



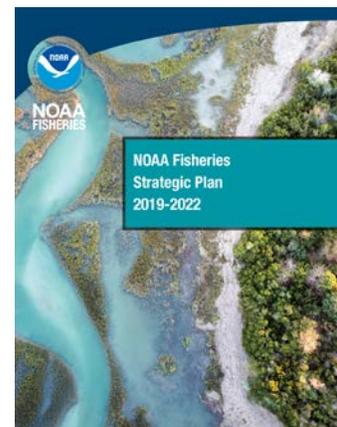
Priorities for Fiscal Year 2020

Purpose

The new NOAA Fisheries Strategic Plan and West Coast Geographic Strategic Plan establish our strategic direction, as guided by National Oceanic and Atmospheric Administration (NOAA) goals and priorities. This FY20 priorities document describes our mission, fiscal setting and challenges, and our strategic approach and funding priorities for meeting our core mission while maintaining focus on emerging needs. We also drill down to division-specific FY20 activities that will address SWFSC priorities. This document lays out our vision for the year ahead.

Our Mission

Our mission is to provide sound scientific advice in support of sustainable fisheries and the recovery and conservation of protected resources using ecosystem-based approaches. We are guided by our Congressional legislative mandates, goals and priorities. We are also guided by strategic planning documents of the Department of Commerce. Additional documents outline work plans and areas of emphasis and emerging needs for the NMFS and SWFSC. These include the NOAA Fisheries Climate Science Strategy and associated Western Regional Action Plan; NOAA Fisheries Ecosystem Based Fishery Management Policy, Roadmap and Implementation Plan; and SWFSC Program Review Reports, and planning documents of partner agencies with shared objectives. NMFS has also identified eight species occurring in US waters that are threatened by extinction, but that have prospects for improvement from conservation actions; six of the eight occur within the West Coast Region. The “Species in the Spotlight” is an agency initiative to change the trajectory of these species and place them on the road to recovery. Collectively, these documents and initiatives represent our core mission and emerging needs for FY20.



Our People

SWFSC employs some of the best scientists and support staff in the federal government. Our people produce impactful, award-winning work and are our most important asset. They are attracted to the agency’s science-based mission and many make SWFSC their career home because of the effect they can have on applied problems. A challenge for the Center is to continue to attract and retain this top talent in the face of ongoing fiscal constraints and an improving

economy. In FY20, we will continue efforts to further engage our employees, diversify our workforce, and maximize our versatility in an effort to increase our resilience to change.

Fiscal Landscape and Challenges

SWFSC has received similar budgets for several years. The FY19 Congressionally-approved budget reflected FY18 levels for the Center in most areas, with moderate increases for Pacific Salmon and Highly Migratory Species activities. Much of the work completed in FY19 could not have been accomplished without partnerships and leveraging of funds. For example, FY19 funding from other federal and state agencies provided support for salmonid recovery and other Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) activities (e.g., abalone, cetaceans and aquaculture). These types of partnerships have become integral to how we accomplish our mission.

The President's FY20 NOAA Budget request includes reductions in the overall NMFS budget, including the elimination of the SWFSC's Antarctic Marine Living Resources Program budget line supporting AERD. However, as of this writing, both the House and Senate budget mark-ups have passed and all of these cuts are restored in those documents. The budget process is long and takes into consideration the budget mark-ups before a final appropriations bill is signed. In addition, increased agency fee-for-service programs within NOAA to improve corporate services will continue to impact our resources. Prudent planning includes preparation for both level funding and reduction scenarios for SWFSC.

FY20 Priorities

NMFS has adopted many of the same steps SWFSC has put in place in recent years to define priorities, so we will continue to develop our priority-based resource allocation process that consists of:

1. A West Coast Geographic Strategic Plan;
2. Activities Descriptions for each Major Activity in the Center;
3. Ranking Criteria (based on NMFS Criteria) (see Appendix B);
4. SWFSC Annual Priorities Memo;
5. Priority and Risk-Based Allocations of funding;
6. Performance Plans Aligned with Center's Prioritized Activities and SES Performance Plan; and
7. Communication to Staff.

NOAA Fisheries Strategic Plan identifies three broad goals:

Goal 1: Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability.

Goal 2 – Conserve and recover protected species while supporting responsible fishing and resource development

Goal 3 – Improve organizational excellence and regulatory efficiency

The following are the priorities for SWFSC base programs in FY20 to support these goals:

- Magnuson-Stevens Act stock assessments, priority economic analyses, and fisheries surveys for Coastal Pelagic Species (CPS), Highly Migratory Species (HMS), Groundfish, and Salmon. Within this list, priority will be given to stocks that are commercially and/or recreationally fished in CA Current Large Marine Ecosystem (CCLME) waters and have economic impacts on the West Coast, as well as those identified through Treaties and international agreements with Regional Fishery Management Organizations and Regional Fishery Organizations. Specific projects include benchmark stock assessments for Pacific albacore, Pacific sardine, Pacific bluefin tuna, Antarctic krill, and Pacific salmon stock abundance forecasts for 2020. Management Strategy Evaluations of Pacific albacore and Pacific bluefin, will be priorities, as will bycatch research and monitoring in CCLME fisheries.
- Marine mammal assessment updates (abundance and trends, population structure, health and condition, and placement into an ecosystem context) for CCLME under the Marine Mammal Protection Act. These assessments also fulfill a SWFSC requirement as a part of our partnership with Navy and BOEM to jointly fund marine mammal surveys in many regions of the Pacific.
- Marine turtle research and assessments, especially for ESA-listed Species in the Spotlight Leatherback turtles.
- ESA-listed Species in the Spotlight Sacramento winter run Chinook, as well as research on Upper Klamath Basin coho to support WCRO decision-making (including dam removal). Identifying a new funding source for Species in the Spotlight California coastal coho salmon population research (including reintroduction research) will be a priority. Commitments made to outside agencies, such as Bureau of Reclamation, are high priorities to fulfill.
- Life history studies, as well as data reporting/management activities that support the above priorities.
- Ecosystem research to implement the agency's Western Region Implementation Plan under the Ecosystem Based Fisheries Management Roadmap, the Western Regional Action Plan for climate variability, and U.S. strategic interests in Antarctica. Special emphasis will be on integrating across divisions to achieve synergies and efficiencies with the Center Ecosystem Science Committee (CESC). Specifically, the two approved CESC Regional Workplans will continue implementation in their two areas of 1) food habits and 2) ecological indicators. The seasonal CalCOFI surveys will be supported.
- Two areas of aquaculture will continue to be a priority: research for recovery of white abalone (a Species in the Spotlight), as well as aquaculture research for *Seriola* (CA yellowtail).

- Habitat surveys and research in the CA Current to support Pacific Fishery Management Council actions on Essential Fish Habitat under the Magnuson-Stevens Act, including deep sea corals.
- Implementation of innovative technologies that increase information content per unit of cost while reducing overall costs (e.g., Antarctic autonomous observing platforms, unmanned aerial systems, etc.).
- Training and development of staff, as well as increasing diversity and inclusion efforts to both provide opportunities to our workforce and bolster our ability withstand attrition.
- Mandatory computing upgrades, data management priorities, and funded facility upgrades.

While we will continue our efforts to focus our scientific enterprise in FY20, the base resources available to support research in the Southwest will remain considerable (in excess of \$40M). We expect to carry out our planned major surveys, process, disseminate, and archive core fisheries data and conduct fisheries stock assessments. We also expect to continue to provide relative abundance and distribution information on several marine mammal and turtle species. We plan to conduct research on environmental variability that will advance the agency's commitment to ecosystem-based fisheries management and improve our understanding of how the environment affects commercial and recreational fisheries over a range of temporal and spatial scales. In addition, a significant number of research projects will be funded through reimbursable agreements with other agencies, as well as with temporary funding from NMFS Headquarters Offices.

We must also plan for the possibility of the President's Budget being enacted, which includes the elimination of the specific budget line supporting our Antarctic research program, while simultaneously preparing for fieldwork and activities to continue there. Finally, we will need to make strategic decisions in FY20 on how the Center is organized and the activities we choose to conduct. Flexibility will be key. Any selection of programs to be eliminated, significantly modified, or reduced in scale, will be done strategically and transparently.

Strategic Approaches for Addressing Priorities

Partnerships

Partnerships have long been important to carrying out our work, and that importance will continue in FY20. Funds external to the Center will be sought to support the above priorities, as needed. For example, two new NMFS Strategic Initiatives focused on 1) genetics and genomics and 2) use of Fourier transform-near infrared spectroscopy for aging should be leveraged. External funds should not be sought if they do not support the Center's priorities.

Cost Containment

We anticipate future budget decreases will hamper our ability collect core data and address emerging scientific and operational issues. Given these challenges and those outlined above, we look to innovate and partner on new ways to collect and analyze data and to maintain our high priority fisheries, marine mammal, turtle and other research programs. Staffing costs are by far our largest expense and these rise each year on average by 3-4%, or nearly \$1M Center-wide/year. We also face increased maintenance costs from aging facilities. We will take steps to contain these costs over the short and longer term to allow SWFSC to devote adequate resources to support research operations.

Alignment of Research Activities and Workforce Capabilities

In this environment, we will bolster our efforts to re-engineer SWFSC science advice and services based on trade-offs between internal base funding levels, staffing requirements, technological advances, strategic partnerships and shared priorities among the SWFSC, West Coast Regional Office, Pacific Fishery Management Council, and NMFS Headquarters. The following strategies will be used to align our workforce capabilities and research activities with fiscal realities:

- Use non-competitive reassignments where possible to fill labor shortfalls;
- Use SWFSC resource allocation process to provide incentives to motivate this workforce re-alignment;
- Continue progress in research integration through cross-divisional staff integration;
- Continue efforts to control federal and contract labor costs.

Appendix A - Division Priorities

Antarctic Ecosystem Research Division (AERD)

FY19 Accomplishments

The AERD's accomplishments from FY19 and previous years provide a foundation for establishing its priorities in FY20 to meet Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) objectives. During FY19, the AERD implemented a new research program that will ultimately link high-resolution (in time and space) data on variations in krill biomass and "flux" to the foraging dynamics of krill-dependent predators. The Division also developed the first-ever estimates of krill biomass using autonomous gliders. Confidence in our estimates of krill biomass was enhanced by simulation work and comparisons with historical, vessel-based estimates. AERD also instrumented penguins and fur seals with animal-borne video cameras and developed methods for using machine learning tools to process these videos and estimate the densities of krill targeted by these predators. The Division has started to transform its field research with technologies that can increase operational flexibility and simultaneously facilitate scientific inquiry across a hierarchy of spatio-temporal scales.

FY20 Priorities

During FY20 the AERD will prioritize scientific work that builds on its accomplishments from previous years to address issues of immediate importance to CCAMLR and of general relevance to the scientific community. Specifically, the AERD will prioritize efforts to

1. collect data on oceanographic conditions and Antarctic krill using gliders and moorings as well as integrate these data with concomitant observations on krill-dependent predators, including observations collected by animal-borne video cameras; and
2. provide scientific advice on the management of the krill fishery and other human activities in the Antarctic.

The aim of Priority 1 above is to collect data that can be used to quantify the functional relationships between krill-dependent predators and their prey and to test hypotheses about whether such relationships are determined more by krill biomass, throughput, or swarm structure. The word "integrate" purposefully implies that the ultimate products of this work will be generated from synthetic analyses of multiple data streams; these products will be relevant to ecosystem-based management of the Antarctic krill fishery specifically and of fisheries that target forage species more generally. The aim of Priority 2 is to inform the U.S. Delegation to CCAMLR about the expected outcomes of various existing and proposed strategies to manage the Antarctic krill fishery by establishing a catch limit that is consistent with the objectives of the CAMLR Convention, distributing this catch limit in space, and harmonizing management of the krill fishery with other management initiatives (e.g., the D1MPA proposal).

To achieve its scientific objectives, the AERD will prioritize recruitment, onboarding, training, and integration of new staff members who will fill key vacancies within the Division.

Environmental Research Division (ERD)

The Environmental Research Division's (ERD) FY2020 priorities track from FY2019 and remain closely aligned with the Center's strategic goals, specifically in regards to researching climate impacts on marine ecosystems, developing dynamic ocean management strategies, improving communication of real-time environmental conditions, and leveraging emerging technologies to bring environmental considerations into management decisions.

FY19 Accomplishments

- ERD remains the Center's lead for continued improvement of the California Current Integrated Ecosystem Assessment (CC-IEA) that brings ecosystem consideration into the Pacific Fisheries Management Council's (PFMC) Fisheries Ecosystem Plans.
- The marine heat wave of 2014-15 (the 'blob'), and the emerging marine heat wave of 2019, demonstrate the importance of having near real-time data available to the Council.
- Two new upwelling indices provide both the rate of upwelling and the nutrient delivery to the euphotic zone at high temporal and spatial resolution
- An assessment of marine heat wave conditions
- A suite of dynamic ocean management tools to reduce protected species bycatch and entanglement while improving fisheries sustainability.

FY20 Priorities

- The "Future Seas" project, a collaboration with OAR, is the primary NMFS eastern Pacific Ocean climate science strategy program to develop short and mid-term climate projections;
- CoastWatch, ERD works closely with NESDIS to develop new satellite products;
- ERDDAP is a sought after web interface that greatly facilitates data exploration
- Contribution to the CESC sponsored update on ecosystem indicators/MSE
- Dynamic ocean management tools are being extended to a suite of management issues

ERD provides leadership on many SWFSC and NOAA initiatives, including leadership of the SWFSC Center Ecosystem Science Committee (CESC) and the CC-IEA, and an advisement role on the Center's Workplace Collaboration Team. In addition, ERD scientists provide leadership in both the NMFS Climate Science Strategy Western Regional Action Plan (WRAP) and the EBFM Western Region Implementation Plan (WRIP), membership on the NOAA Climate and Fisheries Initiative Expert Teams, NOAA Marine Prediction Task Force, whale entanglement steering committee, Southern Resident Killer Whale steering committee, and membership on the CeN-COOS/SCCOOS Joint Science Advisory Board. Internationally, ERD scientists play a leadership role in the North Pacific Marine Science Organization (PICES; Co-Chair of FUTURE Science Program, Science Board member, Chair of Working Group on 'Climate and Ecosystem Predictability', other Committee and Working Group membership), as well as the International Ocean Color Coordination Committee (IOCCG), the International Affairs and Scientific Organizing Committees of PORSEC, and NOAA's Ocean Color Working Group. ERD scientists also serve as Editors of leading scientific journals, including *Fisheries Oceanography* and *Marine Ecology Progress Series*.

Fisheries Ecology Division (FED)

FY19 Accomplishments

FED maintained its focus on providing critical science support to our management partners while advancing basic research to provide the basis for such support into the future. Some notable highlights included:

- Assessing two groundfish stocks and two salmon stocks, and completion of overfishing reports for two salmon stocks declared overfished last year. Cowcod, one of the last overfished groundfish species on the west coast, has been rebuilt.
- Supporting the WCRO's re-initiation of consultation on long-term operations of water projects in the Central Valley and ongoing stakeholder engagement to increase adoption of our modeling tools
- Completing the 37th annual rockfish recruitment and ecosystem assessment survey and a deep-sea coral survey
- Hosting and leading a NMFS workshop on applying empirical dynamical modeling and nonlinear forecasting to fisheries data
- Collaborating with fishers to collect critical data to support assessment of nearshore rockfish species
- Further investigation of the genomic basis of life history variation in salmonids, and using this information in two petition-driven status reviews.

FY20 Priorities

On the PFMC front, we will be conducting assessments of three salmon stocks and supporting the SSC. On the ESA front, we will be conducting 5-year status review updates for listed salmon and steelhead ESUs and DPSs, and we will maintain our focus on winter-run Chinook salmon and California Coast Coho salmon, both Species in the Spotlight. We will also engage in Center-wide efforts to advance ecosystem-based fisheries management. Some particular projects will include:

- Conducting the 38th annual rockfish recruitment and ecosystem assessment survey, a multi-agency deep-sea coral and sponge survey, and repeated surveys of the Trinidad Head Line
- Completion of 5-year status review updates for various Chinook and coho salmon ESUs and steelhead DPSs in California and southern Oregon.
- Putting the CCC coho research program on sustainable footing without reliance on FRGP funding
- Continuation of tagging programs providing real-time information on migration timing and survival for winter-run Chinook and other populations
- Supporting the two ecosystem-focused projects being led by the Center's Ecosystem Studies Committee (food habits and ecosystem indicators/MSE)
- Evaluation of whole genome sequence data in salmon and steelhead to elucidate the heritable bases of life history variation, including migration timing, spawn timing, and age at maturity

Fisheries Resources Division (FRD)

FY19 Accomplishments

In FY19, FRD focused on conducting science directly supporting mandates of the MSA and ESA to provide scientific assessments and advice for managing fish stocks and recovery of protected species. Major accomplishments toward achieving this research objective included:

- completing four seasonal CalCOFI cruises, a joint Gear Selectivity cruise, and the California Current Ecosystem Survey combining data from NOAA ships, unmanned surface vehicles and partner industry vessels
- completing the Pacific sardine assessment update and Pacific mackerel benchmark assessment;
- rearing 1000 juvenile white abalone as part of a collaborative breeding program and inducing the first spawning of captive Black Abalone at the SWFSC;
- completing restructuring of the California Cooperative Oceanic Fisheries Investigations (CalCOFI) database and archiving and documenting legacy data from the mid-water trawl survey in the California Current from 1950-1989;
- developing an individual transferable effort credit program with empirical analysis for the purse seine fishery of the Eastern Pacific Ocean in collaboration with the Inter-American Tropical Tuna Commission;
- development of *Tuna Species of the U.S. West Coast: An Identification Guide*.

FY20 Priorities

FRD's FY20 priorities continue to be informed by internal planning processes from the 2013-2017 MSRA Science Reviews, Species in the Spotlight Initiatives, and recommendations of NOAA Fisheries' national Ecosystem Based Fisheries Management Policy and Roadmap. Within the SWFSC, FRD will also focus on two Science Center initiatives; ecosystem indicators and trophic interactions of top predators including trophic dynamics of forage species.

FRD will also continue to focus on scientific support for white abalone identified as one of eight ESA listed *Species in the Spotlight*, including the first attempt to out-plant juvenile white abalone off Los Angeles and San Diego. In collaboration with international partners, the FRD will continue its efforts on Pacific Bluefin tuna, including the development of Close-Kin Genetic methods and making progress on Management Strategy Evaluations (MSEs) for both Pacific Bluefin tuna and north Pacific Albacore.

Other important FY20 surveys and scientific research will include:

- complete benchmark stock assessments for HMS (Pacific Bluefin Tuna, North Pacific Albacore) and CPS (Pacific Sardine);
- support quarterly CalCOFI cruises as well as a Spring CPS DEPM and Acoustic Survey and a California Current Ecosystem Survey in the summer of 2020;
- expand research on the deep scattering layer by incorporating acoustic survey information with available trawling data;
- execute actions from the National Saltwater Recreational Fisheries Implementation Plan;

- expand managed fish stock climate vulnerability analyses and incorporate guidance on changing climate information into management, including ecosystem indicators;
- support life history and habitat ecology, age and growth, reproductive biology, and status of trends for trust species;
- exploring requirements for aging fish within the Life History Program to meet the increasing demands for high-quality aging data in stock assessments using Fourier-transform Near-infrared Spectroscopy (FT-NIRS) Analysis of otoliths and vertebrae;
- continuing HMS fisheries economic analyses, migration, stock structure and age and growth studies for use in stock assessments and management support; and

Information Technology Services (ITS)

ITS priorities are informed by needs from the SWFSC as well as requirements from the DOC, NOAA, NMFS and other Federal organizations such as DHS and OMB.

FY19 Accomplishments

FY19 brought stability to the ITS team with the addition of a permanent ITS Director who began to explore data and analytics at the Center as well as to work with ITS to strengthen IT service delivery and the customer experience. ITS has worked hard this year to promote one ITS team for the Center, by increasing collaboration with all locations.

Other important FY19 accomplishments:

- Planned and coordinated the mandatory upgrade of all Windows 7 computers to Windows 10; implementation will complete mid-November 2019.
- Implemented change management and project intake/review processes
- Advertised, interviewed, hired and on-boarded new ITS staff member stationed in Santa Cruz
- Worked with staff across the Center in order to implement all the technical changes necessary to meet a mandate designed to improve IT security across all public facing web sites and applications.

FY20 Priorities

FY20 will see continued work in the areas of data management, analytics and storage as well as continuous improvement in IT service delivery and customer experience.

Additional projects planned for FY20 include:

- Pending funds availability, ITS will work to move all Center locations into the N-Wave, NOAA's enterprise network solution that provides high-speed internet connectivity
- Pending funds availability, ITS will procure and implement an upgrade to the existing scientific computing platform
- Complete mandatory infrastructure upgrades due to software becoming end of life:
 - Complete the transition of all computers to Windows 10
 - Upgrade all Windows 2008 servers

- Upgrade all SQL 2008 servers
- Implement Center-wide Intranet site.

Marine Mammal and Turtle Division (MMTD)

MMTD's priorities are informed by our statutes, internal planning processes, action items arising from NOAA Fisheries' National 2015 review of Protected Species Science, advancement of key national initiatives, and science needs of the WCRO, other Pacific Regional Offices, and HQ offices of PR and S&T. Major priorities fall into four general categories: 1) estimate abundance and trends; 2) clarify population structure; 3) assess health and condition; and 4) place our trust species into an ecosystem context. These priorities are implemented through field, laboratory, and analytical research that maintains critical time series, expands the use and development of advanced technologies, further develops quantitative tools to facilitate implementation of our statutes, and strengthens existing partnerships and creates new ones, within and external to the agency.

FY19 Accomplishments

- California Current Ecosystem Survey aboard FSV REUBEN LASKER;
- Leatherback foraging ecology research in central California;
- Aerial surveys for co-occurrence of humpback whales and pot fishing gear along the CA coast and CA Sea lions in the Channel Islands;
- San Diego Bay green turtle monitoring and abundance survey;
- Twenty-sixth consecutive survey of eastern North Pacific gray whale calf production;
- Assessing health and condition of Southern Resident Killer whales, Cook Inlet Belugas, North Atlantic right whales using UAS and photogrammetry;
- Laboratory analyses of UAS photogrammetry images and hormones in biopsy samples from dolphins to assess behavioral and physiological responses to controlled sonar;
- Scientific consultation, data analysis and reporting in support of WCRO efforts related to the proposed MMPA waiver request by the Makah Indian Tribe;
- Advancements in molecular genetics and demographic research capabilities;
- Vaquita Conservation, Recovery, Protection;
- Sequencing of the full genome of the vaquita and leatherback; and

FY20 Priorities

- California Current Ecosystem Survey data analysis;
- Food habits study as part of CESC to understand trophic ecology in the California Current;
- ADRIFT passive acoustic project in the California Current in partnership with BOEM;
- Green turtle monitoring and habitat use in S. California in partnership with WCRO and U.S. Navy;
- Continuing science-based approaches to mitigation of large whale entanglements and ship strikes in the California Current;
- Publication of Marine Mammal Stock Delineation Handbook;

- Providing science-based tools to facilitate identification of and impact of anthropogenic stressors on humpback whale Distinct Population Segments in the California Current;
- NextGen (genomics) analysis for leatherback population structure and vital rates;
- Developing genomics markers for hawksbill turtle demographic studies;
- Conducting aerial surveys and at-sea capture of leatherback turtles off central California;
- Developing age-based habitat use models for endangered hawksbill turtles in the eastern Pacific;
- Conducting Eastern North Pacific gray whale population abundance and calf production surveys;
- Testing new fixed-wing Unmanned Aircraft Systems (UAS) for photo-surveys of whale abundance;
- Marine mammal and sea turtle stranding response and necropsy;
- Enhancing assessments of health and condition of cetaceans;
- Developing and testing eDNA methods for marine mammals and turtles; and
- Clarifying cetacean taxonomy and stock structure of cetaceans.

Operations and Management Division (O&M)

FY19 Accomplishments

O&M focused on activities related to support a variety of programmatic and administrative operations.

- Implemented new NOAA/DOC system requirements for travel, purchase cards, human resources and other administrative compliance areas.
- Completed over 300 procurement actions including new and modified task orders on the IDIQ contracts, reimbursable agreements and contract deobligations.
- Oversaw management of the Center's Purchase Card Program and 90+cardholders
- Served as the Center's sole Contracting Officer Technical Representatives on over a dozen contracts with a value of over \$30M dollars
- Executed a \$50M budget with final appropriations arriving in late July
- Completed seven compliance reviews as part of ongoing efforts by NMFS and NOAA to increase internal controls and compliance in several areas
- Organized or provided training for procurement and contracts, purchase card holders, travel regulations and management system and supervisory safety training
- Provided coordination of several NOAA Workforce Management transitions including implementation of the HRConnect system
- Created new accountable property excess procedures and managed the Center's accountable property program
- Supported hundreds of travel trips and needs including foreign travel, administration of the Integrated Travel Management System, and fiscal management of travel deobligations

FY20 Priorities

O&M's FY20 priorities will address and are consistent with facilitating the advancement of key national initiatives such as internal controls reviews and processes, statutory and regulatory audits, and annual management control reviews. O&M staff will also manage several DOC/NOAA system changes, including SmartPay3 and ProTech and will continue to serve as the Contracting Officer Representatives for SWC contracts. Changes at DOC/NOAA level will also require certain Standard Operating Procedures and Policies to be revised and distributed. O&M will also be prepared to provide content and recommended tools for the upcoming SWC Intranet project being managed by the IT Group.

The division will focus on maintaining dedicated and knowledgeable technical and support staff for our main operational and administrative functions to support SWC's research. This includes providing the Center with the facilities and field program support needs to carry out research activities.

SWC received funding from NMFS to undertake several SWC facility projects in FY20, which are underway. Projects at Santa Cruz include: 1) Emergency Backup Generator and Major System Components, 2) Facility Security Improvements, 3) Sea Water Tower Sand Filters and Coating, 4) Cooling Tower repairs, 5) Sump Pump System repair, 6) Window Weather Stripping, and 7) Roof Replacement. Projects in La Jolla include: 1) Plumbing and Sump repairs, 2) Condenser Water System repairs, 3) Facility Security Improvements, 4) Freezer Condenser Unit Improvements, 5) Aquaria Life Support Systems repairs, and 5) Building drainage and Roof Leak repairs.

Appendix B - Criteria for SWFSC Activity Assessment¹

Key Questions and Evaluation Scale

Part I: Characterize Mission Attributes

A) To what degree is this Activity mandated?

5: Very High – NMFS/NOAA/DOC has exclusively identified that SWFSC will conduct this specific activity

4: High – NMFS/NOAA/DOC has identified that SWFSC and other FMCs will conduct this specific activity

3: Moderate – SWFSC is permitted to act

2: Low –

1: Very Low – There are no statutes or orders compelling or permitting SWFSC to act.

Mandated activities include those required by statute, judicial order, treaty or convention. These include but are not limited to:

- Assessments, recovery plans, status reviews and data reporting requested by the PFMC and WCRO.
- Data reporting requested by RFOs, RFMOs, and Commissions to which the US is a party.
- Assessments and analyses requested by RFOs, RFMOs, and Commissions to which the US is a party and there is a science requirement.
- Assessments or status reviews required by the MMPA.
- ESA requirements assigned to the SWFSC, such as priority actions identified in the US Pacific Sea Turtle Recovery Plans
- Actions defined in recovery plans [does this go under/with ESA requirements?]
- Actions required by Biological Opinions
- Interagency Agreements that support our statutes (MSA, ESA, MMPA).

B) If SWFSC did not execute this Activity, to what degree would other organizations NOT be able to provide similar capabilities (products/services/data/information/other)?

5: Very High – Only SWFSC can provide this Activity's capabilities.

4: High – The number of other organizations including FMCs which could provide this Activity's capabilities is limited and the quality, timeliness, and/or utility of the capabilities would be inferior compared to SWFSC completion of this Activity.

3: Moderate – Many other organizations could provide this Activity's capabilities, but the quality, timeliness, and/or utility of the capabilities would be inferior to those of this Activity.

2: Low –

1: Very Low – Many other organizations could provide this Activity's capabilities and the

¹ * NMFS criteria adapted to SWFSC.

quality, timeliness, and/or utility of the capabilities would be similar to those of this Activity.

C) Is the Activity central to SWFSC's ability to achieve its strategic plan's goals and objectives?

5: Very High – Critical to achieve goals/objectives and/or a SWFSC fixed cost requirement.

4: High Important to achieve goals/objectives, but discretionary other than associated fixed cost labor requirements.

3: Moderate – Important discretionary activity with no fixed labor costs.

1: Low – Discretionary activity

D) Is the Activity one of the emphasis areas in the current SWFSC Annual Priorities Memorandum?

5: Yes

1: No

Part II: Risk Assessment of potential impacts

E) If SWFSC did not execute this Activity, what would be the scale of the impact on relevant communities, stakeholders and economies, i.e., what would be the degree of impact for those segments that are affected?

5: Catastrophic

4: Major

3: Moderate

2: Minor

1: Minimal

F) If SWFSC did not execute this Activity, how severe would the risks be to the scientific, technical and organizational capabilities required to execute SWFSC's mission functions today?

5: Catastrophic

4: Major

3: Moderate

2: Minor

1: Minimal

G) If SWFSC did not execute this Activity, the risk to a trust resource population would be:

5: Greatly increase

3: Increase

1: Remain unchanged