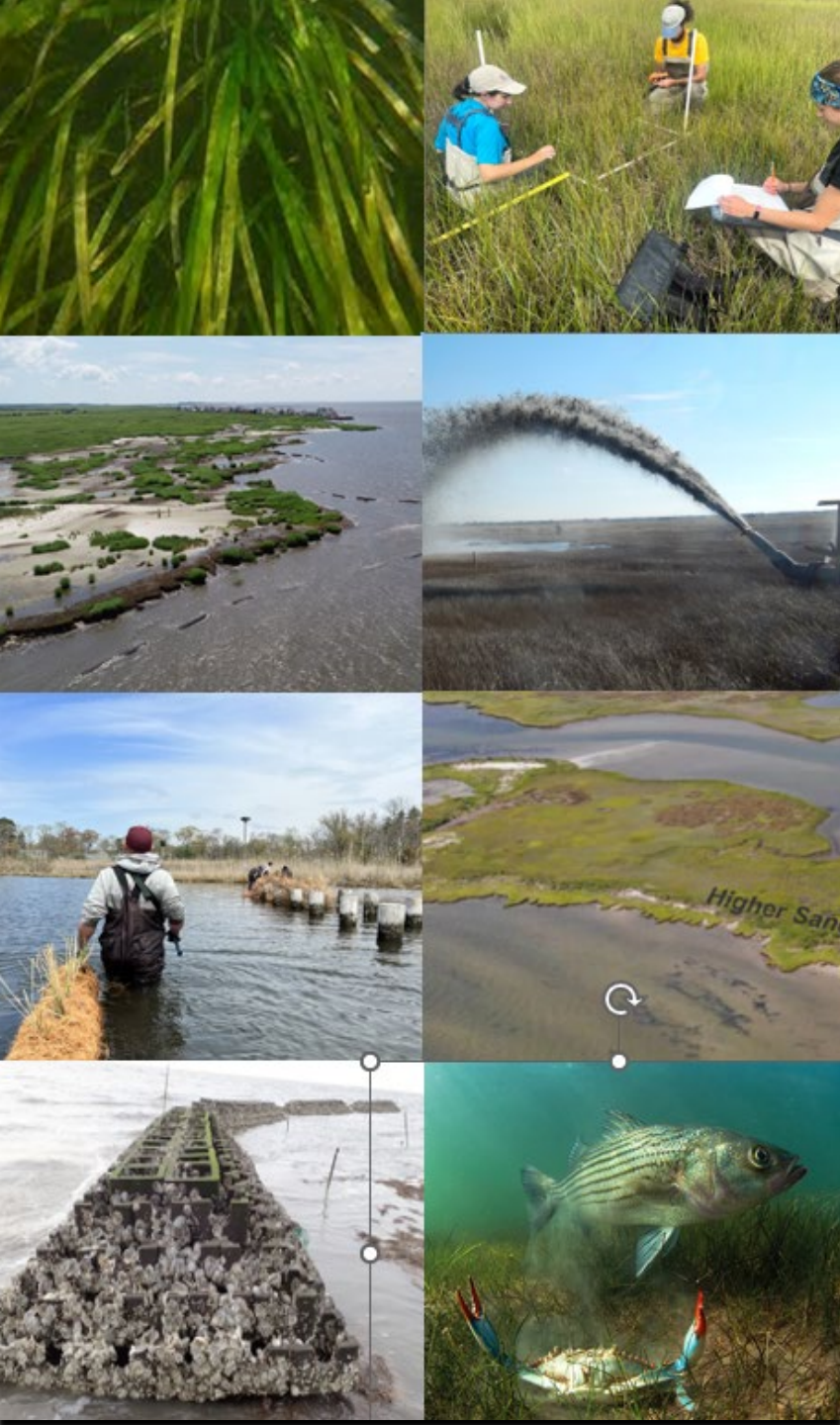


CHARRM Objectives



1. **Facilitate communication and collaboration** among:
 - Resource managers and regulatory agencies
 - Restoration practitioners
 - Research scientists
2. **Increase efficiencies** among the 3 target groups
3. **Facilitate science-based coastal habitat restoration** in our region
4. Ensure **data collection** around restoration work meets shared objectives and **answers outstanding resource questions**
 - Prioritize data collection to answer outstanding questions

What does CHARRM do?



- **Host an open forum for free discussion among the 3 groups**
- Collaborate on restoration and monitoring at landscape scale
 - SAV, EFH, HAPC, Shellfish; thinking big picture instead of single-species or single habitat-focus
 - Standardize monitoring for comparison across projects
- Keep the targets groups up-to-date on the latest science and projects
 - Share project lessons learned
 - Present new projects/ novel tactics
 - Review current and novel projects (outside of JPP or permitting processes)
- Provide resource manager input for other workgroups, guidance documents and community of practices
- Seek funding for data collection and research to answer outstanding resource agency questions
- Help streamline permitting processes

CHARRM Workflow

1. ASSEMBLE

- Resource Managers & Regulatory Agencies
- Research Scientists
- Restoration Practitioners

2. LISTEN

- Hold an open forum for collaboration
- Create listening sessions
- ID information gaps, communication hurdles, etc.

4. COLLABORATE

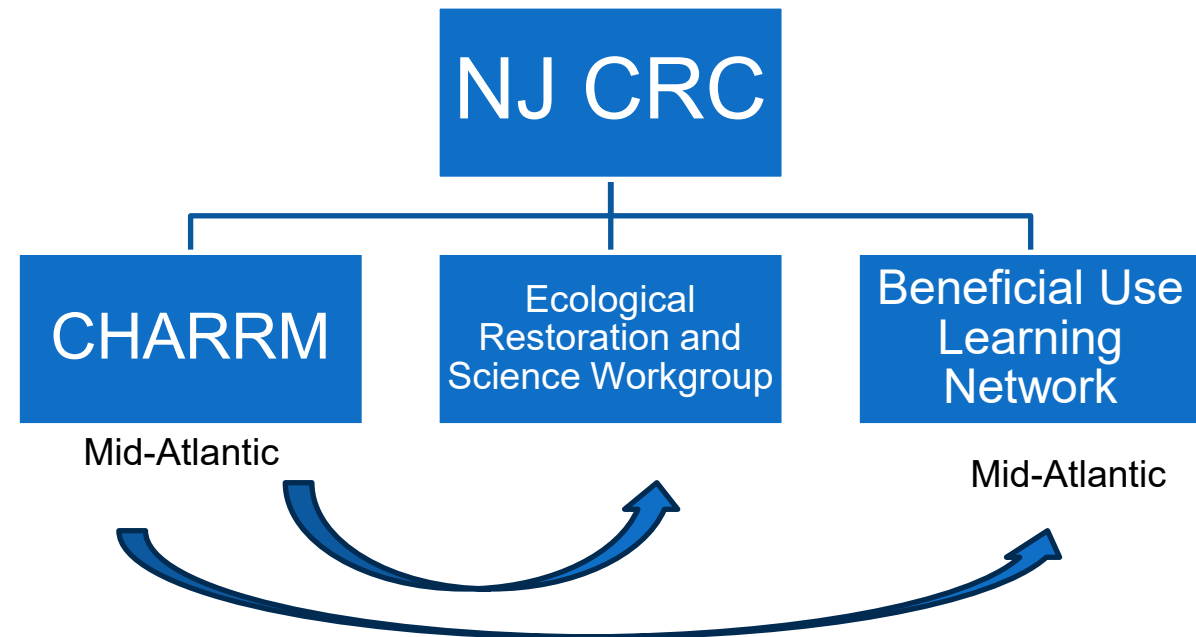
- Find efficiency opportunities
- Develop/ update guidance docs
- Establish/standardize success metrics
- Develop proposals for funding research
- Streamline permitting review processes for all

3. EDUCATE

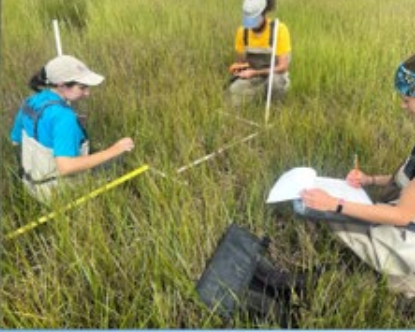
- Facilitate discussions around relevant topics
- Use Learning Webinars for knowledge integration and to fuel discussions

NJ CRC x CHARRM

- NJ Coastal Resilience Collaborative
 - The NJ Coastal Resilience Collaborative (NJCRC) is a network established to foster sustainable and resilient coastal communities and ecosystems by generating informed action.
 - Provides resources for these workgroups
- NJ CRC and CHARRM
- CHARRM objectives align with NJ CRC objectives
 - Scale up science-driven and successful coastal habitat restoration, with a resource manager/ regulatory agency lens
 - Knowledge integration and sharing
- CHARRM and NJ CRC Workgroups
 - CHARRM brings in expertise from all Mid-Atlantic watersheds
- nj-crc.org/charrm-work-group



Top Meeting Topics



- SAV / Seagrasses
- Living Shorelines
- Fish / Fish habitat
- Marsh restoration
- Navigating habitat tradeoffs
- Innovative restoration tactics and regulatory concerns
- ID Perceived hurdles, and how to overcome them
- Standardizing monitoring, data collection and success metrics

CHARRM Learning Webinar Series

Seagrasses and SAV: Biology and Basics

Seagrasses and SAV: Regulations and Management

Living Shorelines: Biology and Basics

Living Shorelines Case Studies and Lessons Learned

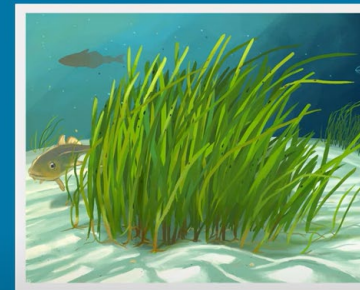
Living Shorelines Novel Tactics

Mid-Atlantic Marshes: Biology, Processes, and Trends

12 hours of webinars!
25+ different experts!

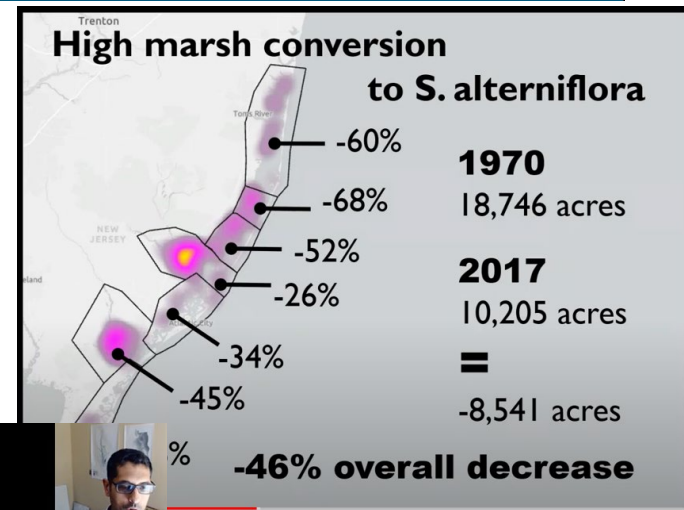
Research we'd love to see...

- BACI and/or BAG studies
- Sediment transport – is it going where you think it is? How much?
- Dredge material compatibility with surrounding sediments and effects on SAV
 - Z talked about the challenges of SAV colonization post-disturbance
 - Can placement of compatible material foster growth?
- Does wave attenuation foster SAV growth on the leeward side?
 - Forked River assessments may yield answers
- Success or failure of active SAV restoration in project
- Innovative ideas are welcome for discussion



Find recorded webinars at:

nj-crc.org/charrm-work-group



Geomorphic vulnerability of salt marshes a combination of processes

Edge erosion controlled by waves, elevation, marsh characteristics

Internal deterioration controlled by multiple factors (SLR, sediment deficits, herbivory, salinity stress) but ultimately diagnosed through open water conversion and elevation loss

Migration potential a function of slope, inundation frequency (tidal and storm), salinity, land use, canopy cover

USGS

5:15 / 1:54:41

DM JS
McCall... Small...
AR KM
Hug... Kim McK...
JM MY
Jessi M... Yeph...
TD RB
Terry Doss Rob...
ML Conover...
TG +26

What's next?

2024 Action Items

- Continue the Webinar Series
next topics:
 - Today's presentation
LS and SAV interactions?
- Summarize webinars into easy-to-reference factsheets
- Today's Session
 - Expand CHARRM's reach/ network
Interested? Sign up!
- CHARRM Field trip series
- The NJ CRC WG in-person meeting
- Develop guidance documents to streamline permit review



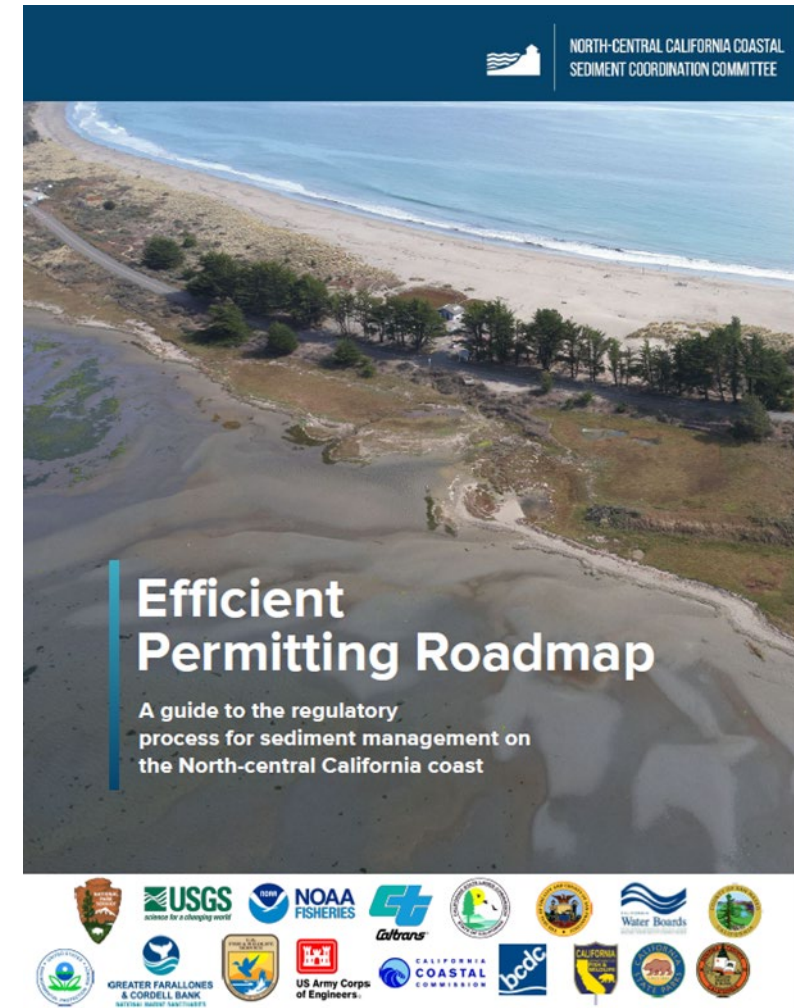
Develop guidance documents to streamline permit review

For Permit Reviewers:

- Factsheets and guides on latest restoration projects
- Coalesce lessons learned from BUDM, LS, and other NbS

For applicants:

- Coalesce permit application questions for ecological restoration
- Show species restrictions timelines
- Easy-to-reference graphics and info
- Plain language explanations
- Tables and checklists



Develop guidance documents to streamline permit review

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Table 1. Which Agencies Do You Need to Contact?

Questions that cover the basic triggers associated with the common regulations that are encountered in North-Central California, and the relevant agencies from which you are likely to require permits. Run through all the questions and use your resulting list to delve into the details of the requirements of each agency in Table 2.

	USACE	EPA	USFWS	NOAA ONMS	NOAA NMFS	NPS	CCC	CDFW	RWQCB	CSLC	State Parks	Caltrans	BCDC	SHPO	Tribes	County, Landowner, other Municipality
Will you be working in Waters of the US? (1)	X	X					X	X								
Will you be importing sediment? If so, will it be beneficially reused dredged material?	X	X					X	X					X			
Will you be working in a tidal marsh?	X						X	X	X							
Will your project propose the placement structures, sediment or other materials below Mean High Water?	X	X	X				X	X	X	X	X		X			
Are there listed species likely to be found in your project site? (2)			X	X			X									
Are there marine mammals likely to be found within your project site?				X												
Is your project in an area where sea otters have been known to be found?			X				X									
Are there other migratory birds or seabird colonies likely to be found in your project area?			X													
Will you be working on a state owned road?												X				
Do you know if any historic, tribal, or other cultural resources might exist? (3)														X	X	
Will you be working within or adjacent to a national marine sanctuary? (4)				X												
Will you be working within a state marine protected area? (5)								X								
Will you be working in a national or state park or designated/potential Wilderness? (6)					X					X						
Will your project be on sovereign/state-owned lands? (7)									X							
Will your project be on county owned land, a regional or county park, or other municipality? (8)																X
Will your project involve county road rights-of-way (e.g., haul, transport, construction)?																X
If you are proposing work on private land, do you have the landowner's consent?																X

1 Waters of the United States [epa.gov/wotus/about-waters-united-states](https://www.epa.gov/wotus/about-waters-united-states) and <https://www.spn.usace.army.mil/Missions/Regulatory/Jurisdiction/>

2 State wildlife.ca.gov/Conservation/CESA, Federal [fws.gov/program/endangered-species](https://www.fws.gov/program/endangered-species), and <https://ipac.ecosphere.fws.gov/>

Table 2. Quick Guide to Requirements by Agency

Permit and compliance requirements by agencies that are associated with the common regulations that are encountered in North-Central California sediment management actions.

Agency	Requirement (Permit/ Compliance)	Notes, Key Issues & Concerns, Recommendations
<i>Federal Agencies</i>		
U.S. Army Corps of Engineers (USACE)	<p>Permit: Section 404/10 Individual Permit or General Permit - Clean Water Act/ Rivers and Harbors Act</p> <p>Website: USACE San Francisco District www.spn.usace.army.mil/Missions/Regulatory.aspx</p> <p>Regulatory Jurisdiction Overview www.spn.usace.army.mil/Missions/Regulatory/Jurisdiction/</p> <p>www.spn.usace.army.mil/Missions/Regulatory/Interagency-Meetings/</p>	<ul style="list-style-type: none"> • Permits are required for discharges of dredged and/or fill material into federal waters and for structures or work that could affect navigation. • The USACE could issue a one-time Section 404/10 Individual Permit for a term of their discretion and based upon project specifics, or a 'programmatic' Section 404/10 permit, such as a Regional General Permit, for a term of typically 5-10 years and with an efficient process for renewal. • The federal lead agency (assumed USACE) leads Federal Endangered Species Act Section 7 consultations with USFWS and NMFS, and the National Historic Preservation Act Section 106 review process with the State Historic Preservation Officer as part of its permit process. • For beach fill placement, a Sampling and Analysis Plan and Sediment Analysis Report are required – and must also be submitted to EPA and RWQCB. • For the USACE to issue a permit for a project, the proponent must demonstrate that the proposed project is the "least environmentally damaging practicable alternative." For either an Individual Permit or Regional General Permit, the USACE permit process includes a Public Notice, requires preparation of an Alternatives Analysis in compliance with the Section 404(b)(1) Guidelines, and preparation of a NEPA document. <p>Key Issues/Concerns:</p> <ul style="list-style-type: none"> • Physical, chemical, and biological integrity of waters of the US, and navigation. <p>Recommendations:</p> <ul style="list-style-type: none"> • Early communication with USACE staff to ensure project design includes the appropriate level of alternatives analysis. The NEPA alternatives versus the Clean Water Act 404(b)(1) alternatives analysis. • Early coordination with USACE regulatory staff to ensure planning timeline includes the appropriate permit review timelines. • Coordination with other federal and state agencies to define the critical path of the permitting timeline.
U.S. Environmental	Compliance: Sections 401 and 404 - Clean Water Act	<ul style="list-style-type: none"> • EPA may review and comment on the Clean Water Act Section 404 permit process, and review



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Questions?

