

CIVIL WORKS PROGRAMS INTEGRATION DIVISION

California Marine Affairs and Navigation Conference

Theodore A. Brown
Chief, Programs Integration Division

14/15 September 2023



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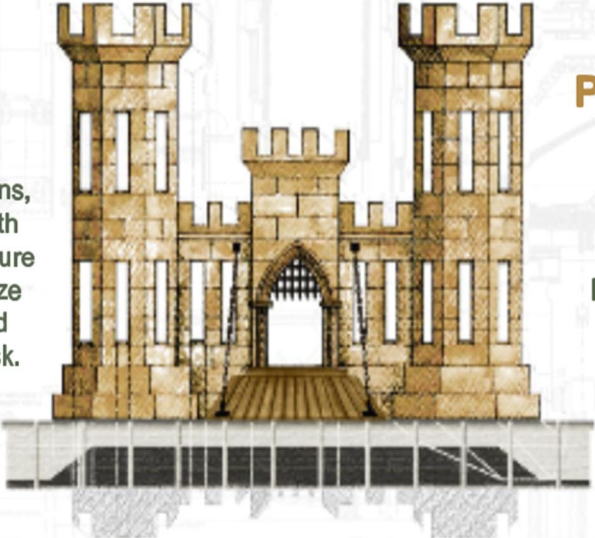
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MISSION AND PRIORITIES

U.S. ARMY CORPS OF ENGINEERS

MISSION

Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce disaster risk.



PRIORITIES

- PEOPLE
- READINESS
- PARTNERSHIPS
- INNOVATE

ENGINEERING SOLUTIONS TO THE NATION'S TOUGHEST CHALLENGES

Chief's Priorities

Upgrade the Nation's Waterways & Ports





Build Innovative, Climate-Resilient Infrastructure

Modernize the Civil Works Program





Invest in Science, Research & Development

Strengthen Communication and Relationships



Assistant Secretary of the Army
for Civil Works Priorities

ACCOMPLISHMENTS

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Upgrade the Nation's Waterways

- **BIL allocations (\$4B in Construction)**
- Making strategic investments in inland system using Capital Investment Strategy
- Improved channel and waterway conditions
- Completing consolidated closures to upgrade lock infrastructure



Build innovative, climate-resilient infrastructure

- Drought resilience strategy
- **Corps Water Infrastructure Financing Program**
- Climate Action Plan Progress Report



Modernize the Civil Works Program

- **Environmental Justice interim guidance**
- Tribal Partnership Program guidance update
- **CAP Sec 165(A) pilot project**



Invest in science, research and development

- **Beneficial use of dredged material pilot projects and initiatives**
- Innovative application of data, analytics and artificial intelligence



Strengthen communications and relationships

- Command Partnering Philosophy
- Synchronized Civil Work Leader Engagement & Messaging
- Innovative Communication Tools: interactive map; podcast; quarterly DCW update



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Top 5 Most Valuable Asset Portfolio

Operating, maintaining, and managing more than
\$212 Billion worth
of the Nation's water resources infrastructure.



68 studies started
82 studies completed
over the past 5 years



48 construction projects started
61 completed construction projects
over the past 5 years



BUILDING FOR
THE FUTURE

U.S. ARMY CIVIL WORKS National Impacts



Navigation Reliability

Improves transportation efficiency and supply chain, lowers import and export costs, and reduces carbon footprint

Recent investments have led to

25 channel & harbor deepenings completed and in progress

Allowing cargo ships to carry over **2.2 billion tons** of cargo annually. (2017-present)

40%

Increase in investment in USACE locks & dams since 2010



Resulted in a
80%
decrease of unscheduled stoppages (greater than 1 day)

More Efficient mode of Transportation

1 BARGE
is equivalent to



10 RAILCARS



OR
70 SEMI-TRAILERS

ECONOMIC
GROWTH

INFRASTRUCTURE
RESILIENCY

\$13 ROI **\$1**

USACE provides technical assistance and innovative solutions that reduce risks, drive economic growth, and create resilient communities for future generations.



more than **700** dams
13,000 miles of Federally Authorized Levees
The reduce the risk of flooding to more than 45 million people & \$3.8 trillion in property



400+ miles

1.4 Billion visits
to USACE recreation areas
over the past 5 years



\$14 Billion
Economic Impact
supports **210,000** jobs



Over the past 5 years

Successfully used innovative financing tools to deliver innovative, resilient, and sustainable projects.

Public-Private Partnerships
Projected Federal Savings of more than

\$450 MILLION & 23 YEARS



STRONG

INNOVATIVE
SOLUTIONS

SUSTAINABILITY

more than **350**
aquatic ecosystem
restoration projects
in **40** states

Restoring more than
200,000 acres
of aquatic habitat
over the past 5 years



Steward **12 Million** acres
of land and water
in **43** states



Hydropower
Improved Turbine Reliability
25% decrease in
unscheduled outages

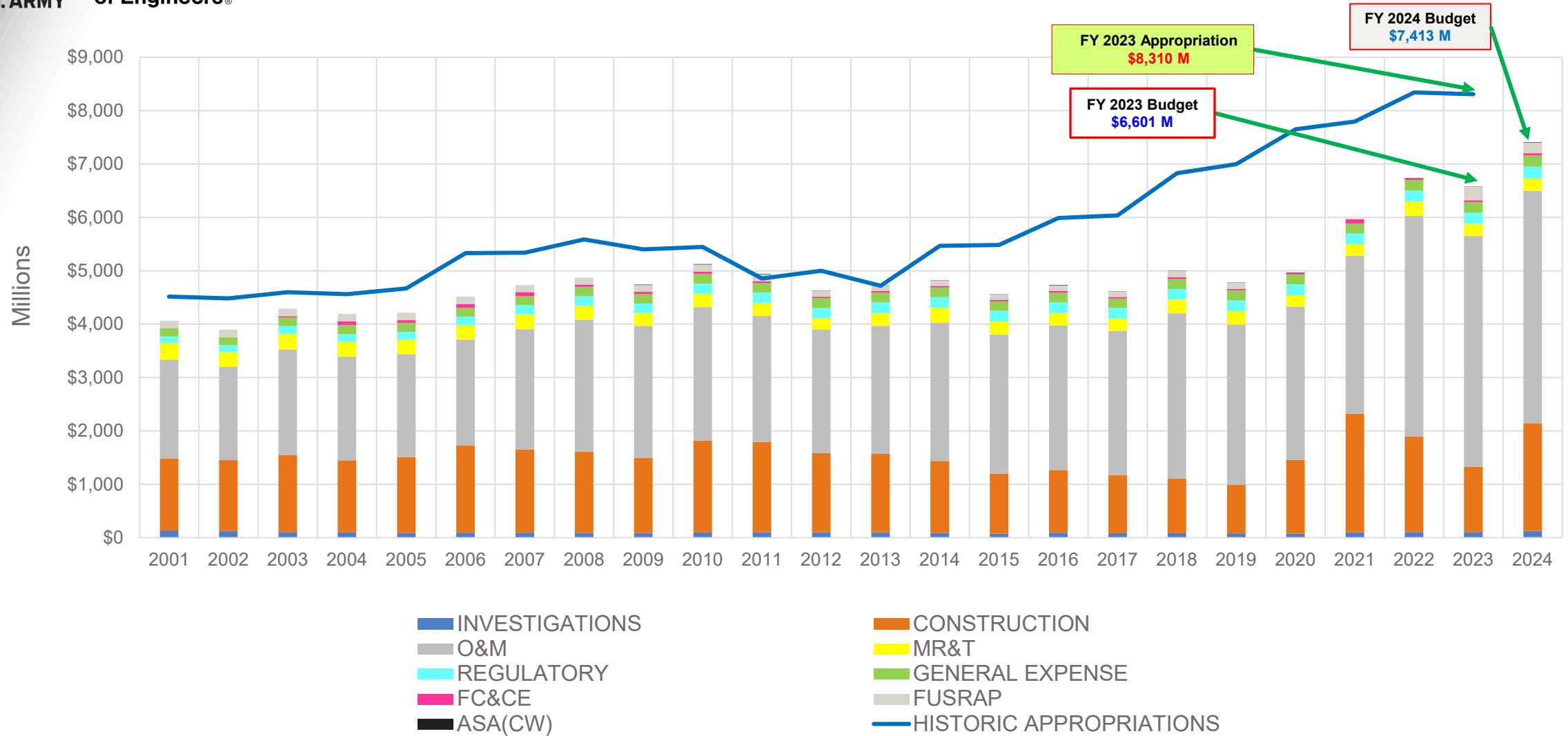
over the
past 5 years



Generating enough to power
11 Million +
homes every year

CIVIL WORKS INVESTMENT TRENDS

(EXCLUDES SUPPLEMENTAL FUNDING)



FY24 Budget is ~11% increase above FY23 Budget
FY23 Work Plan is ~21% increase above the FY23 Budget
FY23 Work Plan is ~0.4% decrease below FY22 Work Plan



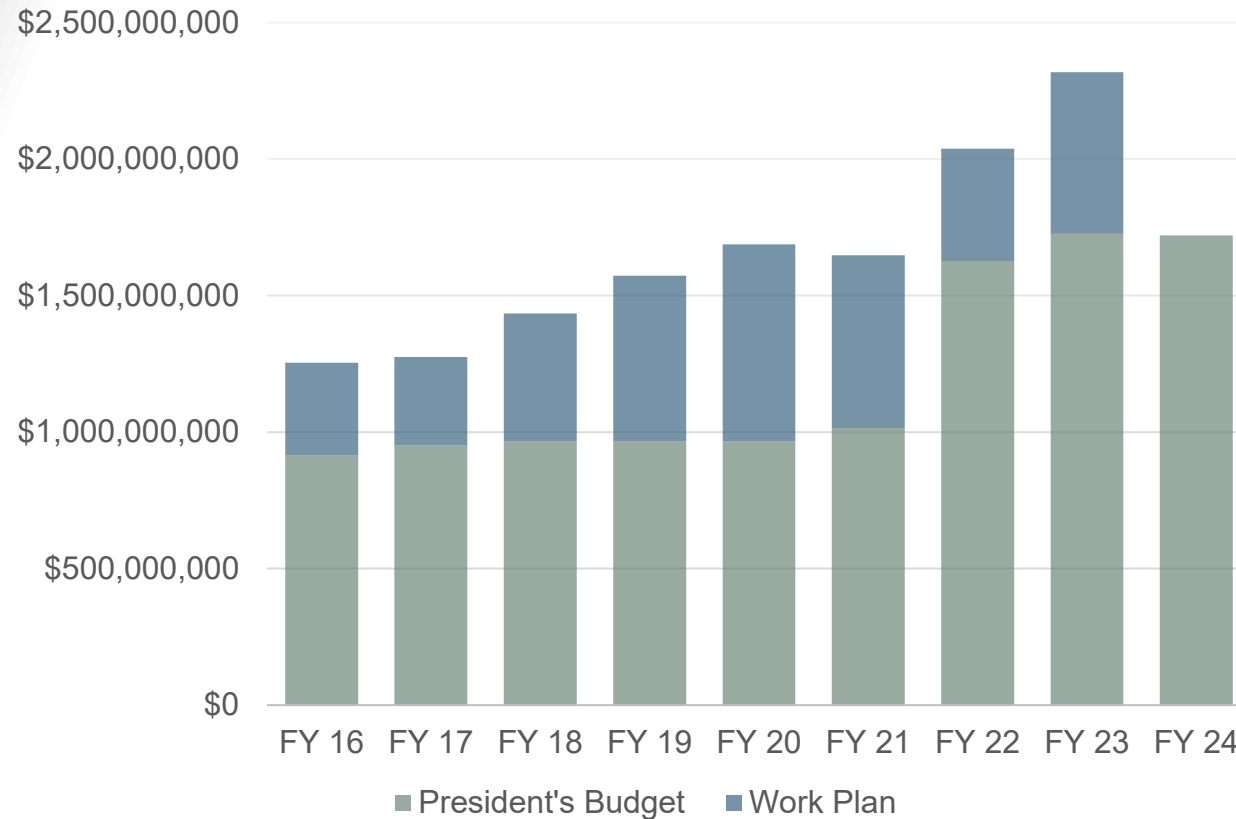
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HARBOR MAINTENANCE TRUST FUND

HMTF Allocation Trends



-FY 22 EOY Balance- \$9.5B

-FY23 bill directed \$2.32B in funding,
FY24 PBUD was \$1.72B

-With the exception of a minor dip in FY
20 collections have remained at about
\$1.5B/year

-The additional HMTF investments have
allowed us to:

- maintain further into the
portfolio those low use projects
- address breakwater and jetty
maintenance
- consider advanced
maintenance activities at critical harbors



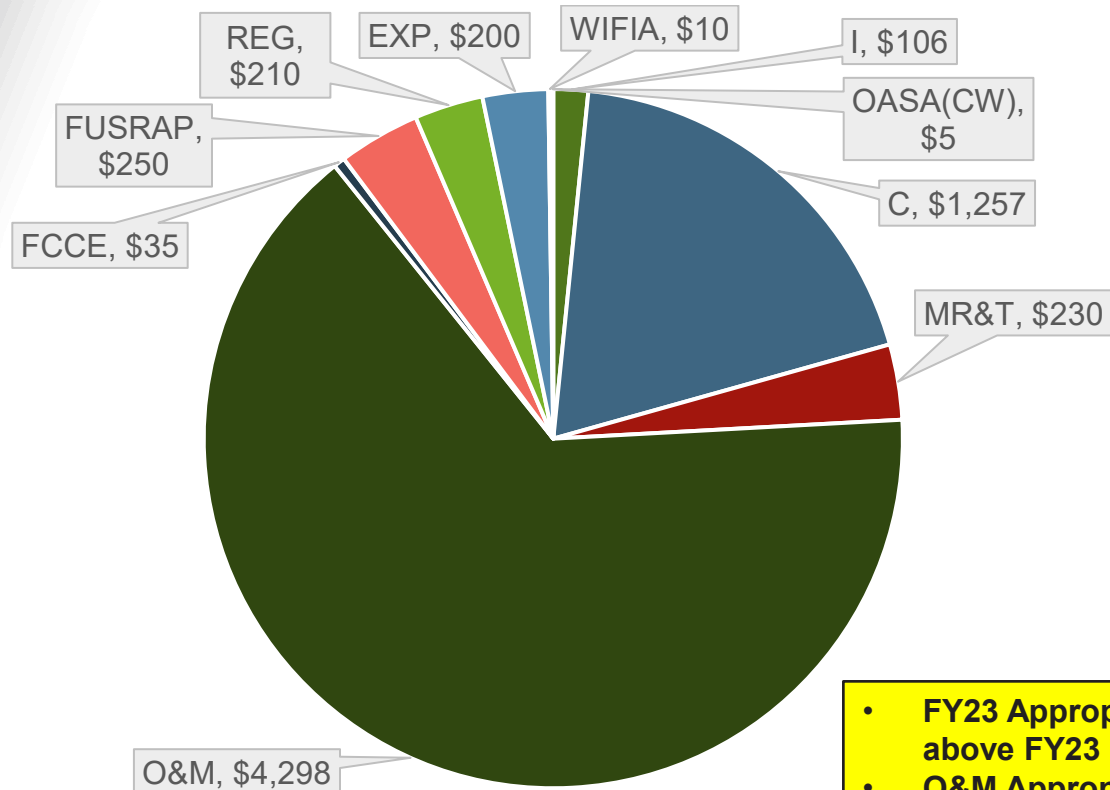
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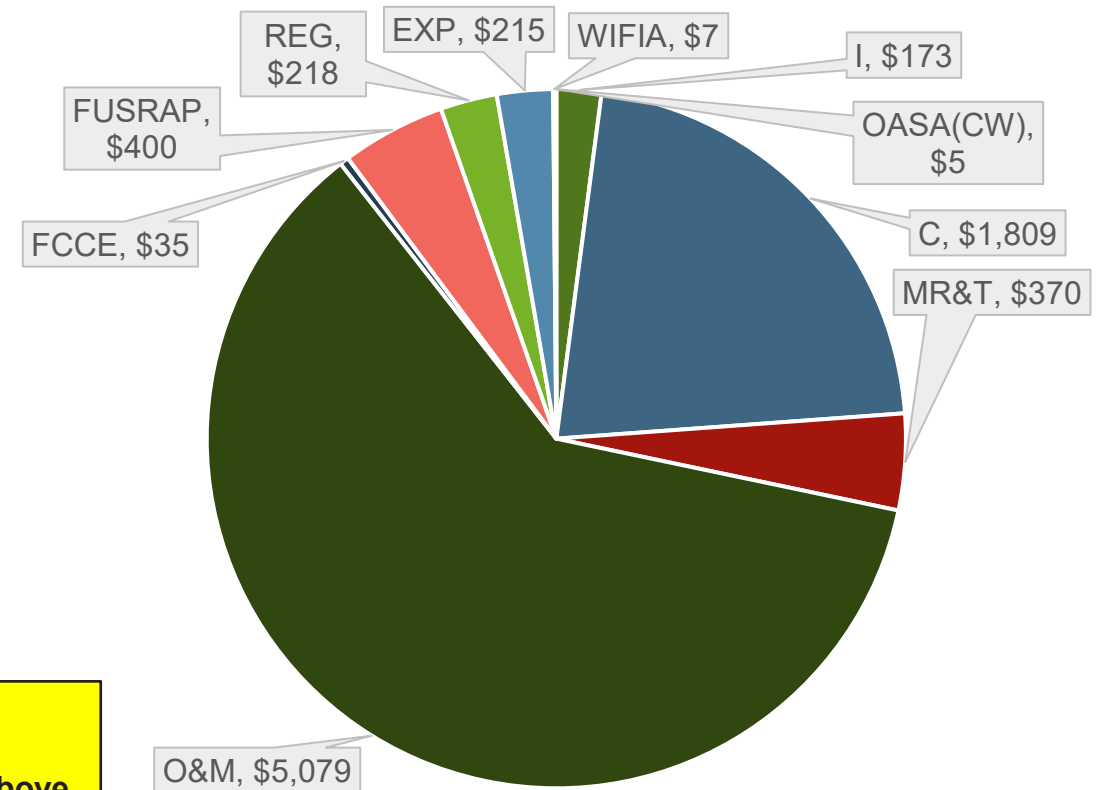
FY23 CIVIL WORKS PROGRAM SUMMARY

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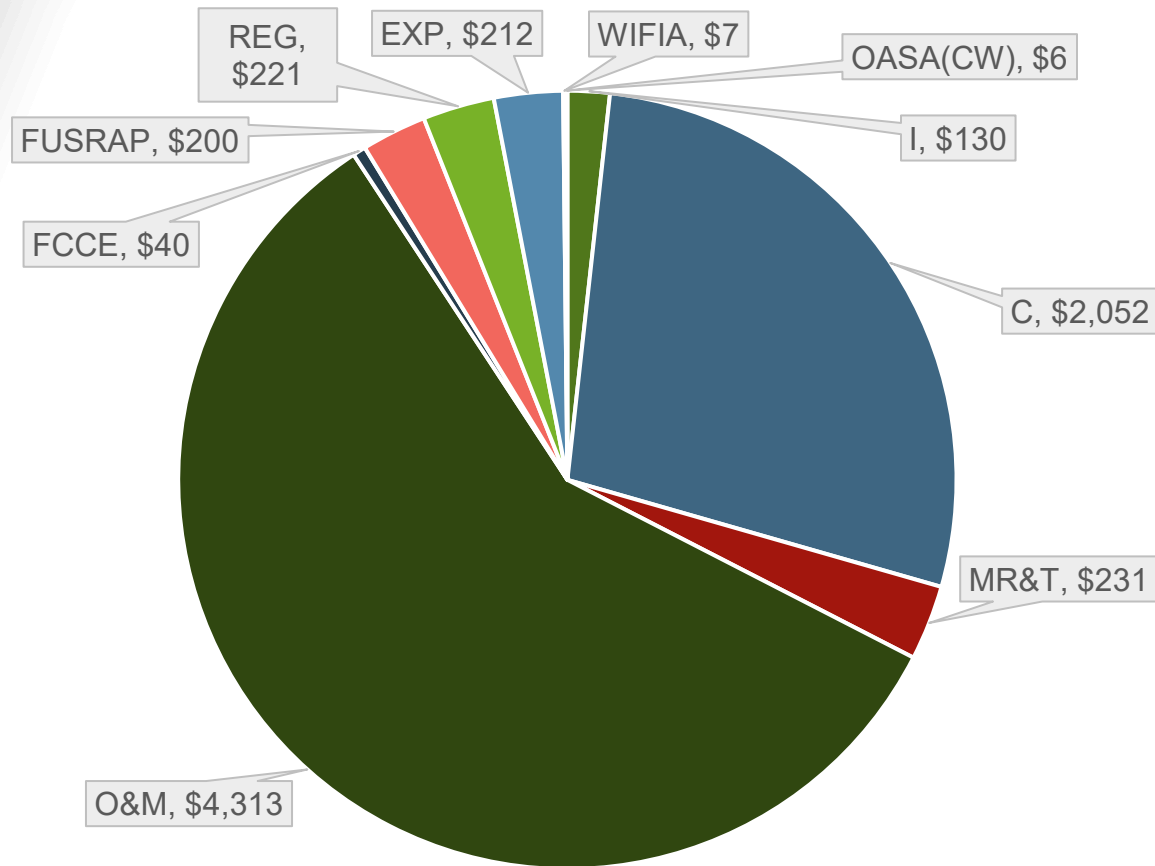
FY2023 Budget - \$6,601
By Account
(\$ Millions)

- FY23 Approp is \$1.709B above FY23 PBUD
- O&M Approp is \$780M above PBUD
- C Approp is \$552M above PBUD
- MR&T Approp is \$140M above PBUD

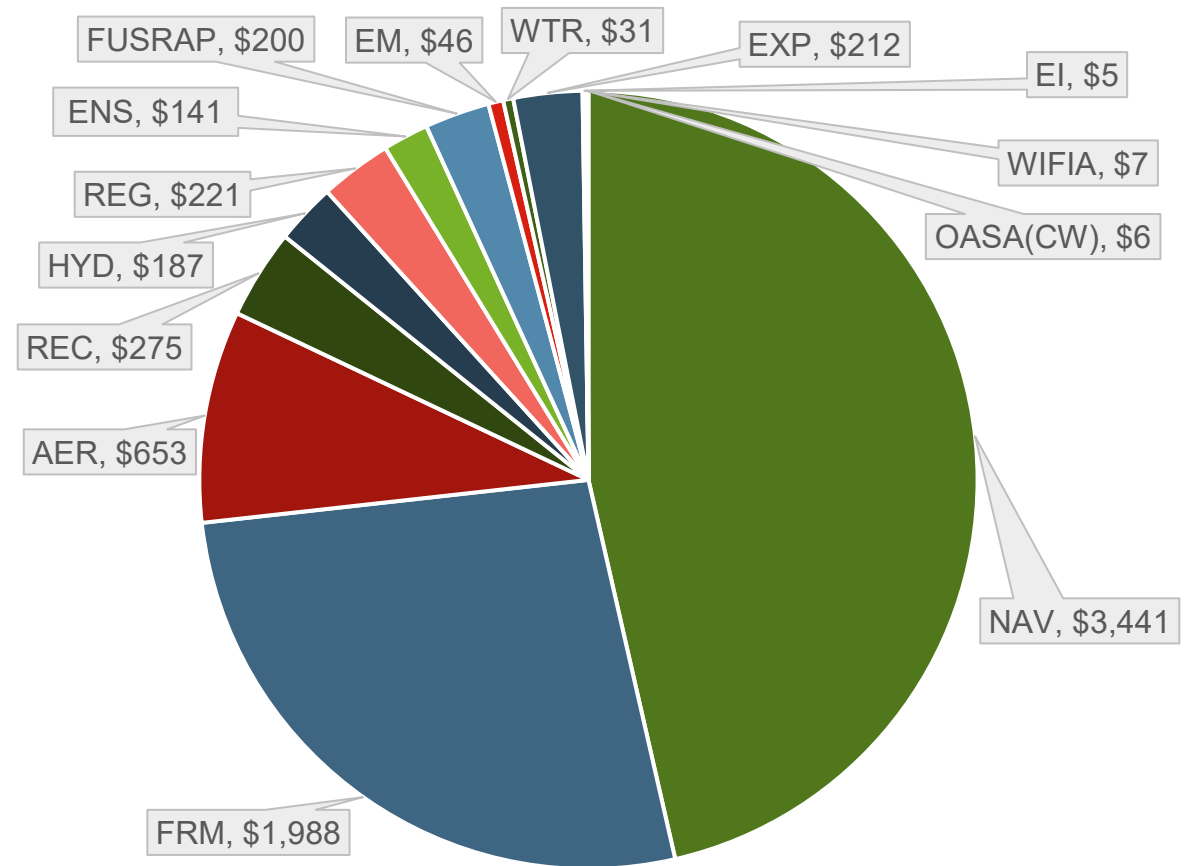


FY2023 Appropriation - \$8,310
By Account
(\$ Millions)

FY24 CIVIL WORKS PROGRAM SUMMARY

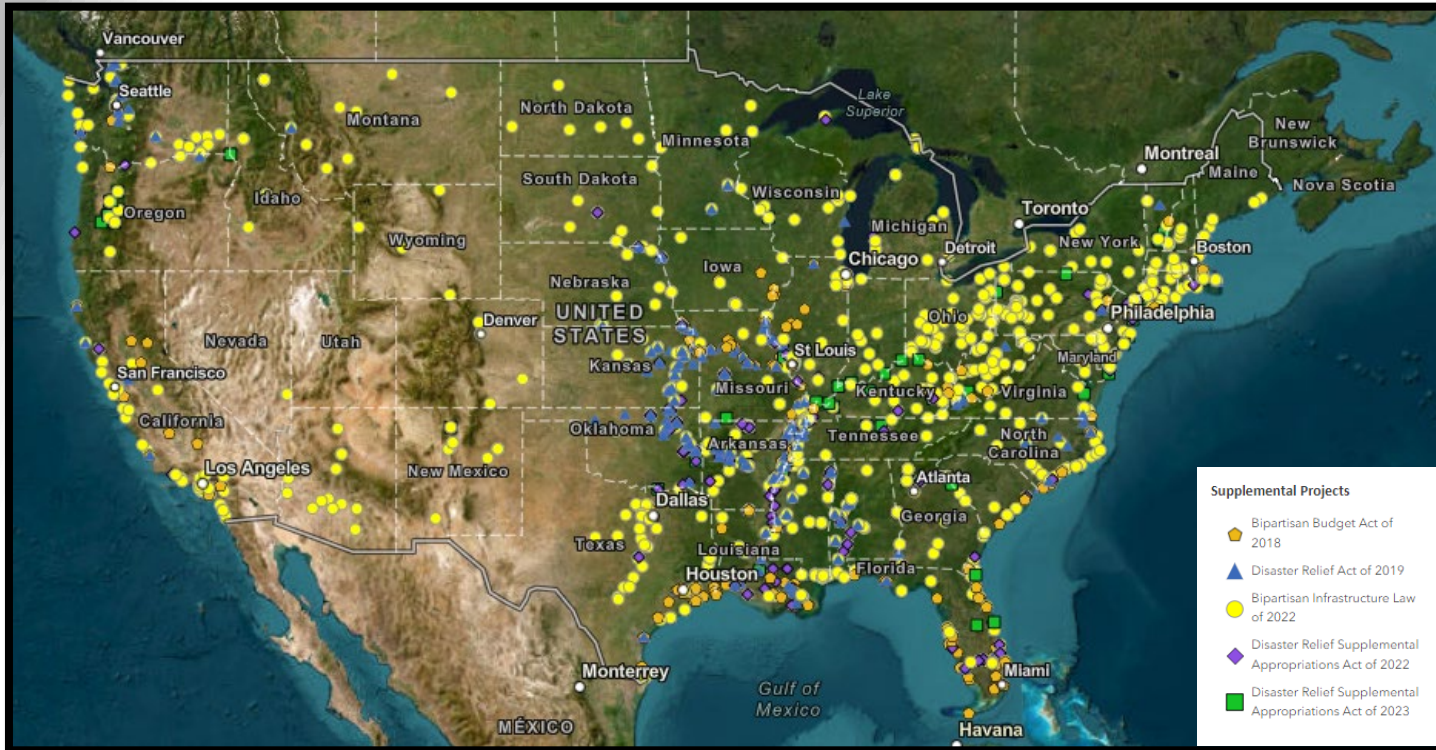


FY2024 Budget
By Account
(\$ Millions)



FY2024 Budget
By Business Line/Funding Category
(\$ Millions)

SUPPLEMENTAL PROGRAM OVERVIEW



Katrina (aka HSDRRS): \$14.5B
(multiple laws starting in 2005); Managed by MVD

Disaster Relief Appropriations Act, 2013 (Sandy): \$5.1B
(signed into law 29 Jan 2013); Managed by NAD

Bipartisan Budget Act of 2018: \$17.4B
(signed into law 9 Feb 2018)

Disaster Relief Act of 2019: \$3.25B
(signed into law 6 Jun 2019)

Disaster Relief Supplemental Approps Act, 2022: \$5.7B
(signed into law 30 Sep 2021)

Bipartisan Infrastructure Law (BIL), 2022: \$17.1B
(signed into law 15 Nov 2021)

Disaster Relief Supplemental Approps Act, 2023: \$1.48B
(signed into law 29 Dec 2022)

Total Supplemental Program - ~\$44.93 Billion



To be directed to
our interactive
project map



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PARTNERSHIPS

BUILDING AND SUSTAINING STRATEGIC RELATIONSHIPS

One Mission – One Team:

The quality of our relationships drive performance outcomes

Relationship Spectrum

Transactional

- Cost Driven
- Short-Term
- Unequal Power
- Low Trust/Reward
- Compromised Objectivity
- Independent Goals
- One-Way Accountability



Strategic

- Value-Driven
- Longer-Term
- Shared Risk/Reward
- High Trust
- Principled Delivery
- Common Vision & Goals
- Mutual Accountability

3 Cs of Successful Strategic Relationships



Key Principles:

- ✓ Partnering requires enduring leadership commitment and active involvement
- ✓ A “partnering mindset” is needed to achieve successful partnering outcomes
- ✓ Partnering is continual and should be incorporated into all activities, interactions, and phases of delivery
- ✓ Each relationship is unique and should be treated as such



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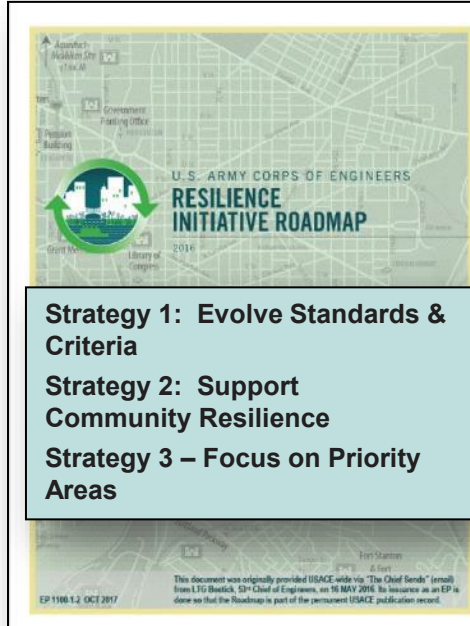
CLIMATE RESILIENCE IN USACE PROJECTS

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USACE RESILIENCE INITIATIVE

USACE Approach to Resilience

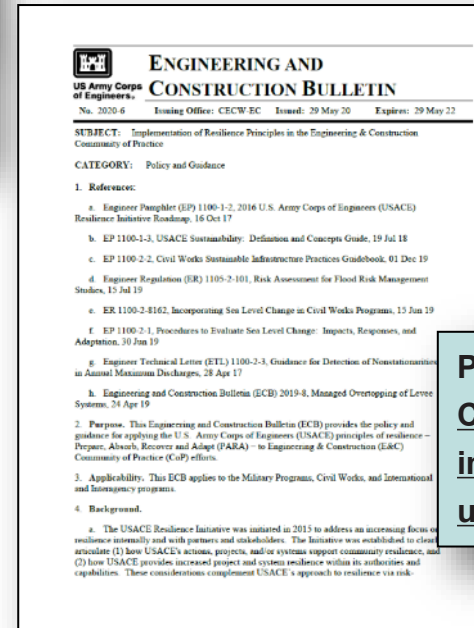
- USACE applies **resilience thinking** through **four principles** that spring from **our definition of resilience**:
“the ability to anticipate, **prepare** for, and **adapt** to *changing conditions* and **withstand, respond to**, and **recover** rapidly from *disruptions*.”
- The **PARA principles** frame & guide actions that build resilience throughout the considered lifecycle.



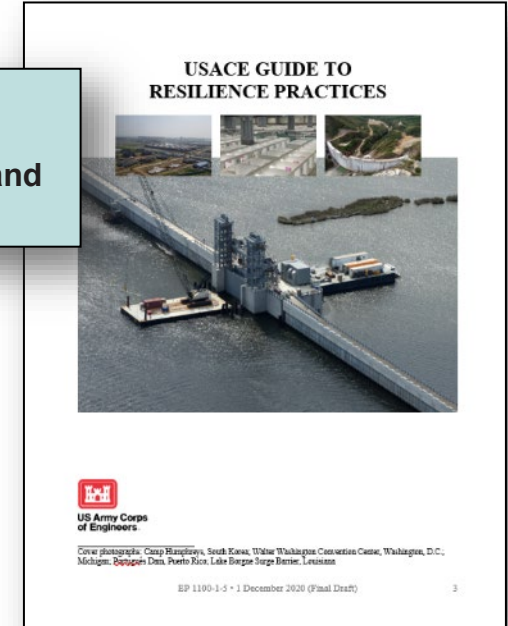
- Strategy 1: Evolve Standards & Criteria
- Strategy 2: Support Community Resilience
- Strategy 3 – Focus on Priority Areas

Comprehensive inventory of USACE resilience activities, guidance documents, tools, and methods

Implementation of Resilience Principles (ECB 2020-6)



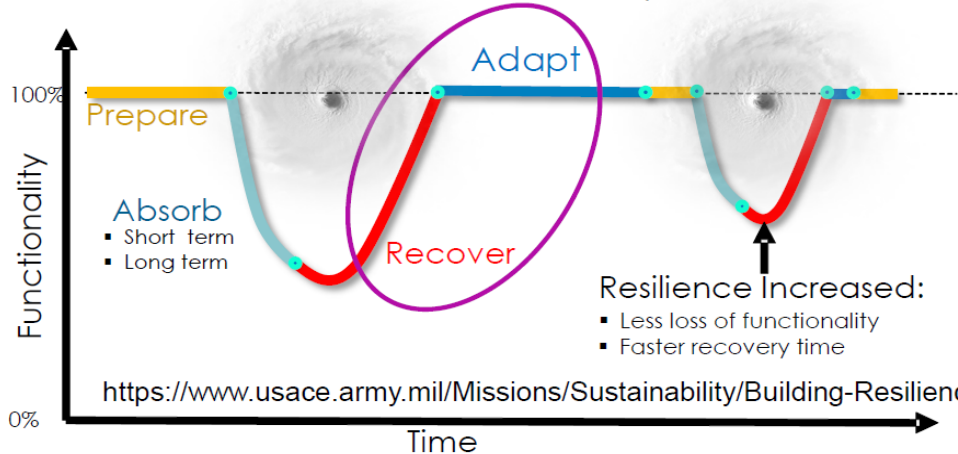
USACE Guide to Resilience Practices (EP 1100-1-5)



Policy: “The E&C CoP and sub-CoPs will reflect resilience thinking in their practices and in new and updated standards and criteria.”

DEFINING RESILIENCE

2016 Resilience Initiative: resilience will be implemented USACE-wide





CLIMATE RESILIENCE IN USACE PROJECTS

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Climate Science Resources

PRIMARY VARIABLE	OBSERVED		PROJECTED	
	Trend	Literature Consensus (n)	Trend	Literature Consensus (n)
Temperature	↓	(5)	↑	(7)
Temperature MINIMUMS	↑	(1)	↑	(3)
Temperature MAXIMUMS	↑	(1)	↑	(3)
Precipitation	↑	(4)	↓	(3)
Precipitation EXTREMES	↓	(4)	↑	(3)
Hydrology/ Streamflow	↑	(4)	↓	(4)

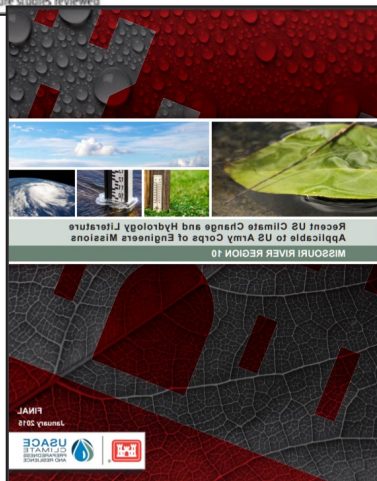
NOTE: Spatial variability was observed in the literature review for Observed Precipitation Extremes. The inland portion of HUC 12 generally showed decreasing trends while the coastal portion of the HUC generally showed increasing trends for observed precipitation extremes.

TREND SCALE

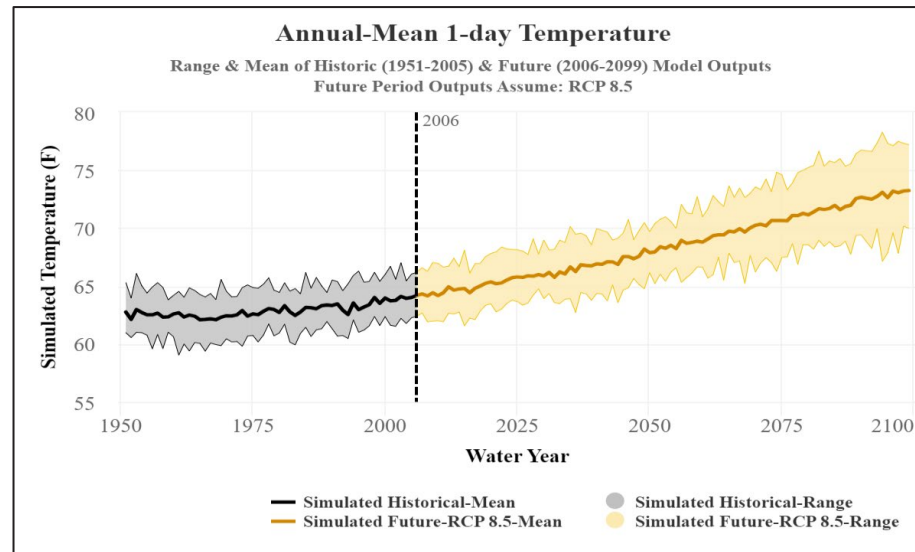
↑ = Large Increase ↗ = Small Increase — = No Change ↘ = Variable
↓ = Large Decrease ↙ = Small Decrease ○ = No Literature

LITERATURE CONSENSUS SCALE

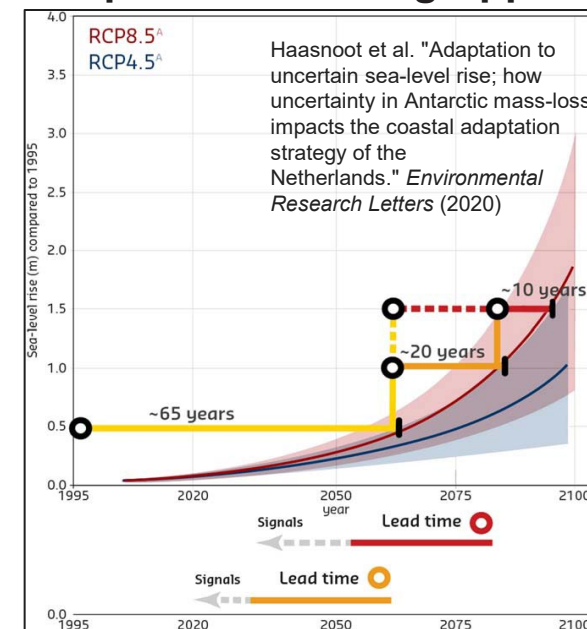
☺ = All literature report similar trend ☹ = Low consensus
☺ = Majority report similar trends ○ = No peer-reviewed literature available for review
(n) = number of relevant literature studies reviewed



Climate Tools



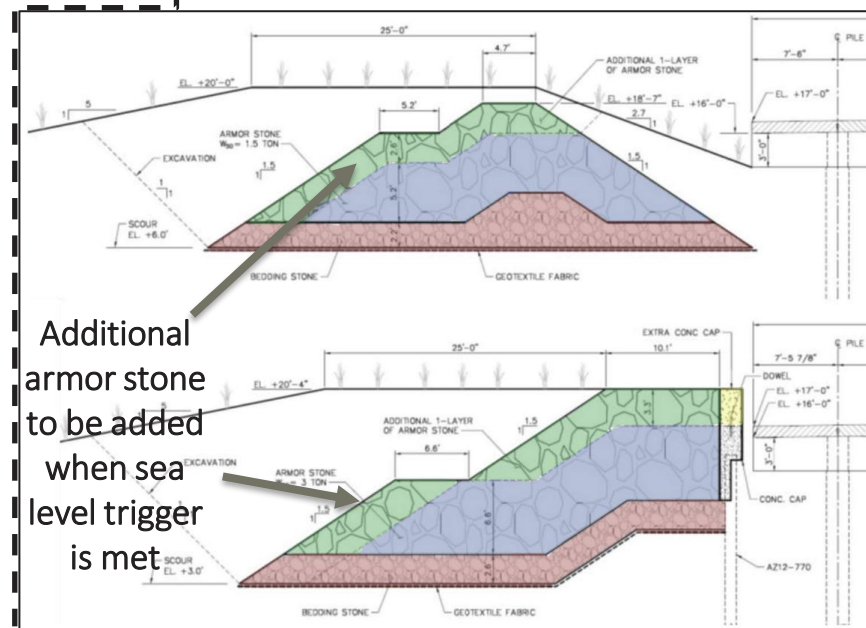
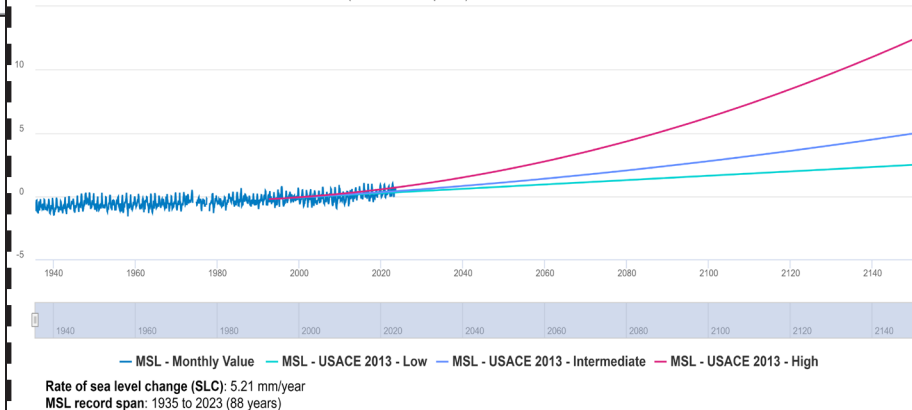
Adaptation Planning Approach



Sea Level Data and Projections: Fort Pulaski, GA (8670870)

NOAA Tide Gauge

Feet above North American Vertical Datum of 1988 (1983-2001 epoch)





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Listen to learn more about our programs and projects!



*A podcast that goes behind castle doors to
have real conversations
with real people about solving the nation's
toughest challenges.*

<https://podcasts.apple.com/us/podcast/inside-the-castle/id1539014668>

Episodes of Interest:

- Spotlight on the Water Resources Development Act
- Interview with Assistant Secretary of the Army for Civil Works
- Environmental Infrastructure
- USACE Budget Process
- Corps Water Infrastructure Financing Program
- Interview with Chief of Engineers
- USACE Supplemental Program Overview
- Aging Infrastructure
- Overview of USACE Operations Division

Thank you!