



# **GREEN INFRASTRUCTURE FOR CORAL CONSERVATION**

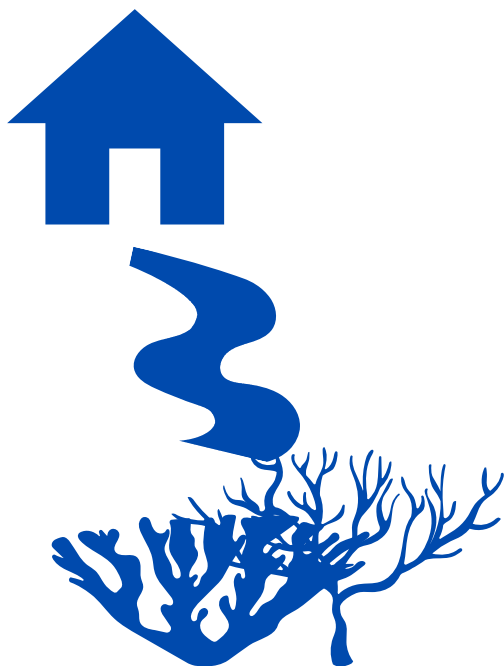
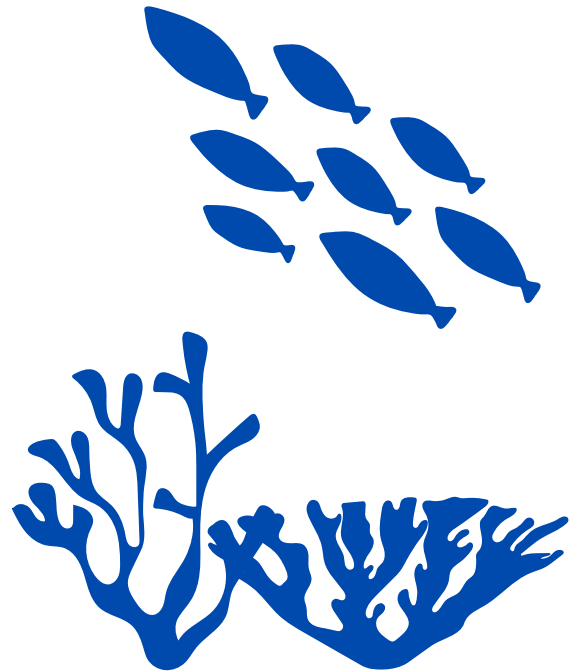


# The Importance of Green Infrastructure for Coral Conservation

## Why Do Coral Reefs Matter to Me?

Aside from their beauty and ecological benefits, corals provide the following services for you every year:

- \$3.7 billion in tourism dollars on reef-associated activities in the U.S.,
- \$100 million in U.S. commercial fisheries, and
- barriers protecting 18,000 lives and \$1.8 billion in property and economic activity from flooding in the U.S.



## How does Green Infrastructure Benefit Corals?

Green infrastructure, or the use of natural or permeable infrastructure to reduce and treat storm water, is one way to reduce pollution from nearby land. A decrease in pollution:

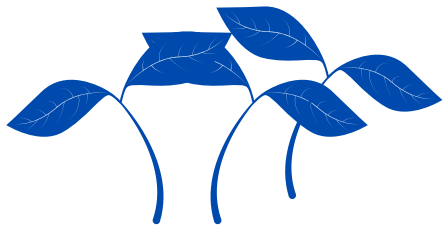
- mitigates disease and coral mortality,
- maintains ecological functions,
- encourages normal coral feeding, and
- motivates coral growth and reproduction.



# Actions You Can Take on Your Property

## Harvest Rainwater

Rainwater harvesting systems collect and store rainwater for later use and during droughts. They reduce runoff and provide a water source in dry areas.

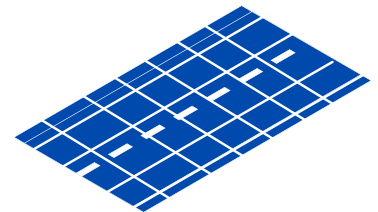


## Plant a Rain Garden

These gardens collect and absorb runoff from roofs, sidewalks, and streets. They also improve water quality through filtration.

## Install Green Streets, Alleys, and Parking Areas

Permeable pavements, planter boxes, and trees can collect, treat, and store rainwater.



## Build a Green Roof

Roofs covered in vegetation can collect rainwater. Green roofs are especially useful in urban areas.

## Protect Open Spaces

Conserved areas, such as shorelines, can both address runoff and serve as recreational spaces.



## Learn more and find green infrastructure tools:

- Learn About Green Infrastructure: <https://go.usa.gov/x6pG2>
- The NOAA Coral Program's Watershed Management Activities: <https://go.usa.gov/x6pGX>
- Green Infrastructure Options to Reduce Flooding: <https://go.usa.gov/x6pGp>
- Stormwater Management in Pacific and Caribbean Islands: <https://go.usa.gov/x6pG7>
- Green Infrastructure Modeling Toolkit: <https://go.usa.gov/x6ftJ>
- Rain Garden Installation Training Guide: <https://go.usa.gov/x6pGe>

### References

1. Spalding, M. et. al. 2017. Mapping the Global Value and Distribution of Coral Reef Tourism. Marine Policy (82), 104-113.
2. NOAA National Ocean Service. 2021. How Do Coral Reefs Benefit the Economy? [https://oceanservice.noaa.gov/facts/coral\\_economy.html](https://oceanservice.noaa.gov/facts/coral_economy.html)
3. U.S. Geological Survey. 2019. Rigorously Valuing the Role of U.S. Coral Reefs in Coastal Hazard Risk Reduction. <https://pubs.er.usgs.gov/publication/ofr20191027>
4. US Environmental Protection Agency. 2020. Nonpoint Source: Urban Areas. <https://www.epa.gov/nps/nonpoint-source-urban-areas>
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