

Abstract

Contaminants of Emerging Concern (CECs) are not well regulated and their impacts on human health and ecosystems are not well understood. They include a diversity of compounds/families of compounds that have received popular press, such as the “forever chemicals” PFAS, pharmaceuticals and personal care products and microplastics, along with lesser visibility chemicals such as nanomaterials and other less known chemicals. Recent work in the field of CECs includes a diversity of disciplines, ranging from analytical chemistry to exposure, effects in humans and on ecosystems, and remediation. There is also no clear single agency jurisdiction to address CECs, and therefore significant overlap exists in interests and responsibilities across state and federal agencies/programs in addition to NGO and academic interests and programs.

The purpose of this proposal is two-fold. First, through a scoping exercise, we propose to survey the national landscape on CECs, both inside and outside Sea Grant, and identify, a strategic national role/framework for Sea Grant on the broad topic of CECs. This will be accomplished in the first six months of the project by appointing an advisory committee to oversee and guide the project, performing a detailed literature survey, defining Sea Grant interests and aspirations as well as the national landscape through comprehensive surveys, define a potential strategic role for Sea Grant that will be refined through a series of regional workshops and a national webinar, and finalize a scoping report. We anticipate the regional workshops to take place virtually in each of five broad regions: the Great Lakes, Northeast, Mid-Atlantic and Southeast, Gulf of Mexico and the West coast including Hawaii and Alaska. The second part of the project will focus on a regional (US East coast) initiative that will align with and test the framework identified in the scoping exercise to initiate the implementation of the vision of the role Sea Grant can play. Efforts will be made to leverage commitment and resources from like-minded partners to enhance the size of the funds to be competed, and initiate the development of strategic and meaningful partnerships.

The project team will build on the complementarity of views and experience from within and outside of Sea Grant, including in terms of both CECs topical and Sea Grant functional experience (the team includes directors, extension, research and communications representatives). Importantly, the team includes a professional facilitator with relevant experience, including working with Sea Grant, so that potentially divergent opinions can be heard respectfully and reconciled, and team members can fully engaged in topical discussions.

The project outreach and technology transfer plan will include efforts at continued discussions on CECs beyond the scoping phase by maintaining engagement through the development of a community of practice, and engagement with the funded PIs at the beginning, middle and end of the research projects. The effort will be facilitated by the engagement of a Sea Grant communicator from the beginning of the project.

The team will be intentional in including all views, and be sensitive to the concepts of diversity, equity and inclusion, as well as environmental justice, as underserved communities are often the most affected by and least protected from environmental contaminants, including CECs.