

Virginia Coastal Resilience Technical Advisory Committee

Funding Subcommittee Quarterly Meeting (2024Q1)

Date: Thursday, January 25th, 2024
Time: 010:00 am

Location: Bank of America Building
3rd Floor Conference Room
1111 East Main St., Suite 1400
Richmond, VA 23219

For Virtual Access, Register at

https://vcu.zoom.us/webinar/register/WN_MKKVsqRuRT-c05L1kLBNoQ



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Meeting Agenda

- Call to Order, Roll Call, and Introductions
- Adoption of Meeting Agenda
- Adoption of 2024Q1 Subcommittee Meeting Minutes
- Subcommittee Overview
- Old Business
 - Peer State Review of Resilience Plans Financial Sections
 - Lines of Effort Work Item Prioritization
 - Tasks for CRMP Phase II
 - Tasks for future planning efforts
- New Business
 - Subcommittee Members Discussion
- Public Comment
- Action Items, Scheduling
- Adjourn


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Name	Title	Organization
Shawn Crumlish (Chair)	Executive Director	Virginia Resources Authority
Peter D'Alema (Alternate Chair)	Director of Program Management	
William Curtis	Assistant Director	
Whitney Katchmark	Principal Water Resources Engineer	Hampton Roads Planning District Commission
Ben McFarlane (A)	Chief Resilience Officer	
Lewis L. Lawrence, III	Executive Director	Middle Peninsula Planning District Commission
Curtis Smith (A)	Deputy Director	
Kristin Burhop	Vice President for Public Policy and Legislative Affairs	Virginia Chamber of Commerce
Keith Martin	Executive Vice President, Public Policy and Government Relations	
Robert Coates	Director, Grant Management and Recovery Division	Virginia Department of Emergency Management
Debra Messmer (A)	State Hazard Mitigation Officer	
Chris Swanson	Environmental Division Director	Virginia Department of Transportation
Christopher Berg (A)	Assistant Division Director	
Jamie Green	Commissioner	Virginia Marine Resources Commission
Rachael Peabody (A)	Director of Coastal Policy, Restoration and Resilience	
Randy Owen (A)	Chief of Habitat Management	
Dr. Troy Hartley	Director	Virginia Sea Grant
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Funding Subcommittee Objectives

- Inform quantification of financial need for flood resilience.
 - What funding needs should be identified in the CRMP Phase II, including to guide appropriations needs?
- Identify and examine financial tools and processes that are suited and/or needed to implement flood resilience.
- Identify challenges/opportunities to implementing financial tools.
- Develop recommendations for future planning.

This includes, but is not limited to:

 - Recommend approach to quantifying and presenting financial need for flood resilience during future planning efforts.

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Funding Subcommittee Lines of Effort

LOE-1

Building the Financial Baseline

LOE-2

Making the Financial Case

LOE-3

Document Opportunities for State Support

LOE-4

Providing Guidance and Information

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CRMP Phase II - Plan Development Timeline

Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24	Oct 24	Nov 24	Dec 24	
Meetings																		
	Sub	TAC			Sub	TAC			Sub	TAC			Sub	TAC			Sub	TAC
Schedule																		
Develop Flood Hazard Exposure Model Research, Data, and Innovation						Data Display (CRWE Update) Research, Data, and Innovation												
Data Collection Project Prioritization			Flood Hazard Risk Assessment Project Prioritization															
Project and Initiative Info Collection Project Prioritization						Analyze Planned Resilience Actions Project Prioritization, Funding												
				Quantify Financial Need for Flood Resilience Funding														
Ongoing Stakeholder Outreach and Engagement Outreach and Coordination																		
Develop TAC Subcommittee Recommendations All Subcommittees																		



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Subcommittee Schedule

2023Q3	CRMP PII – Identify Financial Needs
2023Q4	CRMP PII – Identify Financial Needs
2024Q1	CRMP PII – Prioritize Financial Needs
2024Q2	CRMP PII – Financial Assessment Future Plans – Recommendations
2024Q3	CRMP PII – Financial Assessment Review Future Plans – Recommendations
2024Q4	Future Plans – Final Recommendations

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Contractor Support for CRMP Phase II

- Existing Dewberry Contract
 - Pluvial Modeling
 - Combined Flood Hazard
 - Flood Hazard Impact
- Resilience Planning and Consulting Contract (Pending)
 - Plan Design and Production
 - Coastal Resilience Web Explorer Update
 - Outreach and Engagement
 - Planned Resilience Actions
 - Financial Tools and Information

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Research, Data, and Innovation Subcommittee

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Old Business

Peer State Review of Resilience Plans Financial Sections
Lines of Effort Work Item Prioritization

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Peer State Review of Resilience Plans Financial Sections

- [State Resilience Partnership State Flood Resilience Planning Checklist](#)
- [Urban Institute State Flood Resilience and Adaptation Planning Report](#)
- [Louisiana Coastal Resilience Master Plan](#)
- [Texas Coastal Resiliency Master Plan](#)
- [Florida Statewide Resilience Plan](#)
- Virginia Context

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FLOOD RESILIENCE CHECKLIST FOR STATE PLANNERS

Better prepare your state for flooding and sea level rise



- **Identify dedicated funding** for flood planning and other hazard mitigation planning, including for continual data collection and analysis.
- Target efforts to ensure **low-capacity communities can access state funding** and technical assistance.
- **Highlight co-benefits of projects** to encourage buy-in and coordination among stakeholders.
- Create a prioritized list of specific projects and actions **linked to accountable entities and funding sources**.
- **Use metrics** tied to desired strategic outcomes, rather than outputs, to track and report progress toward implementation.

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Urban Institute 2022 STATE FLOOD RESILIENCE AND ADAPTATION PLANNING REPORT

TABLE 1

Number of Plans, by Type

Plan type	Number of plans
Coastal 309 plan	29
Climate action plans	22
Resilience plans	12
Direct response plan	2
Emergency management	3
Flood plan	7
Hazard mitigation	53
Combined hazard mitigation/climate plan	1
Water plan	19
Total count	148

TABLE 3

Funding Measures, by State Rule Type

Percentage

	Dillon's Rule	Home Rule	Hybrid
Primary source of funding—state	53	39	61
Primary source of funding—federal	47	61	35
FEMA Hazard Mitigation Assistance	48	12	9
State hazard mitigation assistance	20	6	9
Other state or private funding	84	17	19
None	12	2	2
Funding fully committed	25	35	22
Funding partially committed	42	43	65
No funding committed	32	22	13
Budget included	29	39	26
Partial budget included	17	13	17
No budget included	54	48	57

Source: Authors' data.

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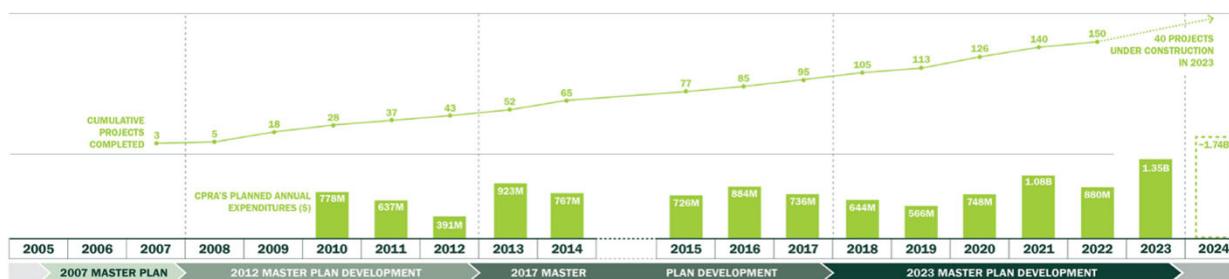
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- “CPRA is an implementation agency – we do not just plan projects, we build them.”
- For decades, the state and our partners have moved projects forward from conception to construction, securing \$21.4 billion in pursuit of coastal restoration and risk reduction efforts since 2007



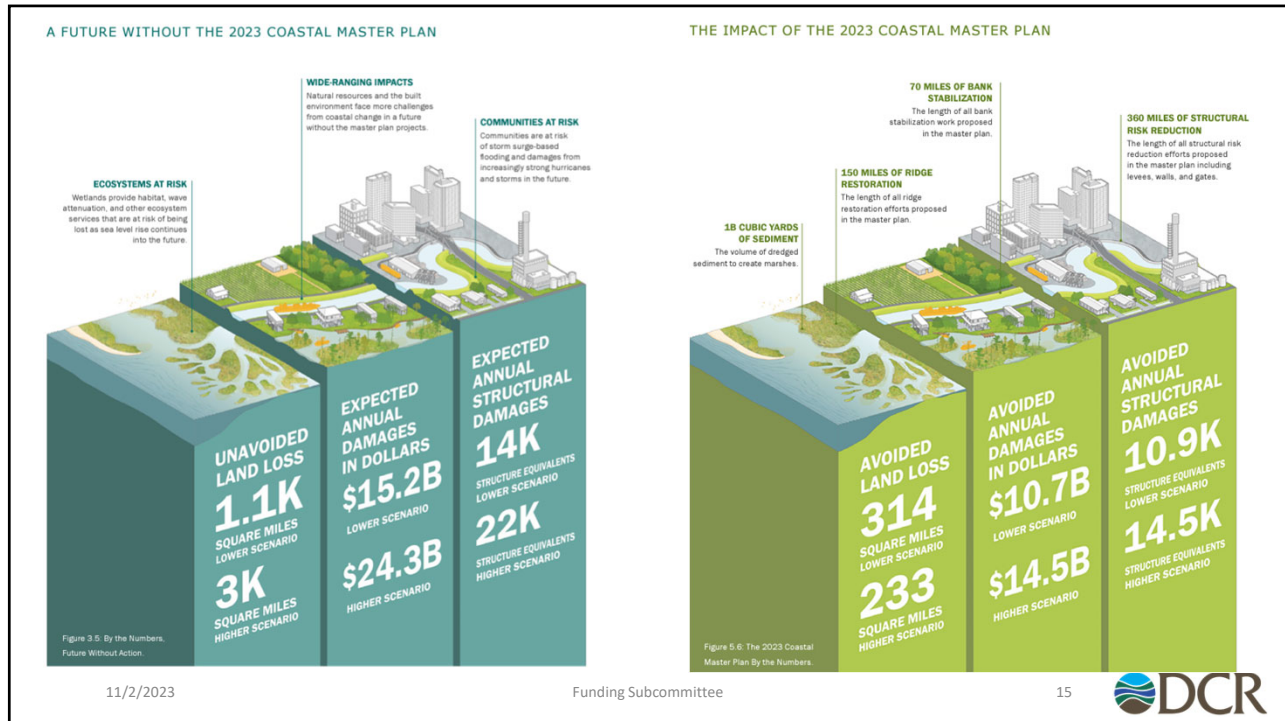
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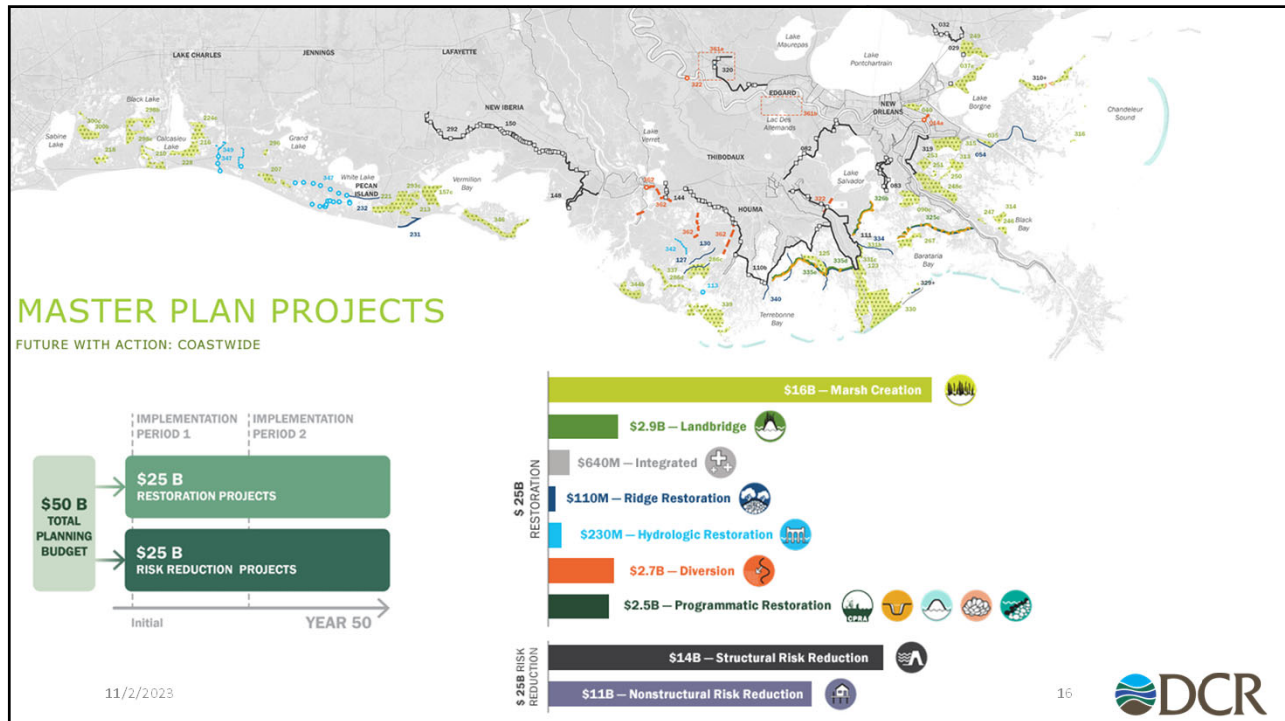
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TEXAS COASTAL RESILIENCY MASTER PLAN

MARCH 2023
Commissioner Dawn Buckingham, M.D.
Texas General Land Office

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The Value of the Texas Coast

33% of the nation's total refining capacity

33% of U.S. Tonnage Export Value

\$195 M of seafood production

2.3. Economic Systems of the Texas Coast

The Texas ocean economy consists of enterprises that rely on coastal features, resources, and amenities. These include waterborne commerce, energy and chemical industries, military, commercial and recreational fishing, marine transportation, ship and boat building, and tourism and nature tourism. The data below represent Texas coastal counties in 2020.

Region	Annual Wages	No. of Jobs	Businesses	Avg. Wage/Employee
1	\$23.3 billion	382,844	16,251	\$61,000
2	\$624 million	10,741	700	\$58,200
3	\$1.4 billion	32,039	1,725	\$42,600
4	\$358 million	15,744	946	\$22,800

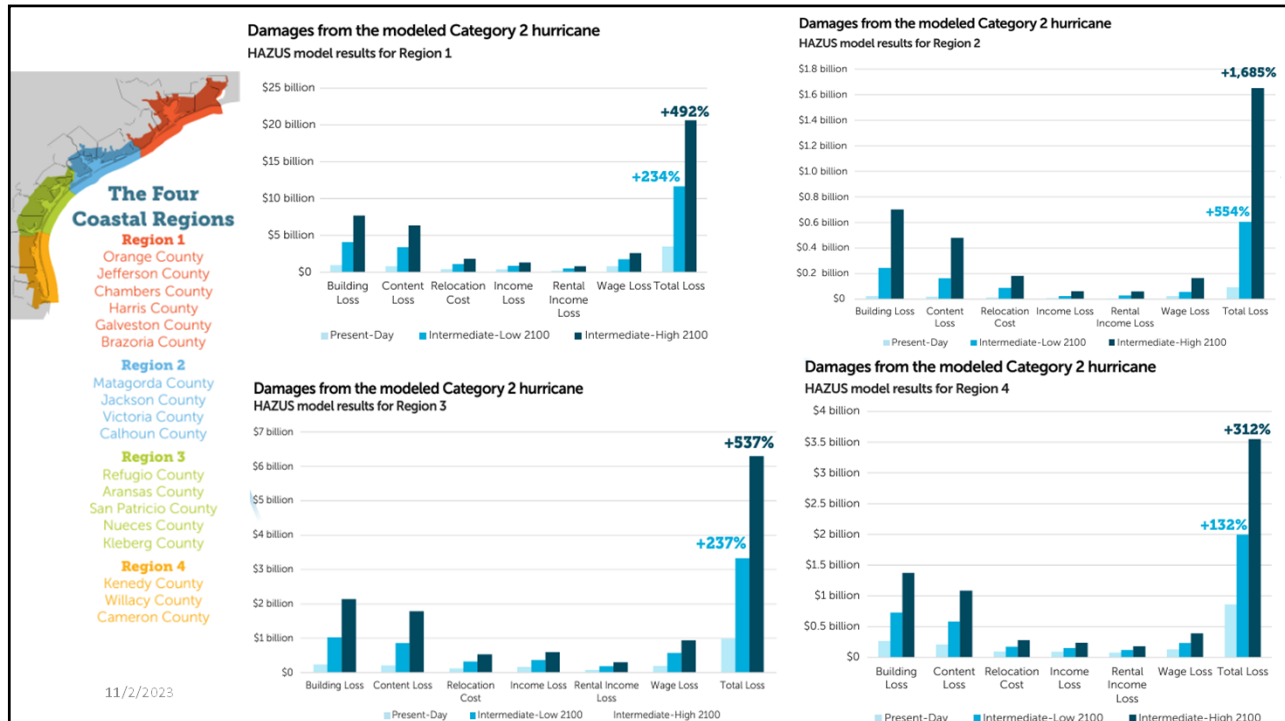
Source: Bureau of Labor Statistics, 2022.⁷

Table 3.1: Storms impacting the Texas coast 2019 - 2022

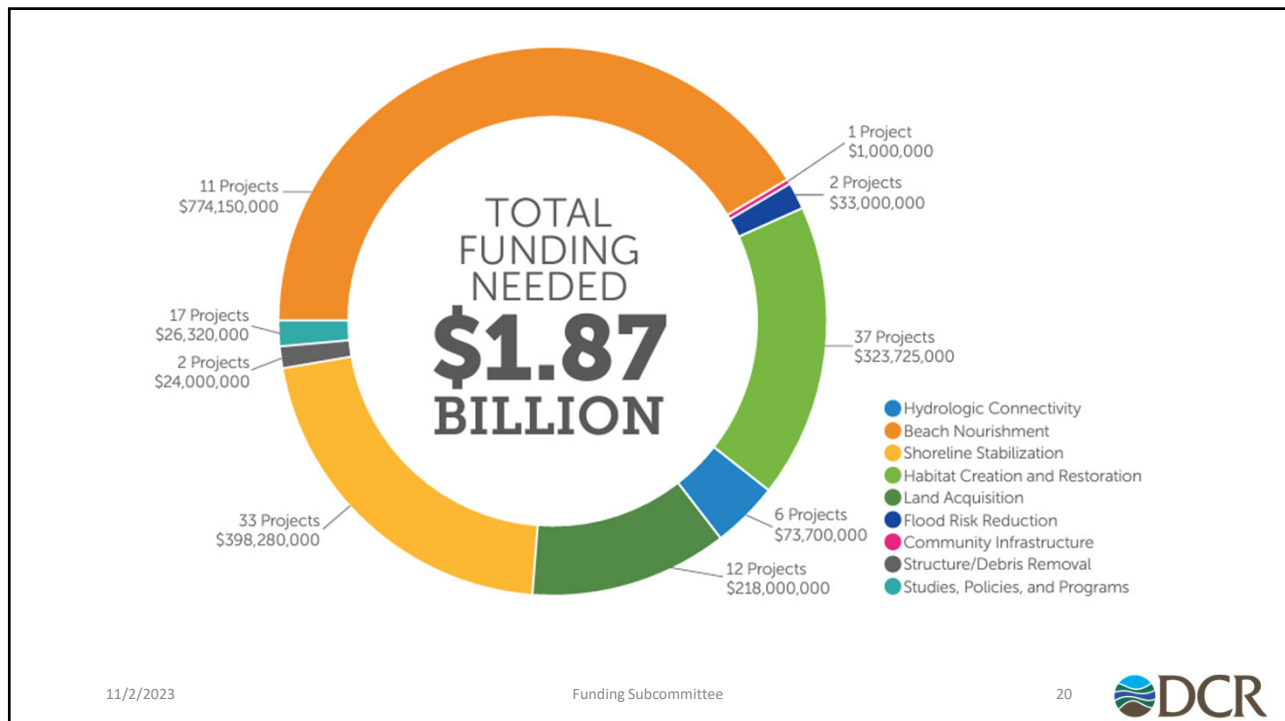
Season	Storm	Landfall Date	Landfall Location	Storm Category at Landfall	Max Rainfall in Texas (in)	Direct Deaths	Damage (\$)
2019	Imelda	9/17/2019	Southeast TX	Tropical Storm	44.3	5	5 billion
2020	Hanna	7/25/2020	Padre Island, TX	1	15.5	0	1.1 billion
2020	Laura	8/27/2020	Cameron, LA	4	6.7*	2	19 billion overall 975 million in Texas
2020	Beta	9/22/2020	Matagorda Bay, TX	Tropical Storm	15.8	1	225 million
2021	Nicholas	9/14/2021	Matagorda Peninsula, TX	1	10.2	0	1 billion

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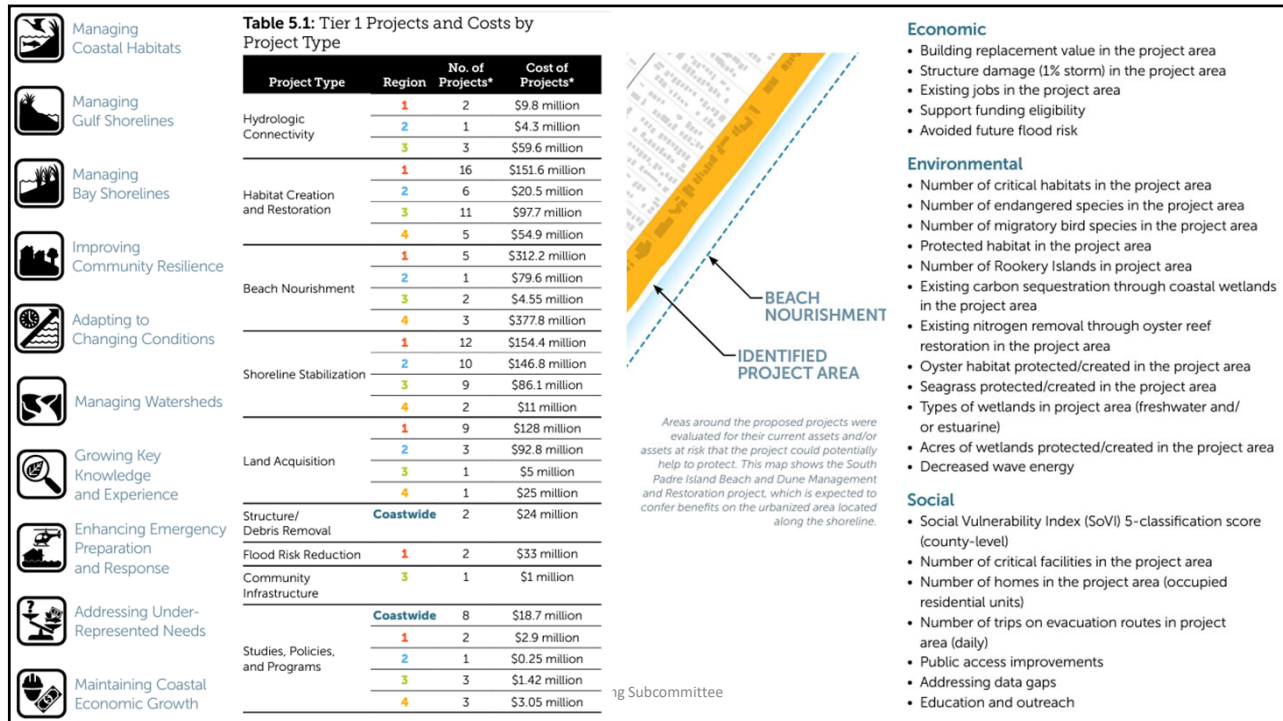
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6.2. Funding this Plan

The GLO's Coastal Protection Division is involved in many funding efforts dedicated to meeting coastal resiliency needs. These efforts have produced many implementation successes in recent years, contributing to the GLO's overall goal of restoring, protecting, and enhancing the Texas coastal area. The total funding needed for Tier 1 projects in this Plan is shown by project type in Figure 6.2.

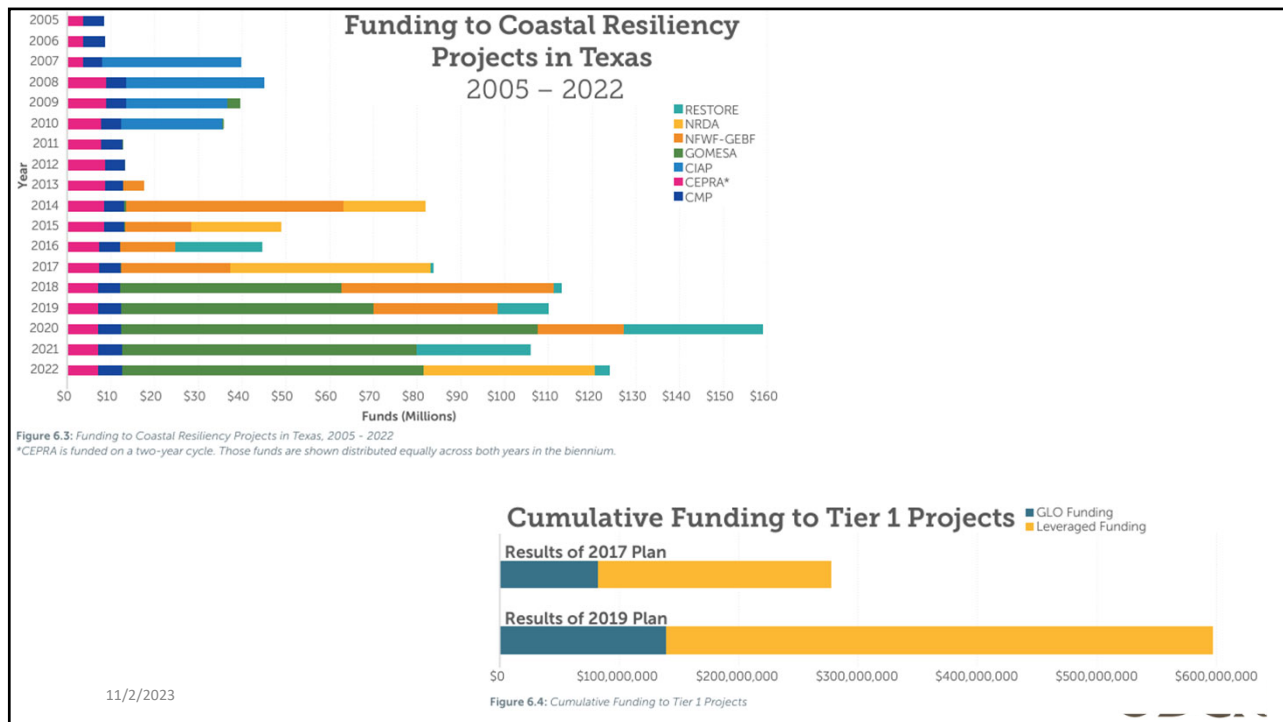
Opportunities

The GLO has leveraged the work of this Plan to more effectively prioritize coastal projects using federal and local funding opportunities.

- **GLO Coastal Programs** – There are several federal and state grant funding programs that the GLO administers supporting coastal projects in Texas. These include the CEPRA Program; GOMESA, which pays out royalties from oil and gas exploration in the Gulf of Mexico; and the CMP, funded by NOAA, among others. See Section 6.2.1, below, for more detail.

- **Hotel Occupancy Tax** – The Hotel Occupancy Tax House Bill 6 was passed during the 2019 Texas Legislative Session and included dedicating 2% of HOT revenues in coastal counties to the GLO's CEPRA program to boost the state's capabilities to address coastal erosion and ensure money spent on the Texas coast stays on the Texas coast.
- **Integration with CDBG-MIT** – The GLO is administering nearly \$4.3 billion in CDBG-MIT grants through its Community Development and Revitalization Division. Of these funds, the Coastal Resiliency Program received nearly \$20.5 million for two Tier 1 projects that boosts shoreline protection in coastal communities.
- **Deepwater Horizon** - Funds collected from civil and criminal penalties from the Deepwater Horizon oil spill are administered through three funding streams: National Fish and Wildlife Foundation-Gulf Environmental Benefit Fund (NFWF-GEBF), NRDA, and the RESTORE Act. The 2019 Plan was referenced as a representation of regional priorities for the allocation of funding under these sources.

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FUNDING PROGRAMS RESILIENCY DESIGN GUIDE

Conservation Funding Programs

Opportunity	Description	TCRMP Project Types Funded	Funding/ Administering Agency	Per Project Funding Cap	Total Annual Funding Available	Typical Application Range			Special Requirements
						Pre-Application (If Applicable)	Final Application	Funding Delay After Award	
CBEP Project Funding	Funding to protect and conserve the Galveston Bay estuary, including funds to address water and sediment quality, education, outreach, monitoring, and research	<ul style="list-style-type: none"> Plans/Policies/Programs/Studies Land Acquisition Habitat Creation/Restoration 	EPA, TCEQ/CBEP	Varies	Varies		July	Up to 3 Months	
Gulf Coast Conservation Grants Program	Supports priority land conservation needs for the Gulf Coast	<ul style="list-style-type: none"> Land Acquisition Habitat Creation/Restoration Shoreline Stabilization Plans/Policies/Programs/Studies 	NFWF	Ranges \$50,000 to \$250,000	\$700,000		February	N/A	
National Coastal Resilience Fund (NCRF)	Funds projects to protect coastal communities from the impacts of storms, floods, and other natural hazard and enhance habitats for fish and wildlife	<ul style="list-style-type: none"> Habitat Creation/Restoration Shoreline Stabilization Flood Risk Reduction Dune Restoration Plans/Policies/Programs/Studies 	NFWF	Ranges \$125,000 to \$5,000,000	\$31,000,000	April	June (by invitation)	Funds available through reimbursement	Project is in a coastal HUC-8 watershed 1:1 Non-Federal Match
Environmental Quality Incentives Program	Provides agricultural producers with one-on-one help and financial assistance to develop a plan and implement conservation practices by investing in solutions that conserve natural resources for the future while also improving agricultural operations	<ul style="list-style-type: none"> Plans/Policies/Programs/Studies Habitat Creation/Restoration Hydrologic Connectivity Community Infrastructure 	USDA-NRCS	Up to \$140,000 over 4 years	Varies		Rolling application	Funds available through reimbursement	Advanced payments available for historically underserved producers

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Technical Report Details

Table 8-2. Summary Table of Datasets to Support Project Evaluation Phase

DATASET	SOURCE	DESCRIPTION/ PURPOSE	FOR THIS PHASE?	DATA CATEGORY(IES)
CONTEXTUAL: ECONOMIC DATA				
EMPLOYMENT	ESRI Business Analyst	Overview of employment density aggregated by two-digit NAICS code industries and number of employees by business, to understand industries, business types and number of employees at risk from hazards under no action.	Yes	
WAGES	Quarterly Census of Employment and Wages, BLS	Overview of employee wages by NAICS code to understand the potential wage losses caused by hazard events. Information from BLS is available at the county-level.	Yes	
HUD LMI DATA	LMI data, HUD	Overview of primarily residential LMI populations and AMI to understand concentrations of lower income households.	Yes	
REAL ESTATE VALUE	CoStar	CoStar analytics to understand residential and commercial real estate values at the census tract level.	Maybe	
AVOIDED DAMAGES (BENEFITS)	See below under Hazus Risk Estimation	See below.	See below	

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Benefit Metrics

Table 8-3. Benefits Evaluated for Tier 1 Projects

Category	Benefit	Source	Geographic Input
Economic	Building replacement value	Hazus 2018	Identified project census block(s)
Economic	Structure damage (1% storm)	Hazus 2018	Identified project census block(s)
Economic	Existing jobs	ESRI Business Analyst	Identified project census block(s)
Economic	Support funding eligibility (binary)	Project description	N/A (binary)
Economic	Avoided future flood risk (binary)	Project description	N/A (binary)
Environmental	Number of critical habitats	USFWS Information for Planning and Consultation	Defined project area
Environmental	Number of endangered species	USFWS Information for Planning and Consultation	Defined project area
Environmental	Number of migratory bird species	USFWS Information for Planning and Consultation	Defined project area
Environmental	Protected habitat in the area (binary)	Project description	Defined project area
Environmental	Number of Rookery Islands	Project description	Project description
Environmental	Oyster habitat protected / created (binary)	TPWD Oyster Database	N/A (binary)
Environmental	Nitrogen removal by oysters (lbs N, annually)	Role and Value of Nitrogen Regulation Provided by Oysters in the Mission-Aransas Estuary, Texas, USA (Pollack et al. 2013)	Project description or complete containment of oyster polygon within defined project area

Environmental	Seagrass protected / created (binary)	TPWD Seagrass Viewer	N/A (binary)
Environmental	Seagrass carbon sequestration (tons C)	Seagrass blue carbon dynamics in the Gulf of Mexico: Stocks, losses from anthropogenic disturbance, and gains through seagrass restoration (Thorhaug et al. 2017)	Project description
Environmental	Wetland types	NWI	NWI
Environmental	Acres of wetland protected / created	NWI	Project description or complete containment of wetland polygon within defined project area
Environmental	Existing wetland carbon sequestration (tons C)	Texas Blue Carbon Opportunities: Wetland Biogeochemistry and Carbon Offset Optimization Strategies (Feagin 2022b)	Project description
Environmental	Decreased wave energy (binary)	Project description	N/A (binary)
Social	Social Vulnerability	SOVI 5-classification score (county-level), Texas CDBG-MIT Action Plan	Identified project county(ies)
Social	Number of critical facilities	Hazus 2018	Defined project area or identified project census block(s)
Social	Trips on evacuation route (daily)	TxDOT	TxDOT evacuation routes near project defined areas
Social	Number of homes (occupied housing units)	2020 Decennial Census	Identified project census block(s)
Social	Public access improvements (binary)	Project description	N/A (binary)
Social	Addressing data gaps (binary)	Project description	N/A (binary)
Social	Education and outreach (binary)	Project description	N/A (binary)

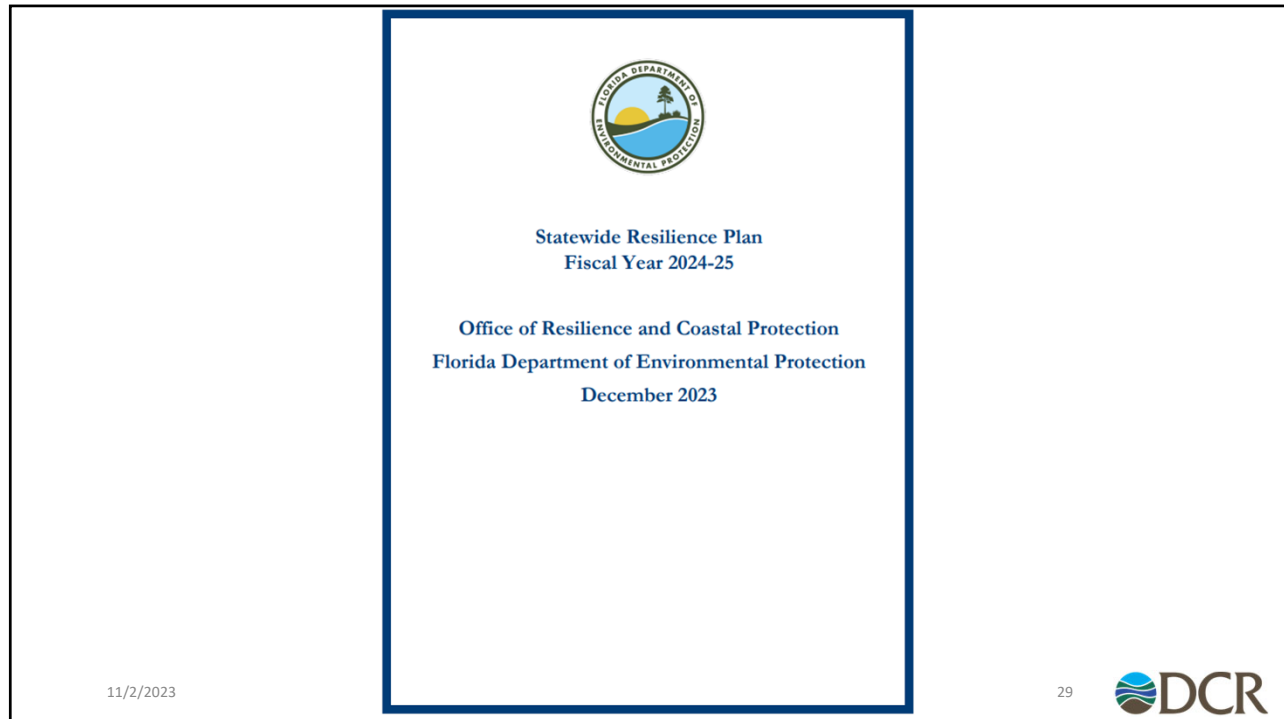
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Florida 2023 Statewide Resilience Plan

- Statewide Flooding and Sea Level Rise Resilience Plan
 - The plan must consist of ranked projects that address risks of flooding and sea level rise to coastal and inland communities in the state.
 - All eligible projects submitted to the department pursuant to this section must be ranked and included in the plan.
 - Overall summary of proposals including:
 - The total number of project proposals received and deemed eligible;
 - The total funding requested;
 - The total funding requested for eligible projects; and
 - A link to access a copy of each submitted project proposal application form separated by eligible and ineligible projects

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Florida 2023 Statewide Resilience Plan

Eligibility:

- Project must address threats in current or future conditions
- Local sponsor must be an eligible entity
 - Counties, municipalities and special districts with certain responsibilities
 - Other established districts include:
 - Water management districts
 - Drainage districts
 - Erosion control districts
 - Flood control districts
 - Regional water supply authorities

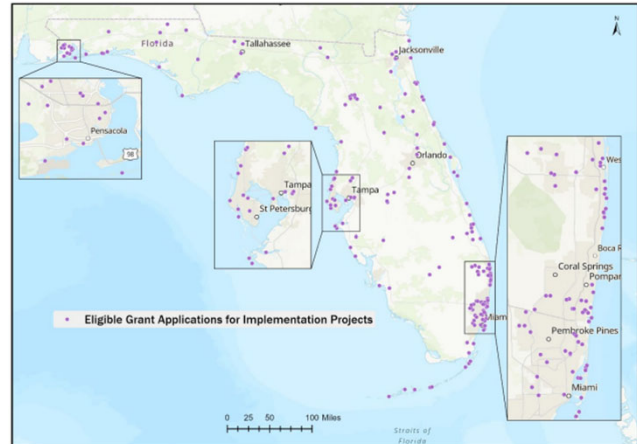


Figure 1. A distribution of eligible proposals submitted during the 2023 application cycle.

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Florida 2023 Statewide Resilience Plan

- Statewide Flooding and Sea Level Rise Resilience Plan
 - \$2.5B Total project cost across 238 proposals (\$1.1B State Funding Request)
 - \$1.8B total project cost of 196 eligible proposals (\$870M State Funding Request)
 - Resilient Florida Trust Fund of \$100 million for Year 1 (FY 2024-25)
 - Of the 197 eligible projects, the top 16 prioritized projects are proposed for FY 2024-25 state funding.
 - In addition to the 16 projects referenced above, the FY 2024-25 Statewide Plan proposes continued funding for four multiyear projects totaling \$15,675,000.

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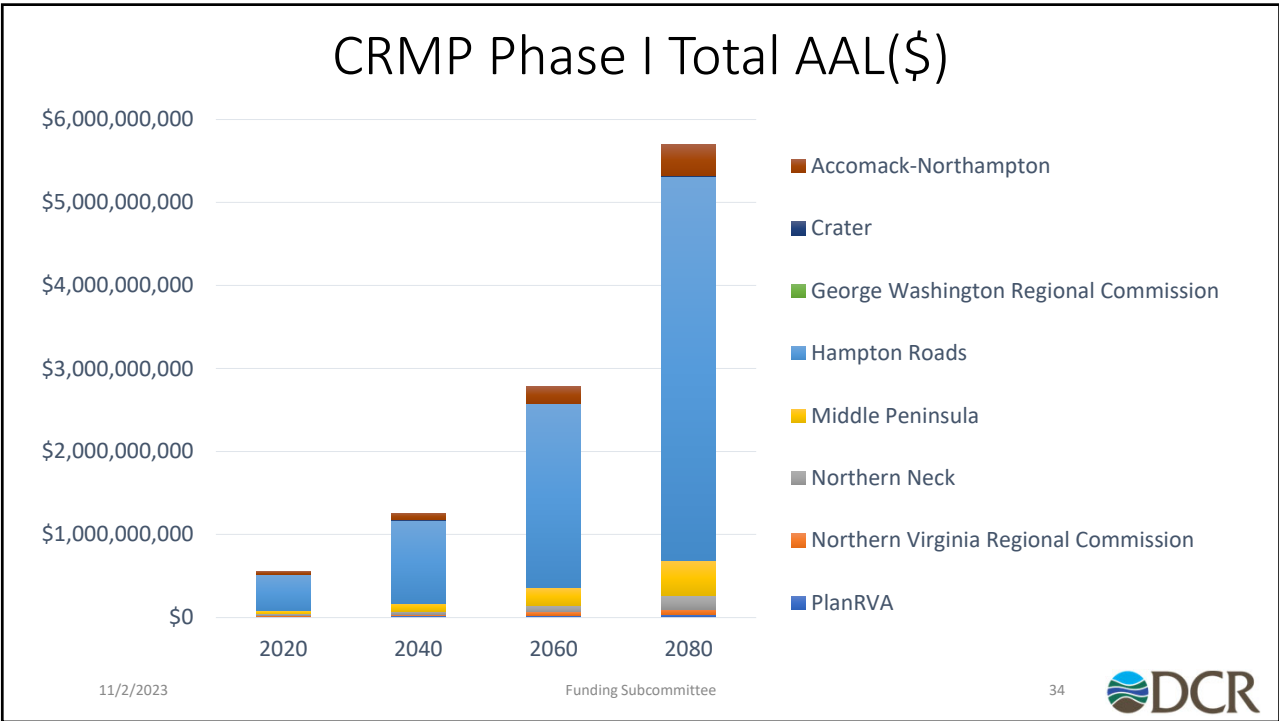
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Virginia Context

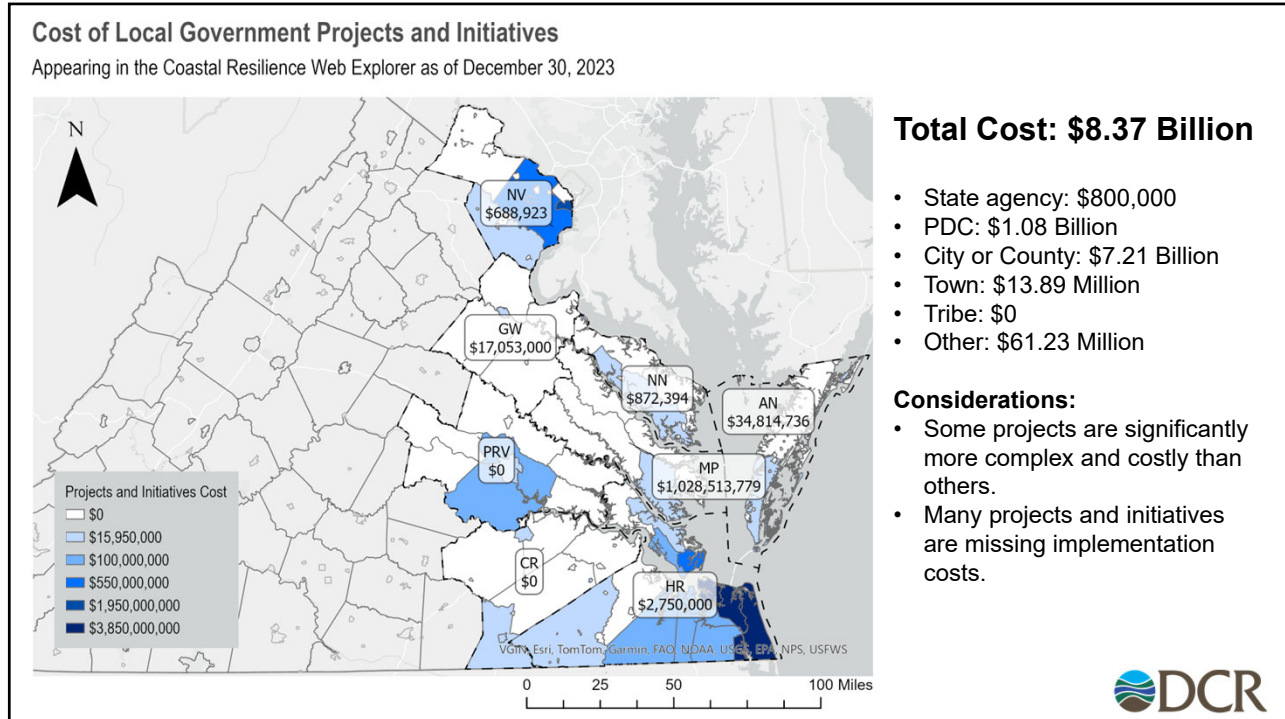
Average Annualized Loss
Projects and Initiatives
Funding

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Funding Flood Resilience

- DEQ Coastal Zone Management Program
- Virginia Dam Safety, Flood Prevention and Protection Assistance Fund
- Community Flood Preparedness Fund
- Resilient Virginia Revolving Loan Fund

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Comments + Questions

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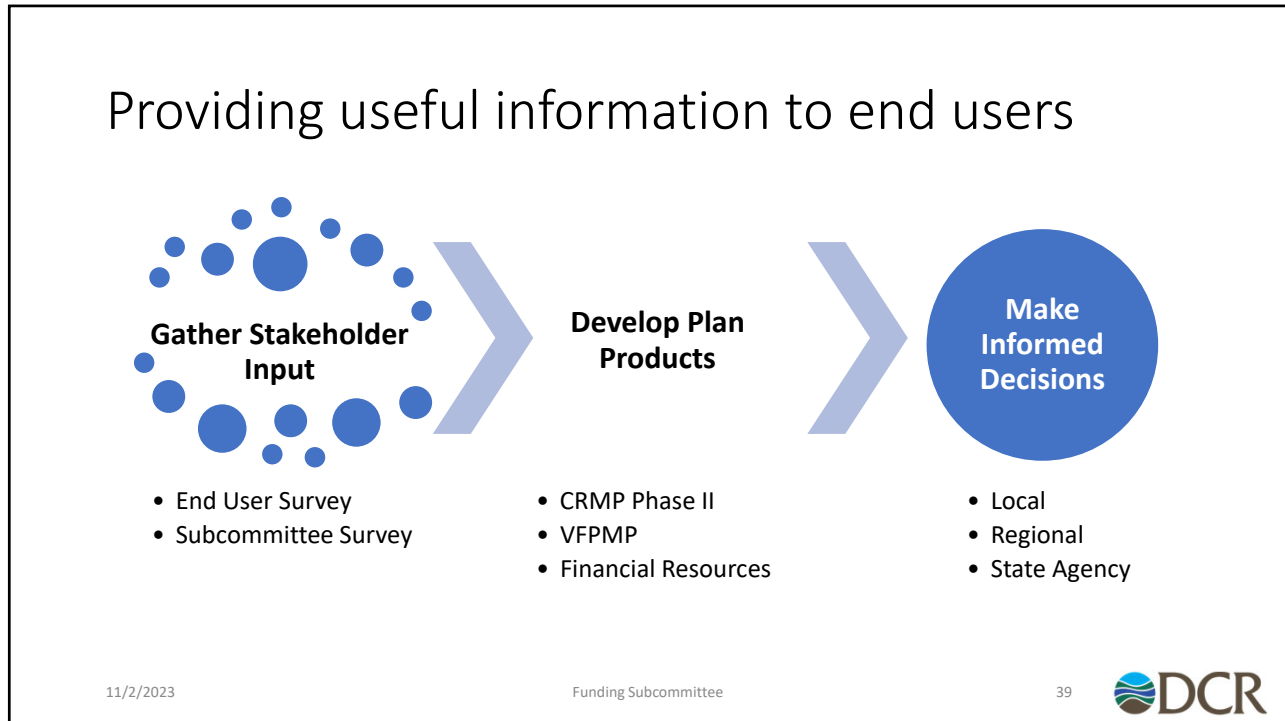
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Lines of Effort Work Item Prioritization

End User Survey
Subcommittee Financial Priorities

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End User Survey

Responses to the Financial Questions

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End User Survey - Financial Questions

Please provide any comments regarding the usefulness of the Coastal Resilience Master Plan products.

- PDC Staff: Except limited AAL, impacts are not put into dollar amounts. This is what local stakeholders/decision-makers need.
- State Agency Staff: The information in the plan could be used for other agency plans. The better integrated these planning processes are, the more useful these products will be for decision making at other agencies. It is challenging to set statewide priorities from two different planning efforts. Alignment is key.

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End User Survey - Financial Questions

What content would you most like to see included in future PDF plan documents?

- PDC Staff: Dollar amounts on flooding impacts.
- PDC Staff: Expand sections on water management, economic development, job creation, and innovation in Virginia.
- PDC Staff: % of homes and businesses have flood insurance. Knowing the extent of insurance and how many will need it would be nice.

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Subcommittee Financial Needs Survey

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Prioritizing Funding Efforts

	Metric	Description	1 – Low	3 – Medium	5 – High
Subcommittee	Impact	How impactful will this information be to building flood resilience?	This information is nice to have but not necessary.	This information can help overcome a small hurdle to progress.	This information can help overcome a major hurdle to progress.
	Urgency	When does this need to be delivered by?	Rolling Basis	2025 VFPMP	2024 CRMP
DCR/Contractor	Feasibility	How feasible will it be to produce the requested information? (technical, schedule, ..)	It will be very difficult to meet the request.	There are some obstacles, but progress can be made.	There are minimal obstacles to meet the request.

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Survey Results

[Slides will be updated prior to the meeting]

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Comments + Questions

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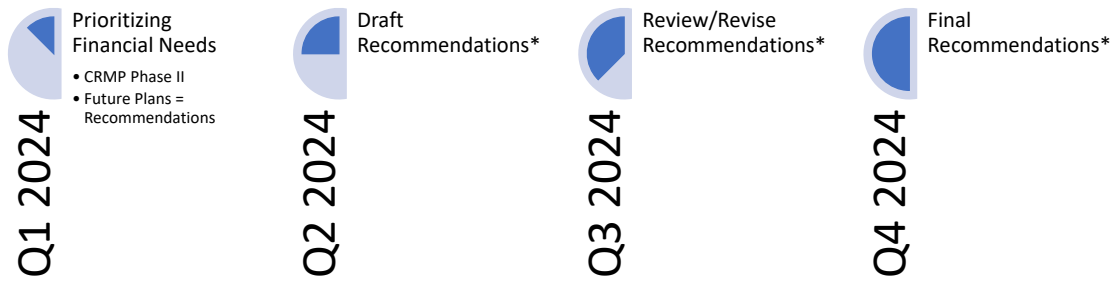
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New Business

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Subcommittee Recommendations Next Steps



Q1 2024 Prioritizing Financial Needs


- CRMP Phase II
- Future Plans = Recommendations

Q2 2024 Draft Recommendations*

Q3 2024 Review/Revise Recommendations*

Q4 2024 Final Recommendations*

* Facilitated by Resilience Planning and Consulting Contractor

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Subcommittee Members Discussion

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Action Items, Scheduling

- Action Item Review
- 2024Q2 Meeting
 - Date/Time
 - Location
 - Agenda Items

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Public Comment

If you would like to provide public comment, please let us know using the Chat window.

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