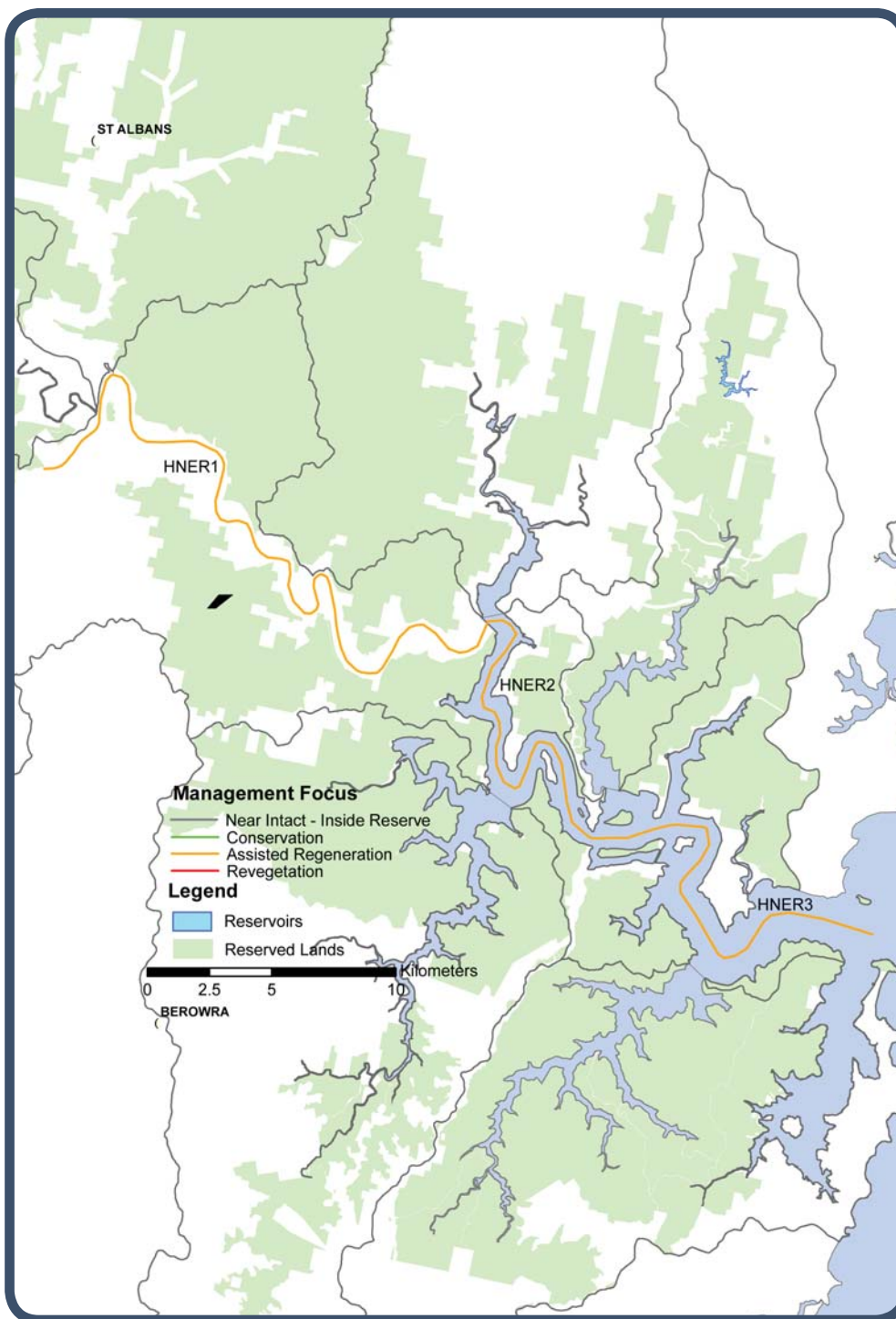


## Hawkesbury River Estuary Subcatchment



This lower estuary subcatchment is dominated by bushland interspersed with small, local foreshore settlements. Reserved areas include Ku-ring-gai Chase, Marramarra and Dharug National Parks, and Muogamarra Nature Reserve. These reserved areas help to protect the valuable mangrove communities along much of the foreshore. The tidal influence in the Hawkesbury River extends approximately 145km upstream.

The flows reaching the Hawkesbury River Estuary are highly reduced due to a number of upstream weirs and reservoirs (23 in-stream structures in total) including the major impoundments for drinking water of Sydney's metropolitan area and the Gosford/Wyong areas on the Central Coast. The floodplains of the lower Hawkesbury estuary have been significantly modified by agricultural, recreation and village developments.

The Hawkesbury Estuary has extremely high social and economic values including high recreational usage and commercial fishing. The Hawkesbury River estuary supports the second largest commercial coastal fishery of estuary prawns, oysters (prior to the outbreak of QX disease ) and fish in NSW with a wholesale value of \$6.3 million annually. Community based environment activity is very high.

## Reach Management Recommendations – Hawkesbury River Estuary Subcatchment

Reach Name	Reach Description	Riparian Land Management Category	Reach Values	Reach Threats	Reach management recommendations (Planning, Education, Works, Monitoring, Institutional)
HNE R1	Webbs Creek Junction (just upstream of Wiseman's Ferry) to Spencer (junction with Mangrove Creek)	Assisted Regeneration	<ul style="list-style-type: none"> <li>• Good riparian vegetation</li> <li>• Wetlands of regional (SREP 20) and state significance (Saltmarsh)</li> <li>• Significant vegetation community</li> <li>• Popular recreational fishing</li> <li>• Popular motor boating</li> <li>• Identified flagship species– Hawkesbury Prawns, Mangroves, Black Cockatoo, Owls.</li> <li>• River based tourism is a major focus for regional economy</li> <li>• Commercial fishing. Diversity of species in trawl increases markedly downstream of Sentry Box, Mud crabs and prawn trawling significant. Note: Mangroves are very significant to fish populations</li> <li>• Significant community based environment activity - 8 river restoration sites</li> </ul>	<ul style="list-style-type: none"> <li>• Damaging access – cattle grazing to bank; restricted to specific locations in upstream section</li> <li>• Poor Water Quality</li> </ul>	<ul style="list-style-type: none"> <li>• Management of stock impacts on waterways (W)</li> <li>• Encourage adoption of sustainable land management practices in riparian lands (E)</li> <li>• Manage human impacts at public recreation river access points and along foreshores (W,P)</li> <li>• Riparian wetland management</li> <li>• Maintenance of recreational values – recreational water quality (M)</li> <li>• Water quality / nutrient management (I)</li> <li>• Increase public recreation access points in reach (P)</li> <li>• Maintain existing community based environment activity (E,P)</li> </ul>
HNE R2	From Spencer (Mangrove Creek Junction) to Brooklyn Road Bridge, including Peats Bight and Bar Island	Assisted Regeneration	<ul style="list-style-type: none"> <li>• Good riparian vegetation</li> <li>• Wetlands of regional (SREP 20) and state significance (Saltmarsh)</li> <li>• Significant vegetation community</li> <li>• Popular recreational fishing</li> <li>• Popular motor boating</li> <li>• Popular non-motor boating</li> <li>• Identified flagship species - Oysters and Jewfish</li> <li>• River based tourism contributes to regional economy</li> <li>• Commercial fishing Note: Mangroves are very significant to fish populations as are Mangrove and Mooney Mooney Creeks for fish breeding.</li> <li>• Bar Island Restoration Program</li> </ul>	<ul style="list-style-type: none"> <li>• Modified / engineered channel – reclaimed areas (filled) and rock walls associated with settlements</li> <li>• Damaging access – clearing of mangroves and other vegetation at specific sites, boating related damage including wash, jetties, informal access</li> <li>• Poor Water Quality</li> </ul> <p>Action Triggers</p> <ul style="list-style-type: none"> <li>• Severe immediate threat - QX disease in oysters</li> </ul>	<ul style="list-style-type: none"> <li>• Management of stock impacts on waterways (W)</li> <li>• Encourage adoption of sustainable land management practices in riparian lands (E)</li> <li>• Manage human impacts at public recreation river access points and along foreshores (W,P)</li> <li>• Riparian wetland management</li> <li>• Maintenance of recreational values – recreational water quality (M)</li> <li>• Water quality / nutrient management (I)</li> <li>• Increase public recreation access points in reach (P)</li> <li>• Increase community capacity for environmental restoration (E)</li> </ul>

## Reach Management Recommendations – Hawkesbury River Estuary Subcatchment

Reach Name	Reach Description	Riparian Land Management Category	Reach Values	Reach Threats	Reach management recommendations (Planning, Education, Works, Monitoring, Institutional)
HNE R3	From the Brooklyn Road Bridge to the heads of Broken Bay	Assisted Regeneration	<ul style="list-style-type: none"> <li>• Good riparian vegetation</li> <li>• Wetlands of regional (SREP 20) and state significance (Saltmarsh)</li> <li>• Significant vegetation community</li> <li>• Popular recreational fishing</li> <li>• Popular motor boating</li> <li>• Popular non-motor boating</li> <li>• Popular swimming</li> <li>• High public recreation access</li> <li>• Identified flagship species - Jewfish, squid, sea eagles</li> <li>• River based tourism is a major focus for regional economy</li> <li>• Commercial fishing</li> <li>• Community activity – Bushcare, Waterwatch, Estuary Management Committees</li> </ul>	<ul style="list-style-type: none"> <li>• Modified / engineered channel – foreshore modifications, rock walling etc; dredging in Brooklyn Channel in the past</li> <li>• Damaging access</li> <li>• Water Quality</li> </ul> <p>Action Triggers</p> <ul style="list-style-type: none"> <li>• Severe immediate threat - water quality, sand dredging, expanded reclamation of McKells Park</li> </ul>	<ul style="list-style-type: none"> <li>• Management of stock impacts on waterways (W)</li> <li>• Encourage adoption of sustainable land management practices in riparian lands (E)</li> <li>• Manage human impacts at public recreation river access points and along foreshores (W,P)</li> <li>• Riparian wetland management</li> <li>• Maintenance of recreational values – recreational water quality (M)</li> <li>• Water quality / nutrient management (I)</li> <li>• Increase community capacity for environmental restoration (E)</li> </ul>