

Pilot Sites: Redfish Rocks and Otter Rock		
Work Product	Procedures	Projected Timeframe
P1. Community Teams	<p>A. Refine and formalize community teams. Port Orford Ocean Resource Team (POORT) and Depoe Bay Near Shore Action Team (NSAT) consider including advisors, representing additional interests/expertise, as part of their community team that will focus on marine reserves work. Submit memberships to ODFW. ODFW will formally recognize and post marine reserve community team memberships on marine reserves website.</p>	Summer 2009
	<p>B. Develop management plan. Community team, including advisors, assist ODFW staff in developing marine reserve Management Plans (see P6) that include: i) site specific goals, ii) biological and social/economic monitoring plans (see P4 and P5), iii) outreach and education, and iv) compliance/enforcement. All meetings will be advertised and open to the public.</p>	Summer 2009 - Summer 2010
	<p>C. Implement baseline surveys and monitoring. Teams assist staff in implementing baseline surveys and monitoring (see P4 and 5).</p>	Fall 2009 - Spring 2011
P2. Outreach	<p>A. Develop, with Oregon Sea Grant, a communications strategy for outreach and public engagement. Focus communications strategy on keeping communities and the general public informed of the marine reserves process. Determine means of disseminating information about the process, opportunities for public engagement, and means of reporting on the progress and results of work conducted during the 2009-2011 biennium. Oregon Sea Grant leads implementation of outreach work. [DLCD staff assist with development and maintenance of marine reserves website.]</p> <p>Outreach to include: i. ongoing website development and maintenance, publications, mailings, and other methods of disseminating information as provided for in the communications strategy. ii. public meetings</p>	Summer 2009
	<p>B. Implement outreach.</p>	Summer 2009 - Spring 2011

Work Product	Procedures	Projected Timeframe
P3. Rule Making for Site Designation	<p>A. Initiate rule making process. Departments of State Lands (DSL), Fish and Wildlife (ODFW), and Parks and Recreation (OPRD) initiate their respective rulemaking processes to designate the pilot sites.</p> <p>Rule authorities include:</p> <ul style="list-style-type: none"> i. DSL - reserve boundaries; authorizations for a use, a Removal-Fill Permit for a regulated removal-fill activity, or to use or place a structure on, in or over state-owned submerged and/or submersible land; [subtidal kelp harvest] ii. ODFW - commercial and recreational subtidal and rocky intertidal fish and invertebrate harvest iii. OPRD - intertidal algae harvest, other non-living intertidal take 	Summer 2009
	<p>B. Draft rules. Draft rules for the pilot marine reserve at Otter Rock and the pilot marine reserve and marine protected area at Redfish Rocks. Includes working with Dungeness crab industry to develop rules to allow for removal of crab pots that accidentally drift into marine reserve areas.</p>	Summer 2009 - Fall 2009
	<p>C. Public meetings. ODFW will make draft rules available and will conduct public meetings to receive public comment and input on draft rules. ODFW meetings will be held in/near Port Orford, Depoe Bay, and Salem. OPRD and DSL will hold joint rulemaking hearings to receive public comment and input on their respective draft rules.</p>	Fall 2009
	<p>D. Rule making. The State Land Board, Fish and Wildlife Commission, and Parks and Recreation Commission undergo rule making at their respective meetings:</p> <ul style="list-style-type: none"> i. Fish and Wildlife Commission meeting December 11, 2009 in Salem ii. State Land Board meeting [December 2009/February 2010] iii. Parks and Recreation Commission meeting [January/February 2010] 	Fall 2009/Winter 2010
	<p>E. Implement State Land rules.</p>	Winter 2010
	<p>F. Implement Fish and Wildlife and Parks and Recreation harvest and take rules after baseline surveys are completed.</p>	Fall 2010, or once baseline surveys are completed

Work Product	Procedures	Projected Timeframe
P4. Biological Monitoring and Baseline Surveys	<p>A1. Hold science workshop to assist in identifying monitoring and research objectives for marine reserves monitoring program.</p> <p>Workshop participants will consider monitoring and research objectives for a marine reserves monitoring program. Monitoring conducted for marine reserves will be part of a larger Nearshore Monitoring Program that can inform nearshore resource management and planning. Participants consider monitoring and research objectives that meet the OPAC marine reserve objectives of: using marine reserves "as reference areas for conducting ongoing research and monitoring of reserve condition, effectiveness, and the effects of natural and human-induced stressors," and "[using] the research and monitoring information in support of nearshore resource management and adaptive management of marine reserves."</p> <p>Workshop participants had the following general guidance:</p> <ul style="list-style-type: none"> i) monitoring program should build on existing marine sampling programs and use well-established sampling protocols and metrics ii) indicator species/parameters need to be selected that are easy to monitor and would be sensitive to changes in environmental conditions over time. A literature review and discussion with experts should provide the information needed to select indicators. iii) analytical needs should be considered up front, prior to designing a monitoring plan iv) POORT and Depoe Bay NSAT should coordinate closely to ensure consistency in monitoring plans and goals, where possible 	Held July 14, 2009
	<p>A2. Continue to work with scientific community (scientific advisors) to establish research and monitoring objectives for marine reserves monitoring program.</p> <p>Set research questions/objectives for the marine reserves monitoring program and identify indicators and metrics to be monitored. Many of the objectives will involve comparing populations and conditions inside and outside the reserve over time. Specific sites outside the reserve (referred to as "comparison sites") need to be selected for each reserve area. Based on input from the science workshop, ecological monitoring objectives may include:</p> <ul style="list-style-type: none"> i) species composition inside and outside of reserves ii) size and age structures inside and outside of reserves (for selected species) iii) changes in habitats inside and outside reserves (including biogenic habitats) iv) habitat usage/species behavior inside and outside of reserves (use indicator species) v) other, for site specific research/monitoring 	Summer 2009

Work Product	Procedures	Projected Timeframe
	<p>B. Develop monitoring plan for each site. Develop plan to monitor habitats and biological resources within the site and corresponding comparison area(s). Work with scientific experts and community teams to develop studies. Include opportunities for collaborative and cooperative research and monitoring projects with the fishing industry, ocean users, and the scientific community. Monitoring plans will be based on monitoring and research objectives for the marine reserves monitoring program and site specific marine reserve goals. Monitoring plans will be complementary between sites for purposes of implementing an overall marine reserves monitoring program and feeding into a larger Nearshore Monitoring Program to inform nearshore resource management and planning.</p> <p>Plans will include: i) specific monitoring and research studies to address monitoring and research objectives for the marine reserves monitoring program, and ii) specific monitoring and research studies for site specific goals.</p>	<p>Summer 2009 - Fall 2009</p>
	<p>C. Review and finalize monitoring plans. Community team and Scientific and Technical Advisory Committee (STAC) review draft plan. ODFW staff finalize monitoring plans.</p>	<p>Winter 2010</p>
	<p>D1. Conduct baseline habitat field work and data gathering. Baseline surveys should provide both a beginning point for long-term monitoring and provide a general characterization of the marine reserve area. Work includes staff work, collaborating with university and other scientists, chartering local vessels, and working with communities and volunteers. May include outside contract work. Baseline habitat surveys and data gathering may include:</p> <ul style="list-style-type: none"> i. high resolution bathymetry (depth) mapping [there are possible feasibility issues at Otter Rock marine reserve area due to shallowness. High resolution surveys will not be able to map areas shallower than 10 m] ii. geological characteristics (bottom structure and composition) iii. physical oceanographic characteristics iv. biological characteristics (primarily habitat forming or structuring organisms) 	<p>Summer 2009 - Fall 2009 Spring 2010 - Fall 2010</p>

Work Product	Procedures	Projected Timeframe
	<p>D.2 Conduct baseline biological field work and data gathering. Baseline surveys should provide both a beginning point for long-term monitoring and provide a general characterization of the marine reserve area. Work includes staff work, collaborating with university and other scientists, chartering local vessels, and working with communities and volunteers. May include outside contract work. Baseline biological surveys and data gathering may include:</p> <ul style="list-style-type: none"> i. number and types of species present and community composition ii. relative species abundances (focusing on indicator species) iii. size and age structure of selected species iv. species/habitat associations vi. other, for site specific research/monitoring vii. species movements for selected species and sites 	<p>Fall 2009 Spring 2010 - Fall 2010 Spring 2011</p>
	<p>E. Analyze baseline data.</p>	<p>Winter 2010 - Summer 2010</p>
	<p>F. Draft results from baseline surveys and scientific review. Draft a technical report of baseline results. STAC and STAC advisors review draft report and provide comments to ODFW (verbally or in writing).</p>	<p>Summer 2010</p>
	<p>G. Final report of baseline results. Report summary of results to community teams and OPAC. Make summary and technical reports available to the public. Include summary of results in report to legislature.</p>	<p>Fall 2010</p>
	<p>H. Incorporate final monitoring plan into site management plan.</p>	<p>Summer 2010</p>
	<p>I. Continue implementation of monitoring.</p>	<p>Summer 2010 - Spring 2011</p>

Work Product	Procedures	Projected Timeframe
P5. Social/Economic Monitoring Plan	<p>A1. Hold science workshop to assist in identifying monitoring and research objectives for marine reserves monitoring program.</p> <p>Workshop participants will consider social and economic objectives for a marine reserves monitoring program. Monitoring conducted for marine reserves will be part of a larger Nearshore Monitoring Program that can inform nearshore resource management and planning. Workshop participants will identify and prioritize research questions/monitoring objectives that will help define the marine reserves monitoring program and from which researchers can then design specific studies. Workshop participants will also discuss ideas for appropriate indicators and metrics to be monitored to meet high priority monitoring objectives. Constraints and uncertainty concerning funding underscore the need for this workshop to carefully prioritize recommendations on research goals and objectives.</p>	Held July 14, 2009
	<p>A2. Continue to work with social science and economic community (scientific advisors) to establish research and monitoring objectives for marine reserves monitoring program.</p> <p>Set research questions/objectives for the marine reserves monitoring program and identify indicators and metrics to be monitored. Based on input from the science workshop, social and economic monitoring objectives may include:</p> <ul style="list-style-type: none"> i) changes in human behavior including fishery effort shifts ii) costs and benefits of marine reserves iii) changes in social values of the area 	Summer 2009
	<p>B. Develop plan, for each site, to monitor social and economic effects from implementation of marine reserve sites.</p> <p>Develop studies in collaboration with economists and social science experts and local community teams. Plan will include opportunities for collaborative and cooperative research and monitoring projects with the fishing industry, ocean users, and the scientific community. Monitoring plans will be based on monitoring and research objectives for the marine reserves monitoring program and site specific marine reserve goals. Monitoring plans will be complementary between sites for purposes of implementing an overall marine reserves monitoring program and feeding into a larger Nearshore Monitoring Program to inform nearshore resource management and planning. May include contract work.</p>	Summer 2009 - Fall 2009
	<p>C. Review and finalize plan.</p> <p>Community team and Scientific and Technical Advisory Committee (STAC) review draft plan. ODFW staff finalize monitoring plan.</p>	Winter 2010

Work Product	Procedures	Projected Timeframe
	<p>D. Conduct baseline field work and data gathering. Baseline surveys should provide both a beginning point for long-term monitoring and provide a general characterization of the marine reserve area. Work includes staff work, collaborating with university and other scientists, and working with communities and volunteers. May include contracting local liaisons within community to assist with conducting interviews/surveys. Baseline field surveys and data gathering may include: i) spatially explicit human use patterns (extractive and non-extractive) ii) relative economic importance of areas (for example catch data) iii) social value of the area</p>	Fall 2009 - Winter 2010
	<p>E. Analyze baseline data.</p>	Spring 2010
	<p>F. Draft baseline results and expert review. Draft a technical report of baseline results. STAC and STAC advisors review draft report and provide comments to ODFW (verbally or in writing).</p>	Summer 2010
	<p>G. Final report of baseline results. Report summary of results to community teams and OPAC. Make summary and technical reports available to the public. Include summary of results in report to legislature.</p>	Fall 2010
	<p>H. Incorporate final monitoring plan into site management plan.</p>	Summer 2010
	<p>I. Continue implementation of monitoring.</p>	Summer 2010 - Spring 2011
P6. Management Plan	<p>A. Develop management plan for each site. Work with community teams, Oregon State Police, and other relevant state agencies to develop management plans. Management plans will include i) site specific goals, ii) biological (see P4) and social/economic monitoring plans (see P5), iii) outreach and education plans, and iv) compliance and enforcement plans.</p>	Summer 2009 - Summer 2010
	<p>B. Review and finalize plan. Provide plan to community teams and OPAC. Make plan available to the general public. Include summary of plan in report to legislature.</p>	Summer 2010

Work Product	Procedures	Projected Timeframe
	C. Collaboratively implement management. Collaborate with community teams, university and other scientists, regulatory agencies, and Oregon State Police to implement actions in management plan.	Summer 2010 - ongoing
P7. Report to Legislature	A. Develop report on pilot marine reserve sites to state legislature. Develop report for state legislature as mandated in HB 3013.	Summer 2010
	B. Report to legislature.	Fall 2010
Evaluation & Proposal Sites		
Work Product	Procedures	Projected Timeframe
E1. Community Teams	A. Initiate formation of marine reserve community teams. ODFW and Sea Grant contact and meet with local government entities that have expressed interest in hosting marine reserve community teams. Discuss what/if there is a local entity that can provide an appropriate meeting structure by which community teams can operate by (e.g. bylaws, open public meetings). Discuss team membership requirements established in HB 3013. Discuss ways of providing for community teams that overlap county boundaries. ODFW and Sea Grant determine the appropriate entity for each community team. Determine how each team will solicit members and how members will be selected. The state will only recognize one official marine reserve community team for each site.	Summer 2009
	B. Formalize marine reserve community teams. ODFW and Sea Grant review community team membership to determine if proposed team meets requirements of HB 3013. If deficiencies are determined, will work with entity to resolve. Once team has been approved, members for each team will be posted on the marine reserves website. Meeting days and locations will be posted on the website for all teams.	Summer 2009
	C. Community team work. Community teams work in collaboration with staff to: i) assist with biological and social/economic assessments, ii) develop site specific marine reserve goals consistent with OPAC's marine reserve definition and goals, and iii) refine and recommend sites (Cape Perpetua, Cascade Head, and Cape Falcon teams) or consider developing and recommending a proposal (Coos Bay team) consistent with the site specific goals.	Summer 2009 - Summer 2010

Work Product	Procedures	Projected Timeframe
	<p>D. Scientific support. In addition to ODFW staff, a pool of marine science, social, and economic experts has expressed interest in providing technical assistance to community teams.</p>	Summer 2009 - Summer 2010
E2. Outreach	(See pilot sites, P.2, above)	(See pilot sites)
E3. Biological Assessments	<p>A. Hold science workshop to assist in identifying evaluation site objectives specific to habitat and biological assessments. Workshop participants will consider biological assessments needed to help community teams refine or develop site recommendations.</p> <p>Constraints and uncertainty concerning funding underscore the need for this workshop to carefully prioritize recommendations on assessment objectives.</p>	Held July 14, 2009
	<p>B.1 Develop habitat and biological assessment. Work with scientific experts to develop habitat and biological assessments to be conducted for site/area. Use new and existing data with a focus on compiling existing information.</p> <p>Assessments will gather and compile information on: i) species presence with a focus on indicator species ii) habitats</p>	Summer 2009
	<p>B.2 Develop experiential knowledge survey. Design local experiential survey (may require contract work, including potential for contracting local liaison for conducting surveys).</p> <p>Experiential knowledge surveys will gather information on: i) species presence with a focus on indicator species ii) habitats</p>	Summer 2009
	<p>C. Conduct field work and data gathering. Includes ODFW staff work, collaborating with university and other scientists, chartering local vessels, and working with communities and volunteers. May include outside contract work.</p>	Summer 2009 - Spring 2010

Work Product	Procedures	Projected Timeframe
	<p>D. Analyze data and report information. Analyze data and provide information in formats that will facilitate collaborative work by community teams.</p>	Fall 2009 - Spring 2010
	<p>E. Incorporate information into developing site recommendations/proposal. Assist community teams in developing site recommendations/proposal that meet ecological and/or research goals. Agency staff will continue to work with community teams and provide analytical products as needed.</p>	Spring - Summer 2010
E4. Social/Economic Assessments	<p>A. Hold science workshop to assist in identifying evaluation site objectives specific to social and economic assessments. Workshop participants will consider social and economic assessments needed to help community teams refine or develop site recommendations.</p> <p>Constraints and uncertainty concerning funding underscore the need for this workshop to carefully prioritize recommendations on assessment objectives.</p>	Held July 14, 2009
	<p>B. Develop social and economic assessment. Work with economists and social science experts to develop social/economic assessment. Use new and existing data with a focus on compiling existing information. May include outside contract work.</p> <p>Assessments will gather information on: i) spatially explicit human use patterns, (extractive and non-extractive) ii) relative economic importance of areas</p>	Summer 2009
	<p>C. Conduct field work and data gathering. Includes staff work, collaborating with university and other scientists, and working with communities and volunteers. May include contracting local liaisons within community to assist with conducting interviews/surveys.</p>	Summer 2009 - Spring 2010
	<p>D. Analyze data and report information. Analyze data and provide information in formats that will facilitate collaborative work by community teams.</p>	Fall 2009 - Spring 2010

Work Product	Procedures	Projected Timeframe
	<p>E. Incorporate information into developing site recommendations/proposal. Assist community teams in developing site recommendations/proposal that minimize adverse economic and social impacts and capitalize on benefits. Agency staff will continue to work with community teams and provide analytical products as needed.</p>	Spring - Summer 2010
E5. Site Recommendation/ Proposal	<p>A. Develop community team process. ODFW staff will work with community teams to develop: i) ground rules, ii) site specific marine reserve goals complementary to OPAC's marine reserve definition and goals, and iii) a process for developing site recommendations/proposal. Include means of disseminating information to the public and providing opportunities for public input. Identify staff resources and products needed for process.</p>	Summer 2009
	<p>B. Incorporation of information. Community teams incorporate habitat and biological information to refine sites or develop proposal that meets site specific marine reserve goal(s).</p>	Fall 2009 - Spring 2010
	<p>C. Draft site recommendation/proposal and public input.</p>	Summer 2010
	<p>D. Recommendation/Proposal. Community teams submit recommendation/proposal to ODFW.</p>	Summer 2010
	<p>E.1 Biological evaluation for final site recommendation/proposal. ODFW staff, incorporating review and advice provided by STAC, evaluate final site recommendation/proposal as to whether site meets ecological and/or research goals developed for the site. [Go back to teams for refinement if needed.] Provide evaluation results along with recommendation/proposal to OPAC. Include summary of results for each recommendation/proposal in report to legislature.</p>	Summer 2010 - Fall 2010
	<p>E.2 Evaluate potential economic effects of recommended/proposed site. Analyze potential economic effects of recommended/proposed site and provide analysis along with the recommendation/proposal to OPAC. Include summary of analysis for each recommendation/proposal in report to legislature.</p>	Summer 2010 - Fall 2010
	<p>F. Community teams refine site, if needed.</p>	Summer 2010 - Fall 2010
	<p>G. OPAC reviews site recommendations and provides input to ODFW staff.</p>	Fall 2010
	<p>H. ODFW makes site recommendations in report to legislature.</p>	Fall 2010

Work Product	Procedures	Projected Timeframe
E6. Report to Legislature	A. Develop report on evaluation/proposal sites to state legislature. Develop report for state legislature as mandated by HB 3013.	Fall 2010
	B. Report to legislature.	Fall 2010