

UNCERTAINTY IN NUMERICAL MODEL APPLICATIONS TO MANAGE COASTAL EUTROPHICATION

Spring 2021 Webinar Series and Workshop

Webinar Series and Workshop Goals

The goals of this virtual webinar series and workshop are to:

- #1 Educate managers on basic approaches to estimating uncertainty in numerical model applications to investigate coastal eutrophication.
- #2 Discuss the relevance of these approaches for ongoing investigations of effects of land-based nutrients in the San Francisco Bay estuary and the southern California Current System.

Who Should Attend? How to Sign Up?

Who Should Attend: Scientists, staff of California sanitary agencies, stormwater agencies, water quality regulatory and natural resource agencies.

To sign up for our listserv and get updates, click [here](#).

To review background materials, click [here](#)

Why Uncertainty? Two separate efforts are independently using coupled physical and biogeochemical numerical models to quantify the effect of land-based nutrients on eutrophication in the San Francisco Bay (San Francisco Nutrient Management Strategy) and on the California Coast (Ocean Protection Council Coastal Ocean Acidification and Hypoxia (OAH) Modeling). The outcomes of these modelling research programs could drive important management decisions on nutrient management, to the tune of billions of dollars. For managers and policy makers to confidently use the results of the model, the model uncertainty would ideally be smaller than the change the model is predicting is attributable to anthropogenic nutrients. Managers are seeking information on approaches to take these uncertainty analyses to the next level and their efficacy in how models are used to support management conversations.

WEBINAR SERIES: APRIL 15- MAY 5, 2021

REGISTER NOW FOR OUR FIRST WEBINAR



Marjorie Friedrichs, Ph.D.
Professor, Virginia Institute of
Marine Science (VIMS)

**When: Apr 15 12pm-
2pm PST**

[Register here](#)

Dr. Friedrichs uses mathematical computer models and observations to quantify the impacts of climate, land-use changes and local management efforts on hypoxia, acidification, and biogeochemistry in coastal systems. Go [here](#) for more on her research.

Talk Focus: An overview of approaches to quantify uncertainty in coastal numerical models and experience from application to nutrient management in the Chesapeake Bay

[Talk title and abstract forthcoming]

SAVE THE DATE FOR UPCOMING WEBINARS!



Christopher Edwards, Ph.D.
Professor, University of
California, Santa Cruz
**When: Apr 21 12pm-
2pm PST /**
[Register here](#)

Dr. Edwards conducts research in physical oceanography and ocean ecosystem dynamics, and geophysical fluid dynamics using numerical modeling and ocean observing systems. Go [here](#) for more on his research.



Samantha Siedlecki, Ph.D.
Professor, University of
Connecticut
**When: Apr 28 12pm-
2pm PST /**
[Register here](#)

Dr. Siedlecki is a biogeochemical oceanographer who uses numerical models to understand mechanism and influences on biogeochemical dynamics in coastal ocean ecosystems. Go [here](#) for more information on her research.



John Dunne, Ph.D.
Oceanographer,
NOAA Geophysical Fluid
Dynamics Lab, Princeton, NJ
**When: May 05 12pm-
2pm PST /**
[Register here](#)

Dr. Dunne is an expert in ocean biogeochemistry, climate, and earth system modeling with 30 years of experience developing instruments, collecting field observations, and performing analysis and modeling studies. Go [here](#) for more information on his research.

Half Day Virtual Workshop and Expert Panel Discussion: Date and Information Coming Soon!

The virtual workshop will consist of a Panel of scientists, modelers and agency staff that discuss the key benefits and limitations of uncertainty approaches for the two California coastal modeling research programs. Selected panelists will give short, summary talks on questions related to the workshop theme and the facilitator will engage the group in discussion and respond to questions from the audience. The ultimate goal is to educate workshop attendees on what uncertainty approaches are relevant and how could they be specifically used to inform the key management questions.

Questions?

**Contact Us At uncertaintyinfo@sccwrp.org
Sign up on the email distribution list [here](#).**

Workshop Organizing Team

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