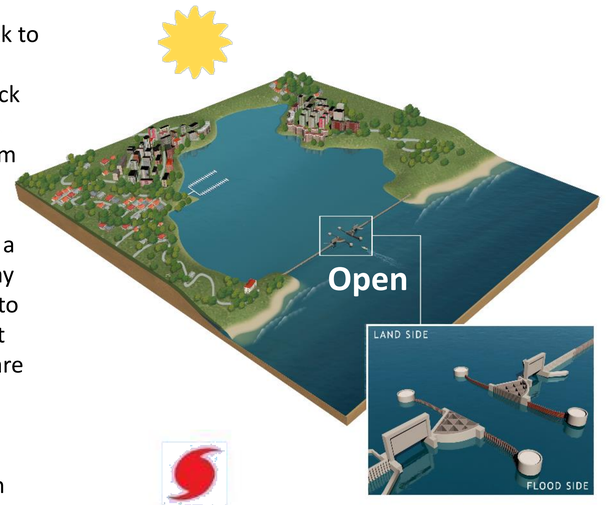
Storm Surge Barriers

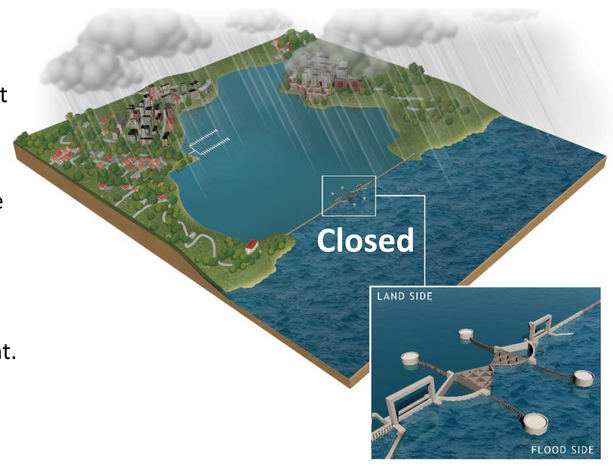
Storm surge barriers reduce risk to people, structures and infrastructure located in the back bay and estuarine environment against flooding caused by storm surge and waves

Storm surge barriers consist of a series of movable gates that stay open under normal conditions to let navigation and flow pass but are closed when storm surges are forecasted to exceed a specific water level.

Storm surge barriers may be an economical alternative at the entrance to large bays and reduce the required length of coastal storm risk management measures behind the barriers.

Storm surge barriers may have environmental impacts under normal conditions associated with reductions in water exchange between the ocean and bay/estuarine environment.





Example at Cape May Canal, NJ

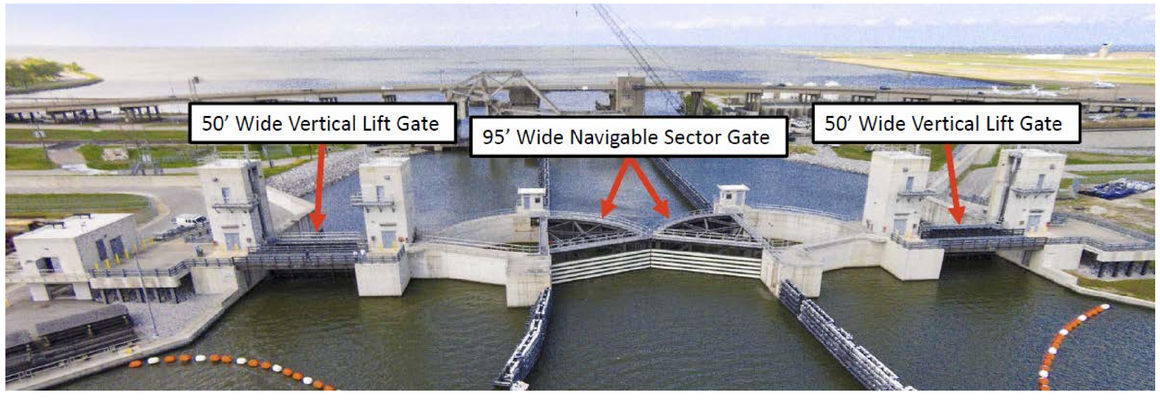
Modeling (In Progress)

- How much do barriers reduce back-bay flooding?
- How do multiple barriers work as a system?
- Are barriers still effective if other inlets are open?

Future Investigations

- Environmental impact of barriers on water exchange between ocean and bay?
- Environmental impact of barriers on back bay salinity, water quality, nutrients, fish passage, and sediment transport?

Seabrook - New Orleans, LA



US Army Corps of Engineers