OFFICE OF NATIONAL MARINE SANCTUARIES
COORDINATION REPORT (March 2021)

Introduction

The NOAA Office of National Marine Sanctuaries (ONMS) serves as trustee for the nation's system of marine protected areas (MPAs). Through active research, management and public engagement, national marine sanctuaries sustain healthy environments that are the foundation for thriving communities and stable ocean-dependent economies. The primary objective of the National Marine Sanctuaries Act (NMSA) is resource protection of marine areas (Great Lakes included) of special national significance, while promoting sustainable uses. Five national marine sanctuaries are located on the west coast: Olympic Coast, Greater Farallones, Cordell Bank, Monterey Bay, and Channel Islands (OCNMS, GFNMS, CBNMS, MBNMS and CINMS respectively)

Purpose of the Annual Coordination Report

The West Coast Regional Office (WCRO) within ONMS appreciates the invitation to provide this annual coordination report to the Pacific Fishery Management Council (PFMC or Council). Since the first invitation in 2017, our relationship has continued to improve through knowledge and recognition of our individual mandates and shared responsibilities. The report contains an update of the following activities implemented in 2020: nominations, management plan review, and deep sea research. This report contains fewer topics of mutual interest compared to previous years to accommodate the Council's abbreviated schedule during COVID-19 conditions.

NOMINATIONS

- **Sanctuary Nomination Process – WCRO** (www.nominate.noaa.gov)
  Purpose: In response to widespread interest from the public, in June 2014 NOAA launched a process to accept new national marine sanctuary nominations (79 FR 33851). ONMS reviews sanctuary nominations against 11 criteria that are derived in large part from the NMSA. Nominations that successfully pass this review are added to an inventory of areas NOAA may consider for potential designation as a national marine sanctuary. The preamble to the final rule establishing the sanctuary nomination process (SNP) states "if NOAA takes no action on the nomination in the inventory, the nomination will expire after five years from time it is accepted to the inventory." NOAA subsequently clarified the process NOAA intends to use for assessing the continuing viability of nominations that are nearing the five-year expiration mark (84 FR 61546; November 2019). The process aims to determine if the nomination after five years is still responsive to the SNP criteria and considerations described in the 2014 final rule. A sanctuary nomination is not the same as a sanctuary designation. Designation is a separate process that by law is highly public and participatory, and often takes several years to complete.

  Outcome: ONMS's goal is to maintain a vibrant list of relevant nominations on the inventory. On the west coast, the second submission for a proposed Chumash Heritage National Marine Sanctuary (CHNMS), located off Point Conception in California, was added to the inventory in October 2015. The St. George Unangan Heritage National Marine Sanctuary nomination, surrounding St. George Island in the Bering Sea, was accepted and

added to the inventory in January 2017. In addition, on the west coast, NOAA has received two other nominations that were not accepted into the inventory of areas that could one day be designated as a new national marine sanctuary: 1) the Aleutian Islands National Marine Sanctuary, covering most of Western Alaska, the Bering Sea, and the Aleutian Islands; and 2) the Southern California Offshore Banks proposal, representing Cortes, Tanner, Cherry and Northwest Banks, and Garret Ridge. This nomination was declined by ONMS on March 12, 2018.

Outcome/Timeline for Designation: NOAA has received 15 nominations. Of these, one nomination is under review, six have been declined or withdrawn, and five have been admitted to the inventory. Three nominations on the inventory have been selected for designation: Mallows Bay – Potomac River in Maryland was designated on September 3, 2019; Lake Michigan in Wisconsin and Lake Ontario in New York continue to work their way through the designation process. Mallows - Potomac is the first national marine sanctuary designated since 2000 and protects the remnants of 118 World War I-era wooden steamships and vessels as well as other significant maritime heritage resources.

Outcome/Timeline for 5-Year Review of Nominations: In 2020, ONMS conducted a five-year review of the CHNMS nomination (see below), and initiated a review for the Lake Erie Quadrangle (PA) nomination. If no designation is initiated within five years, the other three nominations will undergo a similar review.

- **Chumash Heritage National Marine Sanctuary Nomination - WCRO**
  Purpose/Outcome: The purpose of the CHNMS nomination is to protect, study and interpret the region's abundant natural resources and maritime heritage, including the Chumash cultural heritage. The nomination stretches from Cambria along the coast to Gaviota, to offshore to the Channel Islands. It contains an internationally significant ecological transition zone, supporting high biological diversity and densities of numerous important species. The nomination states that the proposed sanctuary should not have an impact on fishing rights, nor impose future regulations upon commercial or recreational fishing. The nomination identified considerable threats to resources including existing and potentially future oil and gas development, offshore wind farms, fiber optic cables, potential marine transport of spent nuclear waste, and others for which a sanctuary could be ideal to address. The nomination recognized national marine sanctuaries can provide a single forum for comprehensive planning of multiple uses. The nomination was added to the inventory of candidate sites for future designation with community support from the public, elected officials, businesses, scientists, and environmental groups.

  The Chumash Heritage National Marine Sanctuary nomination was scheduled to expire on October 5, 2020, as NOAA had not initiated a designation process for this nomination. In March 2020, the WCRO initiated a five-year review to evaluate the responsiveness and relevance of the nominated area to the 11 sanctuary nomination criteria – the same criteria used to evaluate the nomination's eligibility to be on the inventory of nominations. ONMS consulted with the nominating party, held a public workshop and accepted public comment to gather new or updated information regarding the nominated area's responsiveness to the 11 criteria. The public comment period produced a considerable level of interest in the review of

the CHNMS nomination, totaling over 14,000 comments and signatures to various letters and petitions. Throughout summer 2020 the WCRO conducted research and summarized the information relevant to the nomination from the past five years in a technical report. ONMS Director Armor accepted the recommendation of the WCR director to maintain the CHNMS nomination on the inventory. The national significance of the natural and cultural resources of the area still remain, while the threats to those resources have increased from proposed energy production (offshore wind and oil/gas lease sales) and climate change, to mention a few. The nomination will remain on the inventory for an additional five years until October 5, 2025. For more information about the nomination or five-year review processes, visit nominate.noaa.gov, or contact lisa.wooninck@noaa.gov.

Timeline: There is not an active evaluation within NOAA at this time to consider moving this site forward for designation.

MANAGEMENT PLAN REVIEW

The NMSA requires NOAA to "evaluate the substantive progress toward implementing the management plan and goals for the sanctuary" and "revise the management plan and regulations as necessary to fulfill the purposes and policies of this chapter" at intervals not exceeding five years (NMSA 304(e)). Over the last decade, ONMS has strived to complete a sanctuary condition report, which describes the conditions of the sanctuary ecosystem in advance of a comprehensive management plan review. The condition report sets the stage for evaluating previous management efforts as well as the relevance of existing goals and objectives of the sanctuary. When a sanctuary pairs the condition report with the onset of sanctuary management plan review it helps create a clear link between resource protection needs and management priorities.

All national marine sanctuaries on the west coast are currently engaged with condition report development or management plan review, yet at different stages of the process. Here follows a summary of regional progress with the sites furthest along in the process (i.e., finalizing management plan review) mentioned first.

- **Management Plan Review – MBNMS**
  (http://montereybay.noaa.gov/intro/mp/2015review/welcome.html)
  Purpose/Process: MBNMS completed its condition report and kicked off management plan review in 2015 by publishing a Notice of Intent (NOI). The MBNMS Advisory Council held a number of meetings to discuss potential issues and action plan solutions to inform on how best to revise the management plan.

  A draft management plan, environmental assessment, and proposed rule were released for public review from July 6 through September 4, 2020. NOAA is not proposing any actions or regulations that directly or indirectly affect fisheries or is proposing any fisheries management actions or regulations related to fish or fisheries. Regulatory changes proposed are responsive to community needs as discussed in working groups and advisory council meetings. The proposed regulatory changes include 1) expanding the use of motorized personal watercraft (MPWC; e.g., jetski) seasonally at Mavericks by reducing the required

condition to operate from high surf warning to a high surf advisory; 2) moving the boundaries for year-round MPWC zones closer to shore; 3) clarifying the *beneficial use* of clean and suitable dredged material for habitat restoration purposes within MBNMS is fundamentally different from *disposal* of dredged material below the mean high water line; and 4) noticing the excepted Department of Defense activities at the Davidson Seamount Management Zone. MBNMS's proposed revisions to the 2008 management plan includes action plans addressing Climate Change, Coastal Erosion and Sediment Management, Davidson Seamount, Elkhorn Slough, Marine Debris and Introduced Species. Programmatic plans are Education and Outreach, Research and Monitoring, Resource Protection, Maritime Heritage, Operations and Administration and Marine Spatial Planning.

Close to 160 comments were submitted via various channels, including the regulations.gov portal, three virtual public meetings, and meetings of the MBNMS and GFNMS advisory councils, and advisory bodies. The majority of the comments were in support of the proposed regulatory changes. However, some commenters were concerned with the perceived limitations of the proposal to use dredged material for beneficial habitat restoration and misinterpreted terms of the proposed description for beneficial use. To avoid misconceptions, NOAA is clarifying the terms for beneficial use and scope of proposed activities that would be included.

Outcome: Final management plan, final environmental assessment, and final regulations.

Timeline: MBNMS expects to publish the final management plan, environmental assessment, and rule by late spring 2021.

Partners: The MBNMS and GFNMS advisory councils and other experts from local, state and federal partner agencies, such as the California Department of Fish and Wildlife (CDFW), US Fish and Wildlife Service and National Marine Fisheries Service (NMFS).

- **Management Plan Review – CINMS**
  (https://channelislands.noaa.gov/manage/plan/revision.html)
  Purpose/Process: CINMS initiated a public process to update the site's 2009 management plan by issuing a NOI in October 2019. The process to review the management plan was preceded by an update to the CINMS Condition Report, which was released and distributed in the spring of 2019 (https://sanctuaries.noaa.gov/science/condition/cinms/).

  In the NOI, NOAA did not specifically identify the need to revise regulations or adjust boundaries of the marine reserve and conservation area network within the sanctuary. In 2020 CINMS staff reviewed public scoping comments, and received input from the sanctuary advisory council on priority issues to address in the updated management plan. Staff have begun to draft five issue-based action plans to be supported by a range of strategies and actions: Climate Change, Marine Debris, Introduced Species, Vessel Traffic, and Zone Management. Staff also plan to develop five additional programmatic action plans focused on the programmatic areas of: Education and Outreach, Research and Monitoring, Resource Protection, Maritime Heritage, and Operations and Administration. At this pre-draft stage, ONMS is not planning to propose any new or modified actions or regulations that directly or

indirectly adversely affect fish, fisheries, or fisheries management. Throughout the process, sanctuary staff will reach out to coordinate with the PFMC, as well as CDFW and NMFS, as appropriate, should issues arise related to fisheries management.

Outcome: An updated sanctuary management plan containing programmatic strategies to guide sanctuary activities for 5-10 years, supported by an environmental assessment. The updated plan is expected to strategically orient sanctuary programs to meet priority issues relevant to current and future management needs over the next 5-10 years.

Timeline: Looking ahead, staff strives to have a draft management plan and environmental assessment released in 2021, with final documents to follow sometime in 2022.

Partners: The CINMS Advisory Council and other experts from local, state and federal partner agencies.

- **Condition Report Update – OCNMS**
  Purpose/Process: In anticipation of kicking off the OCNMS management plan review process in 2022, sanctuary staff made significant progress in drafting an updated OCNMS Condition Report. A sanctuary condition report provides a summary of resource conditions, specifically water quality, habitat, living resources and maritime archaeological resources in the sanctuary; describes pressures on those resources and the current status and trends of sanctuary resources; and summarizes management responses to pressures that threaten the integrity of the sanctuary's marine environment. The selection of indicators for condition report development, introduced in 2016, follows NOAA's California Current Integrated Ecosystem Assessment (IEA) framework. Use of common indicators across west coast sanctuaries and also shared by partners, greatly improves the ability to establish quantitative status and trends at different spatial scales. Use of confidence scores, also introduced in 2016, improves the certainty of the status and trend ratings. Since 2018, sanctuary condition reports also include a section on ecosystem services. The process to update a sanctuary condition report process is typically initiated with an orientation to the sanctuary advisory council and key partners, particularly from the science community.

  Outcome: An intensive 3-day expert workshop in January 2020 allowed dozens of invited subject matter experts to collectively identify status, trends, and confidence ratings for selected indicators of natural and cultural heritage resources, and ecosystem services in OCNMS 2008 - 2020. Subsequent webinars were held to ensure the participation of key individuals on topics such as cultural heritage and sense of place. The process also helped identify important data and analysis gaps (i.e. where data are lacking or analysis of existing data is needed). OCNMS advanced the ONMS condition reporting process in important ways, with several intended to better embrace tribal perspectives and reflect the *reciprocal* relationships of humans and their environment. Changes include refinement of ecosystem services concepts, and addition of a 'subsistence harvest' category to complement existing ecosystem services for commercial harvest and consumptive recreation. These and other enhancements in developing condition reports are likely to accrue benefits to other sanctuary sites, particularly in the Pacific Islands. The OCNMS Condition Report also supports an

important pilot effort to deliberately build climate forecasts and projections into future-focused management. This is particularly salient in light of one crucial preliminary finding: experts at OCNMS were united in their concerns surrounding the status and trends of climate drivers, resulting in the site's only Fair/Poor ranking.

Timeline: The release of the OCNMS condition report is expected in fall 2021. Members of the Intergovernmental Policy Council (i.e., the four WA Coastal Treaty Tribes and Washington State) were provided early access to the document in January 2021, given their status as key partners and sovereign governments with whom OCNMS works closely on many matters.

Partners: Olympic Coast Intergovernmental Policy Council, Makah Tribe, Quileute Tribe, Hoh Tribe, Quinault Indian Nation, State of Washington, OCNMS Advisory Council, NMFS/Northwest and Southwest Fisheries Science Centers (NWFSC and SWFSC), California Current IEA Program, Washington Sea Grant, NOAA's Pacific Marine Environmental Laboratory, Olympic National Park, and academic partners.

Olympic Coast National Marine Sanctuary Condition Report Workshop – January 2020 (photo credit: Robert Schwemmer/ NOAA).

- **Condition Report Update – CBNMS**
  Purpose/Process: In advance of a management plan review in 2022, CBNMS staff are updating the 2009 CBNMS Condition Report.

  Outcome: Staff at CBNMS are following a similar process for updating their condition report as has been followed by the other west coast national marine sanctuaries (see OCNMS Condition Report Update above). The updated condition report will provide an assessment of conditions in the sanctuary from 2009 to 2021. CBNMS staff kicked off the condition report

process with a presentation to their advisory council in 2020, followed by staff identifying appropriate indicators for natural and cultural resources of the sanctuary. Because of COVID-19 conditions, CBNMS staff held virtual workshops with experts to select data indicator for the status and trends ratings. The CBNMS condition report is relying on long term monitoring conducted by the sanctuary and its partners.

Timeline: Working with colleagues, CBNMS staff are compiling the data summaries for each data indicator and will be presenting these to experts at a series of virtual workshops in March and April 2021. At these workshops, experts will be asked to rate the status and trends of conditions in the sanctuary based on the data presented, and to rate the level of confidence in the data. Data indicators for the ecosystem services section of the report are also being identified and will be presented at a ratings workshop with experts in May 2021. Expected completion of the CBNMS Condition Report is 2022.

Anticipated Partners: CBNMS Advisory Council, National Centers for Coastal Ocean Science (NCCOS), California Current IEA Program, NMFS NWFSC/SWFSC, UC Davis Bodega Marine Lab, Point Blue Conservation Science (PBSC), Farallon Institute, San Francisco State University, Point Reyes National Seashore, The Marine Mammal Center, Cascadia Research, and GFNMS, among others.

- **Kick-off of Condition Report Update – GFNMS**
  Purpose: GFNMS staff kicked-off updating their 2010 Condition Report in January 2021. The condition report provides a basis for the next management plan revision, set to begin in 2023.

  Outcome: GFNMS is implementing a similar process to update their condition report as the other national marine sanctuaries have followed. In February 2021, GFNMS staff were scheduled to introduce the GFNMS Advisory Council and partners to the process and offer participants options to be involved to ensure the process is informed with the best local and current information. The GFNMS Condition Report will have a focus on how human and climate stressors can be managed.

  Timeline: In 2021, via a series of workshops and a research symposium sanctuary staff will consult with experts to identify data sources and gaps in relevant data series, and to assist in identifying appropriate indicators for evaluating status, trends, and confidence ratings for natural and cultural resources, and ecosystem services in GFNMS. In 2022, the sanctuary will invite experts to help evaluate the status and trends of sanctuary resources. Expected completion with release of the final condition report is in 2023.

  Anticipated Partners: GFNMS Advisory Council, Greater Farallones Association, NCCOS, California Current IEA Program, NMFS NWFSC/SWFSC, Restoration Center and Deep-sea Coral Research and Technology Program, UC Davis Bodega Marine Lab, UC Santa Cruz, Moss Landing Marine Laboratories, PBCS, Farallon Institute, San Francisco State

University, Point Reyes National Seashore, Golden Gate National Recreation Area, USFWS, CDFW, NOAA Restoration Center, ORR Marine Debris Program, MBNMS and CBNMS.

HABITAT RESEARCH

- **Deep-Sea Exploration on the E/V *Nautilus* – OCNMS, GFNMS, MBNMS, CINMS, WCRO**
  Purpose: The Ocean Exploration Trust (OET) and ONMS have partnered to explore the marine ecosystems of the West Coast Region. Working from the Exploration Vessel (E/V) *Nautilus,* sanctuary scientists mapped and explored in OCNMS, GFNMS, MBNMS, CINMS, and on and near Santa Lucia Bank in the nominated CHNMS. Many of the explorations were a continuation of NOAA's Deep Sea Coral Research and Technology Program to locate and study the distribution and abundance of deep-sea corals and sponges, in and outside essential fish habitat (EFH) areas, from Washington to California. As important as the scientific exploration from the *Nautilus* is the sharing of the excitement of discovery of rare and unique marine communities via telepresence to many different audiences, including schools.

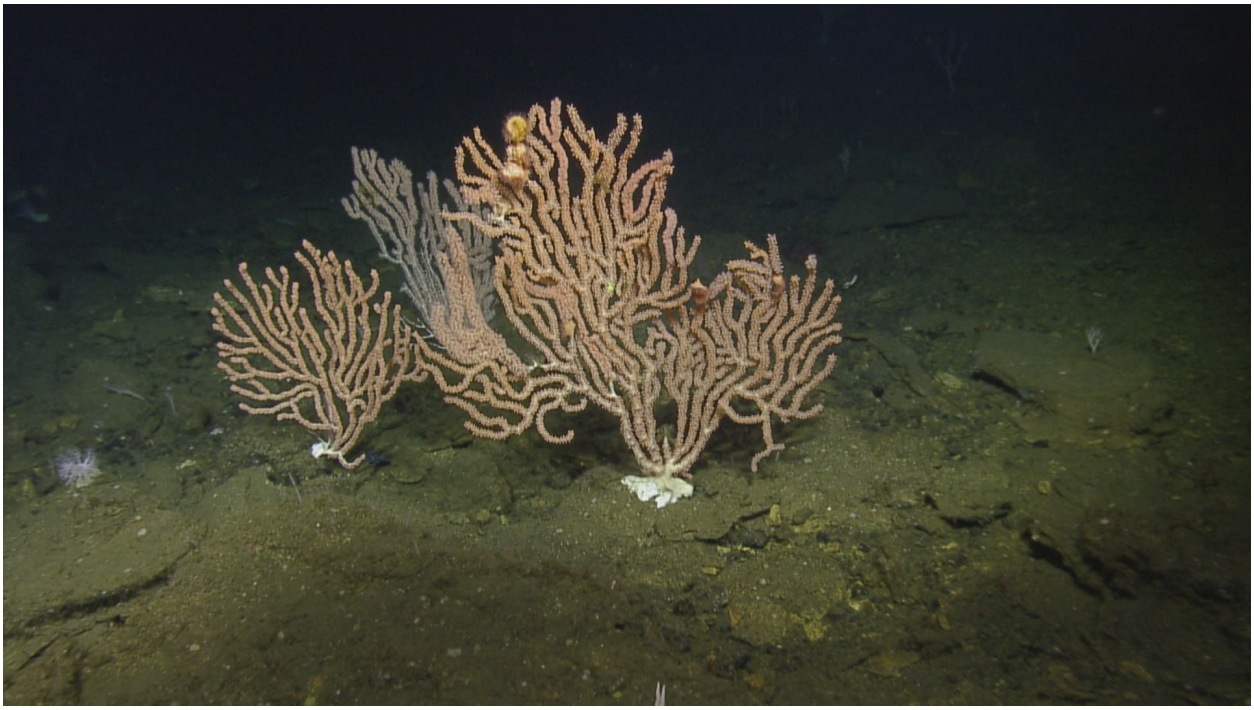
  Outcome: From approximately mid-September to mid-October 2020 researchers used OET's remotely operated vehicles (ROVs) to live-stream footage of deep-sea geology and biology, such as deep-sea corals, sponges, fishes, and octopi, which can be viewed on the ONMS website. Most notable is that the expeditions were conducted by a reduced *Nautilus* crew and guided remotely by 28 shore-side scientists from their homes and offices via telepresence technologies. Highlights of the *Nautilus* cruises of 2020 are as follows:

  - OCNMS and Oregon State University researchers coordinated to explore the deep habitats of Quinault and Grays Canyons for deep-sea corals and sponges. One dive traversed a prominent ridge in the Biogenic 2 EFH area, revealing old colonies of bubblegum coral. The team also explored six active methane seeps of the Cascadia Margin to better understand their use as sources of biopharmaceuticals and biotechnological compounds, and their role in the ocean ecosystem at large.
  - GFNMS and MBNMS researchers coordinated a cruise to sample Pioneer Canyon and the Davidson Seamount region, both in MBNMS. Portions of Pioneer Canyon revealed several areas that had numerous large colonies of bubblegum and bamboo corals on steep slopes with stratified layers of silt and hard substrate. In the "foothills" of Davidson Seamount well over 3,600 octopus were documented on a newly explored feature named the 'Octocone'. Most octopus were females brooding their eggs along warm water seeps surrounding the peak of Davidson Seamount. A whale fall, discovered in 2019, was revisited to compare the succession of decomposition and assess the invertebrates that were devouring the carcass, which has been confirmed to be from a minke whale.
  - CINMS and WCRO researchers coordinated to assess deep-sea corals and sponges in the Santa Lucia Bank region, and in newly mapped areas of CINMS. Exploration of a fault scarp on Santa Lucia Bank demonstrated large bubblegum corals and several large sponge species. Researchers also revisited a rocky feature inshore of the bank and confirmed the presence of seasonal clusters (likely spawning aggregations) of petrale sole. An extensive landscape of dead sponges (*Farrea* sp.) was discovered

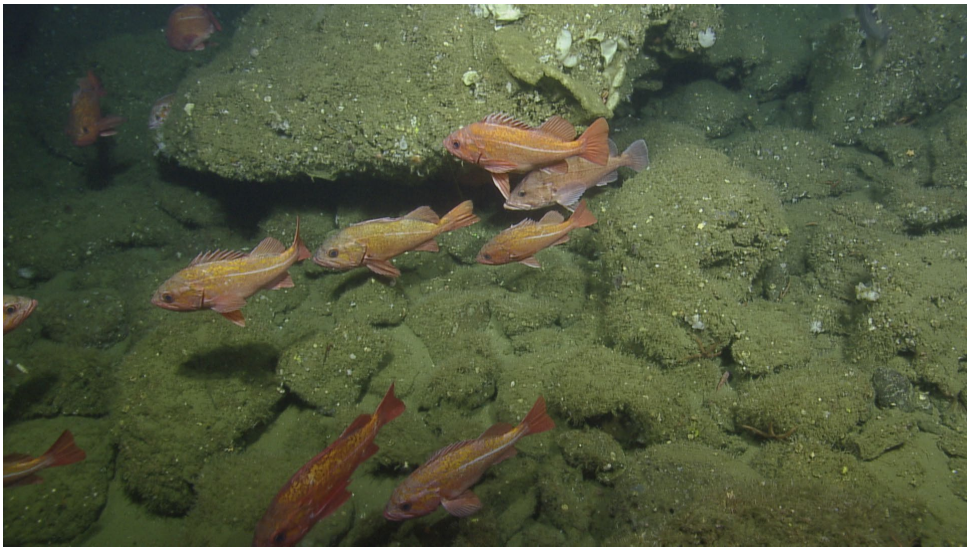
southeast of Santa Cruz Island, providing habitat structure for numerous marine species to attach to and grow. Furthermore, Richardson Rock Marine Reserve in western CINMS demonstrated rocky habitat with large schools of mixed-species rockfishes of vermillion, bocaccio, speckled and olive.

Timeline: The many hours of video data gathered from the cruises, and physical conditions will be analyzed this coming year and used to track and predict conditions and trends in benthic deep-sea habitats of the sanctuaries. In addition, the findings will help advance several sanctuary and fishery management goals.

Partners: Other key partners included the Quinault Indian Nation, United States Geological Survey, Moss Landing Marine Laboratories, California Academy of Sciences, and Santa Barbara Natural History Museum. Scientists from many academic institutions and museums provided generously their expertise in real-time via OET's communication channel Science Chat.



Pioneer Canyon in MBNMS has diverse species of large and small sponges and corals. The southwest portion of the canyon has numerous colonies of bubblegum and bamboo corals. Some specimens were collected for ageing and climate studies (photo credit: OET/NOAA).



Images taken during the Nautilus cruise of large aggregations of several rockfish species at Richardson Rock Marine Reserve (photo credit: OET/NOAA).