

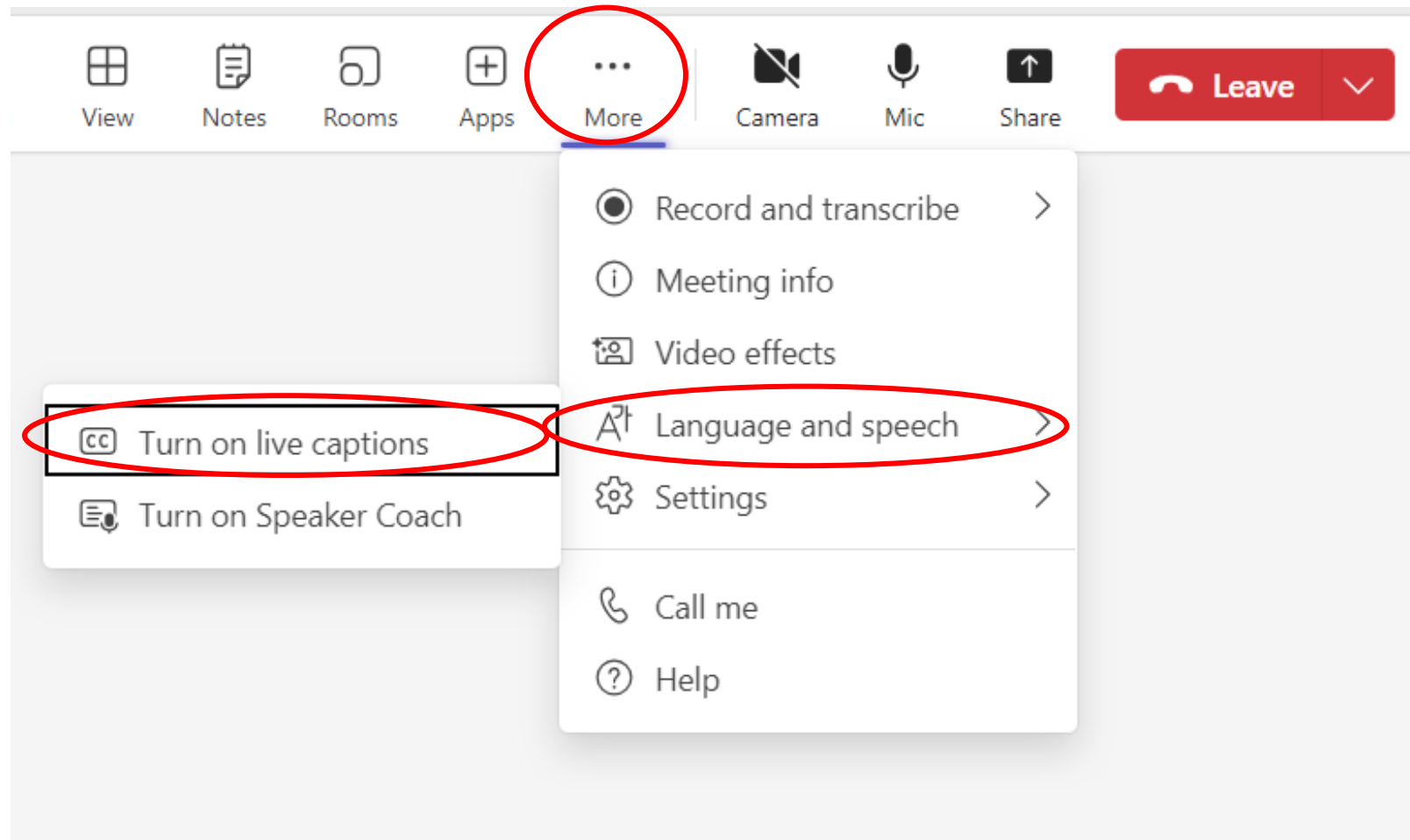
Economic Analysis for Shoreline Management

Public Informational Meeting
January 18th, 2024, 6pm

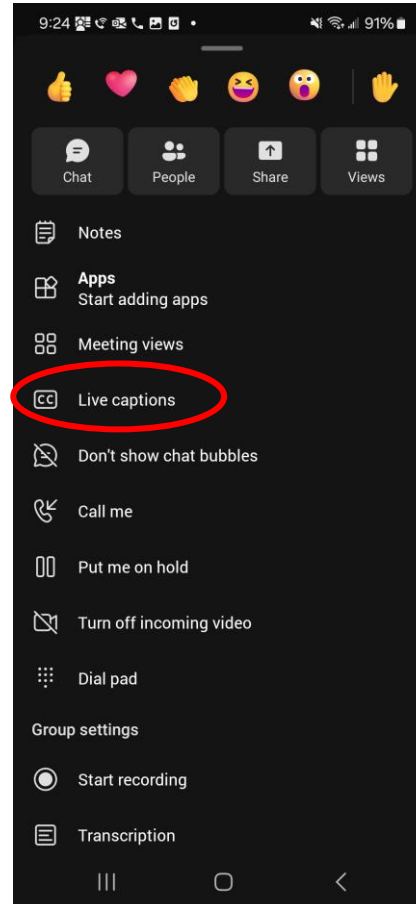
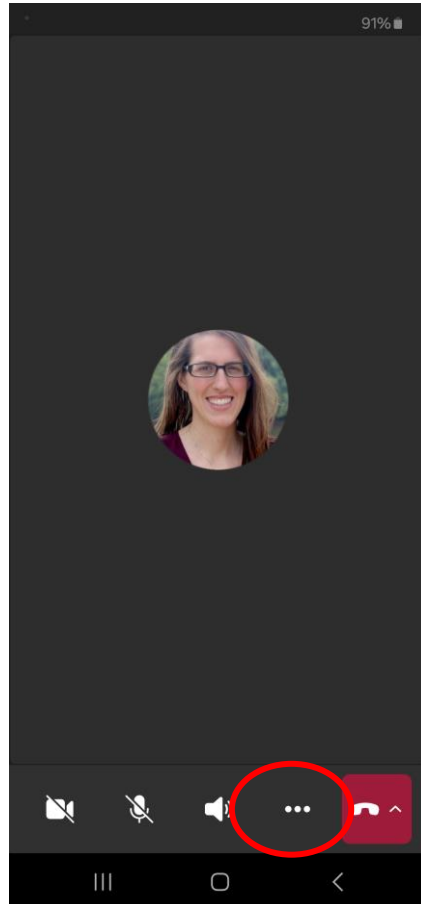


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NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Live Captions on Computer



Live Captions on Mobile



Purpose of the Meeting

- Inform the public about the economic analysis study
- Present background information and project methods and outputs
- Solicit feedback



Questions and Comments

- If you have questions or comments, you can enter your questions into the chat
- Or, email your questions to Shoreline_Questions@delaware.gov
 - Questions will be moderated and answered, as time allows, at the end of the presentations



Project Workgroup

- DNREC; Shoreline and Waterways, Coastal Programs
- IEC & Woods Hole Group (consultant)
- Bay Beach Association
- Association of Coastal Towns
- University of Maryland Environmental Finance Center
- Delaware Sea Grant



Agenda

- Background, historical context; objectives (15mins)
 - Jesse Hayden, DNREC Shoreline and Waterways Program Administrator
- Scope and methods of the study, modelling approach (20mins)
 - Ben Blachly, Maura Flight, IEC; Kirk Bosma, Woods Hole Group
- Question and Answer (40mins)
- Adjourn



Economic Analysis for Shoreline Management

Public Meeting #1
January 18, 2024



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Purpose and Benefits of Beach Nourishment

Storm Protection



Recreation and Tourism



Habitat



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Setting the Stage: 50 years of Beach Nourishment in Delaware

- Since the 1950's, the State of Delaware has been placing sand on Delaware bay and ocean beaches in beach nourishment projects
- **Costs of nourishment projects are increasing to an unsustainable level.**

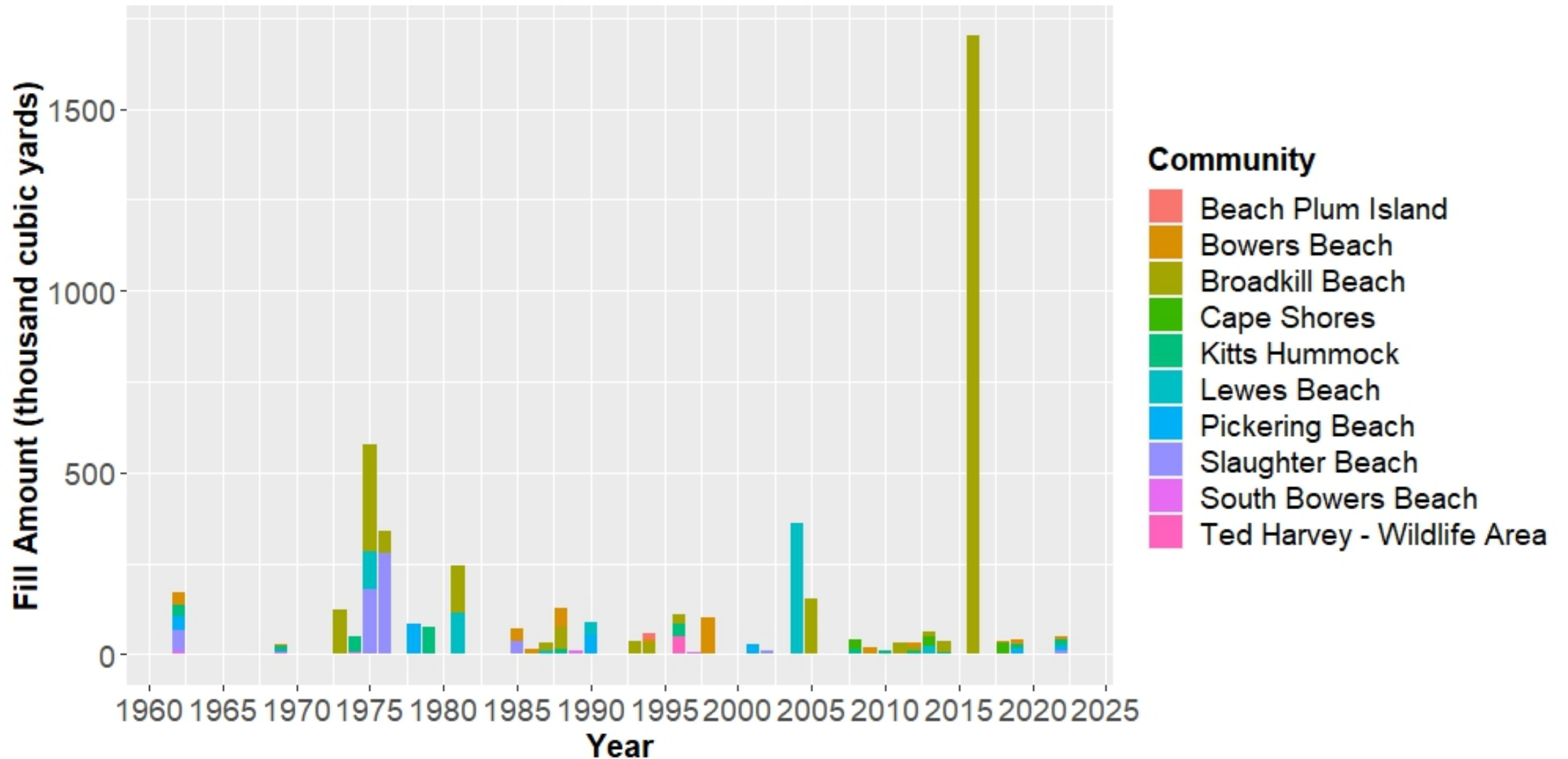


History Of Beach Nourishment In Delaware

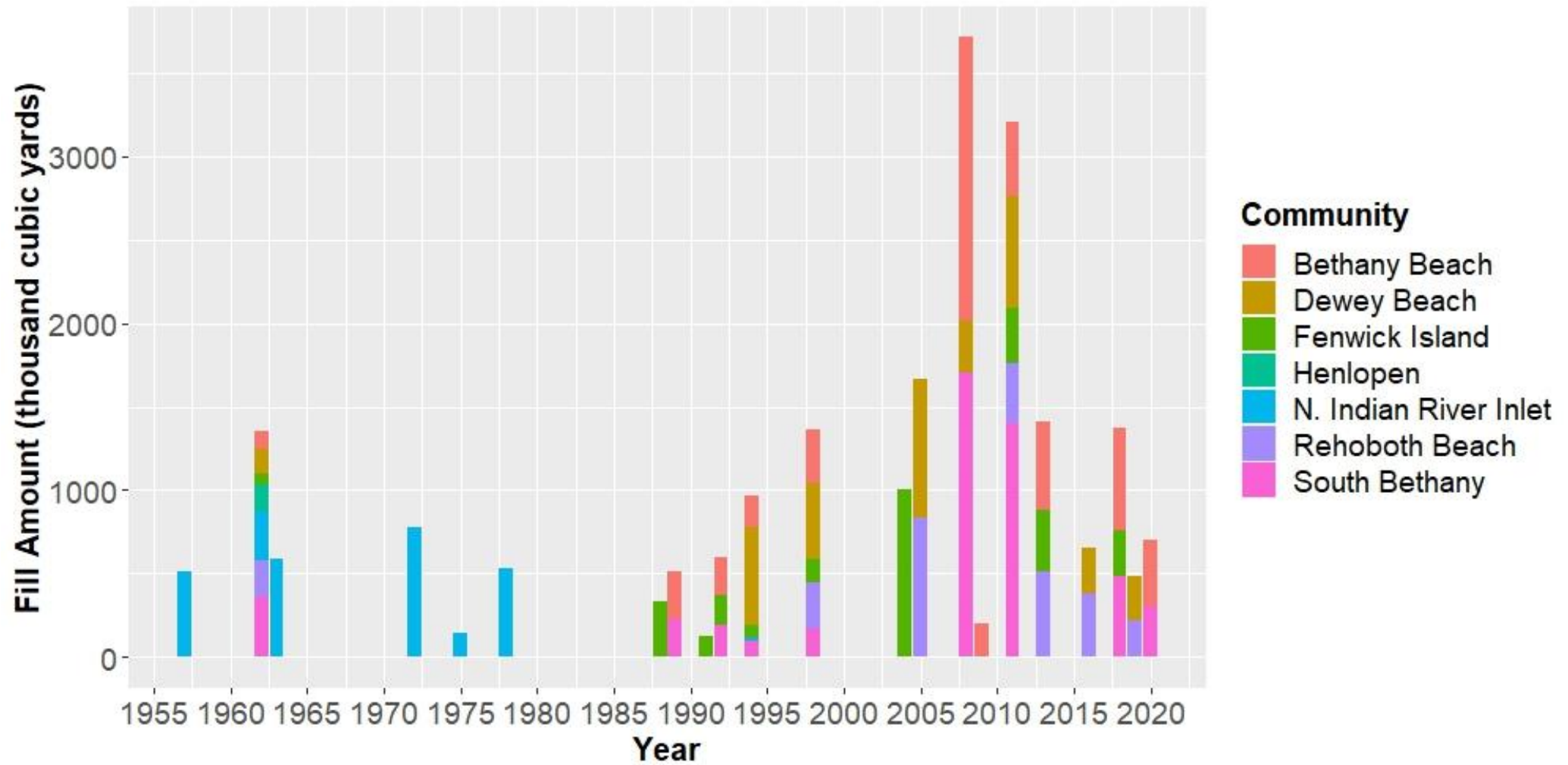
- 71 nourishment projects on the Delaware Bay beaches
- 59 nourishment projects on the Atlantic Coast Beaches
- **Since the 1950's, ~25 million cubic yards of sand have been placed on Delaware's beaches.**



History Of Beach Nourishment In Delaware: Delaware Bay Beaches



History Of Beach Nourishment In Delaware: Atlantic Ocean Beaches

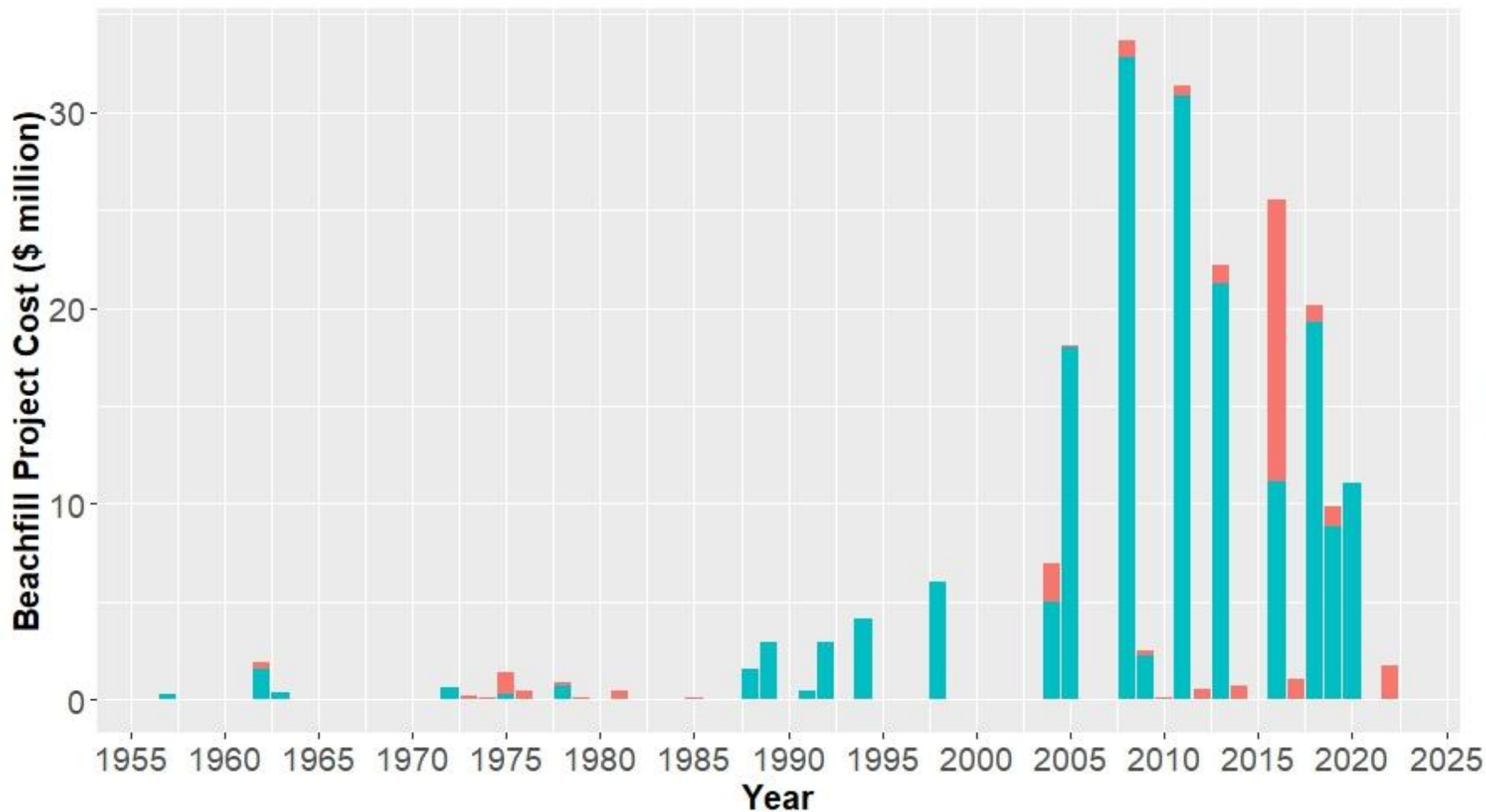


Rising Costs of Beach Nourishment in Delaware

- Total of \$68.1 million spent by state on nourishment projects statewide since 1950's
- Costs driven up significantly in 2000's due to state's cost-sharing obligation on large federal nourishment projects along the Atlantic Coast



Rising Costs of Beach Nourishment in Delaware

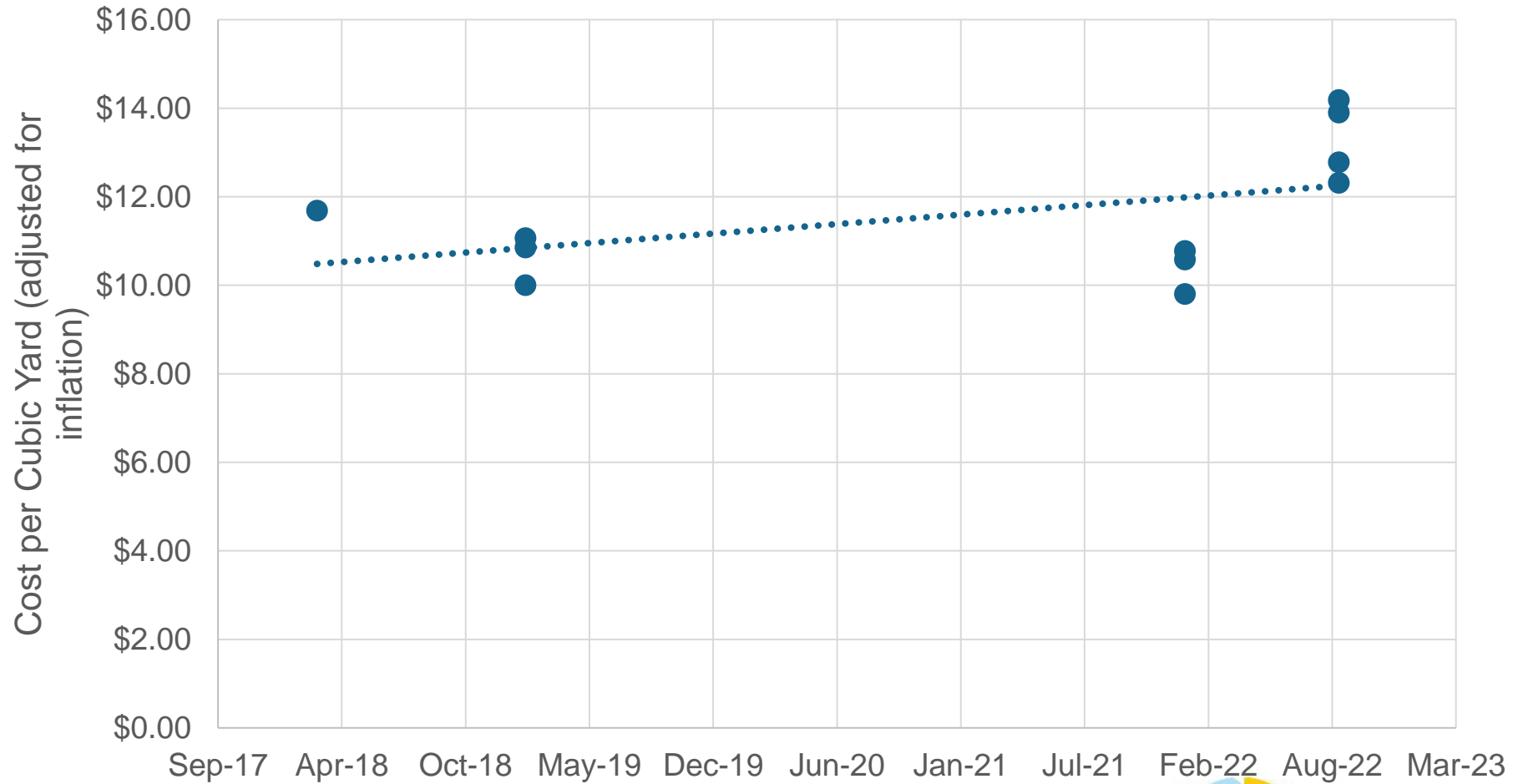


Total Costs:
\$210 million
total, state share
\$68.1 million
(does not
include labor
and equipment
costs)

Region
Bay
Ocean

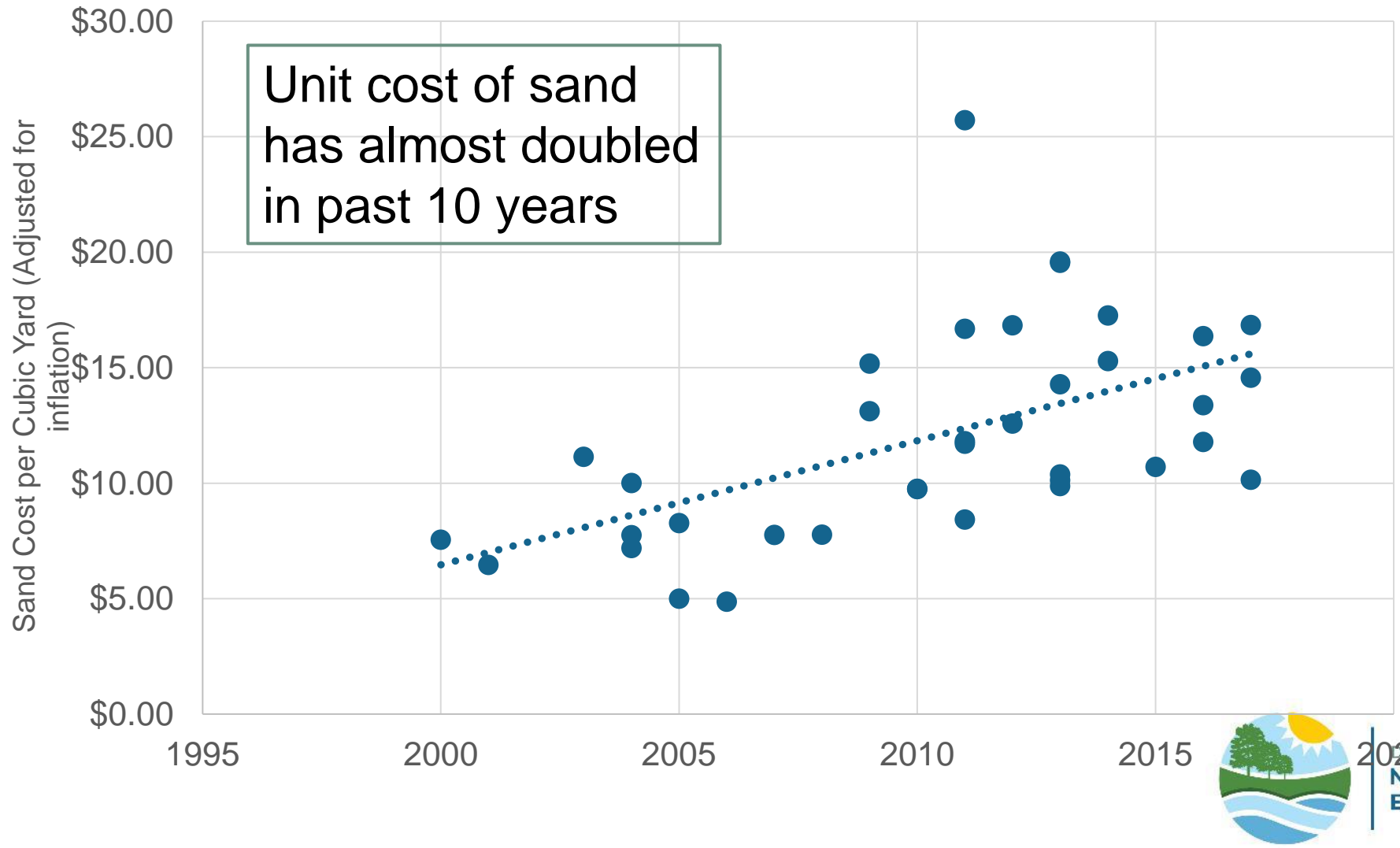
Sand Resources – Truck Fill

Typical Truck
Fill Project is
10,000-50,000
cubic yards

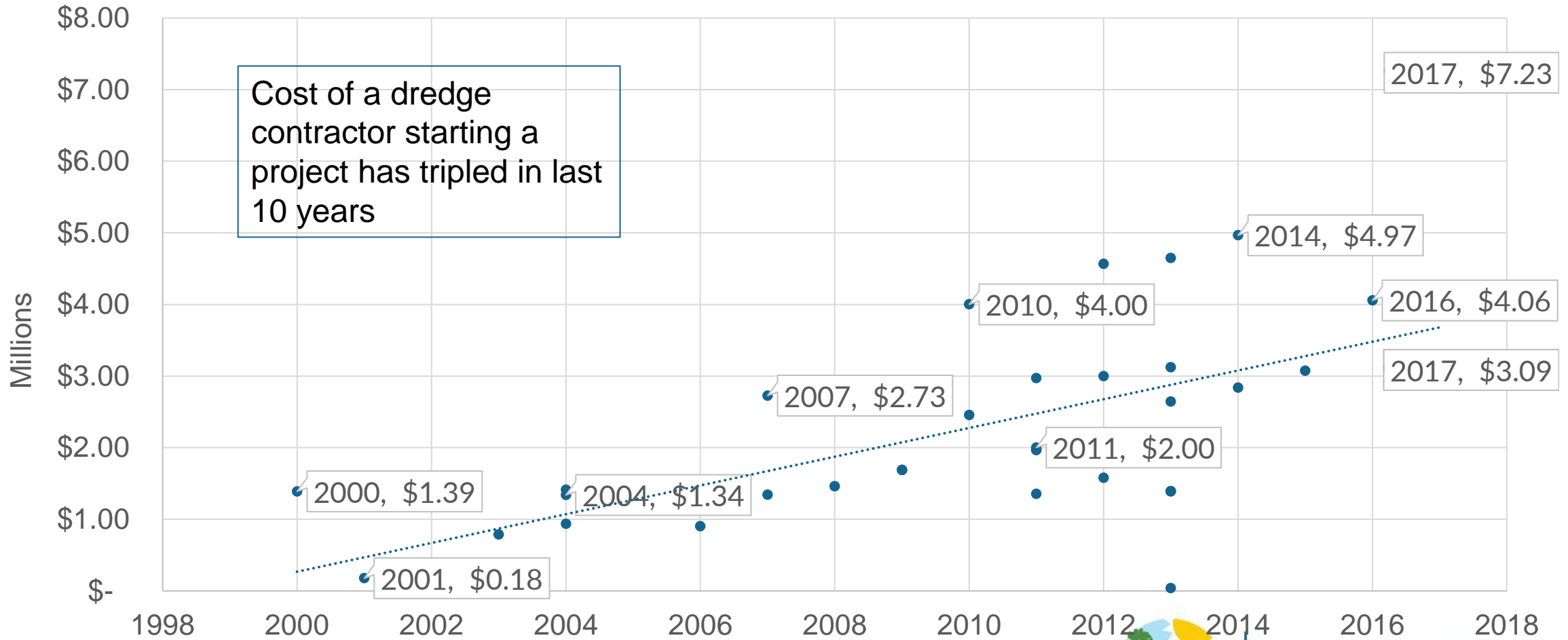


Sand Resources – Dredged

Typical Dredged Project is 100,000+ cubic yards



Dredge Contractor's Mobilization



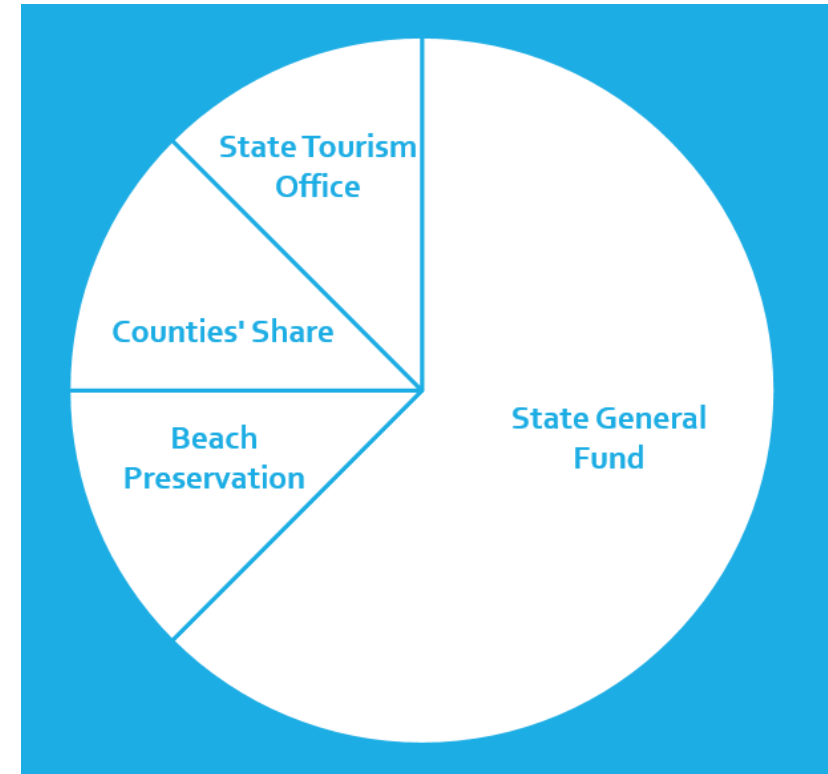
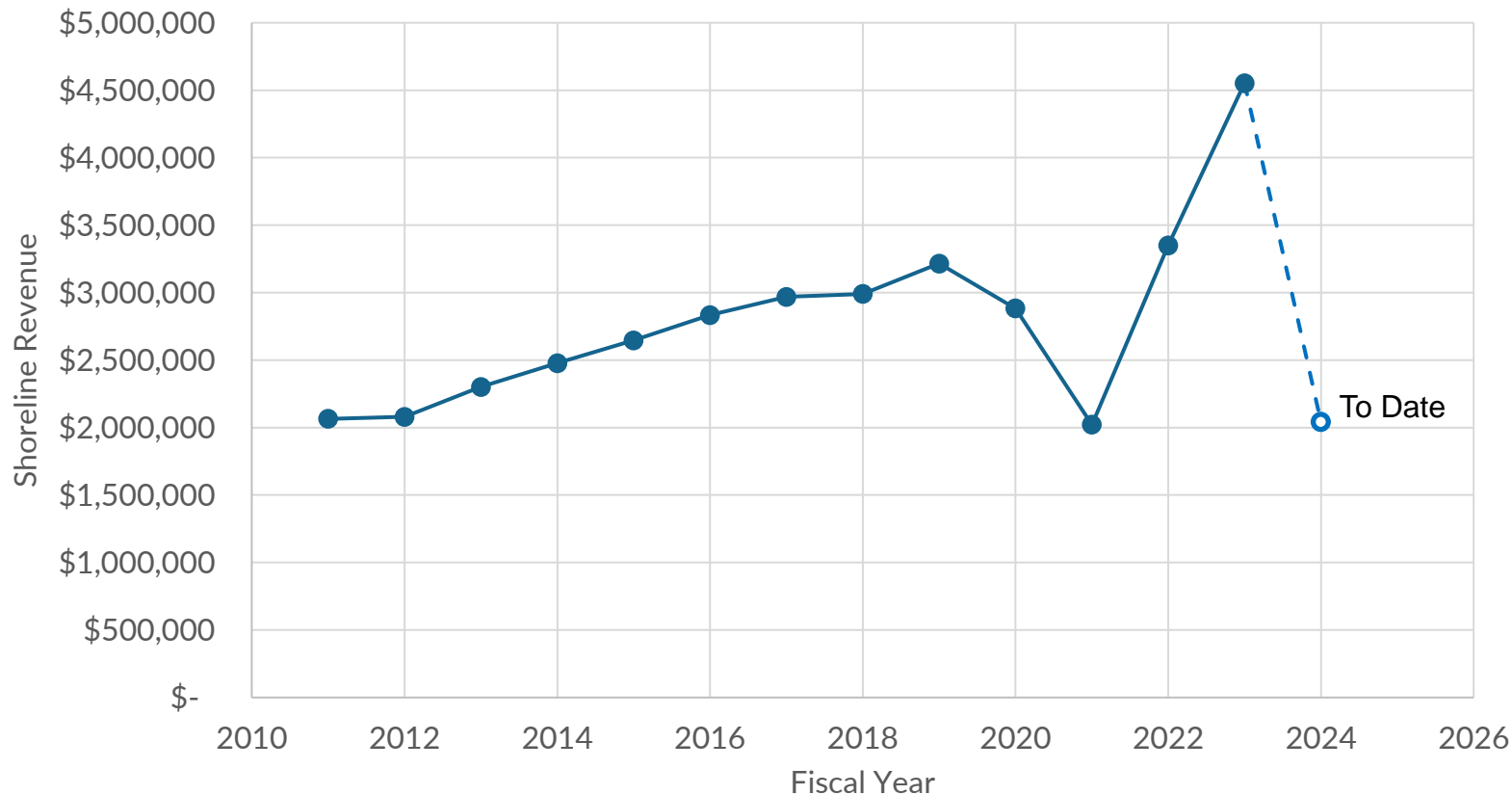
DNREC SWMS Budget Realities

DNREC receives 1/8th of state accommodations tax

FUNDING SOURCE 1 : State Lodging tax

- 8% tax of the rent of hotels and motels

Accommodations Tax Revenue

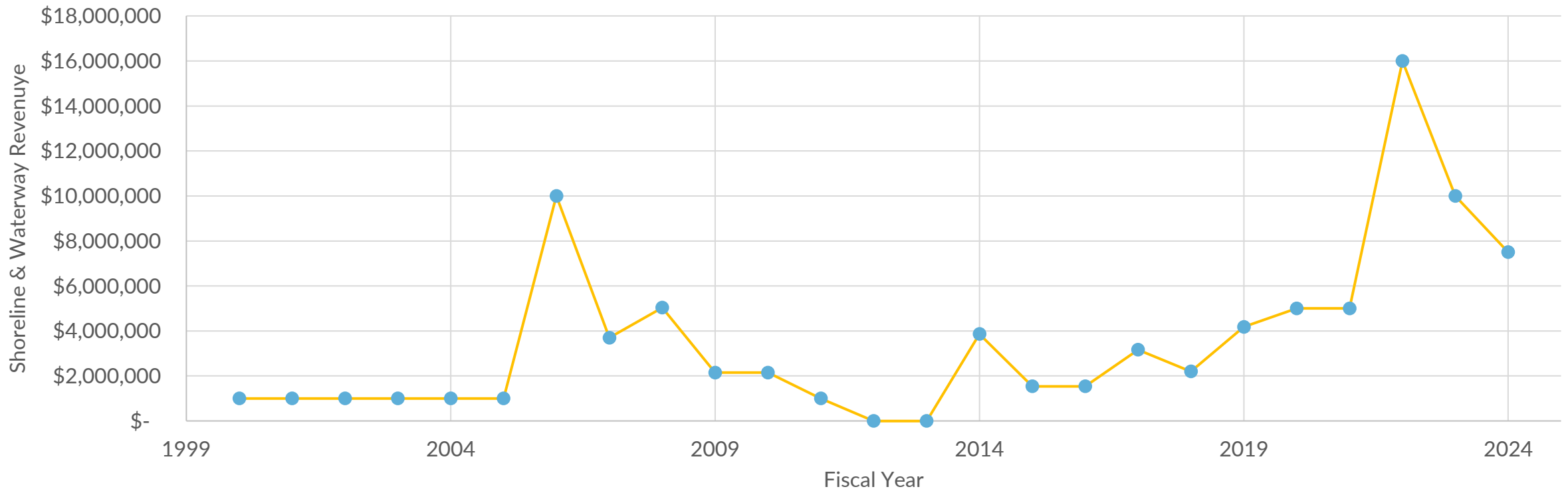


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FUNDING SOURCE 2: Bond Bill Appropriations

- Highly variable revenue stream
- Average for budget planning \$3.5M

Shoreline & Waterway Management Bond Bill Appropriations



Timeline

- 2018 Began in-depth examination of costs for beach nourishment
- January 2019 Beach Nourishment Finance Meeting
- 2022 Economic Analysis Discussion Meeting
- 2023 Economic Analysis Study Commissioned
- 2024 Analysis complete



Economic Analysis for Shoreline Management Study

Key Points

- Looking at benefits that are directly attributed to beach nourishment
- Study is a first step, no immediate changes
- Report will go to Department leadership
- Doesn't affect current projects





February 14, 2024



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Question and Answer

- Will start with addressing questions that were submitted via the online form ahead of the meeting
- If you have questions during the meeting, type in the chat or send to Shoreline_Questions@delaware.gov
 - If clarification is needed, we will ask/allow you to unmute to verbally clarify

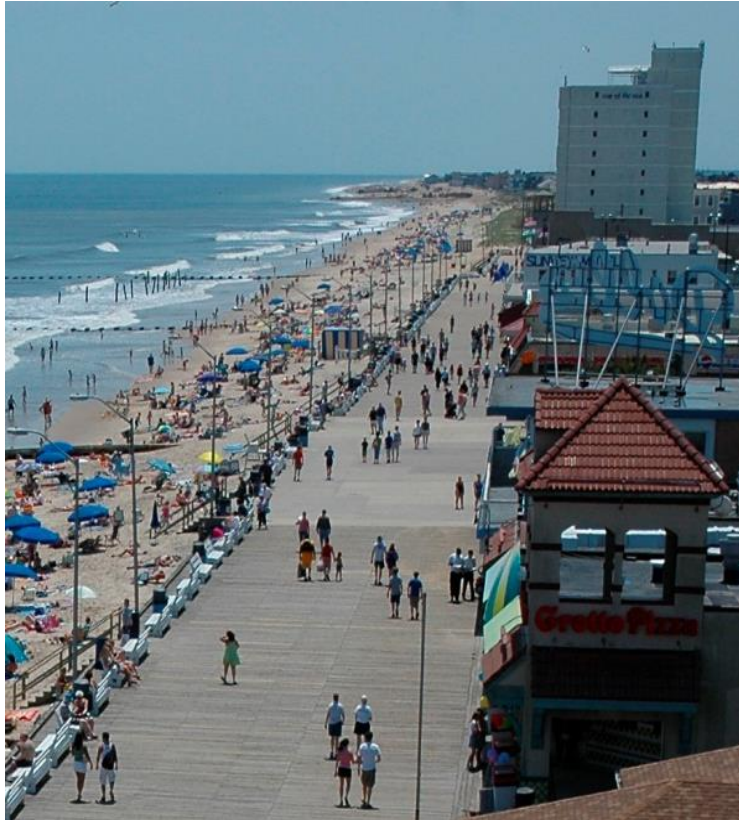


Thank you for Participation

- Key Points
 - Nourishment is getting more expensive
 - DNREC commissioned study will examine the beneficiaries of beach nourishment and recommend cost-share ratios based on those benefits
 - The findings will be presented to Department leadership for further discussion
- Please keep an eye on our website for future meetings to discuss results of the study
- If you have additional questions or feedback, please contact Sarah Bouboulis, sarah.bouboulis@delaware.gov



Purpose and Benefits of Beach Nourishment – Recreation and Tourism



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Purpose and Benefits of Beach Nourishment - Habitat

- Piping plover & other shorebirds
- Horseshoe crabs



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Changing Capacity of Program

- From early 1970's until late 1990's bay beach nourishment projects were executed using state hydraulic dredge
 - Could not sustain due to safety, staffing, and environmental time of year restrictions



This Study is Not...

- Identifying pathways for raising funds
- Looking at issues outside of beach nourishment (i.e. back bay flooding)



Guidelines

- Data supported, follow-up with DNREC (Sarah) with any documents
- Several opportunities for input
- Keep in mind the objectives of the workgroup/project
- Keep comments concise
- We will pass along notes and copies of the PowerPoint Presentations digitally

