MEETING MATERIALS FOR THE CC CoP ANNUAL MEETING
VIRTUAL VIA GOOGLE MEET • IN-PERSON AT THE NATIONAL WATER CENTER
UPDATED MAY 24, 2023 AND SUBJECT TO CHANGE

ANNUAL MEETING AT-A-GLANCE

Outcomes | Pre-work by May 18th | Agenda | Logistics for Virtual Attendees | Logistics for In-Person Attendees | About the CC CoP

Day 1, May 23, 2023	Day 2, May 24, 2023	Day 3, May 25, 2023
9:00 to 4:00 CT	9:00 to 4:00 CT	9:00 to 12:00 CT
Focus on inspirations and information, especially the state of the science, models, initiatives, funding	Focus on information, best practices, shared agreements	Focus on best practices, shared agreements, and next steps

ANNUAL MEETING OUTCOMES

The Coastal Coupling Community of Practice Annual Meeting will advance the mission and eight goals of the CC CoP (see also the Charter):

Mission

- Coupling of models to better represent earth system processes across the coastal zone and provide improved predictions of quantities such as water levels, flow timing and duration, currents, sediment, water quality variables, geomorphic changes, etc.
- Actionable information on these quantities provided to stakeholders in timely, accessible, and user-friendly formats.
- Accelerated national coverage of integrated water prediction capabilities through the adoption of community research and models that acknowledge stakeholder-driven requirements.

Goal #1, Framework for model and tool engagement • Create a sustainable framework and vision for engagement between federal agencies, academia, state and local governments, and private industry around model and tool development.
Goal #2, Best practices • Develop and support coastal coupling modeling best practices.
Goal #3, Collaborative solutions • Work toward collaborative solutions for continental-scale integrated water prediction using a unified modeling approach.
Goal #4, Modeling science • Advance science around modeling that will result in better products and services that meet the needs of the operational use community (e.g., natural and water resources managers, water suppliers, planners, decision-makers).
Goal #5, Standards adoption • Encourage the adoption of standards including definitions, metadata, data access, and transition of models to operations.
Goal #6, Collaboration points • Look for collaboration points with partners outside of coastal coupling modeling (e.g., data providers, end-users, social scientists) and align priorities in order to advance the state of the science.
Goal #7, Related projects • Identify unrecognized pockets of related projects and share work openly with those projects.
Goal #8, Evaluate success • Evaluate the success of the CoP on a regular basis.

PRE-WORK QUESTIONS AND READINGS

BY MAY 18TH, please inform the content and logistics for the Annual Meeting by answering a few questions (2-5 minutes): NOAA Google Form link.

BY MAY 18TH, please consider reading/skimming:

CC CoP. Coastal Coupling Community of Practice's accomplishments to date in the context of the mission, vision, and goals (below).

National Water Model 3.0 and NextGen. Latest changes and upcoming releases (GitHub link).

CoastalApp and UFS Coastal. Latest changes and upcoming releases of the CoastalApp (GitHub link) and the future ufs-coastal code bases (GitHub link).

NOS Modeling Strategy. NOS Modeling Strategy (NOAA link).

Community Modeling Workshop. Coastal and Ocean Community Modeling Workshop Summary (NOAA link).

ANYTIME, INVITE OTHERS: Do you know someone who wishes to join the Coastal Coupling Community of Practice? Virtual participant registration remains open and you're welcome to share the registration link (NOAA link) and these meeting materials.

AGENDA FOR THE CC CoP ANNUAL MEETING

DAY 1 | TUESDAY, MAY 23, 2023 | GOOGLE MEET AND THE NATIONAL WATER CENTER

Focus on inspirations and information, especially the state of the science, models, initiatives, funding.

All times CT | Hybrid Meeting via Google Meet and National Water Center (NWC) Auditorium

8:30 AM ONLINE PARTICIPANTS | Optional Technology Check

9:00 AM ED CLARK | Welcome

9:10 AM MARK OSLER | Keynote: Coastal Coupling

9:40 AM DORI STIEFEL | Community of Practice and Annual Meeting Principles

9:55 AM MATTHEW HARRISON // Developing Regional Ocean Models for Coastal Applications and Global Ocean Configurations for Prediction and Climate Projection

10:15 AM BREAK

10:45 AM LIGHTNING TALKS | Three-minute Presentations
JASON CALDWELL | Coastal Storm Modeling System
JOANNES WESTERINK | Storm and Tide Operational Forecast System (STOFS)
TOM SHYKA | Piloting a Model Visualization System at the Northeastern Regional Association of Coastal Ocean Observing System Based on Tools from the Pangeo Community Platform for Big Data Geoscience

11:00 AM TRACY FANARA | NOS Modeling, including the Coastal and Ocean Modeling Testbed (COMT)
JOHN WILKIN | NOS Community Modeling Insights and Opportunities

11:30 AM PAT BURKE | NOS Operational Forecasts
KELLY KNEE | OCEANSMAP

12:00 PM LUNCH

1:30 PM TREY FLOWERS | National Water Model 3.0 (NWM) Updates and National Water Center (NWC) NextGen Coastal Modeling

3:00 PM BREAK

3:15 PM SUDHIR SHRESTHA | An Overview of the Current and Future Web and Data Service Program

PATRICK TRIPP | Related Insights and Opportunities

3:45 PM DORI STIEFEL | Facilitated Ask-the-CoP-Anything
An opportunity to ask questions of fellow community members.

3:55 PM DORI STIEFEL | Day 1 Wrap-up

4:00 PM ALL | Adjourn

4:15 PM SAM CONTORNO | Optional Tour of the National Water Center (RSVP Required)
For those attending the meeting in-person, meet in the rotunda for a tour of the National Water Center.

DAY 2 | WEDNESDAY, MAY 24, 2023 | GOOGLE MEET AND THE NATIONAL WATER CENTER

Focus on information, best practices, shared agreements.

8:30 AM ONLINE PARTICIPANTS | Optional Technology Check

9:00 AM JOHN WARNER | Welcome

9:10 AM LIGHTNING TALKS | Three-minute Presentations
JOHN WARNER | Coupled-Ocean-Atmosphere-Wave-Sediment Transport
KENDRA DRESBACK | Development and Application of a Coupled Modeling System to Obtain Inland and Coastal Flooding for Coastal North Carolina Due to a Changing Climate for the NIST Community Resilience Project
STAND-AND-STRETCH

9:30 AM ASHLEY CHAPPELL | Topography and Bathymetry Data Synergies
RICK LUETTICH | Related Insights and Opportunities

10:00 AM COREY ALLEN AND SAEED MOGHIMI | Coastal Ocean Modeling and Coupling at the NOS Office of Coast Survey

10:30 AM BREAK

10:45 AM BREAKOUT SESSIONS | Priority Activities for Coastal Coupling
LOCATIONS: Auditorium, Confluence, and Google Meet

Context: The Coastal Coupling Community of Practice met annually (see summaries). And, in October 2021, NOAA hosted a Coastal and Ocean Community Modeling Workshop (see especially Section 3.2).

Discussion:

- Specific to coastal coupling, what might we add, delete, or edit in the various priorities?
- What progress on these priorities is happening now? Where are the gaps?
- How might this community forward the refined list of priorities? Who are the experts and leaders?
- What processes can be put into place to ensure ongoing community alignment on research and operational priorities?

11:30 AM BREAKOUT SESSION REPORTERS | Breakout Session Report-outs
via "Digital Plenary"

12:00 PM LUNCH

1:30 PM BREAKOUT SESSIONS | Best Practices and Opportunities for Transitions
LOCATIONS: Auditorium, Confluence, and Google Meet

Context: The Coastal Coupling Community of Practice has met annually (see summaries). And, in October 2021, NOAA hosted a Coastal and Ocean Community Modeling Workshop. The list of best practices those participants generated for transitioning community-developed innovations and models into operations is available here in Section 3.1.

Discussion:

- What might we add, delete, or edit in the listed priorities?
- How are these best practices being implemented now? Where are the gaps?
- Where are the opportunities to ensure these best practices are implemented? Who are the experts and leaders?
- Which processes might ensure ongoing community alignment on best practices for transitioning community-developed models into NOAA?

2:15 PM BREAKOUT SESSION REPORTERS | Breakout Session Report-outs
via "Digital Plenary"

2:45 PM BREAK

3:05 PM DORI STIEFEL | Facilitated Discussion

- What are the most useful practices and opportunities from the two breakout sessions?
- Given the breakouts, which documentation, tools, and standards might the community choose to develop next and on what timeline (see also Charter)?

3:30 PM LAURA REAR McLAUGHLIN | The Year Ahead

3:50 PM DORI STIEFEL | Day 2 Wrap-up

4:00 PM ALL | Adjourn

DAY 3 | THURSDAY, MAY 25, 2023 | GOOGLE MEET AND THE NATIONAL WATER CENTER

Focus on best practices, opportunities, shared agreements, and next steps.

8:30 AM ONLINE PARTICIPANTS | Optional Technology Check

9:00 AM LAURA REAR McLAUGHLIN | Welcome

9:10 AM LIGHTNING TALKS | Three-minute Presentations
CHANDRA KONDRAGUNTA | Opportunities with JTTI
DAVID VALLEE | Service Delivery and Training in CC CoP Activities
STAND-AND-STRETCH
LAURA REAR McLAUGHLIN | Partnerships plus Opportunities

9:30 AM MAOYI HUANG | Earth Prediction Innovation Center (EPIC)
SAEED MOGHIMI | NOAA National Ocean Service Coastal Ocean Models Coupling Infrastructure: A Community-driven Development Approach

10:00 AM CHANGSHENG CHEN | Demonstrating the Coupling Architecture with the University of Massachusetts-developed Northeast Coastal Ocean Forecast System (NECOFS)
JOSEPH ZHANG | Demonstrating the Coupling Architecture with the Virginia Institute of Marine Science-developed Semi-implicit Cross-scale Hydroscience Integrated System Model (SCHISM)

10:30 AM BREAK

10:50 AM STEVE BURIAN | Leveraging the Cooperative Institute for Research to Operations in Hydrology (CIROH)
LEN PIETRAFESA | Coupling the National Water Model (NWM) to Coastal Model Systems

11:20 AM DORI STIEFEL & LAURA REAR McLAUGHLIN | Co-developing a Way Forward and the Annual Meeting Wrap-up

12:00 PM ALL | Adjourn

LOGISTICS FOR VIRTUAL ATTENDEES

Information for those attending the Annual Meeting virtually follows:

Meeting platform. The online platform for the Annual Meeting is Google Meet; see your calendar invitation for the meeting link.

Testing AV. The Google Meet will open at 8:30 AM CT on each day of the meeting if you wish to test your video and sound.

Virtual participation. With advance appreciation for your contributions in the meeting, and given the ample discussion time and break time built into the agenda, please observe the following guidelines:

> **Camera on.** In the effort to make this online portion as "in-person" as possible, we are encouraging virtual participants to turn their video ON as much as possible. We cannot wait to see your smiling faces!
>
> **Mute.** Please mute your line when you are not speaking.
>
> **Ask a question.** "Raise Your Hand" to alert the facilitators that you have a question for the speaker.
>
> **Comment in the chat.** Please use the chat function in Google Meet to add your thoughts to the discussion or to respond to others using hashtags #agree or #disagree. Please stay on topic as comments and insights from the chat discussion may be brought into the plenary session.
>
> **Focus.** Breaks have been built into the agenda. Please avoid conducting other work (emails, calls, etc.) or having side conversations during the meeting.
>
> **Time.** The Annual Meeting will run on time. Please rejoin on time after all breaks.

LOGISTICS FOR IN-PERSON ATTENDEES AT THE NATIONAL WATER CENTER

Getting to Tuscaloosa. Birmingham-Shuttlesworth International Airport (BHM) is located 60 miles northeast of Tuscaloosa.

Staying in Tuscaloosa. A room block at the Hotel Indigo has been arranged. Make your reservations today!

- Book here: Coastal Coupling Community of Practice (IHG link).
- Phone number: 877-270-1392 (ask for the Coastal Coupling Community of Practice Meeting block).
- Reserve by: Friday, May 12, 2023.

Meals in Tuscaloosa.

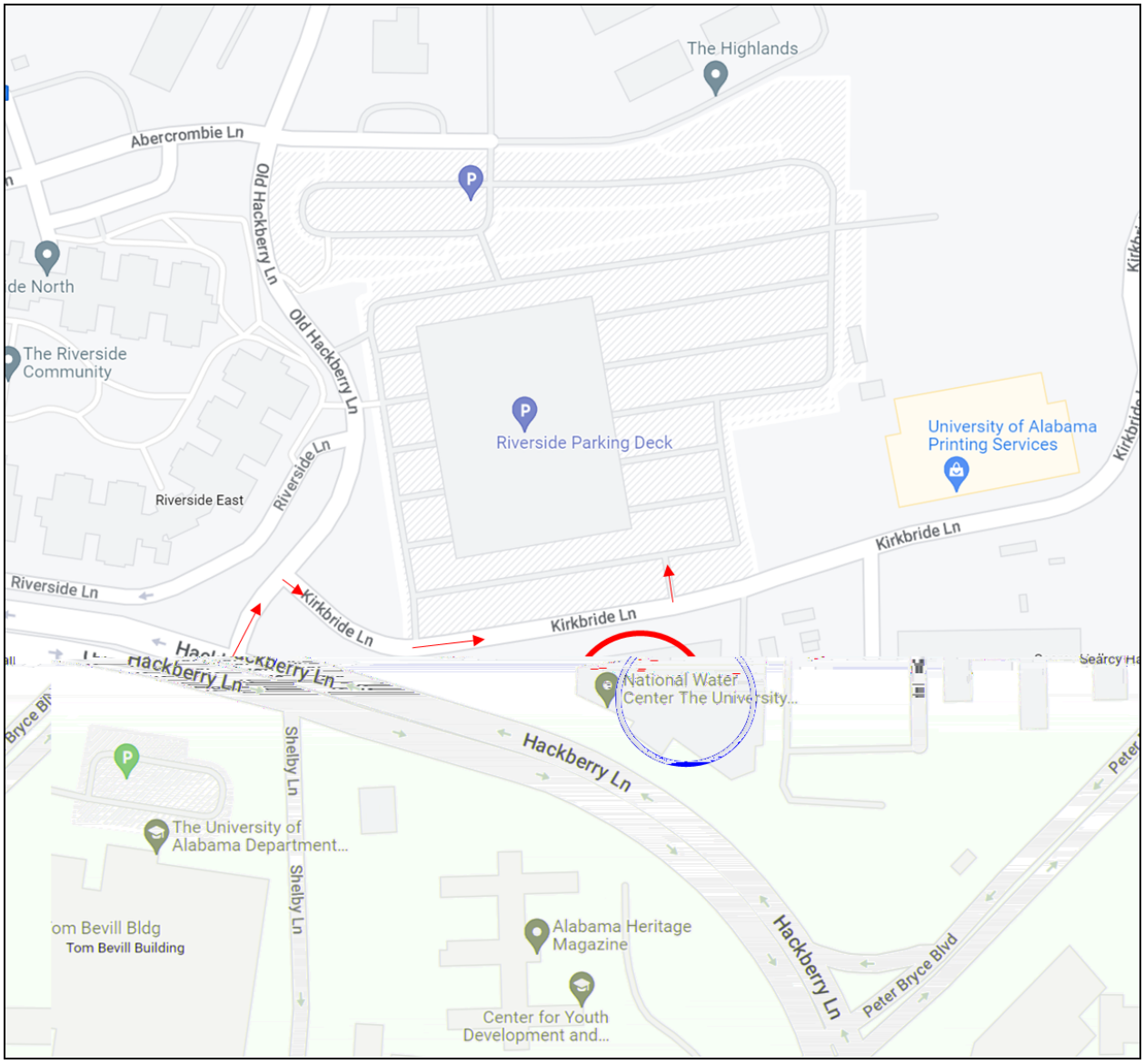
Restaurant	Type	Link
Delivery to the National Water Center via Amber Lucas	Delivery	Grubhub or DoorDash
Another Broken Egg	Breakfast and brunch	https://www.anotherbrokenegg.com/location/tuscaloosa-al
Antojitos Izcalli	Authentic Mexican cuisine	https://www.yelp.com/biz/antojitos-izcalli-tuscaloosa
Avenue Pub	American and brewery	https://www.avepub.com/
Central Mesa	Mexican-American fare	https://www.eatcentralmesa.com/
Chuck's Fish	Seafood and steak	https://www.chucksfish.com/location/chucks-fish-tuscaloosa/
DePalma's Cafe	Italian	Depalmasdowntown.com
Dillard's Chop House	Steakhouse	https://dillardschophouse.com/
Dreamland BBQ	Barbeque	https://dreamlandbbq.com/locations/tuscaloosa/
Evangeline's	Seasonal fine dining	http://www.evangelinestuscaloosa.com/
Five Bar and Restaurant	Southern pub fare and cocktails	https://www.five-bar.com/location/tuscaloosa-alabama/
Fresh Food Company	Buffet-style food	https://ua.campusdish.com/en/locationsandmenus/tuscaloosa/freshfoodcompany/
Half Shell Oyster House	New-Orleans-inspired seafood	https://www.halfshelloysterhouse.com/

Restaurant	Type	Link
Heat Pizza Bar	Artisan pizza and salads	http://heatpizzabar.com/
Hooligan's Restaurant	Burgers and wraps	http://www.sharethehummus.com/hooligans-menu/
Jim 'n Nicks	Barbeque	https://www.jimnnicks.com/menus/tuscaloosa/bar-b-q/
Newk's Eatery	Salads, pizzas & sandwiches	https://newks.com/menu
OEC Sushi	Hibachi and sushi	https://www.oecsushihibachi.com/
Rama Jama's	Sports-centric diner	https://ramajamastuscaloosa.com/
The Historic Waysider Restaurant	Southern, known for breakfast	https://www.yelp.com/biz/waysider-restaurant-tuscaloosa
The River	American food	https://www.rivertuscaloosa.com/
University of Alabama Student Center	Variety of fast-food-type restaurants	https://ua.campusdish.com/LocationsAndMenus/Tuscaloosa/StudentCenter

Gaining access to the National Water Center. Be prepared to present a state- or federally-issued ID and to sign in at the front desk of the National Water Center for each day in attendance.

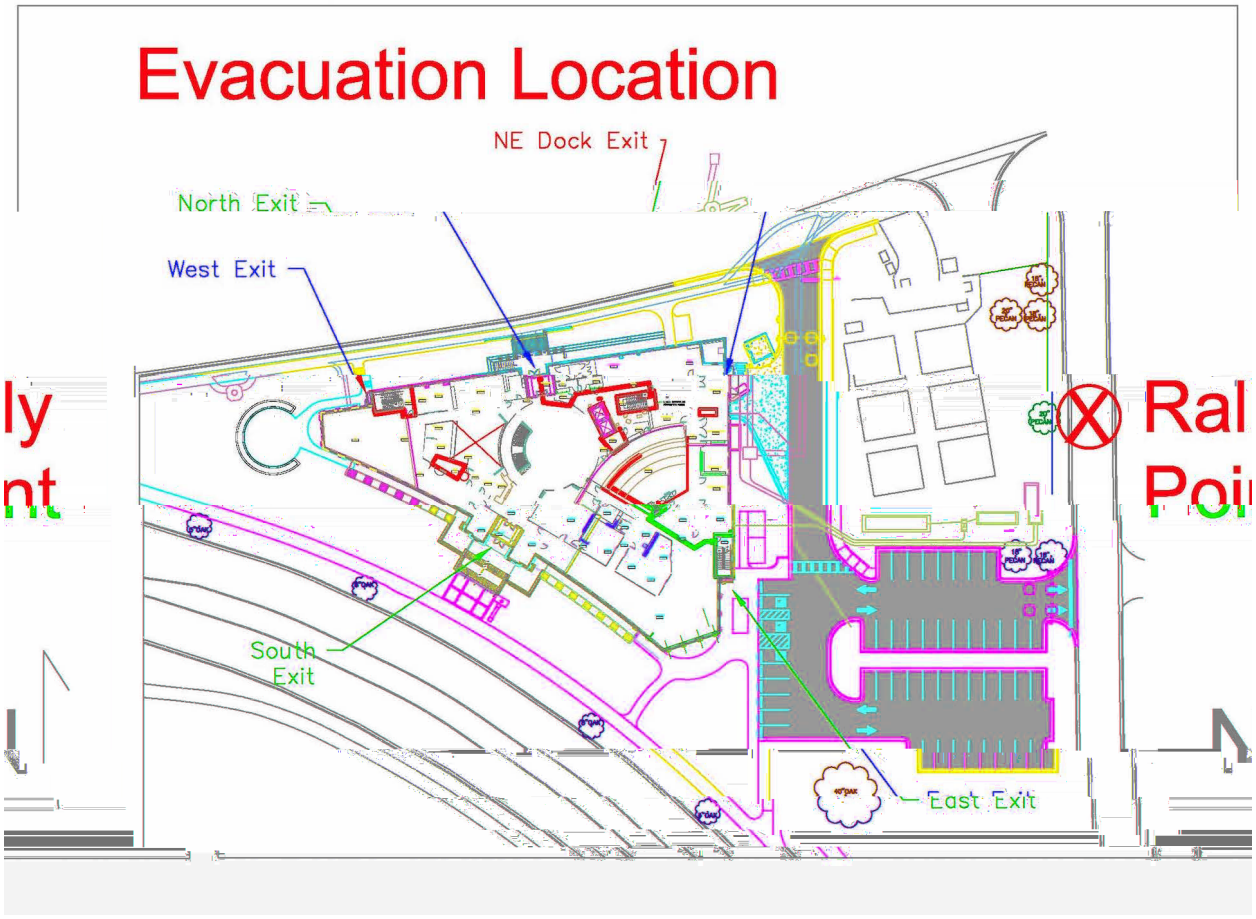
> **Special note:** The National Water Center is a secure federal facility. As a result, any permanent residents (green card holders) or non-U.S. citizens will need to complete additional paperwork. If this applies to you, please contact Murielle Gamache-Morris immediately (murielle.gamache-morris@noaa.gov or 703-298-8230).

Parking at the National Water Center. Limited parking is available in the National Water Center parking lot. Additional parking is available in the deck located behind the National Water Center, off of Kirkbride Lane (see map below). To access the deck, pull up to the gate across from the back entrance to the National Water Center. The keypad code to the first floor of the Riverside Parking Deck is **3259#**. This code will only need to be used at the entry gate, as the exit gate should raise automatically when the vehicle goes to exit the deck. If you have an issue getting into the parking deck, press the call button in the top right corner of the access column at the gate. This will call the University of Alabama Parking office and someone from their office will be able to assist you.



Need additional information? Contact Murielle Gamache-Morris (murielle.gamache-morris@noaa.gov or 703-298-8230).

National Water Center Evacuation Plan



ABOUT THE COASTAL COUPLING COMMUNITY OF PRACTICE

FOR ADDITIONAL DETAILS, VISIT THE WEBSITE (NOAA LINK)

THE NEED

Over 100 million people living in U.S. coastal areas do not have access to accurate information about critical water-related issues, such as floods, droughts, and poor water quality because contemporary operational forecast models do not yet fully capture the complexity of combined freshwater, estuarine, and ocean processes. This challenge is too great for any single agency to address alone. The community has the knowledge and resources needed to meet this issue but must work together to leverage each other's resources and capabilities.

THE RESPONSE

In 2019, scientists and modelers from the federal government and academia formed the Coastal Coupling Community of Practice (CC CoP) in order to address this challenge.

CC CoP VISION

By working together, the CC CoP will provide actionable water information at local, regional, and national scales that helps to protect the lives and property of those living in the coastal zone and that informs adaptation planning in coastal regions to account for a changing climate and rising sea levels.

CC CoP MISSION

The mission of the CC CoP is to enable:

> Coupling of models to better represent earth system processes across the coastal zone and provide improved predictions of quantities such as water levels, flow timing and duration, currents, sediment, water quality variables, geomorphic changes, etc.
>
> Actionable information on these quantities provided to stakeholders in timely, accessible, and user-friendly formats.
>
> Accelerated national coverage of integrated water prediction capabilities through the adoption of community research and models that acknowledge stakeholder-driven requirements.

CC CoP GOALS

The CC CoP will:

> **Create a sustainable framework and vision for engagement** between Federal agencies, academia, state and local governments, and private industry around model and tool development.
>
> **Develop and support** coastal coupling modeling best practices.
>
> **Work toward collaborative solutions** for continental-scale integrated water prediction using a unified modeling approach.
>
> **Advance science around modeling** that will result in better products and services that

meet the needs of the operational use community (e.g., natural and water resources managers, water suppliers, planners, decision-makers).

Encourage the adoption of standards including definitions, metadata, data access, and transition of models to operations.

Look for collaboration points with partners outside of coastal coupling modeling (e.g., data providers, end-users, social scientists) and align priorities in order to advance the state of the science.

Identify unrecognized pockets of related projects and share work openly with those projects.

Evaluate the success of the CoP on a regular basis.

ACCOMPLISHMENTS

2019 Annual Meeting that created a sustainable framework for engagement among Federal agencies and model developers that supports collaborative solutions for continental-scale integrated water prediction: Summary available here, via the CC CoP website.

2020 Annual Meeting that defined data needs: Summary available here, via the CC CoP website.

2021 Annual Meeting that focused on technical model developments, data needs, and stakeholder requirements that can drive model requirements: Summary available here, via the CC CoP website.

Webinars and Conference Sessions since 2019 that have been focused on advancing the science around coupling models through collaborative community engagement for integrated coastal solutions employing research, model development and application, data provision, observations, analysis, and service delivery.