

THIRD
EDITION

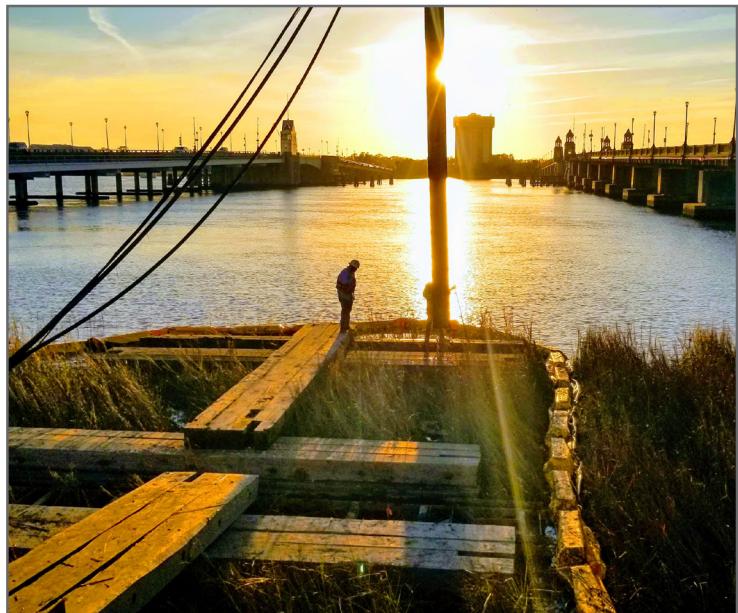


Flooding and Sea Level Rise STRATEGY

QUICK REFERENCE GUIDE

Charleston
SOUTH CAROLINA

2023



SUMMARY OVERVIEW

The City of Charleston Flooding and Sea Level Rise Strategy update for 2023 builds upon the 2019 and 2015 Strategies, including important and updated climate data, as well as infrastructure and drainage project and policy updates.

The 2023 update highlights the valuable work that has been completed; the important work that is underway; and the essential work ahead. The City's flooding, drainage, and sea level rise investments are increasing as are its climate adaptation, resilience and sustainability work.

OUR GOALS

To address flooding and promote a more resilient, sustainable future:

1. Protect our citizens and neighborhoods.
2. Protect and enhance critical City infrastructure.
3. Preserve economic viability for businesses and organizations.
4. Protect and enhance vital resources that protect our neighborhoods.
5. Enhance collaboration and partner with others.



"For more than 350 years, water has been our greatest asset and our biggest challenge...I'd respectfully ask that we all remember the stakes: the water is rising, the clock is ticking, and the future of our city is in the balance."

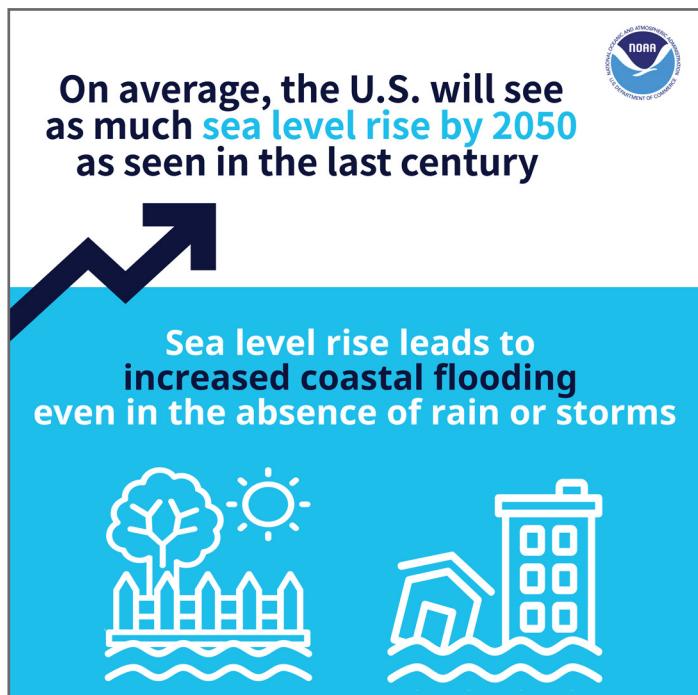
- Mayor John J. Tecklenburg

RECENT DATA

NOAA's most recent projections anticipate **14-18 inches of sea level rise by 2050** for the Charleston region.

Sea level rise and increased coastal flooding combined with more dynamic weather events (rainfall/stormwater) will produce a profound shift in the frequency, duration and impact of flood events over the next 30 years.

It's critical that the City continue to utilize data to mitigate and adapt to complex challenges from flooding.



The City's Flooding and Sea Level Rise Strategy continues to pursue and target near-and long-term actions across the five critical components identified in 2019: Infrastructure, Governance, Land Use, Resources, and Outreach and Partnerships.



FEATURED PROJECTS



LOW BATTERY SEAWALL RESTORATION

The iconic seawall is undergoing an extensive rehabilitation and reconstruction to replace and raise the seawall to account for sea level rise projections. Phases 1 and 2 are complete, Phase 3 construction is underway, and Phase 4 planning is underway.

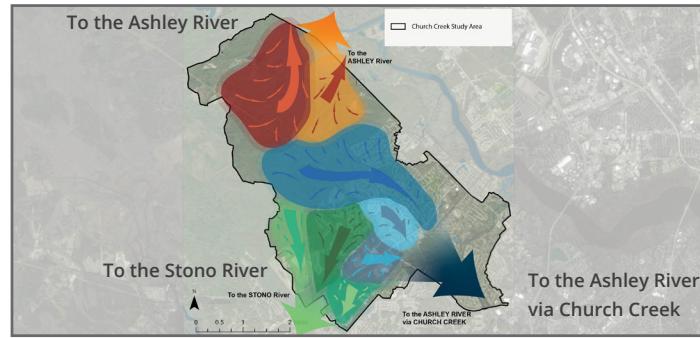


Phase 3 of the seawall under construction at low tide.



CHURCH CREEK ADAPTATION

Repeated flooding in the Church Creek basin in West Ashley led to a series of Federal and City-supported property buyouts. The City's Stormwater Department, inspired by the recommendations for Church Creek from the Dutch Dialogues Charleston, are using the land from those buyout properties to create more water storage, infiltration, flow, recreation and environmental resilience in the neighborhood.

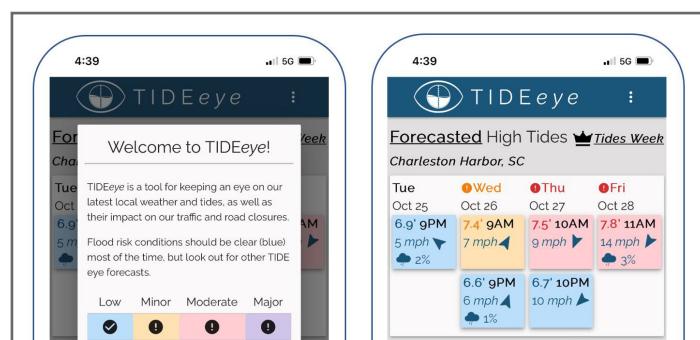


Water flows in many directions in this complex basin. Photo credit: Biohabitats



TIDEeye TOOL

Developed by the City's GIS Department, TIDEeye is a free web and mobile-friendly tool for keeping an eye on our latest local weather and tides, as well as their impact on our traffic and road closures. It allows for residents, business owners and visitors to receive real-time and predicted information to make informed flooding adaptation decisions. Access the tool: gis.charleston-sc.gov/tideeye/

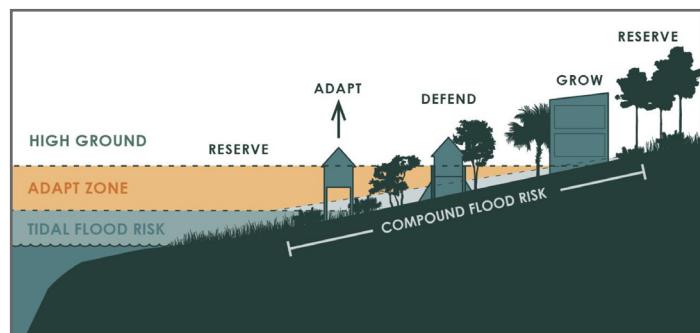


Smart phone screen shots show details about current and upcoming high tides.



COMPREHENSIVE PLAN

The City is required by state law to create a Comprehensive Plan (City Plan) every decade on the vision for development and growth in the coming years. The Charleston 2021 City Plan is grounded in a "water first" approach, where current and future flood risk and sea level rise directly and clearly inform key City goals and approaches to land use, housing, mobility and related considerations. View the plan: www.charlestoncityplan.com/view



The four "water first" planning strategies are reserve, adapt, defend and grow.



NATURE-BASED EXCHANGE

The Nature-Based Exchange is a collaborative effort by The Nature Conservancy, Clemson's Urban Design Program, and the City of Charleston, with the support of Biohabitats, Surculus and Robinson Design Engineers. The Exchange is a series of half-day workshops in 2022 and 2023 that assembles local and regional partners to discuss and develop natural and nature-based solutions for South Carolina. Learn more: www.naturebasedexchange.org/



Marsh restoration in Maryville, West Ashley. Photo credit: South Carolina Aquarium

VIEW THE FULL STRATEGY ONLINE



Collection

2023 Flooding and Sea Level Rise Strategy Update

City of Charleston
Office of Resilience and Sustainability

[Get started](#)



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LEARN MORE

The 2023 Flooding and Sea Level Rise Strategy update is a **dynamic online storymap that will be updated regularly** rather than a static paper document. This is an effort to provide the public with an accessible location to find up-to-date answers and keep citizens informed on the evolving nature of City projects.

To access the full length strategy:

1. Scan the QR code, or
2. Visit charleston-sc.gov/SLR

This quick reference guide can be printed as a snapshot of the update.



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