

OUR MISSION

Design and champion equitable, science-based policies that bring carbon removal solutions to gigaton scale.

OUR VISION

Eliminate legacy carbon emissions and create a livable climate in which current and future generations can thrive.



ENVIRONMENTAL  
JUSTICE

POLICY

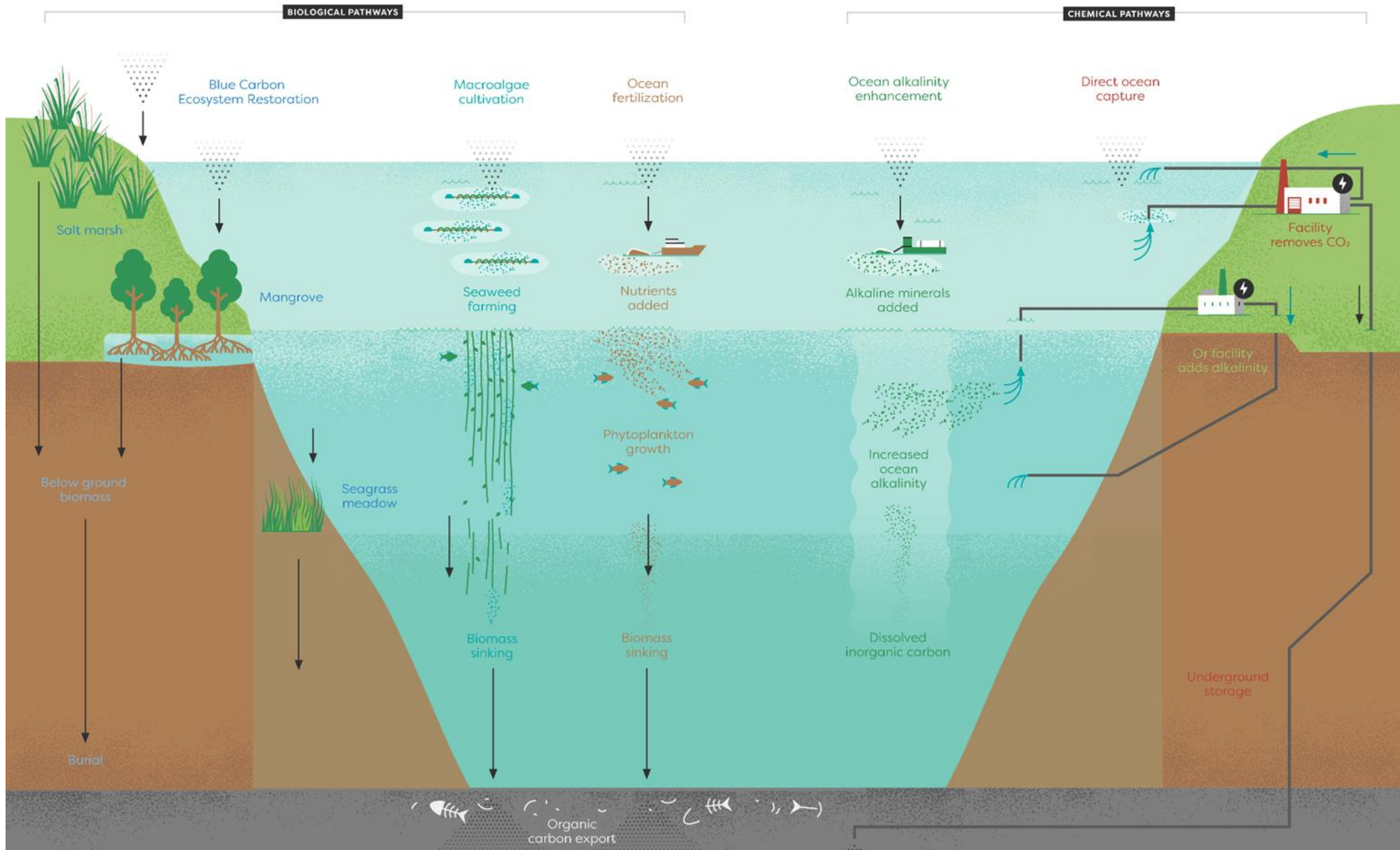
SCIENCE AND  
INNOVATION



# Marine Carbon Dioxide Removal (mCDR)

Marine carbon removal refers to a variety of pathways, both biological and chemical, that enhance the ocean's uptake of carbon dioxide.

↓ CO<sub>2</sub>   ↓ Seawater   ⚡ Electrochemical process



# Importance of Domestic Policy

- Carbon Dioxide Removal is a public good
  - Need regulatory and ethical oversight on this emerging industry to ensure that CDR meaningfully contributes to climate goals
  - Need to ensure that science keeps pace with industry and markets
- Big questions need big investment
  - To answer outstanding questions about OIF and other mCDR technologies requires research investment at a scale that is nearly unprecedented outside government
  - Government has a key role to play in supporting interdisciplinary research into the efficacy and environmental and social impacts of OIF and other mCDR approaches



# ReSCUE Oceans Act:

A marine carbon dioxide removal (mCDR) bill

- Establish a dedicated mCDR research program at NOAA
- Invest in environmental monitoring infrastructure
- Establish a federal mCDR research plan with monitoring goals, standards, and clear safeguards
- Create a research code of conduct
- Require community consultation, knowledge exchange, and indigenous data sovereignty





# Centering Environmental Justice

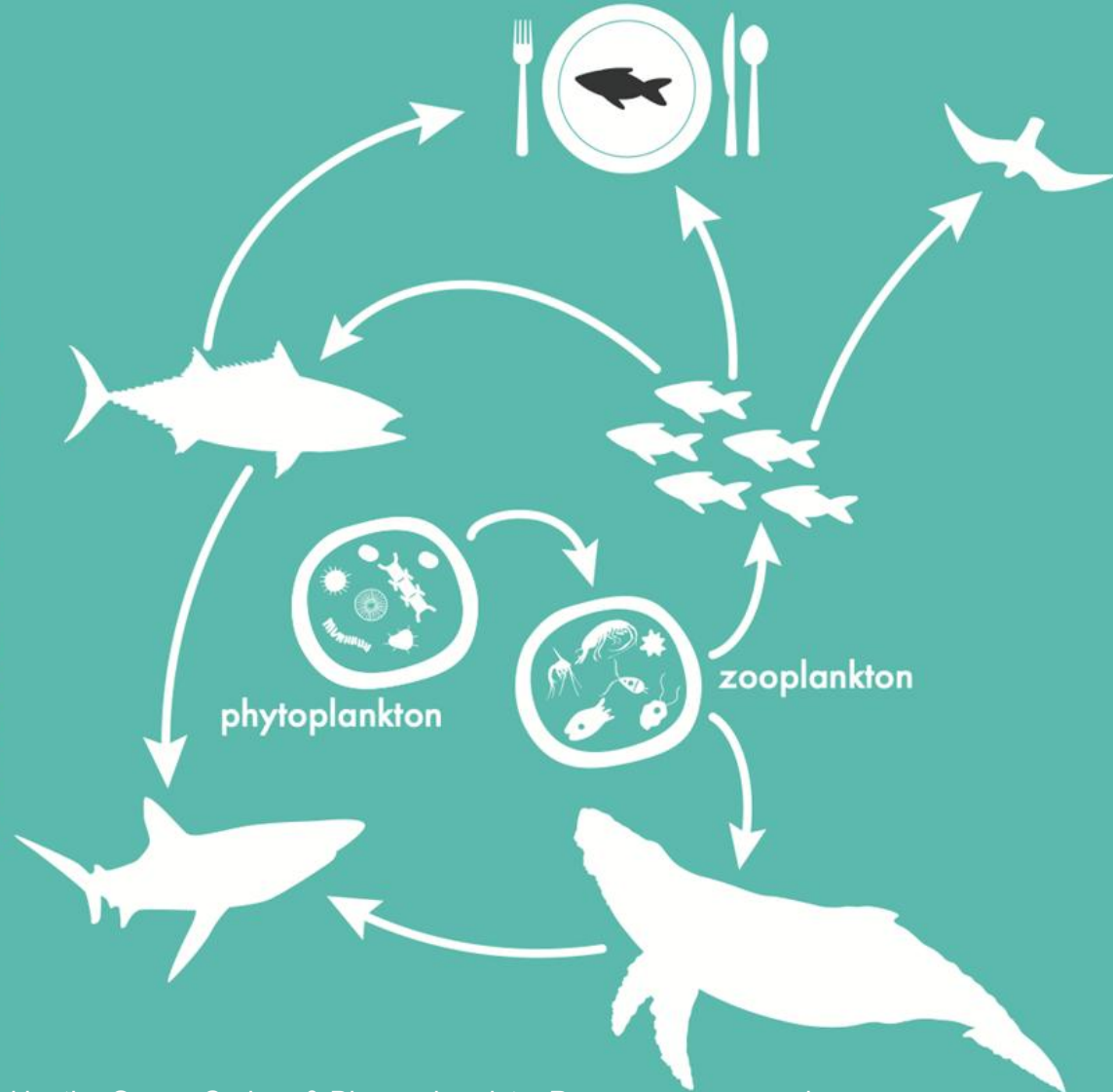
## ACKNOWLEDGMENT

Without EJ front and center, the industry risks marginalizing or further marginalizing communities and reproducing harms of the past and present.

# OCEAN FERTILIZATION:

## Can iron addition keep fish on our plates?

Marine Food Web



The entire marine food web is supported by tiny plants called phytoplankton.

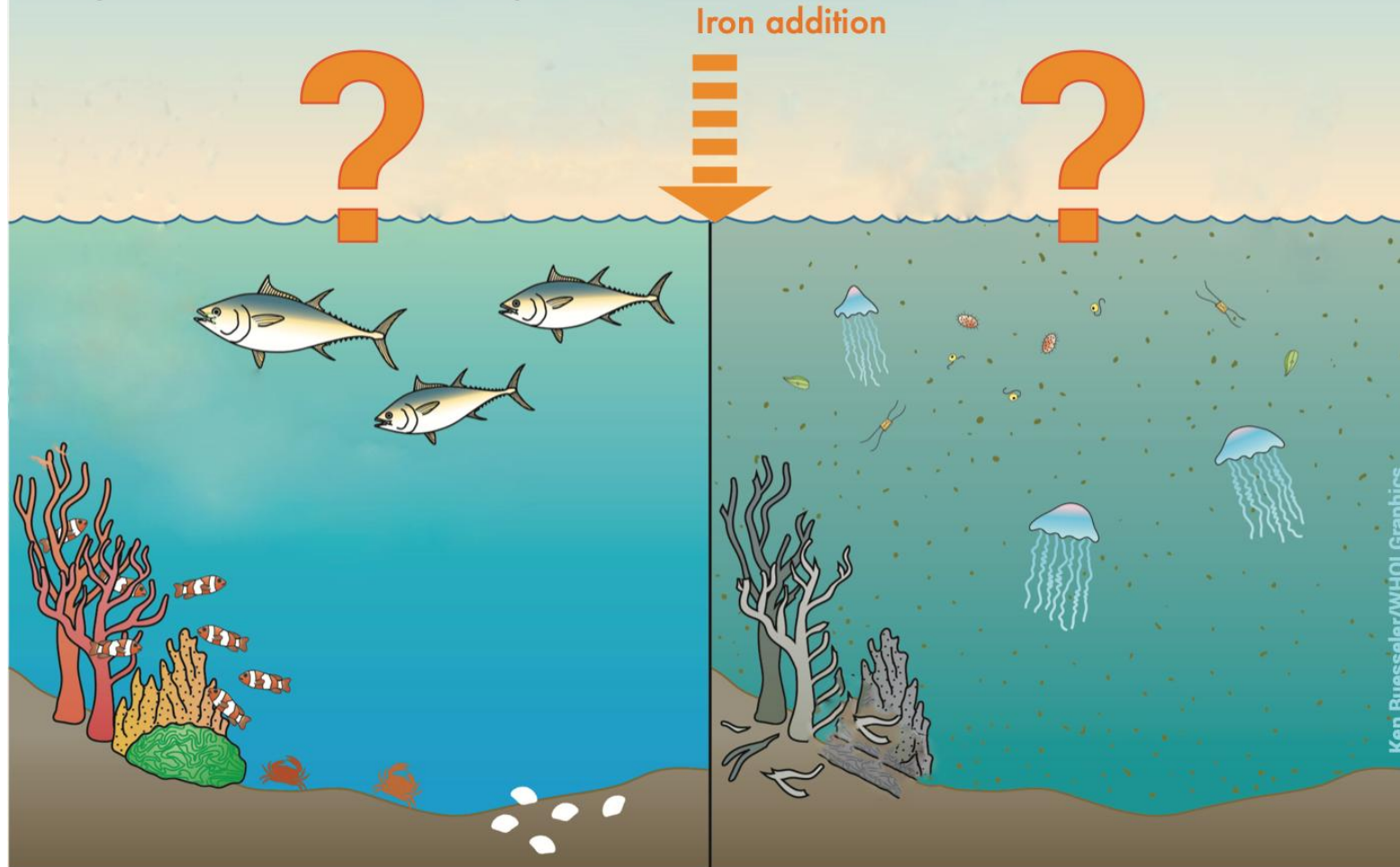


Phytoplankton require nutrients, like nitrogen, phosphorus, and iron to grow.

Iron is available in especially small quantities in the ocean, so it limits phytoplankton production in many regions.

# How will iron addition affect marine fisheries?

Will we see healthy, thriving ecosystems with plenty of fish or degraded ecosystems with more nuisance species?



Ken Buesseler/WHOI Graphics

## How do we move forward?

We need controlled scientific iron addition experiments in dynamic coastal fishery settings to study the response of marine food webs, including commercially important fish species.

**BLIND  
CORNER  
PROCEED  
WITH  
CAUTION**

# Making Waves

COASTAL COMMUNITY REGRANTING INITIATIVE



**ALASKA**  
COMMUNITY LEADERS  
AND MCDR (CLAM)



**HAWAI'I**  
'ĀINA MOMONA



**PUERTO RICO**  
ISER CARIBE

 Carbon180

Ocean Iron Fertilization

# Takeaways and Conclusions

## Climate Action

- It is well past time for meaningful climate action
- Every solution must be weighed against the very high cost of inaction
- Every solution at the scale we need comes with risks

## Responsible Solutions

- We have to ensure that the solutions that move forward are the ones that are the safest and provide the most co-benefits
- We need to learn from past mistakes and ensure that climate solutions are just and equitable

