

# West Coast Geographic Strategic Plan 2024–2027



**NOAA**  
**FISHERIES**





**Cover: Pacific salmon spawning ground. Credit: NOAA Fisheries. Above: The West Coast Bottom Trawl Survey is a key source of fishery-independent data used for stock assessments and groundfish management. Credit: NOAA Fisheries.**



# A Message from Our Leadership

We are proud to release NOAA Fisheries' Geographic Strategic Plan for the West Coast. This is our 4-year blueprint for coordinating and applying the strengths of our West Coast Regional Office, Northwest and Southwest fisheries science centers, Restoration Center, Office of Law Enforcement, and Seafood Inspection Program. It outlines how together we will care for the marine resources that sustain so many lives and livelihoods on the U.S. West Coast.

The rich and productive marine ecosystem of the West Coast supports and has shaped our history, culture, and economy. Its riches reach from the depths beyond the continental shelf where rockfish and deep-sea corals dwell to high mountain rivers where salmon spawn their next generation. Coastal waters, including five National Marine Sanctuaries, foster recreation from paddling to deep-sea fishing and supply a sustainable stream of seafood from aquaculture and fishing fleets to feed our families. This strategic plan applies our scientific expertise, policy leadership, and enforcement and safety oversight to protect and foster that ecological wealth to sustain coastal communities, tribes, and states for many years to come.

The most constant factor in the California Current Ecosystem is change, which drives the vibrant and dynamic nature of the ecosystem and its inhabitants. At the same time, global climate change is accelerating in ways that we are rushing to understand and consider. Collectively we must leverage our science, policy know-how, and on-the-ground presence to comprehend, anticipate, and respond in ways we never have before. We must work with partners to leverage skills and resources that go far beyond our own.

The three main goals in this plan are: managing and making sustainable use of West Coast fisheries, protecting and recovering the species that need it, and taking care of our people and fiscal resources. We strive for a workforce that reflects and values the diversity of our region and its resources, because those resources bring us together, both within NOAA Fisheries and with the West Coast communities and people we serve. We ask for your continued commitment in making this plan a reality in ways that benefit us all.



**Jennifer Quan**  
Regional Administrator  
West Coast Regional Office



**Kevin Werner, PhD**  
Director  
Northwest Fisheries Science  
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**Kristen Koch**  
Director  
Southwest Fisheries Science  
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# Science, Service, and Stewardship

## Vision

The potential of our ocean ecosystems is realized—using innovation and understanding of a changing world—for the benefit of the nation.

## Mission

NOAA Fisheries is responsible for the stewardship of the nation's living marine resources and their habitat. We provide vital services for the nation: sustainable and productive fisheries, safe sources of seafood, the recovery and conservation of protected resources, and healthy ecosystems—all backed by sound science and an ecosystem-based approach to management.

## Organization

The [Northwest Fisheries Science Center](#) provides scientific information to support fisheries management and conserve protected species in the Pacific Northwest, including the marine and freshwater environments of Washington, Oregon, northern California, and Idaho. We conduct conservation science on whales, salmon, and other marine species and the ecosystems upon which they depend; we study the ecological links between fish and their habitats; and we coordinate the Science Center's programs for fisheries monitoring, fisheries data management, fisheries interactions, fish life history studies, and stock assessment in support of sustainable fisheries.

**The Northwest Fisheries Science Center is headquartered in Seattle, Washington** and has facilities in Manchester and Pasco, Washington; and Newport and Hammond, Oregon.

The [Southwest Fisheries Science Center](#) provides scientific information to support fisheries management and conserve protected species in the California Current, throughout the Pacific Ocean, and around Antarctica. Scientists conduct biological, economic, and oceanographic research, observations, and monitoring of living marine resources and their environment, as well as conduct research on the impacts of environmental variability and climate change on marine ecosystems and on fishery and conservation socio-economics.

**The Southwest Fisheries Science Center is headquartered in La Jolla, California** and has facilities in Santa Cruz, Monterey, and Granite Canyon, California; and field stations on Livingston Island and on King George Island, Antarctica.

The [West Coast Regional Office](#) works within the coasts and watersheds of Washington, Oregon, California, and Idaho. Covering 317,690 square miles of the eastern Pacific Ocean, 1,293 miles of Pacific Ocean coastline, and more than 7,000 miles of tidal coastline, as well as the ecological functions within the states' vast rivers and estuaries, our responsibilities are to build sustainable fisheries, recover

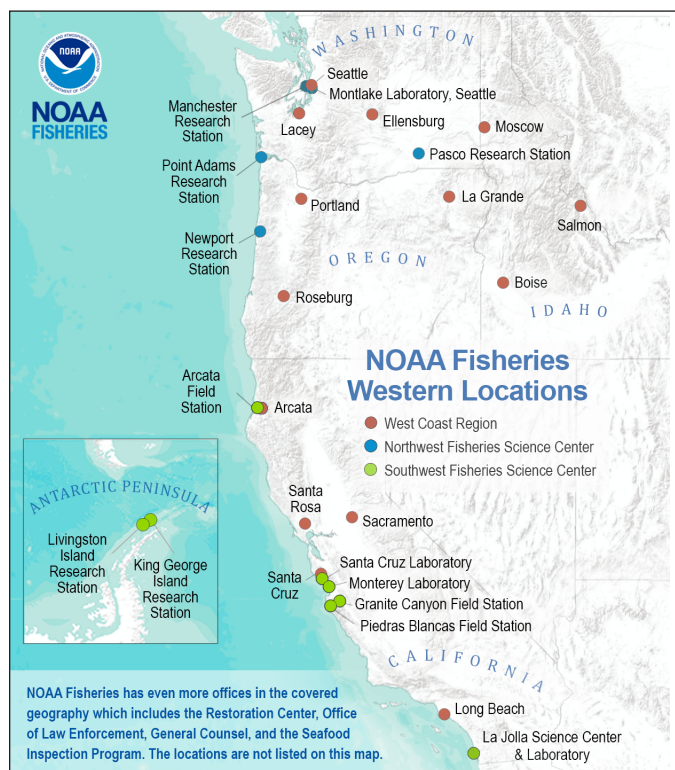
endangered and threatened species, maintain healthy ecosystems, and protect human health.

**The West Coast Regional Office** has facilities in Portland and Roseburg, Oregon; Arcata, Sacramento, Santa Cruz, Santa Rosa, and Long Beach, California; Lacey, Seattle, and Ellensburg, Washington; and Boise, Moscow, and Salmon, Idaho.

**The Office of Habitat Conservation, Restoration Center** protects and restores habitat to sustain fisheries, recovers protected species, and maintains resilient coastal ecosystems and communities, through grants and cooperative agreements in our [Community-based Restoration Programs](#) and through legal means through our [Damage Assessment Remediation and Restoration Program](#).

Our approach to habitat conservation is collaborative and uses sound science in support of our major mandates like the Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act (ESA), the Comprehensive Environmental Response, Compensation, and Liability Act, and the Oil Pollution Act. We focus our efforts for the benefit of marine resources and coastal communities. We provide technical assistance and funding and work in partnerships at all levels—with tribal, federal, state, and local governments, private entities, and non-governmental organizations—toward shared





goals and enhanced understanding. We work to increase fisheries productivity by restoring coastal habitat and supporting the recovery of protected species that rely on healthy habitat to breed, eat, rest, and grow. The Office of Habitat Conservation is implementing funds provided by the Bipartisan Infrastructure Law and the Inflation Reduction Act (BIL/IRA) through funding opportunities in support of fish passage, tribal fish passage, transformational habitat actions, and tribal and underserved communities habitat actions.

Restoration Center offices are co-located with the West Coast Regional Office facilities. West Coast Restoration Center staff can be found in Seattle and Lacey Washington; Portland Oregon; and Arcata, Sacramento, Santa Rosa, and Long Beach, California.

cover a large area of responsibility: the states of Washington, Idaho, Montana, and North Dakota include 1,327 miles of the international border with Canada and the states of California and Arizona include 513 miles of international border with Mexico. There are 1,293 miles of Pacific Ocean coastline and more than 7,000 miles of tidal shoreline, five National Marine Sanctuaries, Puget Sound, 21 major international seaports, 18 international airports, 222,471 square nautical miles of Pacific Ocean within the Exclusive Economic Zone (EEZ), and 339,375 square miles of inland critical habitat encompassing numerous rivers and tributaries feeding into the Pacific Ocean.

The OLE West Coast Division is headquartered in Seattle, Washington, and has offices in

## **The Office of Law Enforcement**

(OLE), West Coast Division reports to NOAA Fisheries' Headquarters Office of Law Enforcement and provides marine resource enforcement and compliance assistance for the West Coast and western states of the continental United States. The division's 44 enforcement officers, special agents, and support personnel

Bellingham, Lacey, Westport, and Vancouver, Washington; Astoria and Charleston, Oregon; and Arcata, Santa Rosa, Alameda, Monterey, Long Beach, and San Diego, California.

## **The Seafood Inspection Program, Northwest Region (Seattle, Washington) and Southwest Region (Long Beach, California)**

report to the [Office of International Affairs, Trade, and Commerce](#) at NOAA Fisheries Headquarters. The Seafood Inspection Program represents the United States in negotiations with other countries regarding their import requirements for seafood products from the United States. The program ensures compliance with all applicable food regulations, servicing establishments such as vessels, processing plants, and retail facilities. The Seafood Inspection Program can help participants achieve their marketing goals while maintaining compliance with the applicable federal regulations and policies.

The Northwest and Southwest regional offices are responsible for the delivery of inspection services (e.g., evaluate fishery products, audit Approved Establishments, and issue export health certificates to cover fish and fishery products shipped to foreign countries) on a fee-for-service basis to stakeholders in Alaska, Arizona, California, Hawaii, Idaho, New Mexico, Montana, Nevada, North Dakota, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, and the U.S. territory American Samoa.



# Overview: West Coast Region

## Local Landscape, Opportunities, and Challenges

NOAA Fisheries' Northwest and Southwest fisheries science centers, West Coast Regional Office, Office of Law Enforcement, Seafood Inspection Program, and Restoration Center are responsible for building sustainable fisheries, recovering endangered and threatened species, maintaining healthy ecosystems, promoting safe seafood and environmentally-sound aquaculture, and supporting coastal communities.

The West Coast region comprises the coasts and watersheds of Washington, Oregon, California, and Idaho, covering 317,690 square miles of the eastern Pacific Ocean, and more than 7,000 miles of tidal coastline. From floodplains to estuaries, nearshore habitats to kelp forests, urban waterways to rural streams, we are responsible for the stewardship of our region's living marine resources and their habitats.

Along the West Coast, we manage the fisheries for salmon and steelhead, more than 90 species of groundfish, coastal pelagics such as anchovy and sardine, and highly migratory species such as billfish, sharks, and tunas. Fishing the Pacific lifts spirits, feeds families, and supports the economies of California, Oregon, Washington, and Idaho. The region harvests close to 1 billion pounds of seafood, worth nearly \$1 billion, each year.



Sockeye salmon. Credit: NOAA Fisheries.



We also manage protected species along the West Coast from blue whales, the largest animals to ever live, to invertebrates, such as abalone that fit in the palm of your hand. These species are key elements of the ecosystem and are critically important for our culture, recreation, and economy. Recovery and conservation of ESA-listed fish species, like Pacific salmon, also support our sustainable fisheries goal by providing the long-term foundation for commercial, recreational, and tribal fisheries. Conserving at-risk habitats contributes to ecosystem resilience. Aquaculture also plays an important role in species recovery and conservation.

There are approximately 50 ESA-listed species, distinct population segments, and evolutionarily significant units under our jurisdiction, including species of whales, sea turtles, fish, and mollusks. Our ESA program supports a national focus on species needing immediate action to prevent extinction and species with identified actions that can be immediately implemented. Under the Marine Mammal Protection Act (MMPA), we conserve and manage marine mammal populations along the West Coast.

From whale conservation and entanglement response to research on climate impacts and deep-sea habitats, we collaborate with the five National Marine Sanctuaries on the West Coast to protect important natural and cultural places, while still allowing people to enjoy and use the ocean.

We operate under a unique relationship with tribal governments based on provisions of the U.S. Constitution, congressional

legislation, treaties, Executive Orders, Secretarial Orders, and judicial decisions that recognize reserved rights of Native Americans to protect their way of life. The relationship between federally recognized Indian tribes and the federal government is one of sovereign-to-sovereign. It has been described at length by the federal judiciary and referred to in federal law promoting tribal self-determination and self-governance. There are more than 150 federally recognized tribes in the region, along with many non-federally-recognized tribes, tribal partners, and intertribal organizations. Many of these tribes have treaties reserving their right to fish in “Usual and Accustomed” areas that include important marine and freshwater fish. These tribes work with NOAA Fisheries as co-managers of these resources with the states and federal government. They actively participate in management decisions, including those related to hatchery production, habitat conservation and restoration, hydropower, and fisheries harvest.

Together with the Pacific Fishery Management Council, Native American Indian tribes, Pacific States Marine Fisheries Commission, and the four states within the region, we have advanced high-quality science to inform management of West Coast marine resources. For example, we guided management efforts to rebuild West Coast rockfish stocks to productive and sustainable levels following a major collapse. We have taken management actions to return winter run Chinook to their historic habitat in the McCloud River (a tributary of the Sacramento River), where they will be safer

from the rising temperatures of climate change.

We participate in the implementation of numerous international treaties and other agreements to sustainably conserve fisheries for cross-boundary species of mutual interest to nations of the Pacific. Additionally, we aim to conserve Antarctic marine life through our role in the international Commission for the Conservation of Antarctic Marine Living Resources.

Our work grows ever more crucial and challenging, as a volatile climate and dynamic conditions affect the many species that live in the Pacific Ocean, around Antarctica, and freshwater and estuarine systems of Washington, Oregon, California, and Idaho. We face a growing need to better understand and respond to a changing climate, including rising water temperatures, increasing frequency of extreme weather events, and longer periods of drought. Additionally, we seek to better understand the benefits and impacts of offshore wind development on our marine resources. These challenges affect many species and the millions of people who depend on these resources for their culture, livelihoods, and well-being.

We will continue to identify, implement, and enforce science-based solutions to these challenging environmental issues as resources allow. This will be accomplished using available resources, as well as new temporary funds received through the Inflation Reduction Act and the Bipartisan Infrastructure Law. We will work together to prioritize regional actions to implement the NOAA Fisheries Strategic Plan.



# Top Geographic Priorities

NOAA Fisheries sustains world-class fisheries, productive ecosystems, and resilient coastal communities. Our highest regional priorities support growth of the Blue Economy and realize the potential of America's oceans and coasts. We strive to:

- Promote sustainable fisheries by enhancing fishery stock assessments and management practices in response to a changing climate.
- Stabilize the highest priority endangered species on the West Coast (i.e., Species in the Spotlight) with coordinated science, management, enforcement, and habitat efforts.
- Advance reintroduction efforts for abalone, salmon, and steelhead.
- Engage with communities, tribes, and partners to develop and implement the West Coast Equity and Environmental Justice (EEJ) regional implementation plan.
- Integrate climate, ocean, and ecosystem science into our management strategies and risk assessments.
- Leverage Inflation Reduction Act and Bipartisan Infrastructure Law funding to tackle the impacts of climate by focusing on data acquisition and management, the Climate, Ecosystems, and Fisheries Initiative (CEFI), Pacific salmon conservation, habitat restoration, support for salmon hatcheries and fish passage improvement, and other tribal initiatives.
- Support federal tribal treaty and trust obligations and engage with tribes on co-management decisions, including those related to agency actions, hatchery production, habitat conservation and restoration, hydropower, and fisheries harvest.
- Provide coordination and technical assistance to support responsible offshore development, including wind energy and aquaculture.
- Counter illegal, unreported, and unregulated (IUU) fishing activity by coordinating across the U.S. Government and with foreign partners to promote sustainable fisheries management and governance; enhance the monitoring, control, and surveillance of marine fishing operations; and ensure only legal, sustainable, and responsibly harvested seafood enters trade.
- Increase compliance and enforcement of fishing regulations, with emphasis on violations jeopardizing the safety of observers and observer data; gear, catch, data integrity, and closed-area violations; and violations that threaten protected species or their habitat.
- Support employee wellness by investing in employee growth and learning, and facilitating an effective hybrid work environment.
- Increase workforce diversity, equity, inclusion, and accessibility.
- Provide infrastructure, expertise, procedures, and structures to store, process, and analyze large data streams to keep pace with emerging innovative technologies.



**Beach Seining at Russian Island near Astoria, Oregon. Credit: NOAA Fisheries.**



# Strategic Goal 1

## Adaptively manage fisheries for sustainability and economic competitiveness

The West Coast is home to federally managed fisheries for salmon, groundfish, coastal pelagic species, and highly migratory species. These fisheries support tribal communities, local economies, and recreational and commercial fishing. From families catching recreational salmon on the weekends, to family-owned fishing operations, to catcher-processor groundfish fleets owned by large companies, our research and management supports them all.

Our charge is to sustainably manage fisheries, prevent overfishing, and develop innovative gear types to improve economic viability and minimize bycatch. Recent additions to the West Coast's Blue Economy such as aquaculture and offshore wind support sustainability and renewable energy goals, but may increase marine resource conflicts, requiring an evaluation of potential impacts on critical habitat, vulnerable species, and fishing opportunities.

With these new demands and a changing climate, we will need to strengthen data collection collaborations and enhance West Coast surveys. We must engage and partner with fishing communities, tribes, and underserved communities to employ an ecosystem-based fisheries management approach that is resilient.

### Key Performance Indicators:

- Fish Stock Sustainability Index — decrease the number of overfished (depleted) stocks and stocks subject to overfishing.
- Fisheries Economics of the United States — increase the economic value of the U.S. fishing and seafood sectors.
- Marine aquaculture — identify areas suitable for offshore aquaculture in Southern California.
- Maximize survey investments — increase the use of advanced technologies, such as uncrewed systems and eDNA.
- Offshore wind — evaluate and mitigate impacts to support renewable energy goals.

### Strategies

#### Manage stocks for optimum yield and build climate and economic resilience in U.S. seafood and fishing sectors

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| <ul style="list-style-type: none"> <li>• Manage stocks sustainably, work to prevent overfishing, and increase harvesting and marketing opportunities in the United States and abroad where international agreements govern resource utilization.</li> <li>• Collaborate with the Pacific Fishery Management Council, international regional fisheries management organizations, states, and conservation groups to</li> </ul> | <p>promote sustainable commercial and recreational fishing.</p> <ul style="list-style-type: none"> <li>• Conduct and enhance stock assessments, models, and management strategy evaluations, including incorporating select biological data, ecosystem drivers, and socioeconomic information, where possible.</li> <li>• Support the development of innovative gear types to improve economic viability and minimize bycatch.</li> <li>• Maximize the value of data collection efforts by strengthening collaborations and improving methods to</li> </ul> | <p>enhance West Coast surveys, including evaluating options to execute surveys in poorly sampled areas.</p> <ul style="list-style-type: none"> <li>• Develop and maintain economic and sociocultural data collection, analysis, and research programs to inform management decisions and amplify resource value in commercial and recreational fisheries, and understand human–ecosystem interactions.</li> <li>• Provide leadership on conservation of salmon and steelhead and related hatchery science throughout the Columbia</li> </ul> |
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River Basin under the Mitchell Act.

- Support responsible aquaculture development on the West Coast; work with agency partners to streamline permitting processes; advance development of the Southern California Aquaculture Opportunity Areas; and promote research and technology to understand the ecological interactions of aquaculture operations as outlined in the Northwest Fisheries Science Center Aquaculture Strategic Plan.
- Participate with international groups—such as the Inter-American Tropical Tuna Commission, Pacific Salmon Commission, International Pacific Halibut Commission, Pacific Whiting Joint Management Committee, and Commission for the Conservation of Antarctic Marine Living Resources—to advance science and promote management that supports fair trade and sustainable utilization of seafood products.

### **Advance climate science and ecosystem-based fishery management (EBFM) to increase the sustainability of marine fisheries**

- Support EBFM techniques including retrospective analysis and management strategy evaluations (e.g., scenario planning) to support management and maintain economic viability of fisheries in the face of a changing climate.
- Investigate how climate change and human activities will affect fisheries and ecosystems along the West Coast

and internationally, including Antarctica. Develop models, forecasts, and other decision support tools to inform fishery management decisions.

- Advance regional implementation of NOAA's Climate and Ecosystems Fisheries Initiative (CEFI) to account for climate variability.
- Provide coordination and technical assistance to support responsible offshore wind development and minimize impacts on critical habitats, protected resources, and fishing opportunities.
- Support sustainable fishing opportunities and aquaculture development by using an EBFM approach, which considers the impacts of activities on protected species and their habitats.

### **Mitigate and adapt to climate-driven changes in fisheries habitat**

- Protect and restore essential fish habitat (EFH), and engage in community-based habitat restoration efforts to advance productive fisheries on the West Coast (e.g., Fir Island Farm Tidal Restoration in Puget Sound, Washington; Southern Flow Corridor Landowner Preferred Alternative in Tillamook Bay, Oregon).
- Support Washington, Oregon, Idaho, and Montana in their development of the Integration and Strategies Group of regional sovereigns and stakeholders to implement the Columbia Basin Partnership Phase II report.
- Capitalize on Bipartisan Infrastructure Law and Inflation Reduction Act funds

to improve fish passage, restore coastal ecosystems, and enhance resilience of tribes and underserved communities.

- Partner with the Pacific Fishery Management Council to improve the climate resilience of federal fisheries. Support its initiative to incorporate climate and ecosystem information into the Council's harvest-setting and fisheries management processes.
- Execute a new Regional Implementation Plan in response to the revised National Saltwater Recreational Fisheries Policy.

### **Diversify our data collection technologies and expand/modernize data products and services**

- Diversify and modernize data collection, storage, infrastructure, and dissemination processes for West Coast fisheries information. Provide scientific expertise to improve data collection technologies, products, and services governed by international agreements.
- Develop incentive-based approaches for commercial and recreational data collection and reporting to improve our ability to effectively manage stocks.
- Enhance the collection, management, and dissemination of fisheries data by advancing collaborations between the NOAA Fisheries West Coast Regional Office and science centers, Pacific States Marine Fisheries Commission and industry and other partners.
- Use new and emerging technologies, such as uncrewed and partially autonomous sampling vehicles, eDNA technology, and artificial



intelligence/machine learning to expand and modernize data collection methods and sustain ongoing data needs in a cost-effective manner.

### Ensure equity and accessibility for tribal, indigenous, and underserved communities

- Engage with communities, tribes, and partners to develop the West Coast EEJ regional implementation plan.
- Expand our understanding of Indigenous Knowledge and traditional natural resource management techniques, in support of reintroducing salmon and steelhead to historical habitats.
- Support tribal efforts to reintroduce salmon into blocked areas of the upper Columbia Basin.

### Counter IUU fishing activity and promote seafood import monitoring and inspection

- Continue to work with the U.S. Coast Guard to implement the Port State Measures Agreement and aggressively investigate interstate or foreign trafficking of illegally harvested or fraudulently represented fish or fish products.
- Provide technical assistance to international partners in fisheries law enforcement to enhance their abilities to detect IUU fish and fish products before they enter the stream of commerce, and to investigate and prosecute IUU fishing violations, including the suspected use of forced labor.
- Develop efficient and effective international monitoring tools related to the seafood supply



**NOAA Fisheries biologists work with Port Blakely to identify improvements that would benefit protected species including Chinook and coho salmon and steelhead. Credit: Port Blakely.**

chain, detect seafood fraud and mislabeling, and enforce import regulations.

- Work cooperatively with state and federal agencies to conduct seafood inspections at ports of entry, and ensure compliance with Seafood Import Monitoring Program requirements so only legal, sustainable, and responsibly harvested seafood enters trade.
- Promote consumer confidence in the quality of domestic seafood

production by providing timely information and services on the sustainability, quality, and safety of West Coast seafood products.

- Advance seafood safety and quality management practices as well as improved processing techniques and delivery to market by West Coast seafood producers.



# Strategic Goal 2

## Safeguard protected species and propel their recovery

On the West Coast, we have approximately 50 ESA-listed species, distinct population segments, and evolutionarily significant units under our jurisdiction. From whales and sea turtles to fish and mollusks, the variety, number, and cultural importance of our ESA-listed species make this region unique. Over half of our ESA-listed species are salmonids. An icon of the Pacific Northwest, salmon are vitally important to our fishing and indigenous communities. The West Coast also has five Species in the Spotlight, a national NOAA Fisheries initiative that highlights nine species most at risk of extinction in the near future. For each species, we have developed priority action plans that outline what we and our partners can do to get these species on the road to recovery.

The changing climate and increasing human impacts put our protected species at great risk. We must use state-of-the-art science to evaluate the implications of droughts and severe climate events, such as marine heatwaves, and how they affect protected resources and their ecosystems. We will work closely with communities, tribes, and partners to implement high-priority recovery actions for species and habitat conservation.

### Key Performance Indicators:

- Protected species recovery actions — increase the number and percentage of recovery actions ongoing or completed, including regulations.
- Protected species recovery trends — increase the number of protected species with stable or increasing population levels.

## Strategies

### Implement actions to recover listed endangered and threatened species

- Advance scientific understanding and management efforts to stabilize and advance recovery efforts for highest priority ESA-listed species through the NOAA Fisheries Species in the Spotlight initiative. Species in the Spotlight include Southern Resident killer whales, white abalone, Pacific leatherback sea turtles, Central California Coast coho salmon, and Sacramento River winter-run Chinook salmon.
- Provide leadership on conservation and mitigation for aquaculture activities coast-wide.
- Advance white abalone recovery by improving spawning and

rearing production through funding and research, outplanting captive raised white abalone to the wild and monitoring survival, and evaluating habitat to add new outplanting locations.

- Support Pacific Fishery Management Council and Pacific States Marine Fisheries Commission development of improved fishing gear marking programs to better identify sources of ESA-listed species bycatch.
- Utilize the expertise of tribes in the recovery process and consider the needs of underserved communities when conducting recovery actions.
- Communicate and implement the Northwest and Southwest

fisheries science centers' salmon recovery science strategies to maximize recovery of ESA-listed salmon.

- Investigate and mitigate impacts of stormwater runoff and thiamine deficiency on salmon populations.
- Investigate violations and enforce regulations against the harming of marine mammals and ESA-listed species and imperiling those species or their habitat.

### Model and predict the effects of climate change on protected species to improve conservation outcomes

- Using state-of-the-art science, evaluate the impacts of acute events (e.g., extreme weather

and marine heat waves) and how they affect protected resources and their ecosystems in both the short and long term.

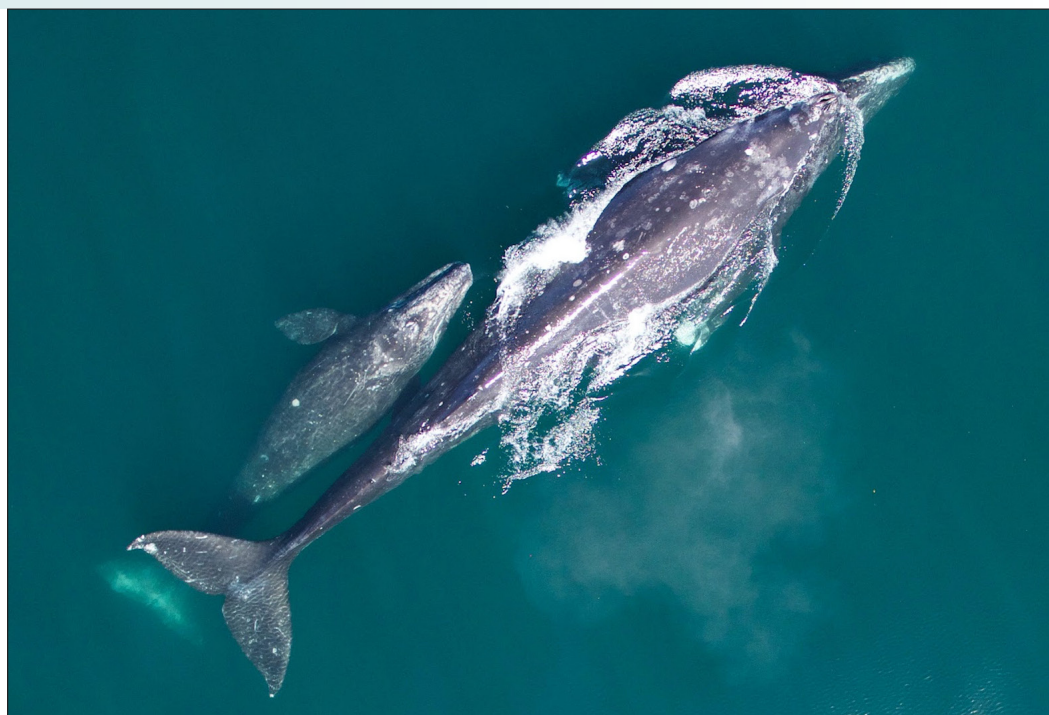
- Develop adaptive and dynamic management approaches to efficiently respond to climate-driven ecosystem disturbances.
- Coordinate and implement proactive strategies to minimize drought impacts on listed species.

### Expand the use of advanced and innovative technologies

- Continue to develop new and emerging technologies (e.g., uncrewed system platforms, advanced sensors, molecular genetics (including eDNA), digital platforms, electronic reporting/monitoring, mobile applications, artificial intelligence/machine learning, and cloud computing) with industry, academia, the Pacific States Marine Fisheries Commission, and other partners to conduct surveys, enhance and improve the accuracy of observing systems, and collect and share data in cost-effective, transparent, and real-time approaches.
- Work with industry, academia, and other partners to test, deploy, and use these technologies.
- Continue Antarctic research to further the development of innovative technologies that can also be applied in the United States.

### Protect and restore important habitats necessary for the recovery of endangered marine species

- Assess damage to habitats and restore where possible to



**A gray whale mother-calf pair migrating along the central California coast from the wintering grounds in Mexico to the summer feeding grounds in the Arctic. SWFSC scientists collect data on eastern North Pacific gray whale abundance, calf production, and body condition to assess the health and status of the population. Credit: NOAA Fisheries.**

regain ecological functions for protected species.

- Implement high-priority actions for species and habitat conservation identified in recovery plans and habitat conservation plans by leveraging partnerships and resources.
- Collaborate with federal, state, and tribal partners to improve use of predictive tools for water management to accommodate protected species' requirements, along with those of competing uses such as agriculture, municipalities, and hydropower.
- Advance reintroduction efforts and/or return species to historic habitats to build resilience in a changing climate.
- Use Bipartisan Infrastructure Law funding to leverage partnerships to improve fish passage and habitat restoration for salmon and steelhead recovery.
- Implement the Pacific Coastal Salmon Recovery Fund to advance

salmon and steelhead recovery and improve the status of vulnerable populations in the face of climate change and other threats.

- Build capacity for underserved communities to access grant opportunities under the Bipartisan Infrastructure Law.

### Protect marine species while supporting ocean-based economic growth

- Study the impacts of offshore development (wind energy, aquaculture) on ESA-listed and protected species. Provide technical assistance to inform siting and promote the conservation of marine species.
- Collaborate with partners to develop and implement measures to prevent entanglement and bycatch of protected species in domestic and international fisheries.



# Strategic Goal 3

## Diversify our workforce, promote equity and environmental justice, and improve our mission performance through organizational excellence

We recognize that the success of our mission relies on the expertise and commitment of our diverse, talented employees and partners. We strive to increase the number of staff from underrepresented groups at all levels over time by recruiting and strategically deploying a diverse, equitable, and inclusive workforce. We will partner with academic institutions to identify, develop, and recruit the next generation of scientists, managers, and staff. Our goal is to maintain an environment of mutual respect, where decisions are made with transparent, reliable, and up-to-date information. We will invest in our current employees to ensure our workforce capacity and capability into the future. Additionally, we will emphasize infrastructure improvement to ensure that our information technology capabilities and facilities continue to adequately serve our mission.

### Key Performance Indicators:

- Human resources — increase the number of staff from underrepresented groups at all levels through strategic use of hiring authorities and consideration of diversity, equity, inclusion and accessibility (DEIA) in recruitment and hiring processes.
- Workplace — optimize the hybrid work environment.
- Equal Employment Opportunity (EEO) — increase recruitment events and outreach activities targeting underrepresented populations.
- Efficiency — improve operational processes and efficiencies.
- Customer service — increase outreach and responsiveness to stakeholders.
- Equity and Environmental Justice (EEJ) — develop and begin executing an EEJ regional implementation strategy.

### Strategies

#### Ensure total worker wellness

- Continue to support total worker wellness by addressing workload and employee burnout.
- Advance efforts to create a culture of respect and prevent workplace violence, harassment, and bullying in all work environments (office, field, etc.).
- Protect the safety of observers by investigating assaults on, interference with, or harassment of observers.
- Encourage staff participation in wellness training and events.

#### Improve workforce diversity, equity, inclusion, and accessibility

- Advance efforts to recruit, retain, and empower a workforce that reflects our diverse region by improving training, coaching, recruitment, and hiring practices.
- Support and retain a diverse, equitable, and inclusive workforce to ensure flexibility in meeting West Coast mission needs and constituent engagement.
- Identify new and innovative approaches to promote

employee engagement and foster an inclusive and safe workplace for all employees.

- Provide equitable opportunities and access for interns, students, and others to recruit a more diverse workforce.
- Embrace inclusive communications strategies to better engage our diverse audiences. This includes incorporating inclusive language and images, offering aides for hearing and visually impaired audiences, and using storytelling to make our work more relevant and accessible.



Staff from the West Coast Regional Office and Restoration Center tour the NOAA Fisheries Survey Vessel *Bell M. Shimada* as part of growth and learning opportunity. Credit: NOAA Fisheries.

## Develop workforce skills for the future

- Prioritize the training and development of employees to ensure future workforce capacity and capability (i.e., succession planning).
- Advance opportunities for internships and fellowship programs.
- Partner with academic institutions to identify, develop, and recruit the next generation of West Coast scientists, managers, and staff.
- Develop and adopt a West Coast Region training framework that allows the region to coordinate and invest strategically in the growth and development of

staff to meet current and future regional needs.

- Emphasize learning opportunities for open science and collaboration tools.

## Embrace a new paradigm for the workplace

- Foster hybrid workplace collaboration to promote a sense of belonging and shared regional identity.
- Expand and enhance use of cross-organizational teams.
- Embrace digital transformation to streamline processes, reduce errors, increase efficiency, automate manual tasks, and digitize paper-based processes.

## Adaptively manage infrastructure

- Support the maintenance of West Coast facilities and properties, including field stations.
- Evaluate the West Coast facility and infrastructure needs for workspace to meet the needs of a changing workforce and distributed customer base.
- Identify and propose strategies for recapitalization to NOAA and the Department of Commerce.
- Implement Northwest Fisheries Science Center facility changes, resulting from the required relocation of the Montlake Campus.
- Ensure computing resources and database administration comply



with agency policy and meet scientific and regulatory needs.

- Prioritize institutional resiliency by planning for disruptions such as natural disasters, cyberattacks, and pandemics to ensure continuity of operations.

### Optimize resources

- Use priority-based methodologies to optimize investments for maximum economic return while meeting our mission and mandates.
- Evaluate organizational performance, assess programmatic and operational risks, and assess opportunities to ensure cost-effective administration, operations, and business practices.
- Invest in energy-efficient infrastructure, sustainable procurement practices, and waste reduction initiatives.

### Expand internal and stakeholder communications

- Support effective and timely internal communications using the latest in digital and hybrid technologies and communications practices.
- Enhance collaborations and engagement with tribal, state, local, and non-profit partners to

leverage resources and increase mission impact.

- Use a DEIA lens to improve communications efforts and reach new audiences and partners.
- Host Recreational Fisheries Roundtables with West Coast saltwater recreational fishermen to highlight the National Saltwater Recreational Fisheries Policy.
- Make our large scientific data streams publicly accessible.
- Involve NOAA Fisheries stakeholders in decision-making processes, including strategic planning efforts.

### Implement an Equity and Environmental Justice Strategy

- Develop a West Coast EEJ regional implementation plan that engages with underserved and underrepresented communities to reduce barriers and ensure equal access to our services and products.
- Increase awareness of EEJ and empower our workforce to apply this knowledge in our work and the communities we serve.

### Adopt innovative information technology strategies

- Embrace cloud computing by reducing the need for

on-premises hardware and maintenance.

- Implement data analytics and artificial intelligence by automating tasks and identifying patterns and trends in day-to-day functions and large datasets.
- Enhance cybersecurity by safeguarding sensitive data, preventing breaches, and minimizing downtime.
- Invest in technologies for remote and mobile environments where connectivity is limited (e.g., edge computing).
- Increase application development collaboration between science centers and regional offices to deliver shared services for multiple offices.
- Adopt highly adaptable web applications and web services to streamline application deployment and management, reduce costs, and increase scalability.
- Emphasize user experience by incorporating user-centered design and user testing into product development and deployment efforts.
- Develop and maintain a workforce that has knowledge of current data management methods, policies, and best practices.

## Implementing This Plan

Between 2024 and 2027, this plan will serve as guidance for planning, budgeting, and execution in NOAA Fisheries. We will develop Activity Plans to focus execution on these strategies, milestones to track progress, and key performance indicators to provide evidence of success.

**Back Cover: Numbered juvenile white abalone ready for outplanting. Credit: J. Demeter.**



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