

HOUSTON SHIP CHANNEL EXPANSION CHANNEL IMPROVEMENT PROJECT (HSC ECIP)

Winter 2018 Stakeholder Meeting Presentation

27 February 2018

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THE INTERNATIONAL PORT OF TEXAS



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STUDY AREA – HOUSTON SHIP CHANNEL (HSC) SYSTEM



National Significance:

- 2nd ranked U.S. port in total tonnage
- 1st ranked U.S. port in foreign tonnage
- 3rd ranked U.S. port in terms of total foreign cargo value
- 6th ranked U.S. container port by total twenty-foot equivalent units (TEUs) in 2016
- \$617 billion in annual economic activity
- \$30 billion in federal tax revenue
- 2.7 million jobs nationally

Regional Significance:

- 68% of U.S. Gulf Coast container traffic in 2016; Largest Gulf Coast container port
- 95% Texas market share in containers by total TEUs in 2016
- 1.2 million Texas jobs
- \$265 billion in statewide economic impact (16% of state's GDP)
- \$5 billion in yearly state and local tax revenue

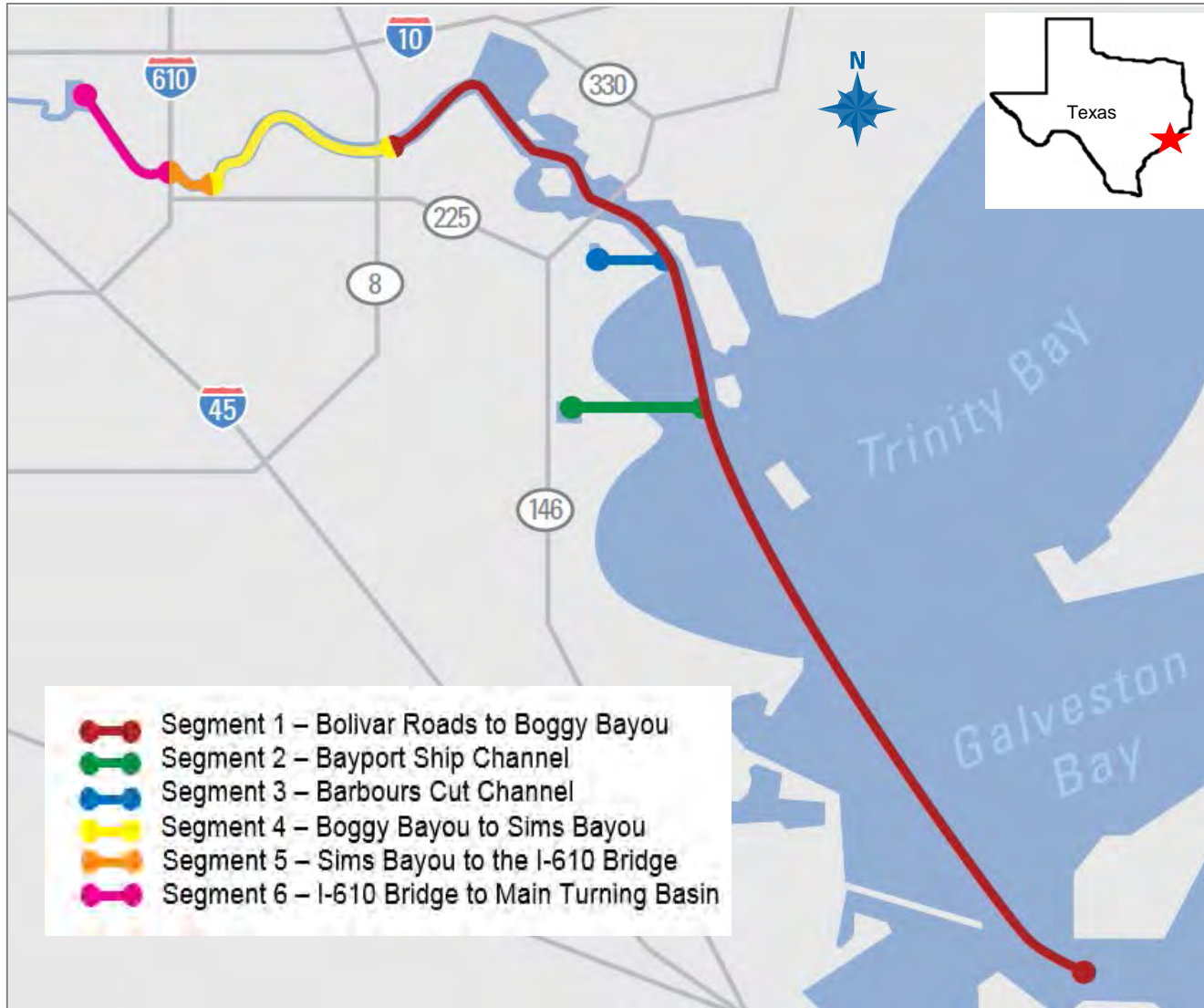
Private Investment in Port Infrastructure



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STUDY AREA – HOUSTON SHIP CHANNEL (HSC) SYSTEM



Agenda:

- Where are we? Planning Process
- The Tentatively Selected Plan (TSP)
- Where are we going?
 - Dredging
 - Impacts
 - Lessons so far



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WHERE ARE WE?



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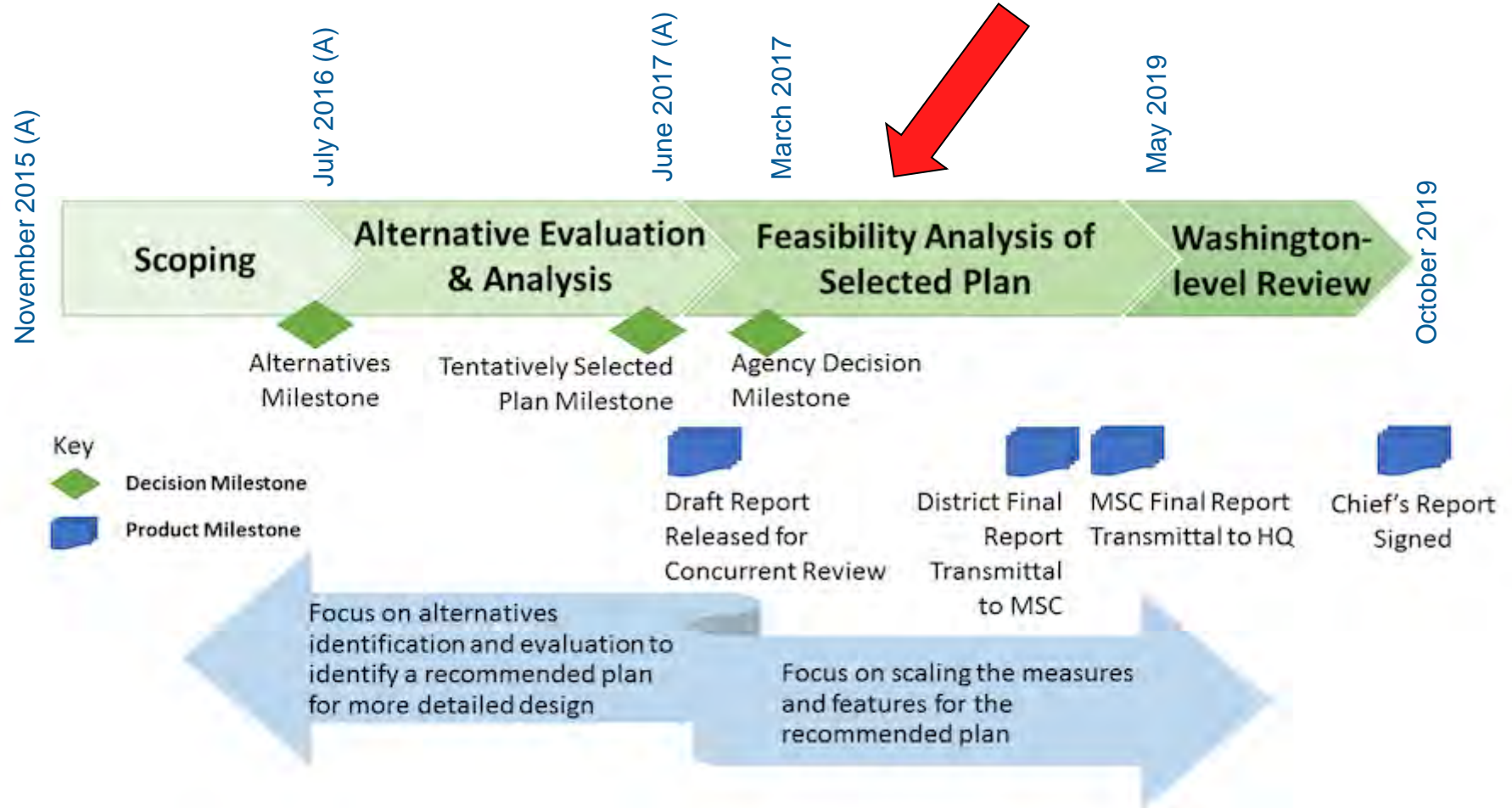


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Feasibility Study Process:

We are Here

3x3x3 Exemption:
4 Years and \$10 M
to Complete Study



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TENTATIVELY SELECTED PLAN PRESENTED IN DRAFT REPORT



- Bend easings (4) on HSC with associated barge lanes relocation (**Segment 1**)
- Widen HSC from Bolivar Roads and BCC from existing 530 feet to between 650 feet to 820* feet with associated barge lanes relocations (**Segment 1**)
** Width has been refined to 700 feet based on limited ship simulations*
- New HSC multipurpose mooring near the San Jacinto Monument (**Segment 1**)
- BSC flare expansion (**Segment 2**)
- BSC shoaling attenuation structure (**Segment 2**)
- Widen BSC from existing 300-400 feet to 455 feet (**Segment 2**)
- Widen BCC from existing 300 feet to 455 feet (**Segment 3**)
- BCC combined flare and turning basin (**Segment 3**)
- Deepen HSC from Boggy Bayou to Sims Bayou from the existing 41.5-foot depth up to 46.5 feet (**Segment 4**)
- Widen HSC from Boggy Bayou to Greens Bayou from the existing 400-foot wide channel up to 530 feet (**Segment 4**)
- Deepen HSC from Sims Bayou to I-610 Bridge from the existing 37.5-foot depth up to 41.5 feet (**Segment 5**)
- Deepen HSC from I-610 Bridge to Main Turning Basin from the existing 37.5-foot depth up to 41.5 feet deep (**Segment 6**)

FEATURES RECOMMENDED FOR FEDERALIZATION

Jacintoport Channel (Segment 1)

- Federalization to a depth of 41.5 feet
- Analysis completed under Section 5001 of WRDA 2007 confirmed the Federal interest

Bayport Ship Channel (Segment 2)

- NFS improved channel to 46.5 feet deep; width is 400-feet from HSC to the Land Cut and 350-feet from Land Cut to Turning Basin

Barbours Cut Channel (Segment 3)

- NFS improved channel to 46.5-feet deep by 300-feet wide

Greens Bayou Channel (Segment 4)

- Federalization of channel [41.5-feet deep by 0.4 miles and 16.5-feet deep by 1.3 miles] serving multiple facilities adjacent to the HSC

ADDITIONAL FEATURES INCLUDED FOR FURTHER EVALUATION

- Minor widening in bayou portion of HSC main channel in Hog Island stretch and two bend easings (**Segment 1**)
- Turning basin at mouth of BSC land cut (**Segment 2**)
- Hunting Turning Basin (**Segment 4**)
- Improve Brady Island turning basin (**Segment 6**)



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WHERE ARE WE GOING?

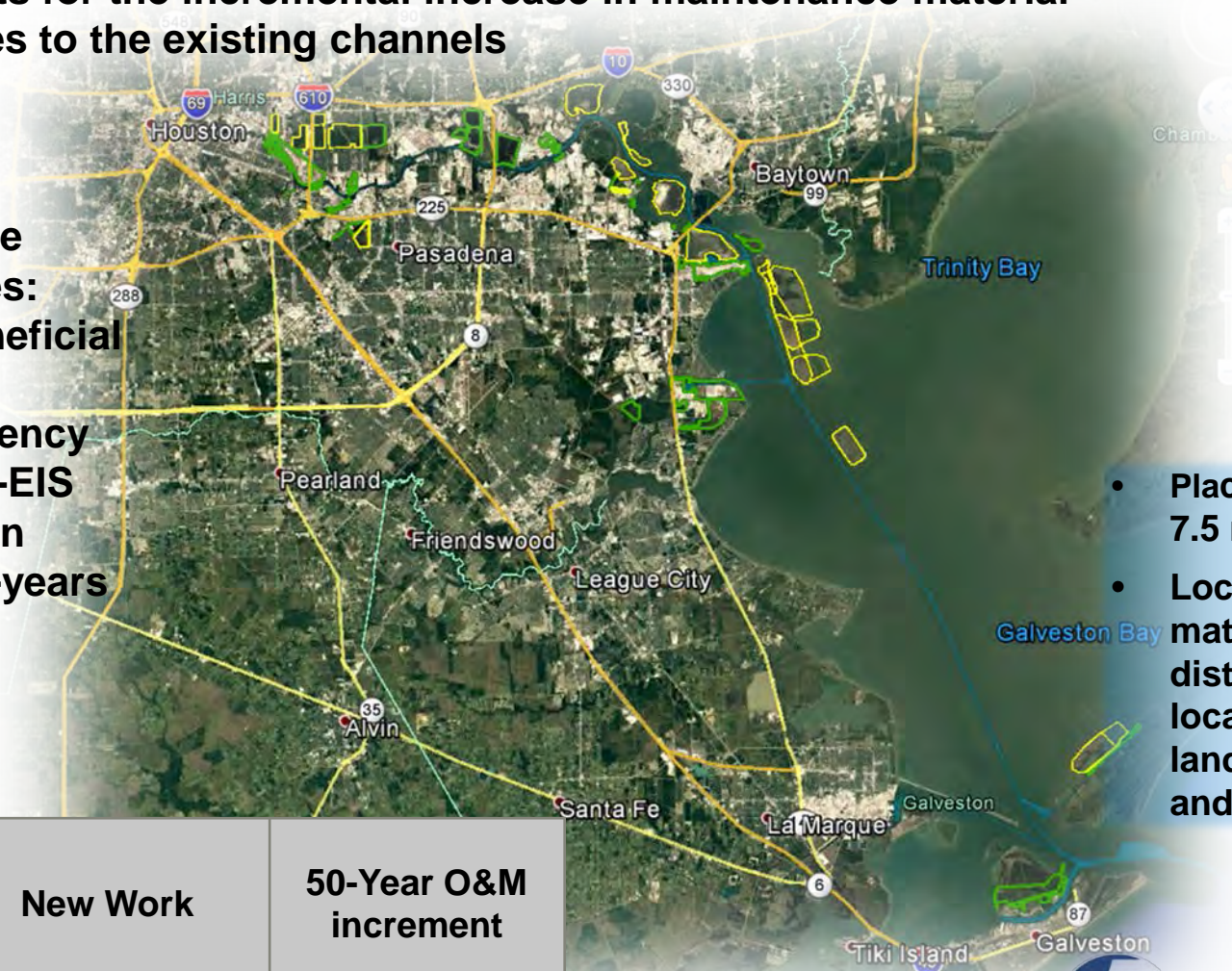


INTEGRATED DREDGED MATERIAL MANAGEMENT

DMMP for the TSP accounts for the incremental increase in maintenance material due to incremental changes to the existing channels

Placement planning for environmentally acceptable placement options includes:

- ✓ Brainstorming with Beneficial Uses Group
- ✓ Consider public and agency comments on Draft IFR-EIS
- ✓ Economic Consideration
- ✓ Detailed for the first 20-years
- ✓ System-wide approach

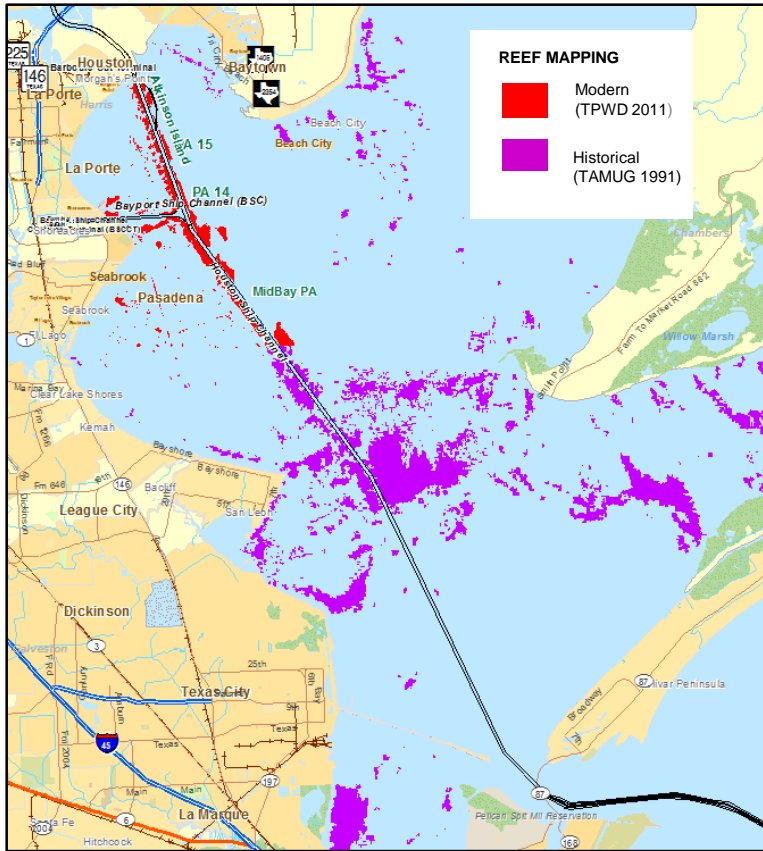


- Placement locations within 5 – 7.5 miles
- Locations depend on volume, material type, pumping distance, foundation condition, location and setting, available land/space, and environmental and development constraints

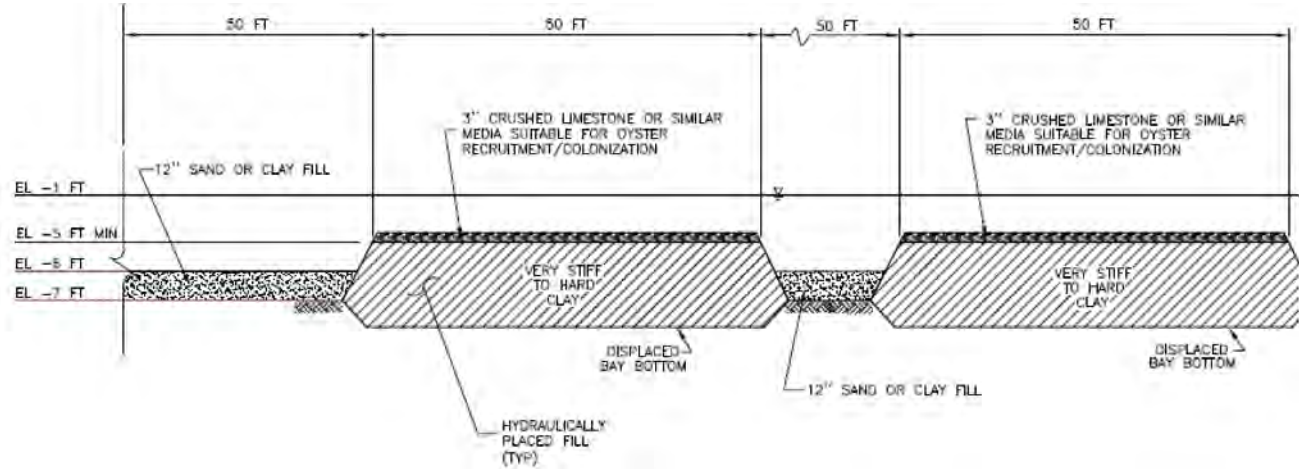
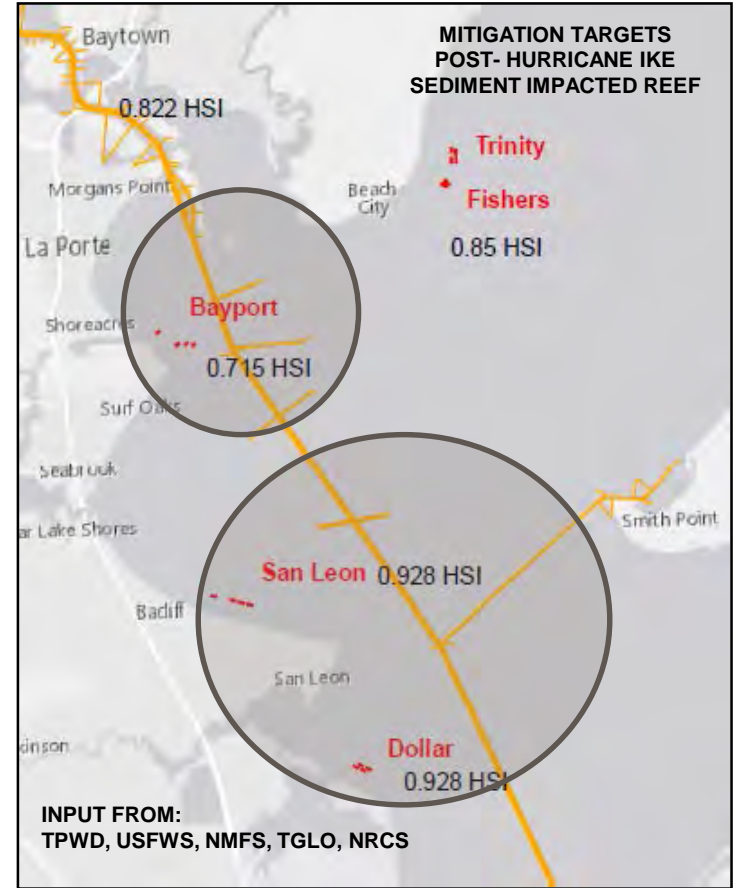
ESTIMATED DREDGED MATERIAL QUANTITIES	New Work	50-Year O&M increment
		26 MCY



OYSTER IMPACTS AND MITIGATION



PERMANENT OYSTER REEF IMPACTS	520 acres
OYSTER MITIGATION (range based on site suitability)	500 - 620 acres



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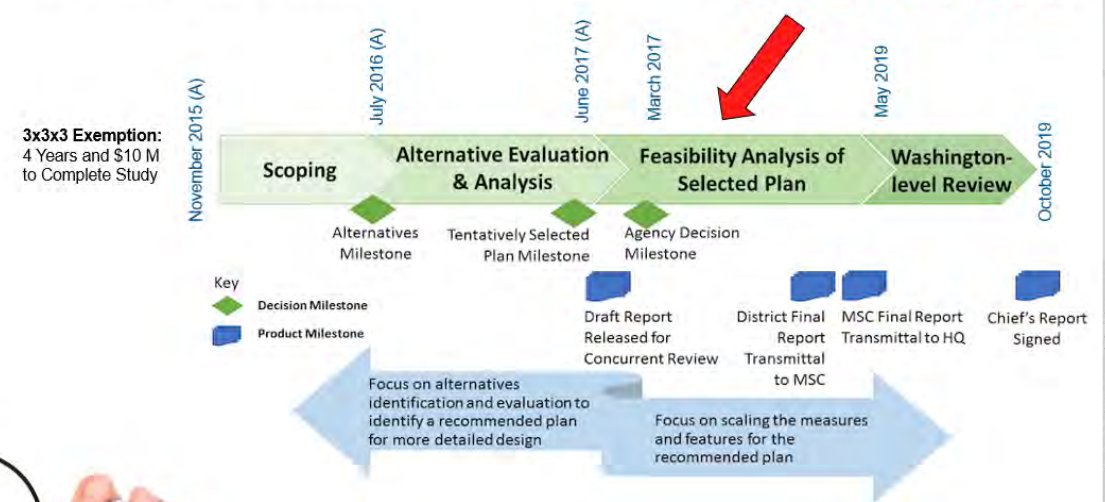


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FROM THE PERSPECTIVE OF THE NFS

Feasibility Study Process:

We are Here



Lessons so far:

- ✓ SMART Planning
- ✓ Policies and Risk
- ✓ Cultural shift
- ✓ Get all the Help you can
- ✓ Iterative process(es)
- ✓ Boulders



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QUESTIONS?

STUDY PURPOSE: NAVIGATION

Reduce transportation costs while providing for safe, reliable navigation on the HSC system

NON-FEDERAL SPONSOR (NFS):

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