Carbon to Sea Initiative

July 11, 2024

National Oceanic and Atmospheric Administration (NOAA)
ATTN: Regional Ocean Partnership Designation Guidance
1305 East-West Highway
Silver Spring, Maryland 20910

Via *regulations.gov*

RE: NOAA's Draft Guidance on Designation of New Regional Ocean Partnerships, Docket ID NOAA-NOS-2024-0066

To whom it may concern:

The **Carbon to Sea Initiative** (CTS) is a nonprofit effort whose mission is to systematically assess whether and how ocean alkalinity enhancement (OAE) can deliver safe, cost-effective, and permanent CO_2 removal at scale. We are guided by a set of core principles that emphasize transparent outcomes, strong and clear governance standards, and sincere stakeholder engagement.

We are delivering on our mission by funding research to close knowledge gaps; advancing relevant technology and policy development; and engaging in community-building to support the emergence of a responsible and sustainable ocean-based CDR sector, should that be appropriate.

Last year, we awarded more than **$23 million to scientists and engineering teams** to ask and answer questions associated with: efficacy and permanence, environmental safety, economics, utility of byproducts, alkalinity delivery, alkalinity generation, and measurement, reporting and verification (MRV).

We strongly support NOAA's effort to recognize existing regional ocean partnerships (ROPs), encourage the establishment of new ROPs, and fund these entities and tribal participation in them. Ocean and coastal ecosystems do not adhere to the legal jurisdictional lines that divide their management, and fragmented management has contributed to their degradation.

Regional planning and coordination, through ROPs and other regional efforts, such as the **regional consortia focused on ocean acidification** and **regional ocean observing systems**, provide important forums in which policy makers, stakeholders, and the general public can learn about pressing marine and coastal issues in the regions; share their concerns, knowledge, and expertise; identify knowledge gaps that need to be filled; and work through and across jurisdictional obstacles to design regionally appropriate

solutions. This model can facilitate increased collaboration required to reduce user conflicts and identify mutual benefits.

Climate change, and its effects on marine and coastal ecosystems, is an increasingly dominant concern in coastal communities. Rising ocean temperature and sea level, and increasing ocean acidity, among other impacts, are beginning to have profound effects on our ocean and coasts. National and international solutions are needed to stem greenhouse gas emissions, which are the fundamental drivers of climate change. However, coastal communities are increasingly taking direct action to address these challenges by developing and implementing adaptation and mitigation measures.

One promising form of ocean-based climate action is marine carbon dioxide removal (mCDR). **All sustainable scenarios for limiting global warming to no more than 1.5 to 2^{o}C require carbon dioxide removal in addition to emission reductions**. Viable forms of CDR will have to scale up by orders of magnitude in the coming decades in order to meet even conservative estimates. If done right, development and deployment of these technologies can also bring new economic opportunities to coastal communities. Leading scientists are answering important questions about the environmental safety and the efficacy at long-term CO_2 removal of mCDR. As potential new users of ocean space and resources, mCDR researchers and practitioners are eager to engage with the broader ocean and coastal community to hear their concerns, learn about their information needs, and listen to their ideas about where, when, and how demonstration of the various mCDR approaches could be most appropriately carried out in different regions. We believe that ROPs provide an efficient and appropriate forum to begin those discussions.

As a leader of the federal interagency efforts to plan for and support research on mCDR, NOAA should continue to encourage and support information sharing, education, and dialog at the ROPs on the potential benefits and effects of mCDR. In March, the Northeast Regional Ocean Council held an informative webinar on mCDR. CTS would like to see more such actions, along with more interactive follow-up discussions at existing and, once they are up and running, new ROPs created under this program. If desired by the ROPs, CTS would be pleased to assist in planning and carrying out such sessions, including by recommending mCDR scientific experts with regional knowledge and expertise.

To improve the utility of ROPs in assisting regional authorities in carrying out their responsibilities for ocean management in an effective, collaborative, and synergistic manner, we offer a few general recommendations for the program as it moves forward:

- As we read the underlying statute and the draft guidance, it seems technically possible for more than one ROP to be established in a given geographic region. This would seem counterproductive to the purpose of integrated regional planning and management. NOAA should clarify in the guidance that it will approve no more than one ROP per major geographic region, and that it will favor applications for ROPs with memberships that broadly cover such regions and their large marine ecosystems.
- An obvious benefit of the program, in addition to providing important support for existing ROPs, is incentivizing the establishment of ROPs in regions where they are

currently lacking, such as the South Atlantic, Caribbean, Western Pacific, and Alaska.

- As ocean-based solutions to climate change mitigation and adaptation continue to evolve and expand, it is particularly important that regional forums to evaluate and coordinate these solutions exist in all US coastal areas.
- Likewise, it will be important, especially in regions with newly created ROPs, for ROPs to work closely with regional ocean observing systems and regional ocean acidification consortia to ensure seamless coverage and avoid duplication of effort.
- With their vast expanses, the Western Pacific and Alaska pose substantial challenges for regional coordination and planning. It is probably impractical to create more than one ROP in each of these regions. However, given the cultural and ecological diversity within these regions, it may make sense to form one ROP for each region, should state, territorial, and Indigenous policy makers be interested in doing so, but to provide for creation of appropriately chartered and staffed subcommittees to deal more effectively with priority sub-regional issues.
- Although funding for this program provided by the Bipartisan Infrastructure Law is critical and welcome, long-term, consistent funding will be needed to ensure its success. For fiscal years beyond FY27, we encourage NOAA to include funding for this program in its annual budget requests.

Because enhanced ocean observations are vital both for broadly assessing marine environmental status and trends, and for monitoring the effects of in-water demonstrations of mCDR, CTS would welcome the opportunity to collaborate with NOAA, its regional ocean observation partners, and new and existing ROPs in the collection and sharing of such data.

In conclusion, CTS strongly supports continued support for existing ROPs and the creation and funding of new ROPs in regions where they are currently lacking. ROPs provide an important forum for discussion and coordination of decision making on important regional issues on the use of ocean space and resources. Such decisions, we believe, will increasingly involve developing and deploying ocean-based climate adaptation and mitigation solutions. The participation of coastal communities in tackling the climate crisis requires an “all hands on deck” approach that is facilitated by regional planning and coordination.

Sincerely,

Diane Hoskins
Global Policy Director
Carbon to Sea Initiative