



Risk-based framework for urban waterway health

Applying a risk-based framework that helps councils consider water quality in urban catchments when they make land-use planning decisions



Risk-based framework for regional waterway health

Support the establishment of a new governance framework for the Richmond River catchment to manage diffuse source runoff in a regional area



Coastal floodplain study

Assessing coastal floodplain systems and infrastructure to assist decision makers in the enhancement of water quality, habitat and biodiversity



Oyster reef restoration

Restoring natural oyster reefs to improve water quality, aquatic habitat and biodiversity



Riverbank vegetation improvements

Rehabilitating degraded riverbank vegetation to reduce sediment and nutrient runoff into waterways, help stabilise riverbanks and improve biodiversity



Clean coastal catchments on-ground

Working with farmers to keep sediment and nutrients on the farm and out of coastal waterways, while supporting profitable and sustainable agriculture



Clean coastal catchments research

Researching fertiliser use and ways to reduce nutrient and sediment runoff from farms



Riverbank stabilisation

Protecting riverbanks from erosion to reduce the amount of sediment entering waterways



Coastal wetland rehabilitation

Rehabilitating degraded wetlands to improve water quality, habitat and biodiversity within the wetland and downstream



Improving roads and tracks

Reducing sediment runoff into waterways from gravel roads and tracks by rehabilitation works such as road sealing



Domestic waterway structure strategies

Developing estuary-wide strategies for jetties, pontoons and boat ramps to streamline approvals while protecting aquatic habitat



Marine vegetation strategies

Developing estuary-wide strategies for rehabilitating and protecting mangroves and saltmarsh so they are more resilient to key threats



Estuary foreshore management strategies

Developing environmentally friendly methods of bank stabilisation to manage foreshores and guide future investment



Subtidal reef monitoring

Improving knowledge about deep rocky reef species in the Greater Sydney region and the effects of natural and human influences



Reviewing jetty designs

Improving the design of jetties to minimise seagrass loss in Greater Sydney estuaries



Threats to estuarine fish assemblages

Understanding the effects of human activities on fish in Greater Sydney estuaries



Sea Country management

Employing Aboriginal people to manage Sea Country



Cultural Resource Use Agreements

Developing Cultural Resource Use agreements with Aboriginal communities in marine parks



Elders as mentors

Involving Elders as mentors in all NSW marine parks to increase the respect and appreciation of Sea Country and Aboriginal cultural values by marine estate staff



Cultural interpretations

Collaborating with Aboriginal communities on additional signage and artwork depicting their cultural connection to Sea Country



Reviving culture

Working with Aboriginal communities to revive cultural knowledge and practices of Sea Country



Cultural tourism

Supporting Aboriginal cultural tourism business opportunities



Cultural economic development

Increasing the number of people engaged in Aboriginal businesses in the marine estate



Cultural fish traps

Recording the history and significance of fish traps and increasing the number of management plans



Pipi harvest

Enabling Aboriginal people to harvest pipis and consume them safely for cultural purposes



Climate change on culture

Understanding the effects of climate change on Aboriginal



Ocean Trap and Line Fishery observer

Extending the observer-based survey of the Ocean Trap and Line Fishery to better understand the threats from bycatch and harvest



Strategies for mitigating species interactions

Developing and implementing strategies to reduce interactions between commercial fishing gear and threatened and protected species



Fisheries enhancements

Improve fishing access by fish stocking and artificial reef installation at key places and planning fishing platforms



Review of offshore anchoring

Reviewing the effects of large commercial shipping vessel anchoring within the Greater Sydney region



Boating Now

Working with partners in the Boating Now program to improve safe and sustainable access to the marine estate



Maritime heritage review

Assessing threats to marine historic heritage and recommending strategies to manage those threats



Capturing local ecological knowledge

Pilot a system for capturing local ecological knowledge to promote the value of using different knowledge systems for understanding and managing the marine estate



Improved marine park management plans

Developing new planning processes for the preparation of management plans and supporting management rules



Greater Sydney region compliance focusing on marine protected areas

Achieving optimal compliance through educating the community and other stakeholders, and enforcing fisheries and aquatic reserve rules and regulations





















Diffuse Source Water **Pollution Strategy**

Improving management of water pollution from diffuse sources in NSW



Building capacity on the Risk-based framework

Increasing awareness of the Risk-based framework through guidance forums and online portal



Review of the NSW Water **Quality Objectives**

Reviewing the NSW Water Quality Objectives so they



Water Quality Working

Working with other government agencies to improve the management of the marine estate's water quality



Aquatic biodiversity offsets

Protecting important coastal habitats by finding better ways to offset unavoidable impacts from development



Fish friendly workshops for councils

Delivering an education program to council staff about the protection of fish and fish habitat



Construction sediment management

Controlling sediment from construction sites through improved methods and development approval



Ovster reef restoration

Exploring better ways to restore oyster reefs



Marine litter campaign

Extending the 'Don't be a Tosser' litter campaign to



Marine Debris Working Group

Working with other government agencies and scientists to learn more about managing marine debris



NSW Litter Prevention Strategy

Integrating marine littler prevention actions into the NSW Litter Prevention Strategy and setting reduction



Estuarine water quality monitoring

Monitoring the water quality and health of estuaries to detect problems and see the benefits of improved



Mapping outflow events

Mapping how water flowing out of estuaries after flood impacts on nearshore underwater habitats



Land use pressures on the marine estate

Monitoring the condition of gauged streams using water quality and biological indicators for different land uses



Commercial dredging audit

Reviewing commercial dredging and sand extraction in estuaries and along the open coast to assess risks and ensure a consistent approach to risk management



ICOLL

Developing an approval framework to support entrance management for intermittently closed and open lakes and lagoons (ICOLL)



Coastal design guidelines review

Improving the design of coastal cities and towns by promoting environmentally friendly planning and infrastructure



Coastal floodplain drainage management

Providing a framework for managing coastal floodplain drainage to improve water quality, simplify approvals and support viable primary industries



Reconnecting fish habitats

Restoring fish passage and river connectivity at priority weir and road crossings so that fish can move between habitats, avoid predators, find food and breed



Mapping seagrass, mangrove and saltmarsh

Developing new methods for mapping seagrass, mandrove and saltmarsh to determine species, measure condition and identify threats



Innovative technology research

Exploring ways of using artificial intelligence to map and monitor estuarine wetland habitats and species



Threats to estuarine vegetation

Understanding the effects of human activities on seagrass, mangrove and saltmarsh



Climate change threats to seagrass, mangrove and

Modelling changes in the distribution of wetlands in response to sea level rise



Climate change adaptation

Building the knowledge and capacity of coastal and marine managers and communities to increase resilience to climate change by identifying adaptation



Climate change research

Researching the effects of climate change to fill knowledge gaps and guide future management actions



Climate change monitoring

Monitoring the condition of offshore rocky reefs as a priority environmental asset



Climate change citizen science

Using community data to map changes in marine species distributions due to climate change



Aboriginal engagement

Establishing an effective framework to involve Aboriginal communities in Sea Country management



Sea Country

Developing Sea Country Plans with Aboriginal



Designing and delivering a Caring for Sea Country ranger model with Aboriginal communities



Cultural fishing funds

Delivering targeted funds to increase economic opportunities for Aboriginal people in the fishing and



Cultural research and monitoring

Developing a cultural research, monitoring and evaluation approach that is integrated with the Marine Integrated Monitoring Program



Planning to protect marine wildlife

Improving strategic planning and coordination of marine threatened and protected species programs across NSW



Partnerships to protect marine wildlife

Strengthening partnerships with government, community and industry to enhance the management, incident response and rehabilitation of marine threatened and protected species



Education to protect and conserve marine wildlife

protected species and the importance of community to achieve this

Improve reporting of



interactions with marine wildlife

Improving reporting and data sharing on marine based decisions about marine wildlife management



Observer survey prioritisation

Updating the commercial fishing observer program prioritisation to address threats to marine threatened and protected species



Estuary General Fishery observer survey

Analysing data from the Estuary General Fishery to address threats to fish from bycatch and harvest



Ocean Trawl Fishery observer survey

Analysing data from the NSW Ocean Trawl Fishery to address threats to fish from bycatch and harvest



Fishing industry sustainability

Working with industry to reduce interactions with threatened and protected species and improve reporting of interactions when they occur



Harvest strategy development

Developing harvest strategies for use by commercial recreational and cultural fishers to reduce the risks of fishing on species of concern



Harvest strategy research

Linking commercial, recreational and Aboriginal cultural fisheries information to improve harvest strategies and



Recreational fishing environmental assessment

Limiting the environmental impacts of recreational fishing by completing an environmental impact assessment and a recreational fisheries strategy



Marine aquaculture

Using the Marine Waters Aquaculture Strategy to explore opportunities for new marine aquaculture ventures



Best practices in oyster aquaculture

Protecting important seagrass habitat by using the bestpractice guidelines in the Oyster Industry Sustainable Aquaculture Strategy



Oyster aquaculture business and environment

Helping oyster businesses recover from natural disasters so they remain financially and environmentally sustainable



Socio-ecological research

Identifying the priorities for socio-ecological research to support the Marine Estate Management Strategy



Recreational fishing values

Analysing historical NSW recreational fishing surveys to understand what motivates fishers and gives them a sense of satisfaction



Marine estate benefits

Investigating the social and environmental benefits from a healthy NSW marine estate to make better management decisions



Cultural fishing monitorina

Understanding cultural fishing participation, practices and limitations to protect and promote cultural fishing



Wild catch fish stocks

Contributing NSW biological, catch and effort data to help develop the Status of Australian Fish Stocks Reports and develop Harvest Strategies



Fishing industry marine stewardship

Working with the fishing and aquaculture industries to

improve sustainable practices, and develop economic







Marine biosecurity awareness

Using social research into recreational boaters knowledge of the risks of aquatic pests and diseases to develop a communication and behavioural change management program

moorings



Progressing the development of a performance-based standards to improve the safety and environmental outcomes from mooring apparatus

Environmentally friendly



Mooring strategy

Improving access to moorings by modernising the way they are managed and administered



Mooring audits

Improving moorings audits and better enforcing of



Investigate ways to manage or remove vessels that are reaching or have reached the end of their useful life, to reduce potential environmental harm and improve future mooring access



Marine pollution responsibilities

Clarifying the status of Transport for NSW's Appropriate Regulatory Authority (ARA) with a focus on pollution from vessels in marine parks



Marine pollution legislation

Reviewing the Marine Pollution Act 2012 and its role in protecting the NSW environment from pollutants discharged from ships



Vessel environmental

Improving the compliance of domestic commercial vessels and recreational vessels with environmental standards and regulations



Recreational boater education

Continuing to educate recreational boaters about



Analysing data in vessel movements and potential interactions with threatened and protected species to



identify knowledge gaps

Maritime infrastructure

Working collaboratively with key stakeholders to invest in maritime infrastructure as part of the Maritime Infrastructure Plan 2019-2024

Marine estate

Strategy and curriculum-based schools package

framework

wellbeing associated with the marine estate



education strategy Implementing the NSW Marine Estate Education



Collecting social, cultural and economic data to provide a foundation for long-term monitoring of community

Community wellbeing



Economic benefits monitoring

Monitoring the economic benefits associated with the marine estate under the community wellbeing



Improving project

Reviewing projects to determine where governance is embedded and identify gaps that need to be addressed



high value sites

value sites Improving management of aquatic reserves and other



Better geographic information systems (GIS) for the marine estate





Improving geographic information systems (GIS) for



Reducing the regulatory burden for community. industry and key stakeholders when using the marine



Reducing inconsistencies and duplication in regulations

Streamlining authorisation



Strategy program

management

Continuing to implement a governance structure and



Strategy communications, engagement, education and stakeholder liaison



Monitoring Program program management





license conditions

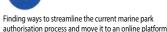




government stakeholders









Improving communications to support and enable engagement, education and stakeholder liasion across the Strategy



evaluate and report on Strategy progress and fill



16615-3/21



























