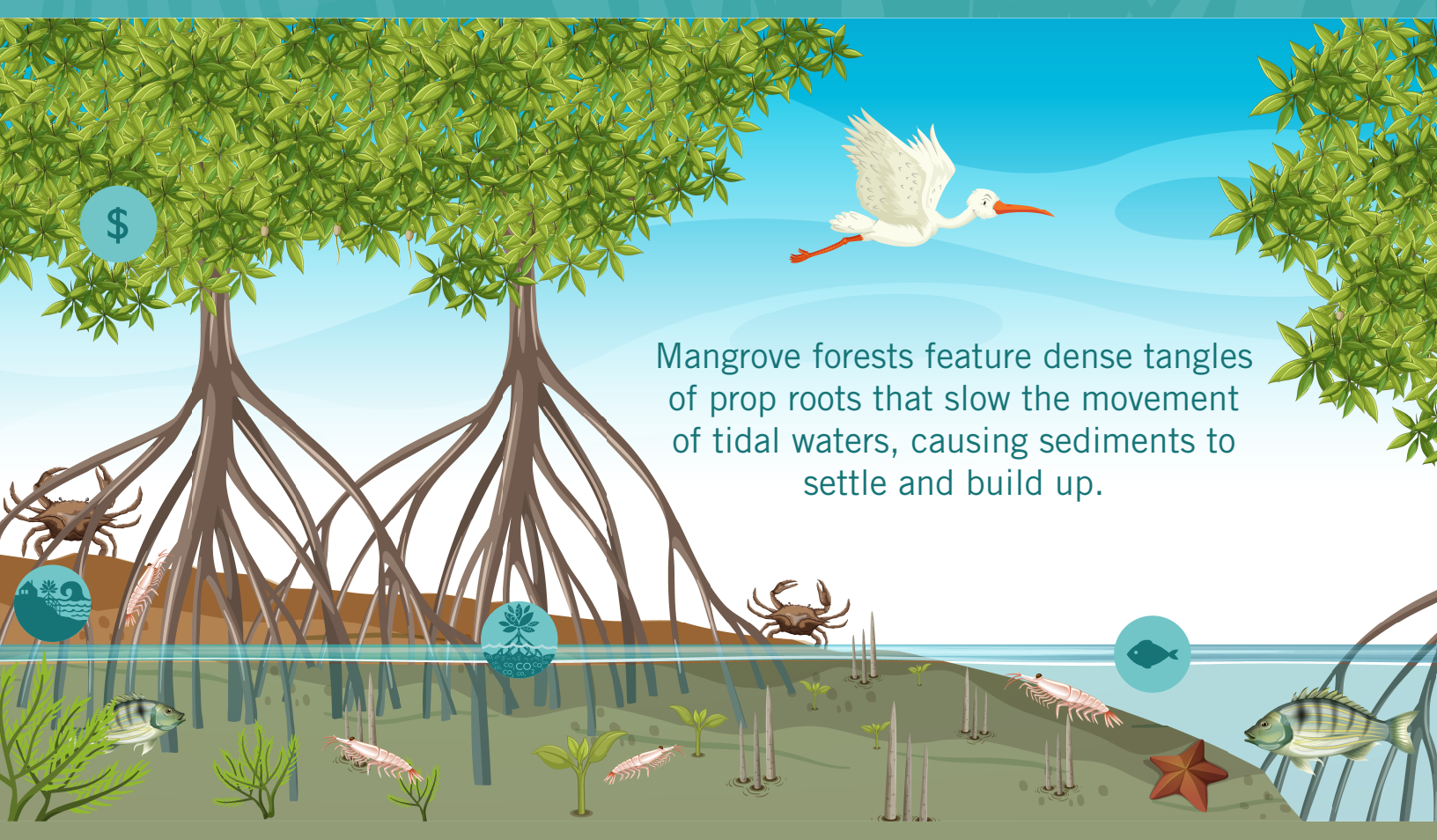
GROWING CARBON & COMMUNITY

SOLUTIONS with MANGROVES



Mangrove forests feature dense tangles of prop roots that slow the movement of tidal waters, causing sediments to settle and build up.

What are the benefits of protecting and establishing mangrove forests?

NATURAL SEAWALL = DISASTER RISK REDUCTION
Mangroves stabilize the coastline, reduce erosion from waves, buffer rising sea levels, avoid coastal flooding, and provide protection from storms and hurricanes.

MARINE AND TERRESTRIAL BIODIVERSITY
The habitat supports a vast diversity of species. The intricate root system of mangroves are attractive to fish and other organisms seeking food and shelter from predators.

CARBON SEQUESTRATION
Mangrove forests are among the most carbon-dense ecosystems and can sequester four times more carbon than rainforests. Most of this carbon is stored in the soil beneath mangrove trees.

ECONOMIC BENEFITS
Mangrove forests prevent more than $80 billion per year in losses from coastal flooding and sustain coastal livelihoods associated with fisheries, forestry, and recreation.

Why are mangrove forests under threat?

Less than 50 percent of the world's mangrove forests were intact at the end of the 20th century, and half of those that remain are in poor condition. Mangrove forests are among the most threatened habitats in the world, and mangrove loss is rampant across the globe.

AQUACULTURE INDUSTRY
The aquaculture industry (eg shrimp farming) converts wetland areas to artificial ponds, diverting the water that maintains the health of surrounding mangroves and contaminating surrounding freshwater and coastal waters with chemicals, antibiotics, and organic waste.

AGRICULTURE
Thousands of acres of mangrove forests have been destroyed for conversion to agricultural use. In addition to loss of habitat, fertilizers, chemicals, and polluted runoff from farming affect the mangrove habitat.

COASTAL DEVELOPMENT
Development along the coast (such as ports, docks, buildings, golf courses, and marinas) displace and damage mangrove habitats. Pollution from development and impacts from population growth damage the rich coastal ecosystem.

LOGGING
Mangrove trees are a source for the charcoal and lumber industries.

CLIMATE CHANGE
Mangroves are affected by rising sea levels, extreme weather, warmer air and water temperatures, increasing variability and intensity of rainfall, ocean salinity, and other climate impacts.

IRRESPONSIBLE TOURISM
Disturbances from irresponsible tourism - including garbage, sewage, noise, fumes, and lights - can damage mangroves and the surrounding ecosystems.

How does the Reserve's Mexico Forest Protocol support mangrove forests?

The Reserve's Mexico Forest Protocol encourages the protection, improved management, and restoration of mangrove forests through the issuance of offset credits for additional emissions sequestration activities above the baseline. Communities following the protocol receive economic resources to ensure that these coastal ecosystems provide greater benefits for surrounding communities and biodiversity, build greater resilience to the impacts of climate change, and store more carbon to benefit the global climate.

For more information, please visit:
https://www.climateactionreserve.org/how/protocols/mexico-forest/

CLIMATE ACTION RESERVE