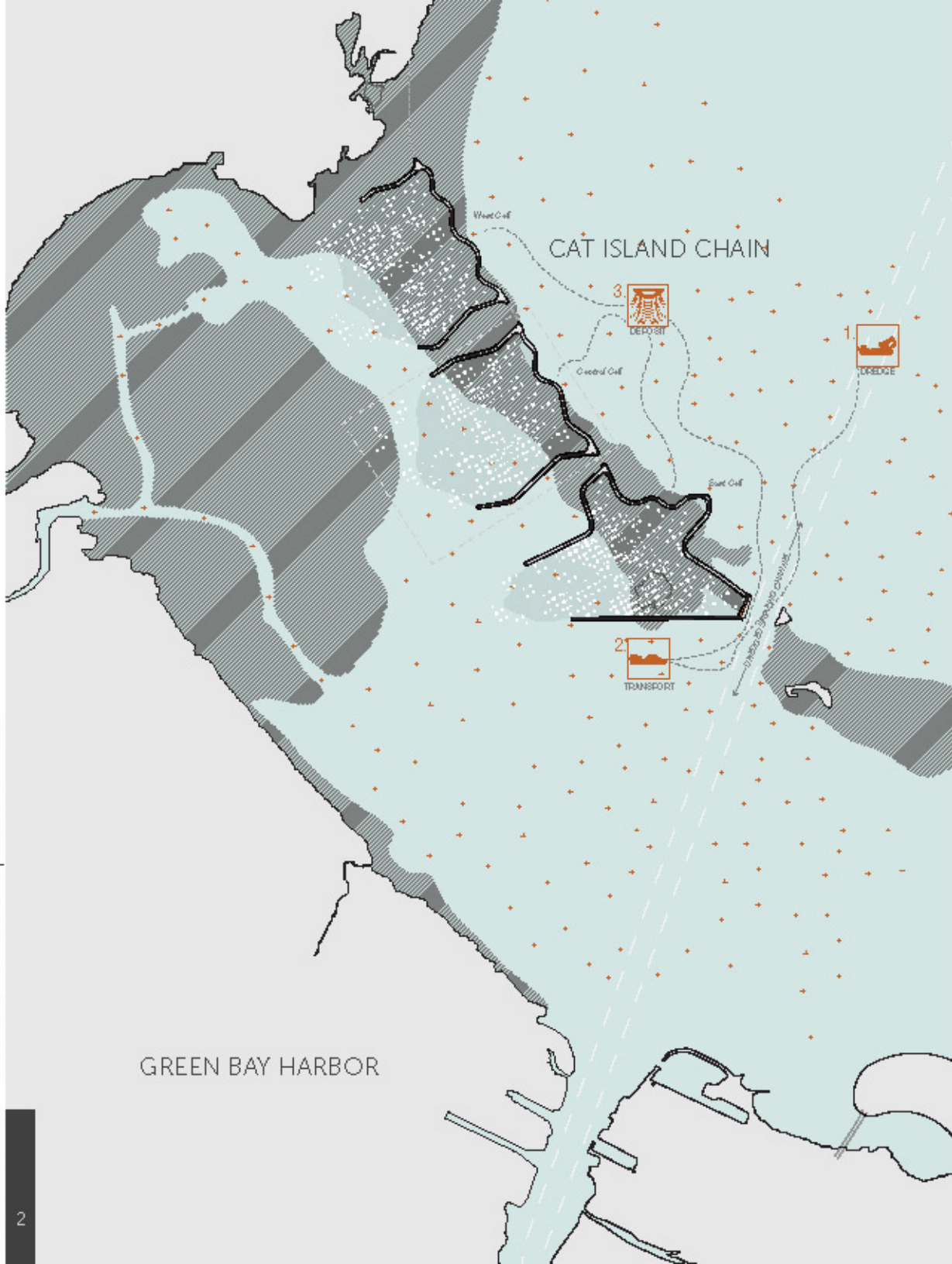


# GRID : LOCK

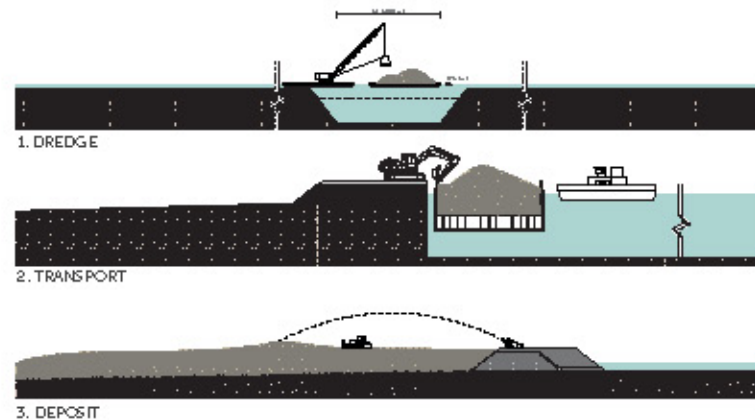
Joel Tremblay & Stefan Berry



THE INTERFACE SCALE | CAT ISLAND CHAIN BENEFICIAL PROJECT



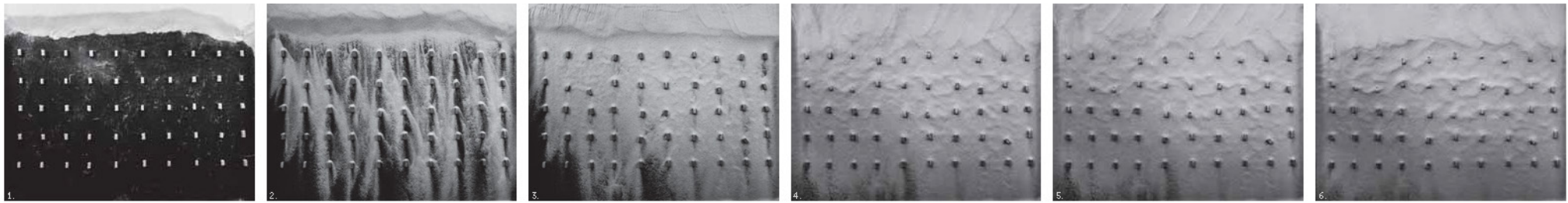
The Cat Island Chain Beneficial Project is an ongoing revitalization project located north of the Green Bay harbor and is the current location of sediment deposition from the shipping channel dredging process. The original island was destroyed by wave erosion in 1975 and completely submerged in 2012. The revitalization is to restore the island and provide mainland protection from wave erosion. The overall goal of the proposal is to introduce a system which will establish a more successful and habitable ecology in the future. The study focuses on the central cell of the chain with the idea that it can be implemented in the other two.



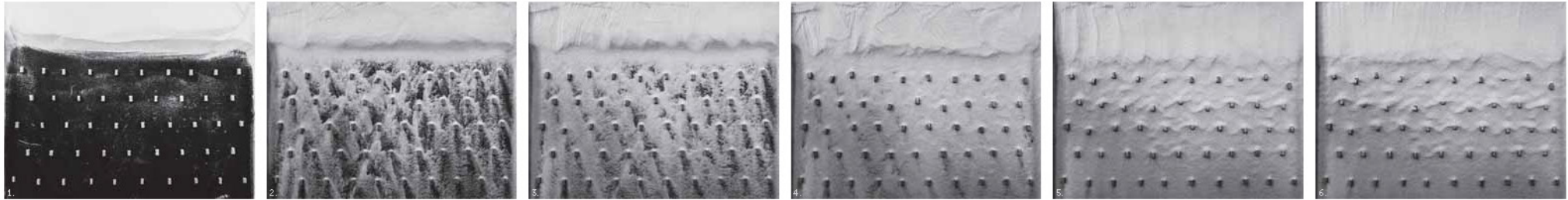
CENTRAL CELL

# PHYSICAL MODEL EXPERIMENTATION

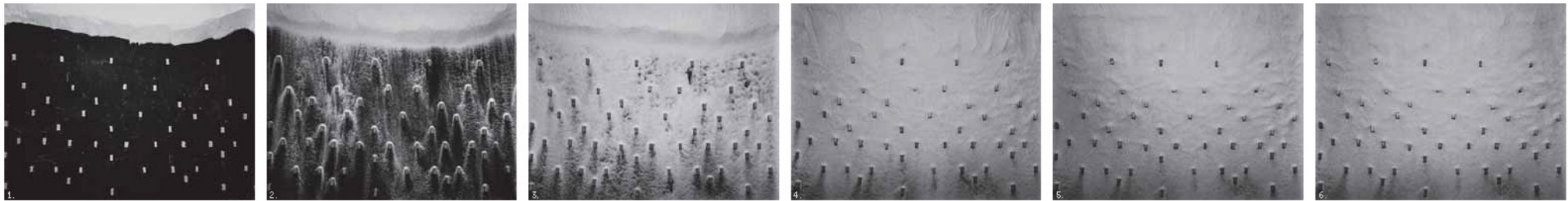
## LINEAR PATTERN



## OFFSET PATTERN

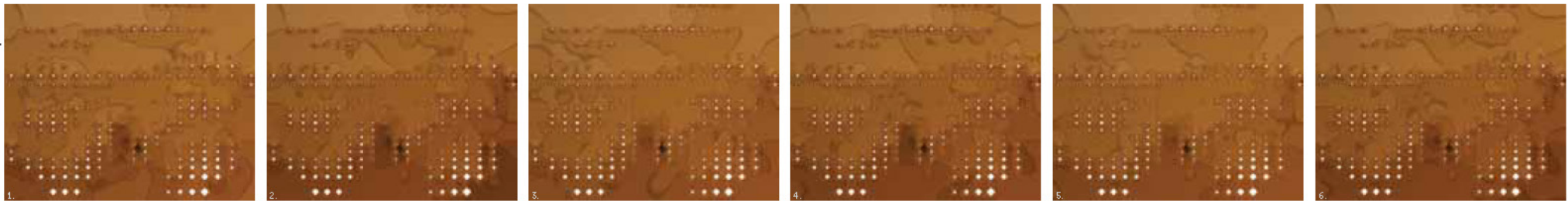


## STAGGERED PATTERN

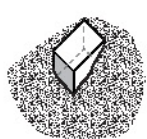


# DIGITAL SEDIMENT FLOW ANALYSIS

## STAGGERED PATTERN



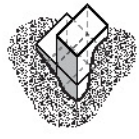
## VARIOUS GROUPING CONDITIONS



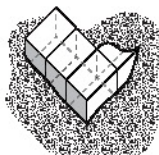
1. SINGLE GABION



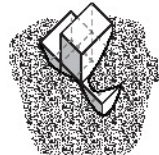
2. DOUBLE STACK



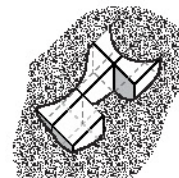
3. DOUBLE STACK  
+1



4. FOUR "L"



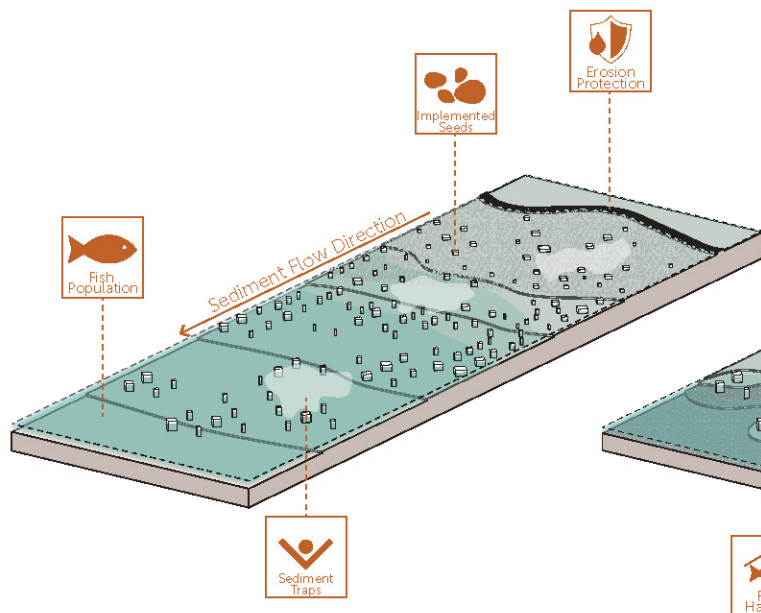
5. UPSIDE DOWN  
"T"



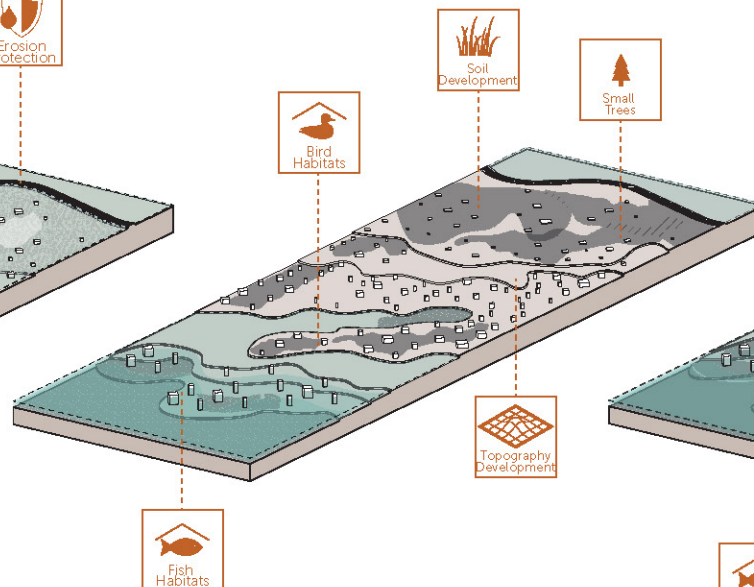
6. FIVE "U"

The concept of the proposal is to introduce a pattern of gabion baskets in a series of groups that "direct" and "trap" sediment. The idea is that these obstacles will interact with the sediment flow creating berms and pools. This effect would create a diverse landscape typography and allow for a variety of fauna and flora to flourish. The baskets will be filled with recycled rocks from the culverts that have been built in place to temporarily connect the three islands. The baskets will act as "kickstarter packs" for vegetation to grow, as they will have seed bags implemented within.

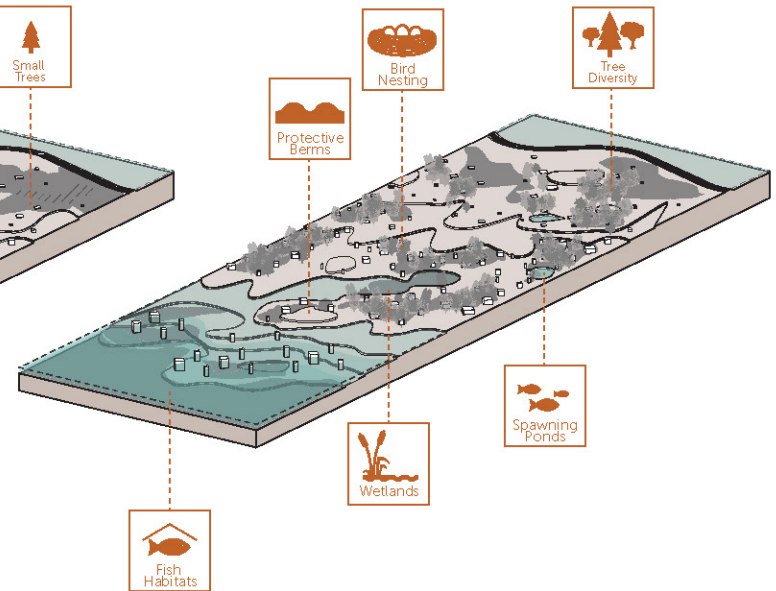
## INITIAL STAGE



## PROCESS STAGE



## ON-GOING STAGE



Soil is being dredged from the shipping channel and transported to the site. Gabion baskets are implemented. The site is governed by water.

Sediment is deposited, landscapes begin to form. Light vegetation emerging, signs of wildlife returning.

Dredging project is complete. Spawning ponds and wind berms created. Vegetation and habitats restored. Micro ecologies form. Apparent diversity of plants and animal species.



Conceptual Perspective

