

Table for Sydney Workshop

What are the main impacts / vulnerability in your sector / area / ecosystem?

Sector	Geographic Area	Ecosystem	Impacts	Ideas to manage	Adaptation Research	Impediment
Multi-tenure (coastal & estuarine)	<ul style="list-style-type: none"> • East Coast 	<ul style="list-style-type: none"> • Coastal/ Estuarine communities (eg. littoral rainforests) 	<ul style="list-style-type: none"> • Retracting coastline impacting EECs 	<ul style="list-style-type: none"> • Purchase land for spread/ revegetation • Revegetation • Water reconnection/ reinstating 	<ul style="list-style-type: none"> • Feasibility • Which species • Engineering solutions 	<ul style="list-style-type: none"> • Technical expertise vs shysters' • Money
Multi-tenure (coastal & estuarine)	<ul style="list-style-type: none"> • East Coast 	<ul style="list-style-type: none"> • Coastal/ Estuarine communities (eg. littoral rainforests) 	<ul style="list-style-type: none"> • Retracting coastline impacting EECs 	<ul style="list-style-type: none"> • Adapt land use options 	<ul style="list-style-type: none"> • Risk assessment • When to act 	<ul style="list-style-type: none"> • Tricky nature of solution (some places) • Community acceptance
National Parks	River areas	Floodplains, forests and woodlands	<ul style="list-style-type: none"> • Increased drought (flows decline) 	<ul style="list-style-type: none"> • Flow capability influenced by dams/ infrastructure management 	<ul style="list-style-type: none"> • When to act 	<ul style="list-style-type: none"> • Broader community acceptance – competing use (consumption vs conservation) infrastructure

			<ul style="list-style-type: none"> • Decrease in groundwater availability 	<ul style="list-style-type: none"> • Manage competition for use 	<ul style="list-style-type: none"> • Linkages between groundwater and surface hydrology (recharge) 	<ul style="list-style-type: none"> • Political will
Multi-sectoral	<ul style="list-style-type: none"> • Eastern Ranges 	<ul style="list-style-type: none"> • Mountains 	<ul style="list-style-type: none"> • Rainfall distribution 	<ul style="list-style-type: none"> • Protect 'adaptation landscapes' 	<ul style="list-style-type: none"> • Refugia 	<ul style="list-style-type: none"> • Accuracy in models
		<ul style="list-style-type: none"> • Montane 	<ul style="list-style-type: none"> • Drying and moisture availability influencing fire 	<ul style="list-style-type: none"> • Fire hazard management 	<ul style="list-style-type: none"> • Appropriate fire regimes 	<ul style="list-style-type: none"> • Mixed & conflicting values for protection
		<ul style="list-style-type: none"> • Montane 	<ul style="list-style-type: none"> • Abundance and distribution of feral species 	<ul style="list-style-type: none"> • Biodegraded control mechanisms 	<ul style="list-style-type: none"> • Vectors 	<ul style="list-style-type: none"> • Length of time involved in guaranteeing likelihood collateral damage
		<ul style="list-style-type: none"> • Montane 	<ul style="list-style-type: none"> • Rainfall rather than snow 	<ul style="list-style-type: none"> • Focus on the more common, 	<ul style="list-style-type: none"> • Adaptation needs of common 	<ul style="list-style-type: none"> • Sheer number of species and

				montane ecosystems	species	possible variables to consider
All	All	All	All	All	<ul style="list-style-type: none"> • Enhancing community willingness 	<ul style="list-style-type: none"> • Likelihood of being able to target message as diversely as needed. • Battling the legacy of other poor “sales” job in the past.
National Parks	<ul style="list-style-type: none"> • Eastern Escarpment 	<ul style="list-style-type: none"> • Rainforests 	<ul style="list-style-type: none"> • Loss of refuge areas on mountain tops 	<ul style="list-style-type: none"> • Habitat enhancement • Manage interspecific competition • Translocation 	<ul style="list-style-type: none"> • Genetic variability • Understand biology 	<ul style="list-style-type: none"> • No where to retreat to • Likely to be lost in the long-term, overall so difficult to prioritise high enough for action
			<ul style="list-style-type: none"> • Changes in weed invasion 	<ul style="list-style-type: none"> • Identify priority areas to manage 	<ul style="list-style-type: none"> • Linking range expansion of weeds • New species invasion 	<ul style="list-style-type: none"> • Money

			<ul style="list-style-type: none"> • Fire regime changes 	<ul style="list-style-type: none"> • Institute protective regimes 	<ul style="list-style-type: none"> • Increased research into species and veg. community responses 	
	<ul style="list-style-type: none"> • Sydney region 	<ul style="list-style-type: none"> • Estuaries 	<ul style="list-style-type: none"> • Sea level • Loss of seagrass, mangroves and saltmarshes • Storm intensity <ul style="list-style-type: none"> ➤ Pollution ➤ velocity • Feral animals 	<ul style="list-style-type: none"> • Urban infrastructure planning • Purchase waterfront land • Appropriate buffer zones • WSUD ?? 	<ul style="list-style-type: none"> • Modelling to show where communities retreat to 	<ul style="list-style-type: none"> • Cost of obtaining land • Cost of implement WSUD • Department of Planning • Rezoning
	<ul style="list-style-type: none"> • Sydney region 	<ul style="list-style-type: none"> • Bushlands/ sclerophyll woodlands 	<ul style="list-style-type: none"> • Invasive species • Provenance species • Fire • Pathogens • Changed ecosystems 	<ul style="list-style-type: none"> • Connectivity • More bush regen. • Appropriate fire regimes • Feral animal control 	<ul style="list-style-type: none"> • Appropriate fire regimes for ecosystems, species at various scale • What constitutes a corridor in urban 	<ul style="list-style-type: none"> • Lack of technology for mapping • Data sharing between agencies • Data scale

					<p>areas</p> <ul style="list-style-type: none"> • Potential critical refuges • Fire scale veg mapping 1:2000 scale 	
NSW Semi-arid ecosystems	<ul style="list-style-type: none"> • Western NSW 	<ul style="list-style-type: none"> • Semi-arid 	<ul style="list-style-type: none"> • Increased temps and species die back • Loss of resilience • Erosion • Invasive species 	<ul style="list-style-type: none"> • Increase veg cover • Decrease grazing pressure • Increase connectivity 	<ul style="list-style-type: none"> • Value of corridors • Tolerance of existing species • Impact of extremes and sustained climate changes 	<ul style="list-style-type: none"> • Lack of plant demographers • Money • Food production • Landholder behaviours • Making people care • Political interests and timeframes
Urban/rural area	<ul style="list-style-type: none"> • Western Sydney 	<ul style="list-style-type: none"> • Cumberland Plain grassy woodlands 	<ul style="list-style-type: none"> • Expansion of weeds • Fire frequency 	<ul style="list-style-type: none"> • Info on requirements to managers • Management strategy for region coordinated as mosaic • Link to self interest of funder 	<ul style="list-style-type: none"> • Tolerance thresholds to drought • Cost effective weed control 	<ul style="list-style-type: none"> • Fragmentation • Large number of landowners • Few of fire high usage

				<ul style="list-style-type: none"> • Continuity of funding • Link to indigenous involvement training and funding 		
Water management	<ul style="list-style-type: none"> • Hunter Catchment 	<ul style="list-style-type: none"> • Riparian woodland • Estuarine vegetation • Aquatic species 	<ul style="list-style-type: none"> • Adaptation to water scarcity has negative biodiversity impact 	<ul style="list-style-type: none"> • Manage flows • No new dams demand • Water management 	<ul style="list-style-type: none"> • Research into species response to flow management 	<ul style="list-style-type: none"> • Dams • Change in ideas and attitudes
Coastal fringe	<ul style="list-style-type: none"> • City of Sydney 	<ul style="list-style-type: none"> • Saltmarsh 	<ul style="list-style-type: none"> • Sea level rise – loss of area 	<ul style="list-style-type: none"> • Mangrove removal • Reclaim new areas for saltmarsh 	<ul style="list-style-type: none"> • Impacts of removing infrastructure 	<ul style="list-style-type: none"> • No room to move • Community attitudes • Lack of value assigned to saltmarsh
Woodland birds	<ul style="list-style-type: none"> • Statewide 		<ul style="list-style-type: none"> • Fragmentation 	<ul style="list-style-type: none"> • Reveg/ reconnect 	<ul style="list-style-type: none"> • ID 	<ul style="list-style-type: none"> • Money

			<ul style="list-style-type: none"> • Loss of refugia 	<ul style="list-style-type: none"> • Forum to connect researchers and implementers • Links to national funding eg. Natural Wildlife Corridors/ Carbon Farming • Link to mitigation strategies 	<p>microclimates needed – heterogeneity needed</p>	<ul style="list-style-type: none"> • Links between reveg implementers and researchers • Funding cycles
Freshwater ecosystems	<ul style="list-style-type: none"> • Statewide 	<ul style="list-style-type: none"> • Coastal streams 	<ul style="list-style-type: none"> • Sea level rise • Fragmentation 	<ul style="list-style-type: none"> • Restoration inland 	<ul style="list-style-type: none"> • Knowledge about blackwater streams 	<ul style="list-style-type: none"> • Lack of knowledge
Freshwater ecosystems	<ul style="list-style-type: none"> • Statewide 	<ul style="list-style-type: none"> • Montane streams 	<ul style="list-style-type: none"> • Temperature increases 	<ul style="list-style-type: none"> • Assisted migration 	<ul style="list-style-type: none"> • Understanding which species may need to move 	<ul style="list-style-type: none"> • Taxonomy • Lack of understanding • Hydrology on macroinverts
Irrigation	<ul style="list-style-type: none"> • MDB 	<ul style="list-style-type: none"> • Rivers and terrestrial wetlands 	<ul style="list-style-type: none"> • Less water • Loss of rainfall quantity/ quality 	<ul style="list-style-type: none"> • Changes to crops grown • Clear plans at regional level 		<ul style="list-style-type: none"> • Entrenched conflict • Lack of political will

