



5.3 Collaborative System Implement Plan

A summary of the actions within the Collaborative System Implement Plan are provided in Table 5-3. Maps depicting relevant actions are provided in Appendix B.

Table 5-3 Action Table - Collaborative System Implement Plan

CMP Strategy	S4 ID	Functional Zone	Locality	Action Name	Action Description	Lead	Support	Priority (Score)	Timing	Performance Criteria
Strategy 1: Governance and Program Delivery	S1.CMP.A	Entire HNRS	Estuary-Wide	Implement the CMPs formal governance partnership for the river system	This will involve the implementation of a new partnership for the governance of the Hawkesbury-Nepean River and its catchment. The partnership will be tasked with the implementation of the CMP, and the broader management of the river system. The aim of the partnership will be to: > Ensure collaboration and coordination between local councils, the state government and other stakeholders > Define the roles and responsibilities of all stakeholders > Ensure dedicated resourcing for river management This Action will also include the employment of a permanent project coordinator for the CMP - as per the Project Governance Structure discussed in Section 5.2.	CCC, NBC, HSC, KC, THSC, HCC	DCCEEW, NPWS, Sydney Water, DPIRD-Fisheries, DPPI-Crown Lands, TfNSW,	High (30)	Within 1-4 years	Governance group established and operating, with a coordinator role maintained for the CMP's duration.
Strategy 1: Governance and Program Delivery	S1.CMP.B	Entire HNRS	Estuary-Wide	Develop and execute a communications plan for Stage 5 of the CMP	Develop a communications plan for the 10 year implementation phase of the CMP. This will include maintenance of the CMP Website and other associated Partner Council information pages. The purpose of the plan should be to provide the community with the following information: > The purpose of the CMP. > The CMP background, and an overview of the NSW Coastal Management Framework. > Key CMP information, including reports available for public consumption. > The Status of CMP actions, with details of the actions and recent updates/progress. > Information pertaining to upcoming community consultation or education events, and avenues for engagement; and > Links to relevant materials such as The NSW Coastal Management Framework, and the Marine Estate Management Strategy. This may also include the ongoing social media presence, mailing lists and newsletters publishing.	CCC, NBC, HSC, KC, THSC, HCC	DCCEEW	High (24)	Within 1-4 years	Plan developed and implemented. Improved community understanding of CMP goals, priorities, and implementation status.
Strategy 2: Monitoring, Evaluation, and Reporting	S2.CMP.A	Entire HNRS	Estuary-Wide	HNRS Water Quality Monitoring - Data Aggregation and Reporting	Water quality across the Hawkesbury-Nepean River System (HNRS) is currently monitored by a range of stakeholders, including partner councils, other catchment councils, the NSW Government (Department of Climate Change, Energy, the Environment and Water – DCCEEW), and Sydney Water. While these programs generate valuable data, they operate independently, resulting in inefficiencies and data gaps that hinder system-wide understanding and management. This action would therefore involve focuses on the aggregation, management, and communication of water quality data across the HNRS. A well-structured reporting and data management framework will enhance transparency, promote shared understanding, and support evidence-based decision-making by councils, agencies, and the community. This action would therefore include: <u>Data Management and Coordination:</u> > Create a centralised database to store, manage, and share water quality data collected by all stakeholders. > Implement robust data entry, validation, and analysis processes to ensure data accuracy and reliability. <u>Reporting:</u> > Develop a user-friendly, public-facing platform to share water quality information > Support community awareness and engagement by making key findings, trends, and alerts easily accessible and understandable.	DCCEEW, CCC, NBC, HSC, KC, THSC, HCC	Sydney Water	High (30)	Within 1-4 years	Centralised database established. Collected data is of tangible benefit from a research and management perspective.



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Strategy 2: Monitoring, Evaluation, and Reporting	S2.CMP.B	Entire HNRS	Estuary-Wide	HNRS Water Quality Monitoring - Implement a Coordinated Monitoring Program	Design and implement a coordinated water quality monitoring program across the HNRS coastal zone. The Action would be led by the DCCEEW Science Unit, and would include the following steps: <u>1. Program Review and Standardisation:</u> > Map existing water quality sampling programs across the HNRS to identify potential gaps and redundancies. > Develop standardised protocols for sampling frequency, locations, parameters tested, and analytical methods across the HNRS. <u>2. Resource Coordination and Capacity Building:</u> > Identify opportunities for resource sharing (e.g. equipment, laboratory services, field teams) between councils and agencies to reduce duplication and costs. > Build technical capacity through workshops, training, and exchange programs to support consistent, high-quality data collection and interpretation. <u>3. Implement coordinated monitoring program:</u> > Roll out the coordinated monitoring program in alignment with agreed protocols and schedules. > Ensure ongoing collaboration between councils, DCCEEW, and other agencies to deliver consistent, high-quality data collection. > Establish a governance framework to oversee program delivery, quality assurance, and adaptive management. > Periodically review and refine the program based on monitoring outcomes, emerging issues, and stakeholder feedback	DCCEEW, CCC, NBC, HSC, KC, THSC, HCC	N/A	High (30)	Within 1-4 years	Plan developed and implemented. Reporting mechanism established and executed.
Strategy 2: Monitoring, Evaluation, and Reporting	S2.CMP.C	Entire HNRS	Estuary-Wide	Implement a bank stability and condition monitoring program across the estuary foreshores	Systematically monitor and assess bank stability and geomorphic conditions in the Hawkesbury River Estuary to identify erosion risks and support effective riverbank management. While monitoring is currently conducted by individual Partner Councils, an integrated and coordinated program would enable a more comprehensive estuary-wide assessment, facilitate resource sharing, and improve cost efficiencies. This program will be designed to be cost-effective, replicable, and adaptable over time, ensuring consistent data collection and long-term riverbank health management.	CCC, NBC, HSC, THSC, HCC	DCCEEW, NPWS	High (24)	Within 1-4 years	Monitoring undertaken and recorded. Collected data is of tangible benefit from a risk and asset management perspective.
Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.A	Entire HNRS	Estuary-Wide	Review and update Partner Council planning instruments for alignment of a consistent best practice approach to managing stormwater and downstream estuarine water quality	The objective of this action is to establish a consistent and best-practice approach to development controls that enhance estuary health, by reviewing and updating the Development Control Plans (DCPs) and Local Environment Plan (LEP) initiatives of the six Partner Councils. This action will also set pollution reduction targets to ensure measurable improvements in estuarine environments. This action would include: > Target setting: Determination of a consistent set of targets for relating to water quality and quantity that are consistent with the Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning and the NSW Water Quality Objectives . > Policy review : Conducting a detailed review of the existing DCPs and LEPs across the six Partner Councils - in relation to how they address stormwater management, sediment and erosion management, and water sensitive urban design (WSUD) applications and requirements. > Gap analysis: Identification of gaps, inconsistencies, and areas needing improvement in the current DCPs and LEPs, particularly those affecting estuary health. > Planning proposals and amendments: Preparing planning proposals to implement the required amendments to LEPs, and drafting updates to DCPs, to embed best-practice stormwater and water quality provisions and achieve greater consistency across the catchment wherever practical. This Action should use the Parramatta River Catchment Groups "Standardise the standards" initiative as an example of contemporary good practice. As supporting agencies, Sydney Water and DPHI can provide technical assistance as required.	CCC, NBC, HSC, KC, THSC, HCC	DPHI- Planning and Assessment, Sydney Water	High (30)	Within 1-4 years	Review completed, and planning controls updated in a consistent manner.



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Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.B	Entire HNRS	Estuary-Wide	Review and update Partner Council planning instruments for coastal hazard risk planning controls every 10 years	The objective of this action is to establish a consistent and best-practice approach to development controls that manage coastal and estuarine hazard risk, by reviewing and updating as relevant the following planning instruments of the six Partner Councils: > Development Control Plans (DCPs) > Local Environment Plans (LEPs) > R&H SEPP Coastal Management Areas - including the Coastal Vulnerability Area Each Partner Council should review their relevant planning controls at least every 10 years, in order to ensure that these controls are based on contemporary climate change projections, consider observed coastal hazard impacts, and are consistent with state government policies. Where necessary, preparing planning proposals to implement the required amendments to LEPs and Coastal Management Areas may be required to embed best-practice.	CCC, NBC, HSC, KC, THSC, HCC	DPHI- Planning and Assessment	Low (7)	Opportunistic, within 8-10 Years	Review completed. Updated applied as necessary.
Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.C	Entire HNRS	Estuary-Wide	Encourage eco-friendly features in seawall development applications	Partner Councils are to review and update their DCPs to encourage development applications for private seawalls to include eco-friendly features - such as installing 3D-printed habitat panels, increasing surface texture, and planting estuarine vegetation around the structures. This could also include: > Ensuring that all relevant Conditions of Consent include reference to the Environmentally Friendly Seawall Design > Providing educational material to foreshore residents promoting eco-friendly features and the ecological value they provide. > Providing access to suppliers and contractors to help install ecofriendly features. Any review an implementation should be consistent with the NSW Coastal Design Guidelines 2023, and the Coastal Crown Lands Guidelines 2023.	CCC, NBC, HSC, KC, THSC, HCC	DCCEEW, DPIRD- Fisheries	Medium (12)	Within 4-8 years	Review completed.
Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.D	Entire HNRS	Estuary-Wide	Develop Intertidal Marine Vegetation Strategy for Hawkesbury River estuary	Intertidal Marine Vegetation Strategies developed as part of the MEMS program use evidence-based methods to coordinate protection and build resilience of intertidal wetlands now and into the future. The IMVS [Hawkesbury River estuary] would contain detailed information on recommended responses to the key threats and risks to saltmarsh and mangrove communities in the Hawkesbury River estuary. It would include management actions categorised under Hydrology, Sediments, Vegetation and, People and Planning. The IMVS would consider, with an estuary-wide perspective, the benefits of undertaking adaption actions informed by current and projected SLR. Development of such approaches is important because not acting on sea level rise, or, attempting to isolate ecological communities from their changing environmental settings ultimately reduce the time available for ecosystems to adapt or migrate, consequently increasing their vulnerability and diminishes the valuable services they provide to residence and visitors using the estuary. IMVS actions can be delivered with suitable partnership and funding opportunities. For example, this could include: > projects identified in approved Coastal Management Programs > projects aligned with environmentally focused Non-Government Organisation or community groups > Aboriginal land managers who are looking to deliver projects that involve working on and restoring culturally significant areas or habitats > major developers that are required to offset unavoidable impacts on mangrove or saltmarsh habitat with an identified action under Section 220 of the NSW Fisheries Management Act 1994 > a court ordered directive for environmental rehabilitation > collaborative projects between local government and NSW Government through opportunities such as the Recreational Fishing Trust Flagship or Habitat Action Grant Programs > private land conservation agreements under the Biodiversity Conservation Trust that facilitate the redistribution of intertidal and adjacent habitats that is underway with sea level rise > enforceable undertakings under Environment Protection Authority for the purpose of s 253a Protection of Environment Operations Act 1997 > opportunities to participate in the emerging nature repair market.	DPIRD- Fisheries	DCCEEW, NPWS, CCC, NBC, HSC, KC, THSC, HCC	High (32)	Within 1-4 years	Strategy completed and adopted to guide management of saltmarsh and mangroves.



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Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.E	Entire HNRS	Estuary-Wide	Develop Foreshore Stabilisation and Rehabilitation Guidelines for the HNRS	Develop comprehensive Foreshore Stabilisation and Rehabilitation Guidelines to provide clear, consistent guidance for landowners and managers on best practices for stabilizing and restoring foreshore areas. These guidelines will help balance environmental sustainability, erosion control, and land use requirements, ensuring that foreshore management aligns with ecological and planning objectives. The guidelines will outline appropriate stabilisation treatments and construction techniques suited to different site conditions, promote nature-based solutions where feasible, and support ecological function while mitigating erosion risks. They will also serve as a supporting document to each Council's Development Control Plan (DCP) for foreshore and waterway development, ensuring consistent advice for development proponents across the Hawkesbury-Nepean River System (HNRS). This approach builds on successful models, such as the Lake Macquarie City Council's foreshore management framework, which can serve as a reference point for guideline development. The guidelines should be consistent with the NSW Coastal Design Guidelines 2023, and the NSW Environmentally Friendly Seawalls guidelines (2009).	CCC, NBC, HSC, KC, THSC, HCC	DCCEEW, DPIRD-Fisheries, DPPI-Crown Lands	Medium (14)	Within 4-8 years	Guidelines prepared and endorsed, providing consistent advice across councils.
Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.G	Entire HNRS	Lower Estuary, Broken Bay, Pittwater	Undertake a Planning Proposal to adopt a CVA	Mapping for the Coastal Vulnerability Area (CVA) has not been provided from the RH SEPP, and no such CVA map yet exists for the HNRS. Subsequently, it is the intent of the three Partner Councils who are significantly impacted by coastal hazards (Central Coast Council, Northern Beaches Council, Hornsby Council) to propose, by way of a planning proposal, the adoption of a map indicating a CVA – which may be comprised of a combination of the following hazards across the study area, which are identified in the CM Act: > Beach erosion. > Shoreline recession. > Estuary entrance instability. > Coastal cliff and slope instability. > Coastal inundation. > Tidal inundation. > Erosion and inundation of foreshores caused by tidal waters and the action of waves, including the interaction of those waters with catchment floodwaters. It should be noted that the CM Act requires the consideration of a 100 year planning horizon (considering future climate change impacts). As such, all extents used in defining the CVA should be based on a suitable forward planning horizon, which incorporates the projected effects sea level rise on coastal hazards. The Partner Council's existing coastal hazard mapping and controls within the LEP and DCP will be required to be updated to reflect, and be supplementary to, the proposed CVA mapping.	CCC, NBC, HSC	NPWS, DPPI-Planning and Assessment	High (24)	Within 1-4 years	Planning proposal lodged and mapping incorporated into statutory controls.
Strategy 3: Resilience, Planning, and Adaptation	S3.CMP.H	Entire HNRS	Estuary-Wide	Collaborate with local universities and research institutions to establish a list of research priorities for the Hawkesbury-Nepean River System	This Action would include the Partner Councils collaborating to determine a list of priorities for research project across the Hawkesbury-Nepean River System - and establishing formal connections with local universities and research institutions in order to facilitate research projects.	CCC, NBC, HSC, KC, THSC, HCC	GS LLS	Medium (8)	Within 4-8 years	research priorities identified and partnerships established. Research output is of tangible benefit from a management perspective.



CMP Strategy	S4 ID	Functional Zone	Locality	Action Name	Action Description	Lead	Support	Priority (Score)	Timing	Performance Criteria
Strategy 4: Community & Stakeholder Engagement	S4.CMP.A	Entire HNRS	Estuary-Wide	Design and Implement a Community Engagement and Education Program to support the vision and objectives of the CMP	The action includes the design and implementation of a Community Engagement and Education Program to support the vision and objectives of the CMP. The purpose of the program would be to educate the community regarding the keys threats and risks facing the estuary system, and how they can actively contribute to mitigating these risks and improving the resilience of the coastal zone. It would include the following components, or themes: > Water quality and marine litter > Riparian zone and foreshore management (focusing on foreshore residents) > Ecosystems of the estuary and biodiversity > Aboriginal and European cultural heritage values of the estuary > Coastal hazard risk (focusing on residents impacted by such hazards) > Recreational use impacts (including boating) The program can leverage off the existing community education material developed by the state government (DPIRD-Fisheries, DCCEEW, NPWS, TfNSW) and be implemented across the Hawkesbury River System by the Partner Councils in a strategic and integrated manner.	CCC, NBC, HSC, KC, THSC, HCC	NPWS, TfNSW, GS LLS	High (24)	Within 1-4 years	Program developed, materials produced, and implementation commenced. Improved community awareness of program subject matter.
Strategy 4: Community & Stakeholder Engagement	S4.CMP.B	Entire HNRS	Estuary-Wide	Community education and outreach program for estuary frontage communities	This Action would be a specialised extension of the broader community and stakeholder education program (S4.CMP.01). The purpose of this action is to undertake targeted engagement with private landowners in the Coastal Zone (particularly those with river frontage), in order to help increase their awareness of estuary management issues riverfront residents would be provided with information on best practice for management of the foreshore within their property boundaries – including recommended riparian species, weed identification and management. The program material should leverage off information set out in the NSW Coastal Design Guidelines, and the NSW Coastal Crown Land Guidelines.	CCC, NBC, HSC, THSC, HCC	DCCEEW, GS LLS	High (24)	Within 1-4 years	Program and materials created, and program implemented. Improved community awareness of program subject matter.
Strategy 4: Community & Stakeholder Engagement	S4.CMP.D	Freshwater Tidal Pool	Upper Estuary	Implementing a community-based carp fishing initiative	European Carp pose a serious threat to local ecosystems, degrading water quality and displacing native species. This Action involves implementing a community-based carp fishing initiative - an effective and engaging way to control invasive carp populations in the freshwater sections of the Hawkesbury River System. Such activities not only contribute to the management of this invasive species but also raise public awareness and foster ongoing community involvement in environmental conservation. This could be similar to the "Catch a Carp Day" programs in other estuaries, or even could be modelled on the "Carp to Croc" program implemented by Central Coast Council	CCC, HCC, THSC, HSC	N/A	Low (6)	Opportunistic, within 8-10 Years	Program and materials created, and program implemented.
Strategy 4: Community & Stakeholder Engagement	S4.CMP.E	Entire HNRS	Estuary-Wide	Hawkesbury River Marine Compliance & Education Campaign	A targeted compliance and education campaign will be conducted across the Hawkesbury River to promote best practices within the marine industry and improve estuary health outcomes. This initiative will focus on raising awareness of environmental regulations, sustainable operational practices, and the impacts of pollution, sediment runoff, and habitat disturbance. The campaign will combine proactive education with compliance monitoring, engaging key industry stakeholders such as commercial fishers, boat operators, marina managers, and waterfront businesses. Outreach efforts will include workshops, on-site visits, digital resources, and enforcement where necessary to ensure adherence to environmental guidelines. By fostering industry-wide accountability and knowledge-sharing, the campaign aims to reduce harmful impacts on water quality, aquatic habitats, and biodiversity within the estuary. This will also include the development of a strategy for managing vessel pumpouts across the Hawkesbury River System. This will aim to improve water quality and protect marine ecosystems by planning new pumpout facilities, incentivising oil-absorbent device use and routine pumpout services, and regularly reviewing spill management plans to ensure effective and sustainable boating practices	NBC, CCC, HSC	TfNSW, NSW EPA	Medium (18)	Within 4-8 years	Program and materials created, and program implemented.



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Strategy 5: Estuary & Waterway Health	S5.CMP.A	Entire HNRS	Estuary-Wide	Undertake a coordinated riparian rehabilitation works program across the River System	Implement a targeted riparian rehabilitation program to improve the condition of riparian vegetation and manage the spread and introduction of weeds across the coastal zone. These activities are considered 'Environmental protection works' (EPW) for mapped coastal wetlands and littoral rainforest in accordance with the R&H SEPP, and the Standard Instrument - Principal Local Environmental Plan (2006 EPI 155a). Figure B-1 provides an overview of the potential works areas as identified by the Partner Councils. Figures B-2 onwards provides more local, site specific mapping. These maps include overlays of R&H SEPP Coastal Wetlands and Littoral Rainforest layers, so that areas subject to EPWs are clearly identified. Priority will be given to high-value riparian areas where weed infestations overlap with Threatened Ecological Communities (TECs), as identified using the most current and relevant Plant Community Type (PCT) mapping. The program will adopt a multi-species control strategy, supported by follow-up treatment and revegetation with native species suited to each PCT. Activities will include wetland restoration, weed suppression, and the establishment of resilient native vegetation communities. This program will be coordinated with relevant agencies, including NPWS, to leverage existing systems, datasets, and operational capacity. The approach will focus on achieving resource efficiencies through collaborative planning, shared funding opportunities, and integration with existing on-ground works programs.	CCC, NBC, HSC, HCC	DCCEEW, DPPI-Planning and Assessment, GS LLS, NPWS, KC, THSC,	High (30)	Within 1-4 years	Restoration works successfully implemented.
Strategy 5: Estuary & Waterway Health	S5.CMP.B	Entire HNRS	Estuary-Wide	Continue to support landcare networks across the river system	Landcare groups play a vital role in improving the health of waterways and foreshore environments through volunteer-driven activities. The activities range from litter collection and weed removal through to native planting and surveys of local wildlife. Support for these programs from the participating Partner Council's would in the form of: > Financial and logistical support for Floating Landcare Activities - including the allocation of agreed-upon funding pipelines > Technical support and identification of priority sites and activities > Promotion of Floating Landcare through Council communications channels > Utilising Council networks with existing businesses and chambers of commerce to actively promote Floating Landcare corporate volunteering events and donations	CCC, NBC, HSC, HCC	GS LLS, KC, THSC,	High (24)	Within 1-4 years	Support provided - and associated works undertaken and monitored.
Strategy 5: Estuary & Waterway Health	S5.CMP.C	Middle Estuary	Estuary-Wide	Fencing of riparian foreshores on high risk agricultural lands	Conduct a comprehensive audit of high-risk agricultural locations to identify areas where livestock access to estuaries is prevalent. Develop and implement a targeted program to undertake fencing installation and stabilisation in these critical riparian zones. It would include: > Identify High-Risk Areas: Conduct field surveys and use geographic information systems (GIS) to map high-risk agricultural areas where livestock frequently access riparian zones. > Evaluate Impact: Assess the extent of damage caused by livestock and prioritize sites based on the severity of impact and potential for recovery. > Engage Landowners: Work collaboratively with landowners and stakeholders to secure permissions and support for the fencing installations. > Install Fencing: Carry out the installation of fences in the identified high-risk areas, ensuring minimal disruption to the environment. Sydney Water can provide technical assistance as required.	GS LLS	CCC, HCC, THSC	High (24)	Within 1-4 years	Works undertaken. LLS monitoring of works indicates reduced livestock impacts on waterways at nominated locations.
Strategy 6: Coastal Hazard Resilience	S6.CMP.A	Broken Bay Pittwater	Broken Bay Pittwater	Activate the "Coastal Hazard Emergency Action Sub-Plans" (CZEAS) for each beach as required after storm events	Undertake planning, engagement and emergency works, if appropriate, to manage beach erosion before, during and after storm events in accordance with the Coastal Zone Emergency Action Subplans for the CMP.	CCC, NBC, HSC, NPWS	DCCEEW, NSW SES	High (30)	Within 1-4 years	Plans activated and implemented in a timely manner when needed.



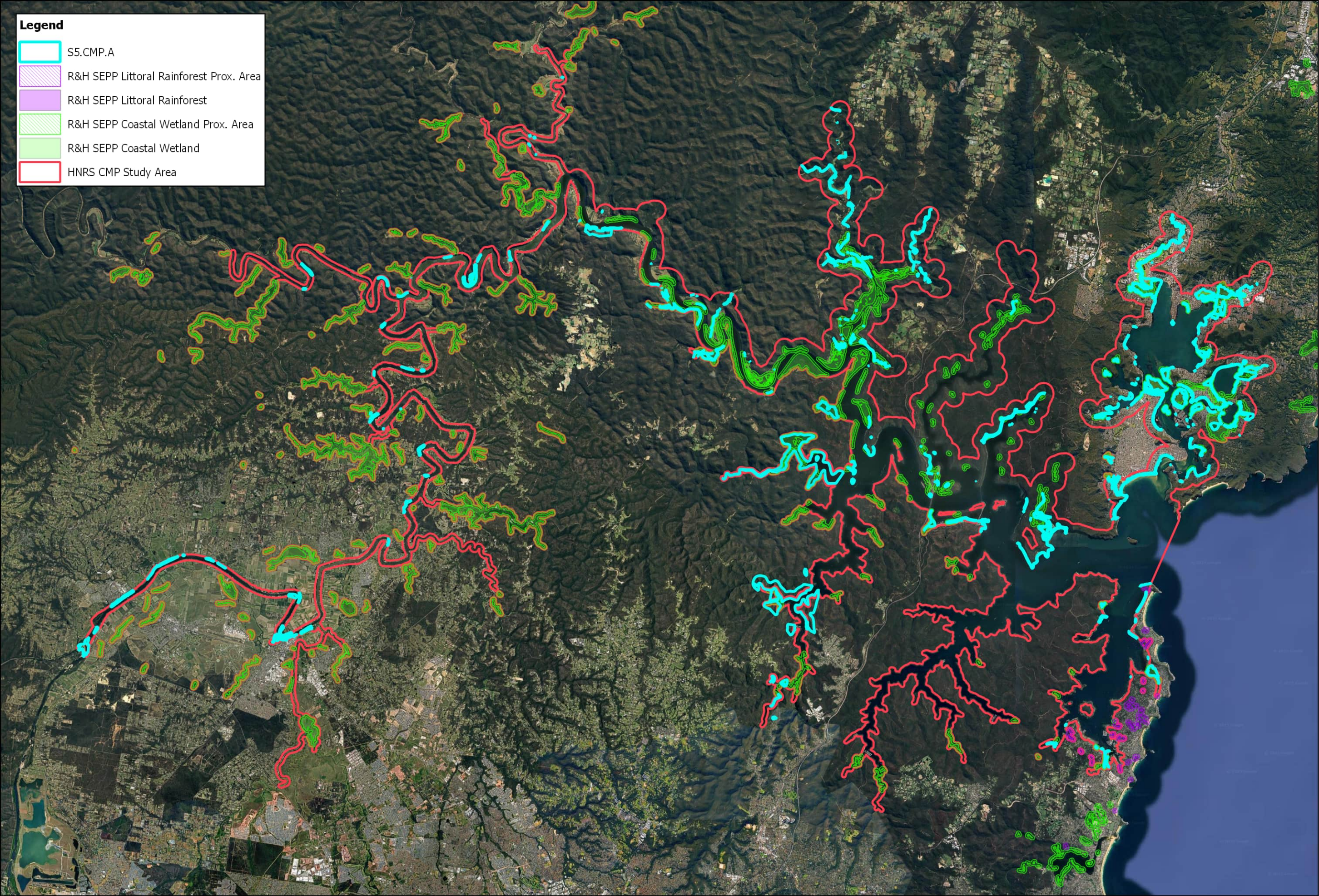
CMP Strategy	S4 ID	Functional Zone	Locality	Action Name	Action Description	Lead	Support	Priority (Score)	Timing	Performance Criteria
Strategy 6: Coastal Hazard Resilience	S6.CMP.B	Entire HNRS	Estuary-Wide	Develop a Tide Alert Calendar Tool for the low lying communities of the river system to encourage citizen science in monitoring tidal inundation	There are numerous areas across the river system that are exposed to a high level of tidal inundation risk (sunny day flooding), with increasing vulnerability to this risk over time due to future sea level rise. As the tides can be predicted many years in advance, this action involves development of a "Tide Alert" Calendar, and a public engagement program. It specifically includes: A) The creation of a Tide Alert Calendar: This would be a simple and practical tool that clearly communicates dates of higher-than-normal high tides to indicate when low-lying land is particularly vulnerable to tidal inundation and coastal flooding. Red-alert tide calendars are highly visual and easily interpreted, and do not require technical expertise or interpretation of large amounts of data or text. B) Public awareness and citizen science: This initiative would focus on public engagement and awareness around the highest red-alert days each year, encouraging citizens to "snap the coast" at the designated time of the high tide and upload the photograph to Councils social media channels or a Council web repository. This kind of public engagement initiative allows both Council and the local community to utilize these red-alert tide days and visualize the impacts rising sea levels may have on their communities in the future.	CCC, NBC, HSC,	DCCEEW	Medium (12)	Within 4-8 years	Calendar developed, and communication system implemented - and considered to be of value by the Partner Councils and key impacted communities.
Strategy 7: Social and Recreational Amenity	S7.CMP.A	Entire HNRS	Estuary-Wide	Prepare and implement an Environmental Tourism Strategy for the Hawkesbury River System	Prepare and implement a regional environmental tourism strategy and plan for the Hawkesbury River System. The strategy should promote sustainable tourism experiences that showcase the region's rich cultural heritage, ecological values, and natural landscapes. This would include: > Stakeholder Engagement: Meetings, workshops with relevant state government agencies, and First nations Groups > Review of Existing Programs: Desktop review, site visits, analysis of current tourism and heritage activities > Market & Opportunity Assessment: Identification of new tourism opportunities, market demand, regional gaps > Strategy & Plan Development: Drafting the strategy, incorporating feedback, producing final deliverables	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	NPWS First Nations Groups	Low (5)	Opportunistic, within 8-10 Years	Strategy completed, and implementation commenced.
Strategy 8: Cultural Heritage Protection	S8.CMP.A	Entire HNRS	Estuary-Wide	Engage First Nations teams where appropriate to undertake bush regeneration works including weeding and revegetation	To enhance the involvement of First Nations peoples in the stewardship and management of the estuary system and its catchment by building strong, collaborative partnerships with First Nations Ranger Groups and Bush Regeneration Teams. This approach aims to integrate traditional knowledge and contemporary conservation practices for sustainable environmental management. This would include: > Identify key First Nations Ranger Groups and Bush Regeneration Teams that are active in the region. Initiate dialogues to understand their perspectives, goals, and areas of expertise. > Engage teams where appropriate to undertake bush regeneration works including weeding and revegetation > Provide training and capacity-building opportunities to First Nations Rangers and community members. This can include workshops on estuary management, ecological monitoring, and restoration techniques.	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	GS LLS, NPWS	High (24)	Within 1-4 years	Quantifiably increased role for FN Groups in coastal management across the LGA
Strategy 8: Cultural Heritage Protection	S8.CMP.B	Entire HNRS	Estuary-Wide	Further develop and implement community education programs for awareness and appreciation of Indigenous cultural heritage	Develop and implement a program of Indigenous cultural education activities along the HNRS. The objective is to increase community awareness and appreciation of the Indigenous cultural heritage values of the estuary and Indigenous management practices along the Hawkesbury River. This Action would be a specialised extension of the broader community and stakeholder education program (S4.CMP.01).	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	GS LLS, NPWS	High (24)	Within 1-4 years	Program and materials created, and program implemented.
Strategy 8: Cultural Heritage Protection	S8.CMP.C	Entire HNRS	Estuary-Wide	Support cultural education and awareness of estuary health issues for First Nations Groups	Provide funding and technical support for the development of a coordinated program of cultural education activities that are designed to enable local First Nations groups to further their understanding and awareness of key estuary health issues and associated management approaches. The objective of these activities are to increase First Nations participation in catchment and estuary management.	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	GS LLS, NPWS	High (24)	Within 1-4 years	Support provided and considered to be of tangible benefit to FN Groups



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Strategy 8: Cultural Heritage Protection	S8.CMP.D	Entire HNRS	Estuary-Wide	Develop a Hawkesbury heritage central display	Develop a mobile exhibition for the display of artefacts, models, and other items that educates the community and tourists about the maritime heritage of the river. The exhibition will be designed to travel between locations for public display. The mobile format will enable the exhibition to be hosted at a variety of venues — such as community centres, libraries, schools, and local events — increasing its accessibility and reach. It will allow for seasonal or themed displays, incorporate interactive elements, and be adaptable to different audiences. This approach will maximise opportunities for community engagement, foster pride in local heritage, and promote the river's historical significance to both residents and visitors	CCC, NBC, HSC, THSC, HCC	First Nations Groups, KC,	Low (5)	Opportunistic, within 8-10 Years	Display developed.
Strategy 8: Cultural Heritage Protection	S8.CMP.E	Entire HNRS	Estuary-Wide	Identify opportunities for, and undertake cultural land management practices, including cultural burning	The Partner Council's should engage with local First Nations groups to identify opportunities for, and undertake cultural practices (including cultural burning) across the river catchment. This would involve the Partner Councils working closely with local First Nations Groups to develop and implement appropriately. This action can link with existing technical resources regarding cultural land management practices currently used by NPWS, NWS RFS, and GS LLS - and liaising with these agencies to technical advice communications regarding activities.	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	NPWS, RFS, GS LLS,	Medium (10)	Within 4-8 years	Quantifiably increased role for FN Groups in coastal management across the LGA
Strategy 8: Cultural Heritage Protection	S8.CMP.F	Entire HNRS	Estuary-Wide	Engage with local First Nations Groups to protect and preserve cultural heritage items across the coastal zone	This action involves engaging with the relevant First Nations Groups to protect and preserve Aboriginal Cultural Heritage (ACH) items across the Hawkesbury River System. It is anticipated that there would be four main tasks for this action: > Consultation with the relevant First Nations Groups. > A literature review of existing ACH databases (such as AHIMS) and existing cultural heritage plans > An Aboriginal cultural heritage survey of the legally defined coastal zone, which should include field work, and recording of cultural heritage sites (such as middens sites) and detailed documentation of findings. > The development and prioritisation of local, site specific management plans for protection and preservation of sites exposed to coastal hazard risk.	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	NPWS	High (30)	Within 1-4 years	Local protection actions identified and implemented.
Strategy 8: Cultural Heritage Protection	S8.CMP.G	Entire HNRS	Estuary-Wide	Identify locations for cultural connections across the HNRS	Identify, map, and promote key locations across the HNRS that support cultural connections – including opportunities for gathering, knowledge sharing, and strengthening the interrelationship of ideas, people, and Country. This may include locations of cultural significance aligned with known songlines or other important cultural pathways. Key elements include: > Engage with Traditional Custodians to identify culturally significant places, especially those already mapped or emerging from projects such as the Wisemans Ferry cultural mapping initiative. > Focus on public land where opportunities exist for culturally respectful access and use – including Council-managed Crown Land subject to Plans of Management (PoMs). > Explore the use of these locations for cultural gathering places, yarning circles, interpretive signage, art installations, or ceremonial activities, where appropriate.	First Nations Groups, CCC, NBC, HSC, KC, THSC, HCC	NPWS	High (24)	Within 1-4 years	Connection areas identified and implemented.

Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area



Data sources:
Contains SIXMAPS Information © State of NSW 2025

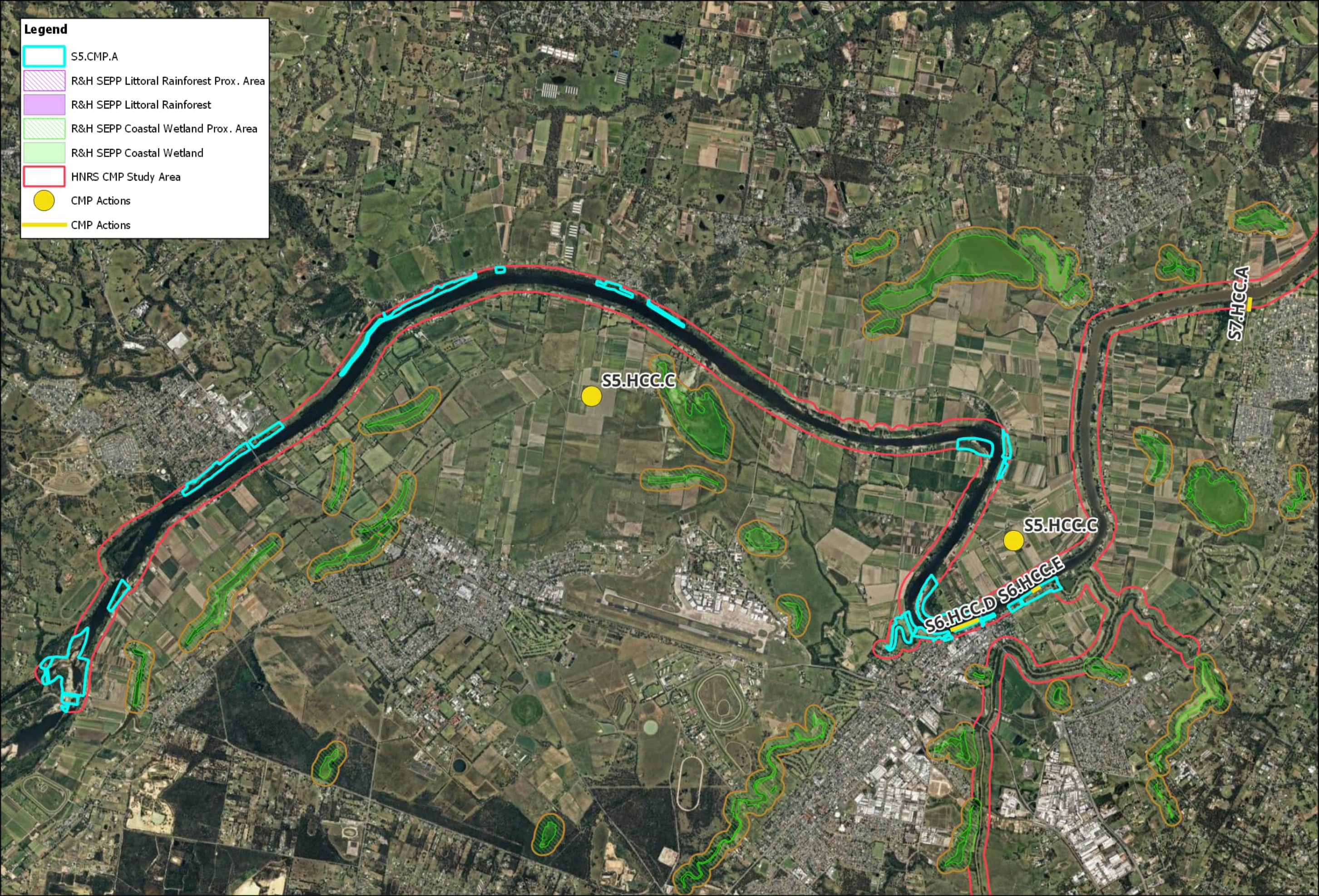
0 2.5 5 km

Figure B1



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Data sources:
Contains SIXMAPS Information © State of NSW 2025

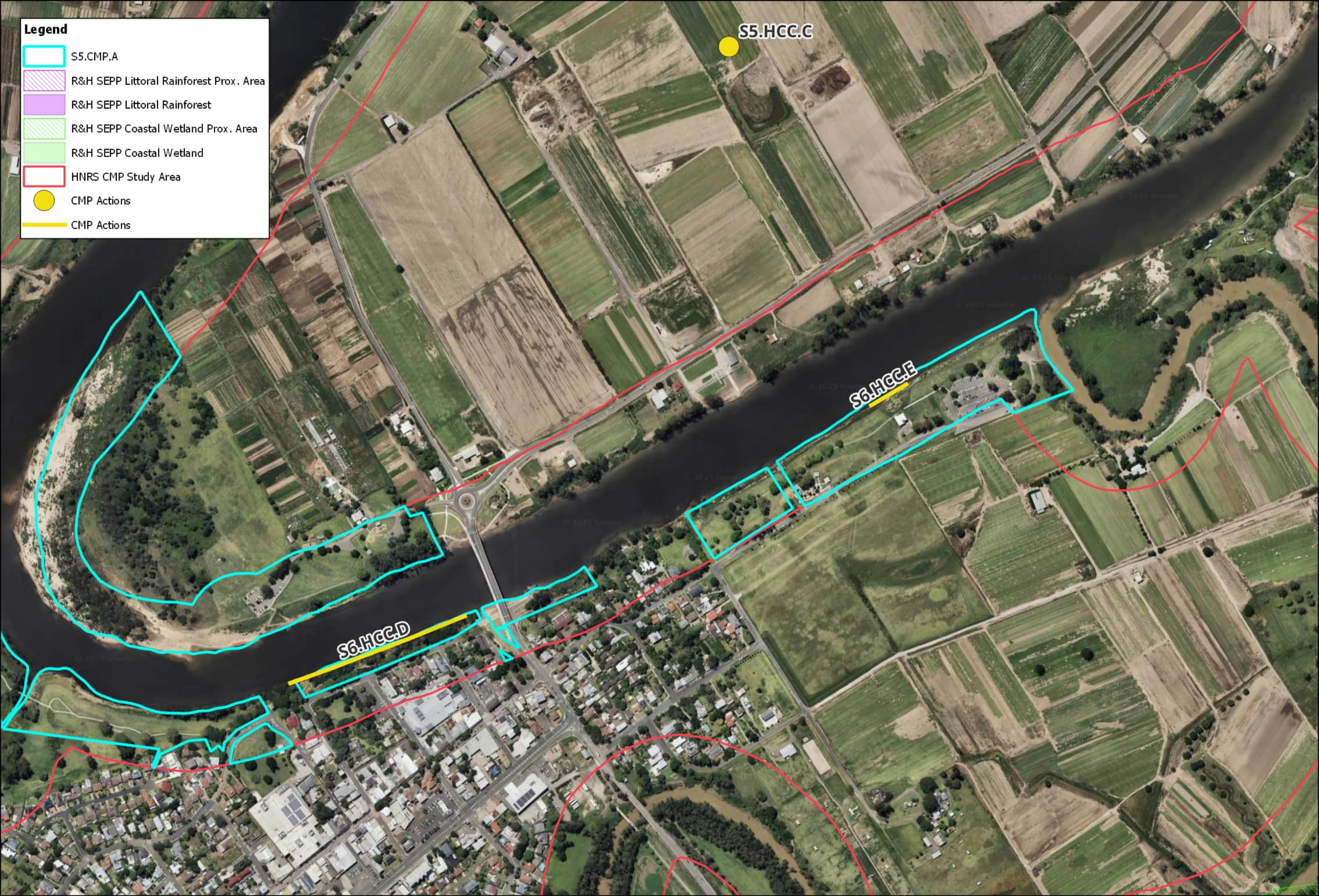


Figure B2



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Data sources:
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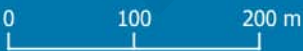
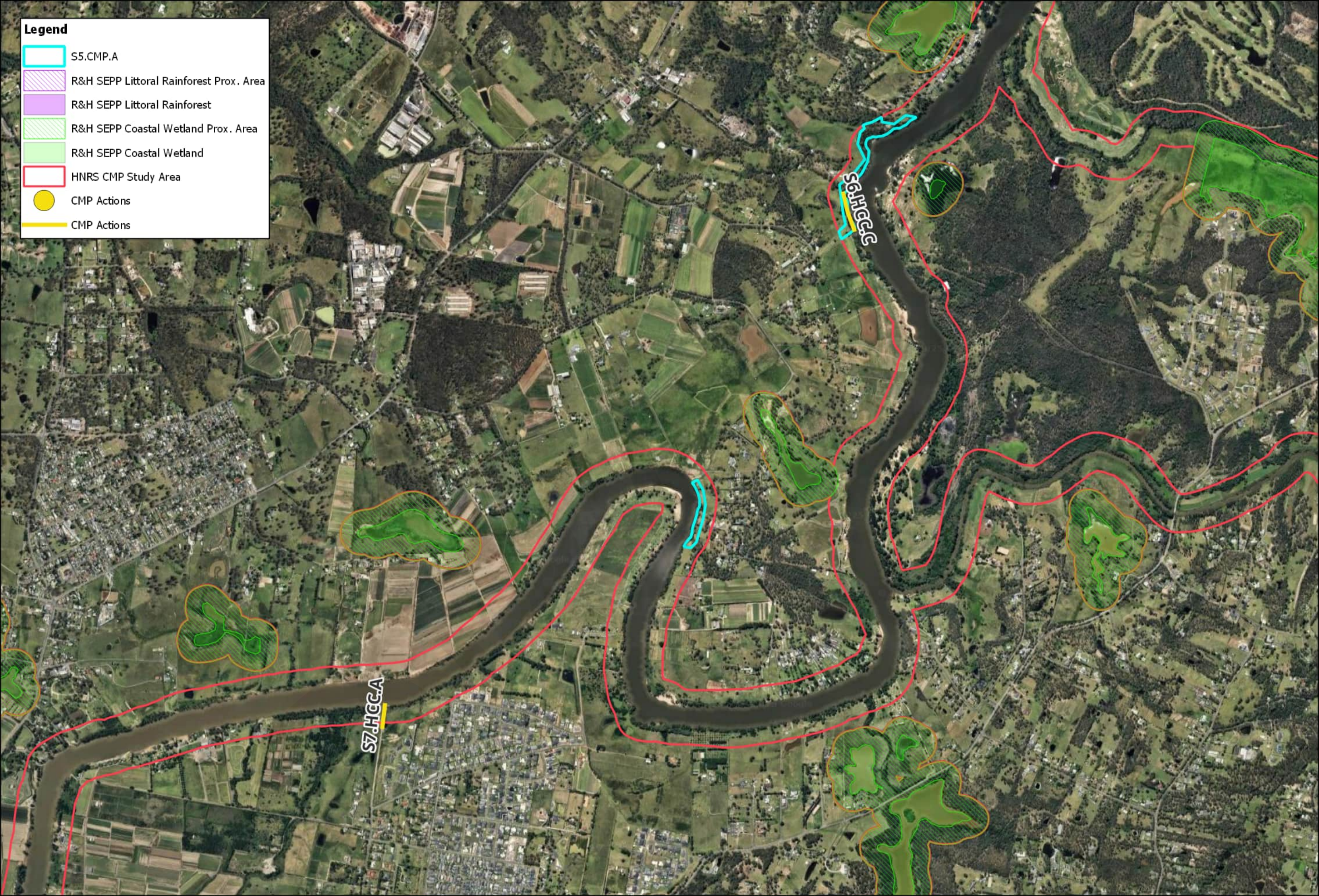


Figure B3



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

S6.HCC.B



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B6





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

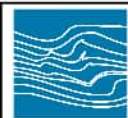
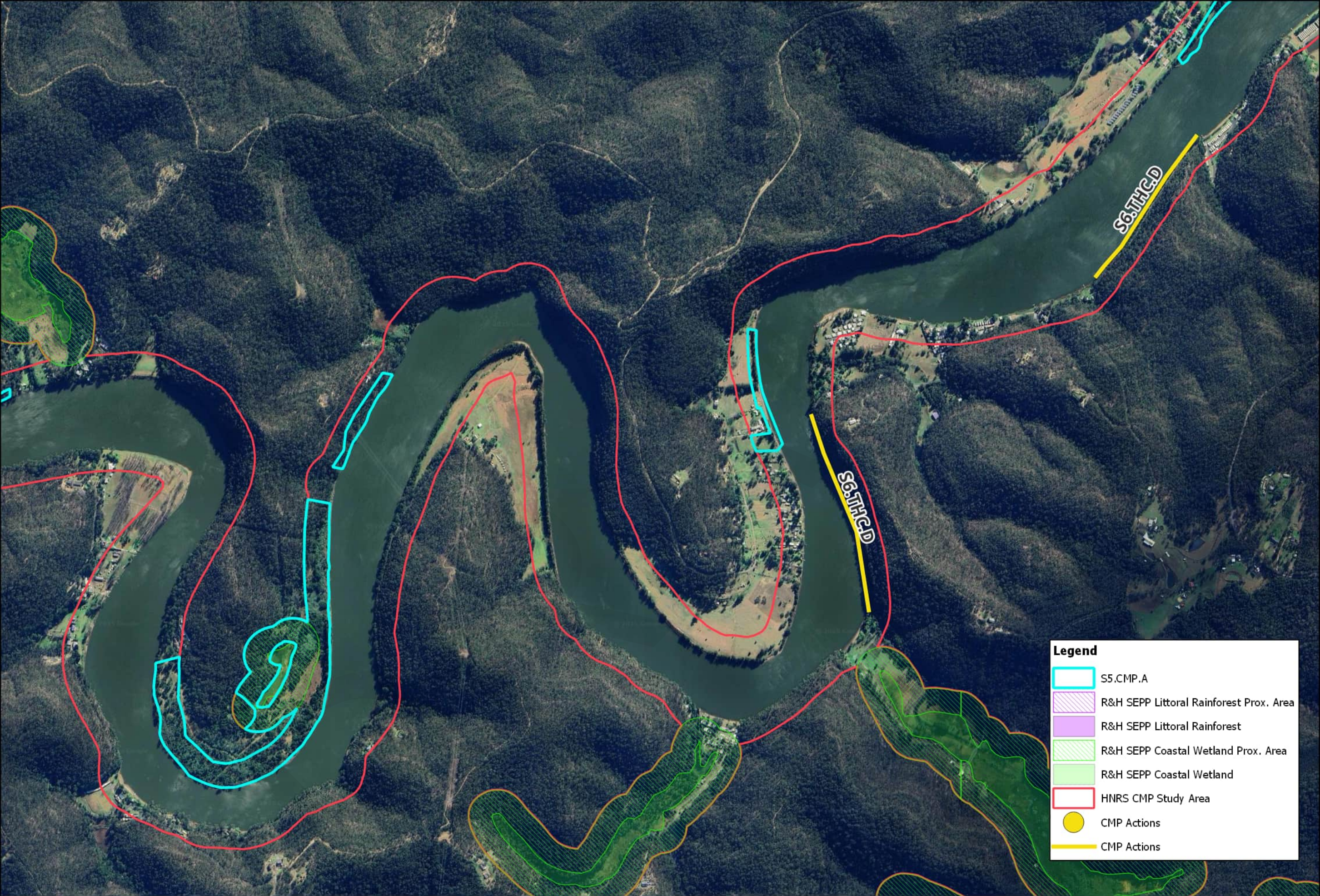


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B7





Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

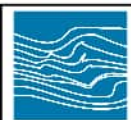
Figure B8





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

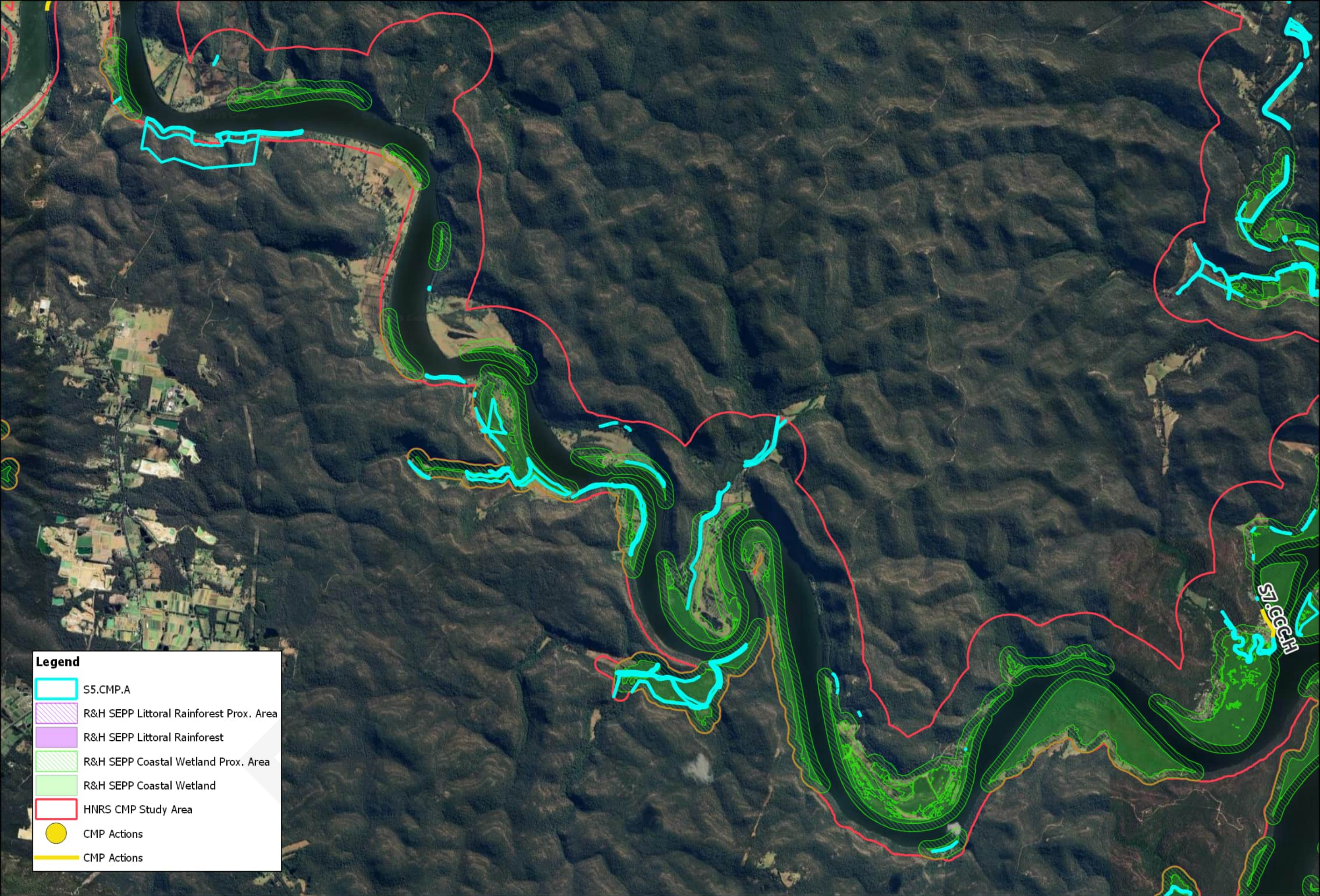


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

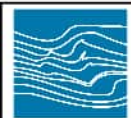
Figure B9





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

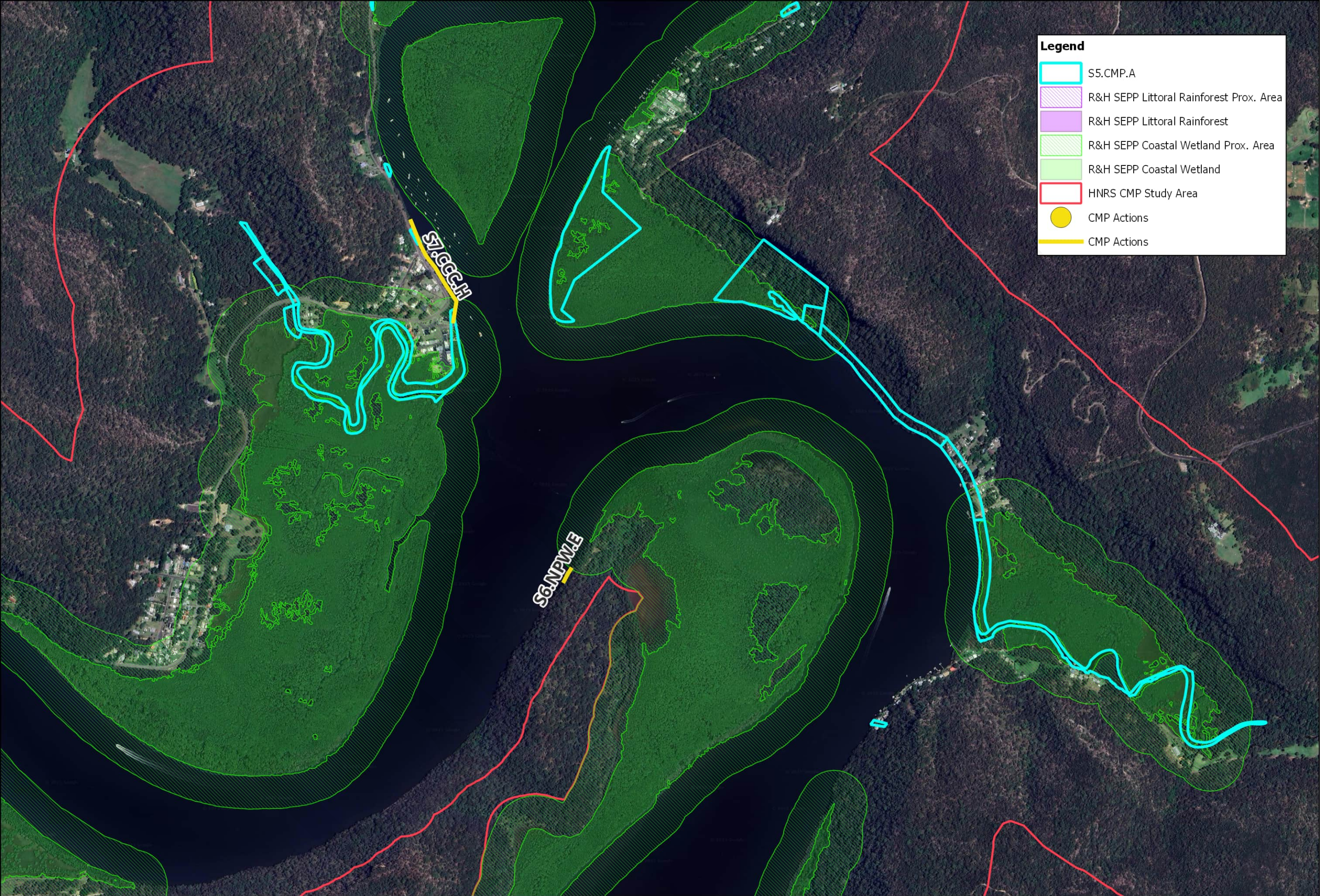


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 1 2 km

Figure B10





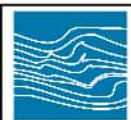
Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Legend

-  S5.CMP.A
-  R&H SEPP Littoral Rainforest Prox. Area
-  R&H SEPP Littoral Rainforest
-  R&H SEPP Coastal Wetland Prox. Area
-  R&H SEPP Coastal Wetland
-  HNRS CMP Study Area
-  CMP Actions
-  CMP Actions



Data sources:
Contains SIXMAPS Information © State of NSW 2025



Figure B12





Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B13





Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B14



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



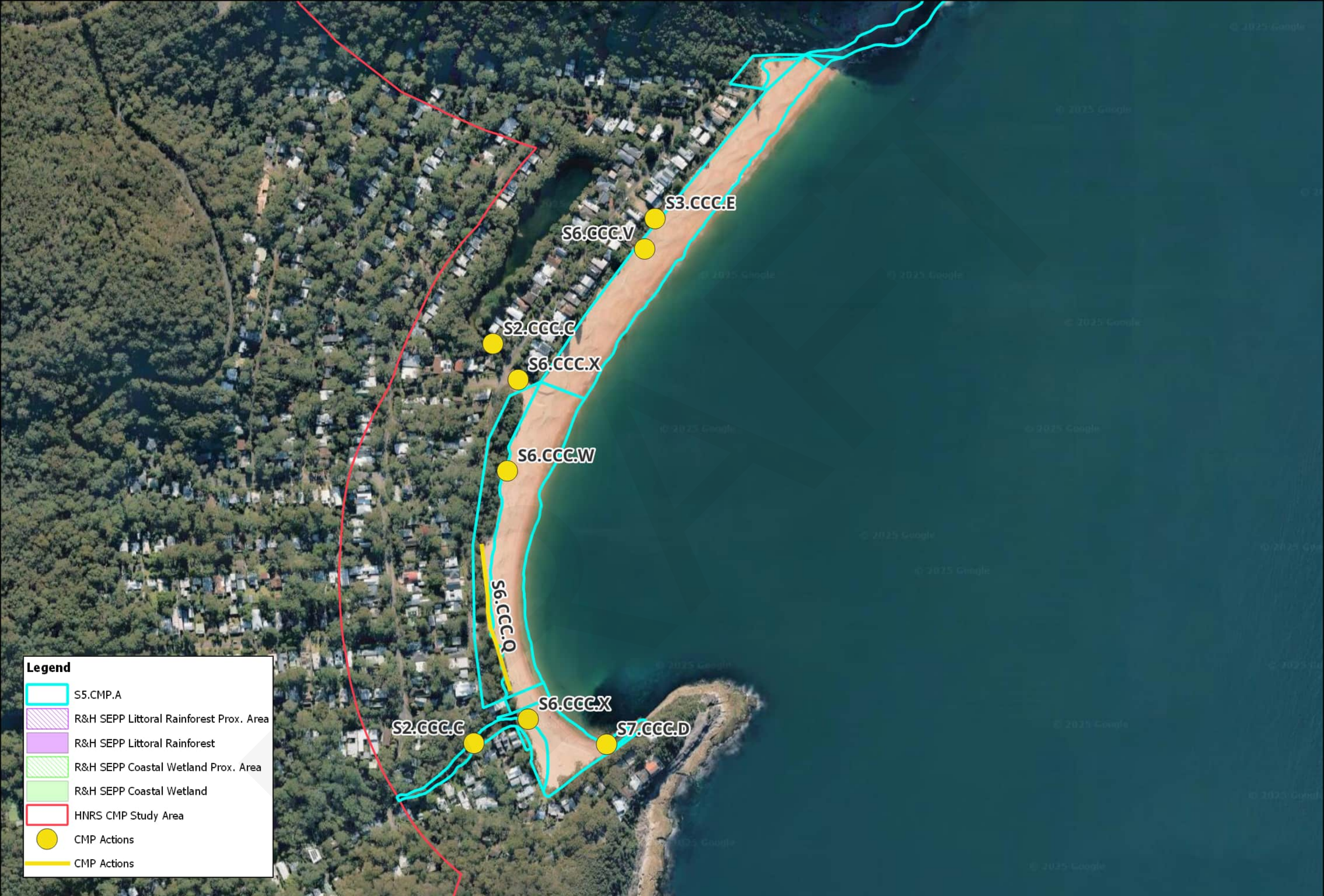
Data sources:
Contains SIXMAPS Information © State of NSW 2025



Figure B15

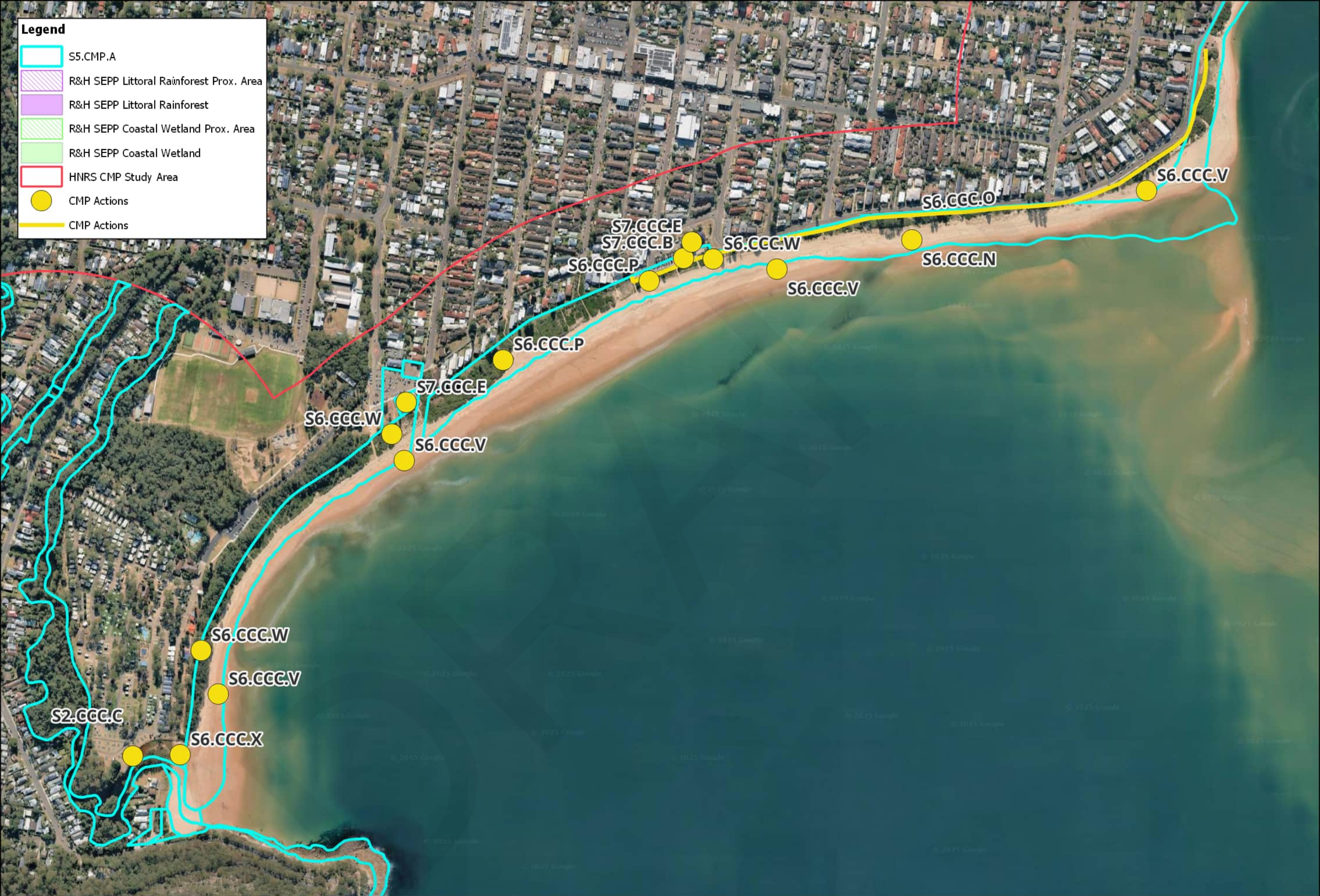






Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

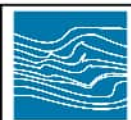


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B18



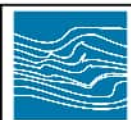
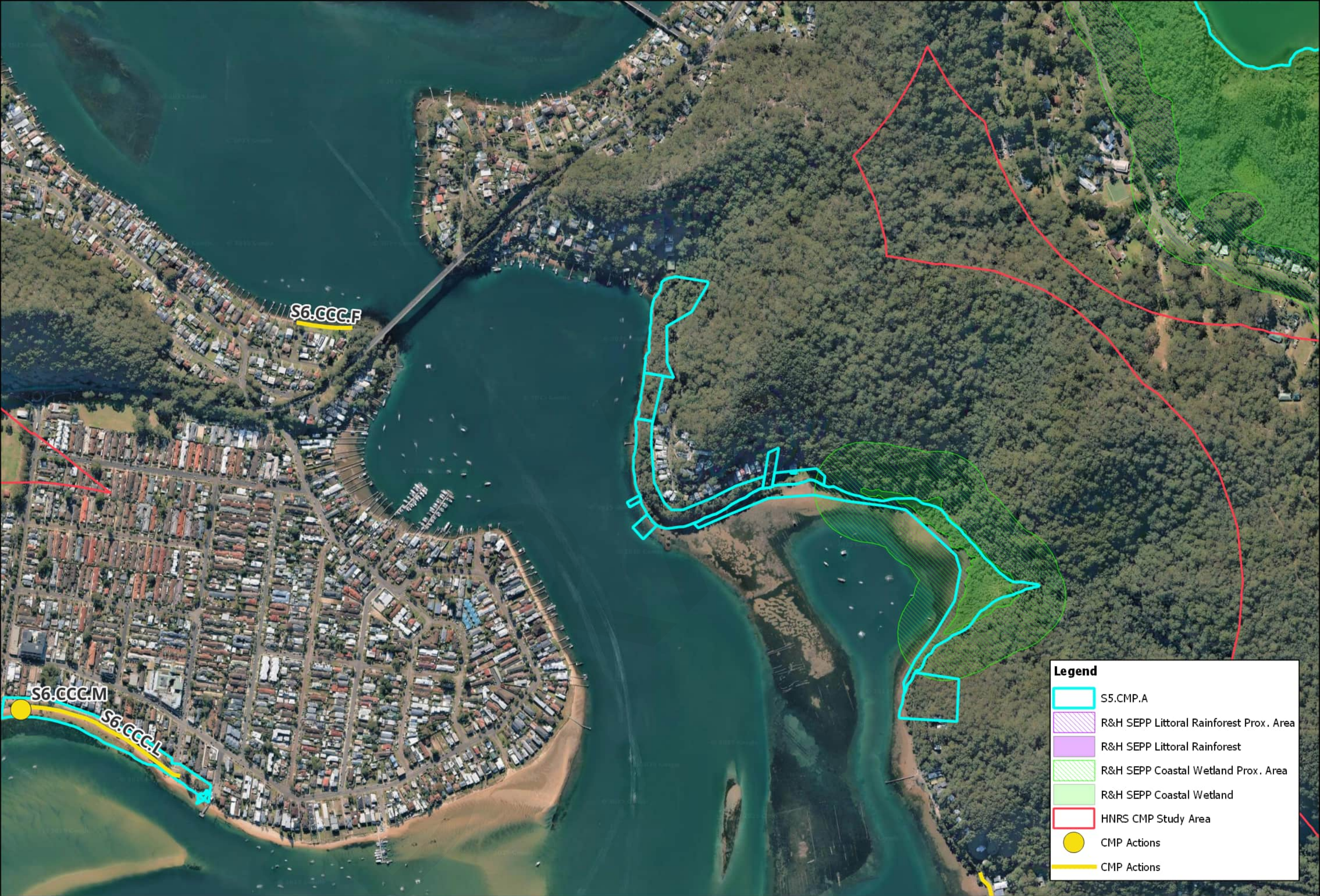


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B19





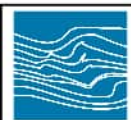
Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B20



2025-09-19T19:43:36.070



Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B21



2025-09-19T19:43:53.779

Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

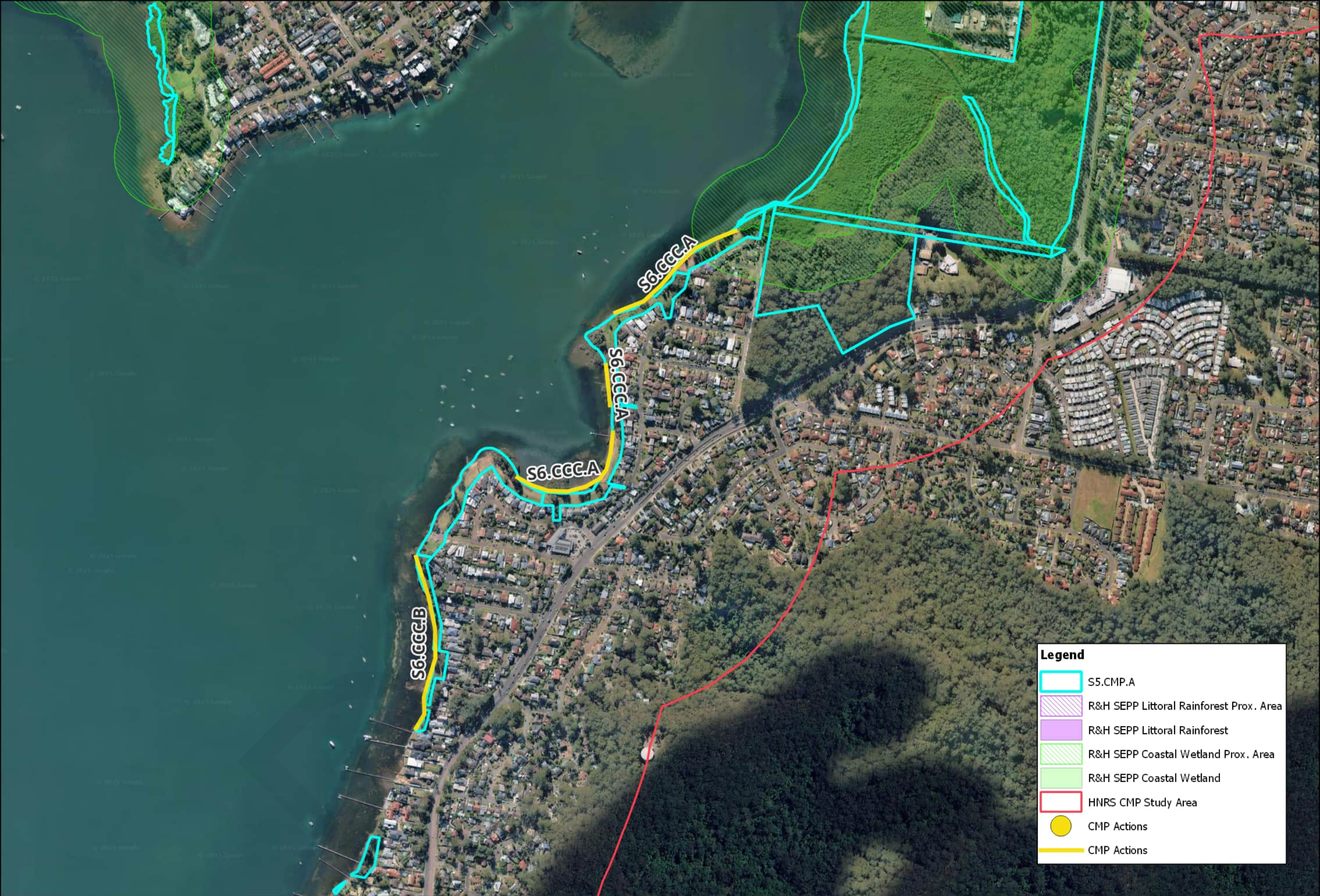


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B22



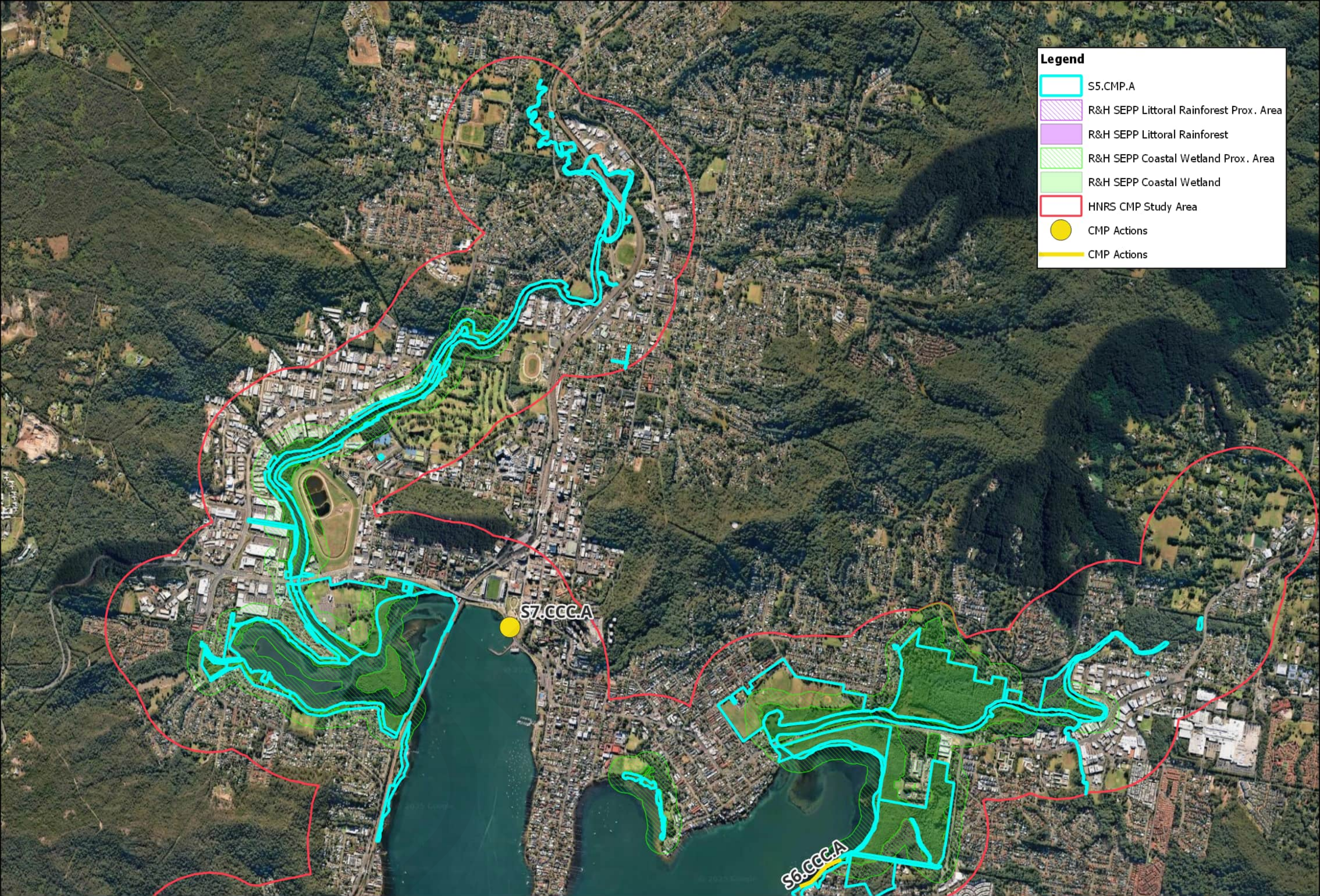


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 100 200 m

Figure B23





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 1 2 km

Figure B24



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

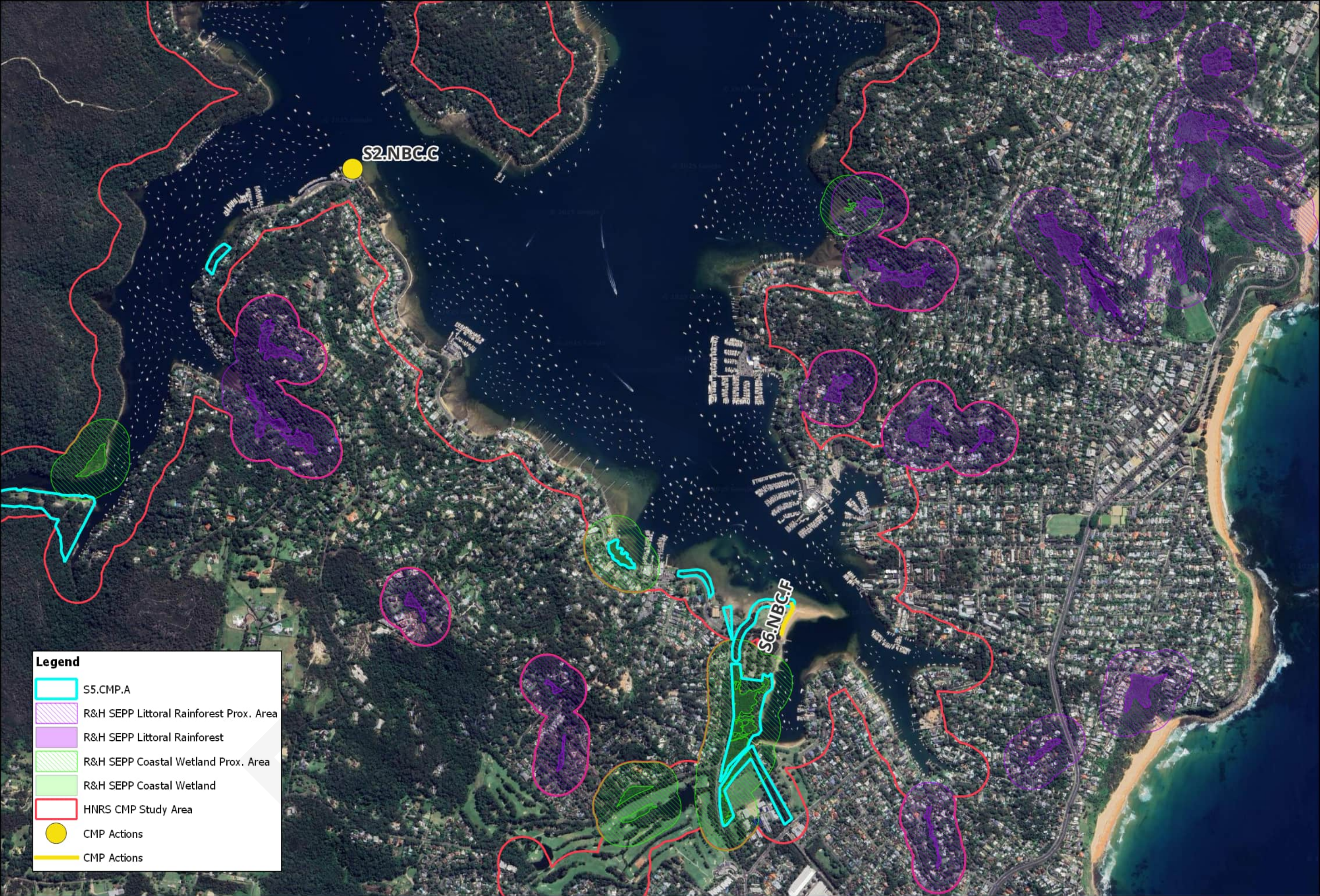


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 250 500 m

Figure B27



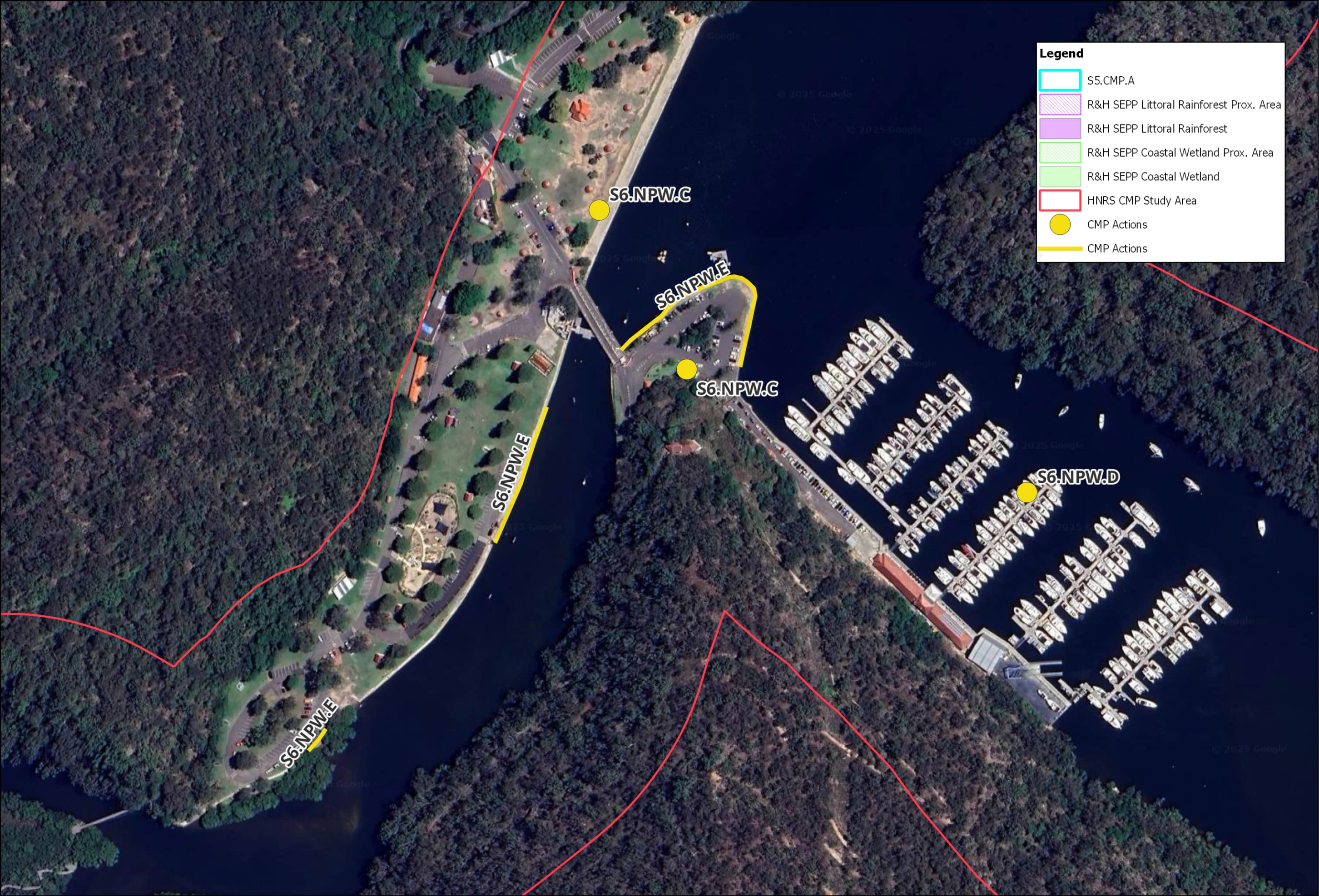


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 250 500 m

Figure B28





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

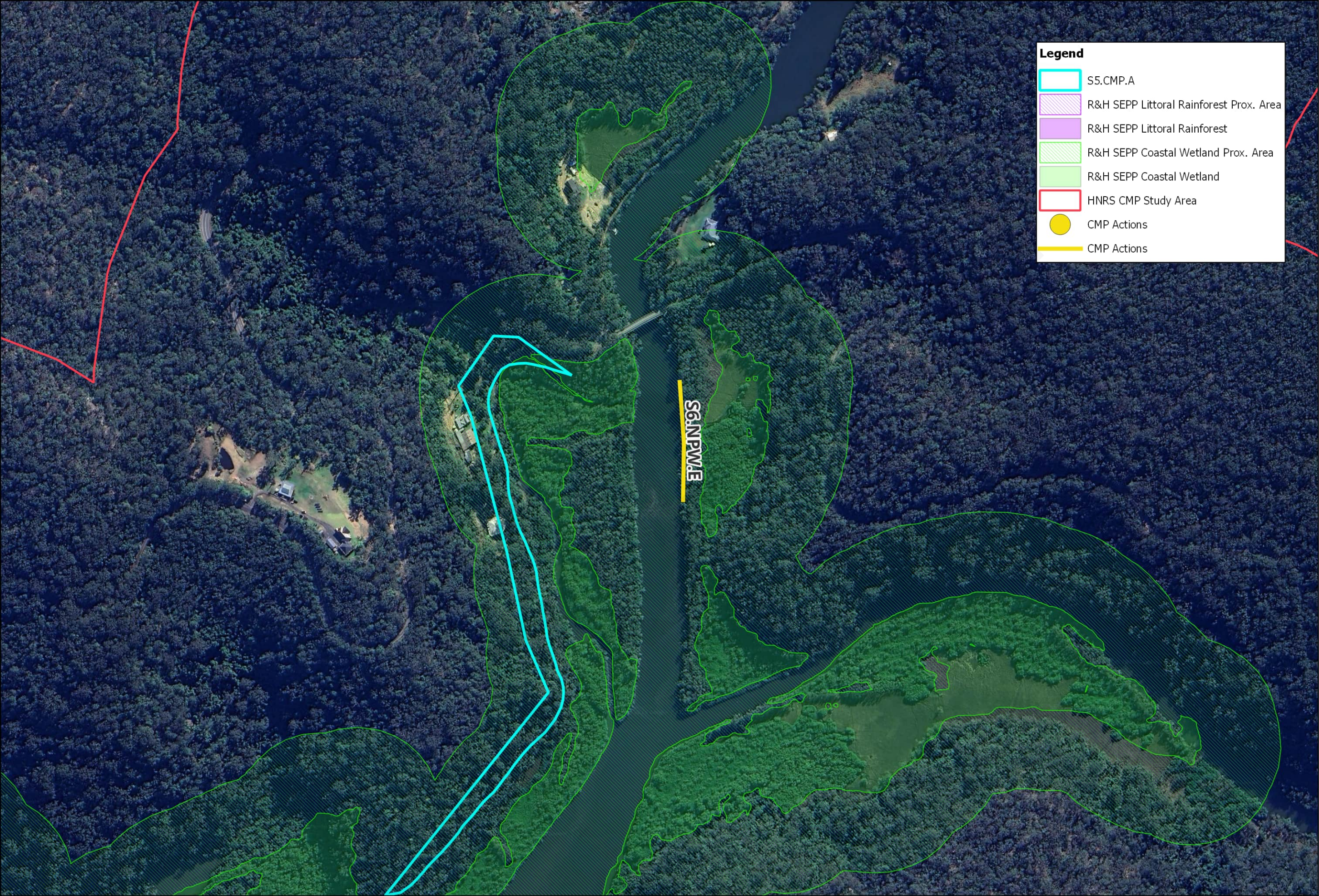


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 50 100 m

Figure B29





Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions

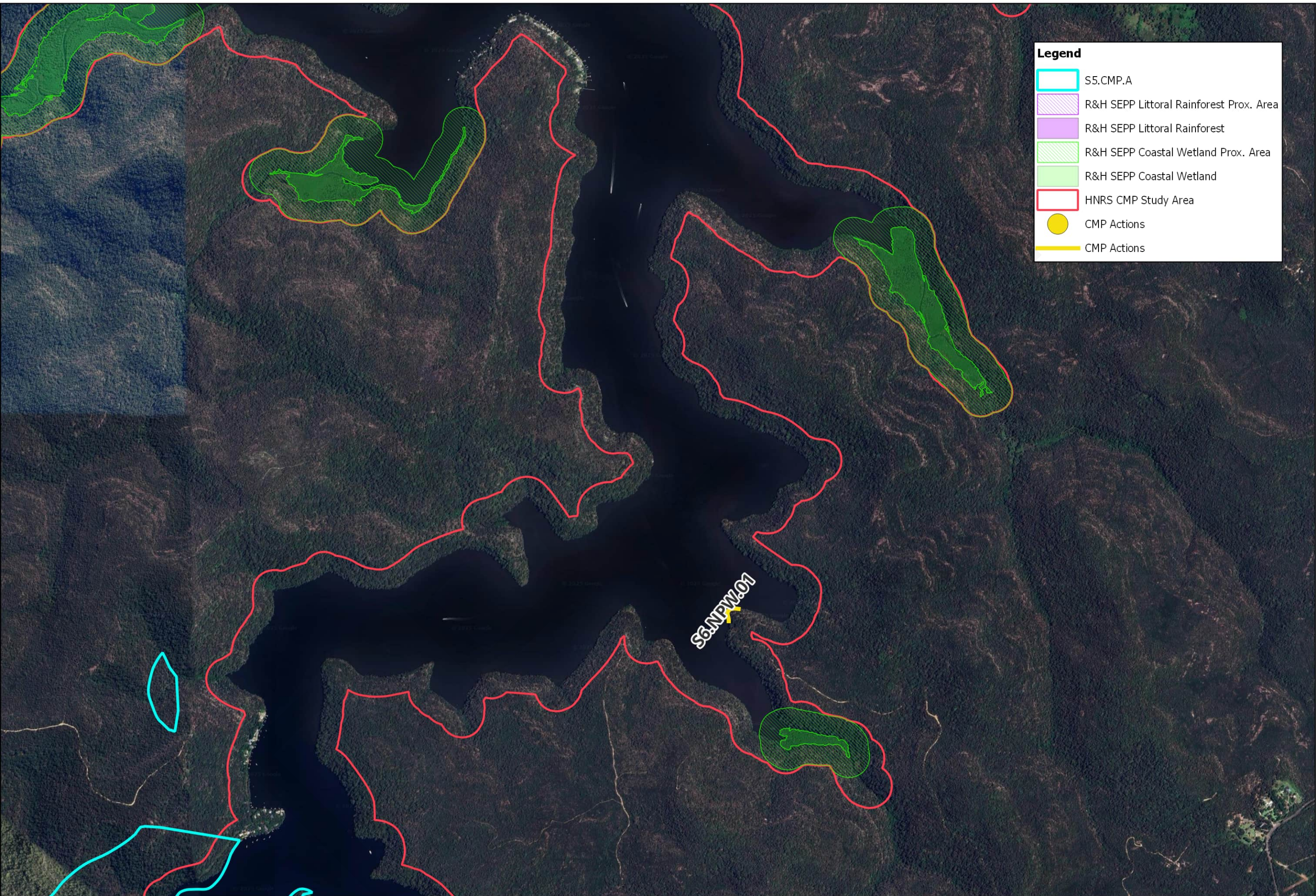


Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 250 500 m

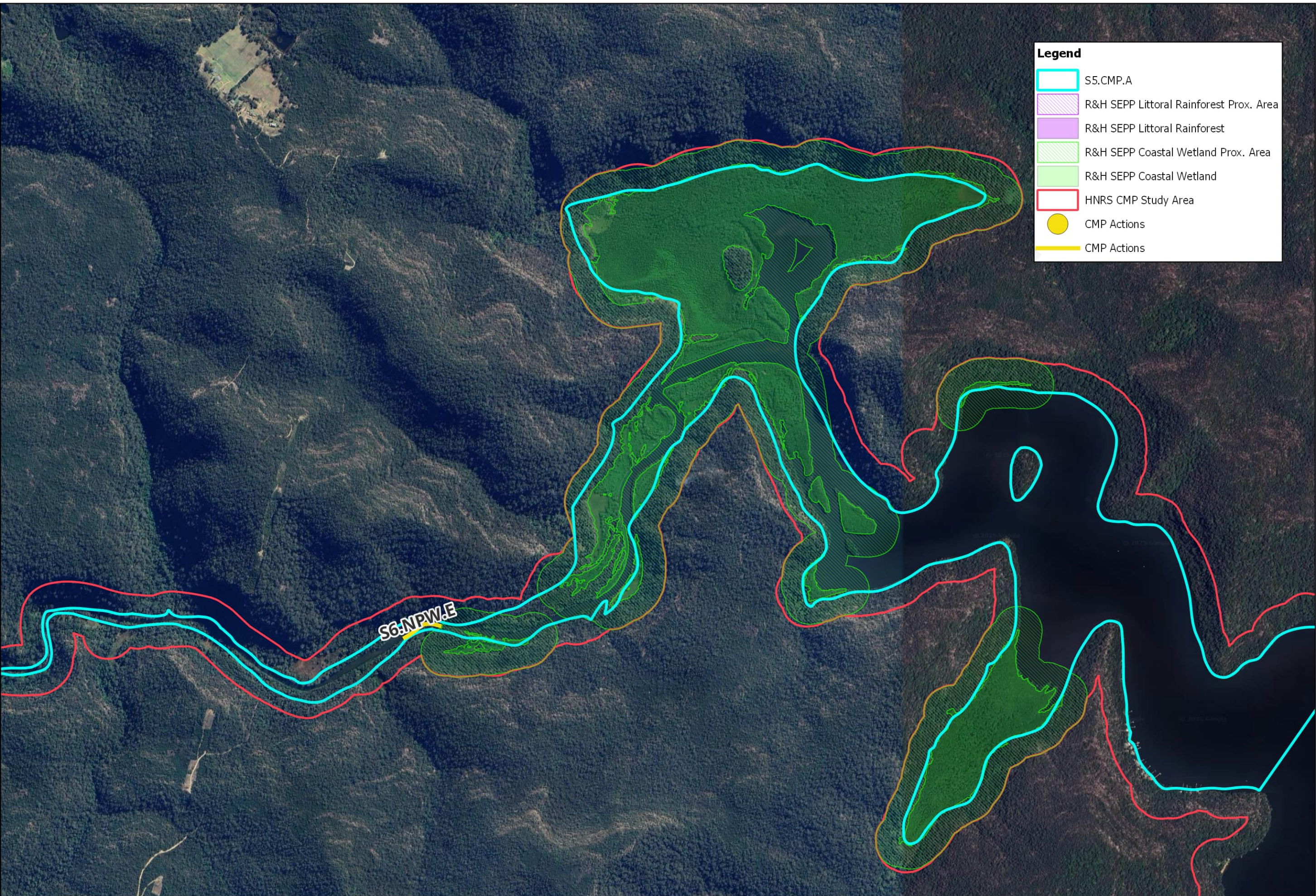
Figure B30





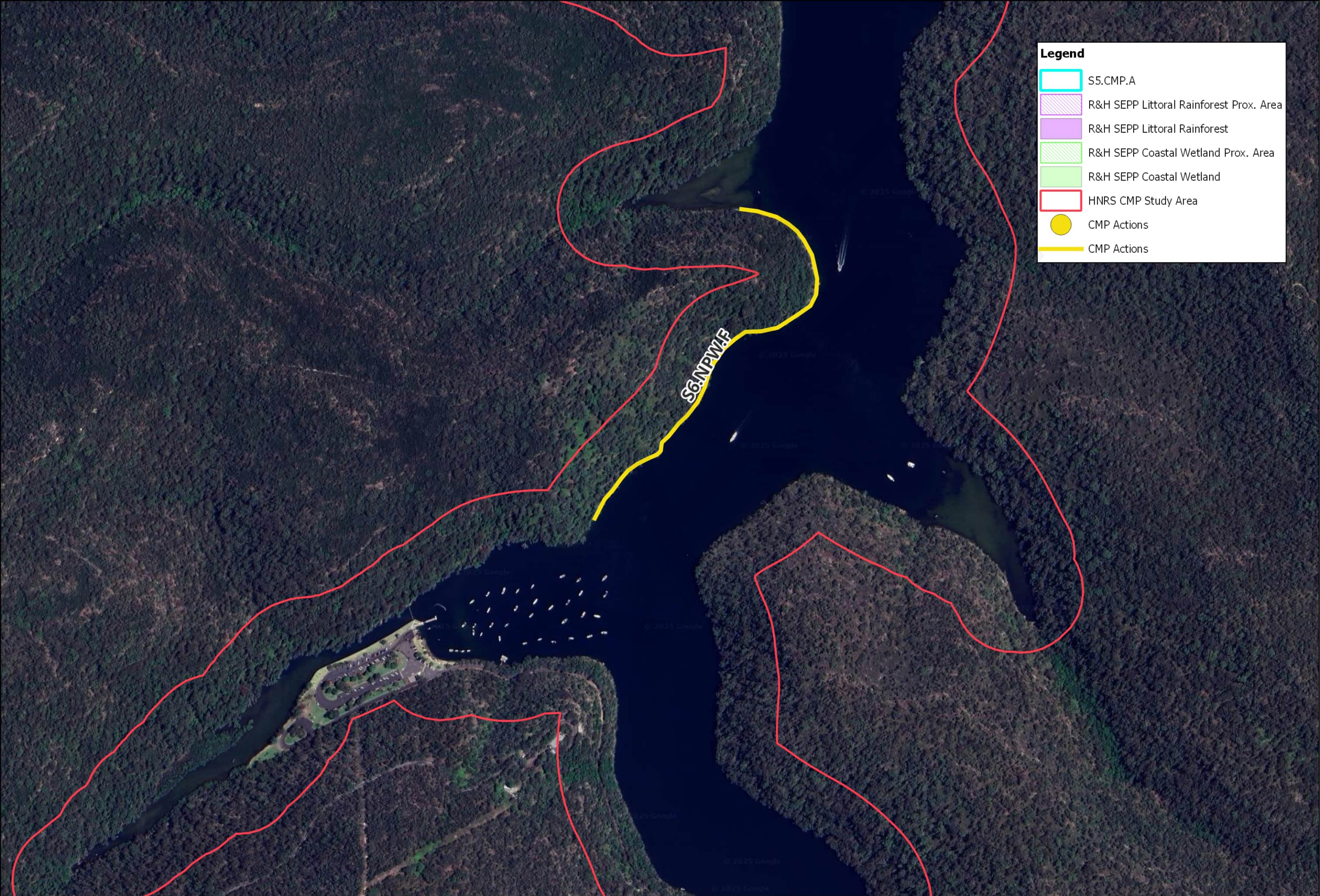
Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Legend

- S5.CMP.A
- R&H SEPP Littoral Rainforest Prox. Area
- R&H SEPP Littoral Rainforest
- R&H SEPP Coastal Wetland Prox. Area
- R&H SEPP Coastal Wetland
- HNRS CMP Study Area
- CMP Actions
- CMP Actions



Data sources:
Contains SIXMAPS Information © State of NSW 2025

0 50 100 m

Figure B33

