

DRAFT Coral Reef Ecosystem Restoration Working Group Recommendations for Sanctuary Advisory Council Consideration DRAFT

REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Upper Keys	Turtle Reef, FKNMS	Offshore Patch Reef - Federal waters	Coral Reef and Hardbottom, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids: staghorn, elkhorn; condition data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA, (6 mooring buoys present, installed/maintained by FKNMS) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - outplant sites Coral Restoration Foundation nursery target area Historic presence of Acroporids: staghorn Trap line and debris - needs debris clean-up/restoration FKNMS Permitted Restoration sites Known long-term research stations; Acroporid research data available FKNMS monitoring program thermograph station: nearby; existing long-term monitoring data available 	An offshore patch reef managed by FKNMS, in Federal waters. The site is a linear complex of individual and aggregated coral patch reefs, located approx. 4.1 nm southeast of Ocean Reef Club, surrounding green daymarker 1 and adjacent to daymarker 3. Accessible from Ocean Reef and Card Sound via Angelfish Creek, it is visited primarily by Ocean Reef residents for fishing/diving and charter operators conducting baitfishing activity on the backreef. Consumptive activities other than lobster trapping are allowed.
Upper Keys	Turtle Reef, Pennekamp (East Ocean Reef)	Mid-Channel patch reef - State Waters	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids: staghorn, elkhorn	<ul style="list-style-type: none"> FPS/John Pennekamp State Park Existing Management Area/Lobster Trapping Exclusion Zone No FKNMS Existing Management Area/SPA (FKNMS mooring buoys present) State Waters: 3 mooring buoys in Pennekamp, (5 installed/ maintained by FKNMS) 	<ul style="list-style-type: none"> East of Ocean Reef (circled, aka Turtle Rocks) Minimal use - low visitation Historic presence of Acroporids: staghorn, elkhorn FKNMS Vessel Grounding Restoration site: <i>Bad Boyz</i> FKNMS CREMP monitoring program thermograph station; existing long-term monitoring data available 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The site is a linear complex of aggregated coral patch reefs, located approx. 3.1 nm southeast of Ocean Reef Club within State waters. Accessible from Ocean Reef and Card Sound via Angelfish Creek, it is visited primarily by Ocean Reef residents and charter operators conducting baitfishing activity on the backreef. The proposed site partially overlaps the no lobstering zone, so consumptive activities are limited.
Upper Keys	Turtle Harbor	Mid-Channel patch reef - State Waters	Individual or Aggregated Patch Reef, Seagrass	large population <i>Acropora cervicornis</i> , is population of <i>A. palmata</i> , <i>A. prolifera</i> ; recovering, recruitment; exiting data available		<ul style="list-style-type: none"> Historic presence of Acroporids: staghorn, elkhorn, fused staghorn No FKNMS Existing Management Area/SPA FPS/John Pennekamp State Park Research Station: existing <i>Acropora</i> data available Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone (nearby) FKNMS Maritime Heritage Program Research site: <i>Guererro</i> Turtle Harbor Wreck (<i>Acropora palmata</i>, <i>A. cervicornis</i>, <i>A. prolifera</i> present) 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The site is a complex of individual and aggregated coral patch reefs with distinct halos surrounded by seagrass, located approx. 3 nm southeast of Ocean Reef Club, and 2.5 nm off North Key Largo Hammocks State Park, within State waters. Accessible from Ocean Reef and Card Sound via Angelfish Creek, it is visited primarily by Ocean Reef residents for fishing/diving and charter operators conducting baitfishing activity on the backreef.
Upper Keys	Basin Hill Shoals	Mid-Channel patch reef	Aggregate Reef, Individual or Aggregated Patch Reef	Reef in good condition; existing data available	<ul style="list-style-type: none"> FPS/John Pennekamp State Park Research Station: existing Acropora data available Existing Management Area: Protected by FPS/Key Largo Hammocks Botanical State Park Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Minimal use - low visitation Reef in good condition; corals survived the cold spell 2010 Historic presence of Acroporids: staghorn FPS selected - suggested all reefs here made a zone 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The site is a complex of individual and aggregated coral patch reefs, many with distinct halos among seagrass beds, located approx. 2.3 nm east of North Key Largo (Ocean Forest Estates), and approx. 5 nm northeast of Garden Cove, within State waters. The shoals receive boating pressure and impacts from vessels cruising Hawks Channel between Miami and Florida Keys destinations. Recreational fishing is the primary use, with research and a no lobstering zone limiting consumptive activity.
Upper Keys	Carysfort Reef - North	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; degraded Acroporids, recovering, recruitment - elkhorn	<ul style="list-style-type: none"> Existing Management Area: SPA is the largest (1.5 nm²) 	<ul style="list-style-type: none"> Minimal use - low visitation, hard to get to/remote Permitted/Coral Restoration Foundation - outplant sites Historic presence of Acroporids: elkhorn, staghorn; degraded but recruitment underway, recovering FKNMS Vessel Grounding Restoration sites; vessel grounding hot spot FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	Carysfort/South Carysfort Reef is one of the best developed reef systems in the Keys and is the largest of all SPAs. It contains a spur and groove reef, including well-developed stands of elkhorn coral, patch reefs and rubble. Historic Carysfort Lighthouse nearby, the site is located 5.6 nm off Key Largo. Accessible from Ocean Reef and Card Sound via Angelfish Creek. Some diving and fishing occur in the area, but little conflict among users.

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Upper Keys	South Carysfort	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; degraded Acroporids: recovering, recruitment (elkhorn); research & monitoring data available	● Existing Management Area - SPA is largest (1.5 nm2)	<ul style="list-style-type: none"> ● Little used - minimal use - low visitation ● Permitted/Coral Restoration Foundation - existing outplanting sites ● Target area for coral nursery ● Historic presence of Acroporids: elkhorn, staghorn; good elkhorn recruitment ● FKNMS Permitted Restoration sites ● FKNMS Vessel Grounding Restoration site: <i>Poco Loco</i> ● FKNMS Vessel Grounding sites: vessel grounding hot spot ● Long-term monitoring site, data available ● Known long-term research stations; Acroporid research data available 	Carysfort/South Carysfort Reef is one of the best developed reef systems in the Keys and is the largest of all SPAs. It contains a spur and groove reef, including well-developed stands of elkhorn coral, patch reefs and rubble. Historic Carysfort Lighthouse nearby, the site is located 5.6 nm off Key Largo. Accessible from Ocean Reef and Card Sound via Angelfish Creek. Some diving, fishing occur in the area, but little conflict among users.
Upper Keys	South of S. Carysfort Reef M/V Alec Owen Maitland	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Seagrass, Unconsolidated Sediment	Elkhorn coral, degraded, vessel grounding	<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA ● Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> ● Historic presence of Acroporids: elkhorn, staghorn ● FKNMS Vessel Grounding Restoration site: <i>M/V Alec Owen Maitland</i>, degraded ● Long-term restoration monitoring site, data available ● FKNMS monitoring program thermograph station; existing long-term monitoring data available 	An aggregate reef patch approx. 0.2 nm southwest of the southern end of South Carysfort SPA, is the location of a vessel grounding restoration site injured by the M/V Alec Owen Maitland. A single spar buoy marks the sight. Consumptive activities other than lobster trapping are allowed. Very low to no use, therefore good candidate for research, no known user conflicts at this site.
Upper Keys	Elbow Reef, North Elpis	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment	Acroporids: staghorn, elkhorn; degraded, vessel grounding - restoration monitoring data available as of 2008; Acroporid research data available	● Adjacent and outside Existing Management Area: SPA (0.3 nm2)	<ul style="list-style-type: none"> ● Low use - Low visitation ● Permitted/Coral Restoration Foundation - outplant sites ● Close to existing nursery ● Historic presence of Acroporids: elkhorn, staghorn ● FKNMS Vessel Grounding Restoration site: <i>Elpis</i>, degraded ● Long-term restoration monitoring site, existing data available as of 2008 ● Known long-term research stations; Acroporid research data available 	A well-defined spur and groove reef with healthy deepwater corals. The SPA located 5.5 nm off Key Largo, and 5 nm east of Rattlesnake Key. The SPA includes reef crest, rubble horns and extends out to the 30' depth contour. Lobster, ballyhoo fishermen use the area, significant recreational fishing adjacent to, and seaward of the reef. Minimal conflict between users, because not heavily used. The proposed site encompasses the <i>Elpis</i> grounding restoration site.
Upper Keys	Elbow Reef, Middle Section	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment		● Existing Management Area: SPA (0.3 nm2)	<ul style="list-style-type: none"> ● Heavy, heavy use area - higher visitation ● Middle of main reef area eliminated, to avoid conflict of users, fish feeding, popular tourist activity ● Permitted/Coral Restoration Foundation - existing outplanting sites ● Historic presence of Acroporids: elkhorn, staghorn ● FKNMS Vessel Grounding site ● FKNMS Maritime Heritage Program research & Shipwreck Trail site: <i>City of Washington</i> shipwreck ● Known long-term research stations; Acroporid research data available 	A well-defined spur and groove reef with healthy deepwater corals. The SPA located 5.5 nm off Key Largo, and 5 nm east of Rattlesnake Key. The SPA includes reef crest, rubble horns and extends out to the 30' depth contour. Lobster, ballyhoo fishermen use the area, significant recreational fishing adjacent to, and seaward of the reef. Minimal conflict between users, because not heavily used.
Upper Keys	Elbow Reef, South	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Reef Rubble, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn	<ul style="list-style-type: none"> ● Existing Management Area: SPA (0.3 nm2) ● Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone (portion outside SPA) 	<ul style="list-style-type: none"> ● Low use - Low visitation ● Permitted/Coral Restoration Foundation - outplant sites ● Close to existing nursery ● Historic presence of Acroporids: elkhorn, staghorn 	A well-defined Spur and Groove reef with healthy deepwater corals. The SPA located 5.5 nm off Key Largo, and 5 nm east of Rattlesnake Key. The SPA includes reef crest, rubble horns and extends out to the 30' depth contour. Lobster, ballyhoo fishermen use the area, significant recreational fishing adjacent to, and seaward of the reef. Minimal conflict between users, because not heavily used.
Upper Keys	Horseshoe Reef	Offshore Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn, staghorn, active recruitment, good; Pillar coral recruitment; <i>Diadema</i> recruitment area; Acroporid research data available	<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA; (2 FKNMS mooring buoys present, installed/maintained by FKNMS) ● Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> ● Permitted/Coral Restoration Foundation - existing outplanting sites ● Historic presence of Acroporids: elkhorn, staghorn; active recruitment underway ● Reef in good condition: great diversity of coral species; <i>Diadema</i> recruitment area ● FKNMS Permitted Restoration sites ● Known long-term research stations; Acroporid research data available 	A healthy offshore patch reef consisting of a cluster of individual and aggregated coral patch reefs configured in a distinct horseshoe shape, adjacent to a sand plain. The reef encompasses one of the largest thickets of elkhorn corals and significant parent thickets of staghorn corals. The site is located approx. 4.1 nm east of El Radabob Key off Key Largo, and 0.24 nm northeast of North North Dry Rocks reef. Accessible from Key Largo and Largo Sound via North and South Sound Creeks. It is visited primarily by recreational fishing, diving boats and used regularly by charter dive operators. Consumptive activities other than lobster trapping are allowed. It is also a research site.

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Upper Keys	North North Dry Rocks	Reef Margin/Fore Reef	Spur and Groove, Individual or Aggregated Patch Reef, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA; (3 FKNMS mooring buoys present, installed/maintained by FKNMS) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting site 	A small spur and groove fore reef with stands of elkhorn coral, slightly deeper than Key Largo Dry Rocks, including a faint spur and groove feature on the southwest end. The site is located approx. 4.4 nm off El Radabob Key, and 0.6 nm northeast of Key Largo Dry Rocks. The site has excellent accessibility from Key Largo and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. Consumptive activities other than lobster trapping are allowed.
Upper Keys	North Dry Rocks	Reef Margin/Fore Reef	Spur and Groove, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA; (3 FKNMS mooring buoys present, installed/maintained by FKNMS) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites 	A small spur and groove fore reef with stands of elkhorn coral, slightly deeper than Key Largo Dry Rocks, with faint spur and groove features on the north and south ends. The site is located approx. 4.2 nm off El Radabob Key, and 0.2 nm northeast of Key Largo Dry Rocks. The site has excellent accessibility from Key Largo and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. Consumptive activities are allowed.
Upper Keys	Key Largo Dry Rocks	Reef Margin/Fore Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: SPA is very small (0.05 nm2) 	<ul style="list-style-type: none"> High use - heavy visitation; rough weather - high windy day use Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn Anchoring issues need to be addressed, in seagrass area FKNMS Permitted Restoration site FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded 	A small spur and groove fore reef with stands of elkhorn coral (historically), and home to the "Christ of the Deep" statue. The SPA is ringed with mooring buoys, and located approx. 4.6 nm east of El Radabob Key, off Key Largo, seaward of Higdon's Reef/White Banks, extending to the 30-foot depth contour. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities.
Upper Keys	Grecian Rocks, East	Reef Margin/Fore Reef	Spur and Groove; Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; degraded; Acroporid research data available; condition data available	<ul style="list-style-type: none"> Existing Management Area: SPA (0.3 nm2) 2 mooring buoys present, installed/maintained by FKNMS 	<ul style="list-style-type: none"> Low use -low visitation by dive operators Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn - degraded FKNMS Permitted Restoration sites FKNMS Vessel Grounding Restoration site: <i>Perseverance</i>, reef framework; vessel grounding hot spot - degraded Known long-term research stations; Acroporid research data available; condition data available FKNMS CREMP monitoring program stations, thermograph station; existing long-term monitoring data available 	A widened spur and groove fore reef with stands of elkhorn coral, and shallow reef crest. The fore reef within the SPA has two mooring buoys, while the backside (west) is ringed by buoys. It is located approx. 4.4 nm east of El Radabob Key, off Key Largo, seaward of Higdon's Reef/White Banks, extending to the 30-foot depth contour. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities.
Upper Keys	Grecian Rocks, West	Back Reef, protected	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; queen conch population	<ul style="list-style-type: none"> Existing Management Area: SPA (0.3 nm2) 	<ul style="list-style-type: none"> High use -heavy visitation on rough weather days Popular safe snorkel spot when wind is strong from the east, high value to users, divers Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn, esp. southern end FKNMS Permitted Restoration sites FKNMS Vessel Grounding Restoration site: <i>Adaro</i> FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded FKNMS CREMP monitoring program stations, thermograph station; existing long-term monitoring data available 	A widened spur and groove fore reef with stands of elkhorn coral, and shallow reef crest. The fore reef within the SPA has a single mooring buoy, while the backside (west) is ringed by buoys. It is located approx. 4.4 nm east of El Radabob Key, off Key Largo, seaward of Higdon's Reef/White Banks, extending to the 30-foot depth contour. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. The SPA helps alleviate extensive user conflicts, with minimal displacement of user groups.
Upper Keys	Higdon's Reef	Mid-Channel patch reef	Aggregate Reef, Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment	degraded - cold spell; existing data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Cold spell 2010 mortality - degraded Historic presence of Acroporids FPS/John Pennekamp State Park Research Station: existing Acropora data available 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The reef consists of a massive complex of aggregated patch reefs with distinct halos and very shallow reef crests. The site is located roughly 3 nm east of El Radabob Key, off Key Largo, along the seaward edge of Hawks Channel and adjacent to White Banks. The proposed site overlaps the no lobstering zone, limiting consumptive activities.

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Upper Keys	Garrett's Reef	Mid-Channel patch reef	Individual or Aggregated Patch Reef, Seagrass	degraded - cold spell; existing data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone (small portion inside) 	<ul style="list-style-type: none"> FPS/Pennekamp Park Coral Nursery: existing outplant site; boulder corals Reef died in cold spell 2010, mortality - degraded; FPS requesting restoration Historic presence of Acroporids FPS/John Pennekamp State Park Research Station: existing <i>Acropora</i> data available FKNMS CREMP monitoring program stations nearby, inshore; existing long-term monitoring data available 	A mid-channel patch reef and hardbottom community that is the location of a FPS coral nursery, managed as part of the FPS John Pennekamp Coral Reef State Park. Corals were relocated to the nursery from a seawall repair site on Pumpkin Cay at Ocean Reef. The site is located roughly 1.5 nm east of El Radabob Key, off Key Largo, in the center of Hawks Channel and 0.6 nm northeast of Cannon Patch.
Upper Keys	Cannon Patch	Mid-Channel patch reef	Aggregate Reef, Individual or Aggregated Patch Reef, Seagrass	degraded - cold mortality; existing data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Coral damage, cold spell 2010 mortality - degraded Permitted/Coral Restoration Foundation - existing outplanting site Historic presence of Acroporids FPS/John Pennekamp State Park Research Station: existing <i>Acropora</i> data available 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The site consists of a collection of small and large clusters of aggregated patch reefs with distinct halos surrounded by seagrasses. The main patch is well marked, ringed with mooring buoys, spar buoys and a white shoal marker. The site is located roughly 2.5-2.8 nm east of El Radabob Key, off Key Largo, along the seaward edge of Hawks Channel and adjacent to White Banks. The proposed site overlaps the no lobstering zone, and it is used primarily for recreational and commercial fishing, snorkeling and diving.
Upper Keys	Benwood Wreck	Reef Margin/Fore Reef	Aggregate Reef; Pavement, Spur and Groove	degraded, vessel grounding	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA; (6 FKNMS mooring buoys and a spar buoy present, installed/maintained by FKNMS) 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids - degraded FKNMS Maritime Heritage Program research & Shipwreck Trail site: <i>Benwood</i> shipwreck 	A shipwreck site located within a faint, drowned spur and groove fore reef, approx. 6 nm southeast of Port Largo, off Key Largo, and 1.1 nm northeast of French Reef. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. The site is managed by the FKNMS as part of the Maritime Heritage Program Shipwreck Trail, with a spar buoy marking the wreck. Consumptive activities are allowed. The wreck is used for recreational and commercial fishing, snorkeling and diving.
Upper Keys	French Reef, North	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; Acroporid research data available	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone (portion outside SPA) 	<ul style="list-style-type: none"> Heavy use area Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn FKNMS Permitted Restoration sites Known long-term research stations; Acroporid research data available 	The spur and groove reef includes rubble fields to the 60-foot depth contour, and contains many caves and arches. The SPA is located 6 nm off Key Largo. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. Lobster fishermen use the surrounding areas.
Upper Keys	French Reef	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; Acroporid research data available	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone (portion outside SPA) 	<ul style="list-style-type: none"> Heavy use area Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn FKNMS Permitted Restoration sites FKNMS Vessel Grounding Restoration site Known long-term research stations; Acroporid research data available 	The spur and groove reef includes rubble fields to the 60-foot depth contour, and contains many caves and arches. The SPA is located 6 nm off Key Largo. The site has excellent accessibility from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and hosts commercial diving, snorkeling and fishing activities. Lobster fishermen use the surrounding areas.
Upper Keys	North White Bank Dry Rocks	Offshore Patch Reefs	Individual or Aggregated Patch Reef, Seagrass	Acroporids present: staghorn; degraded, disease, vessel groundings; Acroporid research data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone (portion outside SPA) 	<ul style="list-style-type: none"> Popular use on rough weather days White band disease outbreak in 2003 - degraded Cold spell 2010 mortality - degraded Permitted/Coral Restoration Foundation - existing outplanting site Historic presence of Acroporids: staghorn FKNMS Permitted Restoration sites FKNMS Vessel Grounding Restoration sites; vessel grounding hot spot - degraded Known long-term research stations; Acroporid research data available 	An offshore patch reef consisting of a cluster of individual and aggregated coral patch reefs with distinct halos surrounded by a dense seagrass community. The reef is located approx. 4.2 nm east of Rodriguez Key off Key Largo, and 0.2 nm northeast of White Banks Dry Rocks white shoal marker. Easily accessible from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks, it is visited primarily by residents and charter operators on windy days. Consumptive activities allowed, except within lobster trapping exclusion zones. The reef was designated a temporary closure area in 2003 due to a white-band disease outbreak that resulted in the death of staghorn corals.

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Upper Keys	South White Banks Dry Rocks	Offshore Patch Reef	Individual or Aggregated Patch Reef, Seagrass	Acroporids present: staghorn; degraded, disease; Acroporid research data available	<ul style="list-style-type: none"> • No FKNMS Existing Management Area/SPA • Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone (portion outside SPA) 	<ul style="list-style-type: none"> • Popular use on rough weather days • White band disease outbreak in 2003 - degraded • Cold spell 2010 mortality - degraded • Permitted/Coral Restoration Foundation - existing outplanting site • Historic presence of Acroporids: staghorn • FKNMS Permitted Restoration sites • FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded • Known long-term research stations; Acroporid research data available 	An offshore patch reef consisting of a cluster of individual and aggregated coral patch reefs with distinct halos surrounded by a dense seagrass community. The reef is located approx. 4.2 nm east of Rodriguez Key off Key Largo, and adjacent to White Banks Dry Rocks white shoal marker. Easily accessible from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks, it is visited primarily by residents and charter operators on windy days. Consumptive activities allowed, except within lobster trapping exclusion zones. The reef was designated a temporary closure area in 2003 due to a white-band disease outbreak that resulted in the death of staghorn corals.
Upper Keys	Mosquito Bank	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment	Acroporids present: staghorn; degraded - cold spell, existing research data available; boulder corals present	<ul style="list-style-type: none"> • No FKNMS Existing Management Area/SPA • Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> • Killed by cold spell 2010 mortality - degraded • Permitted/Coral Restoration Foundation - existing outplanting site • Historic presence of Acroporids: previously good populations of staghorn • FPS/John Pennekamp State Park Research Station: existing <i>Acropora</i> data available 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park. The site consists of a collection of small and large clusters of aggregated patch reefs with distinct halos surrounded by seagrasses. The patches are marked with mooring buoys, spar buoys and the flashing green light tower/marker 35. Easily accessible from Key Largo's Port Largo, and Largo Sound via South Sound Creek, the site is located roughly 2 nm southeast of El Radabob Key and 2.3 nm southeast of Port Largo in the center of Hawks Channel. The proposed site overlaps the no lobstering zone, limiting consumptive activities.
Upper Keys	Admiral Reef	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment	historic presence Acroporids; degraded - cold spell	<ul style="list-style-type: none"> • No FKNMS Existing Management Area/SPA (a single spar buoy present, installed/maintained by FKNMS) • Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> • Cold spell 2010 mortality - degraded • Permitted/Coral Restoration Foundation - existing outplanting site • Historic presence of Acroporids: previously good populations of staghorn • FKNMS Vessel Grounding Restoration - degraded • FKNMS CREMP monitoring program stations; existing long-term monitoring data available 	A mid-channel patch reef managed as part of the FPS John Pennekamp Coral Reef State Park, with a lobster trapping exclusion zone. The site appears as the tips of two horns on a larger patch reef, and consists of a collection of small and large clusters of aggregated patch reefs with distinct halos surrounded by seagrass beds. Easily accessible from Key Largo's Port Largo, and Largo Sound via South Sound Creek, the reef is located 2.8 nm east of Rodriguez Key and 3.3 nm southeast of Port Largo, along the seaward edge of Hawks Channel and south of Mosquito Banks light. The reef is marked by a spar buoy, and is primarily used by private snorkeling and fishing boaters, but also by some commercial operators on rough weather days.
Upper Keys	Sand Island	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn; degraded; Acroporid research data available	<ul style="list-style-type: none"> • No FKNMS Existing Management Area/SPA (3 FKNMS mooring buoys present, 4 installed/maintained by FKNMS) • Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> • Permitted/Coral Restoration Foundation - outplanting sites • Historic presence of Acroporids: elkhorn • FKNMS Permitted Restoration sites • Known long-term research stations; Acroporid research data available 	A fore reef exhibiting a few shallow spur and groove features with stands of elkhorn coral, transitioning to a faint, deep spur and groove reef seaward. The site is located by a white shoal marker, 4.6 nm east-southeast of Rodriguez Key, 5.25 nm off Key Largo and approx. 0.2 nm northeast of Molasses Reef. The site is highly accessible from Port Largo, Largo Sound via South Sound Creek and central Key Largo for commercial diving and snorkeling activities, especially on days with strong currents. Consumptive activities allowed, except within lobster trapping exclusion zones.
Upper Keys	Memorial Reef Gardens North (1)		Individual or Aggregated Patch Reef, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> • No FKNMS Existing Management Area/SPA • Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> • Permitted/Coral Restoration Foundation - existing outplanting sites • FKNMS Permitted Restoration sites 	A large offshore seagrass community encompassing the significant rubble horn feature at Sand Island, a portion of the Sand Island restoration zone and a section of the deep Molasses Reef Channel, located inside the reef tract. The site is centered approximately 4 nm southeast of Rodriguez Key and overlapping Sand Island.

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Upper Keys	Molasses Reef	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	economic data available	<ul style="list-style-type: none"> Existing Management Area: SPA (0.3 nm2) 	<ul style="list-style-type: none"> Heavy use, highest visitation (next to Sand Key) Economic data available (51 K visitors/year) Area of concentrated charter dive operators' use Permitted/Coral Restoration Foundation - existing outplanting sites Closer proximity to existing coral nursery FKNMS CREMP, CDC monitoring program stations, thermograph stations; existing long-term monitoring data available (extensive) 	A spur and groove reef that includes a significant number of boulder corals and a deep wall. Located 6 nm off Key Largo, adjacent to the historic Molasses Reef Light and the south white shoal marker. The SPA is highly accessible from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks and the most heavily visited reef in the Upper Keys for diving. It serves to reduce diver and hook-and-line fishermen conflicts.
Upper Keys	Molasses Reef - North Wellwood Restoration	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; monitoring data available; degraded, vessel grounding	<ul style="list-style-type: none"> Existing Management Area: SPA (0.3 nm2) 	<ul style="list-style-type: none"> Low use, low visitation Permitted/Coral Restoration Foundation - existing outplanting sites Closer proximity to existing coral nursery Historic presence of Acroporids: elkhorn, staghorn FKNMS Vessel Grounding Restoration site: M/V <i>Wellwood</i>, degraded Long-term restoration monitoring site, existing data available FKNMS CREMP, CDC monitoring program stations, thermograph stations; existing long-term monitoring data available (extensive) 	A spur and groove reef that has been heavily degraded by a large ship grounding. Located 6 nm off Key Largo, adjacent to the historic Molasses Reef Light and the north white shoal marker. The SPA is highly accessible from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks. The north end is visited less frequently and has undergone several phases of structural and biological restoration since the grounding injury in 1984.
Upper Keys	Three Sisters	Offshore Patch Reefs (Hardbottom w/patchy coral heads)	Individual or Aggregated Patch Reef, Seagrass		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA (2 moorings buoy present, installed/maintained by FKNMS) Existing Management Area: FPS/John Pennekamp State Park/Lobster Trapping Exclusion Zone 		An offshore patch reef consisting of hardbottom with individual boulder corals and aggregated patch reefs, exhibiting distinct halos surrounded by a seagrass and a white bank. Located 2.7 nm southeast of Rodriguez Key, it is easily accessible from Key Largo's Port Largo, and Largo Sound via North and South Sound Creeks. Historically marked by three daymarkers, the site is now marked by a two mooring buoys. It is located approx. 1 nm south of Admirals Reef, and is used primarily by recreational fishermen.
Upper Keys	Pickles Reef	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Reef Rubble	Acroporids; Pillar coral present, degraded	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 3 mooring buoys present within proposed zone, 4 installed/maintained by FKNMS Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids; Pillar coral - degraded FKNMS Permitted Restoration sites: multiple 	A widened spur and groove fore reef with a shallow reef crest and two rubble horns, that tapers off to a deeper, drowned spur and groove seaward. The fore reef within the proposed restoration zone has three mooring buoys. It is located approx. 4.1 nm southeast of Rodriguez Key and 4.6 nm east of Tavernier Key, off Key Largo. The site encompasses the shallow 3-foot reef crest and extends beyond the 40-foot depth contour. The reef has excellent accessibility from Key Largo and has multiple permitted restoration stations. Pickles reef is visited by recreational and commercial fishing, snorkeling and diving boaters. Consumptive activities are allowed.
Upper Keys	Snapper Ledge	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; active restoration; good condition	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA (2 mooring buoys present, installed/maintained by FKNMS) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Heavy use - by divers, charter operators Permitted/Coral Restoration Foundation - Nursery and existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn Source of parent colonies for nurseries FKNMS Permitted Restoration sites 	This patchy spur and groove reef is a popular site with the dive operators. Located 5.4 nm off Tavernier, just southwest of Pickles Reef. CRF began its Snapper Ledge elkhorn nursery in 2009, and has proven successful producing hundreds of elkhorn colonies a year. Known for it's large population of Snapper often seen at the northwest tip of the patch. In addition to charter dive and fishing operators, the site is used by recreational divers and fishermen.
Upper Keys	North of Conch Reef	Reef Margin/Fore Reef (Shallow Reef)	Aggregate Reef, Pavement, Reef Rubble, Unconsolidated Sediment	Existing coral; circled area w/good coral cover	<ul style="list-style-type: none"> No FKNMS Existing Management Area, and proposed zone overlaps a portion of the small Conch Reef SPA (0.07 nm2) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone located nearby, north of proposed zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - outplanting sites Historic presence of Acroporids: existing corals FKNMS Permitted Restoration sites nearby FKNMS CREMP monitoring program stations; existing long-term monitoring data available 	A shallow fore reef crest on Conch Reef, the shallowest tier of aggregate reef, the site is located adjacent to the north end of Conch Reef SPA, along the landward edge of the SPA. Key features include good conch habitat, good Acroporid coral cover and well-developed stands of rare pillar coral. The site is located approx. 3.1 nm southeast of Tavernier Key and 5.5 nm south of Rodriguez Key. The reef is easily accessible from Key Largo, is heavily used by divers with some tropical fish collecting in the rubble zone. There is little conflict among users, consumptive activities are allowed in the portion outside the SPA.

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Upper Keys	Conch Reef	Reef Margin/Fore Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Pillar coral, conch	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.07 nm²); the SPA is adjacent to the Conch Reef Research Only special-use designated zone, which encompasses the Aquarius underwater habitat Restoration Zone proposed overlaying the north end of SPA, 2 buoys present within zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids FKNMS Permitted Restoration sites Long-term restoration research stations; Acroporid research data available; condition data available FKNMS Monitoring program stations: CREMP stations, multiple others; existing long-term monitoring data available; condition data available 	Conch Reef, a tiered aggregate reef system with faint spur and groove characteristics, has one of the best developed reef wall systems in the Keys. Key features include good conch habitat and well-developed stands of rare pillar coral. The SPA, located approx. 3.3 nm southeast of Tavernier Key, 5.5 nm south of Rodriguez Key, is rectangular and extends seaward to a depth of about 45 feet, including a portion of the reef wall. The reef is easily accessible from Key Largo, is heavily used by divers with some tropical fish collecting in the rubble zone. Catch and release fishing by trolling is allowed in the SPA, and recreational fisherman troll the reef wall in 160 to 180 reef of water. The proposed restoration zone is located on the North end of SPA.
Upper Keys	Little Conch Reef	Offshore Patch Reef	Aggregate Reef, Pavement, Seagrass, Unconsolidated Sediment	data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Existing data available - historical benthic analysis, photos, transects 	A deeper aggregate reef bordered by patchy seagrass landward, transitions to deep spur and groove seaward. Located southwest of Conch reef, the reef is 3.5 nm southeast of Tavernier Key off Key Largo. Trolling is allowed and recreational fisherman troll the reef wall in 160 to 180 reef of water. The proposed restoration zone overlaps a lobster trapping exclusion zone. Consumptive activities allowed, except the portion located within a lobster trapping exclusion zones.
Upper Keys	Hen and Chickens	Mid-Channel patch reef	Individual or Aggregated Patch Reef, Pavement, Seagrass	Mountain star, boulder corals; degraded - cold spells; Acroporids: Elkhorn	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.2 nm²) 	<ul style="list-style-type: none"> High use - heavy visitation Cold spell 2010 mortality - degraded (also 1970) Vulnerable to extreme temperatures Historic presence of Acroporids: elkhorn, staghorn Mountainous star, boulder corals present FKNMS monitoring program thermograph station; existing long-term monitoring data available 	A unique mid-channel patch reef complex with mounds of star corals showing signs of damage/decline. The SPA is 2 nm off Plantation Key, in the middle of Hawks Channel. It is easily accessible, with mooring buoys, and a high-use, low-conflict zone. Commercial and recreational snorkelers and divers are the primary users.
Upper Keys	Davis Reef	Reef Margin/Fore Reef (Transitional, low relief)	Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.2 nm²) (Research Closure suggested) 	<ul style="list-style-type: none"> Heavy use area Permitted/FWRI Restoration - Nursery, existing outplanting sites and active research site Historic presence of Acroporids FKNMS Permitted Restoration sites 	Low-relief transitional reef with well-developed gorgonian coral. The SPA, located 4 nm off Plantation Key, helps to protect unique deepwater corals. It is easily accessible and heavily used. Used by Islamorada's divers, recreational fishermen, a few tropical fish collectors, and commercial fishermen offshore.
Upper Keys	Davy-Crocker Reef	Reef Margin/Fore Reef	Aggregate Reef, Pavement, Unconsolidated Sediment	good boulder corals	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA FKNMS mooring buoy present, 1 installed/maintained by FKNMS 	<ul style="list-style-type: none"> Good boulder corals 	An aggregate reef inshore with individual patches of boulder corals, bordered by a linear intermediate reef margin that transitions to a deep spur and groove reef seaward. The site is located 3.6 nm southeast of Plantation Key, and approx. 0.5 nm northeast of Crocker Reef. Consumptive activities are allowed. Users include commercial and recreational snorkelers, divers and fishermen.
Middle Keys	Cheeca Rocks	Inshore Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Scattered Coral/Rock in Unconsolidated Sediment, Seagrass	degraded, vessel groundings	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.05 nm²) 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - outplant sites FKNMS Permitted Restoration sites FKNMS Vessel Grounding Restoration sites; vessel grounding hot spot - degraded 	The SPA is the only zone in the Middle Keys designated to protect inshore patch reefs. Located 0.5 nm off Upper Matecumbe Key (Islamorada). An easily accessible site, heavily used, especially by visitors to Cheeca Lodge. Primary uses include diving, snorkeling and education. No major consumptive users, a few tropical fish collectors displaced.

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Middle Keys	Alligator Reef	Reef Margin/Fore Reef	Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: SPA (0.02 nm²) 	<ul style="list-style-type: none"> Heavily used - easily accessible (for a variety of recreational, commercial uses) Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: staghorn Deeper, drowned spur and groove reef typical of the Middle Keys; marks the transition area from shallower reefs of the Upper Keys FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	A drowned spur and groove bank reef system with transitional, intermediate reef features, surrounding the historic Alligator Reef Lighthouse. The SPA is located 3.5 nm southeast of Upper Matecumbe Key and protects the drowned spur and groove system, reef crest, and a portion of the northeast rubble ridge. Diving and snorkeling activities focus on the reef crest/spur and groove reef, while commercial fishing is on the rubble and surrounding flats areas, including tropical fish collecting and ballyhoo fishing. Catch-and-release fishing by trolling is allowed in the SPA. The SPA serves to alleviate user conflicts with minimal displacement of any single user group. This deeper, drowned spur and groove reef type is typical of the Middle Keys, marking the geological transition from the shallower reefs of the Upper Keys.
Middle Keys	South of Lower Matecumbe	Reef Margin/Fore Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids: staghorn	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: staghorn FKNMS Permitted Restoration sites 	A linear reef margin complex located 4.4 nm south of Upper Matecumbe Key, 3.8 nm southeast of Lower Matecumbe and approx. 1.5 nm southwest of Alligator Reef Light. Habitat consists of aggregate patch reefs with transitional, intermediate reef characteristics of a very faint drowned spur and groove reef that tapers off to deep reef. This reef type is typical of the Middle Keys, marking the geological transition from the shallower reefs of the Upper Keys. Consumptive activities allowed, except within lobster trapping exclusion zones.
Middle Keys	Memorial Reef Garden South (2)	Reef Margin/Fore Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids: staghorn	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: staghorn FKNMS Permitted Restoration sites 	The site encompasses a portion of the linear reef margin complex located 4.4 nm south of Upper Matecumbe Key, 3.8 nm southeast of Lower Matecumbe and approx. 1.5 nm southwest of Alligator Reef Light. Habitat consists of aggregate reef, and deep transitional reef with characteristic drowned spur and groove reef features typical of the Middle Keys, marking the geological transition from shallower reefs of the Upper Keys. Consumptive activities allowed, except within lobster trapping exclusion zones.
Middle Keys	Caloosa Rocks	Inshore Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Mountainous star, boulder corals present 	An inshore patch reef consisting of a complex of large mounds of star coral. The site is located 0.7 nm southeast of the southern tip of Lower Matecumbe Key, along the inside edge of Hawks Channel and encompasses a portion of the seagrass community nearby. Consumptive activities are allowed, heavily used by recreational fishermen and charter fishing operators out of Islamorada.
Middle Keys	North of Tennessee Reef	Offshore Patch Reef	Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Good Hardbottom 	An aggregate, offshore patch reef with underlying remnant spur and groove features, surrounded by sparse seagrass patches. The site is located 3.6 nm southeast of Long Key and 3.7 nm southeast of Craig Key, offshore of the Channel 5 bridge. Consumptive activities are allowed.
Middle Keys	Tennessee Reef	Reef Margin/Fore Reef	Aggregate Reef, Pavement	Acroporids: staghorn	<ul style="list-style-type: none"> Existing Management Area: Research Only designated special-use zone (0.2 nm²) No mooring buoys present 	<ul style="list-style-type: none"> Historic presence of Acroporids: staghorn Deep Reef Spur and Groove FKNMS CREMP monitoring program stations, thermograph station; existing long-term monitoring data available 	A deep, drowned spur and groove reef, extending seaward to the 30-foot depth contour encompassing unique deepwater, slow-growth corals and sponges. A "Research Only" zone located 4 nm south of Long Key. A low-use, inaccessible site with no mooring buoys, not a prime dive spot. Located in the path of Florida Bay waters and also an area with good water quality. Fishing and lobster trapping inshore.

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Middle Keys	South of Long Key Viaduct, North	Reef Margin/Fore Reef	Spur and Groove, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 		An intermediate drowned spur and groove reef, extending seaward to the 30-foot depth contour encompassing unique deepwater, slow-growth corals and sponges. The site is approx. 4.6 nm south of Long Key and 5.2 nm southeast of Conch Key. A low-use, inaccessible site with no mooring buoys, not a prime dive spot. Located in the path of Florida Bay waters and also an area with good water quality. Fishing and lobster trapping inshore, as consumptive activities are allowed.
Middle Keys	South of Long Key Viaduct, South	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 		A reef margin, aggregate reef complex in a more-or-less linear pattern landward, creates a prominent border along a drowned spur and groove intermediate reef extending seaward, that transitions to deep reef, sloping to the 60-foot depth contour. The site is approx. 5 nm southeast of the west end of Long Key and 4.7 nm southeast of Conch Key and the viaduct. A low-use, inaccessible site with no mooring buoys, not a prime dive spot. Located in the path of Florida Bay waters and also an area with good water quality. Fishing and lobster trapping inshore, as consumptive activities are allowed.
Middle Keys	South of Little Duck Key	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement. Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Large rectangle, multiple reefs FKNMS Maritime Heritage Program research & Shipwreck Trail site: <i>Adeline Baker</i> shipwreck; one spar buoy and a single mooring buoy present, installed/maintained by FKNMS 	A linear reef margin complex along the southwest end of the proposed zone that fringes an intermediate to deep, drowned spur and groove reef system exhibiting transitional reef features. Three additional reef margin features to the northeast along the reef tract are included, also exhibiting the same drowned spur and groove system. The site is located just seaward of the <i>Adeline Baker</i> shipwreck, and 4 nm south-southeast of Duck Key. Consumptive activities are allowed.
Middle Keys	South of Grassy Key	Reef Margin/Fore Reef	Spur and Groove, Pavement. Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> FKNMS Permitted Restoration site 	A reef margin/aggregate reef borders a faint spur and groove intermediate reef on the shoreward edge, that transitions seaward over two linear deep reef slopes with drowned spur and grooves. Rubble, sand and very patch seagrass extends landward. The site is 4.4 nm southeast of Grassy Key and 1.8 nm northeast of lighted reef marker 20. Consumptive activities are allowed.
Middle Keys	[East] Turtle Shoal - Marker 45 Reef	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	good bottom	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Good bottom Inclusion of Marker 45 Permitted/TNC - FWRI Restoration Site - existing outplanting sites Historic presence of Acroporids: staghorn FKNMS CREMP monitoring program stations nearby; existing long-term monitoring data available 	A complex of mid-channel patch reefs consisting of individual and aggregated coral patches (slight spur-shaped pattern) surrounded by distinct halos and seagrass beds. The shoal is located approx. 2.5 nm south of Toms Harbor Keys, 2 nm northeast of West Turtle Shoal and adjacent to lighted green marker 45, (less than 0.3 nm southeast). The reef is easily accessible to residents of and visitors to Duck Key, Hawk's Cay, Grassy Key, Crawl Keys and the Deer Keys for fishing and lobstering. Consumptive activities are allowed.
Middle Keys	[West of] East Turtle Shoal	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Permitted/TNC - FWRI Restoration Site - existing outplanting sites FKNMS Permitted Restoration Site FKNMS CREMP monitoring program stations nearby; existing long-term monitoring data available 	A relatively shallower complex of mid-channel patch reefs consisting of individual and aggregated coral patches (slight linear pattern) surrounded by a distinct halos and dense seagrass beds. The shoal is located approx. 2.2 nm southwest of Grassy Key, and about equal distance between East and West Turtle Shoals (0.8 nm). The reef is easily accessible to residents of and visitors to Duck Key, Hawk's Cay, Grassy Key, Crawl Keys and the Deer Keys for fishing and lobstering. Consumptive activities are allowed.

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Middle Keys	West Turtle Shoal-Marker 47 Reef	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment	boulder corals	<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> ● Popular dive site, nice boulder corals ● Inclusion of Marker 47 ● Permitted/TNC - FWRI Restoration Site - existing outplanting sites ● FKNMS CREMP monitoring program stations; existing long-term monitoring data available 	A more linear-shaped complex of mid-channel patch reefs consisting of individual and aggregated coral patches surrounded by distinct halos and seagrass beds, situated along the seaward edge of Hawks Channel . The shoal is located approx. 2.7 nm south of Grassy Key, 2.2 nm southeast of Deer Key and 0.7-0.9 nm north of Coffins Patch. The reef is adjacent to green daymarker 47 and easily accessible to residents of and visitors to Duck Key, Hawk's Cay, Grassy Key, Crawl Keys and the Deer Keys for fishing and lobstering. The reef is a popular site for divers. Consumptive activities are allowed.
Middle Keys	Marker 20 Reef	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> ● Hardbottom 	An intermediate spur and groove reef with aggregated patches, partially buried by sand, that transitions to a deeper and faint spur and groove coral slope. The site is located almost 4 nm southeast of Coco Plum, Crawl Key and Deer Key off Marathon and approx. 0.7 nm south of Coffins Patch. The site is named for flashing red reef light/marker 20, located adjacent to and landward of the spurs. Consumptive activities are allowed.
Middle Keys	Coffins Patch	Offshore Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Reef Rubble, Seagrass, Unconsolidated Sediment	Pillar coral present	<ul style="list-style-type: none"> ● Existing Management Area: SPA (0.4 nm2) 	<ul style="list-style-type: none"> ● Permitted/TNC - FWRI Restoration Site - existing outplanting sites ● Pillar corals present here, significant population 	Characteristic of an offshore patch reef, the reef includes rare pillar coral, other unique corals and a rubble field on the back reef. The SPA is located 4 nm south of Grassy Key or southeast of Key Colony Beach. It's easily accessible, low-use and visited by divers, and formerly recreational fishermen, treasure hunters and tropical fish collectors.
Middle Keys	South of Key Colony Beach 1	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> ● Permitted/TNC - FWRI Restoration Site - existing outplanting sites 	Two prominent offshore patch reefs surrounded by sand halos and seagrass beds, give way to intermediate reef with faint, low profile spur and groove reefs seaward. The patch is located roughly 3.6 nm south of Key Colony Beach and 2 nm southeast of Hawk Channel daymarker 45 Consumptive activities are allowed.
Middle Keys	South of Key Colony Beach 2	Mid-Channel Seagrass, Hardbottom or Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	coral nursery, Acroporids; existing data available	<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> ● Permitted/TNC- FWRI Restoration Site - Nursery, outplant site ● FKNMS Permitted Restoration Site ● Pillar coral Restoration Research Site; existing data available 	A mid-channel seagrass and hardbottom community that is the location of a FWRI coral nursery, managed as part of the TNC coral nursery partnership. Located south of Marker 48 Reef and Key Colony Beach. Consumptive activities are allowed.
Middle Keys	South of Key Colony Beach/Marker 48 Reef	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA (FKNMS mooring buoys present, 3 are installed/maintained by FKNMS) 	<ul style="list-style-type: none"> ● FKNMS Grounding Restoration Site: concrete debris removal ● Approx. 1 nm north of Permitted/TNC-FWRI Restoration/Nursery, outplant site; and Pillar coral restoration research site ● FKNMS CREMP monitoring program stations; existing long-term monitoring data available 	A mid-channel patch reef system of individual and clusters of aggregated coral heads with distinct halos surrounded by a dense seagrass community. The site is located approx. 1.4 nm south of the tip of Key Colony Beach and encompasses "Marker 48" along the edge of Hawks Channel. The reef is adjacent to red daymarker 48, and is easily accessible to residents of Key Colony beach, and Marathon via Vaca Cut. Consumptive activities are allowed.
Middle Keys	East Washerwoman Shoal	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass		<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA ● No mooring buoys present 	<ul style="list-style-type: none"> ● Nice Hardbottom 	A large mid-channel patch reef consisting of aggregated coral patches surrounded by halos and seagrass beds. The shoal is easily accessible to Marathon residents situated by flashing green reef light/marker 49 and centrally located in Hawks Channel offshore from Sombrero Beach. The shoal is located 1.2 nm south of East Sister Rock and 1.4 nm southeast of Tingler's Island just east of Sombrero Beach. Consumptive activities are allowed.
Middle Keys	West of East Washerwoman Shoal	Mid-Channel Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> ● No Existing Management Areas present/ SPA Closed area 	<ul style="list-style-type: none"> ● Patch Reefs 	An aggregated patch reef and hardbottom community located between Marathon and Delta Shoals. The proposed zone is located approx. 1.5 nm south of Boot Key and 1 nm west of East Washerwoman Shoal. Consumptive activities are allowed.

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Middle Keys	Delta Shoal	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> Permitted/TNC - FWRI Restoration Site - existing outplanting sites FKNMS Permitted Restoration site: Diadema research, (FWC/FWRI) FKNMS Maritime Heritage Program & Shipwreck Trail site: <i>North American</i> shipwreck; one spar buoy and a single mooring buoy present, installed/maintained by FKNMS 	A spur and groove fore reef, with a prominent rubble berm, that drops off as an intermediate, drowned spur and groove reef to the 30-foot depth contour. The site is located approx. 3.3 nm south of Boot Key (Marathon), and 1 nm northeast of the historic Sombrero Lighthouse. Used heavily by recreational, charter and commercial fishermen and divers, consumptive activities are allowed.
Middle Keys	Sombrero Key	Reef Margin/Fore Reef	Spur and Groove, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.2 nm²) 	<ul style="list-style-type: none"> FKNMS Vessel Grounding site: <i>Corinthia</i> FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	A spur and groove reef with stands of elkhorn, reef crest and rubble field. The SPA is located 3.5 nm seaward of Boot Key (Marathon), and includes the historic Sombrero Lighthouse. Diving and snorkeling occurs in this high-use area. Catch-and-release trolling allowed, recreational fishing off the back and sides of the reef, commercial fishing seaward. The SPA serves to reduce diver and recreational fishing user conflicts.
Middle Keys	West of Sombrero Key	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> Permitted/TNC - FWRI Restoration Site - existing outplanting site FKNMS CREMP, CDC monitoring program and thermograph stations nearby - to east in SPA; existing long-term monitoring data available 	A deep transitional, intermediate reef with faint spur and groove features located 4 nm southwest of Boot Key (Marathon) and west of Sombrero Reef. Easily accessible from Marathon, recreational fishing, and trolling are known to exist in the general area, with commercial fishing offshore. Consumptive activities are allowed.
Lower Keys	Big Pine Shoal	Offshore Patch Reef and Reef Margin/Fore Reef			<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Permitted/Mote Marine Lab Restoration Site - existing outplanting site 	An offshore patch reef marked by flashing red reef light/marker 22, located approx. 4 nm northeast of Looe Key Reef marker 24. The shoal is more characteristic of an offshore patch reef that exhibits very faint, drowned spur and groove features. It can be found approximately 4.3 nm south of Big Pine Key and 4.8 nm south of Spanish Harbor Bridge. Consumptive activities other than lobster trapping are allowed.
Lower Keys	Cook's Island Patch Reefs	Inshore Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass	boulder corals present, degraded - cold spell, vessel groundings	<ul style="list-style-type: none"> Outside Existing FKNMS Management Areas/SPA, no mooring buoys present Newfound Harbor SPA nearby, located to southwest of 	<ul style="list-style-type: none"> Popular use area on rough weather days/SEACAMP Permitted/Mote Marine Lab Restoration Site - existing outplanting sites, "re-skinning" outplant demo project sites Cold spell 2010 mortality - degraded Mountainous star, boulder corals present Inshore Patch Reef - selection criteria consideration FKNMS Permitted Restoration sites FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded 	An inshore patch reef complex adjacent to and toward the east of the Newfound Harbor SPA off Big Pine Key, and seaward of the Newfound Harbor Keys. The site encompasses a complex of nearshore, individual and aggregated patch reefs. It is located between 0.5 nm offshore of Big Munson Key and approx. 0.2 nm offshore of Cook's Island, with the seaward extent around the 18-foot depth contour. Good accessibility, low user numbers, but a high-use area for environmental education, bait fishing, and spearfishing. Consumptive activities are allowed.
Lower Keys	Newfound Harbor SPA S/V Bateau Duhe Voyager - Bela Zeky Restorations	Inshore Patch Reef	Individual or Aggregated Patch Reef, Pavement	boulder corals, Acroporids present: elkhorn; degraded - vessel groundings, cold spell	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²), proposed sites are within, and outside 		This SPA is the only inshore patch reef complex protected in the Lower Keys, and contains a series of nearshore patch reefs located less than 0.5 nm from the entrance of Newfound Harbor. It is centered on two patch reefs along the shoreline of the western Newfound Harbor Keys, adjacent to flashing red channel marker 50, with the seaward extent along the 18-foot depth contour. Good accessibility, low user numbers, but a high-use area for environmental education, and formerly bait fishing, and spearfishing.

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Lower Keys	Content Keys	Hardbottom/Backcountry	Individual or Aggregated Patch Reef	boulder corals present (<i>Diploria</i> heads); existing data available	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> Boulder corals present: especially many <i>Diploria</i> heads FKNMS CREMP Monitoring program stations, thermograph station nearby; existing long-term monitoring data available (Shark Reef - coordinates available; Harbor Key Light thermograph) 	A hardbottom complex of aggregated patch reefs described as consisting of boulder corals, especially brain corals. The most prominent shallow feature is a linear ledge drop-off colonized by multiple coral patches, that runs bayside (north to northeast) of the northernmost Content Keys. The proposed site is located immediately north of the mangrove islands of the Content Keys, with tricky shallow water access from Big Pine Key (approx. 5.5 nm northwest) and the Torch Keys. It is also 1.6 nm southwest of Upper Harbor Key and approx. 3 nm southwest of Upper Harbor Key Light, or flashing red channel marker 67. Consumptive activities are allowed.
Lower Keys	Looe Key Reef SPA R/V Columbus Iselin Restoration	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Unconsolidated Sediment	Acroporids present: staghorn, elkhorn; degraded - hurricanes, disease, vessel groundings	<ul style="list-style-type: none"> Existing Management Area: SPA (0.3 nm²) 	<ul style="list-style-type: none"> High use, heavy visitation, heavily utilized; 38 mooring buoys, 2-3 boats per buoy during periods of high use Historic presence of Acroporids: elkhorn, staghorn; degraded - hurricanes, diseases FKNMS Vessel Grounding Restoration site: R/V <i>Columbus Iselin</i>, mooring buoy #17 spur; long-term restoration monitoring site, existing data available FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program and known long-term research stations, thermograph stations; ongoing research and existing long-term monitoring data available (extensive) 	A classic shallow spur and groove reef, the SPA expands protection to include transitional, intermediate reefs seaward to the 45- foot depth contour line, and a large seagrass community bordered by rubble fields and horns landward. It's located 5.5 nm south of Ramrod Key, 8.8 nm southwest of Bahia Honda Key, is easily accessible and well-marked by flashing red reef light/marker 24.
Lower Keys	West of Looe Key Reef/SPA	Reef Margin/Fore Reef	Drowned Spur and Groove/Transitional Reef; Aggregate Reef; Unconsolidated Sediment	Acroporids: staghorn	<ul style="list-style-type: none"> Existing Management Area: Looe Key EMA (5 nm²), proposed site is within the EMA, but outside the Looe Key SPA (overlapping CREMP deep monitoring stations) Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone 	<ul style="list-style-type: none"> Historic presence of Acroporids: staghorn FKNMS CREMP, CDC monitoring program and known long-term research stations, thermograph stations; ongoing research and existing long-term monitoring data available (extensive) 	A small portion of the transitional, intermediate reef with well developed, low-profile spur and groove features located adjacent to the southwest corner of and outside the Looe Key SPA. It's located 5.5 nm south of Ramrod Key, 8.8 nm southwest of Bahia Honda Key, and is easily accessible. Located in the Looe Key Existing Management Area, consumptive activities are prohibited except for recreational fishing and lobstering.
Lower Keys	Looe Key Reef - West of Research Only Zone	Offshore Patch Reef	Individual or Aggregated Patch Reef, Seagrass, Unconsolidated Sediment	Acroporids: staghorn	<ul style="list-style-type: none"> Existing Management Area: Looe Key EMA (5 nm²), proposed site is within; adjacent to Looe Key Research Only designated special use zone 	<ul style="list-style-type: none"> Permitted/Mote Marine Lab Restoration Site - Nursery, existing outplanting sites Historic presence of Acroporids: staghorn FKNMS Permitted Restoration sites 	A section of the offshore patch reef along the northern boundary of the Looe Key Existing Management Area, and adjacent to the Looe Key Research Only special-use designated zone. The site encompasses a Mote Marine Lab coral nursery, which is located approx. 3.6 nm south of Big Munsen Key and Little Palm Island, and 4.8 nm south of Ramrod Key. Consumptive activities prohibited except for recreational fishing and lobstering (in Looe Key EMA).
Lower Keys	American Shoal Reef	Reef Margin/Fore Reef		Acroporids present: staghorn	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present Existing Management Area: NOAA NMFS Lobster Trapping Exclusion Zone, encompassed within proposed site 	<ul style="list-style-type: none"> Permitted/Mote Marine Lab Restoration Site - existing outplanting sites Historic presence of Acroporids: staghorn, <i>Acropora</i> rubble present 	A faint spur and groove reef, representing an extensive transitional, intermediate reef, including a large back reef rubble zone and large northwest rubble horn. Historic American Shoal Lighthouse nearby, the reef is located 5.5 nm south of Sugarloaf Keys, and 6.6 nm west of Looe Key. Consumptive activities other than lobster trapping (within zoned portion) are allowed.
Lower Keys	Pelican Shoal	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Land, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> FKNMS Wildlife Management Area, no FKNMS SPA present 	<ul style="list-style-type: none"> Historic presence of Acroporids: extensive, acres Potential upstream recruitment for the rest of the Middle, Upper Keys FKNMS Vessel Grounding sites present 	A faint, drowned spur and groove reef adjacent to the Wildlife Management Area, designated over the small rubble island important for nesting birds. Located 4.4 nm southeast of Boca Chica Key, 4.8 nm south of Saddlebunch Keys. No access restriction extends 50 meters offshore (April 1-August 31). Consumptive activities are allowed (observe no access rules).

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Lower Keys	Boca Chica Patch Reefs	Inshore Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporids present, but died 2010 - staghorn; degraded - cold spell, vessel groundings	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> Low use Cold spell 2010 mortality - <i>Acropora cervicornis</i> Vulnerable to hot and cold weather Historic presence of Acroporids: staghorn, degraded Mountainous star, boulder corals present FKNMS Vessel Grounding Restoration site: <i>Lagniappe</i> ; vessel grounding hot spot - degraded; also the <i>Whiz</i> and an orphan grounding site 2012 FKNMS CREMP monitoring program stations nearby; existing long-term monitoring data available (Jaap Reef - GPS coordinates available) 	An extensive complex of inshore patch reefs that includes individual and large aggregated clusters of star and brain boulder corals. Located along the Boca Chica beach shoreline, the patch reefs are approx. 0.5 nm offshore, with the southwest end of the patch just northeast of flashing red channel marker 56 marking the edge of Hawks Channel. The site is utilized mostly by nearby residents of Boca Chica Key, Tamarac Park, and Geiger Key for snorkeling, kayaking, fishing and spearfishing. Consumptive activities are allowed.
Lower Keys	Hawk Channel Patch Reefs 1 East of W. Sambos ER	Mid-Channel Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	good condition	<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> Large polygon north of Middle Sambos, Eastern Sambos, and Pelican Shoal; also south of Boca Chica Patch Reefs Big coral heads in good condition FKNMS CREMP monitoring stations nearby; existing long-term monitoring data available (West Washerwoman Shoal, northeast - GPS coordinates available) 	A large area encompassing an extensive mid-channel patch reef system, consisting of individual and clusters of aggregated coral heads with distinct halos surrounded by dense seagrass communities and hardbottom areas. The site is located approx. 2 nm south of Boca Chica Key, and 2.3 nm south of Tamarac Park/Geiger Key and the southern tip of Saddlebunch Keys, and just west of West Washerwoman shoal, in the middle of Hawks Channel. The complex includes healthy boulder corals, rarely visited due to poor visibility. Commercial lobster fishermen use the area extensively. Consumptive activities are allowed.
Lower Keys	Eastern Sambo	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: elkhorn	<ul style="list-style-type: none"> Existing Management Area: Research Only designated special-use zone (0.1 nm²) No mooring buoys present 	<ul style="list-style-type: none"> Low use Historic presence of Acroporids: elkhorn FKNMS Vessel Grounding sites present FKNMS CREMP, CDC monitoring program stations; existing long-term monitoring data available 	A spur and groove bank reef with excellent coral formations, located in a region of the Keys that has (historically) some of the best water quality along the reef tract. This Research Only special use designated zone is located 4 nm south of Boca Chica Key near Key West.
Lower Keys	Middle Sambo	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA No mooring buoys present 	<ul style="list-style-type: none"> FKNMS Vessel Grounding sites present 	A well developed spur and groove bank reef with a unique western rubble ridge that often shoals as an emergent island after major storms, especially hurricanes. The site is located 4 nm south of Boca Chica Key, adjacent to Eastern Sambos to the east, in a region of the Keys that has (historically) some of the best water quality along the reef tract. Consumptive activities are allowed.
Lower Keys	Western Sambo 1 (larger general EMA)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn, staghorn; degraded - vessel groundings	<ul style="list-style-type: none"> Existing Management Area: Ecological Reserve (9 nm²) 	<ul style="list-style-type: none"> Permitted/FKCC-Coral Restoration Foundation - existing outplanting sites Historic presence of Acroporids: elkhorn, staghorn - degraded FKNMS Permitted Restoration site: FL Aquarium and FKNMS - <i>Miss Beholden</i> vessel grounding; existing long-term monitoring data available FKNMS Vessel Grounding Restoration sites: <i>Jacqueline L, Connected</i> - degraded; monitoring data available as of 2009 FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program stations, thermograph stations; existing long-term monitoring data available 	A well developed spur and groove reef, part of an FKNMS Ecological Reserve that includes the greatest habitat diversity in the Lower Keys. The fore reef proposed zone is located 4.3 nm south of Boca Chica Key at the southern tip of the ER, west of Eastern and Middle Sambos Reefs, in a region of the Keys that has (historically) some of the best water quality along the reef tract. Protection displaced lobster fishermen, commercial and recreational fishermen, tropical marine life collectors and spearfishing. Consumptive activities are allowed only in the portions of this proposed zone that lie outside, or south and west of the ER.
Lower Keys	Western Sambo 2 (West End) JACQUELINE L, CONNECTED Restorations	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass	Acroporids present: Elkhorn, staghorn; existing data available - 2009	<ul style="list-style-type: none"> Existing Management Area: Ecological Reserve (9 nm²) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn - degraded FKNMS Vessel Grounding Restoration sites: <i>Jacqueline L, Connected</i> - degraded; monitoring data available as of 2009 FKNMS Vessel Grounding sites; vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program stations, thermograph stations; existing long-term monitoring data available 	A well developed spur and groove reef, part of an FKNMS Ecological Reserve that includes the greatest habitat diversity in the Lower Keys. The fore reef proposed zone is located 4.3 nm south of Boca Chica Key at the southern tip of the ER, west of Eastern and Middle Sambos Reefs, in a region of the Keys that has (historically) some of the best water quality along the reef tract. This proposed zone is focused on the west end of the shallow fore reef and reef crest, degraded by vessel grounding injuries and heavily used by the charter diving and snorkeling operators.

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REGION	LOCATION	Habitat Type - Goals & Objectives	Habitat Description	Resources Present/Condition	Existing Access Restrictions	Working Group Comments / Site Selection Criteria	Site Information
Lower Keys	Hawk Channel Patch Reefs 2	Mid-Channel Patch Reef	Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: Ecological Reserve (9 nm²), a portion of this zone is within; ER boundary buoys installed/maintained by FKNMS No mooring buoys present 	<ul style="list-style-type: none"> Large polygon north of Western Sambos, Topino Buoy, and 9-Foot Shoal; also south of "Key West Patch Reefs" proposed zone Big coral heads in good condition FKNMS CREMP monitoring stations; existing long-term monitoring data available 	A large area encompassing an extensive mid-channel patch reef system consisting of individual and clusters of aggregated coral heads with distinct halos surrounded by dense seagrass communities and hardbottom areas. The site is located approx. 1 nm South of Key West, roughly 1.3 nm south of Stock Island, and just west of the proposed "Hawks Channel Patch Reef 1" site, in the middle of Hawks Channel. The complex includes healthy boulder corals, rarely visited due to poor visibility. Commercial lobster fishermen use the area extensively. Consumptive activities are allowed.
Lower Keys	Key West Patch Reefs	Inshore Patch Reef	Artificial, Aggregate Reef, Pavement, Land, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Mountainous star, boulder corals present Inshore Patch Reef - selection criteria consideration Large polygon south of Trumbo Point NAS, Casa Marina, the Key West Int'l Airport and Stock Island, extending to Boca Chica Channel FKNMS Vessel Grounding sites present 	A large complex of inshore patch reefs, encompassing an extensive area along the shoreline of Key West extending from Boca Chica Channel to the Trumbo Point Navy Base seaward to the edge of Hawks Channel. Patch reefs are located from 0.3 to 0.7 nm offshore. Consumptive activities are allowed.
Lower Keys	Eastern Dry Rocks 1 (general SPA area)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn, Staghorn; active natural recruitment	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) 	<ul style="list-style-type: none"> Permitted/FKCC-Coral Restoration Foundation - existing outplanting sites Coral Nursery needed nearby Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded; active natural recruitment, especially backreef area FKNMS Vessel Grounding sites present 	A spur and groove bank reef, the SPA is located between the 4-foot-deep reef flat area and 30-foot depth contour, 5.2 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Eastern Dry Rocks 2 (west end)	Reef Margin/Fore Reef	Spur and Groove, Pavement, Reef Rubble		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded; active natural recruitment, especially backreef area FKNMS Vessel Grounding sites present 	A spur and groove bank reef, the SPA is located between the 4-foot-deep reef flat area and 30-foot depth contour, 5.2 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Eastern Dry Rocks 3 (east end - overlaps 4)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Reef Rubble, Seagrass		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded; active natural recruitment, especially backreef area FKNMS Vessel Grounding sites present 	A spur and groove bank reef, the SPA is located between the 4-foot-deep reef flat area and 30-foot depth contour, 5.2 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Eastern Dry Rocks 4 (east end - overlaps 3)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Reef Rubble, Seagrass		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded; active natural recruitment, especially backreef area FKNMS Vessel Grounding sites present 	A spur and groove bank reef, the SPA is located between the 4-foot deep reef flat area and 30-foot depth contour, 5.2 nm southwest of Key West. The reef is easily accessible from Key West, and of high economical value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Rock Key 1 (general SPA area)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn, Staghorn	<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) 	<ul style="list-style-type: none"> Permitted/FKCC-Coral Restoration Foundation - existing outplanting sites Coral Nursery needed nearby Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS Vessel Grounding sites present: <i>Island Diver</i>; vessel grounding hot spot - degraded FKNMS Vessel Grounding & Restoration sites: <i>Italian Stallion, Paradiso</i> restoration site; existing restoration monitoring data available FKNMS CREMP, CDC monitoring program stations; existing long-term monitoring data available 	A spur and groove bank reef, the SPA is located between the reef crest and 30-foot depth contour, 5.8 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Rock Key 2 (east end)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm²) One mooring buoy present (in proposed zone) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS CREMP, CDC monitoring program stations; existing long-term monitoring data available 	A spur and groove bank reef, the SPA is located between the reef crest and 30-foot depth contour, 5.8 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.

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Lower Keys	Rock Key 3 (west end)	Reef Margin/Fore Reef	Spur and Groove, Reef Rubble		<ul style="list-style-type: none"> Existing Management Area: SPA is small (0.1 nm2) 	<ul style="list-style-type: none"> Permitted/FKCC-Coral Restoration Foundation - existing outplanting sites Coral Nursery needed nearby Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS Vessel Grounding site present; vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program stations; existing long-term monitoring data available 	A spur and groove bank reef, the SPA is located between the reef crest and 30-foot depth contour, 5.8 nm southwest of Key West. The reef is easily accessible from Key West, and of high economic value to the charter fishing, sportfishing, diving and lobster fishing communities. High user conflicts are reduced by SPA designation.
Lower Keys	Sand Key 1 (general SPA area)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporids present: Elkhorn, Staghorn	<ul style="list-style-type: none"> Existing Management Area: SPA (0.5 nm2) 	<ul style="list-style-type: none"> Permitted/FKCC-Coral Restoration Foundation - existing outplanting sites Coral Nursery needed nearby Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS Vessel Grounding sites present FKNMS vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	A spur and groove bank reef, the largest of the three Key West SPAs, sits adjacent to the historic Sand Key Lighthouse. It is located 6.5 nm southwest of Key West and extends from the reef flat to between the 30- and 60-foot depth contours. The reef is easily accessible from Key West, and of high economic value to the users. Catch and release trolling is allowed in the SPA and portions of the rubble ridges remain open to consumptive activities.
Lower Keys	Sand Key 2 (east end)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Unconsolidated Sediment		<ul style="list-style-type: none"> Existing Management Area: SPA (0.5 nm2) Four mooring buoys present 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	A spur and groove bank reef, the largest of the three Key West SPAs, sits adjacent to the historic Sand Key Lighthouse. It is located 6.5 nm southwest of Key West and extends from the reef flat to between the 30- and 60-foot depth contours. The reef is easily accessible from Key West, and of high economic value to the users. Catch and release trolling is allowed in the SPA and portions of the rubble ridges remain open to consumptive activities.
Lower Keys	Sand Key 3 (west end)	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Pavement, Reef Rubble, Unconsolidated Sediment	Pillar coral present	<ul style="list-style-type: none"> Existing Management Area: SPA (0.5 nm2) 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded FKNMS Vessel Grounding sites present: <i>FLO719KK</i> FKNMS vessel grounding hot spot - degraded FKNMS CREMP, CDC monitoring program stations, thermograph station; existing long-term monitoring data available 	A spur and groove bank reef, the largest of the three Key West SPAs, sits adjacent to the historic Sand Key Lighthouse. It is located 6.5 nm southwest of Key West and extends from the reef flat to between the 30- and 60-foot depth contours. The reef is easily accessible from Key West, and of high economic value to the users. Catch and release trolling is allowed in the SPA and portions of the rubble ridges remain open to consumptive activities.
Marquesas	Cottrell Key	Backcountry, Hardbottom	Aggregate Reef, Pavement, Mangrove, Seagrass, Unconsolidated Sediment	Boulder/brain corals, Acroporids present: staghorn; carpet anemones; all degraded - Blackwater	<ul style="list-style-type: none"> FKNMS Wildlife Management Area nearby, no FKNMS SPA present FKNMS mooring buoys present, installed/maintained by FKNMS 	<ul style="list-style-type: none"> Blackwater event mortality - degraded Historic presence of Acroporids: staghorn; significant amounts Boulder, brain corals present; carpet anemones FKNMS Vessel Grounding site: <i>Lady Ann</i> 2011 A long way from any proposed nurseries 	A hardbottom area consisting of aggregate coral reef, ledges, pavement, mangroves, and seagrass communities. Located 7.2 nm northwest of Key West, 0.3 nm northwest of Cottrell Key, which is a Wildlife Management Area with a 300-foot no motor zone. The site is used primarily by charter dive operators on bad weather days.
Marquesas	Lost Reef			Acroporid: Elkhorn, Staghorn; degraded	<ul style="list-style-type: none"> No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded 	Consumptive activities are allowed.
Marquesas	Western Dry Rocks	Reef Margin/Fore Reef	Spur and Groove, Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Reef Rubble, Seagrass, Unconsolidated Sediment	Acroporid: Elkhorn, Staghorn; degraded	<ul style="list-style-type: none"> No Existing Management Areas present/SPA FKNMS mooring buoys present, installed/maintained by FKNMS 	<ul style="list-style-type: none"> Least visited of all outside reefs (in the Key West Area) Historic presence of Acroporids: formerly huge elkhorn stands, staghorn stands - degraded Logistically very challenging site to work 	A classic spur and groove reef that is relatively small, with a well-developed rubble horn and several mooring buoys. West of Sand Key (2.6 nm), it is located 4.8 nm south of Man Key and 8.6 nm southwest of Key West. The reef is accessible from Key West, but is visited by charter operators when visibility is better than nearby reefs. Consumptive activities are allowed.
Marquesas	Man Key Patch Reefs	Inshore Patch Reefs	Individual or Aggregated Patch Reef		<ul style="list-style-type: none"> No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> Mountainous star, boulder coral heads present Inshore Patch Reef - selection criteria consideration A long way from any proposed nurseries 	An aggregate of inshore patch reefs, located nearshore approximately 0.3 nm seaward of Man Key, and 6 nm west of Key West. Consumptive activities are allowed.

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Marquesas	Vestal Shoals Reef	Hardbottom - flat	Aggregate Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporid: Staghorn degraded	<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> ● Historic presence of Acroporids: staghorn; extensive, acres of staghorn, now all gone - degraded ● Nice coral heads 	An aggregate patch reef along the reef margin, associated with very faint, drowned spur and groove reef features surrounding the shallow shoal. Located immediately west of the Southwest Ship Channel marker "SW" (lighted, red/white headpin), roughly 1.5 nm west of Satan Shoal and approx. 4 nm south of Boca Grande Key. Consumptive activities are allowed.
Marquesas	Boca Grande Patch Reef	Inshore Patch Reefs	Individual or Aggregated Patch Reef		<ul style="list-style-type: none"> ● No FKNMS Existing Management Area/SPA 	<ul style="list-style-type: none"> ● Inshore Patch Reef - selection criteria consideration ● A long way from any proposed nurseries ● FKNMS monitoring program thermograph station: nearby; existing long-term monitoring data available (Boca Grande Channel) 	An aggregate of inshore patch reefs, located nearshore approximately 0.4 nm seaward of Boca Grande Key, and roughly 10.5 nm west of Key West. Traditionally used by spearfishermen and snorkelers. Consumptive activities are allowed.
Marquesas	Cosgrove Shoals	Reef Margin/Fore Reef Deep Reef/transitional reef	Aggregate Reef, Pavement, Seagrass, Unconsolidated Sediment	Acroporid: Staghorn degraded (formerly huge stands); very clean, good area	<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> ● Seldom visited - low use ● Very clean, good area ● Ledge drops off to 60' water depths, deep water inhabitants, nocturnal zone, fish ● Potential upstream recruitment for Lower, Middle & Upper Keys ● Historic presence of Acroporids: staghorn; extensive, acres, formerly huge stands - degraded 	A linear reef margin, possibly some faint, drowned spur and groove deep reef, but primarily a hardbottom community. The site is located approx. 5.6 nm south-southwest of Mooney Harbor Key, Marquesas, and encompasses the prominent, flashing Cosgrove Shoal Lighttower, built upon a shallow shoal (14'). Consumptive activities are allowed.
Marquesas	Grocery Reef			sharks, goliath grouper (jewfish)present	<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> ● Coral heads at 50' depths, come to within 15' at top ● Sharks, goliath grouper present ● Historic presence of Acroporids: elkhorn, staghorn; extensive, acres - degraded 	Consumptive activities are allowed.
Marquesas	Marquesas Rock	Reef Margin/Fore Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment		<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> ● Potential upstream recruitment for Lower, Middle & Upper Keys ● Historic presence of Acroporids: staghorn; extensive acres - degraded 	A patchy, faint drowned spur and groove reef along the wide reef margin, transitioning to deep reef. The site is located approx. 6 nm southwest of Mooney Harbor Key, Marquesas, and encompasses the red/green nun buoy "MR" set upon a shallow shoal (12'). Consumptive activities are allowed.
Marquesas	New Grounds	Mid-Channel Patch Reef	Aggregate Reef, Individual or Aggregated Patch Reef, Pavement, Seagrass, Unconsolidated Sediment	Patch reefs, Gorgonians, sponges; existing data (limited)	<ul style="list-style-type: none"> ● No Existing Management Areas present/SPA 	<ul style="list-style-type: none"> ● FKNMS Maritime Heritage Program research & Shipwreck Trail site: <i>Henrietta Marie</i> slaver shipwreck & monument ● FKNMS CDC monitoring program stations, thermograph station; existing long-term monitoring data available (5 coral patch reefs - GPS coordinates available); limited CDC monitoring data available 	A vibrant and diverse hardbottom community of aggregate reef north of the Quicksands and northeast of the Rebecca Shoal. The extensive, linear hardbottom is located roughly 12.3 nm northwest of the Marquesas Keys, 6.8 nm north of Half Moon Shoal marker "WR2", approx. 3 nm west of a USAF microwave tower ("space needle") and is marked on the west end by a flashing shoal marker. It is known for its diverse sponge communities, pristine coral patch reefs and typically murky water quality. Consumptive activities are allowed.
Dry Tortugas	East of DTNP Pulaski Shoals	Coral Reef slope, hardbottom	Aggregate Reef, Unconsolidated Sediment	Acroporid: staghorn; existing data available	<ul style="list-style-type: none"> ● No Existing FKNMS Management Areas/SPA 	<ul style="list-style-type: none"> ● Low use, low visitation ● Good control site ● Historic presence of Acroporids: staghorn ● Tortugas Gyre - importance for coral reefs to the east, northeast (Marquesas, Lower, Upper, Middle Keys) ● Logistically very challenging site to work ● FKNMS monitoring program stations: Pulaski Shoals - CREMP, CDC; long-term monitoring data available 	Placeholder for work outside Dry Tortugas NP, (no reef specified). Pulaski shoal is an intermediate to deep reef slope located off the northwest corner of DTNP. It is listed due to existing data available from FKNMS monitoring programs, it being the site of the <i>C/S Mavro Vetrican</i> large vessel grounding November 1989 and known historic presence of Acroporids. Consumptive activities are allowed.
Dry Tortugas	Dry Tortugas National Park		Individual or Aggregated Patch Reef	Acroporid: staghorn; existing data available, photo-documentation	<ul style="list-style-type: none"> ● NPS Existing Management Area: presently doing restoration 	<ul style="list-style-type: none"> ● Historic presence of Acroporids: staghorn; anywhere less than 60 feet used to be entirely staghorn, photo-documentation available ● Logistically very challenging site to work ● FKNMS Monitoring program stations: multiple CREMP, CDC stations within the park; long-term monitoring data available 	(no site specified)

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Dry Tortugas	Tortugas Banks EMA - Ecological Reserve	Deep Reef/hardbottom	Individual or Aggregated Patch Reef	Acroporids present: staghorn, existing data available; black coral all over	<ul style="list-style-type: none"> ● FKNMS Existing Management Area: Tortugas North Ecological Reserve (91 nm2) ● FKNMS mooring buoys present, installed/maintained by FKNMS 	<ul style="list-style-type: none"> ● Historic presence of Acroporids: staghorn; staghorn has been documented on the Banks ● FKNMS Monitoring program stations: CREMP, SCREAM, CDC multiple stations; existing long-term monitoring data available ● FKNMS monitoring program thermograph station: existing long-term monitoring data available (<i>Diego</i> Anchor Injury restoration site) 	<p>The Dry Tortugas Banks are located at the westernmost extent of the Florida Keys, and contain highly diverse habitats including seagrass beds, coral reef habitats and hardbottom areas. Clean, clear water and powerful ocean currents fuel the diversity of life in the region. The "Tortugas Banks" are home to a wide variety of species, healthy deep coral reefs and pinnacles, one of which exhibits large rosette-like stands of elkhorn coral. Coral here is healthier and more abundant than anywhere else in the Florida Keys. Because of its isolation, the Tortugas region also has the best water quality in the sanctuary. A portion of the Northern Tortugas Banks has been designated an FKNMS Ecological Reserve due to these features and increased visitor pressures.</p>