

**LEGEND**

- Weir near Fullers Bridge
- Lane Cove River Catchment
- LGA Boundaries
- Lane Cove River Estuary Zone
- Lane Cove National Park



Title:  
**Study Area**

Figure.	Rev.
<b>1</b>	<b>0</b>

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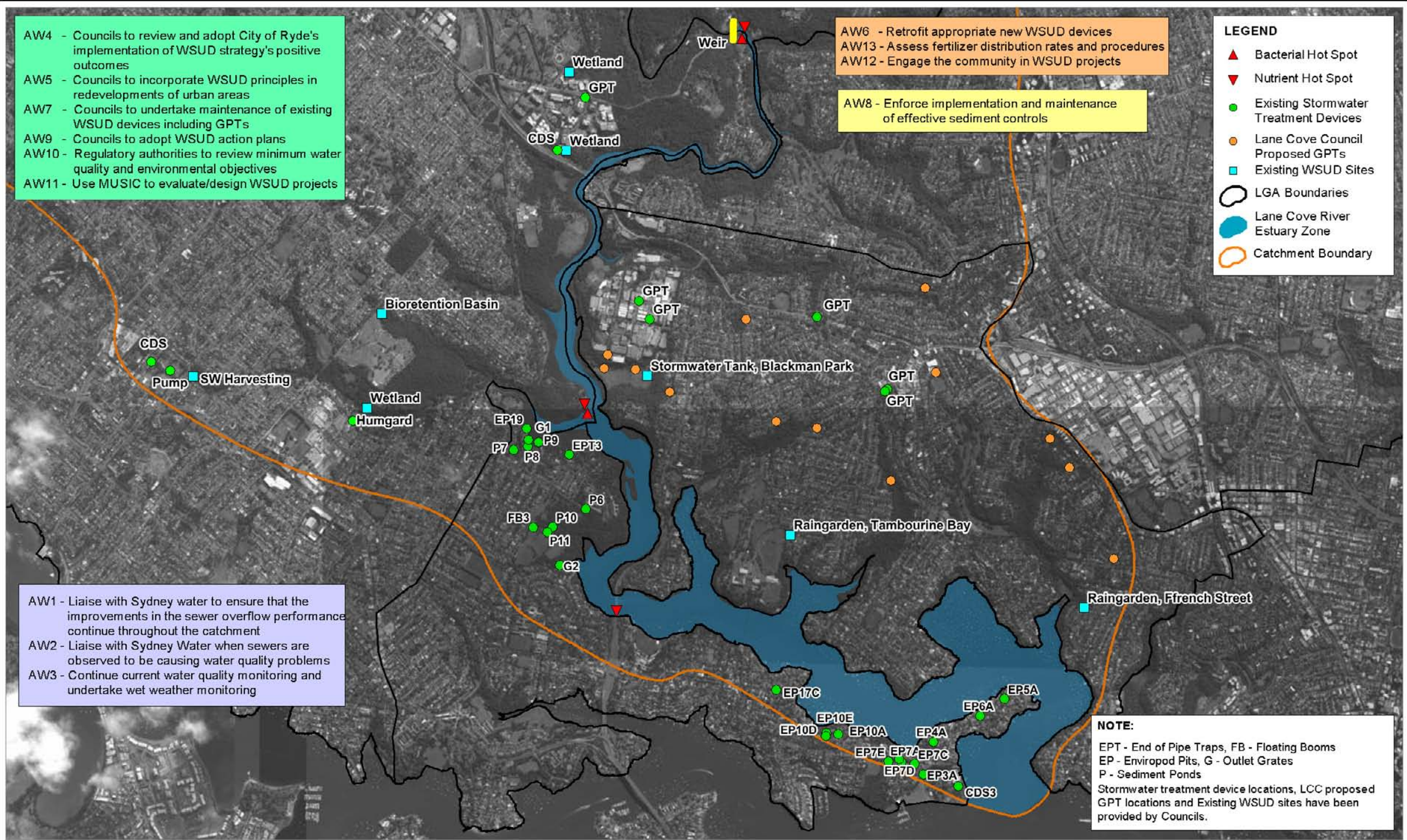
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AW4 - Councils to review and adopt City of Ryde's implementation of WSUD strategy's positive outcomes  
 AW5 - Councils to incorporate WSUD principles in redevelopments of urban areas  
 AW7 - Councils to undertake maintenance of existing WSUD devices including GPTs  
 AW9 - Councils to adopt WSUD action plans  
 AW10 - Regulatory authorities to review minimum water quality and environmental objectives  
 AW11 - Use MUSIC to evaluate/design WSUD projects

AW6 - Retrofit appropriate new WSUD devices  
 AW13 - Assess fertilizer distribution rates and procedures  
 AW12 - Engage the community in WSUD projects  
 AW8 - Enforce implementation and maintenance of effective sediment controls

**LEGEND**

- ▲ Bacterial Hot Spot
- ▼ Nutrient Hot Spot
- Existing Stormwater Treatment Devices
- Lane Cove Council Proposed GPTs
- Existing WSUD Sites
- LGA Boundaries
- Lane Cove River Estuary Zone
- Catchment Boundary



AW1 - Liaise with Sydney water to ensure that the improvements in the sewer overflow performance continue throughout the catchment  
 AW2 - Liaise with Sydney Water when sewers are observed to be causing water quality problems  
 AW3 - Continue current water quality monitoring and undertake wet weather monitoring

**NOTE:**  
 EPT - End of Pipe Traps, FB - Floating Booms  
 EP - EnviroPod Pits, G - Outlet Grates  
 P - Sediment Ponds  
 Stormwater treatment device locations, LCC proposed GPT locations and Existing WSUD sites have been provided by Councils.



- Already Ongoing Actions - To be Continued
- Actions Within Council's Budget - Start Implementation
- Actions Requiring External Funding - Source Funding and Start Implementation
- Actions Requiring External Funding - Source Funding and Start Implementation As Appropriate

Title:  
**Water Quality and WSUD**

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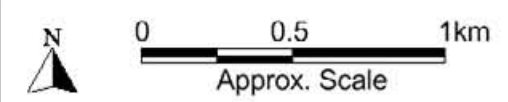
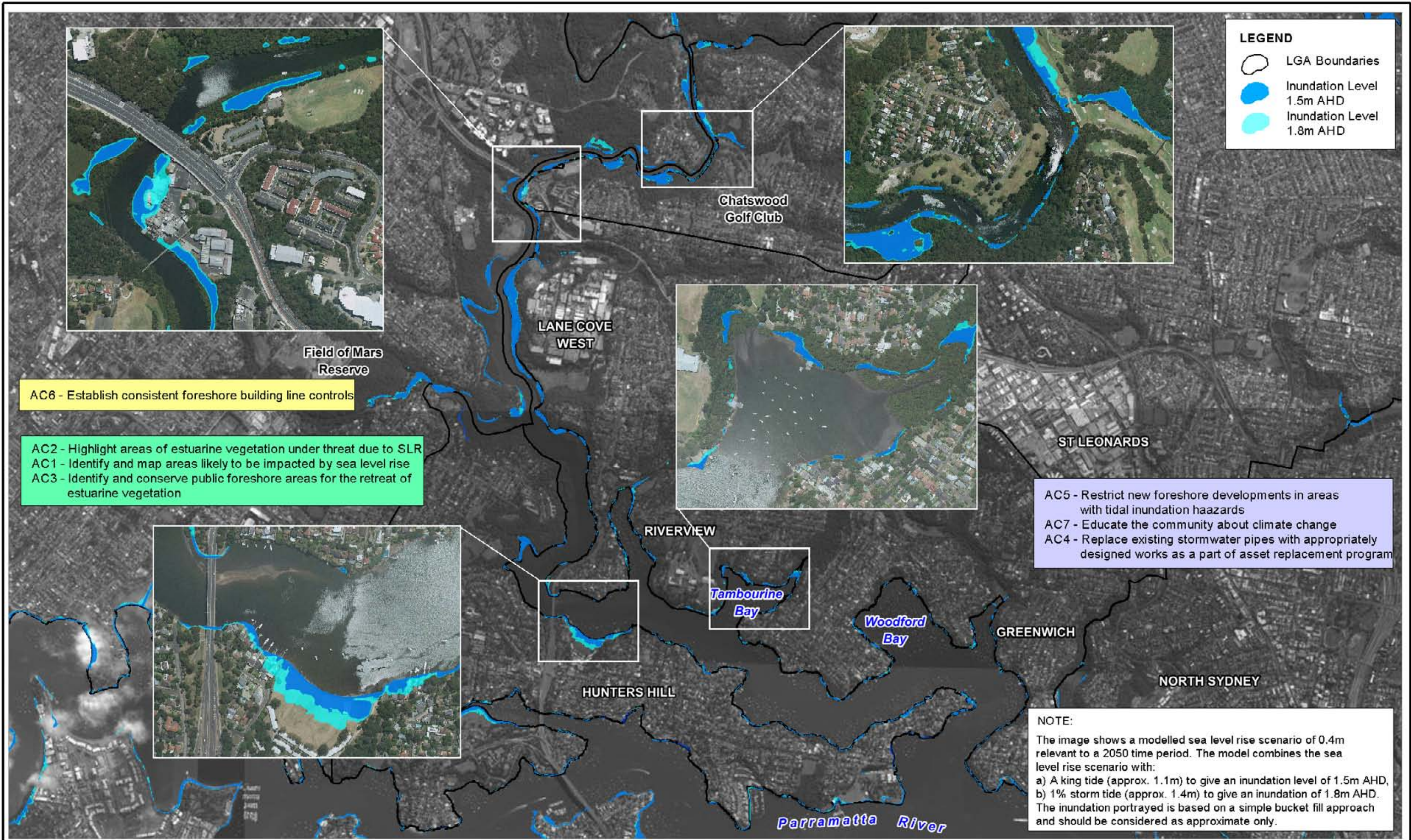


Figure: **2**  
 Rev: **1**





**LEGEND**

- LGA Boundaries
- Inundation Level 1.5m AHD
- Inundation Level 1.8m AHD

AC6 - Establish consistent foreshore building line controls

AC2 - Highlight areas of estuarine vegetation under threat due to SLR  
 AC1 - Identify and map areas likely to be impacted by sea level rise  
 AC3 - Identify and conserve public foreshore areas for the retreat of estuarine vegetation

AC5 - Restrict new foreshore developments in areas with tidal inundation hazards  
 AC7 - Educate the community about climate change  
 AC4 - Replace existing stormwater pipes with appropriately designed works as a part of asset replacement program

**NOTE:**  
 The image shows a modelled sea level rise scenario of 0.4m relevant to a 2050 time period. The model combines the sea level rise scenario with:  
 a) A king tide (approx. 1.1m) to give an inundation level of 1.5m AHD,  
 b) 1% storm tide (approx. 1.4m) to give an inundation of 1.8m AHD.  
 The inundation portrayed is based on a simple bucket fill approach and should be considered as approximate only.

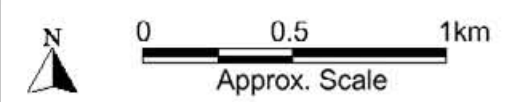


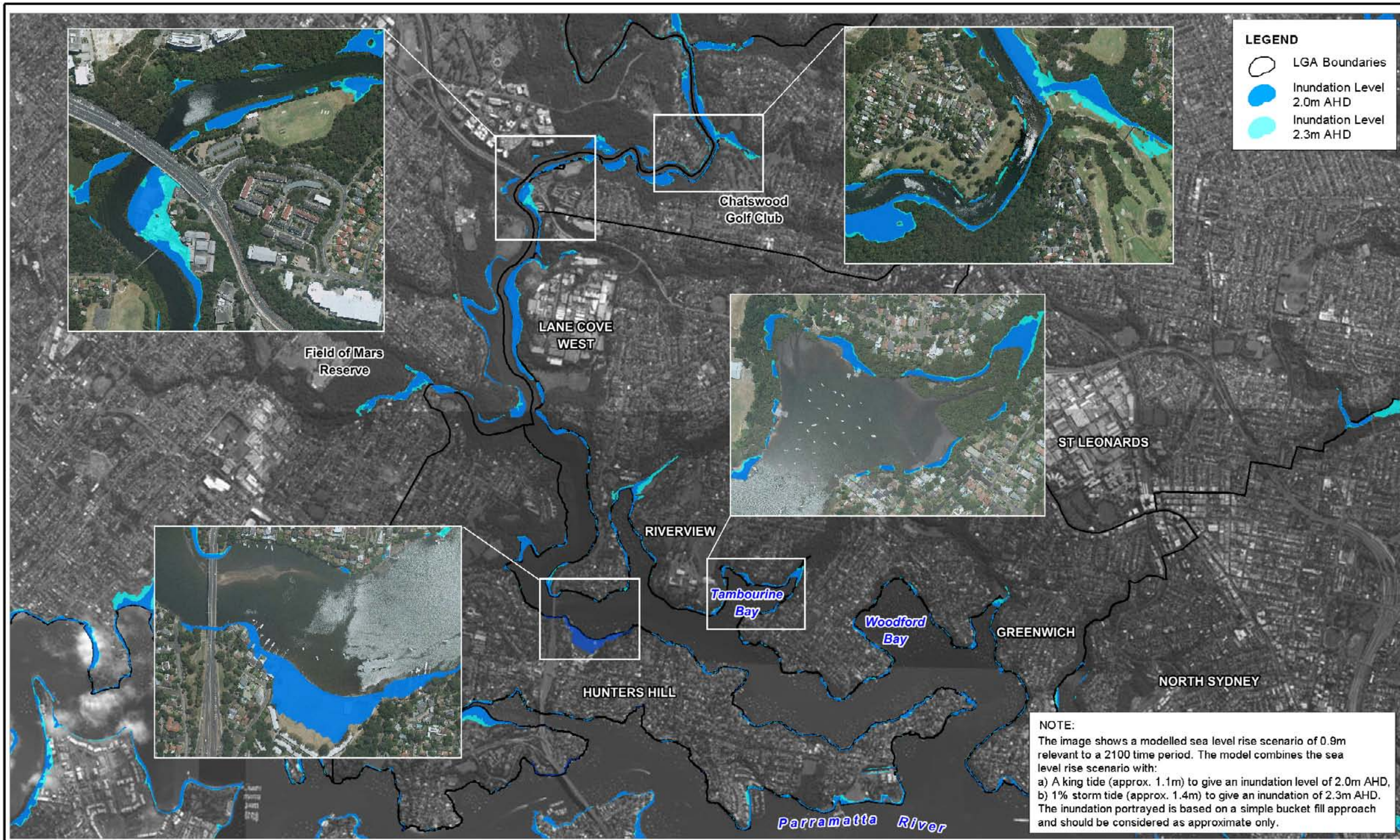
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Title: **Climate Change - Sea Level Rise Scenario of 0.4m**

Figure: **3** Rev: **2**

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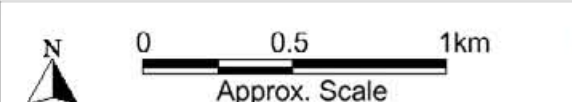


Title:  
**Climate Change - Sea Level Rise Scenario of 0.9m**

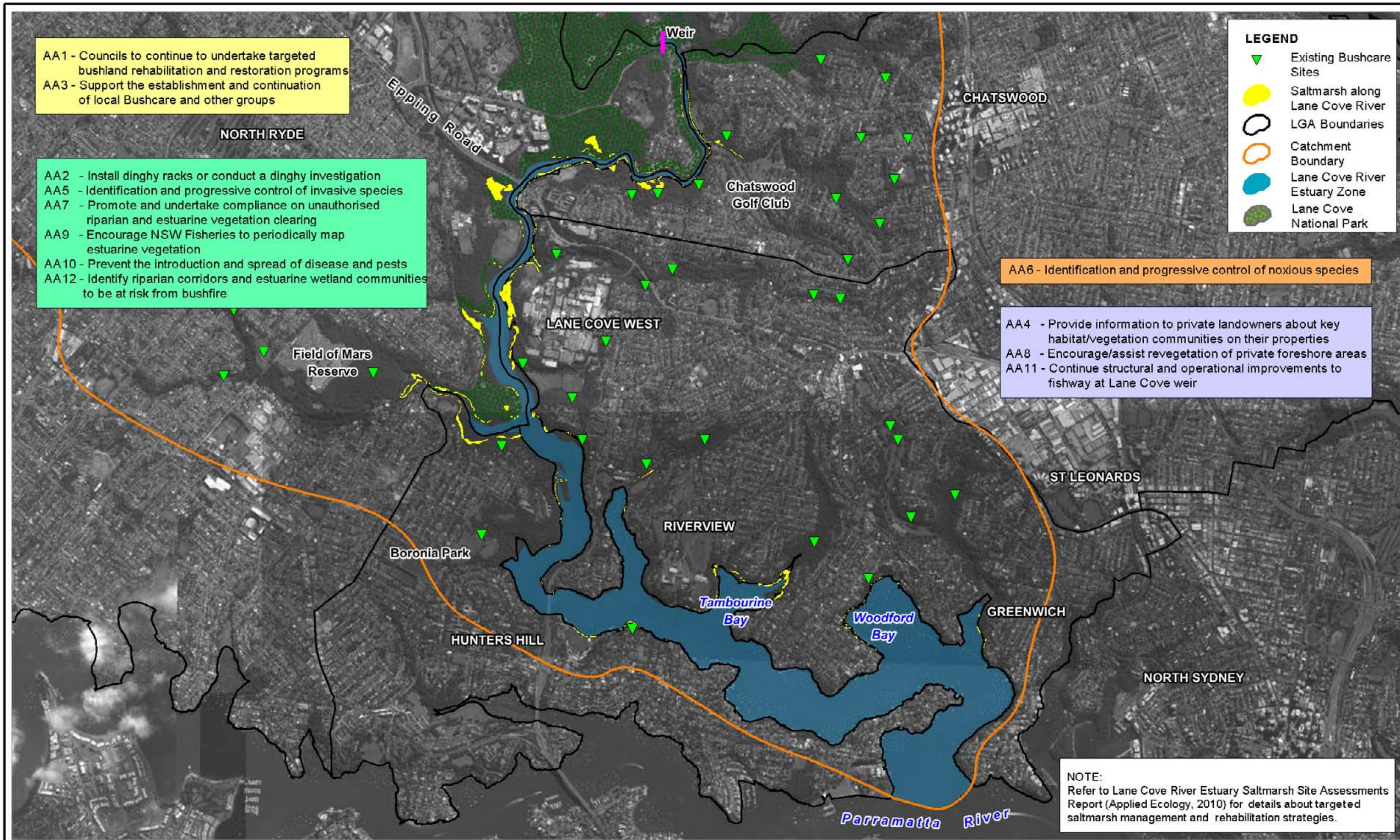
Figure:  
**4**

Rev.  
**2**

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AA1 - Councils to continue to undertake targeted bushland rehabilitation and restoration programs  
 AA3 - Support the establishment and continuation of local Bushcare and other groups

AA2 - Install dinghy racks or conduct a dinghy investigation  
 AA5 - Identification and progressive control of invasive species  
 AA7 - Promote and undertake compliance on unauthorised riparian and estuarine vegetation clearing  
 AA9 - Encourage NSW Fisheries to periodically map estuarine vegetation  
 AA10 - Prevent the introduction and spread of disease and pests  
 AA12 - Identify riparian corridors and estuarine wetland communities to be at risk from bushfire

AA6 - Identification and progressive control of noxious species

AA4 - Provide information to private landowners about key habitat/vegetation communities on their properties  
 AA8 - Encourage/assist revegetation of private foreshore areas  
 AA11 - Continue structural and operational improvements to fishway at Lane Cove weir

**LEGEND**

- Existing Bushcare Sites
- Saltmarsh along Lane Cove River
- LGA Boundaries
- Catchment Boundary
- Lane Cove River Estuary Zone
- Lane Cove National Park

**NOTE:**  
 Refer to Lane Cove River Estuary Saltmarsh Site Assessments Report (Applied Ecology, 2010) for details about targeted saltmarsh management and rehabilitation strategies.



- Already Ongoing Actions - To be Continued
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Title:  
**Aquatic and Riparian Habitat**

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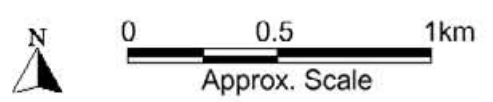


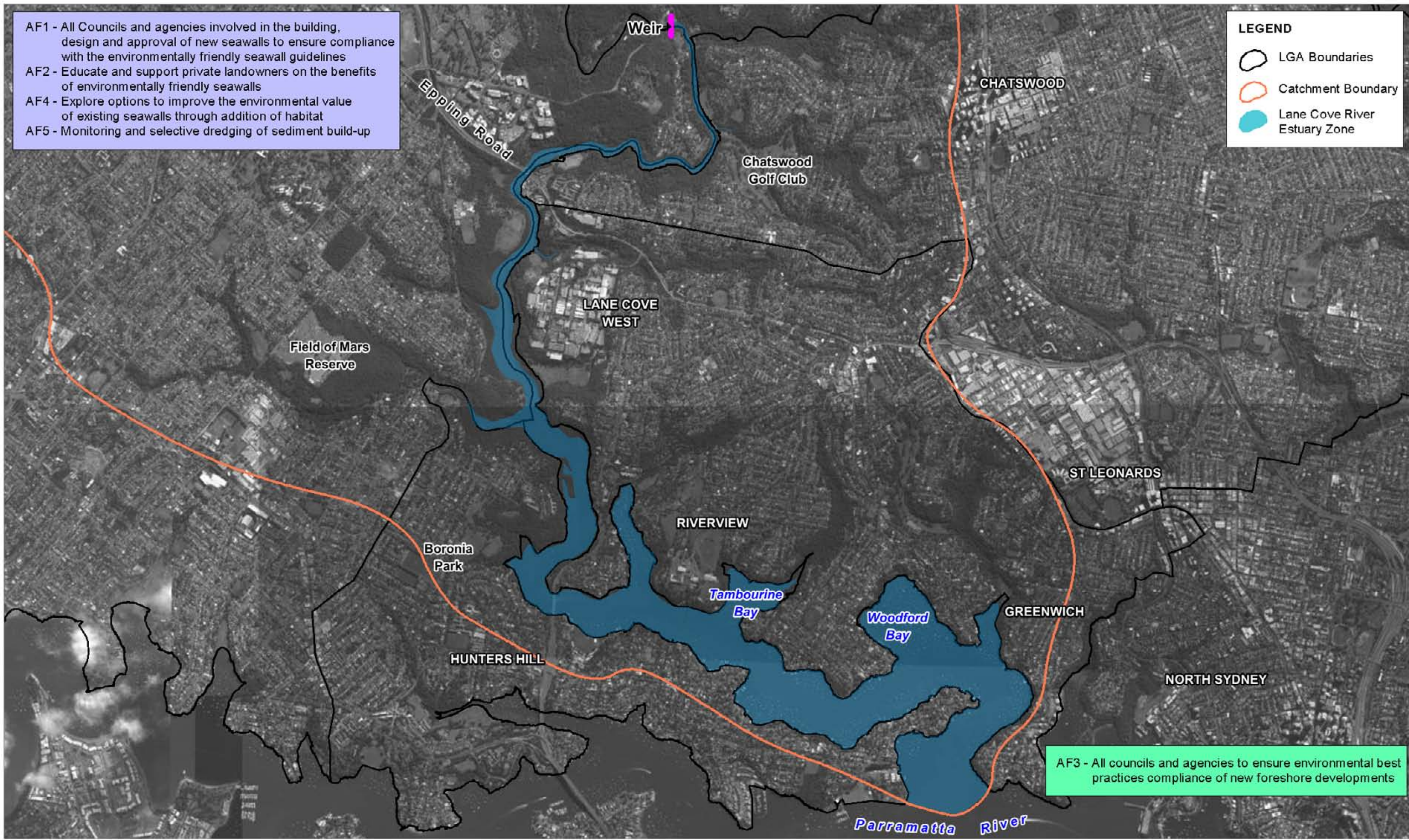
Figure. **5**  
 Rev. **2**



- AF1 - All Councils and agencies involved in the building, design and approval of new seawalls to ensure compliance with the environmentally friendly seawall guidelines
- AF2 - Educate and support private landowners on the benefits of environmentally friendly seawalls
- AF4 - Explore options to improve the environmental value of existing seawalls through addition of habitat
- AF5 - Monitoring and selective dredging of sediment build-up

**LEGEND**

- LGA Boundaries
- Catchment Boundary
- Lane Cove River Estuary Zone



AF3 - All councils and agencies to ensure environmental best practices compliance of new foreshore developments



- Already Ongoing Actions - To be Continued
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Title:  
**Foreshore Protection**

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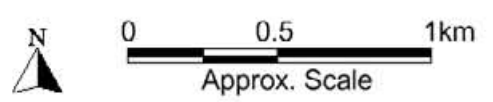
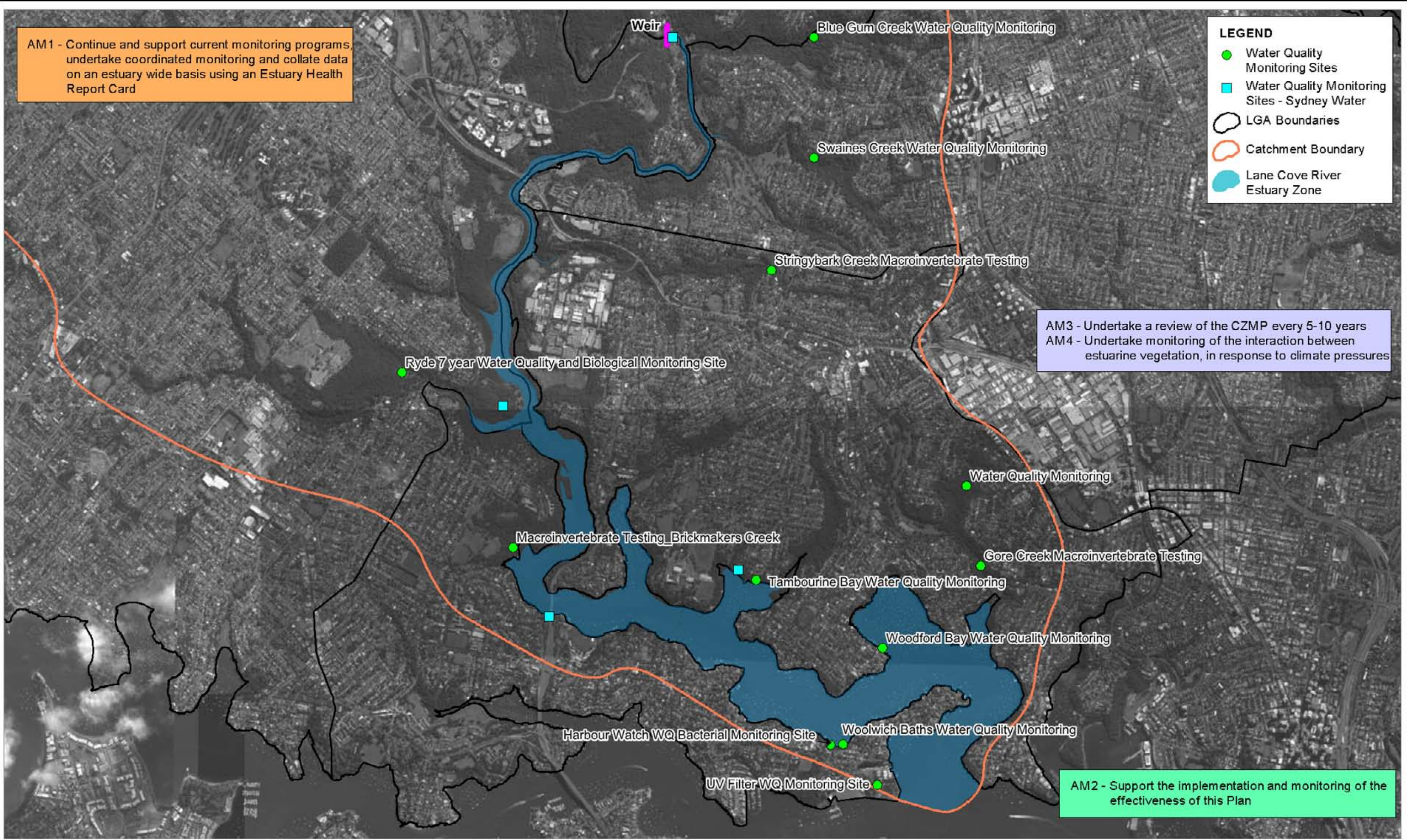


Figure. **6** Rev. **1**

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- Already Ongoing Actions - To be Continued
- Actions Within Council's Budget - Start Implementation
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Title: **Estuary Health Monitoring and Evaluation**

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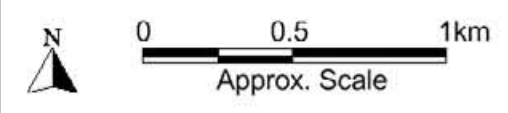
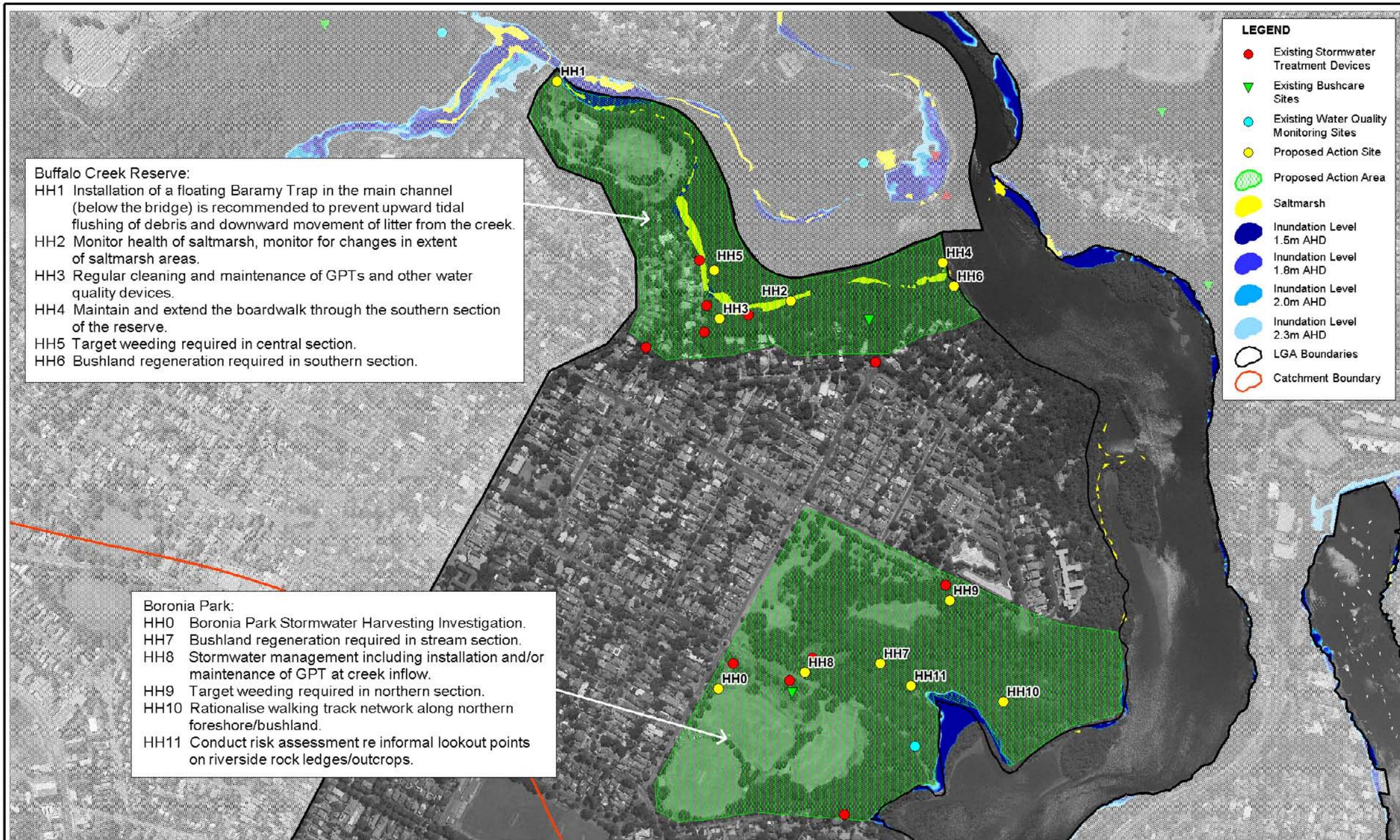


Figure.	Rev.
<b>7</b>	<b>2</b>

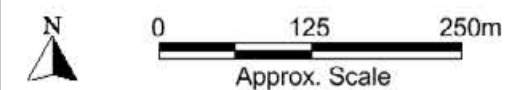


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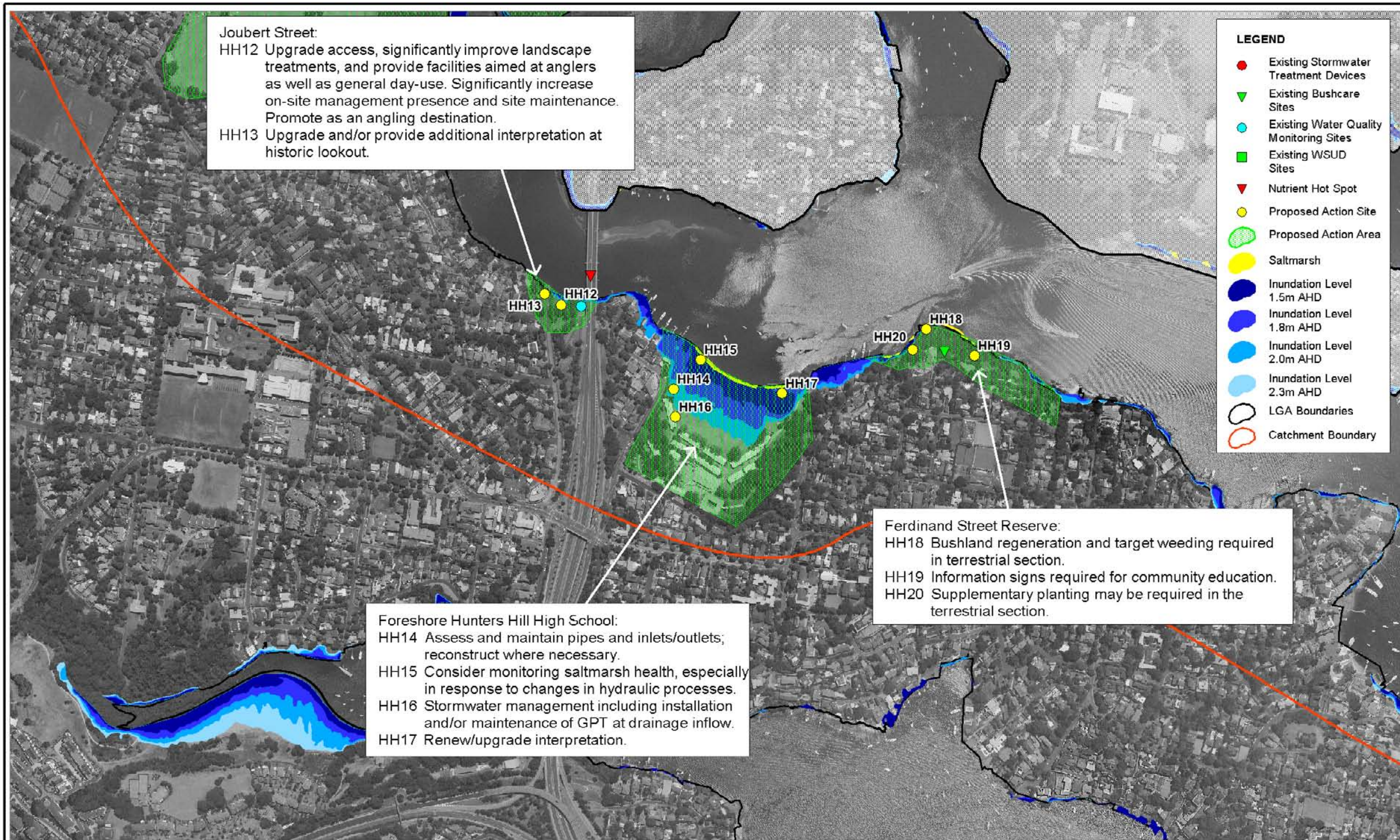


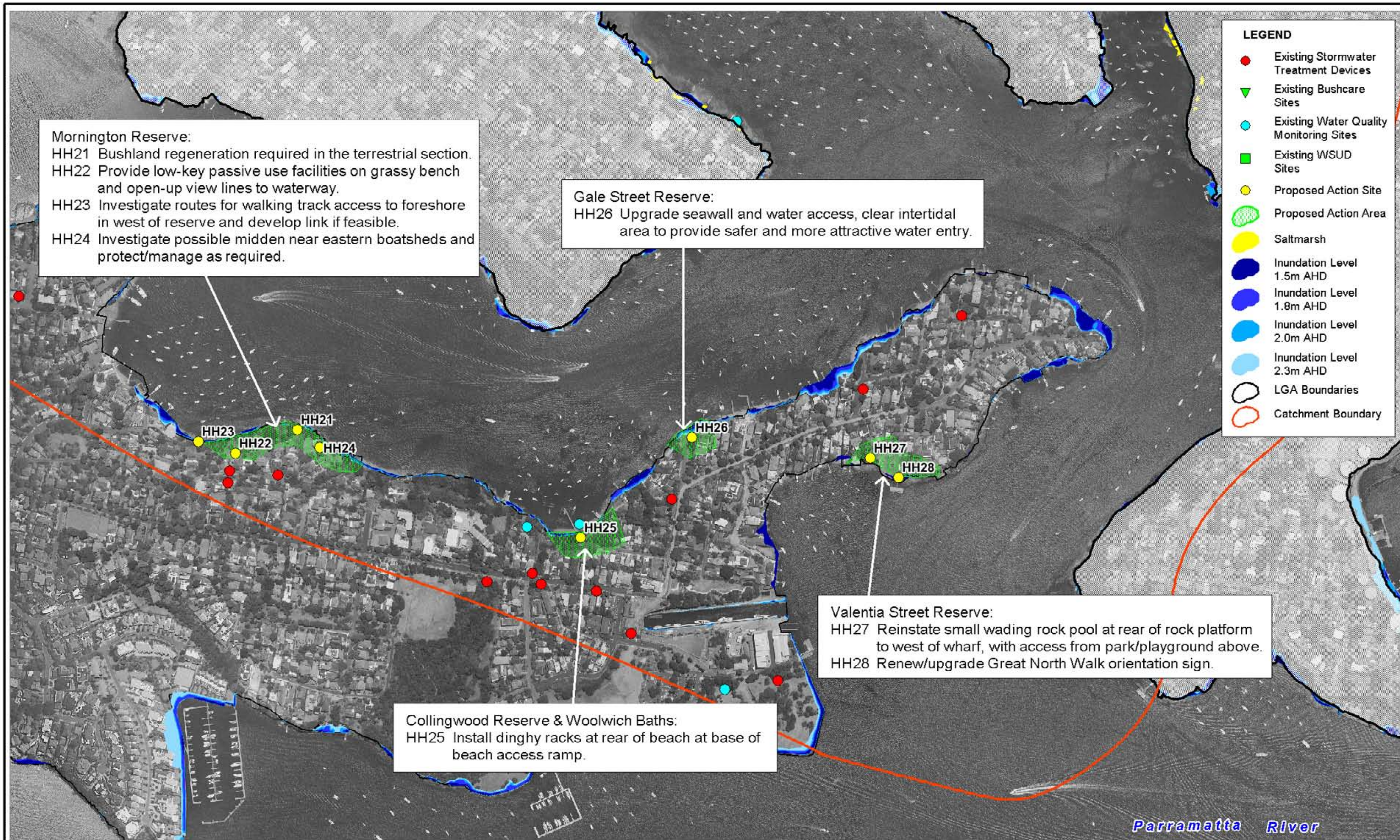
Title:  
**Hunters Hill LGA Action Plan 1**

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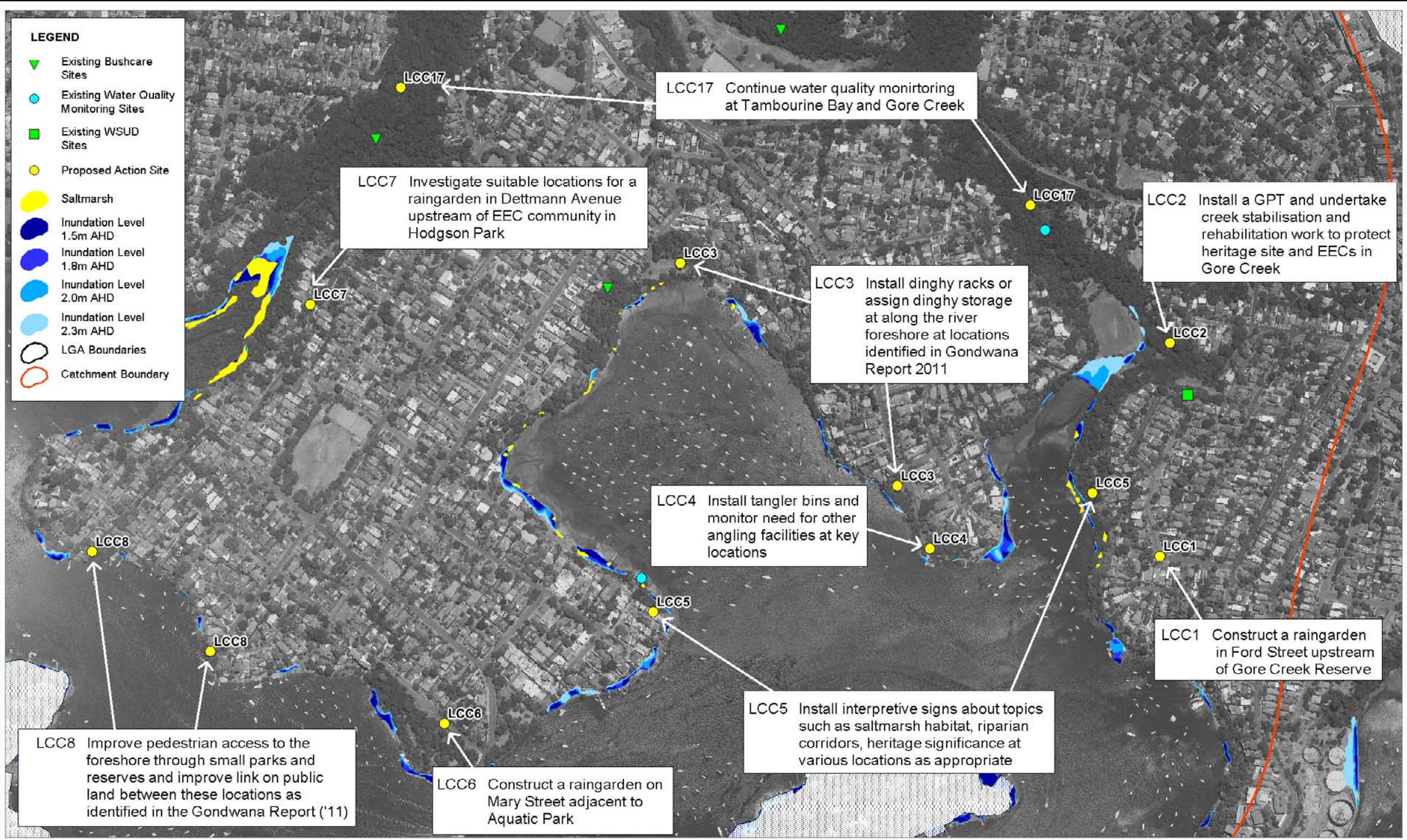




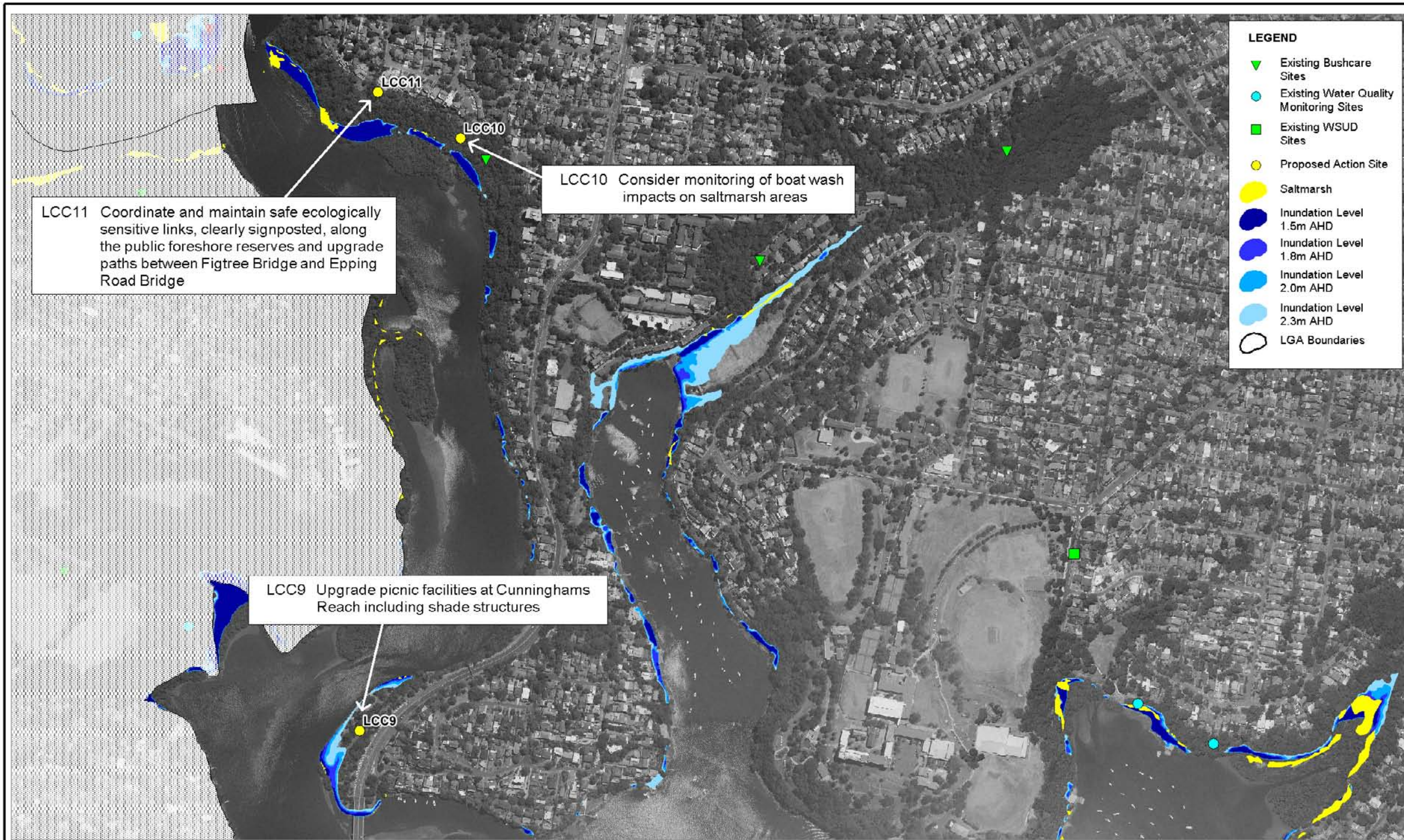




Title: <b>Hunters Hill LGA Action Plan 3</b>		Figure: <b>10</b>	Rev.: <b>2</b>
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Title: <b>Lane Cove LGA Action Plan 1</b>		Figure: <b>11</b>	Rev.: <b>1</b>
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**Lane Cove LGA Action Plan 2**

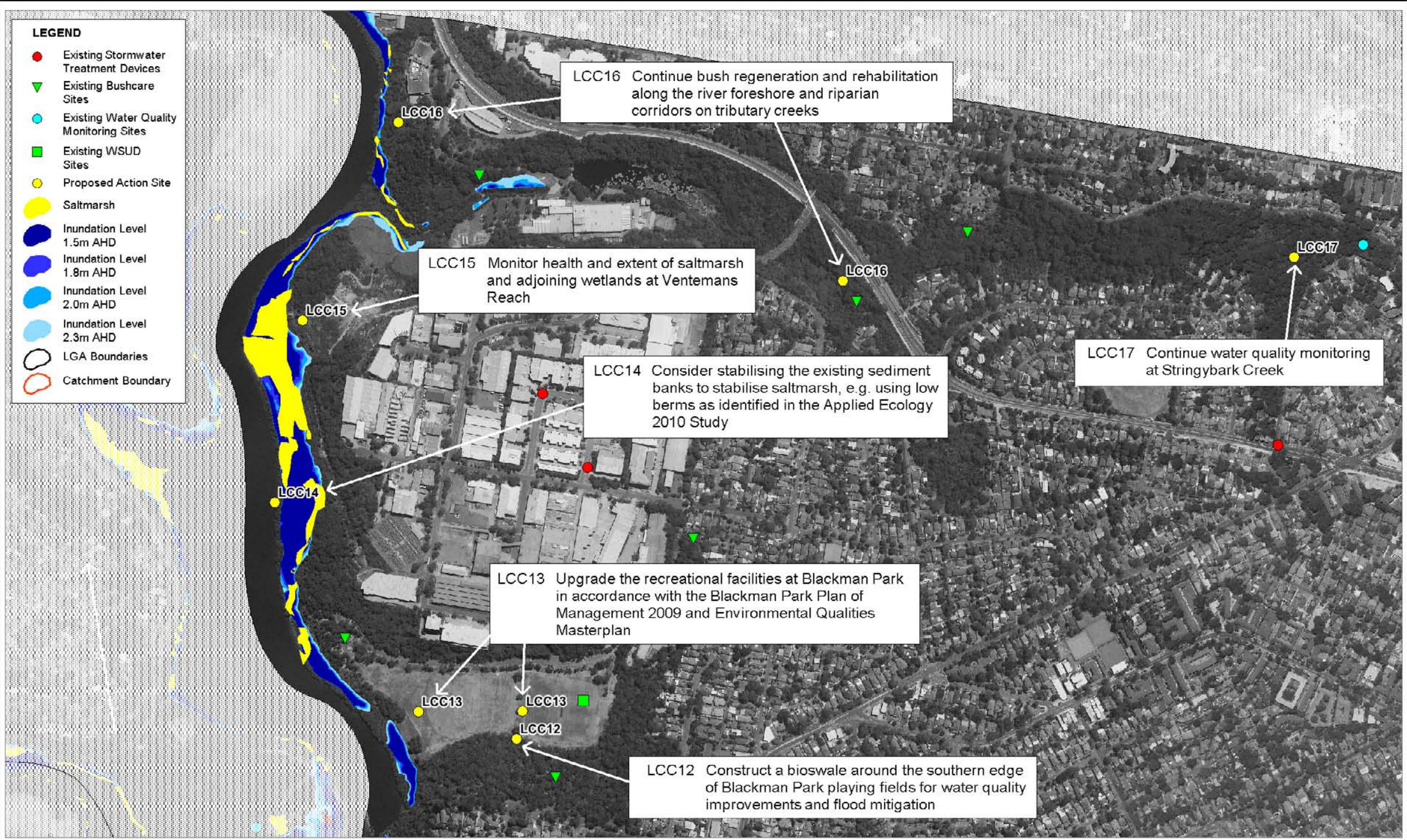
Figure.	Rev.
<b>12</b>	<b>1</b>

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0 125 250m  
Approx. Scale





**LEGEND**

- Existing Stormwater Treatment Devices
- ▼ Existing Bushcare Sites
- Existing Water Quality Monitoring Sites
- Existing WSUD Sites
- Proposed Action Site
- Saltmarsh
- Inundation Level 1.5m AHD
- Inundation Level 1.8m AHD
- Inundation Level 2.0m AHD
- Inundation Level 2.3m AHD
- LGA Boundaries
- Catchment Boundary

LCC16 Continue bush regeneration and rehabilitation along the river foreshore and riparian corridors on tributary creeks

LCC15 Monitor health and extent of saltmarsh and adjoining wetlands at Ventemans Reach

LCC14 Consider stabilising the existing sediment banks to stabilise saltmarsh, e.g. using low berms as identified in the Applied Ecology 2010 Study

LCC17 Continue water quality monitoring at Stringybark Creek

LCC13 Upgrade the recreational facilities at Blackman Park in accordance with the Blackman Park Plan of Management 2009 and Environmental Qualities Masterplan

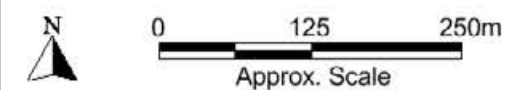
LCC12 Construct a bioswale around the southern edge of Blackman Park playing fields for water quality improvements and flood mitigation

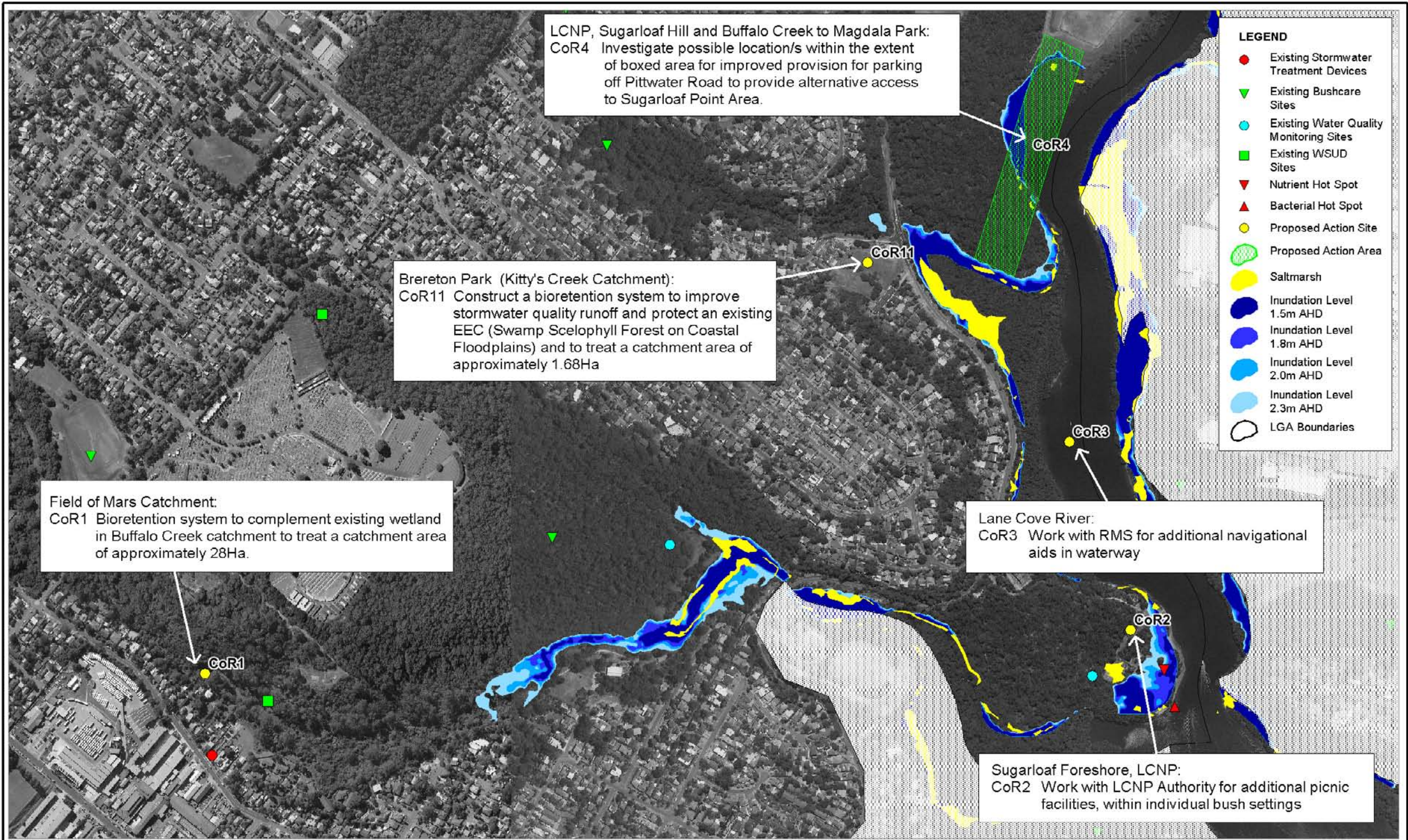
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**Lane Cove LGA Action Plan 3**

Figure:  
**13**

Rev.  
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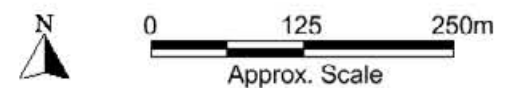


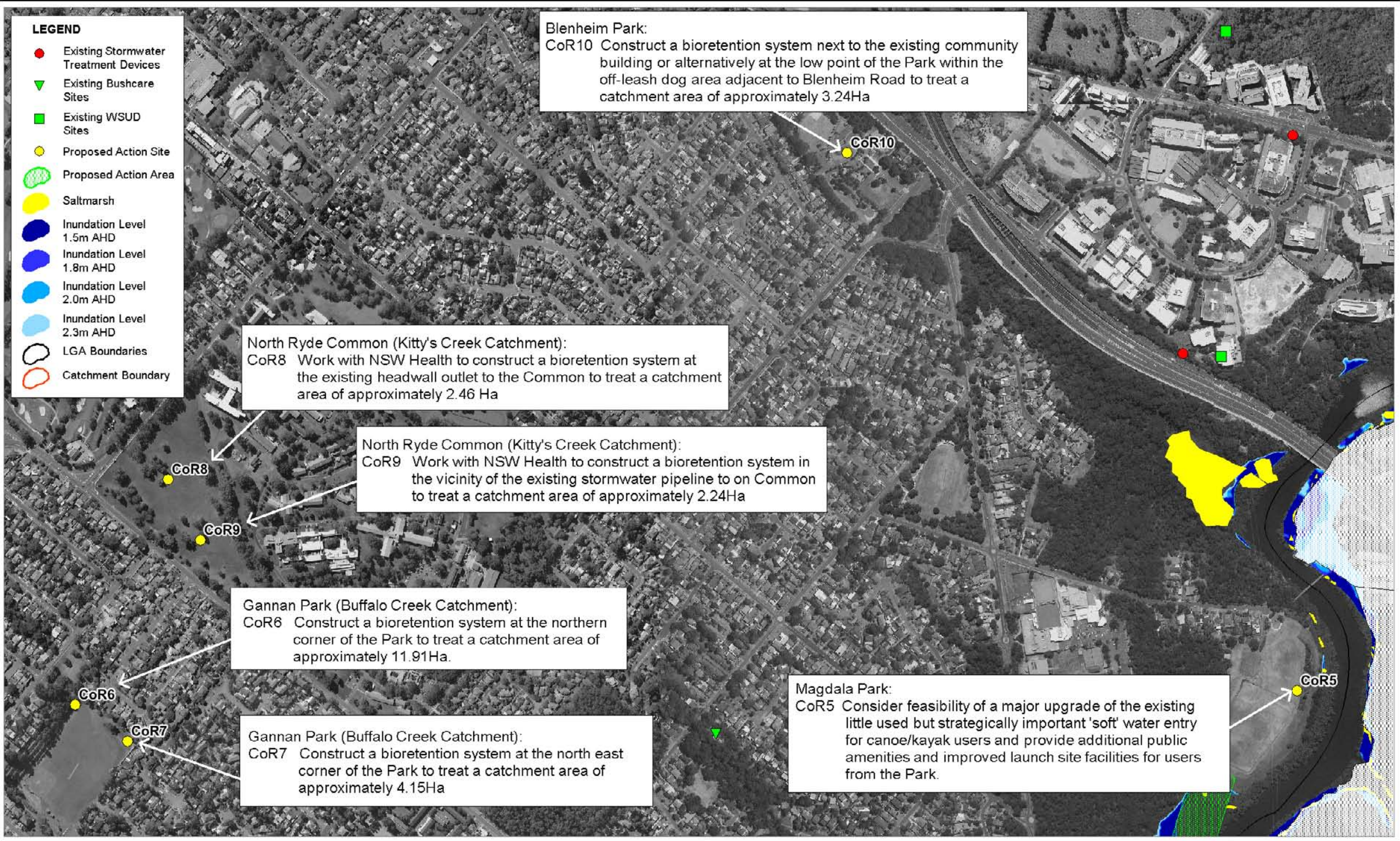
Title:  
**City of Ryde LGA Action Plan 1**

Figure:  
**14**

Rev.  
**0**

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**Blenheim Park:**  
 CoR10 Construct a bioretention system next to the existing community building or alternatively at the low point of the Park within the off-leash dog area adjacent to Blenheim Road to treat a catchment area of approximately 3.24Ha

**North Ryde Common (Kitty's Creek Catchment):**  
 CoR8 Work with NSW Health to construct a bioretention system at the existing headwall outlet to the Common to treat a catchment area of approximately 2.46 Ha

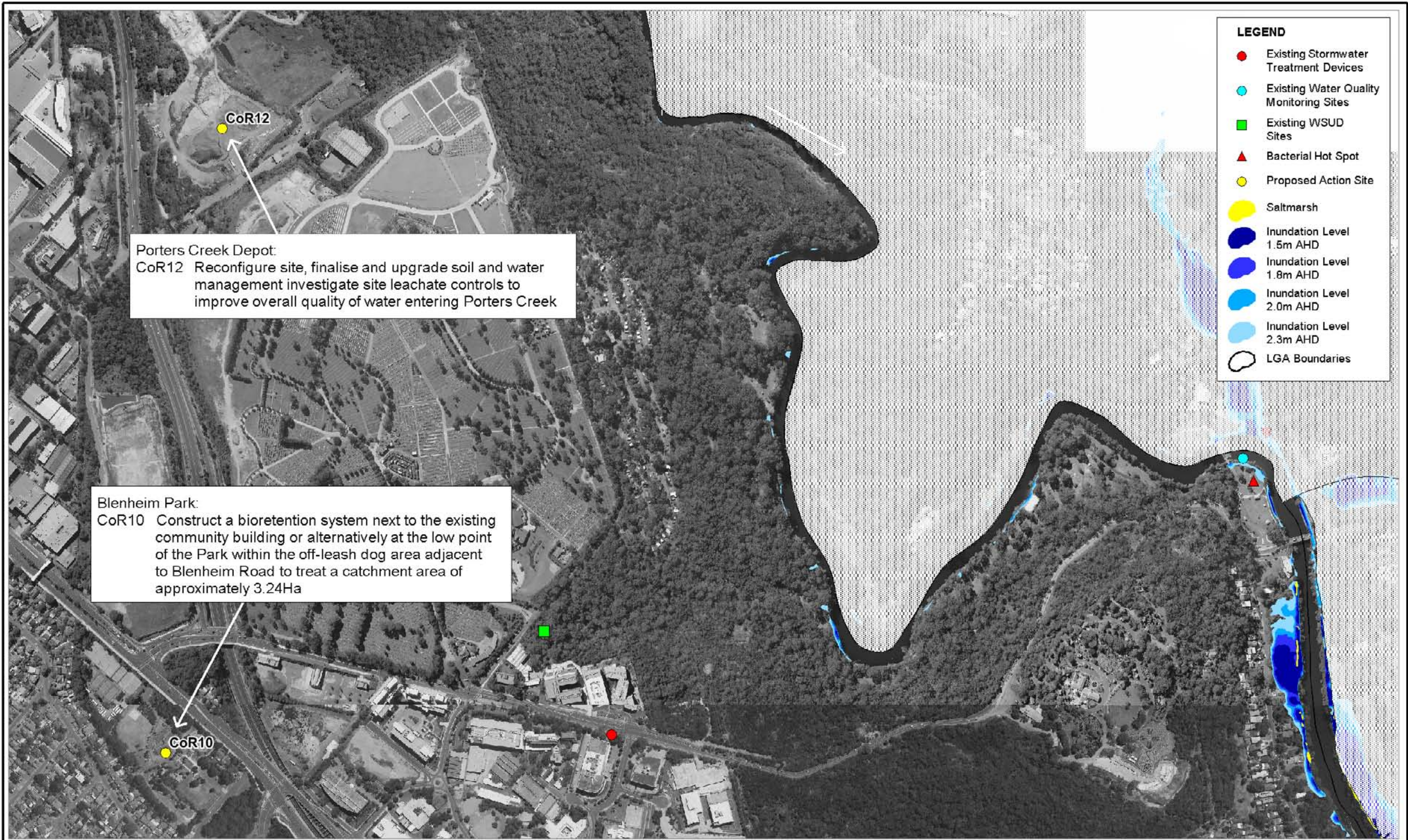
**North Ryde Common (Kitty's Creek Catchment):**  
 CoR9 Work with NSW Health to construct a bioretention system in the vicinity of the existing stormwater pipeline to on Common to treat a catchment area of approximately 2.24Ha

**Gannan Park (Buffalo Creek Catchment):**  
 CoR6 Construct a bioretention system at the northern corner of the Park to treat a catchment area of approximately 11.91Ha.

**Gannan Park (Buffalo Creek Catchment):**  
 CoR7 Construct a bioretention system at the north east corner of the Park to treat a catchment area of approximately 4.15Ha

**Magdala Park:**  
 CoR5 Consider feasibility of a major upgrade of the existing little used but strategically important 'soft' water entry for canoe/kayak users and provide additional public amenities and improved launch site facilities for users from the Park.





Title:  
**City of Ryde LGA Action Plan 3**

Figure:  
**16**

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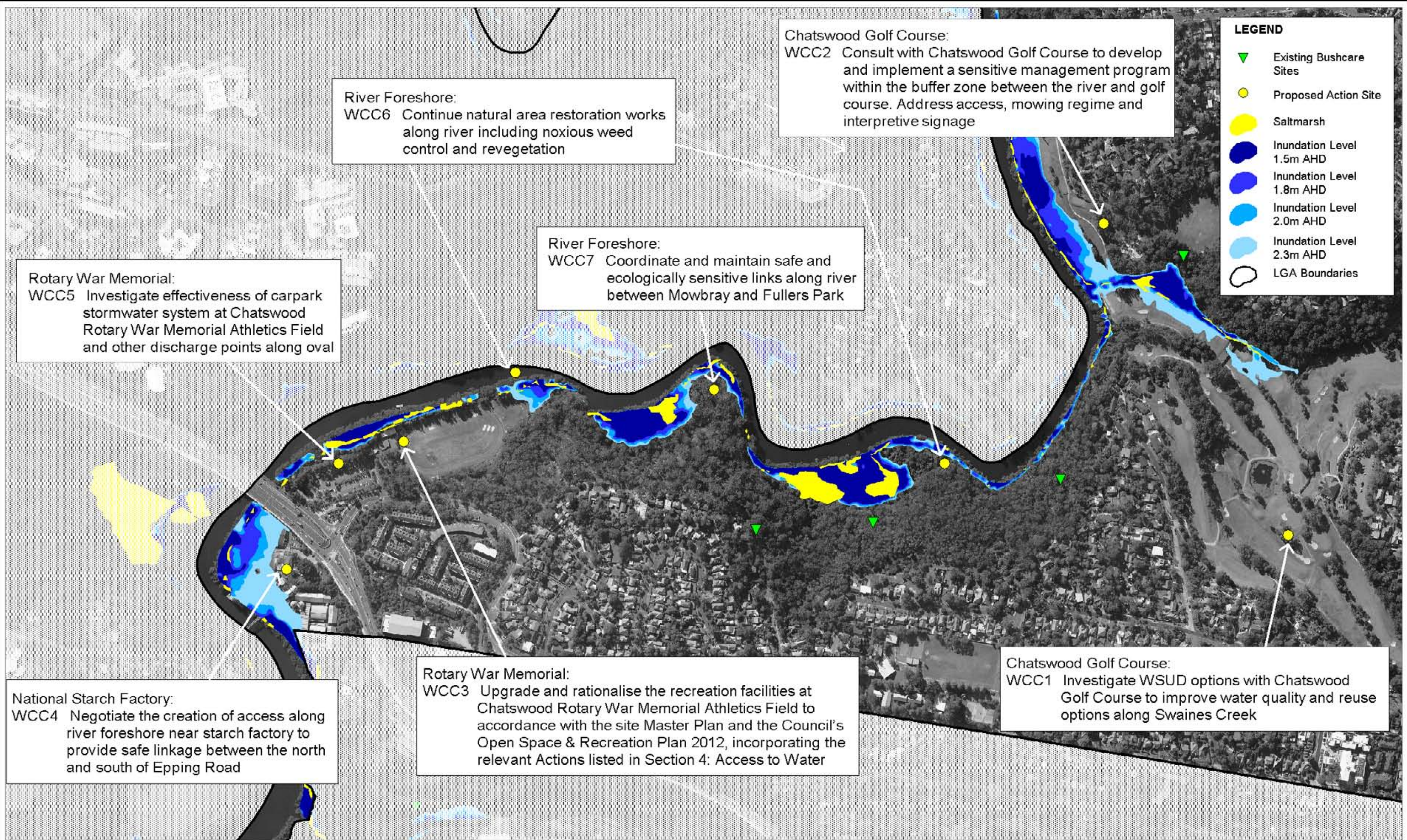
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0 125 250m  
Approx. Scale







**LEGEND**

- ▼ Existing Bushcare Sites
- Proposed Action Site
- Saltmarsh
- Inundation Level 1.5m AHD
- Inundation Level 1.8m AHD
- Inundation Level 2.0m AHD
- Inundation Level 2.3m AHD
- LGA Boundaries

**Chatswood Golf Course:**  
**WCC2** Consult with Chatswood Golf Course to develop and implement a sensitive management program within the buffer zone between the river and golf course. Address access, mowing regime and interpretive signage

**River Foreshore:**  
**WCC6** Continue natural area restoration works along river including noxious weed control and revegetation

**River Foreshore:**  
**WCC7** Coordinate and maintain safe and ecologically sensitive links along river between Mowbray and Fullers Park

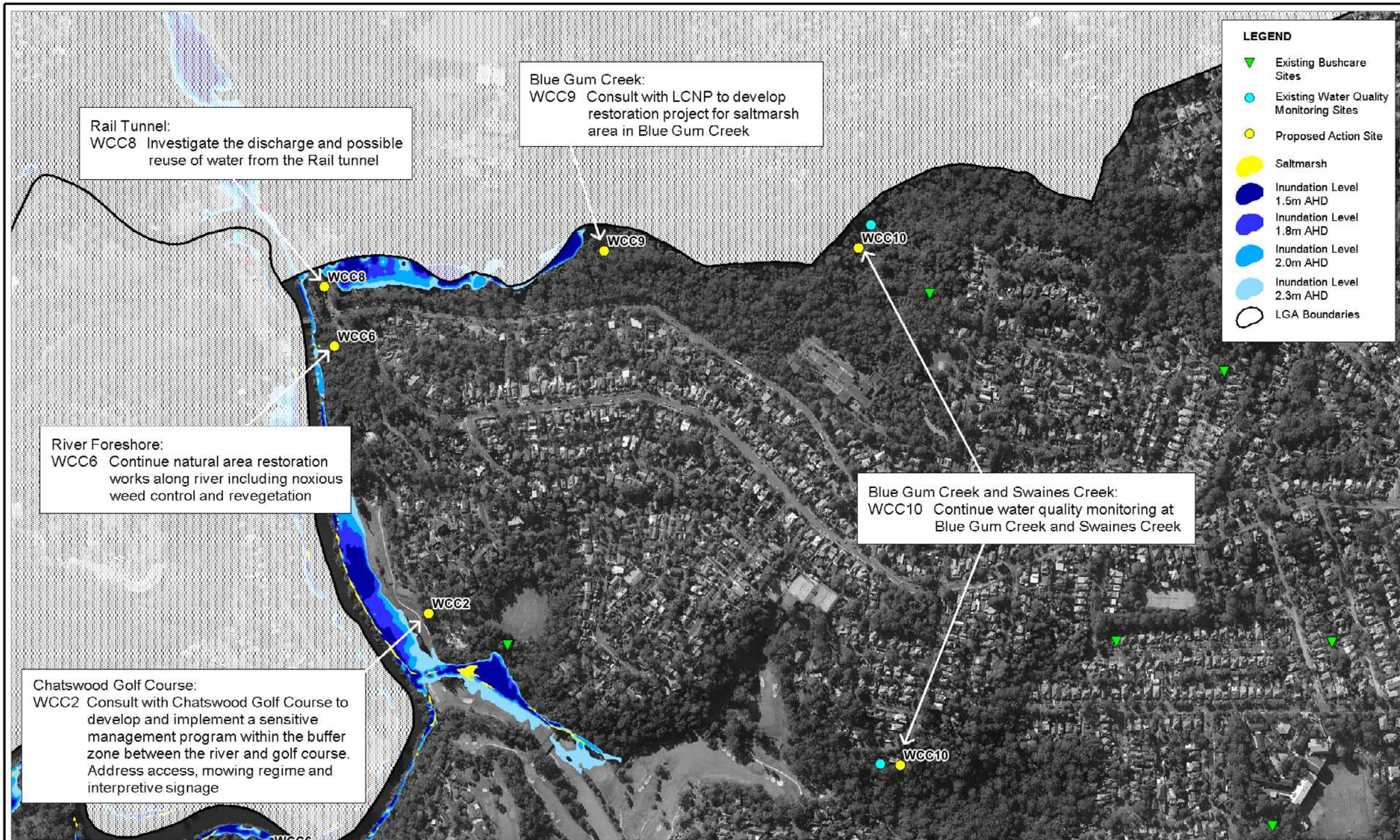
**Rotary War Memorial:**  
**WCC5** Investigate effectiveness of carpark stormwater system at Chatswood Rotary War Memorial Athletics Field and other discharge points along oval

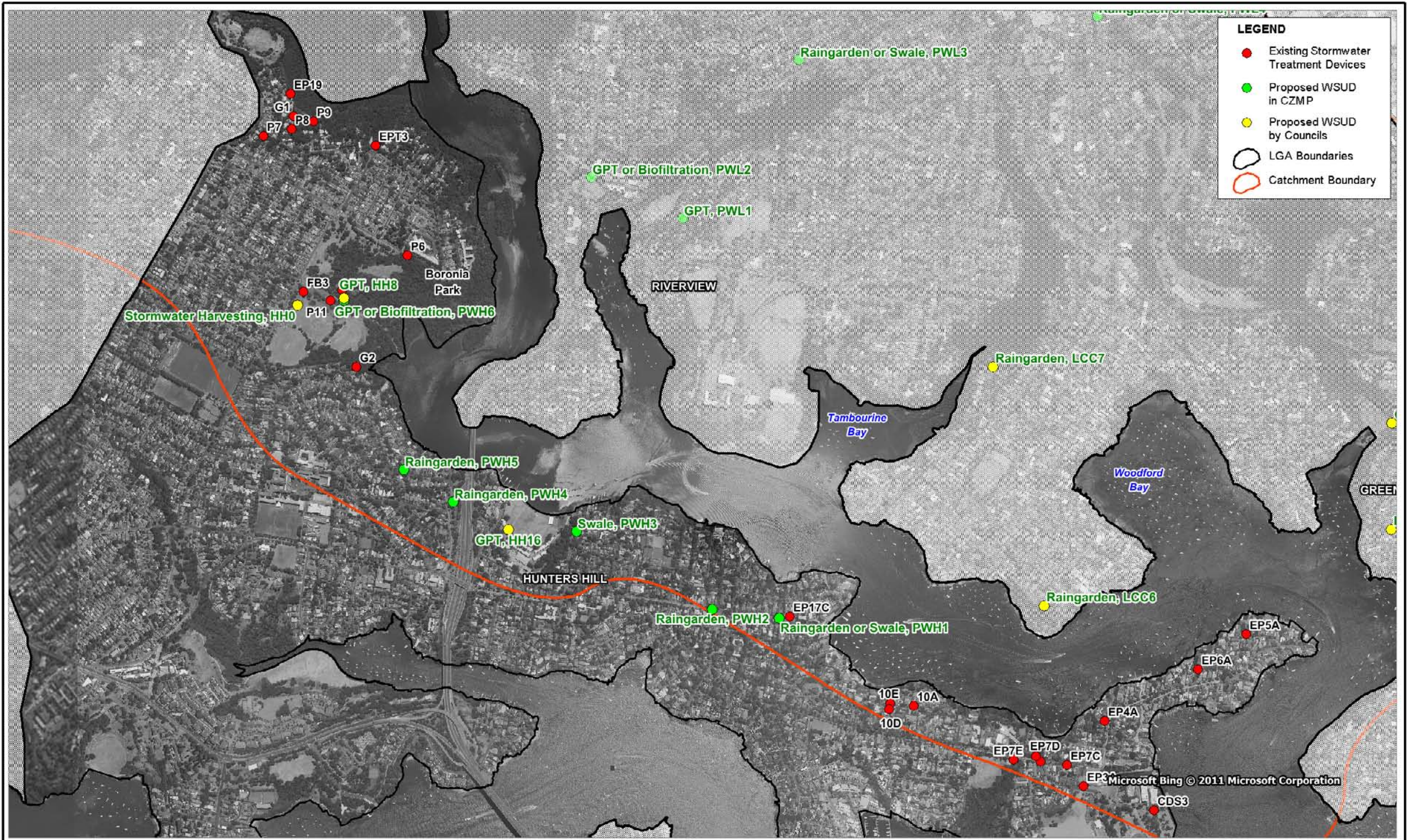
**Rotary War Memorial:**  
**WCC3** Upgrade and rationalise the recreation facilities at Chatswood Rotary War Memorial Athletics Field to accordance with the site Master Plan and the Council's Open Space & Recreation Plan 2012, incorporating the relevant Actions listed in Section 4: Access to Water

**Chatswood Golf Course:**  
**WCC1** Investigate WSUD options with Chatswood Golf Course to improve water quality and reuse options along Swaines Creek

**National Starch Factory:**  
**WCC4** Negotiate the creation of access along river foreshore near starch factory to provide safe linkage between the north and south of Epping Road







**LEGEND**

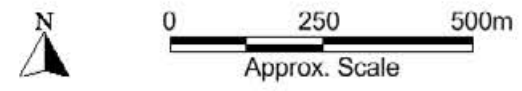
- Existing Stormwater Treatment Devices
- Proposed WSUD in CZMP
- Proposed WSUD by Councils
- LGA Boundaries
- Catchment Boundary

Title:  
**Hunters Hill LGA Proposed WSUD Sites**

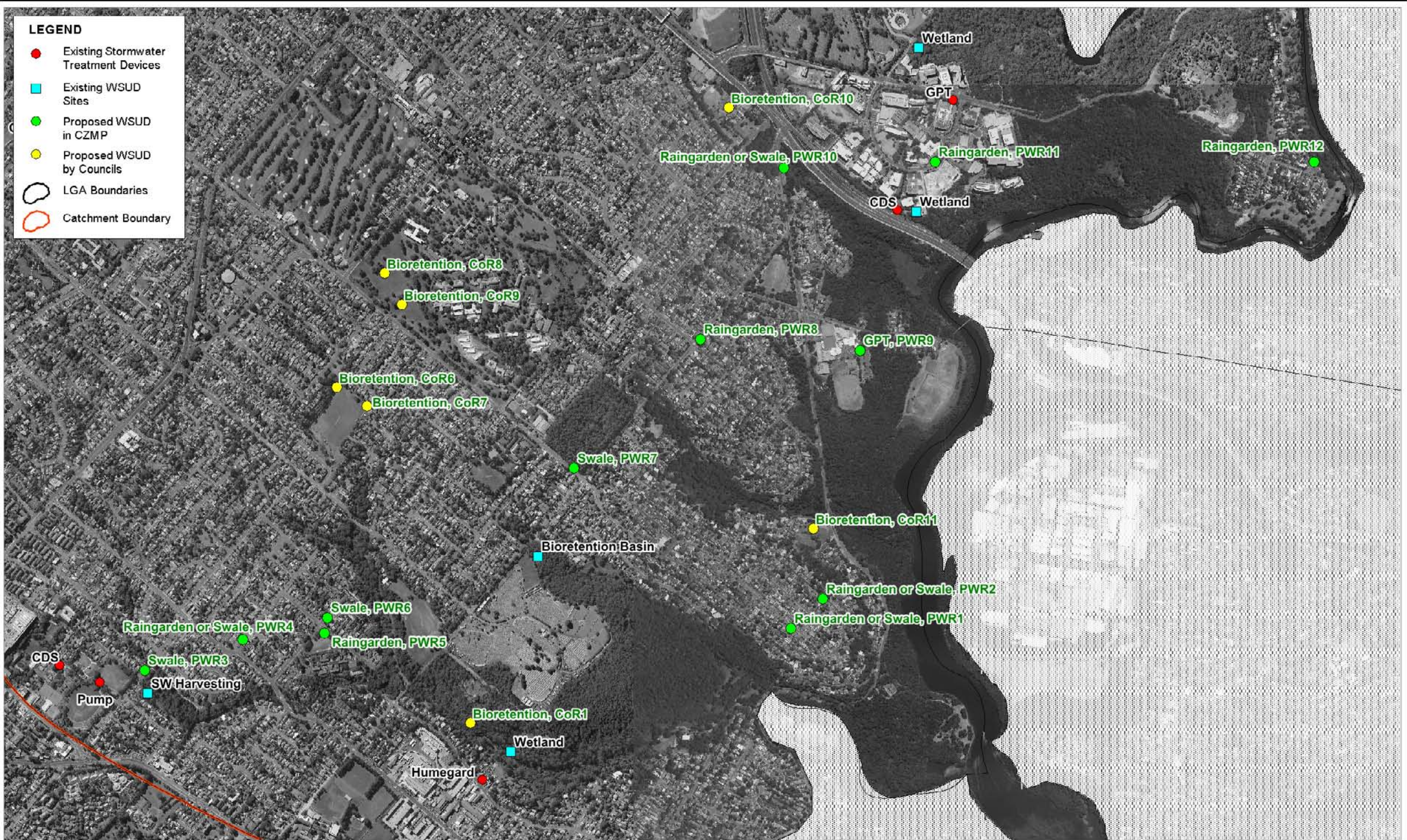
Figure:  
**19**

Rev.  
**2**

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Title:  
**City of Ryde LGA Proposed WSUD Sites**

Figure. **21** Rev. **0**

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Title:  
**Willoughby LGA Proposed WSUD Sites**

Figure.	Rev.
<b>22</b>	<b>0</b>

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