

Coastal Coupling Community of Practice Annual Engagement Plan

June 2, 2020

Over the last year, we have hosted a number of scientific and town hall sessions around coastal coupling and community modeling that have been very well-received. Thus far, we have received a high level of response from our engagement efforts. However, we can do better at aligning our future engagement efforts in a clear and transparent way as a community. **It is very possible that without a plan in place multiple groups could conduct similar sessions or meetings that overlap in scope resulting in inconsistent messaging and competing resources for participants to attend.** In our current unpredictable travel situation, it is essential for the CC CoP to be on the same page for how we engage with the broader scientific community on coastal coupling work.

This document serves as the initial annual engagement plan to help us plan and engage as a community in the events (conference, workshops, etc.) that are the best investment of our time. Our plans to engage over the next year are outlined here including opportunities to continue engaging in the following year.

TENTATIVE ENGAGEMENT PLAN

There are several types of engagement activities represented in this plan. First, are conferences where sessions can be organized by members of our CC CoP. Second, is a running list of conferences, workshops, meetings, and other non-formal engagements that could be of interest to the members of the CC CoP. Finally, opportunities for students are compiled to help build our community and the skill sets of our future generation of coastal coupling specialists.

CONFERENCES WITH SESSIONS ALREADY SUBMITTED

As of right now, there have been several sessions already submitted at major conferences that are being led by members of the CC CoP. These are outlined below.

| <i>Conference</i> | <i>Date & Location</i> | <i>Comments</i> |
|--|---|---|
| 2020 American Geophysical Union (AGU) Fall Meeting https://www.agu.org/fall-meeting | December 7-11, 2020 San Francisco, CA | <ul style="list-style-type: none">• Continental-scale modeling session (lead by NWC)• CC CoP town hall• NWC town hall• NOAA modeling forum town hall• Abstract submissions open in June |

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| 2021 American Meteorological Society (AMS) Annual Meeting https://www.ametsoc.org/ams/index.cfm/meetings-events/upcoming-meetings/annual-meeting/ | January 10-14, 2021 New Orleans, LA | <ul style="list-style-type: none"> • Operational modeling session led by NWC • Coastal Environment Symposium has relevant sessions including one on the COASTAL Act lead by EMC • Jesse Feyen (GLERL) invites members of the CoP to offer 4- or 8-hour short courses • Information Processing Technologies session |
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CONFERENCES AND WORKSHOPS OVER THE NEXT YEAR

In order to maintain the consistency in messaging that we desire, we need to start early in our planning effort. In the future, we envision that one organization or office will volunteer to take the lead for each session or town hall proposal based on expertise. Once leads for each conference session are determined, other members have the opportunity to get involved as co-conveners and ensure we have well-rounded representation at these meetings including a diversity of ideas and consistent messaging.

Below is a list of upcoming events based on the feedback from the 2nd Annual Coastal Coupling Community of Practice meeting May 12-13, 2020, that could be of interest to the CoP.

| <i>Conference</i> | <i>Date & Location</i> | <i>Comments</i> |
|---|--|---|
| Association of State Floodplain Managers (ASFPM) https://asfpmconference.org/ | June 9-11, 2020 Virtual | Registration is still open |
| Community Earth System Model Workshop http://www.cesm.ucar.edu/events/workshops/2020/ | June 15-17, 2020 Virtual | Deadline for presentations has past, but registration is open until the beginning of the workshop |
| A Workshop on Modeling, Prediction, and Sensor Networks for Coastal Flooding in the US East Coast https://www.oceanvisions.org/coastal-solutions-2020 | July 2020 4 morning sessions Virtual | <ul style="list-style-type: none"> • Bring together groups working on quantitative frameworks for monitoring and predicting coastal flooding along the US East Coasts • Draft a strategy for advancing an integrated modeling system for coastal flooding that includes the ocean, atmosphere, land, and urban infrastructure components. |

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| Unified Forecast System Users Workshop https://dtcenter.org/events/2020/ufs-users-workshop | July 27-29 Virtual | <ul style="list-style-type: none"> • Abstract submission deadline 6/7 • Registration closes 7/20 |
| NOAA Water Initiative Meeting | October 13-15 Virtual | |
| OCEANS 2020 https://gulfcoast20.oceansconference.org/ | October 19-22 Biloxi, MS | Sessions on environmental modeling and coupled systems |
| Coastal Ocean Modeling Testbed Annual Meeting | Late-October Dates and location TBD | This remains to be scheduled |
| CC CoP Fall Meeting | Late-October Dates and location TBD | Plan to hold this in person following the COMT meeting |
| Coastal GeoTools Coastalgeotools.org | February 2021 Charleston, SC | <ul style="list-style-type: none"> • Hosted by ASFPM in conjunction with OCM • Focus on geospatial data, tools, technology, and information for coastal resource management professionals |
| NOAA General Modeling Meeting | Spring 2021 | Dates and locations are still being planned |

FUTURE PLANS

As stated above, we need to start our engagement planning early to maintain consistency in messaging and reduce the overlap of resources. This section lists future opportunities occurring more than a year from now. Many of these conferences and workshops were originally planned for this year and were postponed to a later date due to COVID-19. Some potential opportunities for next year include:

| <i>Conference</i> | <i>Date & Location</i> | <i>Comments</i> |
|--|-----------------------------------|--|
| The Louisiana State of the Coast https://www.stateofthecoast.org/ | June 2-4, 2021 New Orleans, LA | <ul style="list-style-type: none"> • Hosted by the Coalition to Restore Coastal Louisiana (CRCL) • Postponed from June 2020 • More details on abstract submission coming soon |

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| Gordon Research Conference on Coastal Ocean Dynamics https://www.grc.org/coastal-ocean-dynamics-conference/2021/ | June 6-11, 2021 Southern New Hampshire University, Manchester, NH | <ul style="list-style-type: none"> ● Session titles are being developed and will be posted by August 6, 2020 ● Session on coastal ocean to land coupling has been suggested ● The GRC format is invited talks only - 30 to 45 mins. |
| International Conference on Flood Management https://icfm2020.org/ | August 9 - 11, 2021 The University of Iowa, Iowa City, IA | <ul style="list-style-type: none"> ● Postponed from 2020 ● Abstract submission will be open July 1, 2020 - October 23, 2020 |
| International Workshop on Waves, Storm Surges and Coastal Hazards www.waveworkshop.org | October 10-15, 2021 University of Notre Dame, Notre Dame, IN | |
| Coastal and Estuarine Research Federation (CERF) biennial conference https://www.cerf.science/ | November 7-11, 2021 Richmond, VA | |

NON-FORMAL ENGAGEMENT

In addition to formal conferences and workshops, there are non-formal engagement methods that could be beneficial for the CC CoP to be aware of and participate in. Some of those that have been brought to my attention over the last year include the following:

- Hack weeks
- Trainings
 - GitHub training
 - There are now many online training courses on machine learning from HPC centers
 - WAVE Summer School at the University of Maryland, College Park +NCEP (except this year due to Covid19). Includes WW3 +ADCIRC coupling in the training.
- Regional conferences to engage practitioners - Each IOOS Regional Association hosts an annual meeting involving stakeholders from their region,
<http://www.ioosassociation.org/calendar>

WEBINAR SCHEDULE

At the CC CoP inaugural meeting, members agreed that quarterly or bi-monthly webinars are a helpful platform to provide briefings on ongoing efforts and new initiatives. To date we have had webinars that covered the following topics:

- Joseph Zhang (VIMS) gave an overview of the SCHISM creek-to-ocean model
- Katrina Wyllie (NOAA OCS) talked about the National Bathymetric Source Project

- Doug Graham (NOAA NGS) talked about the Continually Updated Shoreline Project
- Mary Mullusky and Kate Abshire (NOAA AFS) presented on using social science to gather stakeholder feedback to inform National Water Model development

Below is the tentative schedule for our webinar series over the next year.

| <i>Date</i> | <i>Speaker(s)</i> | <i>Topic</i> |
|---------------------------------|---|---|
| Early July | TBD | TBD |
| August 20, 1:00 - 2:30 pm CT | Ehab Meselhe, Tulane University Ali Abdolali, NOAA EMC | Channel routing in the coastal transition zone including backwater and tidal effects WAVEWATCH III coupling strategies |
| Late September | Greg Dusek, NOAA CO-OPS Mehdi Rezaeianzadeh, NOAA OWP | Artificial Intelligence in coastal coupling modeling efforts |
| Late November | TBD | TBD |
| Early February | Sea Grant Resilience Coordinators | Understanding local community coastal inundation needs |
| Early April | TBD | TBD |

At the recent 2nd Annual CC CoP meeting and previous webinars, the CC CoP members expressed interest in several webinar topics that are still working to be scheduled. These additional topics include the following:

- Panel discussion on data warehouses including NOAA/NCEI, Big Data project, cloud partners, IOOS, etc.
- Vertical referencing in the models
- Grid automation
- NWM updates on coastal coupling
- Additional project updates

STUDENT OPPORTUNITIES

Helping students to gain the skills needed to continue this innovative coastal coupling work in the future is also important for our community. An opportunities section has been added to the website (<https://www.weather.gov/watercommunity/opportunities>) to address this. This page can serve as a platform for advertising opportunities for students, post-docs, and others. Current listings include the following:

- NRL is looking for a shared post-doc with GA Tech to couple WRF-Hydro to another coastal modeling system, SHYFEM
- USACE ERDC is always hiring good coastal engineering students for engaging work
- GLERL sponsors summer internships with our Cooperative Institute, CIGLR <https://ciglr.seas.umich.edu/opportunities/student-fellowships/>
- PhD student at UGA: <http://www.mattbilskie.com/ms-phd-student-opportunity/>
- CUAHSI Summer Institute (summer 2021)

HOW TO STAY INFORMED

This is presently a rough draft of the ways we want to engage as a community. This document provides a list of the conferences that have already had sessions and town halls submitted, conferences and workshops that CC CoP members plan to attend in the future, and the suggestions we heard from the CoP meeting. This engagement plan will continue to evolve over time as events arise and pass. **In order to finalize the first version, we ask you to think about the following questions.**

- Are there any items that we did not capture?
- Do you have any additional information on the listed events (links, dates, etc.)?
- Do you have interest in submitting a session on coastal coupling to any of these conferences or others that have not been listed here? If so please let me know and what you are interested in submitting.

We will continue to update this document regularly and post it on the website as we to gather your feedback. **You can help contribute to this by continuing to share relevant webinars, meetings, and training sessions.**