Introductions

- Name
- Real Estate Agency
- Favorite Coastal Activity

Calling the Coast Home

Course Series:
- Living with Water
- The Land Water Connection
- Tidelands, Water, and Beach: Regulations and Rebuilding
- Coastal Lifestyle for Clean Water
South Carolina Coastal Information Network
https://www.sccoastalinfo.org/

Instruction and Information Provided by:
• ACE Basin National Estuarine Research Reserve
• Clemson University
• Coastal Carolina University
• North Inlet-Winyah Bay National Estuarine Research Reserve
• S.C. Sea Grant Consortium
• S.C. Dept of Health and Environmental Control
• S.C. Dept of Natural Resources
• University of South Carolina

What does it mean to “Live with Water”?

Our Coastal Landscape

Tides, Storms, and Flooding
• What questions are you asked about water, flooding, and storms?

Break – 10 minutes

Flood Maps
Resources
Questions and Wrap-Up

Poll
• How many years have you been working in real estate in coastal SC?
About Our Coast

- 190 linear miles of beaches
- 40 barrier islands and sea islands
- 350,000 acres salt marshes
- Over 20 million tourists per year
- > 30% of SC's 5.1 million residents live in the 8 coastal counties

North Coast

Greater Charleston Area

South Coast

Greater Charleston Area

- McClellanville
- Awendaw
- Mt. Pleasant
- Charleston
- North Charleston
- Summerville
- Moncks Corner
Part 2: Tides, Storms, & Flooding

Poll

- What effects have you experienced from extreme weather?
  - Standing water on your street
  - Commute delays due to street flooding
  - Minor flooding in your home
  - Major structural damage to your home
  - Car damage from floodwaters
  - Wind damage
  - Evacuated ahead of a storm
  - Real estate sale affected
What causes sea level to change

- Ice Melting
- Ocean-atmosphere Interaction
- Terrestrial Water Storage
- Vertical Land Motion

Ocean Circulation
Density Changes

Source: Watson, recreated from Milne, 2009

Ice Melting
Ocean Circulation

Septic Tanks

- Residence
- Septic tank
- Septic field
- Groundwater flow
- Change in groundwater level

Tide Levels

Water Level

Credit: NOAA/NOS
https://tidesandcurrents.noaa.gov
Charleston Area Tides
https://water.weather.gov/ahps
Select Charleston harbor station

https://water.weather.gov/ahps2/hydrograph.php?wfo=chs&gage=chts1

Tidal Flooding
https://mycoast.org/sc

2024 Predicted King Tides
Based on Water Resources data for the Charleston, South Carolina area.

For details, see https://mycoast.org/sc
April 2024 King Tides

https://gis.charleston-sc.gov/tideeye/

Adapting to Flooding in Charleston

https://chucktownfloods.cofc.edu/
Folly Beach: Preserving the Edge of America


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Storm History

• Oct. 2015 flood
• Oct. 2016 Matthew
• Sept. 2017 Irma
• Sept. 2018 Florence
• Sept. 2019 Dorian
• Sept. 2022 Ian
• August 2023 Idalia

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Heavy Rain

Tidal Flooding

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More Frequent Heavy Rainfall

‘Wetter’ Hurricanes

Challenges to commutes
Activity and Break

**What questions are you asked about water, flooding, and storms?**

10 Minute Break

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**Poll**

- How comfortable are you with using flood maps?
  - Comfortable
  - Somewhat comfortable
  - Not comfortable

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**Home Insurance**

- Grand Strand residents concerned about large increases in homeowners insurance
- Florida’s insurance industry is in flux as Idalia cleanup begins
- Homeowners face uncertainty amid the upheaval that has emerged in Florida’s insurance industry in recent years.
Flood Insurance

- National Flood Insurance Program (NFIP) managed by FEMA
- All rates are ‘equal’ for a unique property, do not need to shop around
- Required to purchase in high-risk flood areas
- May be required by mortgage lender even if outside high-risk area
- Flood insurance will pay claims regardless of whether there is a Presidential Disaster Declaration
- Community discounts available based on Community Rating System classification
- With house purchase policy effective immediately, otherwise 30 day waiting period
- Floodsmart.gov
FEMA Risk Rating 2.0:

- FEMA Risk Rating 2.0 main website
- Deliver FAIRER rates, use replacement cost data
- Effective for new policies Oct. 1, 2021
- Effective for renewals April 1, 2022
- Elevation Certificates are no longer required to purchase insurance coverage
Flood Maps
Flood Insurance Rate Map (FIRM)
Flood maps ONLY show risk for
storm surge, not flooding from
heavy rain.

https://msc.fema.gov/portal/home

There are a lot of houses that have
flooded in the Charleston region
that are not in a mapped floodplain
When in doubt ask your County/City
for help interpreting maps

https://msc.fema.gov/portal/home
Coastal Resources Guide

Topics Covered:
- Community Rating System (CRS)
- Evacuation Routes
- Emergency Preparedness & Remediation Resources

State → County → Municipality

Resources by County

**Charleston County**
- Community Rating System
- Evacuation Routes
- Remediation Resources
- Hurricane Preparedness
- Charleston Regional Hazard Mitigation Plan
- BCD Council of Government
- Office Contacts

**Berkeley County**
- Community Rating System
- Evacuation Routes
- FAQs, useful links
- Hurricane Information
- Office Contacts

**Dorchester County**
- SCDOT evacuation routes
- Emergency services
- Hurricane Information
- Flood Zones
- BCD Council of Governments
- Office Contacts
Community Rating System

- A voluntary incentive program through FEMA that recognizes and encourages community floodplain management activities that exceed the minimum National Flood Insurance Program (NFIP) requirements.

  Common practices:
  - Open Space Preservation
  - Floodplain Mapping
  - Stormwater Management
  - More Listed in their Brochure

Evacuation Resources

Know Your Zone

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Poll

• What resources will you share with your clients?
For more information and course materials

South Carolina Coastal Information Network

https://www.sccoastalinfo.org

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Please let us know how we can improve this course and the series.

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