



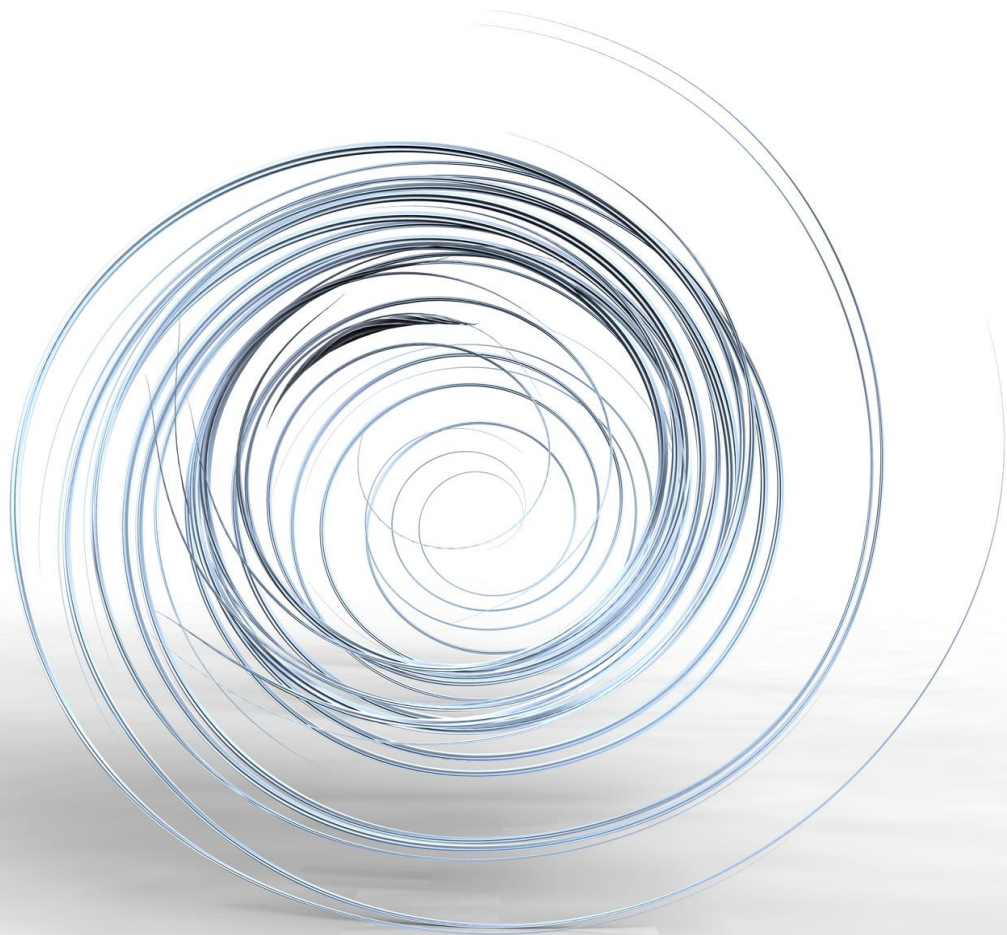
MARINE ESTATE MANAGEMENT STRATEGY

Quarterly snapshot

Reporting period – Year 3, Quarter 1

MARINE ESTATE MANAGEMENT AUTHORITY

INT20/366849



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Part A: Strategy snapshot

Reporting period

Year	Quarter	From	To
3	1	1 July 2020	30 September 2020

The reporting timeframe for this quarterly report is 1 July 2020 – 30 September 2020, which marks the first quarter in year 3 of the 10-year Strategy.

Purpose of this snapshot

The purpose of this snapshot is to provide key stakeholders and the community with regular (quarterly) progress updates on the implementation of the Marine Estate Management Strategy (the Strategy). This snapshot includes updates on notable project highlights and informs stakeholders of planned deliverables in the first quarter, Year 3.

Delivering long term outcomes

The Strategy's nine initiatives contribute to delivering healthy waterways and coastal habitats, sustainable land use practices, as well as planning for climate change, protecting Aboriginal cultural values of the marine estate, reducing impacts on marine life, delivering sustainable boating and fishing, enhancing social, cultural and economic benefits and delivering effective governance. Additionally, program management, monitoring, reporting and evaluation is an overarching component of the Strategy to provide assurance to the community and stakeholders that the program is implemented and monitored effectively and in a coordinated, integrated and transparent way.


Collectively, the initiative projects will improve water quality, reduce marine litter, improve the health of coastal habitats, reduce threats to marine wildlife, ensure sustainable foreshore development, sustainable fishing and aquaculture, promote safe and sustainable boating, prepare for climate change and protect the Aboriginal cultural values of the marine estate.






Some project names have changed from the previous quarter to better align with program and stakeholder understanding of the work. Additionally, some new projects have been added to the program. Detailed information on the Marine Estate Management Strategy is available [online](#) and should be referred to when reading this document.

Program highlights this quarter

Of the 53 management actions contained in the Strategy, 41 are underway. Many of the management actions have multiple projects within them, which means over 100 projects of varying scale are currently active this quarter.

The highlights this quarter for each initiative are numerous; a selection of six highlights illustrating the breadth of work and accomplishments achieved this quarter are below.

Project	Project icon	Highlights
Review of the NSW Water Quality Objectives		Preparations underway to engage with stakeholders on the update of the NSW Water Quality Objectives . This includes an approach to engaging with Aboriginal people on Country to enable inclusion of cultural values in the objectives

Project	Project icon	Highlights
Clean coastal catchments research		A macadamia industry nutrient trial has been completed with key findings being compiled. Collaboration underway with North Coast LLS, Greater Sydney LLS and South East LLS for the delivery of the berry, greenhouse vegetable, beef and dairy incentive grant programs. At macadamia and blueberry demonstration sites - nitrate and turbidity probes and flow meters have been installed and are collecting data.
Private foreshore structure strategies		Draft maps have been created for priority estuaries along the south coast of NSW. Consultation with commercial fishers to recognise important commercial fishing grounds has been completed for the Richmond River estuary and included in the constraint's analysis.
Strategies for mitigating species interactions		Collaboration with Ocean Watch Australia and commercial fishers to develop ten vessel specific Seabird Management Plans (SMP) that identify the main threats posed to seabirds.
Marine aquaculture		NSW Marine Waters Sustainable Aquaculture Strategy is being reviewed to attract and guide aquaculture investment to NSW including South Coast Mariculture such as the new aquaculture leases in Jervis Bay. Story reported through ABC Landline .
Boating now		Successful projects under Round 3 of the Boating Now Program have been announced. Sixty-nine projects have received funding to improve maritime infrastructure and facilities across NSW. This investment supports the needs of recreational and commercial boaters and enables broader economic and social benefits for communities.

Part B: Initiative summaries

Initiative summaries include updates on notable project highlights from the reporting quarter as well as what is planned for next quarter. A full update on all projects is reported in the Strategy's Implementation Annual Report. For more information on the location of projects refer to the [Strategy Implementation page](#) on the Marine Estate website or use these links to download the [statewide coastal LGA map](#) and the [Greater Sydney map](#).

Initiative 1 – Improving water quality and reducing litter

Initiative 1 is split into two sections:

- **1a** reports on work led by Department of Planning Industry and Environment–Environment Energy and Science (DPIE-EES) primarily addressing water quality issues in the urban areas of the marine estate, and coordination of marine litter projects
- **1b** reports on the work led by Department of Primary Industries–Fisheries (DPI-Fisheries) which primarily focuses on improving diffuse source water quality in the regions, including on-ground works and coastal floodplain management.

The summary for Initiative 1 is split into 1a and 1b for reporting purposes.

1a – DPIE-Environment Energy and Science




Project summary


A wide range of projects are underway to improve water quality and reduce litter entering the marine estate. Water pollution was identified as the greatest threat to the marine estate and is a priority initiative under the Strategy.

Most projects are in the development phases, which involves finalising scoping, engaging service providers and finalising methodologies. Continuing projects have built on the progress already achieved in previous quarters.

Quarterly progress and highlights



A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Risk-based framework for urban waterway health		South Creek	Risk-based Framework application in South Creek has been used by the Western Sydney Planning Partnership, Sydney Water and DPIE-EES to inform precinct plans and development controls on protection and restoration of waterways.
Building capacity on the Risk-based framework		Statewide	Planning underway to develop materials to assist stakeholders implement the Risk-based Framework.
Review of the NSW Water Quality Objectives		Statewide	Proposed methodology to engage with stakeholders on the update of the NSW Water Quality Objectives has been prepared . This includes an approach to engaging with Aboriginal people on Country to enable inclusion of cultural values in the objectives.

Project	Project icon	Location	Progress
Estuary water quality monitoring		Statewide	Water quality database finalised and will be used to deploy contemporary data onto the SEED website . Historic water quality monitoring data (15 years) has been made publicly available on the SEED website.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Marine Debris Working Group		Statewide	Preliminary results from the marine debris threat and risk assessment will be delivered by the University of NSW.
Estuary water quality monitoring		Statewide	Release of the redeveloped estuaries webpages as a community information tool.

1b – Department of Primary Industries-Fisheries






Project summary





A wide range of projects are underway to improve water quality and manage diffuse water quality issues across coastal floodplains draining to the marine estate. Water pollution was identified as the greatest threat to the marine estate and is a priority initiative under the Strategy.

Projects within Initiative 1B are progressing well. Several projects are undertaking consultation with local government and other key stakeholders on policies and documents developed in the first two years of the Strategy. On-ground planning is underway with key partners; implementation will commence in quarter 2.

Quarterly progress and highlights




A breakdown of progress is outlined below.






Project	Project icon	Location	Progress
Fish friendly workshops for councils		Clarence Valley	Completed 15 compliance audits in the Clarence Valley Council LGA to ensure conditions of approvals for works in waterways affecting fish habitat were being met.
		Statewide	Produced four workshop videos for LGA, contractor and State agency use that will soon be available online: <ul style="list-style-type: none"> - Harm to Marine Vegetation, - Barriers to Fish Passage, - Fisheries Management Act - Permits and Orders - Dredging and Reclamation
Construction sediment management		Statewide	Consultation undertaken with coastal councils across NSW to consider a range of current Local Environment Plan (LEP) conditions about construction sediment management and development of suitable alternative policy options.
Oyster reef restoration		Port Stephens	Monitoring of the Port Stephens pilot oyster reef project is revealing an increase in biodiversity and fish abundance. Program results were highlighted by University of Newcastle during National Science Week.
		Statewide	Mapping of potential oyster reef restoration sites in north and south coast locations continues. Guidelines for "Shellfish Reef Restoration in NSW" document and statewide site selection criteria finalised.
Riverbank vegetation improvements		Ballina, Midcoast Shoalhaven, Eurobodalla, Bega Valley	Completed 40ha along 4.8km of riverbank. Early site identification and discussions with some landholders and potential service providers. Development of 'Expressions of Interest' programs completed and in review for public release.
Clean coastal catchments on-ground		Coffs Harbour, Bega Valley, Shoalhaven, Eurobodalla	Grant guidelines, Expressions of Interest forms, a media release and web pages are being prepared to inform and engage the blueberry and other intensive horticulture industries in the Coffs Harbour region.
			In the South East, three priority sites have been

Project	Project icon	Location	Progress
			identified and draft agreements are in preparation.
Clean coastal catchments research		Lismore, Ballina, Coffs Harbour, Bega Valley	A macadamia nutrient trial has been completed with key findings being compiled. Agreement details reached in collaboration with North Coast LLS, Greater Sydney LLS and South East LLS for the delivery of the berry, greenhouse vegetable, beef and dairy incentive grant programs. Macadamia and blueberry demonstration sites - nitrate and turbidity probes and flow meters installed and collecting data.
Riverbank stabilisation		Ballina, Midcoast, Kiama, Eurobodalla	Project sites are being identified for bank stabilisation works, including Punkally Creek, Minnamurra River, Manning River and sites in the Ballina area.
Coastal wetland rehabilitation		Tweed, Midcoast, Port Stephens	Engaged with MidCoast Council regarding potential projects in the Manning. Rehabilitation options for Christies Creek developed. New design finalised to repair and reinforce Tomago wetland auto-tidal flood gates.
Improving roads and tracks		Ballina, Midcoast, Shoalhaven, Bega Valley	Priority road improvement sites identified and Expressions of Interest and direct engagement with partner organisations (local government, national parks and forestry) are underway.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Coastal floodplain study		Tweed, Richmond, Clarence, Hastings, Macleay, Manning & Shoalhaven	All studies internally reviewed and updated, ready for local government consultation.
Oyster reef restoration		Port Stephens, South Coast	Completed new oyster reef pilot site monitoring. Progressed site selection and community engagement for further oyster reef on-ground works on the South Coast.
Riverbank vegetation improvements		Ballina, Midcoast, Shoalhaven, Eurobodalla, Bega Valley	Contracts finalised for riparian revegetation projects in all LLS regions. Contracts awarded to successful monitoring and maintenance service providers.

Project	Project icon	Location	Anticipated work
Clean coast catchment on-ground		Coffs Harbour, Shoalhaven, Eurobodalla and Bega Valley	Project Expression of Interests released, assessed and contracts developed for successful recipients.
Clean coast catchment research		Ballina, Coffs Harbour, Shoalhaven, Eurobodalla, Bega Valley	Preliminary results of monitoring of erosion mitigation methods in macadamias completed. Rainfall simulation study report for blueberries produced. Nutrient balance model produced from blueberry pilot trial data. Initial set of irrigation assessments conducted on the south coast to assess current practice in the dairy and beef sectors.
Riverbank stabilisation		Ballina, Manning, Kiama, Eurobodalla	LLS staff are working with land managers to develop agreements for riverbank stabilisation at identified priority sites.
Coastal wetland rehabilitation		Tweed, Bellingen, Kempsey, Port Stephens, Shoalhaven	Implement floodgate repair works at Tomago and Kalang. Co-fund projects in the Macleay. Progress project sites at Christies Creek and in the Shoalhaven.
Improving roads and tracks		Ballina, Midcoast, Shoalhaven, Bega Valley	Staff will work with road managers for identified priority sites to develop and sign agreements for delivery of all grant funding.

More information

More information on Initiative 1 projects are on the marine estate web site [here](#).

Initiative 2 – Delivering healthy coastal habitats with sustainable use and development





Project summary



Initiative 2 seeks to improve coastal and marine habitats as well as foreshore and waterway management through various projects. A multiagency and local government collaborative effort is underway to prioritise rehabilitation works and funding, while providing strategies that facilitate streamlined approvals.

Continued and improving cross agency collaboration & co-ordination has resulted in management strategies, macrophyte (mangrove, saltmarsh) mapping and methods documentation being completed to final draft stage and ready for consultation with relevant LGA's.

Quarterly progress and highlights






A breakdown of progress is outlined below.


Project	Project icon	Location	Progress
Commercial dredging audit		Statewide	Draft audit report finalised and reviewed internally by DPIE- Crown Lands staff and DPI Fisheries. Currently in final review phase within DPIE-Crown Lands.
Coastal lake and lagoon (ICOLL) management		Statewide	Interagency ICOLL audit steering committee established, and project implementation plan being prepared.
Coastal design guidelines review		Statewide	Extensive review and update of the draft Coastal Design Guidelines completed and further consultation underway.
Private foreshore structure strategies		Statewide Ballina and Byron	Draft maps have been created for priority estuaries across south coast NSW. Consultation with commercial fishers to recognise important commercial fish grounds completed for the Richmond River estuary and included in constraints analysis.
Marine vegetation strategies		Tweed Heads to Evan Heads	Completion of draft marine vegetation (mangroves and saltmarsh) strategy methodology and completed draft strategies for Tweed and Richmond estuaries for internal review. Completed biophysical analysis for estuaries from Bulli to Batemans Bay for next stage of marine vegetation strategy development.
Estuary foreshore management strategies		Tweed and Byron Shire LGA	Developed a draft Decision Support Tool (DST) for councils and consultants that includes an interactive web-based map categorising erosion severity, and best practice management options along the foreshores of two priority estuaries - Tweed and Brunswick.

Project	Project icon	Location	Progress
			Priority estuaries for north and south NSW have been identified.
Mapping seagrass, mangrove and saltmarsh		Brisbane Water and Richmond River	Updated macrophyte (mangroves and saltmarsh) maps for Brisbane Water and the Richmond River.
Underwater surveys in the Greater Sydney region		Newcastle to Wollongong	Modelled the distribution of <i>Ecklonia radiata</i> seaweed between depths of 15 – 40 m using underwater video samples and determined environmental predictors (depth and surrounding reef area) to develop a heat map of where this kelp species occurs in the region to provide baseline information for future monitoring and management decision making.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Commercial dredging audit		Statewide	Finalise a draft report for the auditing of commercial dredging and sand extraction and prepare an implementation plan.
Coastal design guidelines review		Statewide	Distribute draft guidelines to internal stakeholders for feedback. Prepare guidelines and communications materials for further consultation with stakeholders.
Private foreshore structure strategies		Ballina, Lismore, Richmond Valley and Byron Bay Wollongong to Lake Illawarra	Approved Richmond River and Brunswick River estuary Private Foreshore Structures Strategies published online. First set of draft maps and companion booklet component ready for inter-agency review for 10 priority estuaries in south NSW
Mapping seagrass, mangroves and saltmarsh		Statewide South coast	Latest maps updated on Fisheries Spatial Portal . Macrophyte maps completed for St Georges Basin, Bermagui.
Innovative technology research		Statewide	Develop methods for mapping mangrove and saltmarsh using machine learning technologies.

Project	Project icon	Location	Anticipated work
Underwater surveys in the Greater Sydney region		Newcastle to Wollongong	Publish peer-reviewed article assessing the effects of anchor scour on seafloor habitats.

More information

More information on Initiative 2 projects are on the marine estate web site [here](#).

Initiative 3 – Planning for climate change


Project summary

Key projects underway are mapping vulnerable estuarine ecosystems and monitoring rocky reefs, to increase resilience and mitigate the effects of climate change.

Marine habitat monitoring planned for 2020 at selected sites throughout NSW has been completed and a predictive model examining kelp and urchin coverage is in development. Several projects are still pending funding before commencing.


Quarterly progress and highlights

A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Climate change monitoring		Statewide	Analyses on changes to marine habitats, from 2019-2020, in NSW has been completed.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Climate change monitoring		Statewide	A predictive model for kelp distributions along the NSW coast has been constructed to examine potential distributional shifts due to climate change. A draft paper describing modelling methods in in preparation.
		Port Macquarie	Snorkel surveys examining the northernmost populations of crayweed (<i>P. comosa</i>) conducted to examine climate change impacts.

More information

More information on Initiative 3 projects are on the marine estate web site [here](#).


Initiative 4 – Protecting the Aboriginal cultural values of the marine estate

Project summary

There are high-risk threats that cumulatively affect Aboriginal cultures and cultural heritage associated with Sea Country. There are also significant knowledge gaps relating to Aboriginal cultural values. Aboriginal people and their cultural values are not yet appropriately represented or engaged in management of the marine estate. Initiative 4 aims to increase the broader community's understanding of Aboriginal Sea Country values. It also aims to increase the economic opportunities and employment for Aboriginal people, as well as increase their ownership and active involvement in managing the marine estate.



Quarterly progress and highlights

A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Sea country rangers		South coast-Shoalhaven to Bega Valley	The Sea Country Ranger activities on the South Coast, including ongoing local employment and continuation of work to care for Sea Country, are continuing.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Sea country rangers		Coffs Harbour Kempsey, Eurobodalla	Delivery of training to respond to wildlife mammals and fauna. Delivery of South West Rocks and Wallaga Lake Boardwalk ranger projects.
Reviving culture		Shoalhaven to Bega LGAs	Launch of the online Sea Country School Education program for Southern region. This program includes a series of seven virtual excursion videos and associated curriculum based learning activities for upper primary school students.

More information

More information on Initiative 4 projects are on the marine estate web site [here](#).

Initiative 5 – Reducing impacts on threatened and protected species

Project summary






Taking action to protect threatened and protected species in the marine estate by working with the community, partners, industry and government partners to share information and resources to respond to marine wildlife events, undertake monitoring programs and ensure people using the marine estate minimise interactions with threatened and protected marine species.


This quarter has seen a significant increase in marine wildlife incidents and progress has been made coordinating responses. Three external organisations have been on-boarded into [Elements](#) (the NPWS marine wildlife response portal), workshops with stakeholders held and a Shorebird education and extension officer to commence next quarter.

Observed commercial fishing activity continues onboard cooperative vessels and information is contributing to inform management decisions. Industry specific gear and method modifications are being tested and implemented to enable sustainable fishing and reduce interactions with threatened and protected species.

Quarterly progress and highlights






A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Planning to protect marine wildlife		Statewide	Coordination of marine wildlife response including two meetings of the newly established Marine Wildlife Response Working Group. Annual reporting for target marine species completed in Saving Our Species .
Partnerships to protect marine wildlife		Statewide	Publication of Code of Practice for injured and sick sea turtles and sea snakes . Commenced workshop series with key stakeholders to identify priority gaps and partnership opportunities including IFAW, WWF, Southern Cross University. Delivered and distributed priority rescue gear along the NSW coastline including seal signs, turtle rescue mats, dolphin slings and satellite tracking tags.
Improve reporting of interactions with marine wildlife		Statewide	Completed user agreements and onboarded three external organisations (ORRCA, Dolphin Marine Rescue, Sydney SeaLife) to Elements to improve coordination to marine wildlife emergencies.
Observer survey prioritisation		Mid-Coast, Port Stephens, Newcastle, Central Coast, Northern Beaches	Analysed Ocean Fish Trawl Fishery observed data to revise sampling designs to provide effective and statistically robust coverage for estimating total catch and interactions with high risk species including threatened and protected species.
Ocean Trap and Line Fishery observer survey		Tweed to Port Stephens	35 observed-sea days completed onboard cooperating commercial vessels from several northern NSW ports.

Project	Project icon	Location	Progress
Strategies for mitigating species interactions		Mid-Coast, Port Stephens, Newcastle, Central Coast	In collaboration with Ocean Watch Australia and commercial fishers, developed ten vessel specific Seabird Management Plans (SMP) that identify the main threats posed to seabirds.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Planning to protect marine wildlife		Statewide	<p>Marine Wildlife Response Working Group to finalise updates to the Marine Wildlife Management Manual.</p> <p>Commencement of a new Code of Practice for injured and sick sea turtles and sea snakes for licensed rescue organisations.</p> <p>Staff and volunteer training in the management and monitoring of threatened beach-nesting birds.</p>
Partnerships to protect marine wildlife		Statewide	<p>Participate in Australian Government Marine Turtle Roundtable.</p> <p>Completion of preliminary stakeholder workshops to identify priority gaps and partnership opportunities. Stakeholders include universities (e.g. Southern Cross University, Macquarie University), marine wildlife rescue organisations (e.g. Australian Seabird Rescue, Dolphin Marine Rescue) and conservation groups involved in marine wildlife (e.g. IFAW, Living Ocean).</p>
Ocean Trap and Line Fishery observer survey		Tweed to Port Stephens	50 observed-sea days completed.
Ocean Trawl Fishery observer survey		Tweed to Newcastle	Detailed analysis of observer data to describe bycatch in the NSW Ocean Prawn Trawl fishery, and examine benefits associated with the introduction of bycatch mitigation measures.
Strategies for mitigating species interactions		Port Stephens, Newcastle, Northern Beaches	A series of port visits will be held in Nelson Bay, Newcastle and Sydney to discuss the implementation of Seabird Management Plans and distribute physical mitigation measures (i.e. buoys) with NSW Ocean Trawl Fish Trawl Northern Zone fishers (10 participants).

More information

More information on Initiative 5 projects are on the marine estate web site [here](#).

Initiative 6 – Sustainable fishing and aquaculture






Project summary



This initiative aims to deliver viable recreational, Aboriginal and commercial fisheries now and into the future. Actions include enhancing fishing opportunities with fish stocking and installing artificial structures, ensuring best management practice through policy reviews and education programs, and exploring new business opportunities.

New fisheries management processes are being advanced with policy guidelines nearing public consultation, assistance is being provided to enable new marine aquaculture ventures, live stream events delivering key messages about ethical angling delivered to thousands of recreational fishers, fish stocking events and artificial reef installation are working to enhance fish populations, and research projects expanding our knowledge including a peer reviewed publication to determine finfish management priorities.

Quarterly progress and highlights






A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Harvest strategy development		Statewide	Draft NSW Fisheries Harvest Strategy Policy & Guidelines reviewed by relevant Advisory Councils and preparations underway for broader public consultation. Harvest strategy working groups established for Trawl Whiting and Lobster fisheries.
Harvest strategy research		Statewide	Draft harvest strategy processes developed for Trawl Whiting including methods for data collection, assessment and management responses for upcoming review by working groups. Peer reviewed publication detailing a method for prioritising 141 fished species in NSW for population monitoring and assessment, contributing to harvest strategies development.
Recreational fishing environment assessment		Statewide Wollongong to Bega	Two livestream "The Fishing Stream" events focussing on Snapper and Mulloway delivered, promoting responsible recreational fishing to over 137,000 people. Signage to encourage responsible fishing around stingrays at boat ramps installed at 12 locations throughout the south coast from Bellambi to Tathra.
Marine aquaculture		Shoalhaven	NSW Marine Waters Sustainable Aquaculture Strategy is being used to attract and guide aquaculture investment to NSW including South Coast Mariculture new aquaculture leases in Jervis Bay. Story reported through ABC Landline .
Socio-ecological research		Statewide	Research agreement with University of Tasmania Centre for Marine Socioecology to identify the barriers to integrating socioecological research and management in multi-agency programs and how to address them.

Project	Project icon	Location	Progress
Fisheries enhancement		Botany Bay	590 juvenile kingfish stocked into Botany Bay averaging approximately 20-25cm in length.
		Tweed	Tweed Offshore Artificial Reef, NSW most northern reef complex, installation commenced.
Marine biosecurity awareness		Statewide	<p>Charles Sturt University (CSU) engaged to design and deliver social research into the barriers, benefits and drivers for management of biofouling on small-medium sized vessels.</p> <p>Stakeholder analysis questions drafted in readiness for community interviews.</p>

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Harvest strategy development		Statewide	<p>Public consultation on NSW Fisheries Harvest Strategy Policy & Guidelines.</p> <p>Formally establish lobster and spanner crab harvest strategy working groups and undertake meetings.</p>
Harvest strategy research		Statewide	Investigations into performance indicators such as catch rate and size from NSW recreational fishing data.
Socio-ecological research		Statewide	Report from the Centre for Marine Socio-Ecology, University of Tasmania examining barriers to integrating socioecological research and management in multi-agency programs and how to address them.
Fisheries enhancement		Tweed	Complete installation of the Tweed Offshore Artificial Reef.
		Batmans Bay	Undertake Request for Tender (RFT) process for the Batmans Bay Offshore Artificial Reef and award design and construct contract to successful tenderer.
		South coast estuaries	Request for Quote (RFQ) process for the supply of dusky flathead fingerlings for stock enhancement under NSW DPI marine stocking program.
Marine biosecurity awareness		Statewide	Develop online statewide social research survey and invite submissions.

More information

More information on Initiative 6 projects are on the marine estate web site [here](#).




Initiative 7 – Enabling safe and sustainable boating

Project summary

Projects are achieving safer and sustainable boating by developing new mooring technology to minimise seagrass impacts, improving infrastructure including boat ramps and navigational aids, and delivering education campaigns to reduce environmental impacts.





Quarterly progress and highlights


A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Boating Now		Statewide	Successful projects under Round 3 of the Boating Now Boating were announced in July 2020. Sixty-nine projects have received funding under this round, including boat ramps, jetties, wharves, car and trailer parking, dinghy storage racks and sewage pump-outs.
Best practices for offshore vessel anchoring		Wollongong	Underwater video surveys conducted off the coast of Wollongong to assess the potential impact of merchant ship anchors on rocky reef habitat.
End-of-life vessel management		Statewide	Development of an End-of-Life vessel issues paper.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders. The below list is not exhaustive.

Project	Project icon	Location	Anticipated work
Recreational boater education		Statewide	Finalisation of draft Boating Handbook by early 2021.
Boating Now		Statewide	Continue to collaborate with stakeholder to deliver projects under the Boating Now Program .
End-of-life vessel management		Statewide	Finalise End-of-life vessel issues paper after completion of internal and external reviews through MEMS and targeted stakeholders.
Best practices for offshore vessel anchoring		Greater Sydney region	Remotely operated vehicle surveys in the Greater Sydney region to assess the potential impact of large ships anchoring on deep reef habitats.

Project	Project icon	Location	Anticipated work
Marine pollution legislation		Statewide	Marine Pollution Amendment (Review) Bill 2020 scheduled to be introduced to parliament.

More information

More information on Initiative 7 projects are on the marine estate web site [here](#).

Initiative 8 – Enhancing social, cultural and economic benefits




Project summary

This initiative has a major education, research and monitoring component, working with institutions and government agencies to increase understanding of how we all use and value the marine estate, to maximise community benefits.

This quarter has seen the draft Marine Estate Education Strategy in its final approvals to be released for targeted consultation. A new project 'maritime heritage review' has commenced that will undertake a localised risk assessment of threats to marine historic heritage. The implementation of the Community Wellbeing Framework is advancing with the coastal residents and visitors surveys undergoing in-depth internal engagement with other agencies and is now awaiting final approval. The Sea Country (marine estate) community wellbeing survey has progressed with the drafting of the questionnaire and sampling approach.


Quarterly progress and highlights



A breakdown of progress is outlined below

Project	Project icon	Location	Progress
Marine estate education strategy		Statewide	Developing a curriculum-based primary schools Marine Estate Agents Pilot program including establishing a working group.
Maritime heritage review		Coffs Harbour	Project scope developed, and project is running according to the proposed project task schedule.
Community wellbeing framework		Statewide	<p>MEMA agency staff engaged to build capacity for cross agency involvement on the community wellbeing framework and coastal residents and visitors survey.</p> <p>Coastal residents and visitors' surveys refined through cognitive testing of all survey questions prior to implementation.</p> <p>Collection of administration data for cultural indicators.</p> <p>Development and collaboration with DPIE-EES on the internal MEMA agency staff survey.</p>

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Marine estate education strategy		Statewide	Targeted consultation with stakeholders on the draft Marine Estate Education Strategy.

Project	Project icon	Location	Anticipated work
Maritime heritage review		Coffs Harbour	Explore innovative ways of interpreting items and sites. Investigate ways of rebuilding sand dunes around the 'Buster' shipwreck. Prepare a threat and risk assessment for the project area.
Community wellbeing framework		Statewide	Commencement of the coastal residents and visitor survey. Design of the Sea Country (marine estate) community wellbeing survey.

More information

More information on Initiative 8 is on the marine estate web site [here](#).

Initiative 9 – Delivering effective governance





Project summary



Initiative 9 has changed its focus to governance at the project level, which is enabled by several new projects. This includes marine planning actions proposed in 2020/21 that are critical to the delivery of NSW Government commitments and community expectations for the delivery of marine park management planning for the network of six marine parks by 2024, aquatic reserve management, and compliance in the Greater Sydney region.

New projects have been assigned a project lead and project management processes in place to ensure robust, effective and transparent delivery to meet the needs of agencies, partners and stakeholders. A desktop survey of MEMS projects to identify governance and reducing red tape components has been completed.

Quarterly progress and highlights






A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Improving project governance		Statewide	Desktop survey of projects identified that of 100 plus MEMS projects, approximately 34 are anticipated to improve governance and 28 reduce red tape in the marine estate.
Reducing red tape			Six internal project management training sessions including governance/red tape undertaken with MEMS project leads.
Streamlining authorisation processes		Statewide	<p>Over 150 pages of existing DPI Fisheries document-based permit application forms have been mapped into a single draft online permit application form across a range of different fisheries and marine park activities. This draft form is being tested and refined ready for implementation in the coming months.</p> <p>A dedicated DPI Fisheries team established to support streamlined authorisation processes and improved customer service into the future.</p>
Greater Sydney region compliance focusing on marine protected areas		Newcastle to Wollongong	<p>Greater Metropolitan Mobile Squad Fisheries officers conducted more than 440 inspections with an observed compliance rate of 89%.</p> <p>A total of 67 offences have been reported by the officers in this quarter comprised of 17 pending actions, 33 written warnings and 17 penalty notices. Most significant offences were possessing prohibited size fish (23), fail to pay fishing fee (13) and exceed possession limits (11).</p> <p>A total of 3276 invertebrates and fish were seized including 2156 mixed shellfish, 654 abalone, 404 cockles and 20 Blue swimmer crabs.</p>

Project	Project icon	Location	Progress
Better geographic information systems for the marine estate		Statewide	Cadastral data analysis and production of GIS layers for private foreshore structures strategies (INT 2.3) Developed online citizen science tool (Shellfish Reef Reporter) to support oyster reef restoration research (INT 1.3)
Improved management of aquatic reserves and high value sites		Statewide	Interpretative signs installed at Long Reef Aquatic Reserve to support user and school educational activities. Production underway on education video for Long Reef Aquatic Reserve.

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Improving project governance		Statewide	Complete classification of projects by governance outcomes in MIMP framework and determine how to report on these in the next quarterly report.
Streamlining authorisation processes		Statewide	Undertake a risk-based assessment and explore opportunities to allow low impact activities to operate under a code of conduct or exempt and complying criteria rather than a marine park permit. This may include some education, research, tourism, filming, event and Aboriginal cultural fishing activities.
Greater Sydney region compliance focusing on marine protected areas		Newcastle to Wollongong	Inspection of increasing numbers of collectors and fishers throughout the summer holiday period.
Better geographic information systems for the marine estate		Statewide	Complete remnant oyster reef mapping for Port Stephens. Improved bathymetry products available for estuaries including Richmond River.
Improved management of aquatic reserves and high value sites		Statewide	Preparation of an aquatic reserve engagement plan. Education video completed and take-a-tour webpages developed for Long Reef Aquatic Reserve.

More information

More information on Initiative 9 is on the marine estate web site [here](#).

Part C: Additional program requirements

Program management, monitoring, reporting and evaluation

Project summary




Implementing a governance structure and program management framework to support delivery of the Strategy statewide. Provide MEMA agencies and staff with the tools and training to ensure robust governance and project management is coordinated, integrated and transparent.

Improve communication, engagement, and education to increase community awareness of the marine estate and associated threats and benefits and enable effective community participation.

Implement a monitoring program to facilitate centralised and efficient coordination, reporting and integration of environmental, social, cultural and economic information for the NSW marine estate. Develop an evaluation framework for the Authority, responsible agencies and relevant Ministers to report on progress of the Strategy in meeting clearly defined outcomes, highlight successes and consider threats that may need further management intervention.



Quarterly progress and highlights

A breakdown of progress is outlined below.

Project	Project icon	Location	Progress
Strategy program management		Statewide	<p>Program evaluation process commenced. Working group formed and progressed engagement of the chosen consultant.</p> <p>Project management workbook provided to all project leads and project management training delivered to all Strategy project leads.</p> <p>Completion and approval of all MOU's with key project partners for delivery of MEMS in 2020/21.</p>
Strategy education, communication and stakeholder liaison			<p>Functionality of the marine estate website improved and updates to pages including launch of MEMS reporting page, new project profile pages, 4 news stories, 2 agency media releases.</p> <p>Delivered September newsletter to over 1100 subscribers.</p> <p>9 news stories released to inform internal stakeholders of Strategy projects and build support and collaboration.</p>
Monitoring program – program management		Statewide	<p>Program plan and governance developed. Monitoring program Steering Committee created and regular meetings commenced.</p>

What's next?

Work that is planned to occur in the following quarter is reported below, although unexpected changes to scheduling can occur and will be communicated to affected stakeholders.

Project	Project icon	Location	Anticipated work
Strategy program management			<p>Consultant engaged to commence program evaluation.</p> <p>Progress baseline evaluation of the Strategy with focus on process and outcomes.</p> <p>Ongoing project management and training and support for MEMS staff.</p> <p>Provide individual, focused project management training to improve program reporting.</p>
Strategy education, communication and stakeholder liaison			<p>Renew marine estate website working group across four marine estate agencies to determine vision and objectives for the marine estate website and identify updates needed to website layout and management.</p> <p>December newsletter released.</p> <p>Continued development of project profiles, news stories and media releases.</p> <p>Increase number of community and stakeholder subscriptions to Mailchimp.</p>

More information

More information on Program management, monitoring, reporting and evaluation is on the marine estate web site [here](#).

Appendix A – List of abbreviations

Abbreviation	Definition
Authority	Marine Estate Management Authority
COVID-19	Coronavirus
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DPI-Agriculture	Department of Primary industries – Agriculture
DPI-Fisheries	Department of Primary Industries – Fisheries
DPIE-EES	Department of Planning, Industry and Environment – Environment, Energy and Science
DPIE-Lands	Department of Planning, Industry and Environment – Crown Lands
DPIE-Planning	Department of Planning, Industry and Environment – Planning and Assessment
DPIE-Water	Department of Planning, Industry and Environment – Water
FSG	Fertiliser Stewardship Group
GIS	Geographic Information System
Knowledge Panel	Marine Estate Expert Knowledge Panel
LGA	Local Government Area
LLS	Local Land Services
MASC	Marine Estate Agency Steering Committee
MEAM	Marine Estate Activity Mapping
MEMS	Marine Estate Management Strategy
MIMP	Marine Integrated Monitoring Program
MoU	Memorandum of Understanding
NPWS	DPIE- EES: National Parks and Wildlife Service
NSW	New South Wales
RRWQMS	Richmond River Water Quality Monitoring Strategy
SEED	Sharing and Enabling Environmental Data
SEPP	State Environmental Planning Policy
Strategy	Marine Estate Management Strategy

Abbreviation	Definition
TARA	threat and risk assessment
TfNSW	Transport for NSW
WRL	Water Research Laboratory
QLD	Queensland

Appendix B – Communication and engagement

Date	Stakeholder	Activity	Initiative	Communication and engagement
July	NSW community		7	\$28 million to ramp up boating facilities
	Blueberry Industry	webinar	1	Digging the dirt on blueberry mound fertiliser management
	NSW community	Media release	7	Transport for NSW Boating Now Round 3 Successful projects
	NSW community	Facebook livestream event	6	The Fishing Stream - snapper
August	NSW community	Industry newsletter	1	Fertiliser Stewardship Group (FSG) Newsletter - August 2020
	NSW community	Marine estate - news		NSW Marine Estate Newsletter (September)
September	NSW community	Marine estate news	1	How do you make a local council fish friendly
	NSW community	Media release	9	Fishing for fines in Georges River and Botany Bay
	NSW community	Marine estate news	1	Environmentally friendly mooring trail in Port Stephens
	NSW community	Marine estate news	1	Responding to the impacts of recent storms on bushfire affected catchments
	NSW community	Marine estate news	4	Funding helps float cultural tourism on NSW south coast

Date	Stakeholder	Activity	Initiative	Communication and engagement
	NSW community	Facebook livestream event	6	The Fishing Stream - mullocky
	NSW community	Scientific peer review	6	Prioritising fished stocks for monitoring and assessment
