

Ecotone Migration Index (EMI) Conceptual Model Exercise

Model plant community response to sea-level-rise across ecotones



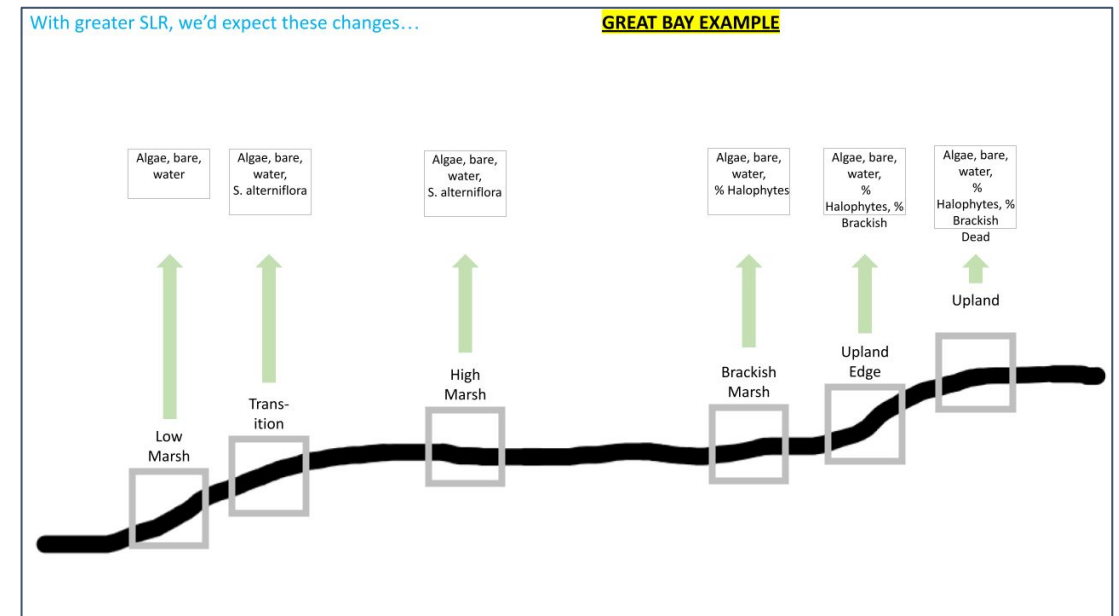
Please create a conceptual model for your Reserve:

1. Create your own by either using the Template [slide #3](#), or editing the Great Bay Example [slide #4](#)
2. Include all applicable **vegetation zones**
 1. A list of NERR **zones** is found on [slide #2](#). Add in additional zones on your [Reserve slide](#) that are important for your site/dataset
3. Add in positive (↑) plant community/abiotic responses (**SLR indicator species**) for each zone
 1. A list of **plant categories** is found on [slide #2](#). Add in additional categories important to consider for site/dataset
 2. Feel free to use specific dominant species. Spell out any abbreviations in the speaker notes (see Great Bay Example [slide #4](#))
4. Repeat for multiple types of marshes in your Reserve
5. Calculate EMI for each zone:

$$\text{EMI} = \frac{\text{Total SLR indicator species covers}}{\text{Total covers}}$$

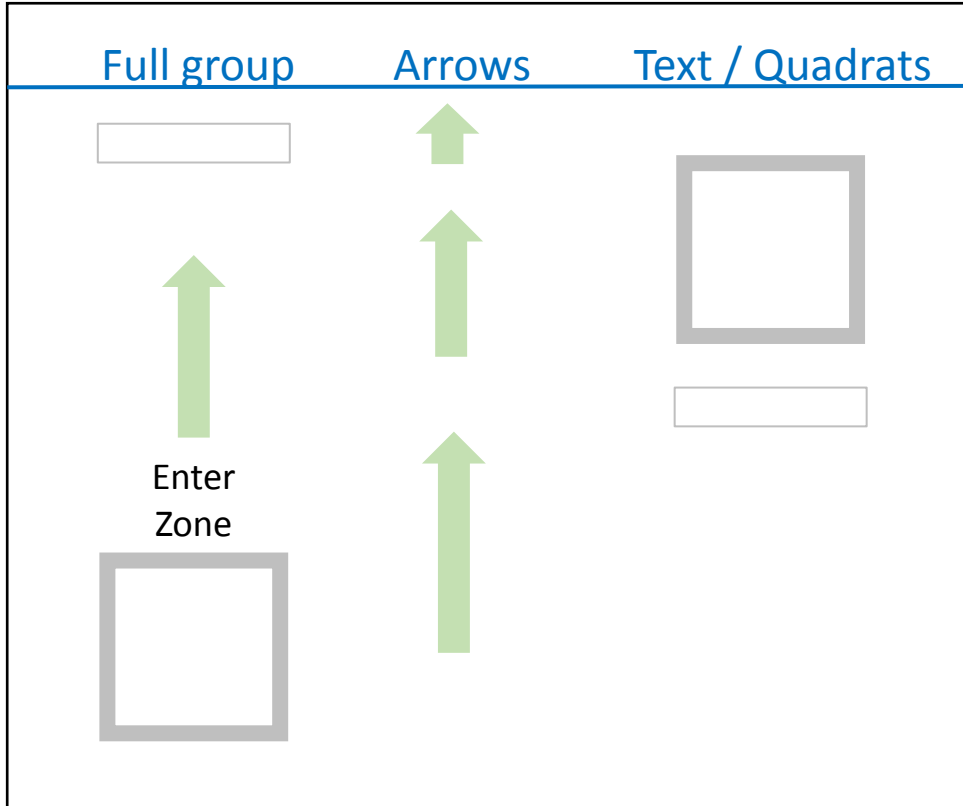


NAMASTE
National Marsh Synthesis Team



Model Icons and Inputs

Icons for your Reserve Conceptual Model



Plant Categories

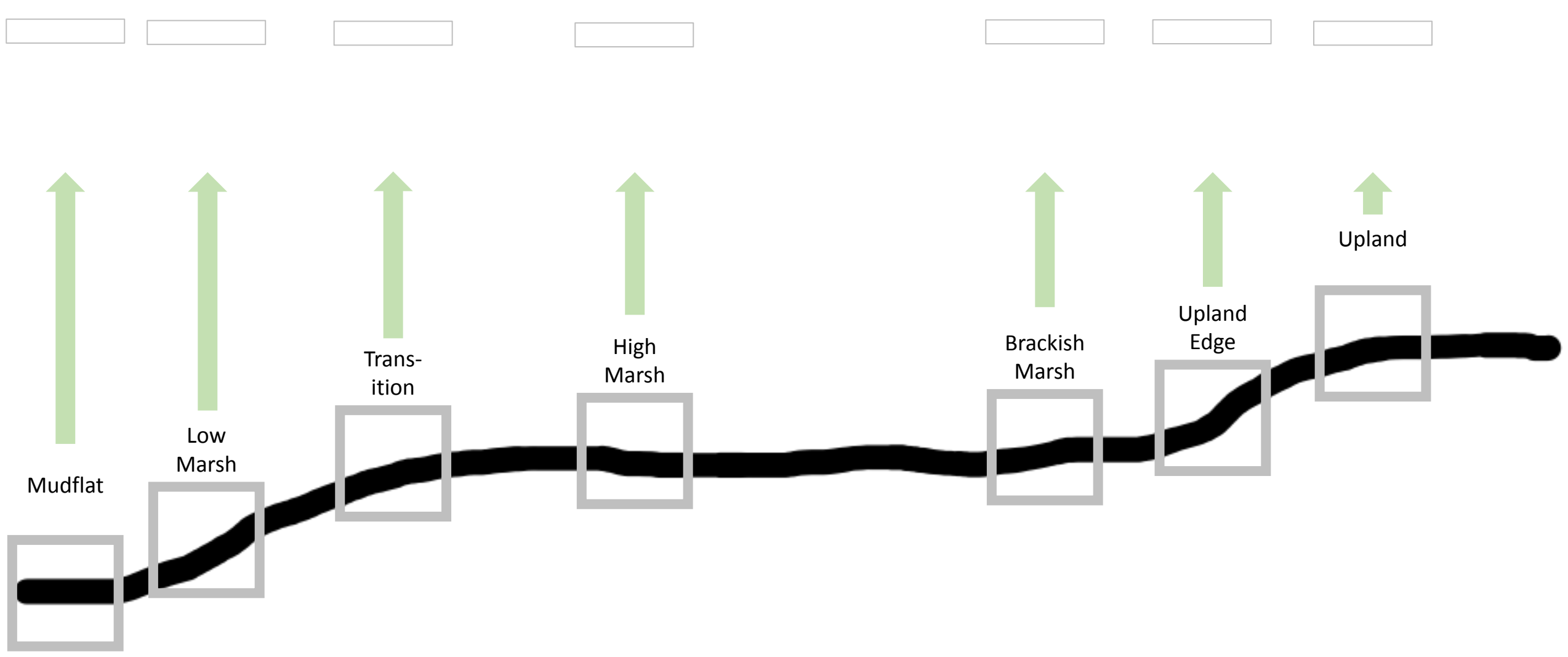
Algae
Halophyte
Brackish
Freshwater
Upland

National List of Vegetation Zones

Mudflat (M)
Seaward Edge (S) – transition of mudflat and low marsh
Low Marsh (L)
Transition (T) – transition of low and high marsh
Pools/Pannes (P) - unvegetated
High Marsh (H)
Brackish Marsh (B)
Upland Edge (UE) – transition of high marsh and upland
Dunes and Berms (DB)
Freshwater Tidal (FT)
Freshwater Non-tidal (FN)
Upland (U)

With greater SLR, we'd expect these changes...

BLANK TEMPLATE



With greater SLR, we'd expect these changes...

GREAT BAY EXAMPLE

