
Oregon Dept of Fish & Wildlife
2040 SE Marine Science Drive
Newport, OR 97365

April 20, 2000 Update
Contents

Introduction ........................................................................................................................................................................3
MRP Mission and Strategy ....................................................................................................................................................4
Summary of MRP Goals and Objectives ............................................................................................................................5
MRP Tasks .............................................................................................................................................................................7
Management and Administration – Tasks ............................................................................................................................7
Resource Assessment and Analysis - Tasks ..........................................................................................................................10
Data Services - Tasks ..............................................................................................................................................................14
Resource Monitoring and Sampling - Tasks ........................................................................................................................15
Research Project Planning Process ....................................................................................................................................16
Appendix: MRP Tasks and Project Proposals ......................................................................................................................17
  Task RA 2.1.2 Nearshore Fixed Gear Survey ..................................................................................................................19
  Task RA 2.1.3 Nearshore Juvenile Rockfish Survey – Pilot Project ..................................................................................25
  Task RA 2.1.5 Sablefish Behavior Toward a Baited Pot .................................................................................................33
  Task RA 2.2.2 Discard Mortality of Lingcod in Bottom Trawls ......................................................................................35
  Task RA 2.3.4 Improving Maturity Data for Selected Groundfish Stocks .................................................................43
  Task RA 2.3.6 Population Structure of Rockfish Off Oregon .........................................................................................59
  Task RA 2.4.1 Testing Square Mesh Escapement Panels in Trawl Gear .................................................................65
  Task RA 2.5.4 Commercial Sardine Sampling ..............................................................................................................67
  Task RA 2.1.1 Nearshore Reef Mapping Project .........................................................................................................71
Marine Resources Program Action Plan 2000

Introduction

It is Marine Resource Program’s (MRP) goal to increase the quality and quantity of stock assessments and biological information through improved at-sea and dockside sampling programs and through carefully designed research projects. Planned work will:

- Address emerging fisheries resource concerns, such as: need to evaluate changes in regulation, need to develop alternative fishing gears, need to provide information on stocks with unknown status, need to develop alternative survey methods, and need to improve stock assessments;
- As funds are of limited duration, we will focus on extension of projects already committed to, or undertake new short-term projects.
- Balance efforts between the nearshore and offshore fisheries and resources.
- Be collaborative and complementary in nature, working with partners including but not limited to Oregon State University, University of Oregon, the National Marine Fisheries Service, other states agencies, and the fishing community;
- Use required framework for Department and NMFS approval.

It is also MRP’s goal to improve efficiency of operation and customer service by implementing a re-organization plan and recruiting for vacant positions.

We begin the MRP’s Plan with a preface which outlines MRP’s overall mission, Fish Division’s agency strategy, and MRP’s goals and objectives which support the strategy. Following MRP mission, goals, and objectives, we outline specific tasks for each major program element which support these goals and objectives.
MRP Mission and Strategy

**MRP Mission Statement**: The MRP mission parallels the Department’s mission

*To protect and enhance Oregon’s living marine resources and their habitats for use and enjoyment by present and future generations.*

The as a part of the Departments Strategic Plan 2006, Fish Division and MRP’s supporting strategies are:

**Fish Division Strategy 1.1:**

*Assess the status of freshwater and marine fish and wildlife populations and their habitats to assist in establishing Department priorities and programs.*

**Fish Division Strategy 1.2:**

*Assess the wants, needs, and values of Oregonians to assist priorities and programs.*

**Fish Division Strategy 1.3:**

*Establish objectives for the management of fish and wildlife populations and their habitats that balance the uses of lands and waters of the state with the values of Oregonians to ensure the sustainability of fish and wildlife populations.*

**Fish Division Strategy 1.5:**

*Implement resource management decisions based on the best available science.*

**Fish Division Strategy 2.4:**

*Establish partnerships to promote research and management actions needed to support a stable fishing industry.*
Summary of MRP Goals and Objectives

Goal 1: To manage Oregon’s marine resources incorporating good science that meets the needs for sustaining and rebuilding its habitat and resources and provide for the needs of the public.

Objective 1.1: Develop and participate in annual status reviews for priority and critically managed species and habitats based on assessments using nationally recognized scientific standards.
Objective 1.2: Develop timely and thorough analysis of policy and management options via staff reports that support decision-making for maintenance or development of harvest and/or impact strategies and resulting new regulations.
Objective 1.3: Provide ample opportunity for public involvement by conducting participatory workshops with multiple stakeholders.
Objective 1.4: Participate in appropriate management and policy forums such as the Oregon Fish and Wildlife Commission, Pacific Fishery Management Council, Pacific Salmon Commission, Ocean Policy Advisory Council.
Objective 1.5: Review permit policies and programs and develop a firm funding base for mandated permit reviews and evaluations of permit related activities.
Objective 1.6: Develop and implement a response and assessment plan for introduced species; continue to develop existing response plans for natural resource damage assessments through appropriate training and readiness.

Goal 2: To provide quality science and information necessary to manage Oregon’s marine resources, fisheries, and habitats for sustainable use, harvest, and enjoyment.

Objective 2.1: Conduct and maintain complete and timely inventories of marine and estuarine species and their habitats.
Objective 2.2: Fully describe major fisheries and participants including gear used, estimates of total removals, impacts by fishery or other use, and maintain timely and accurate monitoring of harvest guidelines or quotas.
Objective 2.3: Collect biological information necessary for stock assessments on managed or critical species of fish and shellfish, through statistically designed and scientifically credible sampling programs.
Objective 2.4: Participate in directed marine fisheries investigations related to evaluating active fisheries and other marine habitat and resources, through cooperative at-sea and shore-based research programs.
Objective 2.5: Conduct timely and prioritized stock assessments for finfish and shellfish to support effective management; support prioritization of stock assessment work by other agencies (e.g., NMFS, WDFW, or CDFG).
Objective 2.6: Promote, fund and conduct marine mammal inventory and predator-prey relationship studies with particular focus on ESA anadromous species.
Objective 2.7: Promote, fund and conduct inventories, life history and habitat requirement studies involving shorebirds and pelagic bird species which depend on Oregon estuaries and marine islands.

**Goal 3: To provide quality customer service in licensing, education, and outreach functions.**

Objective 3.1: Continually train and inform coastal (Charleston, Newport and Astoria) MRP front office staff to provide timely and accurate information on sport and commercial regulations.  
Objective 3.2: Implement new point of sale equipment and procedures at selected coastal locations.  
Objective 3.3: Develop quarterly MRP newsletter and office displays of ongoing projects and activities.  
Objective 3.4: Meet periodically with selected users and general public at informal open house and town hall meetings. Maintain contacts with interested public through mailings and newsletters.  
Objective 3.5: Implement MRP re-organization plan along functional lines – Administrative, Resource Assessment and Analysis, Data Services, and Resource Monitoring and Sampling sub-programs.
MRP Tasks

MRP objectives and tasks are organized in four major groupings according to the four major functional sub-program elements: Management and Administration (MA), Resource Assessment and Analysis (RA), Data Services (DS), and Resource Monitoring (RM).

Management and Administration – Tasks

In addition to providing support for infrastructure, budget, and customer service, we have included tasks which cross sub-program boundaries in support of MRP’s overall policy development and management functions.

Goal 1: To manage Oregon’s marine resources incorporating good science that meets the needs for sustaining and rebuilding its habitat and resources and provide for the needs of the public.

Objective 1.1: Develop and participate in annual status reviews for priority and critically managed species and habitats based on assessments using nationally recognized scientific standards.
   Task MA1.1.1 Participate in pre-assessment workshops, star/stat panel reviews.
   • Jim Golden, Dave Sampson (OSU), Mark Saelens, and Bob Hannah to participate.
   Task MA1.1.2 Participate in harvest policy workshop – make recommendations to state’s Council representatives and to MRP Resource Assessment and Analysis Program.
   • Mark Saelens has lead assignment for MRP.

Objective 1.2: Develop timely and thorough analysis of policy and management options via staff reports that support decision-making for maintenance or development of harvest and/or impact strategies and resulting new regulations.
   Task MA1.2.1 Internal policy development for allocation, resource conservation.
   Task MA1.2.2 Participate in Highly Migratory Management Team – make recommendations to state’s Council representatives.
   • Jean McCrae to take lead on this assignment
   Task MA1.2.3 Initiate nearshore planning process, late in year 2000 or in 2001.

Objective 1.3: Provide ample opportunity for public involvement by conducting participatory workshops with multiple stakeholders.
   Task MA1.3.1 Host a major industry pre-Council meeting – March 2001.
   Task MA1.3.2 Host SIG meetings for salmon and halibut.

Objective 1.4: Participate in appropriate management forums such as the Oregon Fish and Wildlife Commission, Pacific Fishery Management Council, Pacific Salmon Commission, Ocean Policy Advisory Council.
   Task MA1.4.1 Provide Fish and Wildlife Commission marine sub-committee with briefings.
Task MA1.4.2 Participate in Council process for halibut and groundfish.
Task MA1.4.3 Assist with development of EFH in nearshore (deferred, reduce Habitat Committee participation?).
Task MA1.4.4 Participate in Commission process for crab, groundfish, halibut, wildlife integrity.
Task MA1.4.5 Participate in OPAC meetings – develop policies for intertidal and nearshore uses which balance consumptive and non-consumptive uses vs. species / habitat integrity and sustainability.
- Neal Coenen has lead assignment as Director’s designate.
Task MA1.4.6 Develop collaborative projects with the Oregon State Parks Department and U.S. Fish and Wildlife Refuge system to address the use and education needs of visitors and users of Oregon’s territorial sea.

Objective 1.5: Review permit policies and programs and develop a firm funding base for mandated permit reviews and evaluations of permit related activities.
Task MA1.5.1 Continue permit renewals and monitoring.
- Scientific Collecting Permits – Admin. Staff and Arlene Merems.
- Live Fish Transportation Permits – Admin. Staff and Bill Barss
- Fishing Permits – Admin. Staff and Jean McCrae, Bob Hannah, Mark Saelens.
Task MA1.5.2 Permit reviews – cable, USACE, oyster, other estuary. –
- Dave Fox (Marine) and John Johnson (Estuarine).

Objective 1.6: Develop and implement a response and assessment plan for introduced species; continue to develop existing response plans for natural resource damage assessments through appropriate training and readiness,
Task MA1.6.1 Respond to oil and other spills in Marine environment.
- Dave Fox has lead assignment.
Task MA1.6.2 Develop plans for marine non-indigenous species.
- Jim Golden has lead assignment to work on Wildlife Integrity plans in cooperation with Ray Temple and Larry Cooper.

Goal 3: To provide quality customer service in licensing, education, and outreach functions.

Objective 3.1: Continually train and inform coastal (Charleston, Newport and Astoria) MRP front office staff to provide timely and accurate information on sport and commercial regulations.

Objective 3.2: Implement new point of sale equipment and procedures at selected coastal locations.

Objective 3.3: Develop quarterly MRP newsletter and office displays of ongoing projects and activities.
Task MA 3.3.1 Hire administrative specialist for program support.

Objective 3.4: Improve communications by meeting with selected users and general public at informal open house and town hall meetings. Maintain contacts with interested public through mailings and newsletters.

Task MA 3.4.1 Internal policy development for allocation, resource conservation.

Objective 3.5 Implement MRP re-organization plan along functional lines – Administrative, Resource Assessment and Analysis, Data Services, and Resource Monitoring and Sampling sub-programs.

Task MA 3.5.1 Complete reclassification analysis and submit plan for approval.

Task MA 3.5.2 Fill vacancies or re-assign work according to MRP re-organization plan.
Goal 2: Provide quality science and information necessary to manage Oregon’s marine resources, fisheries, and habitats for sustainable use, harvest, and enjoyment.

Objective 2.1: Conduct and maintain complete and timely inventories of marine and estuarine species and their habitats.

Task RA2.1.1 Identify and map potential nearshore reef habitats, continue to inventory and map selected sites with side-scan sonar and or multibeam bathymetry. The goal is to complete a coastwide inventory and mapping of shallow reefs out to 50 fms. Information to be used in new direct nearshore multi-species stock assessment/stock status document, and to plan future marine protected areas.
- Dave Fox will lead this effort.

Task RA2.1.2 Conduct companion biological sampling programs to determine reef and habitat vs species associations, and to develop ‘ecosystem’ based maps and stock health index (size, maturity, abundance, diversity) using key indicator species. Sample age structures on selected species where possible.
- ROV fish transects and groundtruthing – Dave Fox.
- Fixed gear surveys – New NRS-2 Brookings and EBA, John Seaborne, D.Fox.
- Nearshore Reef Biological Sampling – Don Bodenmiller.

Task RA2.1.3 Develop nearshore/estuary survey for juvenile rockfishes.
- John Johnson will develop this project.
- Hire EBA’s and sample summer of 2000.

Task RA2.1.4 Conduct spatial analysis of of NMFS triennial trawl survey catches of rockfish in the Columbia area – use information to suggest alternative survey designs for shelf rockfish, flatfish, and skates.
- Bob Hannah to lead this project.
- Recruit and assign NR-2 at-sea biologist to this task.

Task RA2.1.5 Improve survey methods: develop estimates of catchability for pot gear. This task continues work on studies investigating the feasibility of using pot or longline gear to survey sablefish. In 2000, the study focuses on how current affects bait scent and attraction of sablefish to pots.
- Keith Matteson to lead this project.

Task RA2.1.6 Link shore based sampling/monitoring programs (see below) with inventory base maps and incorporate into GIS layers.

Task RA2.1.7 In cooperation with other stock assessment staff, develop a low tech stock assessment based on selected index sites (using representative examples of heavily fished and lightly fished areas or representative reefs distributed geographically).

Task RA2.1.8 Continue Kelp inventory (deferred, budget reduction).
Task RA2.1.9. Participate in NURPS offshore habitat classification / species association project with OSU and NMFS.
- Bill Barss and Dave Fox will participate with Dr. Waldo Wakefield on this project.

Task RA2.1.10 Develop plans for CARA funds late in 99-01 Biennium. Update and expand inventories of marine/estuarine fish, invertebrate and wildlife species and their habitats

Objective 2.2: Fully describe major fisheries and participants including gear used, estimates of total removals, impacts by fishery or other use, and maintain timely and accurate monitoring of harvest guidelines or quotas.

Task RA2.2.1 Evaluate impacts of changes in size limits on lingcod.
- Eric Schindler will lead this part of the study.

Task RA2.2.1 Determine shrinkage rates of lingcod caught and handled on deck – address size limit enforcement issue.

Task RA2.2.2 Conduct collaborative stress/survival experiments on handled live lingcod with OSU and NMFS.
- Steve Parker will take lead on project from ODFW, collaborators include Dr. Michael Davis, Dr. Bori Olla, NMFS, and Dr. Carl Schreck, OSU.

Task RA2.2.3 Complete Oregon Enhanced Data Collection final report – Mark Saelens.

Objective 2.3: Collect biological information necessary for stock assessments on managed or critical species of fish and shellfish, through statistically designed and scientifically credible sampling programs.

Task RA2.3.1 Review stock assessments including STAR panel reviews-identify gaps in data or parameter estimates.
- Initially, hire EBA to assist in compilation of known data sets.
- Staff to conduct gap analysis of data sets.

Task RA2.3.2 Identify instances in which assessments were done without Oregon data and correct situation in future assessments.

Task RA2.3.3 Review Oregon data sets and establish source database after identifying and error checking archival files.
- This is in part will be accomplished under Project GF-99-1, OSU contract with Dr. Dave Sampson.
- Extend PSMFC contract and have former EDCP personnel clean-up data sets in coop. With Dave Sampson, and Y.Lee.

Task RA2.3.4 Develop a sampling program (at-sea or dockside) to obtain necessary samples to estimate biological parameters for species without information, or to improve estimates.
- Initially, hire EBA to assist in literature search and field studies design.
- Keith Matteson to lead series of short cruises designed to sample key species for size, weight, sex, age, and maturity – canary and yellowtail rockfish, POP, petrale.
- Develop histological techniques to accurately determine maturity status, and do so for selected species.
Task RA2.3.5 Participate in coastwide marine fish stock identification effort to delineate stock boundaries and genetic characteristics of several marine groundfish species.

Task RA2.3.6 Develop contract with Oregon State University to do a genetic microsatellite typing of samples collected in 1999 nearshore surveys, and to do a gap analysis of other ongoing genetic identification work.

- Dr. Barbara Shields, OSU will do analysis of samples sent to independent laboratory for typing and make recommendations for future sampling based on gap analysis.

Task RA2.3.7 Under above contract, develop recommendations on sample sizes and species for ODFW and collaborators.

Task RA2.3.8 Assist collaborators in collecting genetic material from species of mutual interest.

- Collaborators include Dr. Lisa Seeb, ADFG, and Dr. Vince Buonaccorsi NMFS.

Objective 2.4: Participate in directed marine fisheries investigations related to evaluating active fisheries and other marine habitat and resources, through cooperative at-sea and shore-based research programs.

Task RA2.4. Examine alternative fishing gears using at-sea trials to increase access while minimizing bycatch of depressed stocks, or unwanted species.

Task RA2.4.1 Examine by-catch / gear performance issues with video.

- Complete work-up of past years effort, incorporate into design of future studies.
- Polly Rankin to assist in this task.

Task RA2.4.1 Develop and test alternative trawl gears aimed at separating roundfish from flatfish.

- Steve Parker to take lead on design of this study.
- Polly Rankin to provide field support for study.

Objective 2.5 Conduct timely and prioritized stock assessments for finfish and shellfish to support effective management; support prioritization of stock assessment work by ODFW or in collaboration with other agencies, universities, and fishing community.

Task RA2.5.1 Review black rockfish stock status – prepare data for 2000 assessment.

- Extend Steve Kapillus to work up commercial samples.
- Bob Hannah, Don Bodenmiller and Bill Miller to work on recreational fisheries age structures and data sets, along with Bob Mikus and other members of the Age Unit.

Task RA2.5.2 Assist in black rockfish assessment process – participate in STAR panel review (Black rockfish assessment cancelled in 2000, data summarized and reviewed).

- This will be assigned to Jim Golden or Dave Sampson.

Task RA2.5.3 Conduct timely and prioritized stock assessments for developmental fisheries species to support effective management.

Task RA2.5.4 Develop survey for sardines in cooperation with NMFS and CDFG.

- Jean McCrae – will take lead on this project.
- Keith Mattesson will provide assistance.

Task RA2.5.5 Continue with other developmental fisheries research projects – link with other research and shoreside sampling efforts where possible.
Task RA 2.5.6 Support Marine Fisheries Collaborative Fellowship through Coastal Oregon Marine Experiment Station (COMES).

Objective 2.6: Promote, fund and conduct marine mammal inventory and predator-prey relationship studies with particular focus on ESA anadromous species.
   Task RA2.6.1 Recruit NRS-3 Marine Mammal Predation Study Project Leader.
   Task RA2.6.2 Conduct study on predator-prey relationships.
   • Robin Brown has lead assignment.

Objective 2.7: Promote, fund and conduct inventories, life history and habitat requirement studies involving shorebirds and pelagic bird species which depend on Oregon estuaries and marine islands.
   Task RA2.7.1 Develop plan for possible CARA funds late in the 99-01 biennium.
   • Robin Brown has lead on this assignment.
Data Services - Tasks

Goal 1: To manage Oregon’s marine resources incorporating good science that meets the needs for sustaining and rebuilding its habitat and resources and provide for the needs of the public.

Objective 1.2: Develop timely and thorough analysis of policy and management options via staff reports that support decision-making for maintenance or development of harvest and/or impact strategies and resulting new regulations.
   Task DS1.2.4 Supply raw and summarized data as requested by this and other agencies.

Goal 2: To provide quality science and information necessary to manage Oregon’s marine resources, fisheries, and habitats for sustainable use, harvest, and enjoyment.

Objective 2.2: Fully describe major fisheries and participants including gear used, estimates of total removals, impacts by fishery or other use, and maintain timely and accurate monitoring of harvest guidelines or quotas.
   Task DS2.2.3 Maintain commercial landing, logbook, and sampling databases in Newport.
   Task DS2.2.4 Support recreational fish catch, effort, and biological sampling programs for ocean salmon and non-salmonid recreational bottom fish fisheries.
   Task DS2.2.5 Maintain program and computers, hardware, software, and computer network.
Resource Monitoring and Sampling - Tasks

Goal 2: Provide quality science and information necessary to manage Oregon’s marine resources, fisheries, and habitats for sustainable use, harvest, and enjoyment.

Objective 2.1 Conduct and maintain complete and timely inventories of marine and estuarine species and their habitats.

Task RM2.1.11 Revise sport sampling programs to expand coverage of OSM based sport bottom fish sampling programs, and or revise MRFSS RecFIN programs to improve catch estimates recreationally caught species.

Task RM2.1.12 Revise port / sport sampling methods to collect catch species composition, effort, and biological structures from key species on a reef by reef basis. Develop standardized reporting format.

Task RM2.1.13 Continue in-season sampling and monitoring programs for commercial salmon, tuna, halibut, whiting, groundfish, shrimp, and other invertebrates.

Task RM2.1.14 Participate in Port Interview Project with Industry and NMFS – goal is to interpret fisher gathered information to apply ‘windage’ to assessments (project dropped).

Task RM 2.1.5 Increase sampling coverage of groundfish fisheries:
- Add seasonal EBA time to cover additional gears/ports.
- Add port biologist in Brookings (Done).
Research Project Planning Process

At-sea projects were initiated last biennium in response to the emerging groundfish crisis. Work on continuing projects and planning of new projects has been underway since the beginning of the biennium. At-sea work, in particular, must be done in seasons due to the nature of the fishery and the inability to conduct research during certain periods as a result of weather conditions. Any research involving federally managed groundfish species should be consistent with federal research planning efforts to avoid duplication or other conflicts. In addition, the National Marine Fisheries Service must review research requiring a federal permit. The NMFS Regional Director must issue a specific letter of research acknowledgement prior to initiating work. Finally, some staff time will need to be re-programmed to carry out work. In summary, project planning uses the following steps:

- Identify project need, working with both users and peers;
- Develop project approach;
- Evaluate existing literature or data sets;
- Draft research proposal including sampling plan, schedule, personnel list, budget, and literature review;
- Review project internally;
- Submit to NMFS for peer review & letter of research acknowledgement;
- Submit to Fish Division, and to Resource Management Team as required;
- Execute the project, including issuing request for bids, contract preparation;
- Conduct analysis and reporting of project results;
- Revise project goals and objectives – conduct additional studies if necessary.
Appendix: MRP Tasks and Project Proposals

Task RA 2.1.2  Nearshore Fixed Gear Survey
Task RA 2.1.3  Nearshore Juvenile Rockfish Survey – Pilot Project
Task RA 2.1.5  Sablefish Behavior Toward a Baited Pot
Task RA 2.2.2  Discard Mortality of Lingcod in Bottom Trawls
Task RA 2.3.4  Improving Maturity Data for Selected Groundfish Stocks
Task RA 2.3.6  Population Structure of Rockfish Off Oregon
Task RA 2.4.1  Testing Square Mesh Escapement Panels in Trawl Gear
Task RA 2.5.4  Commercial Sardine Sampling
Task RA 2.1.1  Nearshore Reef Mapping Project