Massachusetts Division of Marine Fisheries Strategic Plan





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Division of Marine Fisheries Strategic Plan

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Massachusetts Division of Marine Fisheries Strategic Plan

Maintaining Healthy Prosperous Fisheries Well into the Future

We are pleased to present this Strategic Plan that will guide the Massachusetts Division of Marine Fisheries during the next five years (2010-2014). The plan is a living document that will be revised to address local, regional and national changes in governance, economy and climate; recognized as the forces driving and affecting natural resource management.

This strategic plan assures the work of the Massachusetts Division of Marine Fisheries remains focused on its mission and vision. It also emphasizes the necessary fisheries and ocean leadership that the Division brings to the table on behalf of the Commonwealth.

The state's commercial and recreational fisheries generate over \$5 billion annually and employ in excess of 100,000 people; making it one of the world's richest fishing industries. The Division of Marine Fisheries is dedicated to and passionate about issues important to this industry. We are devoted to upholding state sovereignty, and bringing a practical approach to fisheries management.

Paul Diodati

Director Division of Marine Fisheries

Mary Griffin

Commissioner Department of Fish and Game

Introduction



This Strategic Plan is proposed for 2010-2014. The Plan's goals serve as hallmarks for the Division of Marine Fisheries (*MarineFisheries*), of the Department of Fish and Game, as it reaffirms its core values, charts new directions and strives to fulfill its mission.

Mission To manage the Commonwealth's living marine resources in balance with the environment resulting in sustainable fisheries and contributions to our economy, stable availability of diverse, healthy seafood and enriched opportunities that support our coastal culture.

MarineFisheries is responsible for the development and promulgation of the Commonwealth's laws governing commercial and recreational fishing activity conducted in the marine environment. To successfully accomplish this fisheries management task, *MarineFisheries* has developed a distinct culture and an enduring set of values that binds our agency together and is central to our vision.

While developing the Strategic Plan, *MarineFisheries* focused on the current state of the environment, the agency's greatest strengths, its opportunities, its challenges, and its values. Calculated choices will need to be made so that allocation of its resources will support the achievement of professional excellence. We are committed to fully utilizing state-of-the-art technology to support research that aids in formulating the best governing decisions.

Vision Sustainable fisheries and a healthy marine ecosystem achieved through innovation, collaboration, and leadership enriching the public's way of life.



Meeting Our Challenges

Marine resource management around the country is in constant adjustment to shifts in ecology, growth in human population, changes in global climate, emerging technology, changes in fishing practices and expanded coastal development. Our understanding of the health of coastal waters and the deeper oceans continues to grow under greater public awareness of marine products: their geographic sources, stock status, and health benefits. Cumulative impacts from such factors, combined with increased pressure to harvest marine resources, has caused decline in many U.S. fisheries.

While solving the overfishing dilemma has brought forth scores of action plans, most have been narrowly focused to reduce the level of fishing to remedy the problem. This is of particular concern for local fisheries, since many New England fisheries target multiple fish species at the same time and some species are in need of more protection than others. The complexity of these fisheries has led to fishery management plans that have become convoluted, and habitually ineffective. Popular blame for failure to achieve management plan goals points out the specific measures used to achieve objectives. The measures fall into a broad category of input controls, typically gear, effort and area restrictions. In addition to input controls are output controls that focus on specific catch limits, or quotas, and more often are considered in terms of tradable and non-tradable, individual or group fishing quotas (or rights).

Fisheries Management

It's not surprising then that recent debate has been circling around two solutions:

- 1. Change driving measures in conventional fisheries management plans from input to output controls; and
- Practice ecosystem based management (EBM). Although maturing, the EBM discussion has been driven by the intuitive and intellectual recognition that ocean resources are impacted by multi-use activities and environmental change; paving the way for integrating management into a single comprehensive arrangement.

Proponents for a change in management practices frequently note input controls are largely ineffective in constraining effort and fail to address the common property characteristics of fishery resources leading to overfishing, misreporting and undermining of management objectives. Those supporting a move to output controls in the form of individual tradable quotas argue this system performs better in terms of constraining catch and effort, and improves the quality and flow of products to processing facilities and then to the marketplace. Critics argue output controls result in highgrading, discarding, and often lead to fleet consolidation. In short, both input and output control measures struggle with overcoming the basic challenges posed by New England's characteristically mixed-species fisheries – the effective reduction of unwanted bycatch and discards.

The most notable action to affect fisheries management over the past five years has been the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The MSA calls for specific deadlines to end overfishing, increased use of market-based management tools, creation of a national saltwater recreational angler registry, and an emphasis on ecosystem approaches to management.

Ecosystem approaches to management at the federal level were previously advanced when President Bush signed Executive Order 13366 in 2004. This order established the Committee on Ocean Policy and released the U.S. Ocean Action Plan to make our oceans, coasts, and Great Lakes cleaner, healthier and more productive. The U.S. Ocean Action Plan established a coordinated ocean governance structure to enhance leadership and coordination among the federal agencies with ocean-related responsibilities and activities. Similarly, the Commonwealth of Massachusetts has taken a much stronger role in the marine environment through implementation of the state's Ocean Act in 2008. The Massachusetts Ocean Act calls for the development of an Ocean Plan to guide managed integration of multi-use ocean activities in waters of the Commonwealth.

The Next Five Years

The next five years present the Massachusetts Division of Marine Fisheries with some historically unique challenges related to these and other developments. It is vital that *MarineFisheries* has a strategic plan that recognizes these challenges and balances the interests of commercial, recreational and conservation sectors with the broader community. Policies developed to enhance the use, conservation and management of marine fisheries resources should give strong consideration to improving compliance with and enforcement of regulations, as well as ability to incorporate goals identified by interstate and federal programs. This will necessitate a higher level of participation, cooperation and collaboration by the Division with other states, the federal government, and international and non-governmental partners. Advancing our understanding of oceans, coasts, and estuaries should pay particular attention to improving data collection programs, refining fisheries stock assessments, increasing knowledge about relationships of fish stocks to habitat, and raising awareness of our findings to the people of Massachusetts and others interested in the marine environment.

Jurisdiction & Statutory Obligations



The Commonwealth, through Chapter 130 of Massachusetts General Law (M.G.L c. 130)¹, the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA)² and the Magnuson-Stevens Fishery Conservation and Management Act (MSA)³, is involved with fisheries management at multiple levels of government (state, interstate and federal). This involvement occurs through the Massachusetts Division of Marine Fisheries. Fisheries often are identified and/or characterized with respect to state-federal jurisdictional boundaries and as a consequence there are varied and dynamic biological, political and socioeconomic considerations for fisheries management.

State-federal interactions have led to various combinations of authority with respect to fisheries management. Fisheries are managed under formal fisheries management plans (FMP), which are implemented by state and/or federal regulations. Some fisheries are conducted under a single FMP (either interstate or federal) or some combination of the two.

In the case of a single FMP, the jurisdiction without a formal plan will often implement complementary regulations. For example, cod fishing in state waters is subject to Commonwealth regulations that complement the federal Northeast Multispecies Fishery Management Plan. Fisheries managed under dual FMPs are often termed joint-management and generally result in one of the jurisdictions taking a lead role in management.

Involvement in governance of fisheries extends beyond state and federal authorities and includes industry stakeholders, environmental groups and other interested parties. These entities are a dynamic characteristic of fisheries management and influence the fisheries management agenda. More detailed information on fisheries management, jurisdictions and authorities can be found in the "Commonwealth of Massachusetts Fisheries Management Primer" available through *MarineFisheries*.

Massachusetts General Laws

MarineFisheries receives its mandate from the General Laws of the Commonwealth, specifically Chapter 130 of Massachusetts General Laws (M.G.L. c. 130). This statute provides the Director with broad authority to manage the Commonwealth's marine fisheries and related resources, including the manner, legal limits and numbers of times when and areas where, fish may be taken.

Further, it denotes a clear role for the Marine Fisheries Advisory Commission, relating to the management of major fisheries. The Marine Fisheries Advisory Commission is a nine-member citizens board appointed by the Governor to assist the Director with setting fisheries laws.

Massachusetts Ocean Act

Governor Deval Patrick signed the Oceans Act of 2008 on May 28 requiring Massachusetts to develop a first-in-the-nation comprehensive plan to manage development in its state waters and balance natural resource protection with traditional and emerging uses. Citing the 2003 U.S. Commission on Ocean Policy

and the Pew Commission reports calling for significant reform of state and federal policy on management of marine waters, Governor Patrick described a summer 2009 deadline for a Commonwealth Draft Oceans Management Plan with December 31, 2009 implementation.

To accomplish this planning, the Act created an Ocean Advisory Commission (OAC) and Ocean Science Advisory Council (OSAC). The Director of Marine Fisheries is an OAC member and chairs a Fisheries Workgroup that has identified areas in the Commonwealth's ocean management planning important to living marine resources that support commercial and recreational fisheries. *MarineFisheries'* staff serves on a number of workgroups and on the OSAC.

The Act calls for review and revisions of the ocean plan every five years.

Atlantic Coastal Fisheries Cooperative Management Act

The Act requires Atlantic States Marine Fisheries Commission (ASMFC) to prepare and adopt coastal fishery management plans to promote interstate conservation and management of Atlantic coastal fishery resources. Congress found that coastal fishery resources that migrate across jurisdictional boundaries are of substantial commercial and recreational importance to the Atlantic coastal region and the nation. The responsibility for managing Atlantic coastal fisheries rests with the states and with the federal government. A state's failure to fully implement a coastal fishery management plan can affect the status of coastal fisheries and discourage other states from fully implementing plans. Each state identified in a plan must implement and enforce it within the specified timeframe, subject to annual review by the Commission.

If ASMFC determines that a state is not complying with a plan, it must notify the Secretaries of Commerce and the Interior and provide a list of actions the state must take to comply. If the Secretary of Commerce finds noncompliance, the Secretary must declare a moratorium on fishing in the fishery in question within the waters of the state.

Magnuson-Stevens Act

The Magnuson-Stevens Fishery Conservation & Management Act (MSA), as amended by the 2006 Reauthorization, uses market-based incentives and management tools to replenish America's fish stocks: strengthens enforcement of America's fishing laws; improves information and decisions about the state of ocean ecosystems for application of ecosystem approaches to management; and sets a deadline to end overfishing in America by 2011. Consequently, fishery management councils have new and revised obligations that implicitly involve states in achieving MSA goals and advising and working with the National Marine Fisheries Service (NMFS) in the spirit of cooperative conservation efforts. According to the President, the federal government "must continue to listen to the needs of states, communities, and local citizens."

National Shellfish Sanitation Program & Interstate Shellfish Sanitation Program

The National Shellfish Sanitation Program (NSSP) was created in 1925 to develop control measures to ensure a safe shellfish supply for public consumption. Procedures were established based on the cooperative and voluntary efforts of state regulatory agencies and the shellfish industry. States that ship shellfish took actions and adopted adequate laws and regulations to ensure that the shellfish reaching the consumer had been grown, harvested and processed in a sanitary manner.

In 1982, to improve uniformity and effectiveness of NSSP procedures, a group of states and the Federal Food and Drug Administration (FDA) formed the Interstate Shellfish Sanitation Conference (ISSC). The ISSC adopted the NSSP Manuals of Operations, now the Model Ordinance, as the guidelines to ensure shellfish safety.

¹Chapter 130: Section 1A and 17 (excerpted). Division of Marine Fisheries Section 1A. The Division of Marine Fisheries shall be under the administrative supervision of the Director of Marine Fisheries. The Division of Marine Fisheries shall administer all the laws relating to marine fisheries. It shall be responsible for the biological development of marine fish and fisheries. Section 17. Powers of Director. (10) Notwithstanding any contrary provision of law, the Director of the Division of Marine Fisheries may adopt, amend, or repeal all rules and regulations, with the approval of the Governor, necessary for the maintenance, preservation and protection of all marine fisheries resources between the mean high water mark of the Commonwealth and a straight line extension of the lateral boundaries of the Commonwealth drawn seaward to a distance of 200 miles.

²Public Law 103-206

³ Public Law 94-265, as amended by P.L. 104-297 & 109-479

Partnerships



MarineFisheries is involved with a number of cooperative partnerships. We believe such partnerships are important to build and share ideas, consolidate resources, construct critical mass, and produce timely and informative results. These factors work to increase our ability to solve fisheries management and research problems, and to create dynamic impacts aimed at benefiting the region's fishing communities.

Atlantic Coastal Cooperative Statistics Program (ACCSP)

The ACCSP is a cooperative state-federal program to design, implement, and conduct marine fisheries statistics data collection programs and to integrate those data into a single data management system to meet the needs of fishery managers, scientists and fishermen.

In 1995, representatives from 23 coastal resource agencies along the Atlantic coast signed a Memorandum of Understanding to become partners in the ACCSP. The program partners are now implementing the Program's standards within their respective areas. ACCSP has provided funding to help *MarineFisheries* implement some of these standards. A small ACCSP staff provides coordination for planning and program implementation, and operates the central data management system.

The Director is a member of the ACCSP Coordinating Council and *MarineFisheries* commits several staff members to support the program, and is well represented on ACCSP committees.

Atlantic Coastal Fish Habitat Partnership

The Atlantic Coastal Fish Habitat Partnership (ACFHP) is a geographically-focused and scientifically-based effort to conserve aquatic habitat along the East Coast. Formed under the National Fish Habitat Action Plan, the partnership includes 16 Atlantic coastal states from Maine to Florida with coastal river drainages, as well as federal agencies, Native American tribes, local governments, and nonprofit organizations. The partnership's mission is to accelerate the conservation, protection, restoration, and enhancement of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fish.

ACFHP will focus on three issue areas: ecological connectivity, water quality and quantity, and habitat alterations and modifications. *MarineFisheries'* role in the partnership will include providing technical support and guidance in developing reference materials such as habitat priorities and project lists. *MarineFisheries'* staff will also serve on the Steering Committee and hold leadership roles in forming and managing a regional subgroup in the Northeast. In addition, through cooperative partnerships with other ACFHP participants, *MarineFisheries* will be eligible for restoration and enhancement funds directly from ACFHP for projects such as restoration of fish passages, eelgrass, salt marsh and other near-shore fish habitats.

Atlantic States Marine Fisheries Commission (ASMFC)

In 1942, the ASMFC was formed by the 15 Atlantic coast states, the Potomac River Fisheries Commission, the District of Columbia and two federal fisheries agencies (National Marine Fisheries Service and the U.S. Fish and Wildlife Service), in recognition that fish do not adhere to political boundaries. It serves as a deliberative body, coordinating the conservation and management of the states' shared near-shore fishery resources.

In 1993, Congress formalized the current structure of interstate fisheries management with passage of the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA). The Act allows the Secretary of Commerce to place a moratorium on a state's fishery found out-of-compliance with an interstate fishery management plan that has been adopted by the ASMFC.

The Director is the administrative member of the the Commonwealth's 3-person delegation along with a Legislative and Governor's appointee.

Interstate Shellfish Sanitation Conference

The purpose of the ISSC is to provide a formal structure for state regulatory authorities to participate in establishing updated regulatory guidelines and procedures for uniform state application of the NSSP. Following FDA concurrence, these guidelines are published in revisions of the NSSP Model Ordinance.

To achieve this purpose the ISSC:

- Adopts uniform procedures incorporated into the National Shellfish Sanitation Program (NSSP);
- Gives state shellfish programs current and comprehensive sanitation guidelines to regulate the harvesting, processing and shipping of shellfish;
- Provides a forum for shellfish control agencies, the shellfish industry, and the academic community to resolve major issues concerning shellfish sanitation;
- Informs all interested parties of recent developments in shellfish sanitation and other major issues of concern through the use of news media, publications, regional and national meetings, internet and by working closely with academic institutions and trade associations.

Massachusetts Cooperative Fish and Wildlife Research Unit

The Massachusetts Cooperative Fish and Wildlife Research Unit (Coop Unit) of the United States Geological Survey is located at the University of Massachusetts-Amherst. *MarineFisheries* partners with the Coop Unit under a Cooperative Agreement to provide: 1) students professional training in fisheries science; and 2) the performance and conduct of fishery research necessary for the improvement of the Commonwealth's marine resources. *MarineFisheries* provides funding to the Coop Unit to enable students to obtain graduate degrees through the UMass-Amherst Department of Natural Resource Conservation and to implement important fisheries research under the auspices of the Coop Unit Fisheries Leader.

Massachusetts Marine Fisheries Institute

The Massachusetts Marine Fisheries Institute (MFI) serves as a national model for consolidating and focusing regional assets and expertise to tackle vital marine fisheries questions. Through a cooperative partnership with *MarineFisheries* and the Department of Fisheries Oceanography at the University of Massachusetts Dartmouth School for Marine Science and Technology (SMAST), the MFI enhances the state's ability to positively affect marine fisheries management in the Commonwealth and throughout the Northeast.

The MFI exists to promote sustainable fisheries by providing timely information needed to protect, conserve, and manage Massachusetts' marine and coastal resources. The focus of the MFI continues to be on application-oriented programs that go beyond short-term solutions. These programs strive to develop innovative and practical fisheries management applications contributing to scientific understanding, management, economic growth, and the sustainability of our oceans and coastal communities.

The Director, as co-chair of the MFI, encourages *MarineFisheries* staff to have an active role in coordination, conduct and administration of all MFI programs.

Massachusetts Ocean Partnership

The Massachusetts Ocean Partnership (MOP) is a broadly representative, independent public-private partnership created specifically to advance ecosystem-based integrated multi-use management of the Commonwealth's coastal ocean waters. MOP ultimately aims to promote healthy, resilient ocean ecosystems and thriving, sustainable marine dependent communities, industries and businesses.

The Director is a founding Board Member of MOP and is committed to helping Massachusetts create and implement the best ocean management plan possible — one that fairly represents all interests, is based on the best available scientific information, and ultimately supports resilient ocean ecosystems, productive economies and vibrant communities.

Merrimack River Anadromous Fish Restoration Program

The Merrimack River Anadromous Fish Restoration Program began in 1969 as a cooperative effort of *MarineFisheries*, the New Hampshire Department of Fish & Game, the Massachusetts Division of Fisheries and Wildlife, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service and the U.S. Forest Service. The cooperative goal is the restoration of anadromous fish (e.g. Atlantic salmon, American shad, river herring, alewife and blueback herring) to the Merrimack River system.

The program is administered by the cooperating agencies through two committees. The Policy Committee for the Anadromous Fishery Management of the Merrimack River provides overall program direction and resolves policy issues. The Technical Committee for the Anadromous Fishery Management of the Merrimack River provides oversight of program implementation and advises the Policy Committee on technical issues. The Policy Committee is composed of the Directors (or their proxies) of *MarineFisheries*, MA Division of Fish & Wildlife, and the NH Department of Fish & Game, the Regional Directors of the USFWS (Region5), and NOAA Fisheries (Northeast Region) and the Forest Supervisor for the White Mountain National Forest. Each member of the Policy Committee assigns a staff member to the Technical Committee.

New England Fishery Management Council (NEFMC) & National Marine Fisheries Service (NMFS)

In order to manage and conserve fish stocks, the Magnuson-Stevens Fishery Conservation&ManagementAct(MSA) created eight regional fishery management councils that are overseen by the U.S. Secretary of Commerce (SOC). Each council develops fishery management plans (FMPs) for the stocks in their geographical region, specifying how a fishery will be managed. Among other things, these plans regulate gear types, seasons, quotas, and licensing schemes.

The NEFMC is made up of eighteen voting members:

The Regional Administrator of NMFS; the principal state official with marine fishery management responsibility for Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut; twelve members nominated by the governors of the New England coastal states and appointed by the SOC, each serving no more than three consecutive terms. In addition, four non-voting members represent the United State Coast Guard, U.S. Fish and Wildlife Service, U.S. Department of State, and the ASMFC.

Before the federal government approves and implements FMPs developed by the NEFMC, it must ensure all plans meet 10 National Standards set forth by the MSA. Litigation based on meeting these standards has increased significantly over the years and has led to what many view as the inflexibility of fisheries management.

Northeast Shellfish Sanitation Association

The Northeast Shellfish Sanitation Association (NESSA) is a regional shellfish safety organization representing the interests of state and federal regulators and the shellfish industry in seven states from Maine through New Jersey. Founded in the early 1960's, NESSA provides a forum for shellfish control agencies, the shellfish industry and academia to discuss issues and share information of regional significance.

NESSA also provides an opportunity for local participation and input into the process of improving and modifying the NSSP. The regional shellfish organizations such as NESSA formulate regional positions on proposals under consideration by the ISSC. NESSA member states work together by coordinating activities to influence the policies of the ISSC regarding shellfish safety.

Division of Marine Fisheries Goals



Goal 1	Improve fisheries sustainability, promote responsible harvest and optimize production of our living marine resources.
Goal 2	Promote and support our commercial and recreational fisheries.
Goal 3	Promote and support industry and community involvement in the fisheries management process.
Goal 4	Foster partnerships that help accomplish the Division's mission.
Goal 5	Support continued development of an ecologically sustainable marine aquaculture industry.
Goal 6	Promote a high level of staff commitment and professionalism.
Goal 7	Ensure that marine spatial planning activities are compatible with fisheries management.



Improve fisheries sustainability, promote responsible harvest and optimize production of our living marine resources

This goal focuses on the agency's overarching responsibility to effectively manage the Commonwealth's fisheries. To achieve this goal, *MarineFisheries* will strive to identify biologically sustainable harvest levels of our marine resources and work to develop harvesting guidelines that allow Massachusetts fisheries to benefit from optimum yield without resource waste. Once considered a limitless and inexhaustible resource, the demands of a growing population, and changes in climate and utilization are damaging marine ecosystems and depleting ocean and coastal resources. This goal also aims to evaluate ecosystem health and identify, develop, and implement approaches needed to maintain and restore the biological wealth of the Commonwealth's ocean and coast.

- Collect precise, accurate data to enhance science-based fisheries management.
- Improve stock assessment, survey and environmental monitoring.
- Standardize and increase resolution of fisheries data.
- Enhance dissemination of fisheries data.
- · Improve estimates of recreational catch and effort.
- Improve collection and availability of life history parameters and ecological information.
- Protect and enhance ecosystem health.
- Provide technical review of coastal alteration projects to avoid and minimize impacts on ecosystem health, and recommend mitigation strategies when necessary.
- Investigate and document fish kills, oil spills and other incidents that degrade the marine environment.
- · Improve and restore fisheries habitat.
- Reduce bycatch, discards and interactions with non-target fish species and protected species and promote and develop responsible harvest methods.
- Evaluate and reduce anthropogenic impacts on protected species.
- Consider protected species when developing regulations.
- Enact fine-scale conservation zones to protect vulnerable fish populations.
- Consider and evaluate potential for fishing conservation zones.
- Examine impacts to living marine fisheries resources associated with climate change.
- Investigate changes in species distribution and abundance.
- Work with federal, state and local authorities to adjust overall harvest levels commensurate with changes in abundance.
- Address shifts in fishing effort resulting from new management programs.
- Explore the use of catch shares in state waters fisheries.
- Promote and strengthen state and municipal shellfisheries management.
- Monitor and classify shellfish growing areas for compliance with state, NSSP and federal rules, regulations and guidelines.
- Assist municipalities in maintaining water quality in existing approved shellfish harvest areas and expand approved areas through water quality improvement and pollution abatement.
- Collaborate with municipalities by providing technical services to enhance and manage shellfish resources.
- Administer and manage state waters surf clam and quahog dredge fisheries.
- Actively advocate effective fishery management through coordinated review and response for coastal NPDES discharges by enhancing working relations with permitting authorities, and other state and federal agencies.



Promote and support our commercial and recreational fisheries.

Promotion, marketing and outreach programs provide valuable assistance to address a variety of issues facing commercial and recreational fisheries. Fisheries experts now recognize that resource conflicts can be diminished and resources better managed when fishermen and other stakeholders are more understanding of one another, and access rights are distributed more effectively and equitably. Having a better understanding of the conservation underpinnings of management programs generally leads to better appreciation of fisheries and increased regulatory compliance. Determining what and when products or services may be of interest to customers will help optimize fishing strategies and business development, and create awareness of and accessibility to seafood products. Additionally, promotion of recreational fishing opportunities raises public satisfaction and improves utilization of fisheries resources.

- Promote the development of new markets and brands for the Commonwealth's fishing industries.
- Work with Department of Agricultural Resources, Massachusetts Office of Business Development and Office of Travel and Tourism to create campaigns to promote Massachusetts fisheries and fish products.
- Introduce a green fishing initiative to save fuel and reduce costs, pollution and greenhouse gas emissions.
- Improve seafood safety education and outreach.
- Inform and advise shellfish harvesters, industry, aquaculture, and public about sanitary and PSP ("Red Tide") growing area statistics.
- Establish new and maintain existing working relationships with state and federal agencies involved in seafood safety, chemical contamination and environmental monitoring.
- Prepare regulations and recommendations in cooperation with Department of Public Health.
- Mitigate impacts of shellfish closures.
- Strengthen shellfish water quality and PSP monitoring through enhanced field and laboratory capabilities.
- Work to minimize socio-economic impacts on the Commonwealth's fishing industry and coastal fishing communities resulting from limitations imposed by interstate and federal fisheries management plans.
- Promote "best practice" quality standards and management in fishing and aquaculture industries.
- Improve public access to coastal fishing sites with *MarineFisheries* working closely with the Office of Fishing and Boating Access.



Promote and support industry and community involvement in the fisheries management process.

The relationship between fisheries management and fisheries science has become more complex and challenging in recent years, as we move from a fish stockfocused approach to the management of fisheries with the objective of maximum sustainable yield, to an approach with multiple objectives encompassing the precautionary principle, eco-system based management, and the economic viability of industry. Fisheries science is now being asked to provide advice, information, and analysis on stock interactions and predation, on life history parameters, on essential fish habitat, and on changing ocean conditions and their potential effect on stock dynamics now and in the future. State and federal governments alone can no longer be expected to manage our fisheries without the increased cooperation of industry. Industry stewardship and self-governance will be keys to the sustainability of our fisheries and our marine economy.

- Collaborate with industry groups and community leaders to assist catchshare programs.
- Increase cooperative fisheries research and data collection opportunities involving fishermen and *MarineFisheries*' scientists.
- Promote an ethic of conservation and sustainability through stewardship of our marine resources and fishing education efforts (e.g. "Fish Responsibly").
- Encourage the public's hands-on involvement with conservation programs.
- Develop outreach and education program.



Foster partnerships that will help accomplish the Division's mission.

MarineFisheries works collaboratively with other agencies, jurisdictions, and stakeholders to solve problems with multi-disciplinary solutions. From these partnerships, we can capitalize on the expertise and resources of our partners to deliver services to the public. A culture of cooperation is key to achieving a shared vision for the sustainable management of marine fisheries resources.

- Build relationships with private and public sector bodies, including academic institutions, with mutual objectives relating to the Commonwealth's marine fisheries resources.
- Incorporate the expertise of other agencies to accomplish MarineFisheries' mission and objectives.
- Better communicate to existing and future partners the Division's expertise and capacity in marine fisheries management.
- Strengthen administrative, legislative and stakeholder support for *MarineFisheries* mission, goals and actions.
- Strengthen the Massachusetts Marine Fisheries Institute by expanding involvement with all five UMass campuses.
- Increase core staff devoted to management at state-federal and interstate levels.
- Participate on boards and working groups (Stellwagen Bank National Marine Sanctuary, MMS Task Force, Gulf of Maine Council, NEC, Sea Grants, ICES and NERACOOS/IOOS).



Support continued development of an ecologically sustainable marine aquaculture industry.

In the United States, marine aquaculture has the potential to become a major growth industry in the 21st Century. However, a number of issues continue to constrain its development in Massachusetts. The complex and diverse nature of the industry often conflicts with other, more traditional uses of coastal and ocean waters. Additionally, environmental concerns, and the existing legal and regulatory climate all contribute to the complexities. If the Massachusetts marine aquaculture industry is to succeed and grow in the future, these issues must be resolved. The state must reevaluate and reaffirm its aquaculture policy and support sustainable marine aquaculture practices. The key to the future of marine aquaculture in coastal and offshore waters is the creation of technology and policy systems that provide for sustainability with a goal of producing products while conserving natural resources.

- Protect wild populations of marine organisms and their natural habitats from degradation while promoting safe aquaculture.
- Ensure aquaculture practices are consistent with applicable NPDES discharge and *MarineFisheries* permit requirements. Coordinate NPDES review with permit authorities, EPA and MassDEP, conveying *MarineFisheries'* concerns for protection of marine organisms.
- Undertake research on primary aquaculture species and issues, to address developmental constraints and impediments.
- Encourage new regional industries and exports in the aquaculture sector.
- Develop policies and guidance for 322 CMR 15.00, including guidelines for site review by *MarineFisheries* staff, operational and permit condition review, biological controls, and environmental monitoring of Class 4 sites where organisms feed.
- Broaden the public review requirements for proposed deep-water (nonintertidal) aquaculture projects to allow formal and broader review, including participants in traditional state regulated commercial and recreational fisheries.
- Develop regulations/guidelines to ensure appropriate care and use of captive and cultured marine organisms.



Promote a high level of staff commitment and professionalism

The Massachusetts Division of Marine Fisheries will maintain a productive and well-trained staff capable of meeting the evolving technical challenges of fisheries science and providing leadership in fisheries management, while also providing timely and professional service to the public. We will continue to value and utilize the unique contributions of staff, constituents and stakeholders.

- Promote opportunities for staff development through continuing education and specialized training.
- Encourage staff involvement in professional and scientific organizations, professional conferences, and the production of publications.
- Facilitate the acquisition, sharing and creation of information and knowledge amongst staff.
- Raise the awareness about *MarineFisheries*' activities to recognize the staff's accomplishments and improve the public's understanding of marine fisheries issues.
- Ensure infrastructure and resources sufficient to provide efficient and effective implementation of goals.



Ensure that marine spatial planning activities are compatible with fisheries management.

Due to increasing pressures for development in the nearshore, marine spatial planning initiatives have become common. In order to meet the needs of increasing development while protecting marine fisheries resources and industries, *MarineFisheries* will play an active role in state-based marine spatial planning activities. Fisheries management expertise will play in invaluable role due to its already adaptive approach and familiarity with conflict, resource protection, and environmental change.

- Improve our understanding of the compatibility of fishing and development, and the impact of development on marine fisheries resources.
- Ensure that opportunities and constraints associated with economic development initiatives (e.g. coastal petroleum and port developments) are taken into consideration in the management and development of fisheries and aquaculture sectors.
- Contribute to integrated multi-use ocean management of the Commonwealth's coastal marine waters. Provide the Massachusetts' ocean planning process with informed advice on fisheries management, aquaculture, and marine ecosystems.
- Communicate with the fishing industry to develop recommendations for offshore construction.

Division of Marine Fisheries

Division of Marine Fisheries Headquarters

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New Bedford Offices Quest Campus

1213 Purchase St. - 3rd Floor New Bedford, MA 02740 Tel: (508) 990-2860 Fax: (508) 990-0449

NRC Campus

838 South Rodney French Blvd. New Bedford, MA 02744 Fax: (508) 910-6342

Martha's Vineyard Offices

Martha's Vineyard Marine Fisheries Field Station (previously known as State Lobster Hatchery) P.O. Box 9 Vineyard Haven, MA 02568 Tel: (508) 693-0060 Fax: (508) 693-4157

DMF Locations



www.mass.gov/MarineFisheries





