



## Risk-based Framework for Waterway Health

Local and State government are applying the *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* to support stormwater management in urban catchments.

## Coastal floodplain management\*

Improving our knowledge of floodplain issues, improved management of floodplain infrastructure, reconnecting coastal floodplains and the development of drainage management plans.

## Clean coastal catchments

Providing help to farmers in intensive coastal agricultural industries to reduce their impact on water quality while maintaining long term economic and environmental sustainability.

## Fish friendly workshops

Delivery of a targeted education program to local council staff and key external industries that is tailored to the conservation of fish and fish habitats and associated common council works program in each region.

## Oyster reef restoration

Restoring natural oyster reefs improves water quality and provides other benefits. This project includes a pilot restoration site, community education and future site planning.

## Riparian vegetation rehabilitation

Delivering on-ground works to rehabilitate degraded riparian areas helps filter runoff from the land, prevents erosion by stabilising river banks and provides biodiversity benefits.

## Estuary bank protection works

River bank erosion is being addressed through environmentally friendly bank stabilisation works. Bank stabilisation improves water quality by reducing sediment entering rivers through erosion.

## Wetland restoration

On-ground work on the coastal floodplain to reduce impacts of wetland drainage that degrades marine estate values at the site and for downstream users and habitats.

## Reducing erosion from roads and tracks

Sediment enters waterways from gravel roads and tracks. This is being reduced through remediation works such as road sealing on priority roads and tracks.

## Estuarine water quality monitoring

Water quality and ecosystem health is being monitored and reported on so that poor water quality is detected early and benefits of management are confirmed.

## Estuary domestic foreshore structure strategies

Developing estuary-wide domestic foreshore structure strategies to guide and streamline future applications for domestic developments along foreshores (such as pontoons and boat ramps).

## Estuary bank management Strategies

Developing estuary-wide bank management strategies to streamline bank protection work proposals and optimise rehabilitation opportunities.

## Marine vegetation management strategies

Develop marine vegetation management strategies that maximise resilience, accommodate sea level rise, address key threats (clearing and drainage, four-wheel driving) and encourage rehabilitation opportunities.

## Restore fish passage

Fish passage is being restored at priority weir and road crossings, giving fish the opportunity to migrate.

## Estuary mapping of seagrass, saltmarsh and mangrove

Enhance mapping of estuarine communities (such as saltmarsh and mangroves) to identify those communities most at threat from sea level rise expected under climate change scenarios.

## Aboriginal management of Sea Country

A Sea Country ranger program will include training and employment of Aboriginal people in marine estate industries, providing their cultural expertise in Sea Country management.

## Seal interaction plan

Education and compliance campaigns for targeted marine species to improve protection and conservation.

## Promoting the community benefits of fishing

Multiple projects to promote the consumption of fresh seafood in the community, supporting the fishing industry.

## Safe and sustainable boating

The NSW Boating Now program continues to improve access to waterways through the provision of funding for maritime infrastructure.

## Marine education strategy pilot

A Marine Education Strategy for primary schools will help children learn about physical and mental health benefits of connecting with nature, and the skills they need to become environmental stewards of the marine estate.

## Governance framework pilot

A new governance structure is being developed at a pilot scale in the Richmond catchment to improve river health outcomes.

\* includes drainage management plans, resilient coastal floodplains and floodplain audit sub-actions



## Marine Estate Management Strategy - Stage 1 implementation **statewide**



### Biodiversity offsets

Protecting biodiversity through coordinated improvements to delivery of aquatic biodiversity offsets and working with private landholders to conserve environmentally significant coastal habitats.



### Marine litter campaign

A new campaign is being developed in collaboration with marine users to target marine litter.



### Risk-based Framework for Waterway Health

Providing tools and guidance material to build local government capacity to use the framework in land use planning and stormwater management decisions.



### Dredging audit

The nature of commercial dredging in estuaries is under review. Ways to improve environmental outcomes during and after dredging will be identified and recommendations will be made.



### Coastal design guidelines review

Improving the design of our coastal cities and towns and promoting environmentally sustainable infrastructure in coastal urban areas.



### Estuary training wall enhancements

Develop plans for design features that can be built into maintenance works undertaken at existing estuary training walls to improve environmental and recreational opportunities.



### Vulnerability of tidal wetlands to sea level rise

Identify estuarine wetlands (saltmarsh and mangroves) most at threat from future sea level rise and prioritise areas for protection.



### Monitoring reefs at risk from climate change

Monitoring the resilience and condition of rocky reef habitats will detect impacts of climate change, indicate likely shifts in species' distribution and inform future management.



### Protect and conserve marine wildlife

Education and compliance campaigns for targeted marine species to improve protection and conservation.



### Improve reporting of interactions with marine wildlife

External web portal for key stakeholders to report marine wildlife interactions and emergencies to improve conservation outcomes for targeted marine species.



### Commercial fishing observer program

Expansion of the commercial fishing observer program will inform future fishing practices, reduce bycatch and help to better manage interactions with threatened and protected species.



### Harvest strategies (fishing)

Harvest strategies are being developed for two target fisheries. They seek to maintain fish stocks at environmentally sustainable levels, while providing fishers with more reliable resource access.



### Recreational fishing environmental assessment

An environmental assessment of recreational fishing will inform future management and rules that apply to recreational fishing will be periodically reviewed.



### Application of Marine Aquaculture Strategy

The Marine Waters Sustainable Aquaculture Strategy guides implementation of new marine aquaculture ventures.



### Application of Oyster Aquaculture Strategy

Best practice guidelines for seagrass protection are outlined in the NSW Oyster Industry Sustainable Aquaculture Strategy. These guidelines are being applied in oyster farms across the state.



### Fisheries enhancements

Fish stocking programs and the development of fishing infrastructure will enhance recreational fishing opportunities.



### Seafood industry training

Partnering with OceanWatch, the Master Fisherman Program has expanded its training to commercial fishermen to raise awareness of the threats to the marine estate.



### Boat based contamination compliance and education

Continue compliance and education programs for boat based contamination from commercial and recreational vessels.



### Improved mooring management

Threats to seagrass from vessels are being reduced through improved regulation, administration, education, new mooring technologies and delivery mechanisms.



### Community wellbeing surveys

Monitoring the wellbeing of communities as they relate to the NSW marine estate will improve our understanding of the human dimensions of the NSW marine estate; the diversity of values and benefits, and how they may be impacted (e.g. positive or negative) by environmental change and different management approaches.



### Resource use management and activity mapping

A comprehensive spatial mapping tool is being piloted, detailing current use, supporting infrastructure, access and trends to support evidence based management of the marine estate.



### Marine Integrated Monitoring Program

The Marine Integrated Monitoring Program monitors the condition of the marine environmental assets and community benefits against established baselines, providing critical information needed to fill current knowledge gaps and to evaluate the effectiveness of the Marine Estate Management Strategy initiatives. This will guide adaptive management throughout the Strategy.