



## Become a Sea Level Rise Messenger

Summary: Audubon Florida has made a commitment to engage decision makers in our coastal communities to begin planning for sea level rise. Though there may be some discussion about impacts and planning for changes to man-made communities less attention is being paid to the natural communities such as beaches, saltmarshes and the Everglades system. We hope you will help us share this important message.

The Basic premise: Sea level is rising along Florida's coastline – the experts agree. With rising seas we're seeing more frequent inundation and more rapid erosion of barrier and mangrove islands and coastal beaches that provide nesting grounds for colorful American Oystercatchers and Black Skimmers, Roseate Spoonbills and Brown Pelicans, plovers, gulls, terns and many other species of wading birds. We're watching mangroves migrate into saltmarshes and saltmarshes migrate landward. And Florida's iconic Everglades ecosystem is threatened with saltwater intrusion if restoration plans aren't kept on track to increase freshwater flow southward to keep the rising saltwater at bay.

The special places where Florida's coastal birds now nest, feed, and rest are some of our state's most important "climate strongholds". Climate strongholds are parks, preservers, or privately owned tracts on, or adjacent to, the current coastline that can provide future bird and wildlife habitat as sea level rises. If birds aren't protected where they nest now, their populations will continue to decline as sea level rises leaving them little capacity to adapt to future changes in habitat, temperature, and rainfall conditions.

Given the uncertainty around projected timing and magnitude of sea level rise, and the focus of local and regional agencies on protecting the human-built environment from erosion and inundation, we call on our chapter members to get involved locally in public discussion focused on protecting coastal and tidally-connected freshwater habitats in addition to protecting the human-built environment from rising sea levels.

### **So, what can you do to help?**

FIRST – become familiar with Audubon messages about sea level rise, waterbirds, and their essential habitats:

- View and download the three short videos at [FloridaClimateMessenger.com](http://FloridaClimateMessenger.com)
- View and download the Powerpoint slide presentation at [FloridaClimateMessenger.com](http://FloridaClimateMessenger.com) and consider how content might be modified for your region and habitats

NEXT – put the messages featured in the video **into your own words** and commit to memory so you can be ready to discuss at a moment's notice. Think: elevator speech – quick, simply worded, to-the-point. Examples:

- Learn more about coastal birds and wildlife and how to protect their habitat (climate strongholds) as sea levels rise.

- Recognize that Everglades restoration – increasing freshwater storage and flow within the Everglades - will defend against sea level rise.
- Plan for climate change and make sure our response to sea level rise helps - rather than harms - Florida's coastal habitats.

READ – (Optional) For more information, a list of **online resources** about sea level rise and climate change is provided at the end of this document.

IDENTIFY – **Climate strongholds** in your region. These are sites that currently provide bird nesting, resting, and foraging habitat that also can provide future bird and wildlife habitat as sea level rises because they encompass upland acreage likely to remain above sea level within the next hundred years. Undeveloped, good to high quality coastal habitat that is more than five feet above present high tides is a good candidate for adoption as your chapter's climate stronghold.

IDENTIFY – Local and regional organizations and local governments that may be involved in planning strategies for sea level rise or climate change adaptation: (staff is available to brainstorm these ideas)

- Local governments – city, township, county
- Compact formed of multiple local governments
- Regional planning council
- Water management district
- Land managers
- Estuary program (e.g., Tampa Bay Estuary Program, Charlotte Harbor National Estuary Program, Rookery Bay NERR, Apalachicola Bay NERR, Guana-Tolomato-Matanzas NERR)
- National Parks or Seashores (e.g., Canaveral, Everglades, Gulf Islands)

THEN – Identify **local decision makers** within those agencies or organizations with whom you can meet to deliver Audubon messages and find out how you can be involved in sea level rise/climate change adaptation activities.

- Question for local leaders via email or phone: Is your (city, county, agency, organization) doing something regarding planning for sea level rise or climate change?
  - If YES – Can we meet? (see below)
  - If NO - Can I forward some information to you?
- Meeting:
  - If YES on meeting, meet and deliver fact sheet. Find out what they are doing for sea level and climate change adaptation planning. How can I become more involved?
  - If NO on meeting, deliver information.

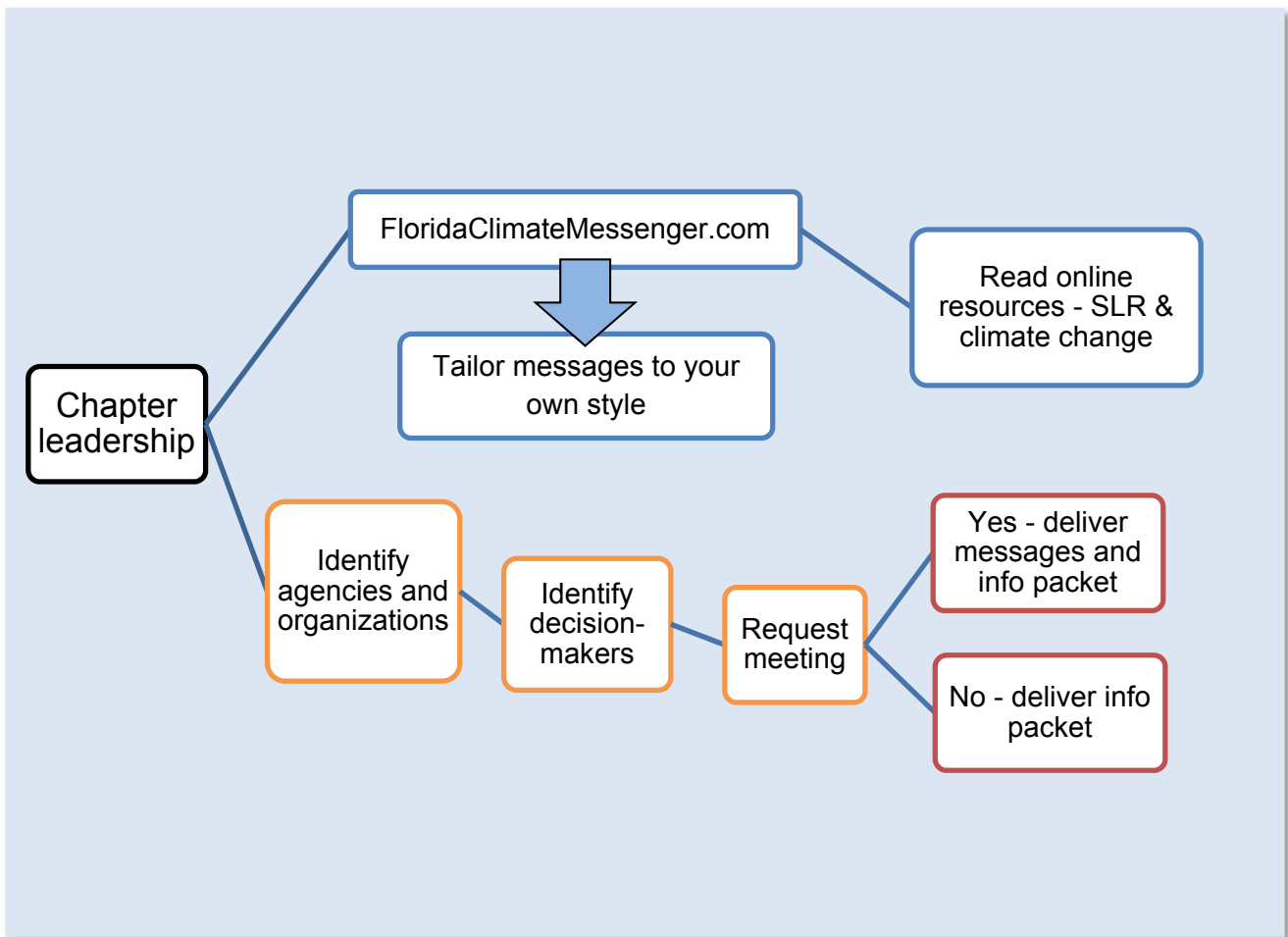


Figure 1. Building your messages, targeting and delivering messages and information packets.

### **Information Packet for Delivery to Local Decision-Makers**

Compile and customize an information packet (with your chapter's logo) to deliver to local decision-makers.

Suggested contents:

- Letter to decision maker – with chapter logo, chapter info as appropriate (include follow-up contact)
- Fact sheet with resources listed on back.
- Sheet of possible action items/recommendations:
  - Amendment 1 - Look for lands to purchase, protect, nominate for state lands purchase. Target undeveloped lands adjacent to current coastal habitat. Find these at <http://floridawaterlandlegacy.org/sections/page/legitoolkit>.
  - Sign up for Audubon Florida coastal conservation <http://fl.audubon.org/coastal-conservation-0> and Action Alerts <http://tinyurl.com/d4n4t4a>
  - Become familiar with statewide shorebird partnerships and resources: [FLShorebirdAlliance.org](http://FLShorebirdAlliance.org)

## Resources

### Florida and Southeastern U.S. focus:

Estevez, E. D. 2011. A Primer on Sea Level and Sea-Level Rise for Longboat Key and the Barrier Island Communities of Southwest Florida. Mote Marine Laboratory Technical Report No. 1523, Sarasota, FL <https://dspace.mote.org/dspace/bitstream/2075/2865/1/estevez-MTR-1523.pdf>

Florida Oceans and Coastal Council. 2010. Climate Change and Sea Level Rise in Florida: an update of the effects of climate change on Florida's ocean and coastal resources. Tallahassee. [http://www.floridaoceanscouncil.org/reports/Climate\\_Change\\_and\\_Sea\\_Level\\_Rise.pdf](http://www.floridaoceanscouncil.org/reports/Climate_Change_and_Sea_Level_Rise.pdf)

Ingram, K., et al. 2014. Climate of the Southeast United States: variability, change, impacts, and vulnerability. Island Press. <http://www.seclimate.org/climate-of-the-southeast-united-states/>

Mitchum, G. 2011. Sea Level changes in the Southeastern United States: past, present, and future. [http://coaps.fsu.edu/~mhannion/201108mitchum\\_sealevel.pdf](http://coaps.fsu.edu/~mhannion/201108mitchum_sealevel.pdf)

Mitchum, G. 2012. Understanding Climate Change and Sea-level Rise (video). USF Oceanography Professor; video by International Ocean Institute. <https://vimeo.com/46292579>

Ruppert, T. 2013. Sea-Level Rise in Florida—the Facts and Science. Florida Sea Grant College Program. [http://www.flseagrant.org/wp-content/uploads/2012/02/SLR-Fact-Sheet\\_dual-column-letterhead\\_8.2.13\\_pdf.pdf](http://www.flseagrant.org/wp-content/uploads/2012/02/SLR-Fact-Sheet_dual-column-letterhead_8.2.13_pdf.pdf)

### Websites

314 Species on the Brink: Audubon's Birds and Climate Change Report <http://climate.audubon.org/>

Intergovernmental Panel on Climate Change – global level reports and predictions <http://www.ipcc.ch/>

National Climate Assessment – U.S. climate change impacts assessments <http://nca2014.globalchange.gov/>

Planning for Sea Level Rise in the Matanzas Basin <http://planningmatanzas.org/>

Sea Level Rise viewer – interactive tool; satellite view of inland ocean movement in U.S. for 1 to 5 feet rise in sea level above present mean sea level <http://coast.noaa.gov/slr/>

Sea Level trend graphs for stations throughout Florida and the U.S. – interactive map. National Oceanographic and Atmospheric Administration <http://tidesandcurrents.noaa.gov/sltrends/sltrends.html>

Southeast Climate Consortium <http://www.seclimate.org/>