

FLORIDA KEYS NATIONAL MARINE SANCTUARY ADVISORY COUNCIL

VIRTUAL WORKING SESSION

Tuesday February 16, 2021

DRAFT NOTES

Council Members:

Boating Industry: Ken Reda
Citizen at Large – Lower Keys: Mimi Stafford
Citizen at Large – Middle Keys: George Garrett
Citizen at Large – Upper Keys: Suzy Roebing
Conservation and Environment: Ken Nedimyer
Conservation and Environment: Chris Bergh
Diving – Lower Keys: Joe Weatherby
Diving – Upper Keys: Elena Rodriguez
Education and Outreach: Jessica Dockery
Elected County Official: Mike Forster
Fishing – Charter Fishing Flats Guide: Will Benson
Fishing – Charter Sports Fishing: Michael Nealis
Fishing – Commercial – Marine/Tropical: Ben Daughtry
Fishing – Commercial – Shell/Scale: Justin Bruland (absent)
Fishing – Recreational: Karen Angle
Research and Monitoring: Erinn Muller
South Florida Ecosystem Restoration: Jerry Lorenz
Submerged Cultural Resources: Corey Malcom
Tourism – Lower Keys: Karen Thurman (absent)
Tourism – Upper Keys: Andy Newman

Council alternates (present)

Citizen at Large – Lower Keys: Stephen Patten
Citizen at Large – Middle Keys: Rachel Bowman
Citizen at Large – Upper Keys: Dave Makepeace
Conservation and Environment: Caroline McLaughlin
Diving - Upper Keys: Daniel Dawson
Fishing – Recreational: Gary Jennings
Research and Monitoring: Patrick Rice
Submerged Cultural Resources: Elizabeth Jolin
Tourism – Upper Keys: Lisa Mongelia

Agency Representatives (present)

Florida Department of Environmental Protection: Jamie Monty, Nicolas Parr
FWC Fish and Wildlife Research Institute: CJ Sweetman
National Park Service, Everglades: Christopher Kavanagh
U.S. Coast Guard: LT. Victor Sanchez

U.S. Fish and Wildlife Service: Christian Eggleston
U.S. Navy: Ed Barham

Municipalities

City of Key West: Teri Johnston, Allison Higgins
Islamorada, City of Islands: David Webb

I. CALL TO ORDER, ROLL CALL, CHAIRPERSONS COMMENTS

Chairperson George Garrett called the meeting to order and thanked everyone for participating. He reminded webinar attendees that public comment would be accepted during the meeting via email, and would be shared with council members in advance of the next meeting.

Chairperson Garrett thanked participants for coming together in this alternative format and thanked the staff for putting together the virtual meetings.

To view this meeting's presentations and other related materials, visit <https://floridakeys.noaa.gov/sac/meetings.html>.

A motion to approve the December 2020 minutes was made by George Garrett. A second was made by Ken Nedimyer. The minutes were approved. A motion was made to approve the February 2021 agenda by Mimi Stafford and seconded by George Garrett. The agenda was approved.

Chairperson Garrett recognized outgoing Conservation and Environment alternate Caroline McLaughlin for her years of service to the council. He also reminded participants that there are 13 seats that are currently up for recruitment, six alternates and seven members, and that the application deadline is approaching.

II. MISSION ICONIC REEFS: PRESENTATIONS AND DISCUSSIONS

Superintendent Sarah Fangman moderated a session about Mission: Iconic Reefs, which included presentations from the National Marine Sanctuary Foundation, United Way of Collier and the Keys, and local restoration practitioners.

Mission Iconic Reefs Process

Megan Fraser, National Marine Sanctuary Foundation

Ms. Fraser provided an overview of Mission: Iconic Reefs, including the governance structure. As this is a very broad project, five working groups have been developed to work closely with the steering committee: Communications & Outreach, Funding & Fundraising, Implementation & Operations, Restoration Monitoring & Research, and Stewardship & Community Engagement.

In order to stay organized, manage timelines, and communicate effectively, an internal "hub" is being created to keep information centralized. This "hub" will also serve as a data sharing

platform for key partners, and a source of material for communication efforts. This “hub” is estimated to be released internally within the next few months.

Ms. Fraser detailed how the various sites selected for restoration as part of Mission: Iconic Reefs were being segmented in order to keep information organized and easy to communicate. The first site that is undergoing preparations for restoration work is Eastern Dry Rocks, utilizing funding from the National Fish and Wildlife Foundation. This site will require clearing of invasive and nuisance species, which is currently being completed by a contractor, before outplanting can begin. The current focus area is the western end of this site, which has been segmented into very distinct experimental plots for monitoring purposes. Once this work is completed, plans can be made for future sites.

Mission Iconic Reefs is a partnership between many agencies, non-profits, and government organizations. United Way of Collier and the Keys is focused on funding reef restoration along with local internships, creating programs utilizing socioeconomic data, and expanding partnership opportunities. In addition, the sanctuary’s Blue Star program will be engaged to allow for recreational opportunities for locals and visitors. Universities such as the College of the Florida Keys and Florida International University are working to understand the relationship of herbivorous crabs and coral restoration. Many facilities around the country are housing rescued corals as part of the Stony Coral Tissue Loss Disease intervention. Beyond these partnerships, new opportunities are emerging to explore new research and development, use new technologies, and ensure this project moves from immediately feasible to progressively possible.

Mission Iconic Reefs Funding

Sara Rankin, Florida Keys National Marine Sanctuary Foundation

Jessica Dockery and Leah Stockton, United Way of Collier and the Keys

Tom Moore, NOAA’s National Marine Fisheries Service, Restoration Center

Ms. Rankin provided an overview of the funding received to date for Mission: Iconic Reefs, including the EPA South Florida Geographic Initiative (\$325,000), the National Fish and Wildlife Foundation (\$5 million dollars), private donations, and the in-kind support of various partnerships with NOAA, Coral Restoration Foundation, and Mote Marine Laboratory. The next steps will include coordination of funding needs and the creation of avenues for general public and private support of Mission: Iconic Reefs.

Ms. Stockton provided an overview of The United Arab Emirates \$3.5 million gift following Hurricane Irma, as a portion of that money pledged to the Florida Keys was to work towards rebuilding healthy coral reefs. The United Way joined in this project because healthy waters sustain local economies and provide economic stability for workers in the Florida Keys. Revitalizing coral reefs supports 60% of Keys residents whose livelihoods depend on the marine ecosystem. United Way is actively working to build initiatives related to global learning exchanges, scholarships, science education, and information sharing amongst the coral restoration community. Recently, United Way announced a Reef Revitalization Request for Proposals, which is open to local restoration partners. Funding announcements will be made in May 2021.

Mr. Moore discussed how NOAA is working to coordinate an all-encompassing plan to better outline what resources are needed to achieve the desired outcomes in reef restoration. This work will make fundraising efforts easier for practitioners and non-profit organizations. NOAA has dedicated significant resources to this project in 2020, including five dedicated staff members.

Mission Iconic Reefs Paradigm Shift

Jessica Levy, Coral Restoration Foundation

Dr. Hanna Koch, Mote Marine Laboratory

Ken Nedimyer, Reef Renewal

Ms. Levy provided an overview of the Coral Restoration Foundation (CRF) goals for 2021, including aiming to return 41,000 corals across nine sites. CRF is currently working to increase capacity to reach that goal, which includes an expansion at their Carysfort Reef and Key West nurseries, completing the Pickles Reef nursery, and beginning Looe Key nursery construction. New advancements for CRF include novel propagation methods such as utilizing rescue corals from electrical infrastructure, preventing removal of wild stands of coral for propagation stock, and investigating pillar coral propagation methods with the goal to produce stock for outplanting in Phase 2 of Mission: Iconic Reefs. CRF is also experimenting with novel outplant strategies, including outplanting larger corals for immediate structural improvement on reef and using new substrates such as hemp rope, bamboo, and engineered boulder coral domes.

Dr. Koch highlighted recent advancements of outplanted corals spawning in the wild for the first time. Mote Marine Laboratory focuses on strategic ways to outplant corals, which speeds up the time to sexual maturity and reproduction. Now, the focus will be on promoting genetic diversity at restoration sites. Mote Marine Laboratory has been focusing on reproductive work, including the Cook Island Case Study, where Mote demonstrated successful coral reproduction from corals resilient to bleaching events, hurricanes, Stony Coral Tissue Loss Disease. Additionally, staghorn corals produced stress-tested genotypes with high survival rates, which are growing well at outplant sites. Mote is waiting to see if they reach sexual maturity and reproduce in the wild, along with outplanted Elkhorn corals. The implications of this work include faster population recovery with quicker onset of sexual maturity and reproduction, diversity can be generated faster with assisted sexual reproduction work, and integration and upscaling of coral restoration efforts.

Mr. Nedimyer provided an overview of Reef Renewal USA's focus on community based programs and atypical coral species. Reef Renewal collects "survivor" corals that resisted diseases, cold snaps, and storms in the past from all areas of Keys to promote genetic diversity. One major advancement made recently includes replacing coral trees with ropes for growing staghorn and Elkhorn coral, which cuts down on maintenance, can more easily be located at reefs where they will be attached later, and leads to a quicker outplanting cycle.

Discussion

- A member asked about mooring buoy work and if an organization were to direct money to mooring buoy install or maintenance. Superintendent Fangman clarified that buoy work is currently happening, but the teams remain unable to dive. Donations can be made to support the Mooring Buoy program through the National Marine Sanctuary

Foundation.

- A member inquired about permits for live rock aquaculture. Mr. Nedimyer clarified that live rock aquaculture creates habitat, draws fish, and has gone through lots of regulations and study.
- A member asked about the relationship with the UAE, how has it been developed and cultivated, where did it come from. Ms. Stockton clarified that after Hurricane Irma, the county pledged to help with future sustainability. Recognizing that that reef is inextricably tied to coastal protection, and the UAE faces similar challenges in their county. They will continue to be engaged on this project.
- A member asked about the nuisance species removal by contractors, and how they are planning for disposal and timing. Ms. Fraser clarified that this will be a pilot project to learn from methodologies.
- A member asked about outreach related to Mission: Iconic Reefs, specifically is NOAA would be leading that effort. Superintendent Fangman commented that this presentation to the council is the first step, and the Communications and Outreach working group will be tackling this issue.
- A member asked about adaptation measures following any major disruptions, specifically a hurricane or large ship impacting the outplant sites and how resources may shift depending on performance measures.
 - *Answered after the meeting:* All practitioners have contingency plans to respond to a hurricane, disease event, and bleaching event. The sanctuary and our partners would conduct assessments following a disturbance and emergency triage including stabilization of broken fragments in response to a storm or ship grounding. We also are accounting for higher than expected mortality by exceeding the outplant targets. Through monitoring of efficacy of different methods we can make midcourse corrections when something fails. And finally, practitioners and scientists maximize genetic diversity to ensure different stress tolerances and adaptations are present in the population and are looking at performance of different genetic strains including genotypes resistant to high temperatures or disease, and all of which will help ensure success.

Break

III. UPDATE: THE FLORIDA KEYS AND SOUTH FLORIDA ECOSYSTEM CONNECTIVITY TEAM

Karen Bohnsack, Florida Keys National Marine Sanctuary

Jerry Lorenz, South Florida Ecosystem Restoration

Ms. Bohnsack described the process to form this working group as a joint effort between the Water Quality Protection Program (WQPP) and this sanctuary advisory council (SAC), both entities passed resolutions to support the group. The priority will be a focus on South Florida regional water issues, with objectives of group including engaging members of various South Florida ecosystem restoration groups, ensure the FKNMS is represented in Everglades Restoration, facilitate regular participation in government meetings, and provide a platform for collaboration. Although the initial focus will be on Everglades restoration, this group can quickly pivot to other South Florida regional issues of urgent importance to the Florida Keys.

The ideal working group will be no more than 15 seats, with half of the seats to represent members of the community not on SAC or WQPP. Nine community seats have been identified for participation in the working group, and government agency representatives as advisors have also been identified. The next steps will be to confirm representatives for the community seats, schedule the first meeting in March of 2021, set up a working group website, and provide regular reports to the WQPP and SAC.

Discussion

Members discussed the working group composition. Final membership will be posted to the working group website once live.

IV. ASSISTANT ADMINISTRATOR'S REPORT

Nicole LeBoeuf, NOAA's National Ocean Service

Superintendent Fangman introduced Nicole LeBoeuf, who provides the strategic vision and leadership for all of the National Ocean Service, including commerce, risk reduction, research, science, policy, international treaties, endangered species protection and more.

Ms. LeBoeuf shared that she is excited to return to focusing on protecting and conserving our environment and ocean and finding ways to lift up less represented voices in ocean conservation. She recognized this council for the more than 1500 hours of time each year dedicated to conservation, and acknowledged the difficult hand dealt by the pandemic to places reliant on tourism, such as the Florida Keys. COVID impacts have also created challenges for the research community, which NOAA relies on for making science and research backed decisions and planning. While there may be missed opportunities for data collection and research, the focus across NOAA has been on safety.

Ms. LeBoeuf serves as Department of Commerce's representative to the South Florida Ecosystem Restoration Task Force Working Group, where she primarily works to represent NOAA's interests, especially those "down-stream" of South Florida, such as the sanctuary. This task means relying on groups like this council to provide their input and feedback on impacts (or lack thereof) on the local environment from regional influences. One success in this area is the increased funding last year for additional resources, including Mission: Iconic Reefs and the new buoy boat. These successes demonstrate that if we work together to express our needs and ability to do good work, the administration will take note. Since 2018, a bright spot for Nicole has been the community coming together after Hurricane Irma to remove debris and recover corals. Working together to reduce human impacts after the storm speaks to the resiliency of the community.

Discussion

- A member asked how the connectivity team can best support the efforts of the Task Force. Ms. LeBoeuf suggested multiple avenues for collaboration, including through our local sanctuary water quality lead Karen Bohnsack, making comment at a task force meeting, providing recommendations for her to champion at the task force level, and likely other options that may be more creative.

- A member asked about ocean warming and ocean acidification on the reef and sea level rise. It seems the local governments are doing their best, how can NOAA support this effort? Ms. LeBoeuf applauded the State of Florida for taking these issues seriously, and recognized that across Florida's low lying communities, NOAA is looking forward to providing decision support and helping to understand what risks and threats lie ahead to those areas, and also to low lying areas like mangroves and marshes. She assured the council that NOAA is focused on looking at implementing the various executive orders that have come out of the White House. The recent Executive Order is being analyzed across NOAA, and project leads such as investment in facilities, protection of areas, and how we deliver services to the American people are in development. NOAA is committed to climate priorities, and has an opportunity to provide leadership across the US government in this area.
- A member asked about law enforcement in the Florida Keys. Ms. LeBoeuf acknowledged that NOAA law enforcement is spread thin and that has been an ongoing issue. She appreciated the continued advocacy for additional resources in this area, but also stressed the importance of education and outreach as an additional tool to supplement enforcement.
- Superintendent Fangman noted that any change in administration could mean a shift of priorities, and if there is any insight from NOS about this new administration. Ms. LeBoeuf reiterated that economic restoration is a focus of this administration, which goes hand in hand with conservation. A healthy reef drives a healthy economy. The SAC will soon be tasked with helping to convey the importance of the ecosystem, and how to best protect fisheries and increase coastal resilience.

V. AGENCY REPORTS

Superintendent's Report

Thank you to Curtis Kruer for bringing an error to our attention from the 30th anniversary figures. It has been corrected on the website and on social media. Florida Keys National Marine Sanctuary is thrilled to welcome new staff members: Lindsey Crews (science and outreach coordinator), Scott Atwell (communications and outreach manager), and Andie Cuffio (NOAA Corps officer). In addition, the sanctuary is preparing to welcome a new buoy boat to our fleet, a survey will be sent to the SAC members for consideration in choosing a name.

The sanctuary is continuing to work internally and with our agency partners to finalize the draft rule content. Expect to begin formal agency clearance within the month and hope for efficient clearance that allows us to release the draft rule for public comment this summer. However given the change in administration and the required inter-agency clearance prior to release, it is difficult to identify a definitive release date. We will keep you updated as this progresses. When the draft rule is released, the draft management plan will also be released for additional public comment, and will include exact coordinates for any modified or proposed new marine zones. In addition, we will create an updated interactive map on our website.

Finally, artificial habitat is a topic of interest to several on this SAC and we also received public comment on this topic as well. While the draft management plan identified necessary research, FKNMS staff is developing a guidance document for the potential use, placement, and necessary

research on artificial habitats in the sanctuary. We will include an agenda item on this topic at a later SAC meeting.

Florida Fish and Wildlife Conservation Commission

FWC will be holding a virtual Commission meeting on February 25-26, 2021. Staff will be providing reports from recent South Atlantic and Gulf of Mexico Fishery Management Council meetings. Of interest to stakeholders in the Florida Keys, a final rule will be presented to the Commission where staff will propose a seasonal closure, April – July, at Western Dry Rocks. This agenda item is scheduled for 9 am on February 26 and can be accessed at the following link: <https://myfwc.com/about/commission/commission-meetings/february-2021/>. The intent of the proposed seasonal closure aims protect a multi-species spawning aggregation of several recreationally and commercially important species, including mutton snapper, yellowtail snapper, gray snapper, and permit, amongst others. The next meeting is scheduled for May 12-13, 2021.

Florida Department of Environmental Protection

Florida Park Service:

- John Pennekamp Coral Reef State Park
 - An \$81,000 donation from Ocean Reef Club received in April 2020, has helped launch the Friends of John Pennekamp Coral Reef and Dagny Johnson Key Largo Hammock Botanical State Parks, a new citizen support organization (CSO).
 - The funds, donated by Ocean Reef Club, their Community Association, Conservation Association, and Rod and Gun Club, will be used to replace mooring balls at the reef that were lost in hurricane Irma, as well as provide several more in the area
 - The project was awarded to Sea and Shoreline and on Feb 1, 2021 the project began. There will be 11 mooring buoys replaced and 7 new ones added which will bring the total for the park to 25 protecting the sea bottom from anchors.
- Islamorada Area State Parks
 - Lignumvitae Key staff, with some help from other state park and aquatic preserve staff recently replaced all the mooring buoys at the San Pedro Underwater Archeological Preserve. All five buoys had gone missing over a period of time, leaving the Preserve essentially unmarked.
 - We have also received financial support to hire a contractor to examine all the Park's buoys and navigational markers and repair or replace all found in need of it. The project is out to bid at this time.
 - Permitting for the completion of the Lignumvitae main "T" dock and the foundation of the Matheson House is taking place now with repairs to begin soon.
 - Lignumvitae staff along with the FWC continue to investigate groundings on the seagrass flats and record the incidents for presentation to the State Attorney's office.
- Bahia Honda State Park
 - Bahia Honda staff have been working hard managing exotic plants at the park. With all the other duties and COVID protocols, they have managed to also remove hundreds of yellow alter, Scaevola, flea bane, Australian pine, and coconut palms.

Resilience and Coastal Protection:

- Lignumvitae Key Aquatic Preserve
 - We have begun bird rookery monitoring on Horseshoe Key. Staff recorded 32 active cormorant nests; most were incubating, and some had chicks. Staff observed seven great egret nests with chicks in six of the nests.
 - New signs will soon be installed at near-by access points to Lignumvitae Key Aquatic Preserve to help raise awareness of the precious seagrass beds there and the No Internal Combustion Motor Zones that already exist in that area by state rule.
- Coupon Bight Aquatic Preserve
 - Aquatic Preserve staff are working with the U.S. Fish and Wildlife Service to secure a contract to remove the large marine debris from Coupon Bight. Donated aerial images reveal many large pieces of debris in the shallow areas of the bight that remain from Hurricane Irma.
- Coral Protection and Restoration Program
 - In the process of finalizing projects that were applied for. Hopefully will be able to share more at the next SAC meeting.

National Park Service

Everglades National Park recently welcomed Melodie Naja as the new director of the SFNRC (South Florida Natural Resources Center). Dr. Naja has been working on Everglades-related issues since 2008, most recently as Director of Science at the Everglades Foundation. Park staff of SFNRC and many other state and federal agencies are currently focused on the planning of the CERP project: Biscayne Bay and Southeastern Everglades Ecosystem Restoration (BBSEER). It is the combined phase 2 of the BBCW and C-111 Projects. Florida Bay condition report—No phytoplankton bloom activity reported; waters generally clear bay-wide, with isolated basins having turbidity issues due to resuspended sediment. Salinity status of Coastal Everglades Florida Bay has been mesohaline (5-18 psu) for the last four months, with polyhaline conditions throughout most of the rest of the bay (18-30 psu). Florida Bay returned to a recognizable estuary this season.

U.S. Navy

- February initiated a habitat enhancement project by removing invasive, exotic vegetation and woody native vegetation from endangered species habitat on Geiger Key.
- January conducted an annual survey of the Lower Keys marsh rabbit, preliminary data indicates Boca Chica population appears stable.
- January NASKW completed the construction of a Pollinator/Butterfly Garden in a mowed field at a central location in the administrative area of the Air Station. The garden was designed by a local skilled volunteer who has extensive experience with native plants of the Florida Keys. The garden includes over 25 native species and was funded by a grant from the Department of Defense.

VI. MEMBER UPDATES OF NOTE

None provided.

VII. CLOSING REMARKS

Chairperson Garrett thanked council members and the public for tuning in to this virtual meeting, and for a robust discussion. The next meeting will take place on April 20th, 2021.

VIII. PUBLIC COMMENT

None provided.

DRAFT