

U.S. Coral Reef Task Force Social Media Tool-Kit

Organized By: USCRTF Communications Working Group

What is the Communications Working Group?

Building off of the work of the Education and Outreach Working Group (active 1999-2019), the Communications Working Group was established in March 2022. The Communications Working Group will act as a resource for the other members of the Task Force and aid in communication needs. The group will develop content such as newsletters, social media posts, and other outreach materials to help promote the Task Force and engage new members, managers, and the general public. This group plans to help promote collaboration within the Task Force and assist in the preparation of outreach materials for the Task Force's biannual meetings, workshops, and seminars. Since March 2022, the working group has successfully developed materials for the biannual Task Force meetings and a Task Force factsheet. Additionally, the Working Group contributed to the National Coral Reef Resilience Strategy, wrote their working group strategic plan, and recruited permanent members to help guide the Communications Working Group into the future. Ongoing work includes working with other Task Force working groups and supporting in-person Task Force meetings.

What is the purpose of the social media tool kit?

The purpose of this tool kit is to help the U.S. Coral Reef Task Force gain more visibility on social media and promote the successes of the working groups. This tool kit contains suggested tweets and hashtags, images, links, and more! Throughout the document you can find Twitter-styled social media posts about coral reefs, the U.S. Coral Reef Task Force, and the accomplishments of each individual working group. These posts are meant to be “Evergreen”, meaning they are timeless and aren’t tailored to specific upcoming events. However, we hope to update and review this document when needed to keep partners informed on the activities of the Task Force and its members.

How to use this guide

1. This document is a social media guide containing suggested social media posts to be published, liked, shared, or retweeted by task force members and other partners.
2. These posts are specifically formatted for Twitter, using hashtags and the correct character limit (280 characters or less). Feel free to modify the text to better suit other social media platforms.
3. Your organization can decide what to add or remove from the suggested posts based on your agency's social media rules and regulations.
4. Please consider tagging relevant accounts and partners in your posts and using our suggested hashtags in all posts (see list below).
5. If your organization adheres to U.S. government accessibility guidelines, please use the provided alternative texts on all social media platforms and posts.
6. These are just suggested posts. Want to make your own? Go for it! Feel free to share them with the Communications WG too!
7. Any questions, comments, or concerns? Email coralreefweb@noaa.gov.

Some online photo and video galleries to source from:

Deep Sea photos: <https://deepseacoraldata.noaa.gov/gallery/gulf-of-mexico-deep-sea-corals>

NOAA photo library: <https://photolib.noaa.gov/>

Office of National Marine Sanctuaries: <https://sanctuaries.noaa.gov/earthisblue/photo-contest-winners-2019.html>

CRCP photos: <https://coralreef.noaa.gov/gallery/welcome.html>

OCM photos - <https://coast.noaa.gov/gallery/>

FWC Flickr - <https://www.flickr.com/photos/myfwc/albums>

AOML photos - <https://www.aoml.noaa.gov/aoml-photo-gallery/>

Videos:

<https://videos.fisheries.noaa.gov/category/videos/coral-conservation>

<https://oceantoday.noaa.gov/>

<https://coralreef.noaa.gov/gallery/videos.html>

Accounts to consider tagging:

Twitter:

- **Federal:** @noaacoral, @noaaoccean, @insularaffairs, @usgs, @uscg, @usacehq, @usnavyresearch, @nsf, @usda, @fema, @thejusticedept, @epa, @usfws, @usfwspacific, @nasaocean, @nasa, @oa_noaa, @SciDiplomacyUSA
- **State/Territory:** @fldepnews, @drnagpr, @dlnr, @CNMICoral
- **International:** @ICRI_Coral_Reef, @CORDAP_, @GlobalFundCoral
- **Other:** @SeaGrantPR, @FloridaSeaGrant, @darpa, @NatIParkService, @sanctuaries, @UOGseaGrant, @nature_org

Facebook:

- **Federal:** NOAA Coral Reef Conservation Program, U.S. Environmental Protection Agency, National Science Foundation (NSF), Office of Insular Affairs, US Department of the Interior: Ocean Great Lakes and Coasts, National Ocean Service, FEMA Federal Emergency Management Agency, US Department of Agriculture, U.S. Coast Guard, Naval Oceanography, U.S. Army Corps of Engineers, NASA - National Aeronautics and Space Administration, U.S. Fish and Wildlife Service, U.S. Geological Survey (USGS), NOAA Ocean Acidification Program, NOAA Office of National Marine Sanctuaries, NOAA National Marine Sanctuary of American Samoa
- **State/Territory:** Reef Response, Department of Planning and Natural Resources, Hawaii DLNR (Department of Land and Natural Resources), CNMI Division of Fish and Wildlife, CNMI Division of Coastal Resources Management, Florida Department of Environmental Protection, American Samoa Coral Reef Advisory Group, Guam Coral Reef Initiative, Virgin Islands Coral Reef Advisory Group, DAR Coral Restoration
- **Other:** U.S. All Islands Coral Reef Committee, Florida SeaGrant, Puerto Rico SeaGrant, American Samoa Community College Marine Science Program, American Samoa Environmental Protection Agency, University of Guam Sea Grant

Instagram:

- **Federal:** @noaadigitalcoast, @noaaoccean, @epagov, @thejusticedept, @usfws, @usfws_south_florida, @usgs, @usgs_climate, @usgs_wild, @nsfgov, @nasa, @nasaclimatechange, @nasaoccean, @fema, @usnavy, @usacehq, @uscg, @uscghawaiiipacific, @noaaocceanacidification, @noaasanctuaries, @nmsamericansamoa, @sciencediplomacy_usa, @pacificcasc,
- **State/Territory:** @reefresponse, @coral.puertorico, @vi.crag @dpr.vi, @guamcoralreefs, @cnmireefrestoration, @goingcoastal_cnmi, @coralreefadvisorygroup, @asdmwr, @hawaiiidlnr, @hawaiiicoralrestoration, @recursonaturalespr, @fl.dep
- **Other:** @darpa, @floridaseagrant, @seagrantpuertorico

Hashtags:

#USCoralForce #USCoralTaskForce #USCorals #TeamUSCorals #CoralTaskForce #ForCoral
#CoralReefs #SavetheCorals

Suggested Posts:**Coral Reefs Fast Facts**

These posts are generic coral reef facts that can be used to help educate your followers on coral reef issues, needs, and information. Feel free to tie in relevant ongoing USCRTF activities as well.

1

Corals might look like plants, but they are actually animals! A coral colony is made of thousands of coral polyps that have been cemented together by their skeletons, which are made up of calcium carbonate.
<https://coralreef.noaa.gov/education/coralfacts.html> #CoralReefs



[alt text: Orange circles with tentacle-like structures attached]

2

Unfortunately threats to #CoralReefs are vast. Some threats include #ClimateChange, disease, run-off of excess nutrients, direct contact with people or anchors, and #InvasiveSpecies. Learn more here: <https://www.epa.gov/coral-reefs/threats-coral-reefs> #SavetheCorals



[alt text: Big brown coral with little blue fish swimming around it]

3

One billion people worldwide benefit directly or indirectly from the ecosystem services that #CoralReefs provide. For example, they protect coastlines from storms and erosion and provide food for many coastal and recreational fishing communities. <https://coast.noaa.gov/states/fast-facts/coral-reefs.html>



[alt text: A scuba diver surrounded by a large school of fish]

CORAL REEFS: **Protectors and Providers**



\$3.4 billion value every year, benefiting fisheries, tourism, and coastal communities

[alt text: Coral reef infographic with text that reads “\$3.4 billion value every year, benefiting fisheries, tourism, and coastal communities”]

4

#CoralReefs are thriving ecosystems that provide a range of ecosystem services that benefit people in the US. Based on their contributions to tourism, fisheries, and coastal protection, it is estimated that their total economic value is \$3.4 billion. <https://coast.noaa.gov/states/fast-facts/coral-reefs.html> #SavetheCorals



[alt text: two people snorkel over a colorful coral reef]

5

#CoralReefs are culturally important to indigenous people around the world. Learn how indigenous #PacificIslanders have stewarded natural resources to sustain their communities, traditions, and culture: <https://www.usgs.gov/programs/climate-adaptation-science-centers/science/pacific-islands-indigenous-communities>



[alt text: A tan and magenta lobster walks in front of a multi-colored coral reef with orange fish hiding within the coral structures.]

6

Healthy fish populations are integral to maintaining healthy #CoralReefs. Fish come in all shapes and sizes. Some are predatory species and others are herbivores who keep the reef clean by eating algae off the coral. #ReefFish
<https://coralreef.noaa.gov/gallery/infographic/coral-housekeepers-atlantic.html>



[alt text: A green fish with an orange ring around its eye lays nestled between brown coral branches]

7

We've all heard of tropical #CoralReefs, but did you know there are #DeepSeaCorals too? They range from 150 to 10,000 ft below sea level! Take time this #NationalOceanMonth to learn all about the creepy crawlers living in these deep-sea reefs: <https://go.usa.gov/xJERv>



[alt text: yellow branching coral attached to a rock surrounded by white and brown branching coral]

8

#CoralReefs are often called the rainforests of the sea because they are diverse and colorful ecosystems that contain about 25% of all marine life! Learn more about what the US Coral Reef Task Force is doing to support coral reef conservation: <https://coralreef.gov> #ForCoral



[alt text: a colorful shallow coral reef]

9

Using reusable water bottles is just one way to help protect #CoralReefs. Here are 10 more ways. See how many ways you practice on a regular basis: <https://oceanservice.noaa.gov/facts/thingsyoucando.html> #ForCoral

10 ways to protect CORAL REEFS

- Corals are already a gift. Don't give them as presents.**
It takes corals decades or longer to create reef structures, so leave them on the reef.
- Long-lasting light bulbs - ARE A BRIGHT IDEA**
Energy efficient light bulbs reduce greenhouse gas emissions. Climate change is one of the leading threats to coral reef survival.
- CHECK SUNSCREEN ACTIVE INGREDIENTS.**
Seek shade between 10 a.m. and 2 p.m., use Ultraviolet Protection Factor (UPF) sunwear, and choose sunscreens with chemicals that don't harm marine life. For more information, visit oceanservice.noaa.gov/sunscreen.
- Choose sustainable seafood.**
Learn how to make smart seafood choices at www.FishWatch.gov.
- IF YOU DIVE DON'T TOUCH.**
Coral reefs are alive. Stirred-up sediment can smother corals.
- BE A MARINE DEBRIS CRUSADER.**
In addition to picking up your own trash, carry away the trash that others have left behind.
- CONSERVE WATER**
The less water you use, the less runoff and wastewater that eventually find their ways back into the ocean.
- Volunteer!**
Volunteer in local beach or reef cleanups. If you don't live near the coast, get involved in protecting your watershed.
- Don't send chemicals into our waterways.**
Nutrients from excess fertilizer increases algae growth that blocks sunlight to corals.
- Practice safe boating.**
Anchor in sandy areas away from coral and sea grasses so that the anchor and chain do not drag on nearby corals.

[alt text: Infographic listing 10 ways to protect coral reefs with a series of icons and text]

US Coral Reef Task Force Evergreen posts

All about the USCRTF members and working groups

1

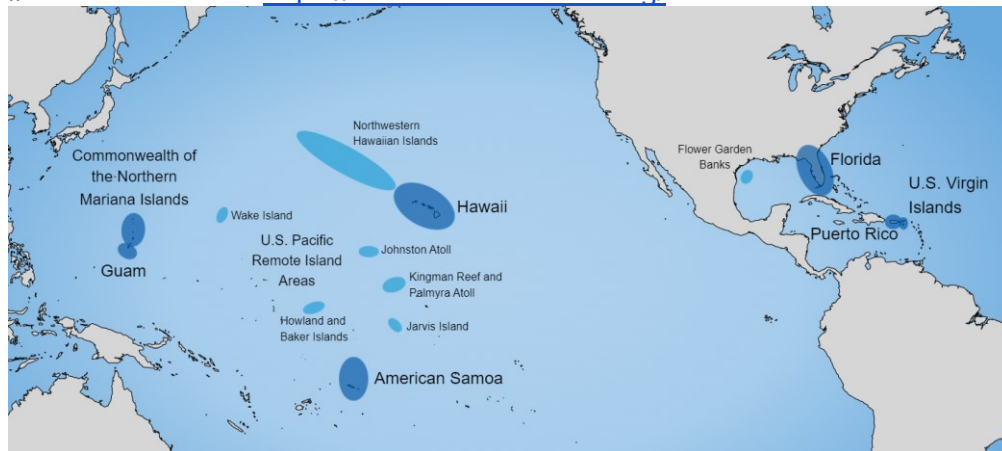
Meet the U.S. Coral Reef Task Force! This group includes U.S. federal agencies, states, territories, commonwealths, and Freely Associated States who all work to understand and protect U.S. coral reefs. Learn more: <https://www.coralreef.gov/#KonaCorals22>



[alt text: Group of people standing on rocks with pond, mountain range, and clouds in the background]

2

The U.S. All Islands Coral Reef Committee represents the combined voice of U.S. jurisdictions & Freely Associated States where coral reefs are found. They work to elevate jurisdictional issues and priorities within the #CoralReefTaskForce related to #coralconservation <https://allislandscommittee.org/>



[alt text: Map with blue dots on Florida, US Virgin Islands, Puerto Rico, Flower Garden Banks, American Samoa, Hawai'i, Northwestern Hawaiian islands, Pacific Remote Islands, Guam, & the Commonwealth of the Northern Mariana Islands]

3

Have you ever heard of the U.S. Coral Reef Task Force? Keep up with the task force through their website: <https://www.coralreef.gov/> #CoralReefs #USCoralTaskForce



[alt text: rocky shoreline with a green mountain in the background and bright blue water]

4

In October 2023, the U.S. Coral Reef Task Force held a meeting in the #USVirginIslands to discuss the state of our nation's #CoralReefs. It was a successful week focused on #ClimateChange, stony coral tissue loss disease, coral reef fisheries, and more.



[alt text: a group of people smiling around a sign that says U.S. Coral Reef Task Force]

U.S. Coral Jurisdictions Evergreen Posts

Hawaii

1

The Northwestern Hawaiian Island #CoralReefs - part of the Papahānaumokuākea National Marine Monument - support more than 7,000 species of fishes, invertebrates, plants, sea turtles, birds & marine mammals. <https://www.papahanaumokuakea.gov/>



[alt text: Monk seal swims above a coral reef]

Guam

1

Marine preserves cover 11% of Guam's coastline. In Guam, coral reefs are home to roughly 400 species of corals and 1,000 species of fish, making them among the most diverse reefs in the U.S! #Guamcoralreefs
<https://repository.library.noaa.gov/view/noaa/17792>



[alt text: Close up of a brown-colored branching coral]

Commonwealth of the Northern Mariana Islands

1

In addition to providing food, shelter, and cultural significance for the citizens of the Commonwealth of the Northern Mariana Islands, the coral reefs generate revenue from tourists and recreational users that are attracted to the beauty of the corals.

https://www.coris.noaa.gov/monitoring/status_report/



[alt text: colorful coral reef with a variety of different types of corals.]

American Samoa

1

Congrats to the Faga'alu community of American Samoa for graduating the first priority watershed supported by the US Coral Reef Task Force!

<https://www.coris.noaa.gov/activities/fagaaluWatershed/welcome.html>

#KonaCorals22



[alt text: Several brown finger-like corals in shallow water]

Florida

1

Florida's #CoralReefs are a national treasure with enormous economic, cultural, and intrinsic value. They protect our coastlines, support local fisheries, and offer opportunities for recreation and tourism.

<https://floridakeys.noaa.gov/corals/economy.html>



[alt text: Colorful reef with boulder and fanlike corals with fish swimming in the background]

Puerto Rico

3

A win for #PuertoRico coral reefs!! In 2020, a law went into effect proclaiming coral reefs in Puerto Rico as essential structures for coastal protection on the island. This opportunity provides Puerto Rico the prerogative to seek funds for the protection of vital coral reefs. <https://www.coralreef.gov/about/members.html>

¡Una victoria para los arrecifes de coral de #PuertoRico! En el 2020 entró una ley que proclama los arrecifes de coral de Puerto Rico como estructuras esenciales para la protección costera de la isla. Esta oportunidad brinda a Puerto Rico la prerrogativa de buscar fondos para la protección de arrecifes de coral vitales.

<https://www.coralreef.gov/about/members.html>



[A variety of corals flowing in the water]

US Virgin Islands

1

Annually, USVI #CoralReefs provide \$47 million in flood protection benefits by preventing damage to property and economic activity.

<https://www.usgs.gov/centers/pcmssc/value-us-coral-reefs-risk-reduction>

USGS Report Summary

The Value of U.S. Coral Reefs for Risk Reduction

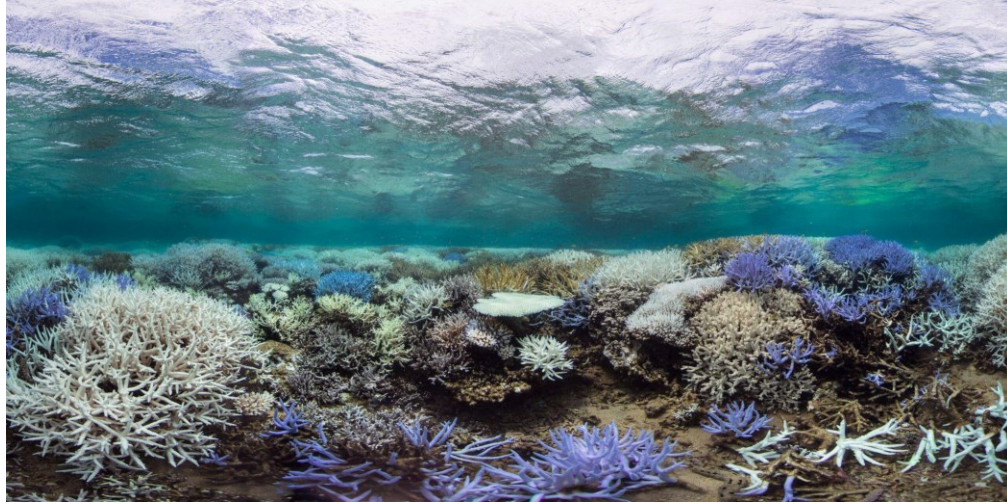
FACTS FOR THE U.S. VIRGIN ISLANDS (USVI)

KEY POINTS

- The social and economic benefits provided by U.S. reefs were assessed across **>3,100 km** of coastline using hydrodynamic models coupled with census data.
- Annually**, reefs in the USVI provide flood protection benefits to more than **300 people** and **\$47 million** in averted damages to property and economic activity.
- With a 1-m loss in reef height, the **100-year floodplain** would increase across USVI by **4 km²**, imperiling **1,000** more people and **\$151 million** in property & economic activity.
- This study provides a comprehensive set of flood risk maps across U.S. coral reef coastlines and the first national quantification of flood protection benefits from reefs.

[alt text: Blue/Green graphic that reads “The Value of U.S. Coral Reefs for Risk Reduction.”]

2023 Coral Bleaching



[alt text: white and purple coral reefs on a shallow water reef]

Florida	This year's #CoralBleaching event was expected to be more intense due to El Niño and climate change. Areas of reefs are suffering, but partners in Florida are working to maintain resilience with monitoring, coral rescue, and reduction of non-climate stress to reefs. #FloridaCorals
Puerto Rico	Puerto Rico was not exempt from this year's #CoralBleaching event. Beginning in late August, reports of bleaching emerged, leading to the loss of a significant thicket of <i>Acroporids</i> . Monitoring and rescue efforts of corals were quickly set in motion. #PuertoRico #CoralPR
U.S. Virgin Islands	Although peak temperatures have passed for this year, reefs remain freckled with bleached coral. By spreading the word about #CoralConservation and getting involved in community efforts, we can amplify coral research in the #USVirginIslands.

Climate Change Working Group Tweets

Social media suggestions that are specific to the USCRTF Climate Change WG.

Climate Change Fast Facts	
Feel free to use the 4th National Climate Assessment link instead (https://www.globalchange.gov/nca4/)!	
1	<p>#ClimateChange refers to the increasing changes in the measures of climate over a long period of time – including precipitation, temperature, and wind patterns. The impacts of climate change can be seen on #CoralReefs around the world.</p> <p>https://www.usgs.gov/faqs/what-difference-between-global-warming-and-climate-change</p>

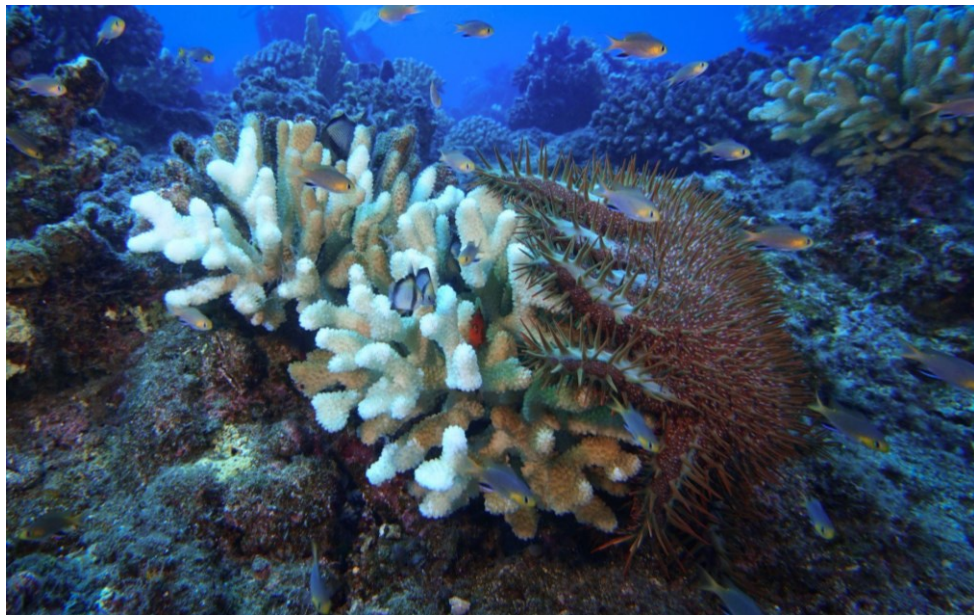


[alt text: Several brown and white corals]

2

Did you know that #ClimateChange hinders the growth of coral reefs and influences the spread of #InvasiveSpecies? Learn how here:

<https://www.invasivespeciesinfo.gov/subject/climate-change>

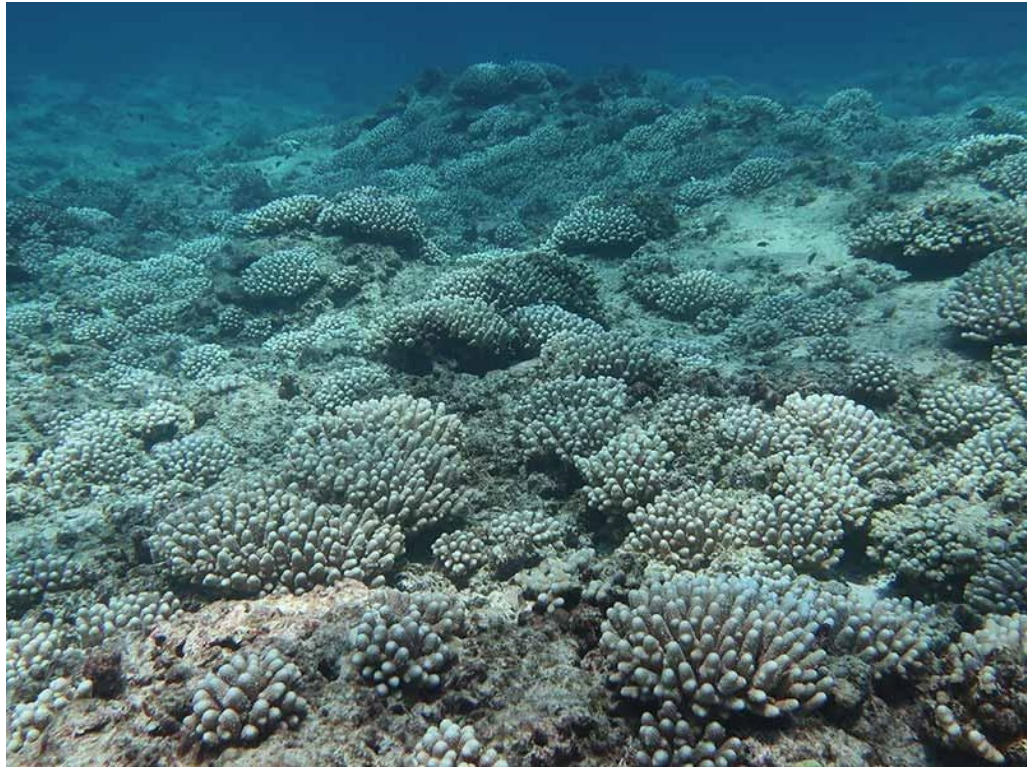


[alt text: Crown-of-Thorns starfish covering part of a branching coral]

3

Bleached corals are still alive, but are more susceptible to disease, predation, and death because they are without their primary energy source: symbiotic algae.

https://oceanservice.noaa.gov/facts/coral_bleach.html #SavetheCorals
#CoralReefs



[alt text: Several white corals]

4

#ClimateChange increases the intensity of weather events like hurricanes and heat waves. Conservation efforts aim to restore #CoralReefs so they have a better chance of surviving these weather stressors. <https://www.epa.gov/climate-indicators/weather-climate>



[alt text: Brown corals that have been damaged and knocked over]

5

One consequence of increased carbon dioxide levels is #OceanAcidification. This

change in the chemistry of the ocean causes decreased coral growth rates and reduced structural integrity of #CoralReefs. <https://oceanacidification.noaa.gov/> #ClimateChange



[alt text: Several colorful corals with fish swimming in the background]

6

#CoralReefs are subject to multiple stressors, such as rising ocean temperatures and overfishing, which can lead to #CoralBleaching. Local conservation efforts can make coral reefs more resilient to #ClimateChange by reducing or eliminating these stressors. <https://www.epa.gov/coral-reefs/threats-coral-reefs>



[alt text: Bright pink fish swim on a coral reef with a diver in the background]

7

Ever wonder how #ClimateChange alters the ocean's currents? No worries, we

have the answers right here: <https://climatekids.nasa.gov/ocean/> Photo: @USGS



[alt text: Underwater image of waves breaking on a coral reef]

Climate Change Working Group Accomplishments

1

In 2017, the USCRTF #ClimateChange group released an Adaptation Design Tool to help #CoralReef managers incorporate climate-smart design into management activities. Learn more: <https://www.epa.gov/qcx/about-adaptation-design-tool-adt>



[alt text: Diver attaches a small coral fragment to a reef]

2

Are you working in #CoralRestoration? The #ClimateChange working group developed an online course to help reef managers incorporate climate-smart design into their management activities. Enroll in the 2-hour online course today! <https://reefresilience.org/adaptation-design-tool/>




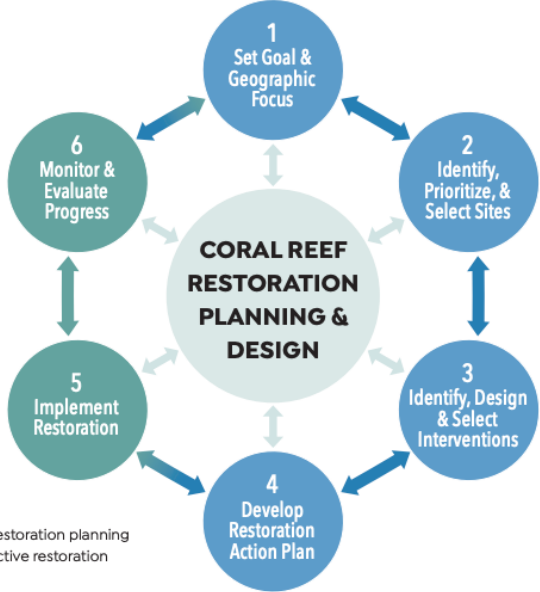
[alt text: A diver holding a clipboard swims over a coral reef.]

3

The USCRTF #ClimateChange & #Restoration working groups teamed up to develop a manager's guide to #CoralRestoration that implements climate-smart decisions. It aims to help U.S. coral jurisdictions produce #CoralReef Restoration Action Plans. https://www.coris.noaa.gov/activities/restoration_guide/welcome.html



[alt text: a diver takes a picture of a coral reef with white and yellow fish swimming nearby]

4	<p>#CoralReefs help shield coastal communities from storms that are intensifying from #ClimateChange. Throwback to the Climate Change panel on Protecting Reefs and People in a New Climate Reality at the USCRTF in Hawai'i. http://www.coralreef.gov/ #KonaCorals22</p>  <p>[alt text: Waves breaking on a rocky ocean floor]</p>
5	<p>Did you know the USCRTF's Manager's Guide to #CoralReef Restoration has reached international audiences? You can find more information on the @ICRI_Coral_Reef website: https://icriforum.org/a-managers-guide-to-coral-reef-restoration-planning-and-design/</p>  <p>[alt text: Diagram of six circles connected by arrows indicating the six steps of coral reef restoration planning & design.]</p>
6	<p><i>This post should be paired with post #1 because post #1 explains what the Adaptation Design Tool is, which is referenced in this post</i></p>

The USCRTF #ClimateChange working group partnered with @TNC to create a series of webinars on the Adaptation Design Tool. The Resilient Reefs Initiative in #NewCaledonia translated the products into French and provided them to 3 provinces. <https://www.epa.gov/qcx/about-adaptation-design-tool-adt>



[alt text: Colorful coral reef with orange fish swimming and waves breaking on the surface]

Coral Disease Working Group Tweets

Social media suggestions that are specific to the USCRTF Coral Disease WG.

Coral Disease Fast Facts

1

Did you know that corals can get sick? There are many #CoralDiseases that cause health complications in corals. Some examples are white band, black band, and stony coral tissue loss diseases. Learn what scientists are doing to treat corals:

https://oceanservice.noaa.gov/education/tutorial_corals/coral10_disease.html



[alt text: Diver swims above a big brown coral with yellow patches]

2

Stony coral tissue loss disease was first detected off the coast of Miami, FL in 2014. The disease is thought to be one of the most lethal #CoralDiseases and can be found in 25 jurisdictions throughout the Atlantic and Caribbean.

https://www.coris.noaa.gov/activities/stony_coral_tissue_loss_disease/ #SCTLD



[alt text: A brown pillar coral with white patches]

3

Divers and snorkelers can help stop the spread of stony coral tissue loss disease by maintaining proper buoyancy, refraining from touching marine organisms, and disinfecting gear between dives. <https://www.gcfi.org/emerging-issues-florida-coral-disease-outbreak/> #SCTLD

General Guidelines for Disinfection

DO

- ✓ Inspect dive gear and equipment and remove debris
- ✓ Move from “cleanest” site first to “dirtiest” last
- ✓ Decontaminate dive gear at end of day
- ✓ Decontaminate dive gear between sites, countries, & sensitive areas
- ✓ Properly dispose of disinfectant & rinse waste into sink, tub, or shower

DON'T

- ✗ Don't leave debris on dive gear
- ✗ Don't move from a diseased to a healthy site
- ✗ Don't forget to disinfect gear between sites, countries, sensitive areas, & end of day
- ✗ Don't dispose of disinfectant & rinse waste into ocean or storm drain

Gear - Specific Guidelines for Disinfection

SOAK (10 min)

Soak sensitive gear for 10 min in quaternary ammonium disinfectant

- 1 0.5% RelyOn (8 tablets 5g ea. / 2 gallons of water)
- 4 1% Virkon (1.3 oz / 2 gallons of water)
- 2 6.6% Lysol (64 oz / 2 gallons of water)
- 3 (e.g., in a 5 gallon bucket)

RINSE (10 min)

Rinse sensitive dive gear in fresh water by soaking for 10 min

- 5 (e.g., in a 5 gallon bucket)
- 3 Properly dispose of disinfectant solutions and rinse waste into sink, tub, or shower

AIR DRY

Allow gear to air dry thoroughly

BC internal bladders: Pour ~ 1 quart of ammonium disinfectant solution into mouthpiece of BC's exhaust hose while depressing exhaust button, inflate BC, & gently rotate BC in all directions (cover all internal parts). Soak for 10 min & then dump waste into a container for proper disposal. Pay attention to wetsuit crevices and folds.

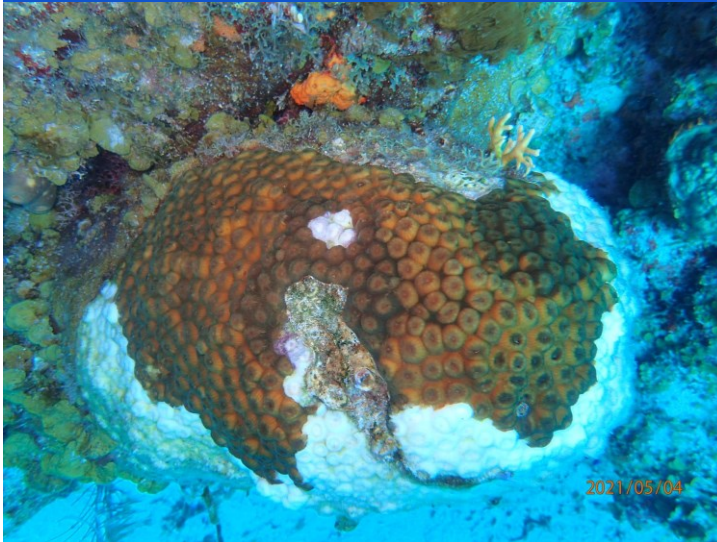
Sensitive Dive Gear

[alt text: 1) Graphics explaining the general guidelines to disinfect dive gear to prevent the spread of stony coral tissue loss disease, 2) Graphic showing guidelines for cleaning fins, BCD, snorkel and wetsuits]

4

Ballast water provides stability to ships, but can also carry invasive species and may transport diseases like stony coral tissue loss disease.

<https://www.aoml.noaa.gov/news/ship-ballast-deadly-coral-disease/>



[alt text: Brown lumpy coral with a white ring surrounding the bottom of the coral]

5

Scientists developed a medicine that can be applied to corals affected by stony coral tissue loss disease that halts most active lesions. Treatments have saved tens of thousands of corals throughout the Caribbean.

<https://www.nps.gov/buis/learn/scienceresearch.htm> #SCTLD



[alt text: Person applies a white paste to the top of a coral]

6

Identifying pathogens in corals is difficult! The pathogen that causes stony coral tissue loss disease is still unknown, but scientists believe it could be viral, bacterial, or a mix of both. <https://www.vicoraldisease.org/sctld-etiology> #SCTLD

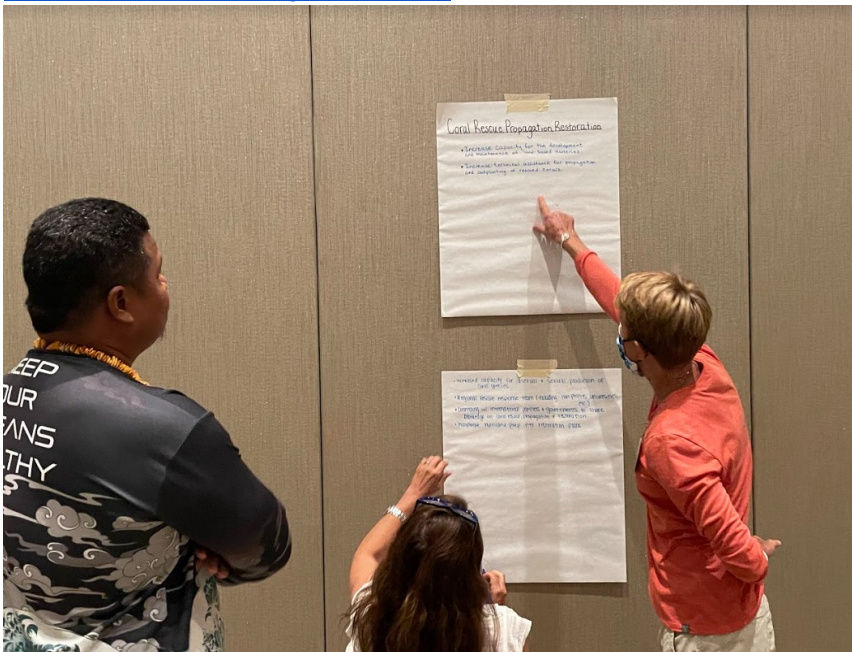


Photo: Miguel G. Figuerola Hernández

[alt text: Finger-like brown coral with white spots and several other corals in the background]

7

Did you know the U.S. Coral Reef Task Force has a #CoralDisease working group? They focus on 5 initiatives: communications, identifying national priorities, preventing the spread of disease, supporting affected jurisdictions, and preparing the Pacific. <https://www.coralreef.gov/disease/>



[alt text: A person points to one of two posters on a wall, with two other people looking on.]

Coral Disease Working Group Accomplishments

1- Affected Jurisdictions

In 2022, the #CoralDisease working group of the U.S. #CoralReef Task Force hosted a workshop series for the Caribbean on coral disease. They focused on funding, transmission, intervention, and communications.
<https://www.coralreef.gov/disease/> #SCTLD



[alt text: Coral fragments sit on tiles in a blue tank]

2- Affected Jurisdictions

📄 An outcome of the Caribbean #SCTLD workshop hosted by the U.S. Coral Reef Task Force was a signed open letter of support for stony coral tissue loss disease response efforts from the governments of #PuertoRico and the #USVirginIslands.
https://dpr.vi.gov/wp-content/uploads/2022/09/Joint-letter-of-support_USVIandPRSigned.pdf



[alt text: Diver puts treatment on an infected coral with other corals in the background]

3 Pacific Preparedness

Check out the stony coral tissue loss disease surveillance guidelines for the #IndoPacific! These guidelines were developed by the Coral Disease working group of the USCRTF to help prevent the spread of SCTLD to the Pacific: https://www.coris.noaa.gov/activities/sctld_strategy/welcome.html
Photo: Karen Neely



[alt text: various diseased corals with yellow fish swimming around]

4 Pacific Preparedness

The #CoralDisease working group of the USCRTF hosted a Pacific Preparedness Workshop at the meeting in Kona last fall. With over 50 participants, the conversations were focused on disease prevention, intervention, and surveillance.
https://www.coris.noaa.gov/activities/sctld_strategy/welcome.html
#KonaCorals22



[alt text: People stand around a map and one person takes notes]

5 -
Communications

The #CoralDisease working group of the #USCoralReefTaskForce released the first #SCTLD newsletter this summer. Learn about the incredible work being done in the Caribbean and Pacific.

<https://www.flseagrant.org/wp-content/uploads/2022/07/SCTLD-Summer-2022-Newsletter.pdf> #ForCoral



[A round textured gray maze-like coral with a white spot on it]

Restoration Working Group Tweets

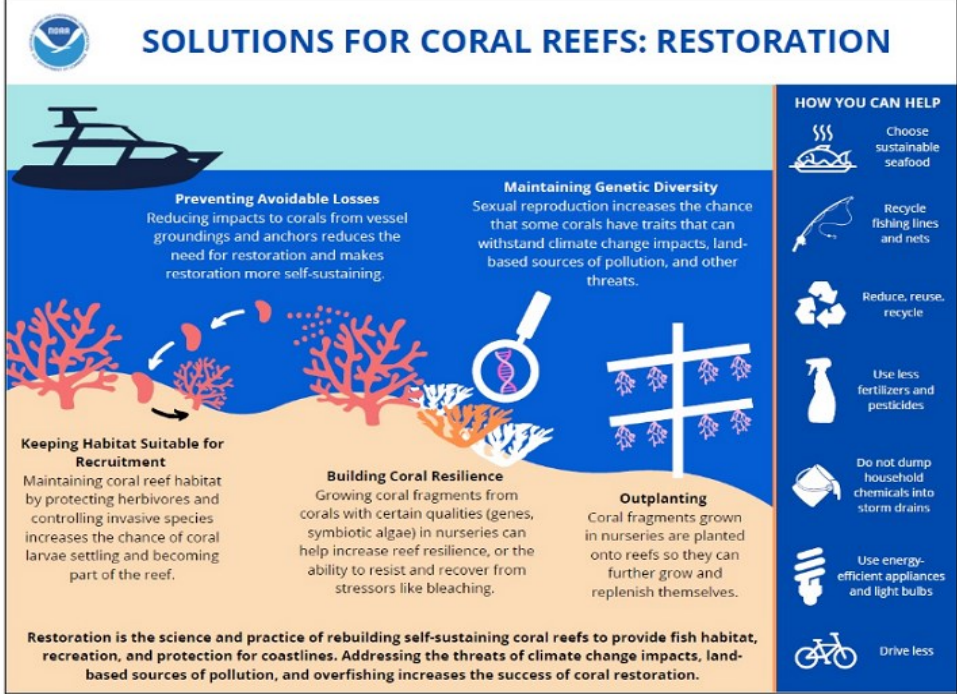
Social media suggestions that are specific to the USCRTF Restoration WG.

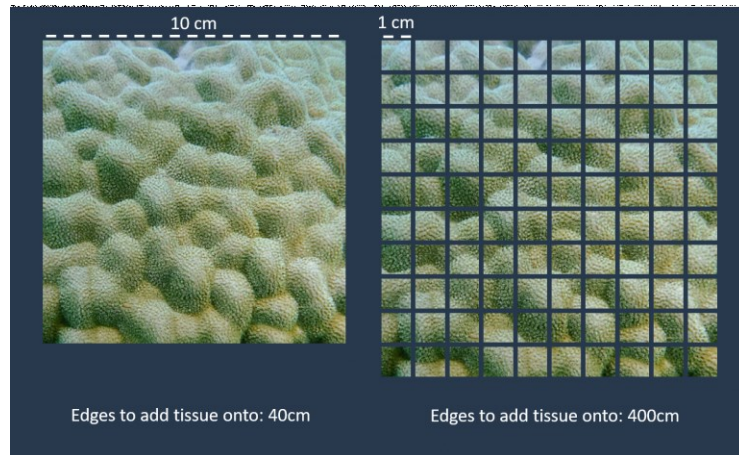
Restoration Fast Facts

1

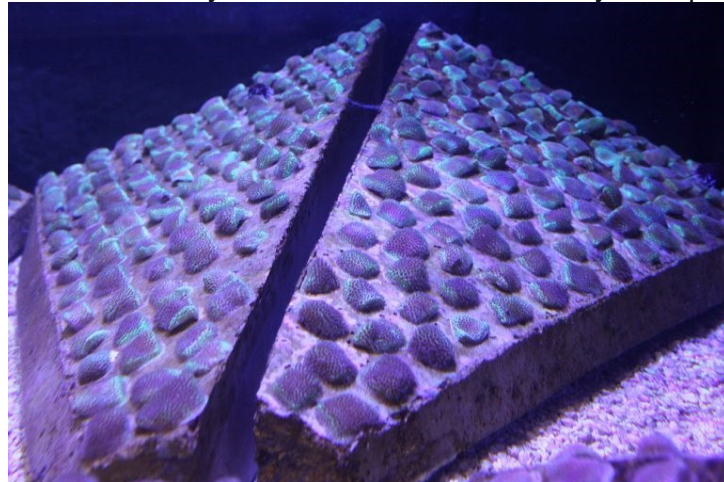
#CoralRestoration is a way to fight back 🛡️💬 against #CoralReef decline! Scientists and managers have a diverse toolkit of restoration methods like fragmentation, spawning, nurseries, outplanting, and habitat restoration.
<https://www.fisheries.noaa.gov/national/habitat-conservation/restoring-coral-reefs>



	<p>[alt text: Large, lumpy orange coral surrounded by other colorful corals and swimming fish]</p>
<p>2</p>	<p>Corals are produced via two main ways:</p> <ul style="list-style-type: none"> □ Asexual fragmentation takes small pieces of the adult colony and grows them into new corals □ Sexual reproduction collects coral spawn, fertilizes the coral, and grows them. This method increases genetic diversity! <p>https://coralreef.noaa.gov/issues/restoration.html</p>  <p>[Alt text: Infographic titled Solutions for Coral Reefs: Restoration, showing a variety of steps in the restoration process and ways people can help protect coral reefs]</p>
<p>3</p>	<p>Early #CoralRestoration efforts focused on fast-growing corals like Acroporids. However, new fragmenting methods focus on speeding up the growth rates of mounding corals, like brain corals. See how these techniques are used in Hawai'i: https://dlnr.hawaii.gov/coralreefs/hawaii-coral-restoration-nursery/</p>



[Alt text: Left: a 10 cm by 10 cm tan coral colony with 40 cm of edge perimeter. Right: the same colony now divided into 100 1 cm by 1 cm pieces]



[Alt text: A cement pyramid base with small coral fragments arranged closely together on top of it.]

4

Exciting restoration breakthroughs! Coral outplant success is boosted by:

- 🔗 exposing fragments to low-level heat stress to increase their thermal tolerance
- ☐☐ using genetic tools to increase diversity and identify corals that can withstand high-stress

<https://www.aoml.noaa.gov/projects/coral-restoration-and-resilience/>
 #CoralRestoration #GenerationRestoration



[Alt text: Multiple orange, stick-like pieces of coral in a glass aquarium.]

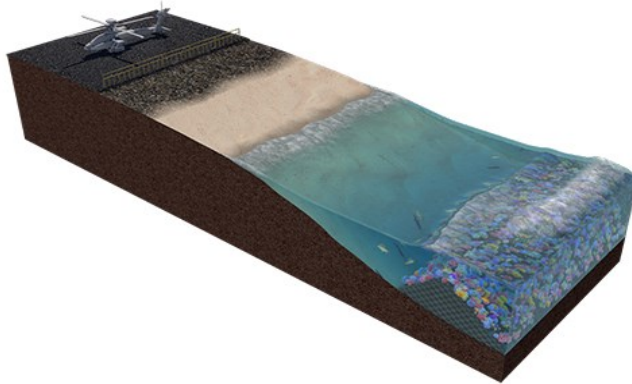
- 5 Annually, #CoralReefs in the U.S. provides \$1.8 billion USD in averted flood damages. However, if we lose 1 m of reef height, we put \$5 billion USD of property and economic activity at risk! Money doesn't grow on coral reefs (or trees), but restoring reefs can save us lots of money 🧐

<https://www.usgs.gov/centers/pcmssc/science/role-reefs-coastal-protection>
<https://d9-wret.s3.us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/atoms/video/Coral%20Reef%20Video.mp4>

#CoralRestoration #GenerationRestoration


- 6 @DARPA's #Reefense is building the resilient reefs of the future ☐ Research teams in Florida and Hawai'i are developing and testing structures that will promote resilient coral outplant to reduce coastal flooding, erosion, and storm damage 🌐☐

<https://www.darpa.mil/news-events/2022-06-15>



[Alt text: Illustration, from left to right: brown land with a gray helicopter on it, a gray fence, tan, sandy beach, blue ocean with a colorful coral reef providing vertical relief and fish.]

- 7 For the first time in history, @fema funded coral reef damage assessments and emergency coral reattachment! This project aims to help corals that survived

	<p>Hurricane Irma and Maria, which damaged ~11% of #CoralReefs in #PuertoRico. #CoralRestoration</p> <p>Federal And Non-Profit Agencies Collaborate To Protect And Restore Coral Reefs</p>
8	<p>Scaling up #ReefRestoration efforts in the Atlantic and Caribbean is crucial as Stony Coral Tissue Loss Disease causes significant coral loss. Witness the remarkable #MissionIconicReefs, a groundbreaking project aiming to outplant 500,000 corals across 7 reefs in the @FloridaKeysNMS</p> <p>https://sanctuaries.noaa.gov/news/dec19/noaa-launches-mission-iconic-reefs-to-save-florida-keys-coral-reefs.html</p>  <p>[Alt text: A split image of an underwater tank with small, circular brown fragments on racks and a white building and blue sky above]</p>
<p>Restoration Working Group Accomplishments</p>	
1	<p>#CoralRestoration efforts are expanding beyond the Caribbean as global stressors threaten #CoralReefs worldwide. The U.S. Coral Reef Task Force is helping to boost capacity for restoration projects in the Pacific through NGO partnerships 📖</p> <p>https://www.fisheries.noaa.gov/feature-story/collaborating-coral-restoration-pacific-islands</p>



[Alt text: A flat, hexagonal metal structure holding pieces of tan and brown coral fragments underwater. A diver swims away from the structure.]

2

Our nation's #CoralReef managers are on the front lines of #CoralRestoration efforts! The #USCRTF is supporting reef managers as they launch restoration programs or assess their current programs using this six-step guide:

https://www.coris.noaa.gov/activities/restoration_guide/welcome.html@NOAA @EPA



[Alt text: Six circles connected by arrows indicating the six steps of coral reef restoration planning & design.]

3

#USCRTF partners: @USGS, @fema, @USACEHQ, and @NOAA developed a #CoralRestoration for Risk Reduction Guide. It guides users in designing projects that reduce flood or erosion risks by rehabilitating, recovering, and restoring reefs



https://coralreef.gov/assets/about/cr4_guide_nov2022_508.pdf



[Brown ocean water and a boat beached on a shore covered with brown seaweed, and flooded fields and streets.]

4

Need assistance figuring out what types of permits or consultations you need to conduct a #CoralRestoration project in your jurisdiction? Our can help:

XXX



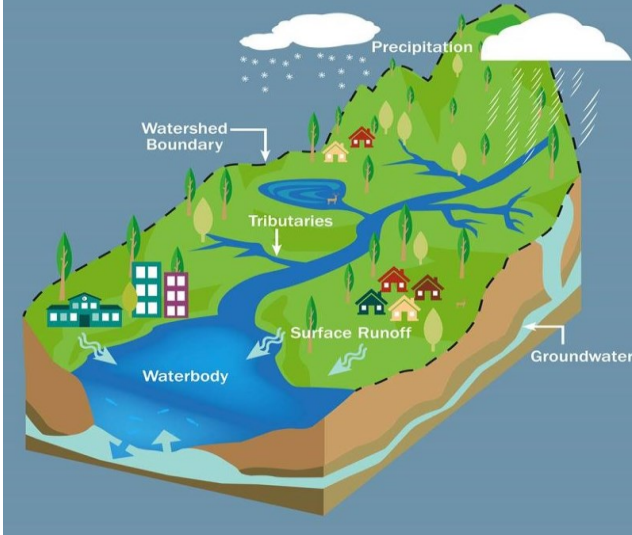
[A diver outplants branching corals secured with black zip ties onto a reef.]

Watershed Working Group Tweets

Social media suggestions that are specific to the USCRTF Watershed WG.

Watershed Fast Facts

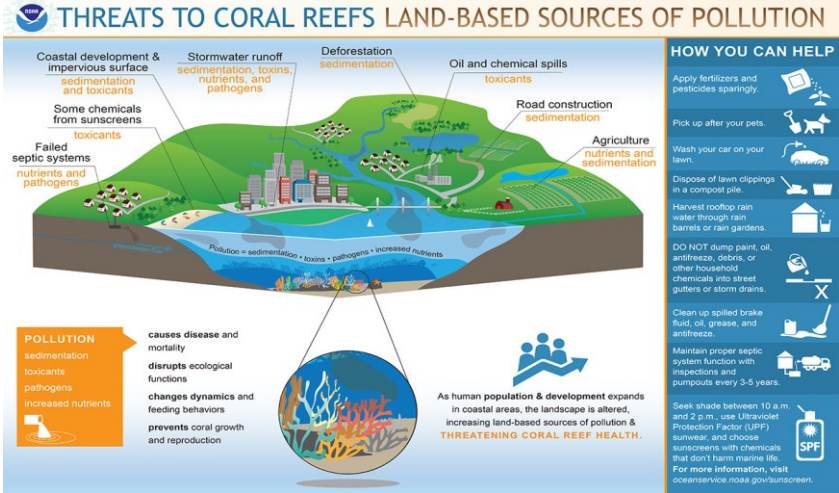
1 What is a #watershed and what impacts can they have on #CoralReefs? A watershed is a land area that drains into a specific receiving water body, such as a river, lake, or ocean. Coastal waters are heavily influenced by their watersheds and can also be home to coral reefs (1/3)
<https://oceanservice.noaa.gov/facts/watershed.html>



[Alt text: Diagram of a watershed with land indicated in green and outlined by a black dotted line to indicate the watershed boundary, water indicated in blue, and watershed inputs indicated with white arrows and listed as precipitation, tributaries, groundwater, and surface runoff]

As rainwater runs through the #watershed it collects and transports sediments, nutrients, and other materials which can be deposited on the #CoralReef! High sedimentation, nutrients and pollutants, and lower salinity from influxes of freshwater are all stressors to corals. (2/3)

THREATS TO CORAL REEFS LAND-BASED SOURCES OF POLLUTION



THREATS TO CORAL REEFS LAND-BASED SOURCES OF POLLUTION

- Coastal development & impervious surface: sedimentation and toxicants
- Stormwater runoff: sedimentation, toxins, nutrients, and pathogens
- Deforestation: sedimentation
- Oil and chemical spills: toxicants
- Road construction: sedimentation
- Agriculture: nutrients and sedimentation
- Failed septic systems: nutrients and pathogens
- Some chemicals from sunscreens: toxicants

HOW YOU CAN HELP

- Apply fertilizers and pesticides sparingly.
- Pick up after your pets.
- Wash your car on your lawn.
- Dispose of lawn clippings in a compost pile.
- Harvest rooftop rain water through rain barrels or rain gardens.
- DO NOT dump paint, oil, antifreeze, solvents, or other household chemicals into street gutters or storm drains.
- Clean up spilled brake fluid, oil, grease, and antifreeze.
- Maintain proper septic system function with inspections and pumpouts every 3-5 years.
- Seek shade between 10 a.m. and 2 p.m., use Ultraviolet Protection Factor (UPF) swimwear, and choose sunscreens with chemicals that don't harm marine life. For more information, visit oceanservice.noaa.gov/sunscreen.

POLLUTION
 sedimentation
 toxicants
 pathogens
 increased nutrients

causes disease and mortality
 disrupts ecological functions
 changes dynamics and feeding behaviors
 prevents coral growth and reproduction

As human population & development expands in coastal areas, the landscape is altered, increasing land-based sources of pollution & THREATENING CORAL REEF HEALTH.

[Diagram showing land-based sources of pollution that are threats to coral reefs, and how you can help.]

Learn more about how the #USCRTF Watershed Working Group has been partnering with local coral reef managers across the Pacific and Caribbean to improve #WaterQuality and reduce stressors on coral reefs (3/3)

<https://www.coris.noaa.gov/activities/projects/watershed/welcome.html>



[Alt text: Aerial view of brown water exiting a river and mixing with blue ocean water]

2

#Runoff is a mysterious source of pollution on #CoralReefs and we have questions! What is the source or origin? What pollutants are present? How are the pollutants transported?! Watershed managers act as super sleuths to identify, reduce, and eliminate these pollution sources! 🕵️

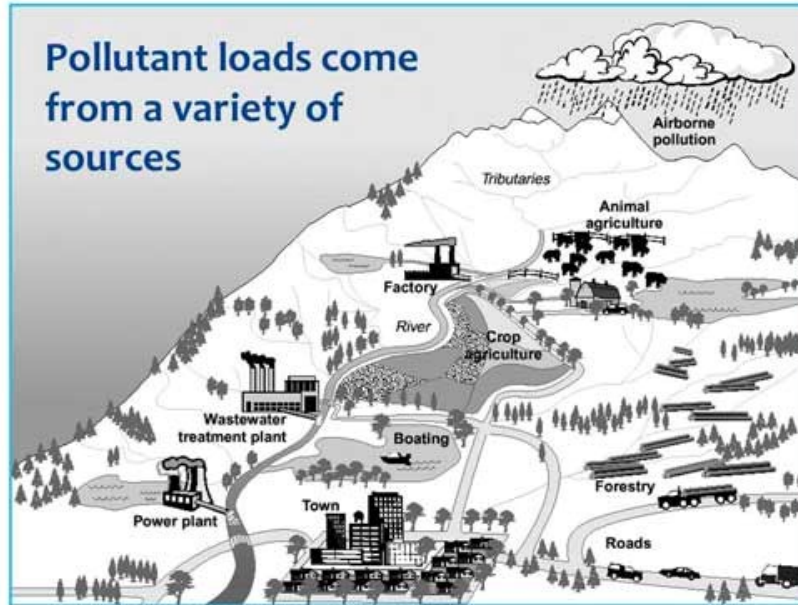
<https://www.epa.gov/coral-reefs/threats-coral-reefs>



[Alt text: Aerial view of a watershed]

3

#DidYouKnow that everything we do within a #watershed affects the water quality and natural resources of that area? From land development to agriculture to household activities, we can all do our part to protect our watersheds. Make every drop count! 💧



[Alt text: Infographic of a watershed with sources of pollutant loads]


4

When it comes to watersheds, we don't just go with the flow 🌀 #Watershed Management Plans identify pollutant sources and activities that affect the health of the watershed, making recommendations to address them so that adverse impacts are reduced. <https://www.coris.noaa.gov/activities/projects/watershed/welcome.html>



[Alt text: Picture of blue ocean water lined by a cluster of high-rise buildings and green spaces]

5

Collaboration is  to effective watershed management. Fostering partnerships is critical as everyone can impact or play a role in watershed health. Learn more about our collaborative approach to prioritizing watershed management plans:

<https://www.coris.noaa.gov/activities/projects/watershed/welcome.html>



[Alt text: Illustration showing buildings on an island, people doing activities on the beach, a plane flying through the sky, boats and cruise ships on the blue ocean, people swimming and snorkeling on a colorful coral reef]

6

While diving on #CoralReefs you may feel like you are a world away from your daily life. However, coral reefs are closely connected to nearby coastal communities through watersheds and can be threatened by daily activities that produce land-based sources of pollution <https://www.coralreef.gov/watershed/>



[Alt text: Red-orange fish swim above a green-gray coral]

7

Make these changes around your home to protect your local #watershed:

📦 Reduce fertilizer, herbicide, and pesticide use

📦 Compost your yard waste

📦 Use rain barrels to collect rooftop rainwater

📦 Maintain proper septic system function with inspections and pump-outs every 3-5 years

<https://www.epa.gov/hwp/tools-and-resources-protect-watersheds>



[Alt text: Rain barrels painted with lots of blue and green colors in front of a brown wall]

8

Protect your #watershed by cleaning up after yourself and watching what you dispose:

- Pick up your pet's waste 🐾 🗑️
- Don't dispose of household chemicals into street gutters or storm drains 🏠 ☐
- Clean up spilled automotive chemicals 🚗 🛢️



[Alt text: storm drain on a gray cobblestone street with brown water rushing into it]

Watershed Working Group Accomplishments

- 9 This #WatershedWednesday we are spotlighting Faga'alu in American Samoa, the first watershed to graduate from the #USCoralTaskForce Watershed Partnership Initiative. Learn more about the united efforts to monitor, implement management, and build local capacity here:
<https://www.coralreef.noaa.gov/aboutcrp/news/featuredstories/dec22/fagaalu-watershed.html>



[Alt text: Photo of a billboard highlighting the Faga'alu watershed that shows a coral reef in blue waters fringing a green island]

- 10 #USCRTF developed a set of cost-effective and quantifiable indicators of coral community health, sediment condition, and water quality. These will help us to determine if our Watershed Partnership Initiative efforts are actually reducing our impact on coastal #coralreef ecosystems 🌐 <https://coralreef.gov/watershed/>



[Alt text: Scuba diver with a blue ruler, yellow transect tape, and white measuring stick on a coral reef measuring a green brain coral]


The #USCoralTaskForce has a Watershed Partnership Initiative strategy which outlines goals, actions, and guidelines for selecting and implementing priority watersheds. Let's work together to protect our #watersheds and in turn, preserve our #CoralReefs <https://coralreef.gov/watershed/>



[Alt text: Picture of brown water mixing with blue water along a sandy beach and hilly, green coastline]

Coral Reef Fisheries and Ecosystem Working Group Tweets

Social media suggestions that are specific to the USCRTF Fisheries WG.

Fisheries Fast Facts	
1	<p>#CoralReefs are used for commercial, recreational & subsistence fishing because fish are a vital food source for many. The U.S. Coral Reef Task Force Fisheries Work Group helps strengthen reef fisheries management across jurisdictions and federal agencies. https://coralreef.gov/fisheries/</p>  <p>[Diver pulls a transect over a brown coral reef with fish swimming in the background]</p>
2	<p>@NOAAFisheries estimates that the annual value of U.S. commercial and recreational fisheries dependent on coral reefs is \$100 million each. https://www.fisheries.noaa.gov/pacific-islands/ecosystems/coral-reefs-pacific#reef-fishes</p>



[A silver fish with red fins swims over a coral reef]

3

#CoralReefs are nurseries for fish species all around the world. They also provide hiding places for smaller fish to avoid predators.

<https://www.fisheries.noaa.gov/feature-story/how-are-fisheries-and-coral-reefs-connected>



[Multiple small fish swim around a branching coral]

4

Clownfish, goatfish, and tuna, oh my! These are just a few of the many fish species that can be found in the #TropicalPacific. In fact, four species of tuna account for a

staggering 90% of the Pacific fishing catch.
<https://doi.org/10.1016/j.fishres.2013.09.001> #Fisheries



[A school of black and white fish swimming above a coral reef]

Caribbean reefs are home to a variety of fishes, including colorful Parrotfish, huge Groupers, shiny Barracuda, and all sorts of vibrant Angelfish! What are your favorite fish to see out on the reef? #fisheries #coralreef
https://www.nps.gov/viis/planyourvisit/upload/FishGuide_All_asOf05022017.pdf



[A red grouper sits in between coral reef structures]

5 -
Sana

Like in many Pacific Island societies, #Fisheries are critical to American Samoa's cultural and social fabric, as well as its sustenance. Local communities particularly rely

on reef fisheries. These practices are steeped in tradition and are a part of Fa'asamoa, the Samoan Way.

<https://www.fisheries.noaa.gov/video/video-highlights-importance-fishing-american-samoa>



[People fishing from a traditional fishing pier in American Samoa]

6

U.S. fisheries are enforced in the Exclusive Economic Zone, which extends 230 miles off the U.S. coast. Enforcement operations cover 4 million sq mi of ocean, including 14 marine sanctuaries and 5 marine national monuments.

<https://www.fisheries.noaa.gov/topic/enforcement>



[A man uses binoculars and has a vest that reads "Federal Officer"]

7

Did you know that fish have jobs to do? It's true, each species plays an important role on the reef! For example, parrotfish graze on algae, preventing overgrowth that smothers corals and limits settlement. Some fish pick parasites off larger species to keep them clean! #FishFriday

<https://www.fisheries.noaa.gov/feature-story/how-are-fisheries-and-coral-reefs-connected>



[A blue parrotfish smiles and swims above a rocky seafloor with fish swimming in the background]

Coral Reef Fisheries and Ecosystem Working Group Accomplishments

1

The U.S. Coral Reef Task Force Fisheries Working Group developed action plans to tackle a variety of coral reef fisheries challenges in all U.S. Coral Reef jurisdictions. 13 common management targets were identified. You can learn more here:

<https://www.coralreef.gov/fisheries/>



[Brown lettuce-like coral with blue fish swimming around it]

Madison Gard, our #HollingsFellow, produced two graphics showing relationships between managed fishery populations and #CoralReef habitats! Each one is tailored to represent species from the Atlantic and Pacific basins.

<https://coralreef.noaa.gov/aboutcrfp/news/featuredstories/oct22/hollings-welcome.html>

CORAL HOUSEKEEPERS

In the Atlantic and Caribbean, fish need healthy coral reefs and coral reefs need healthy fish populations. Managed fishery species rely on reef systems for food and shelter. In the same way people care for their homes, fish maintain coral reef ecosystems.

Fertilization/Nutrients
All fish within a coral reef assist with nutrient cycling. Grunts, damselfish, and other foragers that eat away from the reef excrete new nutrients into the reef system when they return. The extra nutrients enhance coral growth, similar to how people fertilize gardens to help them grow.

Cleaning/Herbivores
Algae compete with corals for space. They grow rapidly to crowd out or smother coral neighbors. Herbivores, like parrotfish and surgeonfish, clean coral reefs like housekeepers by eating algae. This creates space for corals to settle and grow.

Shelter/Reef structure
A healthy reef is home to many species of coral that build and maintain the reef structure. Corals provide places for small fish to hide and attract big fish searching for food. In the same way that a high-rise apartment building in a bustling city can house many families, a large, healthy reef supports a diverse and abundant fish community.

Pest control/Corallivores
Unchecked populations of corallivores, such as the bearded fireworm, are harmful to coral reefs. They eat corals, spread disease, and degrade reef structure. Grunts, triggerfish, and wrasse act like exterminators by eating coral pests to control their populations.

[Infographic with fish and corals from the Atlantic basin. Text reflects post.]

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[Infographic with fish and corals from the Pacific basin. Text reflects post.]

The Coral Reef Fisheries and Ecosystem Working Group Jurisdictional Action Plan for the #USVirginIslands was used to assist the jurisdiction with promulgating regulations for a new recreational fishing license program. <https://www.coralreef.gov/fisheries/>



[A coral reef with fish swimming in the background and a gray fish swimming towards the camera]

3

#TeamworkMakesTheDreamWork! The Fisheries Working Group collaborates closely on enforcement, using priorities from their Action Plans to guide enforcement activities like identifying statutory gaps, building training capacity & improving federal support.

<https://www.coralreef.gov/fisheries/>



[Three people in dark uniforms sit on a silver law enforcement boat on blue water in front of a red lighthouse.]