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Credit: Jessica Rose Photography

Tribes Part of Model Legislation for Ocean CDR Roadmap

By Mark Fogarty

Federal legislation is needed to advance ocean carbon dioxide removal research in the United States. According to an article in Climate Law tribes should be partners in the regional resource councils called for in model legislation.

Authors Korey Silverman-Roati and Romany Webb, writing in a Sabin Center for Climate Change Law blog, said the Sabin Center has released model legislation to start the government on the right course.

"Existing legal frameworks were not designed to regulate ocean CDR and, in some cases, unnecessarily or inappropriately restrict needed research," Silverman-Roati and Webb write, saying field trials and other ocean research are critical to help the country meet climate change goals.

Silverman-Roati is a Climate Law Fellow at the Sabin Center for Climate Change Law, and Webb is Associate Research Scholar at Columbia Law School and Deputy Director of the Sabin Center.

The model legislation, they write, "establishes a clear and efficient permitting regime for in-ocean CDR research. At the same time, the model legislation builds in consultation, monitoring, and other safeguards to ensure research occurs in a scientifically-sound manner and minimizes potential risks to the environment and communities."

"Existing legal frameworks were not designed to regulate ocean CDR and, in some cases, unnecessarily or inappropriately restrict needed research. ... [The model legislation] establishes a clear and efficient permitting regime for in-ocean CDR research."

Ocean CDR techniques have gotten less notice than land-based ones to date, the authors note.

But, they emphasize, things are changing. Some forms of ocean CDR will almost certainly be a critical part of the toolkit for achieving climate goals around the world and in the United States.

Ocean fertilization, artificial upwelling, seaweed cultivation, ocean alkalinity enhancement, and electrochemical ocean capture are some of the techniques worthy of research, the two say.

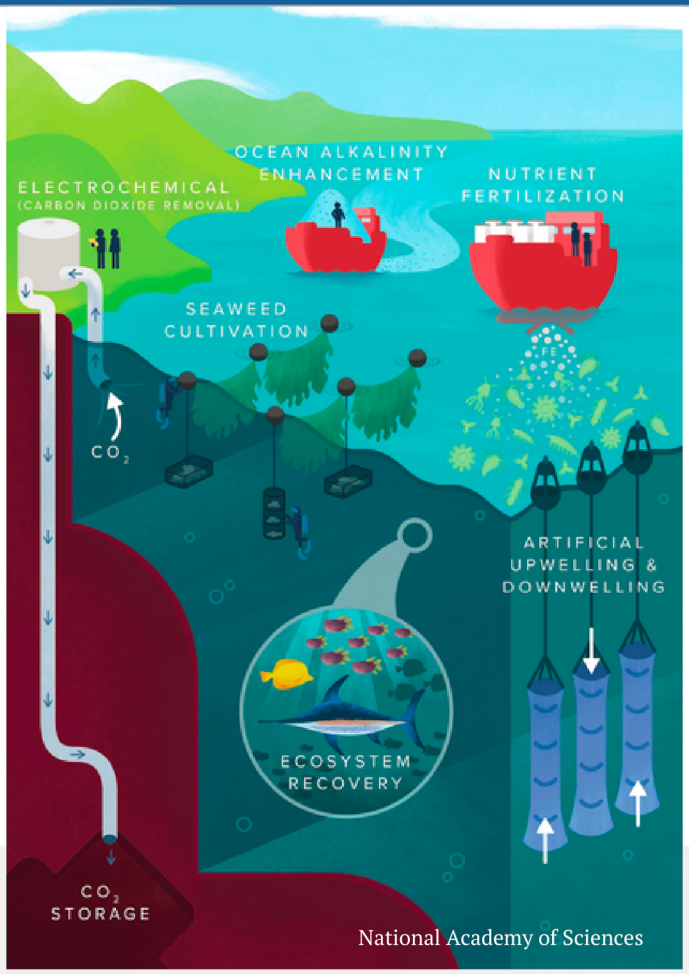
"Further research, including controlled field trials, is urgently needed to fully evaluate each ocean-based CDR technique. Important scientific questions remain about the techniques' effectiveness in removing carbon dioxide and the durability of any associated carbon storage, the scalability of the techniques, the environmental and social risks they might present, and their potential co-benefits. Many of the remaining scientific questions can only be answered through in-ocean research and, in some cases, relatively large-scale or long-duration field trials may be necessary," the authors claim.

While the model law provides for exclusive federal oversight of ocean CDR research, it requires close collaboration between the lead federal agency and tribes, states, local governments, and others.

Ocean CDR lacks a critical framework, according to Webb and Silverman-Roati.

"Our prior research shows that, currently, in the U.S., there is no specific legal framework for in-ocean CDR research. Unless such a framework is developed, research projects will be regulated under a variety of general environmental laws, which were developed with other activities in mind and thus are not well suited to facilitate and regulate ocean CDR."

Webb and Silverman-Roati lay out the main details of this framework, contained in the model legislation:



The Model Law

- ***Distinguishing ocean CDR research from deployment:*** The model law distinguishes between research, undertaken for the purpose of advancing scientific understanding, and deployment, which is defined to mean large-scale projects. The model law only applies to research projects.

- ***Federal authority over ocean CDR research:*** The model law provides that a single federal agency (described in the legislation as the "lead agency") will be solely responsible for regulating all aspects of ocean CDR research in all U.S. ocean waters, including state ocean waters.

- ***Defining national research goals for ocean CDR:*** The model law provides for the establishment of an Interagency Working Group to develop and periodically update a national plan for ocean CDR research. The Interagency Working Group would include representatives of key federal agencies with expertise or an interest in ocean CDR research.

- ***Encouraging regional planning for ocean CDR research:*** The model law designates Regional Research Councils, made up of state and tribal representatives. The Regional Research Councils are authorized to develop research programs to regionally implement the national plan developed by the Interagency Working Group (among other things).

- ***Identifying priority areas for ocean CDR research:*** The model law directs the lead federal agency to designate preferred zones for ocean CDR research zones, with input from the Regional Research Councils and other key stakeholders. Research projects within designated zones will be subject to expedited review and permitting by the lead federal agency.

- ***Permitting of ocean CDR research:*** The model law requires any person or entity wanting to undertake an ocean CDR research project in U.S. ocean waters to obtain a permit from the lead federal agency. The lead agency is authorized to issue permits where it determines that the scientific merit of a research project outweighs any potential negative environmental or other effects of that project.

- ***Providing for meaningful input by tribal, state, and local governments and communities:*** While the model law provides for exclusive federal oversight of ocean CDR research, it requires close collaboration between the lead federal agency and tribes, states, local governments, and others.

- ***Ensuring adequate funds for environmental cleanup:*** The lead agency may require that a person holding a permit maintain a bond or other financial assurance to ensure that funds are available for the cleanup of environmental harms that might be caused by a research project.