

# Proposed Critical Habitat in American Samoa, Guam, CNMI, & PRIA For 7 Reef Corals Listed Under the Endangered Species Act (January 19<sup>th</sup> & 21<sup>st</sup>, 2021)

## Agenda

**4:00** Begin Public Information Meeting (Ann Mooney, NOAA Fisheries)

**4:10** Welcome (Ann Garrett, NOAA Fisheries)

**4:15** Summary of Proposed Coral Critical Habitat (Lance Smith, NOAA Fisheries)

**4:35** Question and Answer Session (All)

**5:20** Break

**5:30** Begin Public Hearing (Ann Mooney, NOAA Fisheries)

## NOAA Fisheries Pacific Islands Regional Office (PIRO) Staff



Ann Mooney  
Natural Resource  
Management Specialist



Ann Garrett  
Assistant Regional Administrator  
Protected Resources Division



Lance Smith  
Fishery Biologist  
Protected Resources Division

## Summary of Proposed Coral Critical Habitat\*

- Why we proposed coral critical habitat.
- How we delineated proposed coral critical habitat.
- Where proposed coral critical habitat is located.
- Implications of final coral critical habitat.
- Schedule for proposed and final coral critical habitat.

\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>

## Why we proposed coral critical habitat

- In 2014, 15 Indo-Pacific coral species were listed as “threatened” under the Endangered Species Act (ESA), 7 of which occur in U.S. waters:



*Acropora globiceps*

Am Samoa, Guam,  
CNMI, PRIA

*Acropora retusa*

Am Samoa, Guam,  
CNMI, PRIA

*Acropora speciosa*

Am Samoa, PRIA

*Acropora jacquelineae*

Am Samoa

*Euphyllia paradivisa*

Am Samoa

*Isopora crateriformis*

Am Samoa

*Seriatopora aculeata*

Guam, CNMI

## Why we proposed coral critical habitat

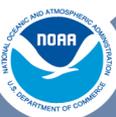
- In 2014, 15 Indo-Pacific coral species were listed as “threatened” under the Endangered Species Act (ESA), 7 of which occur in U.S. waters.
- For ESA-listed species in US waters, critical habitat is required if “prudent and determinable”.
- So after species are listed under the ESA, we ask 3 questions to decide whether to propose critical habitat or not:
  1. Do the listed species occur in U.S. waters? **Yes**
  2. Would critical habitat be helpful for the conservation of the listed species (prudent)? **Yes**
  3. Is there enough known about the habitat requirements of the listed species to delineate its critical habitat (determinable)? **Yes**

## Summary of Proposed Coral Critical Habitat

- Why we proposed coral critical habitat.
- How we delineated proposed coral critical habitat.
- Where proposed coral critical habitat is located.
- Implications of final coral critical habitat.
- Schedule for proposed and final coral critical habitat.

\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>



**NOAA**  
FISHERIES

## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and (ii) areas not occupied by the species that are essential for its conservation.
  - i. First part of definition:
    - a. In US waters, we know which islands are “occupied” by listed corals.
    - b. The “essential features” for listed corals are found on the fringing reefs that surround these islands, which provide hard substrates for corals to grow on, and suitable water quality to sustain them through their life cycles.
    - c. Since these essential features could be degraded by future federal actions, they may require special management considerations or protections.
    - d. In US waters, there are 19 “units” that meet this part of the definition.



Photo by Peter Craig



Photo by Doug Fenner

## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and (ii) areas not occupied by the species that are essential for its conservation.
  - i. First part of definition:
    - a. In US waters, we know which islands are “occupied” by listed corals.
    - b. The “essential features” for listed corals are found on the fringing reefs that surround these islands, which provide hard substrates for corals to grow on, and suitable water quality to sustain them through their life cycles.
    - c. Since these essential features could be degraded by future federal actions, they may require special management considerations or protections.
    - d. In US waters, there are 19 “units” that meet this part of the definition.
  - ii. Second part of definition:
    - a. In US waters, there are several islands “not occupied” by listed corals (e.g., Swains, Baker, Agrihan Islands), but they are not essential for the conservation of listed corals because of the small amount of habitat they provide.
    - b. So there are no areas that meet this part of the definition.

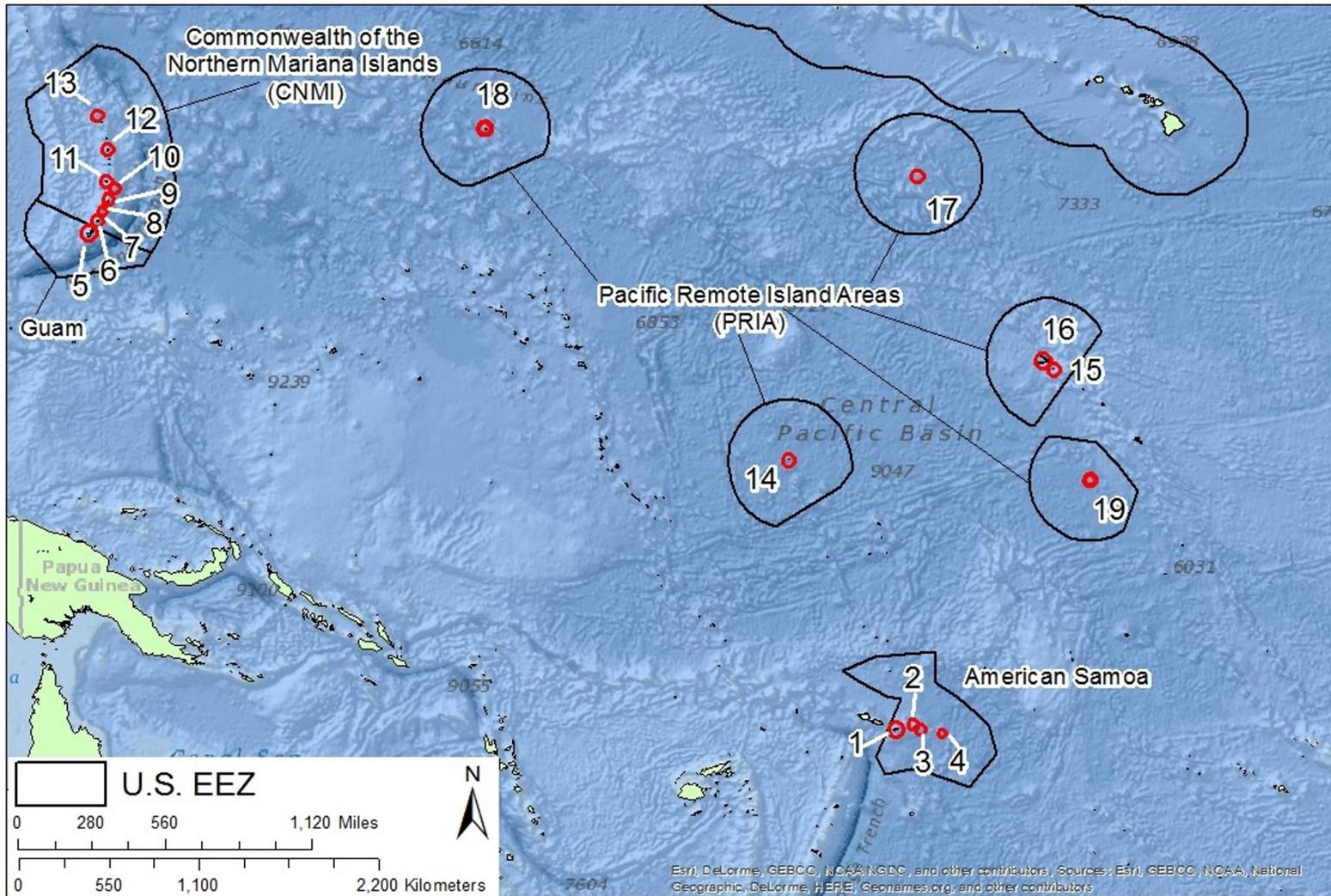


## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and ~~(ii) areas not occupied by the species that are essential for its conservation.~~ Within U.S. waters, there are 19 “units” that meet the definition.



# How we delineated proposed coral critical habitat



## Proposed Coral Critical Habitat Units (# of listed corals)

1. Tutuila (6)
2. Ofu-Olosega (3)
3. Ta'u (3)
4. Rose (2)
5. Guam (3)
6. Rota (1)
7. Aguijian (1)
8. Tinian (2)
9. Saipan (2)
10. FDM (1)
11. Anatahan (1)
12. Pagan (1)
13. Maug (1)
14. Howland (1)
15. Palmyra (1)
16. Kingman (3)
17. Johnston (1)
18. Wake (2)
19. Jarvis (1)

Esri, DeLorme, GEBCO, NOAA, NGDC, and other contributors. Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and other contributors

## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and ~~(ii) areas not occupied by the species that are essential for its conservation.~~ Within U.S. waters, there are 19 “units” that meet the definition.
2. Every unit has between 1 and 6 listed corals, and every species has a different depth range. In each unit, the combined depth ranges of all listed corals are the depth boundaries for proposed critical habitat.

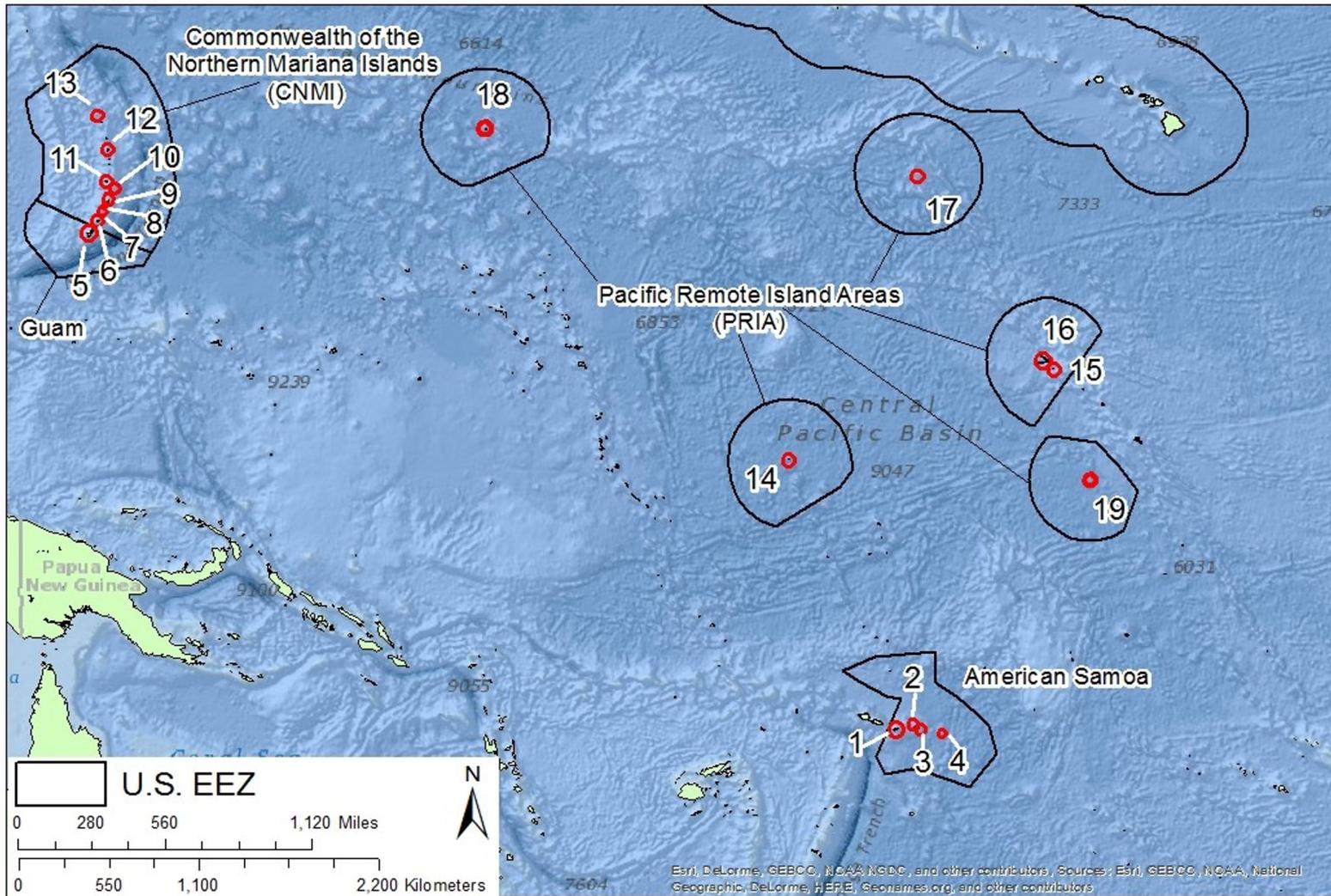


Jurisdiction	Am Samoa				Mariana Islands (Guam and CNMI)									Pacific Remote Island Area					
Unit <sup>1</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<i>A. globiceps</i> (0-20 m)	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	
<i>A. jacquelineae</i> (10-35 m)	X																		
<i>A. retusa</i> (0-10 m)	X	X	X	X	X			X						X		X	X	X	X
<i>A. speciosa</i> (12-40 m)	X															X			
<i>E. paradivisa</i> (2-40 m)	X																		
<i>I. crateriformis</i> (0-12 m)	X	X	X																
<i>S. aculeata</i> (3-40 m)					X				X										
Depths of all listed spp. <sup>2</sup>	a	b	b	b	a	b	b	b	a	b	b	b	b	c	b	a	c	b	c

<sup>1</sup>Unit Key: (1) Tutuila & Offshore Banks; (2) Ofu & Olosega; (3) Ta'u; (4) Rose Atoll; (5) Guam & Offshore Banks; (6) Rota; (7) Aguijan; (8) Tinian and Tatsumi Reef; (9) Saipan and Garapan Bank; (10) Farallon de Medinilla; (11) Anatahan; (12) Pagan; (13) Maug Islands & Supply Reef; (14) Howland Island; (15) Palmyra Atoll; (16) Kingman Reef; (17) Johnston Atoll; (18) Wake Atoll; and (19) Jarvis Island.

<sup>2</sup>Depth Key: (a) 0-40 m; (b) 0-20 m; (c) 0-10 m.

# How we delineated proposed coral critical habitat



## Proposed Coral Critical Habitat Units (# of listed corals)

1. Tutuila 0-40 m
2. Ofu-Olosega 0-20m
3. Ta'u 0-20 m
4. Rose 0-20 m
5. Guam 0-40 m
6. Rota 0-20 m
7. Aguijian 0-20 m
8. Tinian 0-20 m
9. Saipan 0-40 m
10. FDM 0-20 m
11. Anatahan 0-20 m
12. Pagan 0-20 m
13. Maug 0-20 m
14. Howland 0-10 m
15. Palmyra 0-20 m
16. Kingman 0-40 m
17. Johnston 0-10 m
18. Wake 0-20 m
19. Jarvis 0-10 m

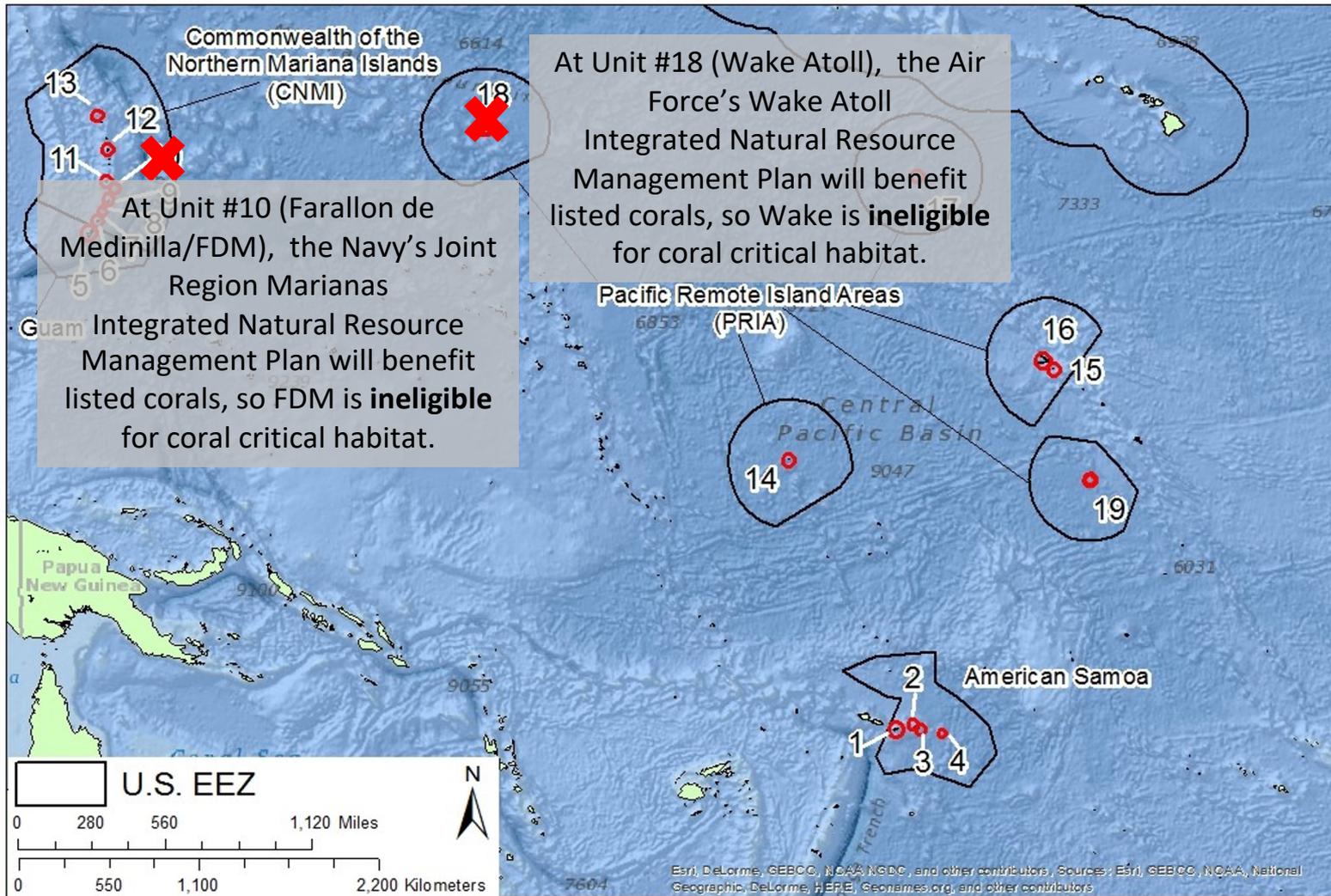
Esri, DeLorme, GEBCO, NOAA, NGDC, and other contributors. Sources: Esri, GEBCO, NOAA, National Geographic, DeLorme, HERE, Geonames.org, and other contributors

## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and ~~(ii) areas not occupied by the species that are essential for its conservation.~~ Within U.S. waters, there are 19 “units” that meet the definition.
2. Every unit has between 1 and 6 listed corals, and every species has a different depth range. In each unit, the combined depth ranges of all listed corals are the depth boundaries for proposed critical habitat.
3. Within the 19 units & depths, several types of areas do not qualify for coral critical habitat:
  - Large, discrete areas with soft substrates.
  - “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
  - “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
  - Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
  - Areas excluded because of national security or economic impacts.



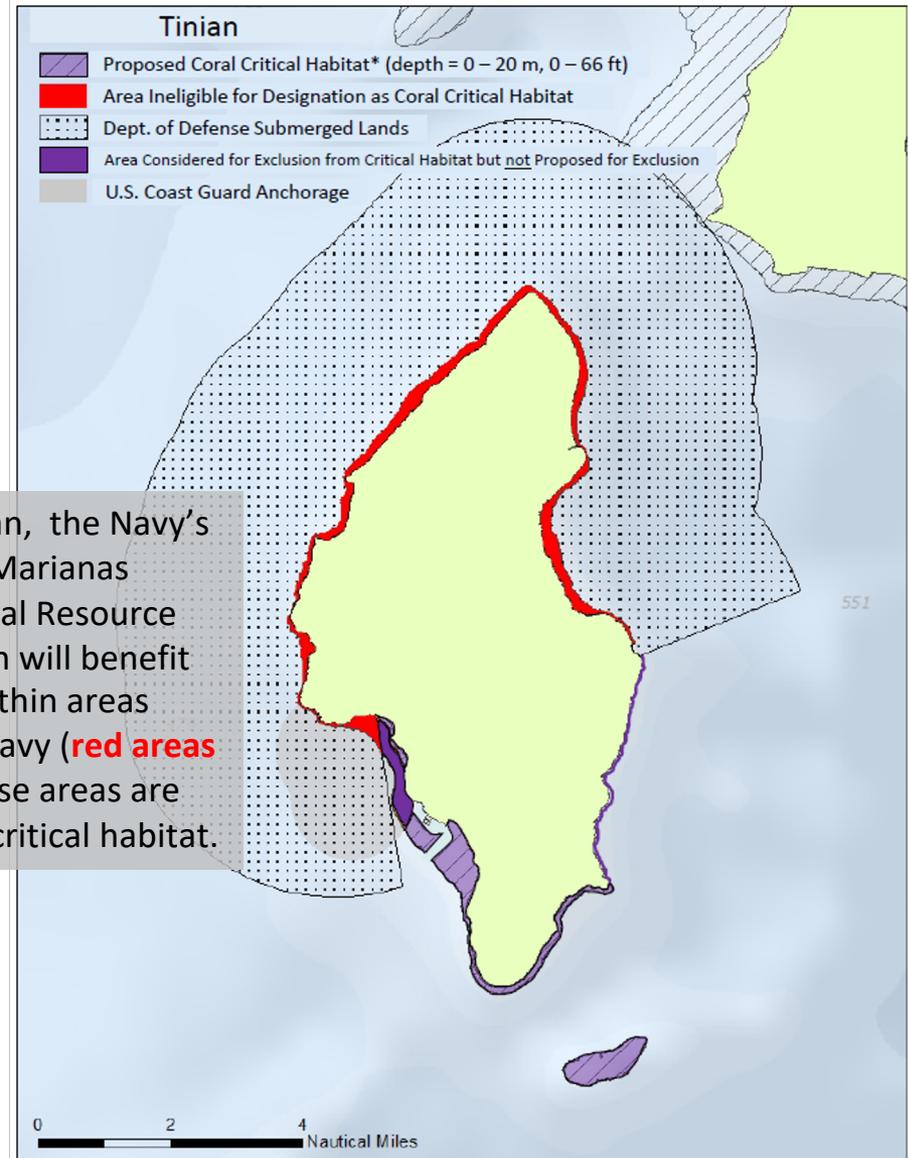
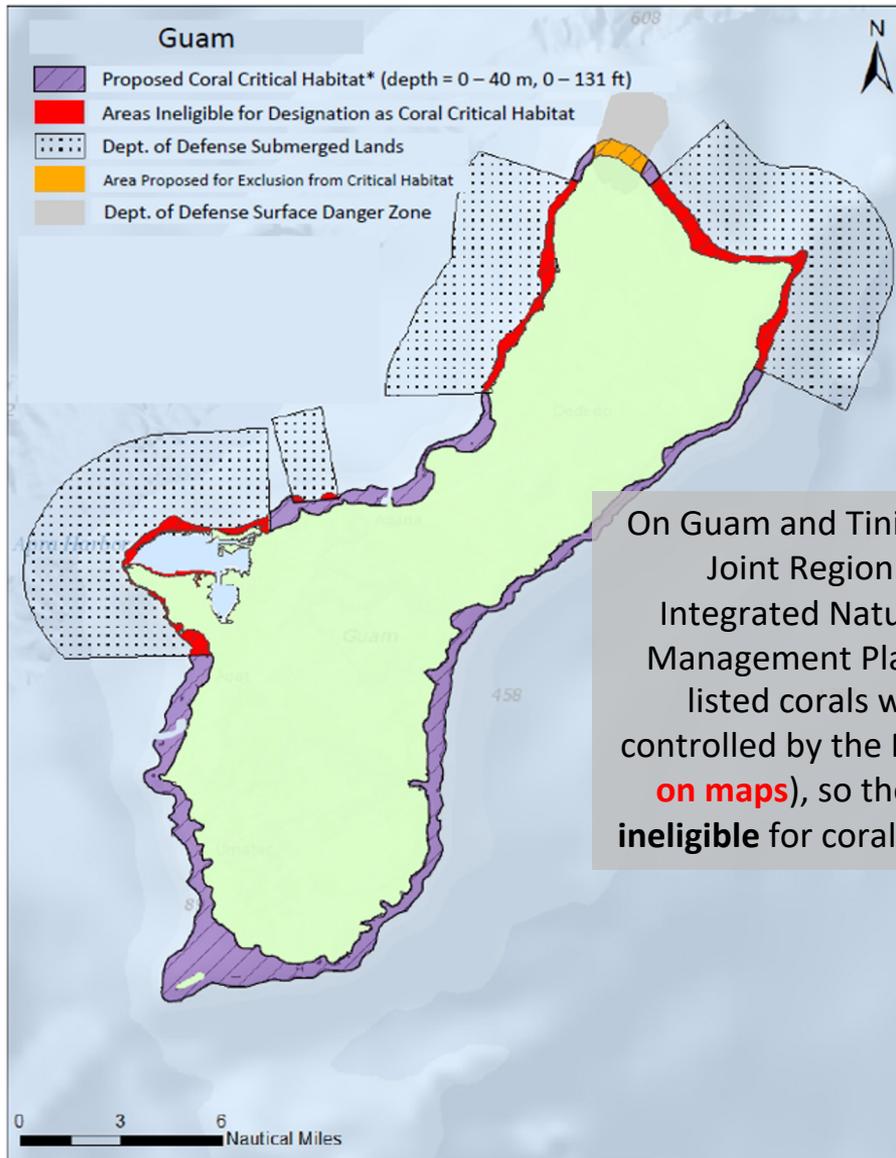
# How we delineated proposed coral critical habitat



## Proposed Coral Critical Habitat Units (# of listed corals)

1. Tutuila 0-40 m
2. Ofu-Olosega 0-20 m
3. Ta'u 0-20 m
4. Rose 0-20 m
5. Guam 0-40 m
6. Rota 0-20 m
7. Aguijian 0-20 m
8. Tinian 0-20 m
- ~~9. Saipan 0-40 m~~
10. FDM 0-20 m
11. Anatahan 0-20 m
12. Pagan 0-20 m
13. Maug 0-20 m
14. Howland 0-10 m
15. Palmyra 0-20 m
16. Kingman 0-40 m
17. Johnston 0-10 m
- ~~18. Wake 0-20 m~~
19. Jarvis 0-10 m

# How we delineated proposed coral critical habitat

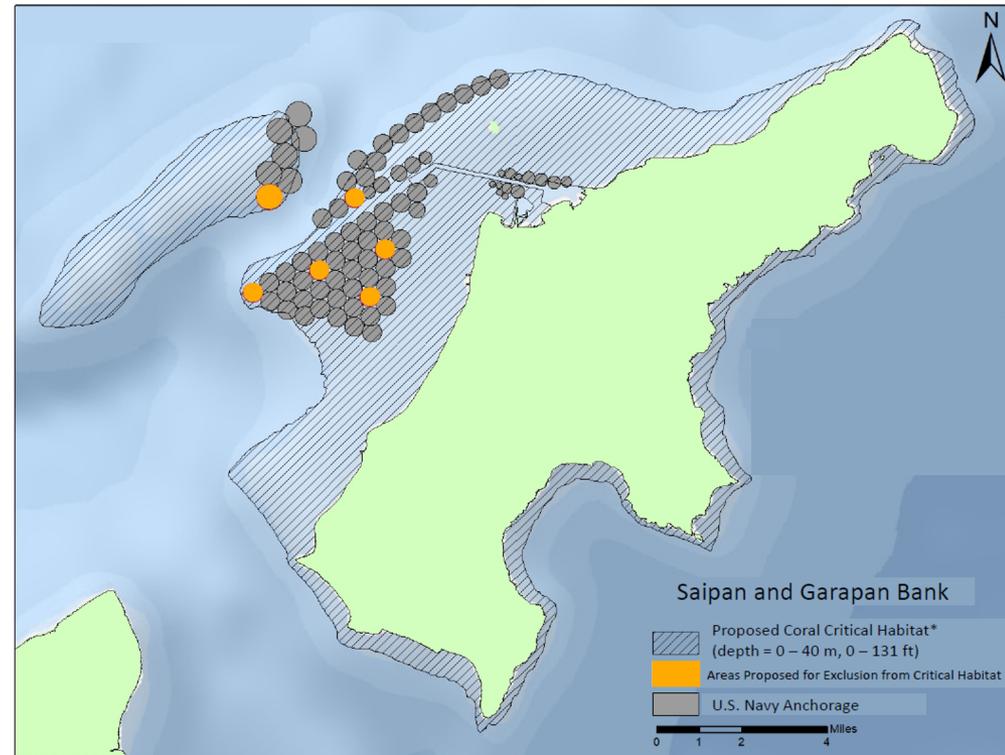
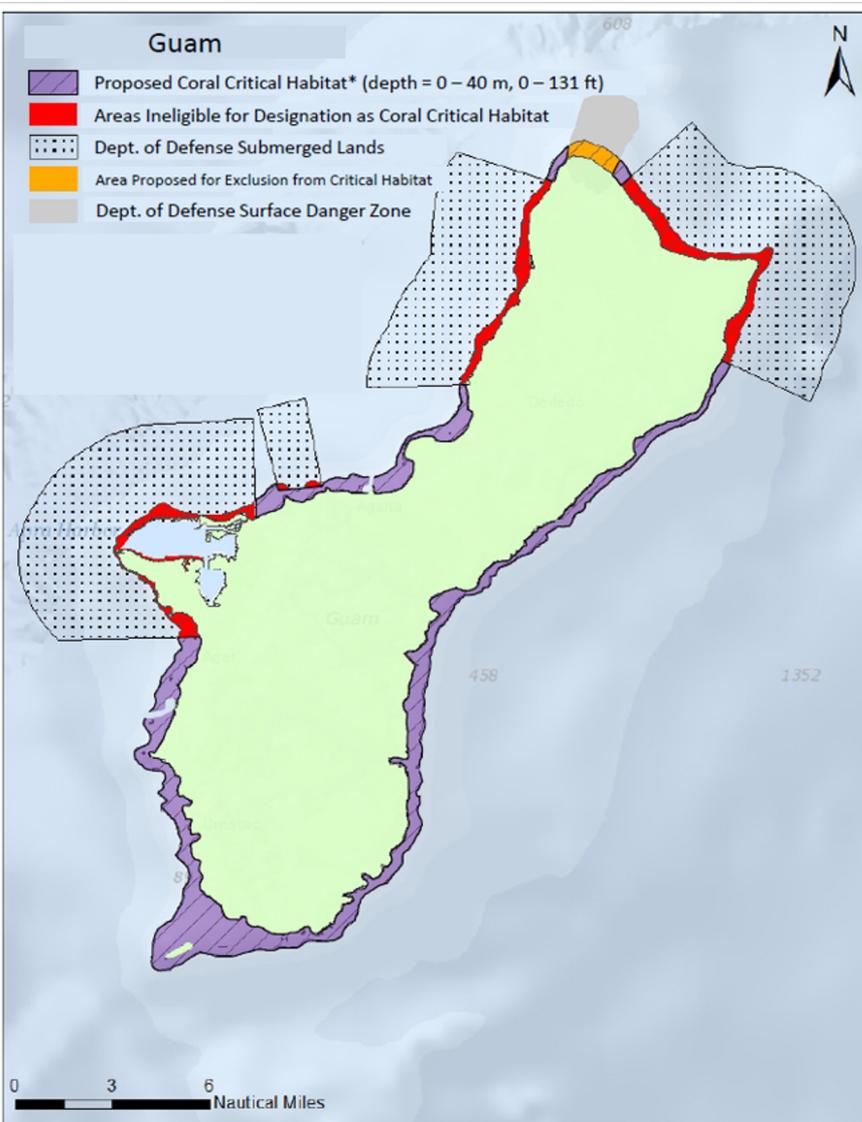


On Guam and Tinian, the Navy's Joint Region Marianas Integrated Natural Resource Management Plan will benefit listed corals within areas controlled by the Navy (**red areas on maps**), so those areas are **ineligible** for coral critical habitat.

## How we delineated proposed coral critical habitat

1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and ~~(ii) areas not occupied by the species that are essential for its conservation.~~ Within U.S. waters, there are 19 “units” that meet the definition.
2. Every unit has between 1 and 6 listed corals, and every species has a different depth range. In each unit, the combined depth ranges of all listed corals are the depth boundaries for proposed critical habitat.
3. Within the 19 units & depths, several types of areas do not qualify for coral critical habitat:
  - Large, discrete areas with soft substrates.
  - “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
  - “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
  - Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
  - Areas excluded because of national security or economic impacts.

# How we delineated proposed coral critical habitat



On Guam and Saipan, Navy and Coast Guard areas are proposed for exclusion from coral critical habitat (**orange areas on maps**) because of national security impacts.

## How we delineated proposed coral critical habitat

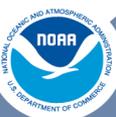
1. Definition of critical habitat: (i) areas occupied by the species that have “essential features” which may require special management, and ~~(ii) areas not occupied by the species that are essential for its conservation.~~ Within U.S. waters, there are 19 “units” that meet the definition.
2. Every unit has between 1 and 6 listed corals, and every species has a different depth range. In each unit, the combined depth ranges of all listed corals are the depth boundaries for proposed critical habitat.
3. Within the 19 units & depths, several types of areas do not qualify for coral critical habitat:
  - Large, discrete areas with soft substrates.
  - “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
  - “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
  - Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
  - Areas excluded because of national security or economic impacts.

## Summary of Proposed Coral Critical Habitat

- Why we proposed coral critical habitat.
- How we delineated proposed coral critical habitat.
- Where proposed coral critical habitat is located.
- Implications of final coral critical habitat.
- Schedule for proposed and final coral critical habitat.

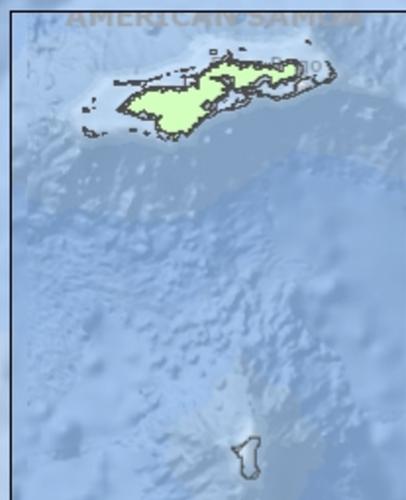
\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>



**NOAA**  
FISHERIES

# Where proposed coral critical habitat is located



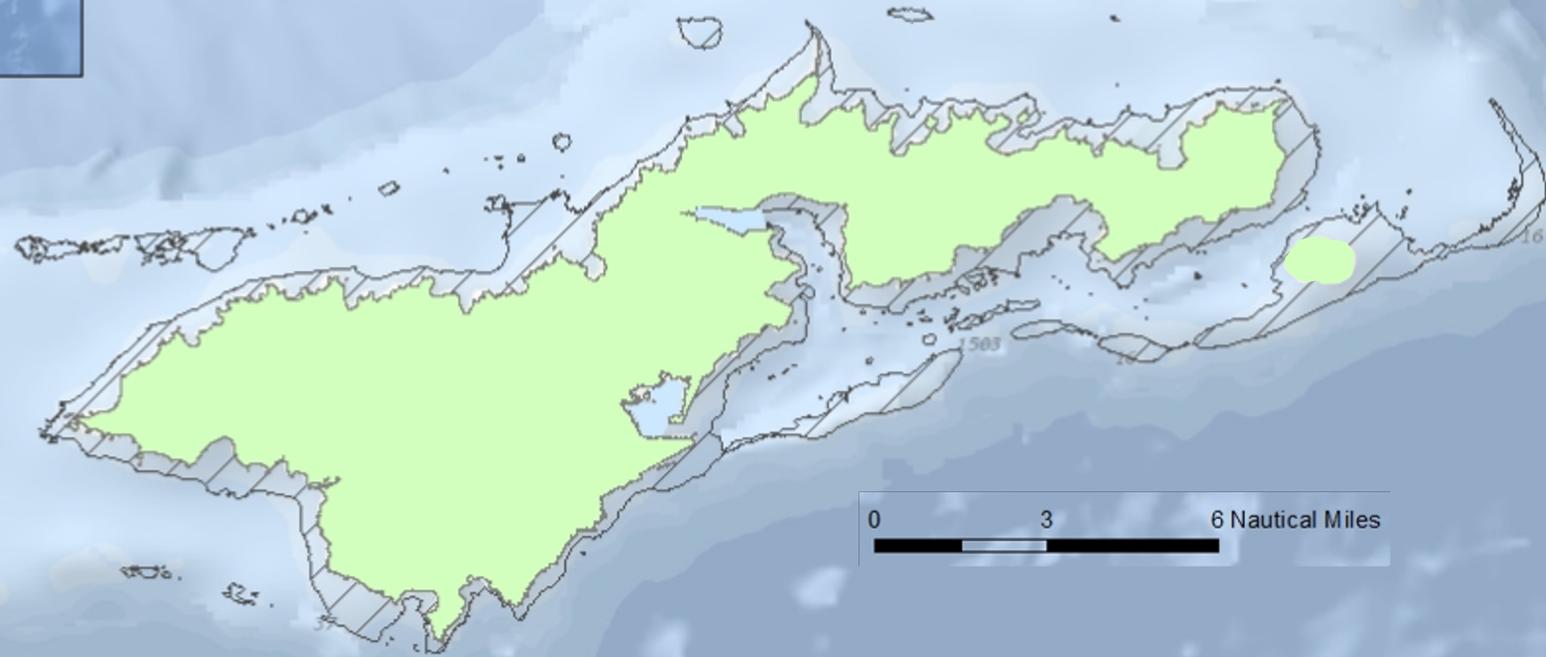
## Tutuila



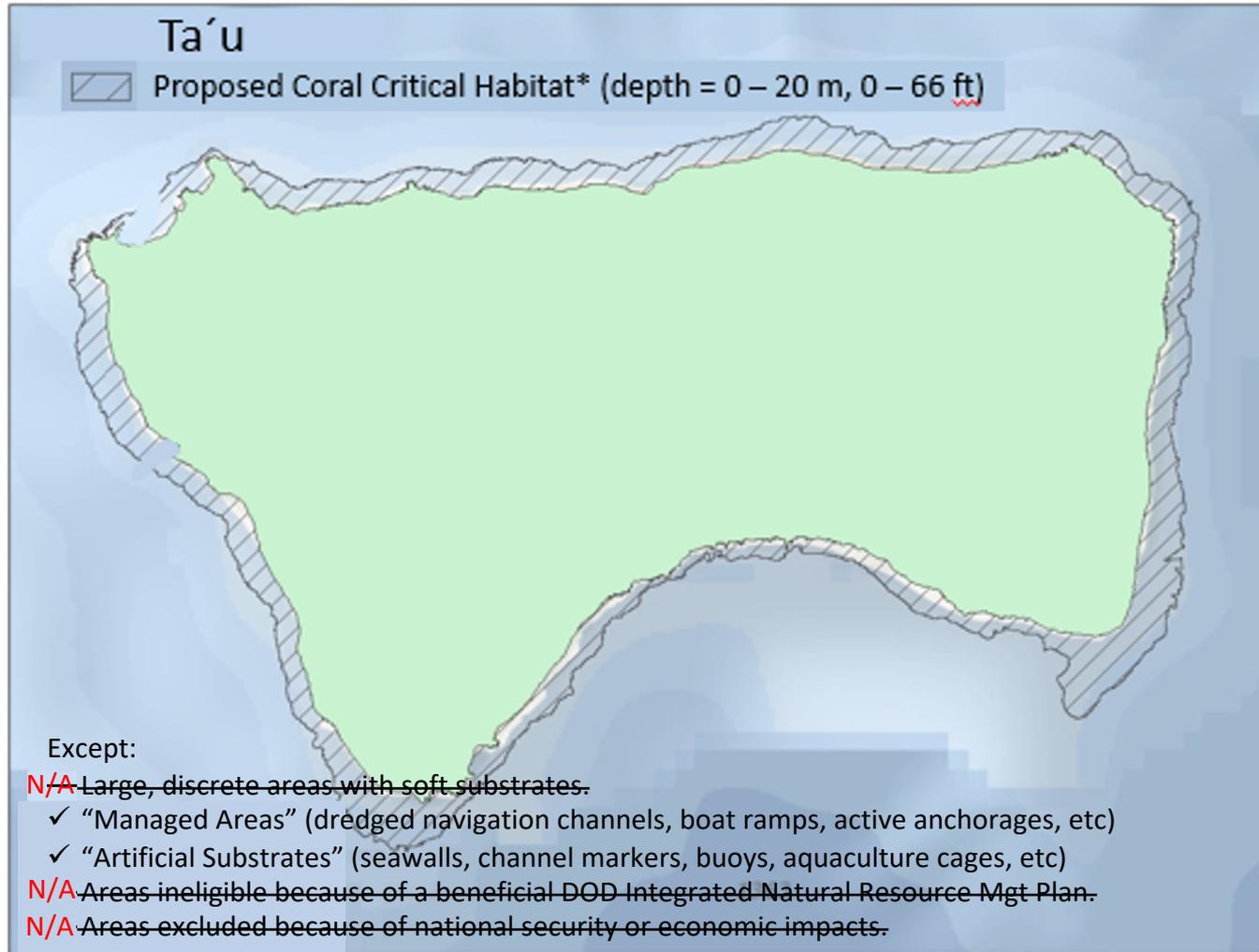
Proposed Coral Critical Habitat\*  
(depth = 0 – 40 m, 0 – 131 ft)

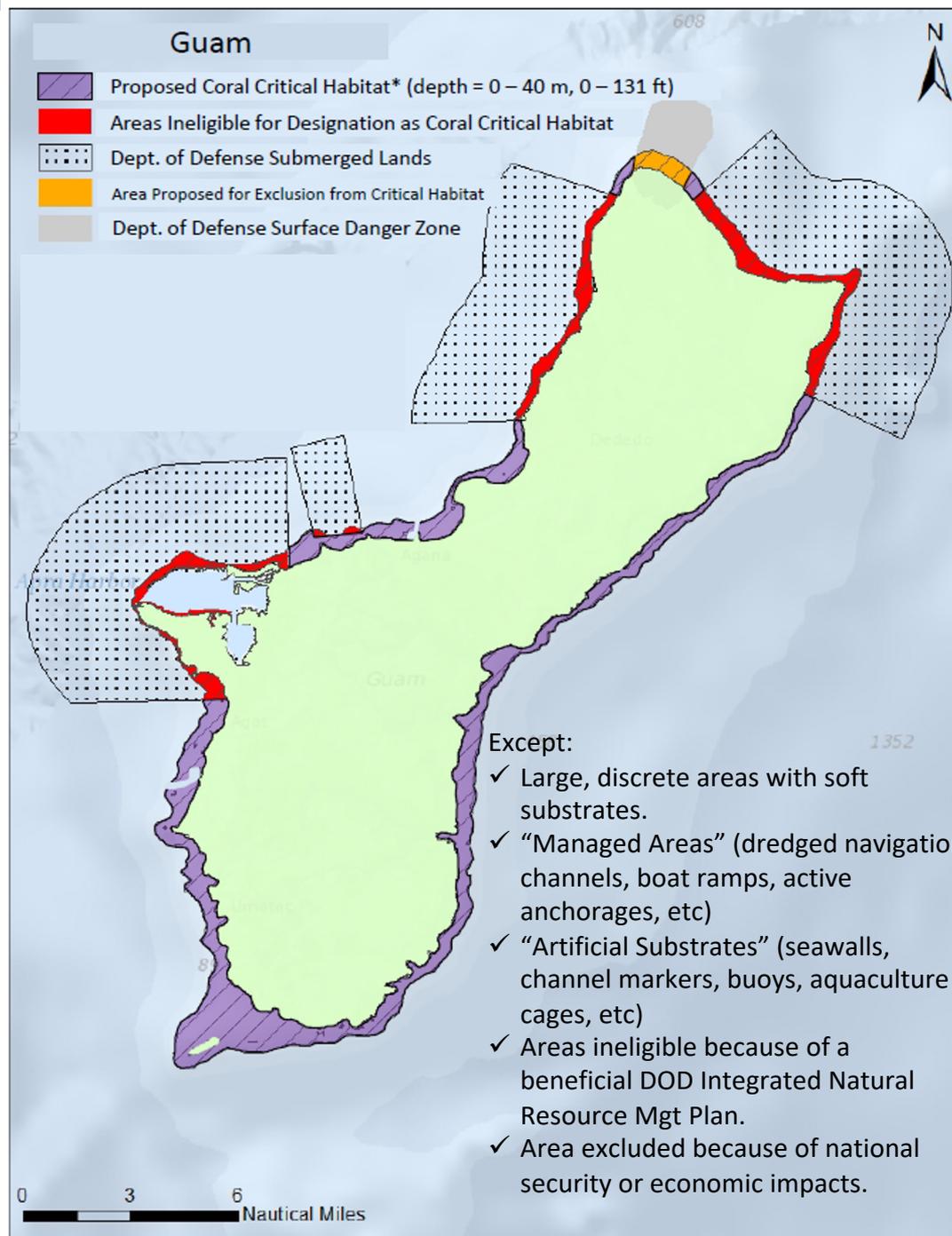
Except:

- ✓ Large, discrete areas with soft substrates.
- ✓ “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
- ✓ “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
- N/A Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
- N/A Areas excluded because of national security or economic impacts.



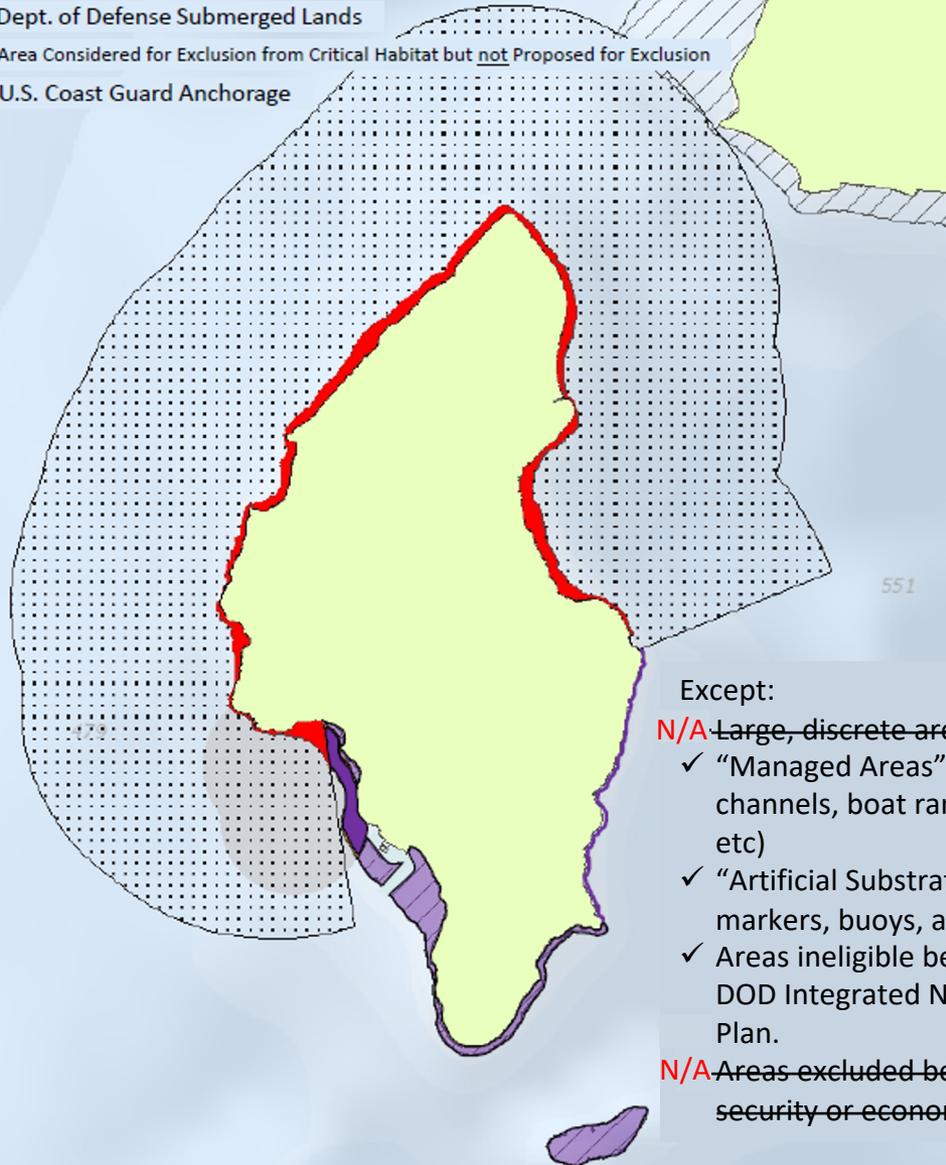
# Where proposed coral critical habitat is located





# Tinian

- Proposed Coral Critical Habitat\* (depth = 0 – 20 m, 0 – 66 ft)
- Area Ineligible for Designation as Coral Critical Habitat
- Dept. of Defense Submerged Lands
- Area Considered for Exclusion from Critical Habitat but not Proposed for Exclusion
- U.S. Coast Guard Anchorage



Except:

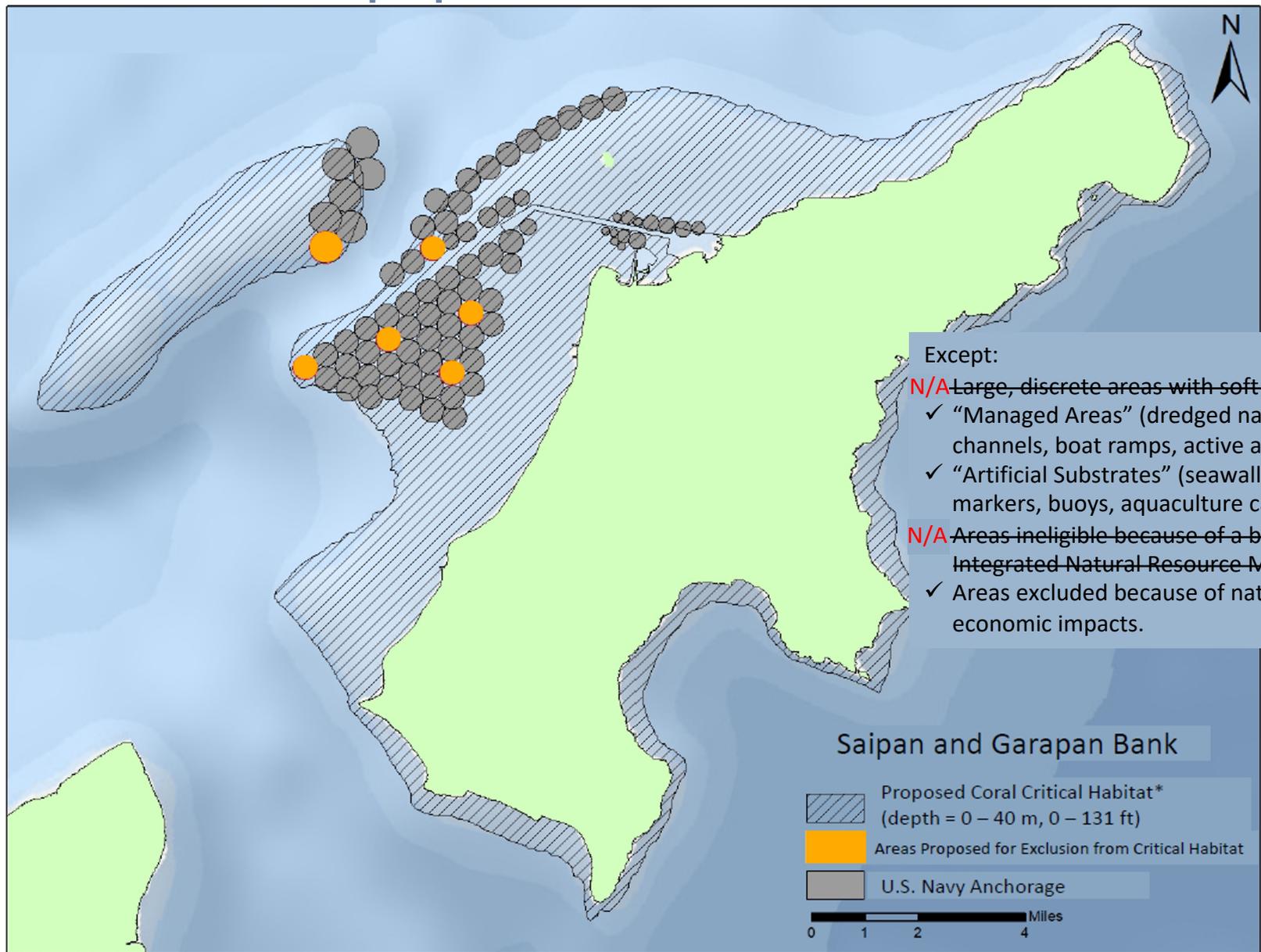
- ~~N/A Large, discrete areas with soft substrates.~~
- ✓ “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
- ✓ “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
- ✓ Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
- ~~N/A Areas excluded because of national security or economic impacts.~~

0 2 4 Nautical Miles



NOAA FISHERIES

# Where proposed coral critical habitat is located



## Except:

- N/A** Large, discrete areas with soft substrates.
- ✓ “Managed Areas” (dredged navigation channels, boat ramps, active anchorages, etc)
- ✓ “Artificial Substrates” (seawalls, channel markers, buoys, aquaculture cages, etc)
- N/A** Areas ineligible because of a beneficial DOD Integrated Natural Resource Mgt Plan.
- ✓ Areas excluded because of national security or economic impacts.

## Where proposed coral critical habitat is located

In addition to these 5 units, critical habitat is also proposed at:

1. Ofu & Olosega
2. Rose Atoll
3. Rota Island
4. Aguijian Island
5. Anatahan Island
6. Pagan Island
7. Maug Islands & Supply Reef
8. Howland Island
9. Palmyra Atoll
10. Kingman Reef
11. Johnston Atoll
12. Jarvis Island



## Summary of Proposed Coral Critical Habitat

- Why we proposed coral critical habitat.
- How we delineated proposed coral critical habitat.
- Where proposed coral critical habitat is located.
- Implications of final coral critical habitat.
- Schedule for proposed and final coral critical habitat.

\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>

## Implications of final coral critical habitat

- Final coral critical habitat will protect the habitat of listed corals from the impacts of “federal actions”, meaning any project that federal agencies permit, fund, or carry out.
- Example:
  - A federal agency proposes to fund a project that may affect the essential features of coral critical habitat (hard substrate, suitable water quality).
  - The federal agency consults with NOAA Fisheries to: (1) ensure its action won't destroy or adversely modify the essential features; and (2) reduce the impacts of its action on the essential features.
- Reducing the effects of federal actions helps protect the habitat of listed corals, whether listed corals are present or not within the project areas.



## Implications of final coral critical habitat

- Final coral critical habitat will only apply to federal actions. It will not affect non-federal actions.
- Final coral critical habitat will not create a new refuge, sanctuary, or marine protected area, nor will it restrict public access.
- But companies or people with federal permits or funding could be impacted if the permitted or funded actions may affect coral critical habitat.



## Summary of Proposed Coral Critical Habitat

- Why we proposed coral critical habitat.
- How we delineated proposed coral critical habitat.
- Where proposed coral critical habitat is located.
- Implications of final coral critical habitat.
- Schedule for proposed and final coral critical habitat.

\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>

## Schedule for proposed and final coral critical habitat

- Public comment period for proposed coral critical habitat is open through February 25, 2021.
  - Submit a written public comment during tonight's meeting.
  - Provide an oral comment tonight during tonight's hearing.
  - Submit comments online until February 25, 2021: Go to [www.regulations.gov](http://www.regulations.gov), search for "NOAA-NMFS-2016-0131", click on "Comment Now!"
  - Instructions on submitting comments also available at <https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>
  - Questions? Please contact me at [lance.smith@noaa.gov](mailto:lance.smith@noaa.gov) or (808) 725-5131.
- Final coral critical habitat:
  - New and updated information collected during the public comment period will be incorporated into the final coral critical habitat rule.
  - Final coral critical habitat is scheduled for completion in approximately 1 year.



## Summary of Proposed Coral Critical Habitat

- ✓ Why we proposed coral critical habitat.
- ✓ How we delineated proposed coral critical habitat.
- ✓ Where proposed coral critical habitat is located.
- ✓ Implications of final coral critical habitat.
- ✓ Schedule for proposed and final coral critical habitat.

\*Published in the Federal Register on November 27<sup>th</sup>, 2020 (85 FR 83899)

<https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-threatened-indo-pacific-corals>