

PRESENTS

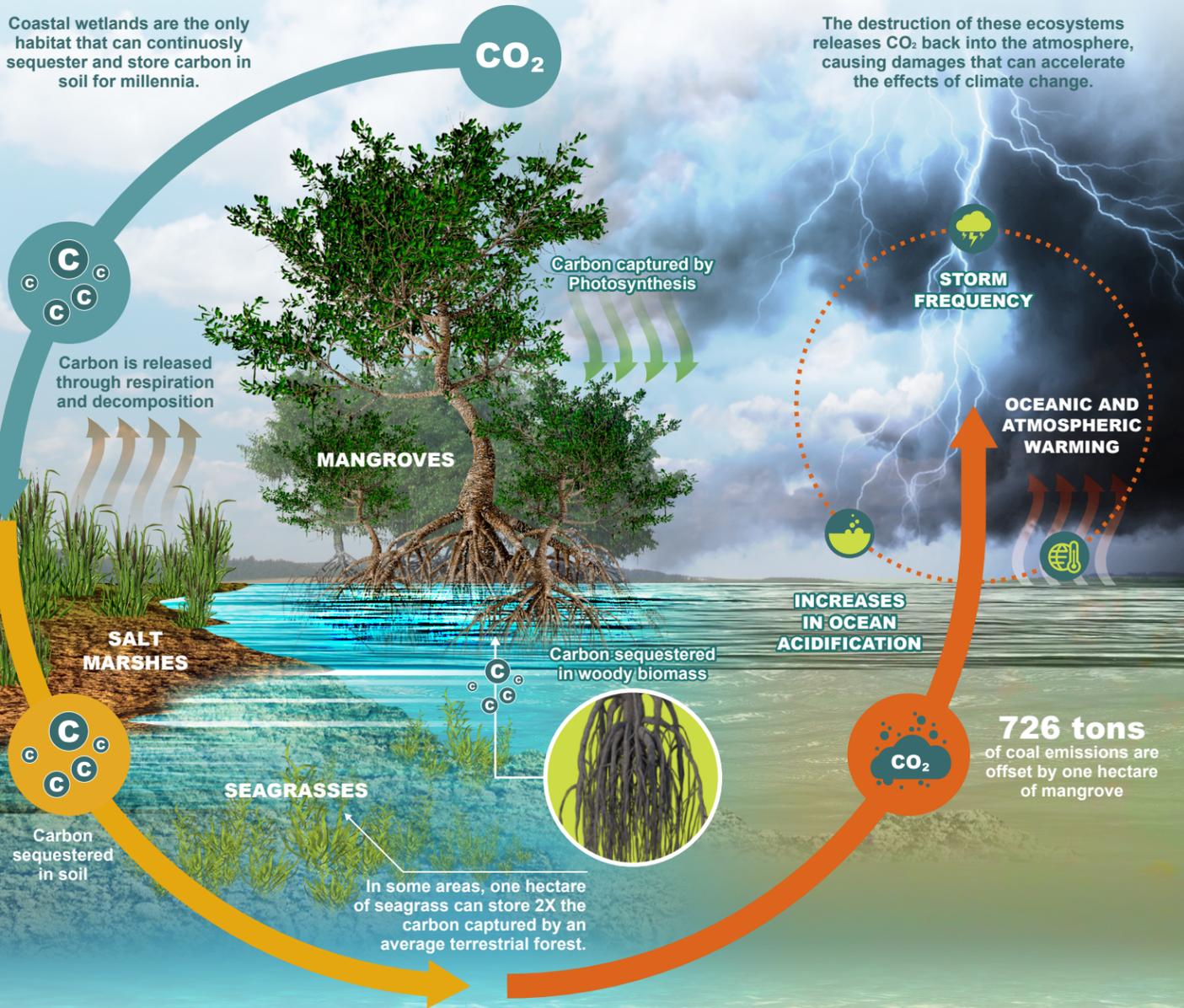
WHAT IS BLUE CARBON?

It is the term for carbon captured by the world's ocean and coastal ecosystems. Human activities emit carbon dioxide into the atmosphere, and the increase in concentration can impact the planet's climate. Our oceans and coastal ecosystems provide a natural way of reducing the impact of greenhouse gases through the sequestration of atmospheric carbon.

CARBON SEQUESTRATION PROCESS

Ecosystems like mangroves, salt marshes and seagrasses remove carbon from the atmosphere and store it below the ground for thousands of years.

Coastal wetlands are the only habitat that can continuously sequester and store carbon in soil for millennia.



Source: <https://reefresilience.org/blue-carbon/blue-carbon-introduction/>

Source: NOAA. What is Blue Carbon. <https://oceanservice.noaa.gov/facts/bluecarbon.html> 27/04/2020.

THE VALUE OF MANGROVE BLUE CARBON

While research shows that mangroves can store up to fifty times more carbon than other tropical forests, they continue to disappear at an alarming rate. Damages stemming from the release of carbon stored in mangrove roots back into the atmosphere can be costly.



0.43%
PER YEAR
RATE OF DEFORESTATION
IN MEXICO



USD \$21,000
PER DEFORESTED HECTARE
IN DAMAGES RELATED TO CARBON
SEQUESTRATION IN THE PRESENT YEAR



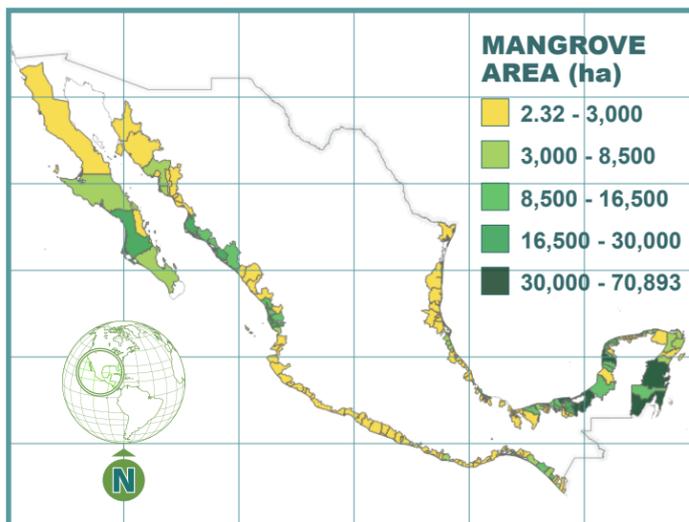
USD \$400
MILLION IN DAMAGES
IF THIS RATE OF DEFORESTATION
CONTINUES IN MEXICO FOR
THE NEXT 25 YEARS.



This represents only a portion of the economic cost of deforesting mangroves, as other ecosystem services are also lost.



780K
ha TOTAL
MANGROVE COVERAGE
IN MEXICO



Source: Kumagai, J.A., Costa, M.T., Ezcurra, E. et al. Prioritizing mangrove conservation across Mexico to facilitate 2020 NDC ambition. *Ambio* (2020). <https://doi.org/10.1007/s13280-020-01334-8>

THE IMPORTANCE OF MANGROVES FOR PEOPLE AND WILD LIFE



Income generation for shoreline communities.



An important diverse habitat for many lifeforms, including endangered and economically important species.



A source of managed timber for building and other uses.



Fodder for many animals in the zone.



Preserve water quality by filtering pollution.



Buffers against coastal erosion and protection from storms.



Mangroves form part of an ecosystem linked with seagrass beds and coral reefs.

MANGROVES VS. TERRESTRIAL FORESTS

Mangroves remove CO₂ from the atmosphere 10 times more than a tropical rainforest.

Most carbon is stored above ground
TERRESTRIAL FORESTS



MANGROVES

Most carbon is stored below ground

CARBON SEQUESTRATION



CARBON STORAGE



Fuentes: <https://reefresilience.org/blue-carbon/blue-carbon-introduction/>