

# Ocean Restoration Research and Development Act of 2024

## Bill Overview

**Purpose:** The Ocean Restoration Research and Development Act of 2024 (H.R. \_\_) directs the Secretary of Energy, in consultation with NOAA and other federal agencies, to develop a demonstration pilot program to help inform policymaking on the marine carbon dioxide removal (mCDR) approach known as ocean iron fertilization (OIF) and other mCDR approaches, along with the potential co-benefits to fisheries and marine mammal conservation.

**Background:** In 2022, the National Academies of Sciences (NAS) released a [report](#) assessing the potential benefits of mCDR approaches, such as OIF, and calling for more research to learn how these methods could help mitigate the impacts of climate change. This legislation builds upon the recommendations set forth in the NAS report and authorizes mCDR projects under DOE's regulatory oversight.

The idea behind OIF has been around for decades. Scientists have shown that many parts of the world's oceans are starving for iron, the lack of which suppresses ocean photosynthesis and its biologic pump. For example, experiments have demonstrated that adding miniscule amounts of iron (parts per trillion) to patches of the ocean can stimulate the production of algae and ocean biomass, thereby sequestering carbon and simultaneously benefitting fisheries through enhanced trophic productivity. However, questions remain regarding how much atmospheric carbon can be reduced and the co-benefits. OIF provides a unique opportunity to sequester many gigatons of carbon annually<sup>1</sup> with the potential for simultaneously helping restore fisheries that have suffered from overharvesting.

### Key Elements of the Bill:

- Provides \$33M for each fiscal years 2023 through 2027 for pilot projects (requires matching non-federal funds).
- Requires pilot projects be performed in open ocean waters to eliminate potential for harmful algal blooms.
- Requires DOE to coordinate with other federal agencies, such as U.S. EPA and NOAA, and use existing data to inform ongoing research and development goals and location of pilots.
- Encourages public-private collaboration and cooperative agreements to carry out and expedite small-scale demonstration projects.
- Requires a report to congress within 3 years regarding effectiveness of the program in terms of reducing CO2 levels and other benefits to fisheries and marine mammals.

**Timing: Rep. Buddy Carter is currently seeking bipartisan co-sponsors in the House. A companion bill, and lead sponsors, is under consideration in the Senate.**

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<sup>1</sup> See July 23 Climate Restoration Working Paper, P. Fiekowsky and C. Douglis, available at [www.PeterFiekowsky.com/resources](http://www.PeterFiekowsky.com/resources)