

# Appendix I: Summary of legislation

The following list is a summary of the main legislation governing coastal management activities in Tasmania. There are also statutory plans and approval processes that need to be considered when undertaking works in coastal areas. **Appendix 2** organises the legislation into topic areas covered in the Manual.

Legislation	Principle/scope
<b>Tasmanian Legislation</b>	
<i>Aboriginal Relics Act 1975</i>	Protection of the physical remains of Aboriginal occupation in Tasmania.
<i>Crown Lands Act 1976</i>	Management, sale, and disposal of Crown lands, including the granting of leases and licences for activities on Crown Land.
<i>Environmental Management and Pollution Control Act 1994</i>	Primary environmental protection legislation dealing with environmental harm from pollution and waste management, and avoiding environmental impacts. Regulation of pollution and emission controls in the marine environment.
<i>Environmental Management and Pollution Control (Waste Management) Regulations 2000</i>	The disposal of controlled waste to prevent direct or indirect environmental harm, for recreational, commercial, domestic, agricultural or industrial processes.
<i>Fire Service Act 1979</i>	All landowners/occupiers have a responsibility to maintain their properties to reduce fire hazard.
<i>Historic Cultural Heritage Act 1995</i>	Protection of heritage with respect to places of archaeological, architectural, cultural, historical, scientific, social and technical significance.
<i>Land Use Planning and Approvals Act 1993</i>	Provides framework for strategic and statutory land use planning and development. Regulates land use and development through planning schemes.
<i>Living Marine Resources Management Act 1995</i>	Regulation and protection of the living marine environment, provision of sustainable fisheries management plans.
<i>Local Government Act 1993</i>	Provides for the creation of council by-laws, issuing of abatement notices for environmental nuisance, and managing and owning public land.
<i>Local Government (Building and Miscellaneous Provisions) Act 2003</i>	Requires creation of a littoral or riparian reserve with subdivision.
<i>Marine and Safety Authority Act 1997</i>	Establishes MAST, responsible for ensuring safe operations of vessels, provides for the development and management of marine facilities, and manages environmental issues relating to vessels.
<i>Marine Farming Planning Act 1995</i>	Regulation of planning and management for marine farming.

<i>Mineral Resources Development Act 1995</i>	Provides for the development of mineral resources consistent with sound economic, environmental and land use management, and applies to all land and minerals in Tasmania
<i>National Parks and Reserves Management Act 2002</i>	Management of parks and reserves based on management objectives of each class of reserve, declaration and management of Marine Protected Areas (marine reserves). Administered through Parks and Wildlife.
<i>Nature Conservation Act 2002</i>	Management and protection of some estuarine/marine species & communities.
<i>Plant Quarantine Act 1997</i>	Provides for the quarantine of plants and the control of pests and diseases
<i>Roads and Jetties Act 1935</i>	Relates to roads, highways and the control and management of certain jetties and marine facilities.
<i>State Coastal Policy 1996</i>	Protection of natural and cultural values of the coast, sustainable development of the coast, and integrated management and protection of the coastal zone.
<i>State Coastal Policy Validation Act 2003</i>	Validates the State Coastal Policy 1996 and amends the coastal zone to include State waters and all land to a distance of one kilometre inland from the high-water mark.
<i>State Policies and Projects Act 1993</i>	Deals with the making of Tasmanian Sustainable Development Policies, the integrated assessment of Projects of State Significance, the State of the Environment Reporting and for related purposes.
<i>State Policy on Water Quality Management 1997</i>	Protection and enhancement of water quality, including monitoring of water bodies, facilitating integrated catchment management, through the application of the precautionary principle.
<i>Tasmanian Building Act 2002</i>	Regulates the construction and maintenance of buildings and building and plumbing matters and to provide for permits, enforcement matters and resolution of disputes.
<i>Tasmanian Planning Commission Act 1997</i>	Establishes the Tasmanian Planning Commission (TPC), assessment of planning schemes, State Policies and Projects of State Significance.
<i>Tasmanian Ports Corporation Act 2005</i>	Provides for matters relating to the control of the Tasmanian Ports Corporation Pty Ltd and its assets.
<i>Threatened Species Protection Act 1995</i>	Classification and listing of threatened flora and fauna, protection of threatened marine species.
<i>Water Management Act 1999</i>	Provides for the control and eradication of declared weeds and the promotion of a strategic and sustainable approach to weed management
<i>Whales Protection Act 1988</i>	Protection for whales in Tasmanian waters. The Commonwealth Whale Protection Act 1980 was replaced by the EPBC Act.
<i>Weed Management Act 1999</i>	Provides for the control and eradication of declared weeds and the promotion of a strategic and sustainable approach to weed management.

Commonwealth Legislation	
<i>Environment Protection (Sea Dumping Act) 1981</i>	Protect & preserve the marine environment with respect to pollution related to dumping at sea. Assessment and permitting of proposals to load and dump wastes in accordance with the National Ocean Disposal Guidelines for Dredged Material 2002.
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Provides a framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, including World Heritage properties, Ramsar wetlands, listed threatened species and ecological communities, listed migratory species, Commonwealth marine areas, and National heritage places.
<i>National Environment Protection Council Act 1994</i>	Establishes the National Environment Protection Council for protection from air, water, soil, or noise pollution. Under this Act measures (NEPMs) have been developed for a range of environmental issues, and these are adopted as State Policies.
<i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i>	Under the NEPC Act, this NEPM has now become a Tasmanian State Policy. It establishes a nationally consistent approach to the assessment of site contamination and provides adequate protection of human health and the environment, where site contamination has occurred.
International Legislation	
<i>Convention on the Prevention of Marine Pollution by Dumping of Wastes or other Matter (London Convention 1972)</i>	Prevent pollution of the sea through the dumping of waste and other matter liable to create hazards to human health, harm living resources and marine life, damage amenities or interfere with other legitimate uses of the sea.





# Appendix 2: Legislation and policy requirements for activities

The following information table is intended to assist those undertaking small-scale activities in coastal areas with a list of the relevant legislation, codes of practice or other guidelines that apply to works on the coast. Local council planning schemes will cover nearly all the requirements.

The list is not complete as it does not include the regulations and amendments to the Acts (refer to [www.thelaw.tas.gov.au](http://www.thelaw.tas.gov.au)).

The table is categorised by the area of interest (environment, cultural heritage etc.) and the nature of works activities within each category. The appropriate contact points and phone numbers for obtaining information and approvals are listed in **Appendix 3 Where to obtain more information**.

Activity	Legislation, codes, policies, guidelines and key strategies
Aboriginal heritage	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1984</i> <i>Aboriginal Lands Act 1995</i> <i>Aboriginal Relics Act 1975</i> Local Council planning scheme
Beach nourishment	<i>Crown Lands Act 1976</i> <i>Environmental Management and Pollution Control Act 1994</i> Local Council planning scheme <i>National Parks and Reserves management Act 2002</i> <i>Nature Conservation Act 2002</i> State Coastal Policy 1996 Tasmanian Reserve Management Code of Practice
Bridges, causeways, culverts	<i>Crown Lands Act 1976</i> <i>Inland Fisheries Act 1995</i> <i>Land Use Planning and Approvals Act 1993</i> Local Council planning scheme <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> <i>Roads and Jetties Act 1935</i> State Coastal Policy 1996 State Policy on Water Quality Management 1997 Tasmanian Reserve Management Code of Practice <i>Water Management Act 1999</i> Waterways and Wetlands Works Manual

Dredging	<p><i>Crown Lands Act 1976</i></p> <p><i>Environmental Management and Pollution Control Act 1994</i></p> <p><i>Environment Protection (Sea Dumping) Act 1981</i></p> <p>Local Council planning scheme</p> <p><i>National Environment Protection Council Act 1994</i></p> <p>National Environment Protection (Assessment of Site Contamination) Measure 1999</p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Nature Conservation Act 2002</i></p> <p>State Coastal Policy 1996</p>
Dune modification and stabilisation	<p><i>Crown Lands Act 1976</i></p> <p><i>Environmental Management and Pollution Control Act 1994</i></p> <p>Local Council planning scheme</p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Nature Conservation Act 2002</i></p> <p>State Coastal Policy 1996</p> <p>Quarry Code of Practice</p>
Excavation	<p><i>Crown Lands Act 1976</i></p> <p>Local Council planning scheme</p> <p><i>Mineral Resources Development Act 1995</i></p> <p>Quarry Code of Practice</p>
Fencing	<p><i>Crown Lands Act 1976</i></p> <p>Local Council planning scheme</p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Nature Conservation Act 2002</i></p> <p>Tasmanian Reserve Management Code of Practice</p>
Fire hazard reduction work	<p><i>Fire Service Act 1979</i></p> <p>Tasmanian Reserve Management Code of Practice</p>
Fishing and marine farms (aquaculture)	<p>Fisheries Rules 1999</p> <p>Fisheries (Shellfish) Rules 1999</p> <p><i>Living Marine Resources Management Act 1995</i></p> <p><i>Marine Farming Planning Act 1995</i></p>
Historic heritage and any works in a place listed on the Tasmanian heritage register	<p><i>Historic Cultural Heritage Act 1995</i></p> <p>Local Council planning scheme</p>
Installation of pipes (sewer; stormwater etc)	<p><i>Crown Lands Act 1976</i></p> <p>Local Council planning scheme</p> <p>State Coastal Policy 1996</p>
Introduced marine pests	<p><i>Australian Quarantine Act 1908</i></p> <p><i>Living Marine Resources Management Act 1995</i></p>

Jetties, marinas, slips and boat launch ramps, construction and maintenance	<i>Crown Lands Act 1976</i> <i>Land Use Planning and Approvals Act 1993</i> Local Council planning scheme <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> <i>Roads and Jetties Act 1935</i> State Coastal Policy 1996 Tasmanian Reserve Management Code of Practice
Marine habitats, working in	<i>Living Marine Resources Management Act 1995</i>
Moorings	<i>Crown Lands Act 1976</i> Marine and Safety Tasmania (MAST) regulations State Coastal Policy 1996
Mowing and slashing	<i>Crown Lands Act 1976</i> <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> Tasmanian Reserve Management Code of Practice
Off-road vehicle access	<i>Civil Liability Act 2002</i> <i>Crown Lands Act 1976</i> <i>Land Use Planning and Approvals Act 1993</i> Local Council planning scheme <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> Tasmanian Reserve Management Code of Practice
Pest/feral animal control (see also introduced marine pests)	<i>Animal Welfare Act 1993</i> <i>Animal Health Act 1995</i> <i>Australian Quarantine Act 1908</i> Tasmanian Reserve Management Code of Practice
Pontoons	<i>Crown Lands Act 1976</i> Local Council planning scheme
Reclamation	<i>Crown Lands Act 1976</i> <i>Environmental Management and Pollution Control Act 1994</i> Local Council planning scheme National Environment Protection (Assessment of Site Contamination) Measure 1999 <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> State Coastal Policy 1996
Revegetation	<i>Environment Protection and Biodiversity Conservation Act 1999</i> <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> Tasmanian Reserve Management Code of Practice <i>Threatened Species Protection Act 1995</i>

River mouths and spits	<p><i>Crown Lands Act 1976</i></p> <p><i>Environmental Management and Pollution Control Act 1994</i></p> <p>Local Council planning scheme</p> <p><i>Marine and Safety Authority Act 1997</i></p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Nature Conservation Act 2002</i></p> <p>State Coastal Policy 1996</p> <p><i>Tasmanian Ports Corporation Act 2005</i></p>
Road and track construction	<p><i>Building Act 2002</i></p> <p><i>Crown Lands Act 1976</i></p> <p><i>Land Use Planning and Approvals Act 1993</i></p> <p><i>Civil Liability Act 2002</i></p> <p>Local Council planning scheme</p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Roads and Jetties Act 1935</i></p> <p>Tasmanian Reserve Management Code of Practice</p> <p>Track Planning Guidelines</p>
Septic tanks and other forms of on-site waste treatment	<p><i>Public Health Act 1997</i></p> <p>Tasmanian Plumbing Code 1994</p> <p>Local Council health regulations</p> <p>Tasmanian Reserve Management Code of Practice</p>
Shoreline modification—groynes, rocks, seawalls	<p><i>Crown Lands Act 1976</i></p> <p><i>Environmental Management and Pollution Control Act 1994</i></p> <p><i>Land Use Planning and Approvals Act 1993</i></p> <p>Local Council planning scheme</p> <p>State Coastal Policy 1996</p>
Signs	<p><i>Crown Lands Act 1976</i></p> <p>Local Council planning scheme</p> <p><i>National Parks and Reserves Management Act 2002</i></p> <p><i>Nature Conservation Act 2002</i></p> <p>Tasmanian Reserve Management Code of Practice</p>
Spraying weeds	<p><i>Agricultural and Veterinary Chemicals (Control of Use) Act 1996</i></p> <p>Regulations and Orders</p> <p>Code of Practice for Spraying in Public Places</p> <p>Pocket Guide for Safe Herbicide Use in the Bush</p> <p>Tasmanian Reserve Management Code of Practice</p>
Stock grazing	<p>Local Council planning scheme</p> <p>Local NRM Plans</p> <p>State Policy on Protection of Agricultural Land</p>



Structures and facilities (toilets, change rooms etc), construction and maintenance	<i>Building Act 2002</i> <i>Crown Lands Act 1976</i> <i>Land Use Planning and Approvals Act 1993</i> Local Council planning scheme <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> State Coastal Policy 1996 Tasmanian Reserve Management Code of Practice
Use of heavy machinery	<i>Crown Lands Act 1976</i> <i>Environment Protection and Biodiversity Conservation Act 1999</i> <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> State Coastal Policy 1996 Tasmanian Reserve Management Code of Practice <i>Threatened Species Protection Act 1995</i>
Use of large rocks and other barriers	<i>Crown Lands Act 1976</i> Local Council planning scheme <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> Tasmanian Reserve Management Code of Practice
Vegetation management	<i>Environment Protection and Biodiversity Conservation Act 1999</i> <i>National Parks and Reserves Management Act 2002</i> <i>Nature Conservation Act 2002</i> Tasmanian Reserve Management Code of Practice <i>Threatened Species Protection Act 1995</i>
Visual quality, works affecting	Local Council planning scheme Tasmanian Reserve Management Code of Practice Siting and Design Guidelines—Victorian Coastal Council State Coastal Policy 1996
Water quality control	<i>Public Health Act 1997</i> <i>Water Management Act 1999</i> State Policy on Water Quality Management 1997 Water Management Plan National Action Plan for Water Quality and Salinity

Weed management	<i>Weed Management Act 1999</i> Local weed management plans <i>Plant Quarantine Act 1997</i> Regional Weed Management Plan Statutory Weed Management Plan Tasmanian Beach Weed Strategy Tasmanian Biosecurity Policy 2006 Tasmanian Biosecurity Strategy 2006 Tasmanian Reserve Management Code of Practice
Wildlife (native animal) management	<i>Animal Farming (Registration) Act 1994</i> <i>Environment Protection and Biodiversity Conservation Act 1999</i> <i>Living Marine Resources Management Act 1995</i> <i>Nature Conservation Act 2002</i> <i>Threatened Species Protection Act 1995</i> <i>Whales Protection Act 1988</i> Wildlife Regulations

# Appendix 3: Where to obtain more information

The following contact information is intended to provide a primary source of information and directions for where to go for further assistance. The following list is not exhaustive. Land managers and NRM regional bodies can provide more information on where to seek advice. Key contacts for community and non government organisations (NGO's) are detailed in **Appendix 4**.

The table below is categorised by the area of interest (environment, cultural heritage etc.) and the nature of works activities within each category. For each activity the appropriate contact point and telephone number is listed. Correct at time of publication.

Activity	Contact point	Phone
<b>Environment</b>		
Acid sulfate soils	DPIPWE: Land Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6336 5441
Climate change	Tasmanian climate change office <a href="http://www.dpac.tas.gov.au/divisions/climatechange">www.dpac.tas.gov.au/divisions/climatechange</a>	6270 5485
Excavation and soil management	DPIPWE: Land Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
Feral animal control	DPIPWE: Wildlife Management Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
	Tasmanian Conservation Trust <a href="http://www.tct.org.au">www.tct.org.au</a>	6234 3552
Fire hazard management and protection	Tasmania Fire Service <a href="http://www.fire.tas.gov.au">www.fire.tas.gov.au</a>	6230 8600 1800 000 699
	Parks & Wildlife Service: Fire Management <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6767
Introduced marine pests	Australian Government <a href="http://www.marinepests.gov.au">www.marinepests.gov.au</a>	6233 3370 0408 380 377

Shoreline modification and stabilisation works (e.g. sea walls, dredging, reclamation)	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6413
	DPIPWE: Land Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
	DPIPWE: Marine Environment (dredging, reclamation) <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6587
	Marine & Safety Tasmania (dredging navigation channels) <a href="http://www.mast.tas.gov.au">www.mast.tas.gov.au</a>	6233 8801
Stormwater	Derwent Estuary Program	6233 3742
	DPIPWE Stormwater Management Officer	6233 3595
Vegetation management	DPIPWE: Biodiversity Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
	Greening Australia <a href="http://www.greeningaustralia.org.au">www.greeningaustralia.org.au</a>	6223 6377
	Understorey Network <a href="http://www.understorey-network.org.au">www.understorey-network.org.au</a>	6234 4286 0407 352 479
Waste management services (e.g. septic tanks)	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Environmental Health Department of the relevant Local Council	6233 6413
Water quality	DPIPWE: EPA Division <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6518
Weed management	DPIPWE: Land Conservation Branch Regional Weed officers <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
Wetlands management	DPIPWE: Biodiversity Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
Wildlife protection	DPIPWE: Wildlife Management Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
	Wildlife emergencies (24 hours)	
	DPIPWE: Threatened Species Unit <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6556 1300 368 550
	Derwent Estuary Program (penguins) <a href="http://www.derwentestuary.org.au">www.derwentestuary.org.au</a>	
	Birds Tasmania (shorebirds) <a href="http://www.birdsaustralia.com.au">www.birdsaustralia.com.au</a>	6233 3742
		0419 138 054

Heritage		
Aboriginal places	DPIPWE: Aboriginal Heritage Tasmania <a href="http://www.aboriginalheritage.tas.gov.au">www.aboriginalheritage.tas.gov.au</a>	6233 6613
	Tasmanian Aboriginal Land and Sea Council <a href="http://www.talsc.net.au">www.talsc.net.au</a>	6231 0288
Geoheritage sites	DPIPWE: Land Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
Historic sites	DPIPWE: Heritage Tasmania <a href="http://www.heritage.tas.gov.au">www.heritage.tas.gov.au</a>	6233 2037
	Parks and Wildlife Service: Heritage section <a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a>	1300 850 332
		6233 2387
Access and facilities		
Fencing	TAFE Tasmania <a href="http://www.tafe-college.org/tafe-tasmania">www.tafe-college.org/tafe-tasmania</a>	
	Conservation Volunteers Australia <a href="http://www.conservationvolunteers.com.au">www.conservationvolunteers.com.au</a>	6231 1779
Moorings	Marine & Safety Tasmania <a href="http://www.mast.tas.gov.au">www.mast.tas.gov.au</a>	6233 8801
Off road vehicle access	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6413
	Parks and Wildlife Service <a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a>	1300 135 513
Public facilities (e.g picnic tables, change rooms, toilets barbeques)	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Parks and Reserves Department of the relevant Council	6233 6413
Road and bridge construction	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Engineering Department of the relevant Local Council	6233 6413
Signs	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6413
	Parks and Wildlife Service: Interpretation Section <a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a>	6233 2184
	Parks and Reserves Department of the relevant Local Council	
Slips, marinas, launching ramps	DPIPWE: Crown Land Services <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	6233 6413
	DPIPWE: Land Conservation Branch <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a>	1300 368 550
	Marine & Safety Tasmania <a href="http://www.mast.tas.gov.au">www.mast.tas.gov.au</a>	6233 8801

Tracks and trails	Sport and Recreation Tasmania <a href="http://www.development.tas.gov.au">www.development.tas.gov.au</a> Parks and Wildlife Service <a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a> Parks and Reserves Department of the relevant Local Council	6233 5888
<b>Recreation</b>		
Fishing and boating	DPIPWE: Wild Fisheries Branch <a href="http://www.fishing.tas.gov.au">www.fishing.tas.gov.au</a> Marine & Safety Tasmania <a href="http://www.mast.tas.gov.au">www.mast.tas.gov.au</a>	1300 135 513  6233 8801
General recreation	Sport and Recreation Tasmania <a href="http://www.development.tas.gov.au">www.development.tas.gov.au</a>	6233 5888
Horseriding and dog walking	Local Council	

# Appendix 4: Community Organisations

Community involvement is central to achieving the protection and conservation of natural and cultural heritage along Tasmania's coastline. It is essential to consult with community groups before planning coastal management works. The following is a list of key community support organisations within Tasmania.

## Useful organisations

Organisation	Purpose	Contact information
<b>Birds Tasmania</b>	<p>Birds Tasmania is a volunteer organisation committed to raising awareness of bird values in Tasmania and is the Tasmanian branch of Birds Australia.</p> <p>Birds Tasmania volunteers actively participate in the management of bird species and habitat through bird counts and surveys and involvement in steering committees and working groups.</p>	<p>GPO Box 68 Hobart TAS 7001            Phone: 0419 138 054  <a href="http://www.birdsaustralia.com.au/the-organisation/tasmania">www.birdsaustralia.com.au/the-organisation/tasmania</a></p>
<b>Conservation Volunteers Australia</b>	<p>Conservation Volunteers Australia (CVA) partners with individuals, businesses and governments to involve local and international volunteers in work on environmental conservation projects.</p> <p>They provide teams of volunteers with an experienced leader for a fee to undertake a range of environmental activities from weeding, revegetation, track work and monitoring.</p> <p>They are also a registered training organisation and deliver accredited training and capacity building workshops.</p>	<p>63 Melville Street, Hobart TAS 7000            Box 4675 Hobart TAS 7000            Phone: (03) 6231 1779            Fax: (03) 6231 1794  <a href="http://www.conservationvolunteers.com.au">www.conservationvolunteers.com.au</a></p>
<b>Derwent Estuary Program</b>	<p>The Derwent Estuary Program (DEP) is a regional partnership between local governments, the Tasmanian state government, commercial and industrial enterprises, and community-based groups to restore and promote the Derwent Estuary.</p>	<p>7 Franklin Wharf, Hobart TAS 7000            GPO Box 1751, Hobart TAS 7001            Phone: (03) 6233 3742            Fax: (03) 6233 3800  <a href="http://www.derwentestuary.org.au">www.derwentestuary.org.au</a></p>

<p><b>Green Corps</b></p>	<p>Green Corps is an Australian Government youth development and environmental training program administered by the Department of Education, Employment and Workplace Relations (DEEWR) in consultation with other Australian Government departments.</p> <p>Green Corps works in consultation with CVA to provide teams of job seekers, with a team leader, who can undertake natural resource management tasks.</p>	<p>Contact through Conservation Volunteers Australia, or call 13 17 64 or visit <a href="http://www.deewr.gov.au/jobservicesaustralia">www.deewr.gov.au/jobservicesaustralia</a></p>
<p><b>Greening Australia</b></p>	<p>Develops projects to engage the community in vegetation management to protect and restore the health, diversity and productivity of Australian landscapes.</p>	<p>GPO Box 1191, Hobart TAS 7001 Industry House, 30 Burnett St, North Hobart Phone: 03 6223 6377 Fax: 03 6223 6392 <a href="http://www.greeningaustralia.org.au">www.greeningaustralia.org.au</a></p>
<p><b>Natural Resource Management (NRM) Regional Bodies</b></p>	<p>Tasmania has three regional Natural Resource Management (NRM) regional bodies. Each play a role in connecting volunteers in their region to environmental planning and on-ground activities.</p> <p>The NRM regional bodies will also be able to provide you with up to date information on Federal, State Government and other funding opportunities available to volunteer organisations and land managers.</p>	<p><b>Cradle Coast NRM</b> (approx Port Davey to Devonport) PO Box 338, Burnie TAS 7320 Phone: 03 6431 6285 <a href="http://www.cradlecoastnrm.com">www.cradlecoastnrm.com</a></p> <p><b>NRM North</b> (approx Devonport to Bicheno) PO Box 1224, Launceston TAS 7250 Phone: 03 6333 7777 <a href="http://www.nrmnorth.org.au">www.nrmnorth.org.au</a></p> <p><b>NRM South</b> (approx Bicheno to Port Davey) PO Box 425, South Hobart TAS 7004 Phone: 03 6221 6111 <a href="http://www.nrmsouth.org.au">www.nrmsouth.org.au</a></p>
<p><b>Ocean Planet</b></p>	<p>Ocean Planet is a branch of Environment Tasmania, a not-for-profit conservation council advocating for protection, conservation and rehabilitation of Tasmania's natural environment.</p> <p>Ocean Planet promotes a sustainable future for Tasmania's marine environment and all that relies on it, our unique wildlife, our idyllic Tasmanian lifestyle and a secure fishing industry for generations to come.</p>	<p>PO Box 1073 Hobart TAS 7001 <a href="http://www.oceanplanet.org.au">www.oceanplanet.org.au</a></p>



<b>Southern Coastcare Association of Tasmania (SCAT)</b>	<p>The Southern Coastcare Association of Tasmania (SCAT) represents approx 40 Coastcare groups in southern Tasmania from Dover to Swansea to Port Arthur. SCAT can put volunteers and coastal stakeholders in touch with member groups.</p> <p>SCAT coordinates training and networking opportunities for Coastcare groups and coastal management stakeholders, and provides small grants for on-ground works.</p>	<p>GPO Box 632, Hobart TAS 7001  Phone: 0447 003 540  <a href="http://www.scat.org.au">www.scat.org.au</a></p>
<b>Sustainable Living Tasmania</b>	<p>Sustainable Living Tasmania is a community resource and education centre working to provide a direct, local, realistic and accessible contribution to the protection and restoration of the natural environment, and the development of homes and cities for a sustainable future.</p>	<p>1st floor, 71 Murray St, Hobart TAS 7000  Phone: (03) 6234 5566  Fax: (03) 6234 5543  <a href="http://www.sustainablelivingtasmania.org.au">www.sustainablelivingtasmania.org.au</a></p>
<b>Tasmanian Conservation Trust</b>	<p>The Tasmanian Conservation Trust (TCT) aims to foster and assist the conservation of flora, fauna and important natural values.</p> <p>The TCT works with other environmental and community groups by providing advice and project coordination where required and representing community and groups on steering committees and submissions for planning and land management decisions.</p>	<p>2nd fl, 191-193 Liverpool St, Hobart TAS 7000  Phone: (03) 6234 3552  Fax: (03) 6231 2491  <a href="http://www.tct.org.au">www.tct.org.au</a></p>
<b>Tasmanian Landcare Association (TLCA)</b>	<p>The Tasmanian Landcare Association (TLCA) is a statewide umbrella organisation for Landcare, Coastcare, Waterwatch and 'Friends of' groups.</p> <p>The TLCA can provide contact and other information regarding their member groups. The TLCA assists groups with strategic planning and provides funding for administrative costs and on-ground works.</p>	<p>PO Box 21, South Hobart TAS 7004  Phone: (03) 6234 7117  <a href="http://www.taslandcare.org.au">www.taslandcare.org.au</a></p>
<b>Tasmanian Parks and Wildlife Service Volunteer Facilitators</b>	<p>The Tasmanian Parks and Wildlife Service (PWS) has a number of staff whose role is to facilitate the effective involvement of volunteers in reserve management activities and to provide support for local environmental groups working on PWS land.</p> <p>PWS Volunteer Facilitators operate out of local PWS field offices around Tasmania.</p>	<p><a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a></p>
<b>Understorey Network</b>	<p>The Understorey Network is a group of individuals from all walks of life around Tasmania, who believe that the understorey is important. They promote the protection of existing native vegetation, and the use of local native understorey in revegetation, are an independent and not-for-profit community organisation.</p>	<p>PO Box 4535, Bathurst Street  Hobart TAS 7000  Phone: (03) 6234 4286  Mobile: 0407 352 479  <a href="http://www.understorey-network.org.au">www.understorey-network.org.au</a></p>

<p><b>Volunteering Tasmania</b></p>	<p>Volunteering Tasmania is the state's peak body on volunteering. It provides information and support to volunteers and those who would like to volunteer and also resources, information and advice to organisations that work with volunteers. Volunteering Tasmania forms partnerships with government, business and the community to enhance and develop volunteering in Tasmania.</p>	<p>57D Brisbane Street, Hobart TAS 7000          Phone: 1 800 677 895  <a href="http://www.volunteeringtas.org.au">www.volunteeringtas.org.au</a></p>
<p><b>Wildcare Inc</b></p>	<p>WILDCARE has around 3,000 individual members undertaking environmental volunteer work on PWS and privately managed land throughout Tasmania. WILDCARE provides \$40,000 each year to support the volunteer activity that their members undertake. WILDCARE provides insurance and other administrative support for individuals wanting to be involved in on-ground works.</p>	<p>GPO Box 1751 Hobart TAS 7001          Phone: (03) 6233 2852  <a href="http://www.wildcaretas.org.au">www.wildcaretas.org.au</a></p>

### Funding opportunities

Funding opportunities for volunteer organisations and their project partners change all the time depending on government programs, current priorities and emerging issues. Funds are available to help community volunteers engage with land management organisations in the planning and undertaking of on-ground works.

Sources of funding include the Tasmanian, Australian and local governments, umbrella organisations, private companies, trusts, and Natural Resource Management (NRM) regional bodies. The organisations listed above will be able to provide up to date information on the current opportunities available.

# Appendix 5: Tools and key resources

These resources are websites, tools and kits. All publications referred to in the tools and resources section at the end of each chapter can be found in the references list.

Activity	Resource
Environment	
Acid sulfate soils	<p><b>Acid sulfate soil information kit</b></p> <p>Collation of resources from around Australia, includes the National Strategy and a booklet on keys to success. Available from the National Acid Sulfate Soil website <a href="http://www.environment.gov.au/archive/coasts/cass/index.html">http://www.environment.gov.au/archive/coasts/cass/index.html</a></p> <p><b>DPIPWE Land Conservation Branch</b></p> <p>Instructions on how to use the maps on the LIST for ASS.</p> <p>Links to the guidelines, pamphlets, poster and more information on ASS are also available here <a href="http://www.dpipwe.tas.gov.au/acidsulfatesoils">www.dpipwe.tas.gov.au/acidsulfatesoils</a></p> <p><b>The LIST</b></p> <p>Predictive maps of possible acid sulfate soil occurrence <a href="http://www.thelist.tas.gov.au/">www.thelist.tas.gov.au/</a></p> <p>Log onto <a href="http://www.dpipwe.tas.gov.au/acidsulfatesoils">www.dpipwe.tas.gov.au/acidsulfatesoils</a> and follow the instructions on how to use the LIST database to access ASS predictive mapping.</p>
Biodiversity	<p><b>Environment Australia Biodiversity website</b></p> <p>A range of information on biodiversity, the EPBC Act and lists of species protected under the Act. <a href="http://www.environment.gov.au/biodiversity/index.html">http://www.environment.gov.au/biodiversity/index.html</a></p> <p><b>REDmap</b></p> <p>A Tasmanian initiative inviting the community to spot, log and map marine species that are uncommon in Tasmania, or along particular parts of our coast. The information collected is mapped and displayed on the REDmap website, demonstrating how species distributions may be changing over time. Report sightings of unusual marine species on the REDmap website <a href="http://www.redmap.org.au">www.redmap.org.au</a></p>

Coastal values identification	<p><b>Coastal values data</b></p> <p>Vegetation, species habitat and geomorphic values data for a 100m wide coastal strip of the northern, southern and north western Tasmania NRM Regions. Available on the LIST.</p> <p><a href="http://www.thelist.tas.gov.au">www.thelist.tas.gov.au</a></p> <p><b>Foreshore Values Mapping</b></p> <p>Provides baseline information on the condition of foreshores and identifies pressures for measuring impacts on key marine and coastal ecosystems. Available on the LIST or by request from DPIPWE.</p> <p><a href="http://www.thelist.tas.gov.au">www.thelist.tas.gov.au</a></p> <p><a href="mailto:coastal.enquiries@environment.tas.gov.au">coastal.enquiries@environment.tas.gov.au</a></p> <p><b>Marine habitat mapping</b></p> <p>Data collected for south and east coasts of Tasmania depicting a range of marine habitats. From the coastline to the 40m depth contour.</p> <p>Contact NRM South for more information.</p> <p><b>Natural Values Atlas</b></p> <p>The Natural Values Atlas is Tasmania's comprehensive database for flora and fauna information including threatened species. Registration is free and is required to use the service.</p> <p><a href="http://www.naturalvaluesatlas.tas.gov.au">www.naturalvaluesatlas.tas.gov.au</a></p> <p><b>Seamap</b></p> <p>Mapping seabed habitat types across the NRM regions. Series of independently funded projects. Useful for identifying marine and estuarine habitat types.</p> <p><a href="http://www.utas.edu.au/tafi/seamap/">http://www.utas.edu.au/tafi/seamap/</a></p>
Feral animal control	<p><b>Feral animals in Australia</b></p> <p>Federal Government: <a href="http://www.environment.gov.au/biodiversity/invasive/ferals/index.html">Department of Environment, Water; Heritage and the Arts, Biodiversity Section website.</a></p> <p><a href="http://www.environment.gov.au/biodiversity/invasive/ferals/index.html">www.environment.gov.au/biodiversity/invasive/ferals/index.html</a></p> <p><b>Feral card deck</b></p> <p><a href="#">Handy laminated deck of cards with photos and descriptions of feral animals</a> to assist identification.</p> <p>Contact the Tasmanian Conservation Trust for more information.</p> <p><b>DPIPWE: Introduced Animals of Tasmania &amp; Know your ferals information on the website</b></p> <p><a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a></p>

Fire management	<p><b>Bureau of Meteorology</b> Up-to-date weather forecasts and some climate change predictions <a href="http://www.bom.gov.au/tas/">http://www.bom.gov.au/tas/</a></p> <p><b>Emergency Services</b> Phone 000</p> <p><b>Tasmania Fire Service (TFS)</b> Local advice and permits Includes bushfire information and publications about hazard reduction and planned burning. Phone 1800 000 699 <a href="http://www.fire.tas.gov.au">www.fire.tas.gov.au</a></p>
Introduced marine pests	<p><b>National Introduced Marine Pest Information System</b> Marine pest information sheets available online. Follow links from <a href="http://www.marinepests.gov.au">www.marinepests.gov.au</a></p> <p><b>National System for the Prevention and Management of Marine Pest Incursions</b> National best practice guidelines for all pathways at risk of transporting marine pests <a href="http://www.marinepests.gov.au/national_system">http://www.marinepests.gov.au/national_system</a></p>
Landscaping	<p><b>Urban forest biodiversity program</b> Information on establishing native plants and making gardens wildlife-friendly. <a href="http://www.backyards4wildlife.com.au">www.backyards4wildlife.com.au</a></p>
Plant and vegetation identification	<p><b>A key to Tasmanian vascular plants</b> University of Tasmania Based on pictures and perhaps the easiest to use of the keys. <a href="http://www.utas.edu.au/dicotkey/dicotkey/key.htm">http://www.utas.edu.au/dicotkey/dicotkey/key.htm</a></p> <p><b>Herbarium: Tasmanian Museum and Art Gallery</b> Advice about identification and natural distribution of species. <a href="http://www.tmag.tas.gov.au/Herbarium">http://www.tmag.tas.gov.au/Herbarium</a></p>

<p>Plant propagation</p>	<p><b>FloraBank Model</b> Code of practice for community-based collectors and suppliers and other guidelines on the website <a href="http://www.florabank.org.au">www.florabank.org.au</a></p> <p><b>Royal Tasmanian Botanical Gardens</b> Provides advice on seed propagation <a href="http://www.rtbg.tas.gov.au/index.aspx?base=227">http://www.rtbg.tas.gov.au/index.aspx?base=227</a> Information on the germination and dormancy of wild seed can be found at Tasmanian Seed Conservation Centre web pages. <a href="http://www.rtbg.tas.gov.au/index.aspx?base=224">http://www.rtbg.tas.gov.au/index.aspx?base=224</a></p> <p><b>Understorey Network</b> Plant database provides information on the identification, habitat and propagation of most Tasmanian native species. <a href="http://www.understorey-network.org.au">www.understorey-network.org.au</a></p>
<p>Shorebirds</p>	<p><b>Birds Tasmania</b> Advice and input in planning for shorebird protection.</p> <p><b>Shorebird information kit</b> A box of resources for education and display purposes. Available from the Parks and Wildlife Service, Interpretation Section on request.</p>
<p>Threatened species</p>	<p><b>Consultant's brief</b> A consultant's guide providing the minimum requirements for information needed to assess the potential impact/s of proposed activities on biodiversity and geodiversity. <a href="http://www.dpiw.tas.gov.au/inter.nsf/WebPages/SSKA-7UM4AN?open">http://www.dpiw.tas.gov.au/inter.nsf/WebPages/SSKA-7UM4AN?open</a></p> <p><b>Environment Australia Biodiversity website</b> A range of information on biodiversity the EPBC Act and lists of species protected under the Act. <a href="http://www.environment.gov.au/biodiversity/index.html">http://www.environment.gov.au/biodiversity/index.html</a></p> <p><b>Threatened Communities listing</b> <a href="http://www.dpipwe.tas.gov.au">http://www.dpipwe.tas.gov.au</a> Go to native plants and animals &gt; threatened species &gt; list of threatened species</p> <p><b>Threatened species listing statements and recovery plans</b> More information on threatened species' needs and survey requirements are available within the specific listing statements and recovery plans on the DPIPWE website. <a href="http://www.dpipwe.tas.gov.au/threatenedspecieslists">http://www.dpipwe.tas.gov.au/threatenedspecieslists</a></p>
<p>Vegetation monitoring</p>	<p><b>Introduction to Enviromark, A system for managing roadside and corridor vegetation</b> <a href="http://www.greeningaustralia.org.au">www.greeningaustralia.org.au</a></p> <p><b>TASVEG metadata notes and on-line maps available through the LIST website, under Vegetation</b> <a href="http://www.thelist.tas.gov.au/">http://www.thelist.tas.gov.au/</a></p>

Weed and disease management	<p><b>Alert List for Environmental Weeds</b>  <a href="http://www.weeds.gov.au/publications/guidelines/alert/index.html">http://www.weeds.gov.au/publications/guidelines/alert/index.html</a></p> <p><b>DPIPWE Codes of practice and guidelines</b>  Information for using herbicides on the website.  <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Go to Biosecurity &gt; Agricultural &amp; veterinary chemicals &gt; Codes of practice and Guidelines</p> <ul style="list-style-type: none"> <li>• Code of practice for ground spraying</li> <li>• Code of practice for spraying in public spaces</li> <li>• Guidelines for disposing of washings and rinsates</li> <li>• Rivercare guideline for the use of herbicides near waterways and wetlands</li> <li>• Guidelines for interpreting labels</li> </ul> <p><b>DPIPWE weed control guides</b>  Control guides for specific weeds replace the former weed service sheets and are available online.  <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Go to &gt; Weeds, Pests &amp; Diseases &gt; Weeds &gt; Weeds Index</p> <p><b>Management areas <i>P. cinnamomi</i> and maps of infected areas</b>  <a href="http://www.dpipwe.tas.gov.au">www.dpipwe.tas.gov.au</a> Go to Weeds, Pests and Diseases &gt; Plant Diseases &gt; Phytophthora &gt; Distribution of <i>P. cinnamomi</i></p> <p><b>Tasmanian Institute of Agricultural Research (TIAR) Biological Control Program</b>  A joint venture between the University of Tasmania and DPIPWE.  <a href="http://www.tiartas.edu.au/extensive/biological-control-of-weeds">http://www.tiartas.edu.au/extensive/biological-control-of-weeds</a></p> <p><b>Tasmanian Skills Institute. Chemical Handling Training</b>  Contact Loretta Satterly on (03) 6434 5846.</p> <p><b>WeedDeck</b>  Handy pocket sized ID cards of the major weeds of Australia.  <a href="http://www.sainty.com.au/">http://www.sainty.com.au/</a></p>
Wildlife	<p><b>Local Parks and Wildlife Service Field Centre</b>  1300 368 550</p> <p><b>RSPCA</b>  6244 3033 or 1300 139 947 (animal cruelty enquiries)</p> <p><b>Whale Hotline</b>  0427 WHALES or 0427 942 537  A 24-hour monitored telephone service to receive reports of all cetacean sightings and strandings.</p> <p><b>Wildlife Management Branch of DPIPWE</b>  6233 6556 (24 hour) – for urgent wildlife problems (other than whales)</p>

## Climate change and hazards

Climate change and sea level rise

### **Antarctic Climate Ecosystems Cooperative Research Centre (ACE CRC) web tool**

This web based tool is based on the history of sea levels mapped at 29 ports around Australia provided by the Australian National Tidal Centre.

[www.sealevelrise.info](http://www.sealevelrise.info)

### **Climate change and coastal risk assessment project.**

A suite of tools and documents including:

- Coastal risk management plan: Template and guidelines (DPIW 2009)
- Coastal hazards in Tasmania: General information paper (DPIW 2008c)
- Climate change and coastal asset vulnerability: An audit of Tasmania's coastal assets potentially vulnerable to flooding and sea-level rise (DPIW 2008b)
- Sea-level extremes in Tasmania: Summary and practical guide for planners and managers (DPIW 2008e)
- Historical and projected sea-level extremes for Hobart and Burnie, Tasmania (Hunter 2008)
- Background report: Coastal flooding - Review of the use of exceedence statistics in Tasmania (DPIW 2008a)

[www.dpiw.tas.gov.au/climatechange](http://www.dpiw.tas.gov.au/climatechange)

### **CSIRO GIS layer: Wave height direction and period in the Australian region.**

A compilation of essential wave statistics. Although the map appears very coarse each pixel is attributed with locally relevant data obtained from satellite instruments.

[http://www.marine.csiro.au/marq/edd\\_search.Browse\\_Citation?txtSession=8083](http://www.marine.csiro.au/marq/edd_search.Browse_Citation?txtSession=8083)

### **LiDAR**

Laser light instrument flown in aircraft to provide detailed height data to generate topographic maps of Tasmania's coastline with 25cm contours up to 10 m above sea level. Useful for identifying coastal areas vulnerable to sea level rise.

[www.thelist.tas.gov.au](http://www.thelist.tas.gov.au)

### **Smartline or coastal vulnerability maps**

Maps of coastal landform types and their vulnerability to sea level rise can be found under 'Climate Change' layers on the LIST and the OzCoasts website. The data is presented as a 'smart line' following the coastline, with information on the geology of the coast readily interpreted for particular coastal areas.

[www.thelist.tas.gov.au](http://www.thelist.tas.gov.au)

[www.ozcoasts.org.au](http://www.ozcoasts.org.au)

### **Tasmarc project: monitoring shoreline erosion in Tasmania**

TASMARC relies on volunteers to survey beach profiles. The network of coastal locations being monitored with TASMARC is growing, and volunteers wanting to monitor new sites are welcomed. For more information contact:

[nicholas.boden@acecrc.org.au](mailto:nicholas.boden@acecrc.org.au)



Hazard management	<p><b>Australian Standard</b> AS/NZS ISO 31000:2009 Risk management</p> <p><b>Bureau of Meteorology</b> <b>Current Tasmanian weather warnings</b> <a href="http://www.bom.gov.au/weather/tas/">www.bom.gov.au/weather/tas/</a></p> <p><b>Emergency Management Australia (EMA)</b> Australian Emergency Manual Series <a href="http://www.ema.gov.au">www.ema.gov.au</a></p> <p><b>Floodplain mapping, flood data and flood timelines in Tasmania</b> <a href="http://www.dpiw.tas.gov.au/">www.dpiw.tas.gov.au/</a> Go to water &gt; Tasmania's water resources &gt; Floods</p> <p><b>Geodata Services</b> Aerial photographs and mapping products. <a href="mailto:geodata.clientservices@dpiw.tas.gov.au">geodata.clientservices@dpiw.tas.gov.au</a></p> <p><b>Melbourne Water</b> Flood management information. <a href="http://www.melbournewater.com.au/content/drainage_and_stormwater/flood_management">http://www.melbournewater.com.au/content/drainage_and_stormwater/flood_management</a></p> <p><b>Mineral Resources Tasmania</b> Landslide susceptibility maps <a href="http://www.mrt.tas.gov.au">http://www.mrt.tas.gov.au</a></p> <p><b>Tasmanian Fire Service</b> 6230 8600 or 1 800 000 699 <a href="http://www.fire.tas.gov.au">www.fire.tas.gov.au</a></p> <p><b>Tasmanian Flood Warning Centre, Bureau of Meteorology</b> Issues flood warnings <a href="http://www.bom.gov.au/hydro/flood/tas/">www.bom.gov.au/hydro/flood/tas/</a></p> <p><b>Tasmania Police, Department of Police and Public Safety</b> <a href="http://www.police.tas.gov.au">www.police.tas.gov.au</a></p>
<b>Works</b>	
Dredging and reclamation	<p><b>Australian Standards</b></p> <ul style="list-style-type: none"> <li>• AS 4482.1—1997 Guide to the sampling and investigation of potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds</li> <li>• AS 4482.2—1999 Guide to the sampling and investigation of potentially contaminated soil Part 2: Volatile substances</li> </ul>

<p>Excavation and soil management</p>	<p><b>Mineral Resources Tasmania</b>          Exploration Licence Application Form, Environmental Impact Information—Mining Form  <a href="http://www.mrt.tas.gov.au">www.mrt.tas.gov.au</a></p> <p><b>Transport Tasmania</b>          Roadwork specification R92 – Underground Service Facilities.  <a href="http://www.transport.tas.gov.au">www.transport.tas.gov.au</a></p> <p><b>Workplace Standards Tasmania</b>          For OH&amp;S procedures  <a href="http://www.wst.tas.gov.au">www.wst.tas.gov.au</a></p>
<p>Shoreline modification</p>	<p><b>Information on Seabees construction in NSW:Wamberal environmental impact statement</b>  <a href="http://www.gosford.nsw.gov.au/Information/Documents/postings/eis_wamberal.htm">www.gosford.nsw.gov.au/Information/Documents/postings/eis_wamberal.htm</a></p>
<p>Stormwater</p>	<p><b>Model for urban stormwater improvement conceptualisation (MUSIC)</b>          A proprietary software product. MUSIC is a user-friendly tool designed to meet the needs of urban stormwater engineers, planners, policy staff and managers in consultancies and state, regional and local government agencies.</p> <p><b>Transport Tasmania</b>          Roadwork specification R92 – Underground service facilities          Roadworks specification R 32 Drainage: Culverts, pipelines and structures          Roadworks specification R34 – Drainage maintenance  <a href="http://www.transport.tas.gov.au">www.transport.tas.gov.au</a>          Bridgeworks specifications (whole series)  <a href="http://www.transport.tas.gov.au/road/specifications/bridgeworks_specifications">http://www.transport.tas.gov.au/road/specifications/bridgeworks_specifications</a></p>
<p><b>Heritage</b></p>	
<p>Aboriginal places</p>	<p><b>A list of Aboriginal Heritage Officers</b>          Available from the Tasmanian Aboriginal Land and Sea Council (TALSC).  <a href="http://www.talsc.net.au/">http://www.talsc.net.au/</a></p> <p><b>Aboriginal Heritage Tasmania</b>          Desktop searches for Aboriginal heritage sites          Information about the importance of protecting Aboriginal heritage.  <a href="http://www.aboriginalheritage.tas.gov.au">http://www.aboriginalheritage.tas.gov.au</a></p>
<p>Geoheritage sites</p>	<p><b>Tasmanian Geoconservation Database</b>          Accessed via the LIST or the Natural Values Atlas.</p>
<p>Historic sites</p>	<p><b>Australian national shipwreck database</b>  <a href="http://www.environment.gov.au/heritage/shipwrecks/database.html">http://www.environment.gov.au/heritage/shipwrecks/database.html</a></p> <p><b>Heritage Conservation Funding Program</b>          Aims to assist heritage property owners by providing funding. The Heritage Council operates the program on behalf of the Tasmanian Government. Places permanently entered in the Tasmanian Heritage Register are eligible.</p> <p><b>Heritage Register</b>  <a href="http://www.heritage.tas.gov.au">www.heritage.tas.gov.au</a></p>

Access and facilities	
Mooring	<p><b>Seagrass Friendly Mooring System</b></p> <p><b>Marine &amp; Safety Tasmania: Mooring guidelines</b></p> <p><a href="http://www.mast.tas.gov.au">www.mast.tas.gov.au</a></p>
Road and bridge construction	<p><b>Austroad publications</b></p> <p>Available for download from the Austroads website. Registration is required to download these products. Registration and products are free.</p> <p><a href="http://www.onlinepublications.austroads.com.au">http://www.onlinepublications.austroads.com.au</a></p> <ul style="list-style-type: none"> <li>• <i>Austroads 1997, AP-127/97: Concrete structures durability, inspection and maintenance procedures – Position paper</i></li> <li>• <i>Austroads 2003, AP-G1/03: Rural road design—A guide to the geometric design of rural roads (8th edn).</i></li> <li>• <i>Austroads 2003, AP-R217/03: Environmental considerations for planning and design of roads + reference CD ROM.</i></li> <li>• <i>Austroads 2003, AP-R180/00: Road runoff &amp; drainage: Environmental impacts and management</i></li> <li>• <i>Austroads 2003, AP-R185/01: Environmental risk management guidelines and tools for road projects</i></li> <li>• <i>Austroads 2003, AP-R232/03: Guidelines for treatment of stormwater runoff from the road infrastructure</i></li> </ul> <p><b>Transport Tasmania</b></p> <p>Roadworks specifications, Road hazard management guide, and Technical advice sheets</p> <ul style="list-style-type: none"> <li>• Roadworks specification R75 – Environmental protection</li> <li>• Roadworks specification R76 – Roadside maintenance</li> <li>• Roadworks specification R34 – Drainage maintenance</li> </ul> <p><a href="http://www.transport.tas.gov.au">www.transport.tas.gov.au</a></p>
Signs	<p><b>Australian Standards</b></p> <ul style="list-style-type: none"> <li>• <i>AS 2156 Part 1 Walking tracks. Classification and signage</i></li> <li>• <i>AS 2899.1-1986 Public information symbol signs – General information signs</i></li> </ul>
Slips, marinas, launching ramps	<p><b>Australian Standards</b></p> <p>Available from ASI Global phone 1 300 654 646</p> <p><a href="http://www.standards.com.au">www.standards.com.au</a></p> <ul style="list-style-type: none"> <li>• <i>AS3962-2001 Guidelines for design of marinas</i></li> <li>• <i>AS4997-2005 Guidelines for design of maritime structure</i></li> </ul> <p><b>MAST Mooring Factsheet</b></p> <p><a href="http://www.mast.tas.gov.au">http://www.mast.tas.gov.au</a></p> <p><b>Seagrass friendly Mooring System</b></p> <p><a href="http://www.seagrassmooring.com.au/">http://www.seagrassmooring.com.au/</a></p>

<p>Tracks and trails</p>	<p><b>Australian Standards</b></p> <ul style="list-style-type: none"> <li>• AS 2156 Part 1 Walking tracks. Classification and signage</li> <li>• AS 2156 Part 2 Walking tracks. Infrastructure design</li> <li>• AS 1428.1 – 1428.2 Design for access and mobility</li> <li>• AS/NZS ISO 31000:2009, Risk management - Principles and guidelines</li> </ul> <p>Replaces AS 4360-2004 Risk management as the leading resource for risk management.</p> <p><b>Austroroads</b></p> <p>AGRD06A/09 Guide to traffic engineering practice Part 6A - Pedestrian and cyclist paths</p> <p>Available for download from the Austroroads website. Registration is required to download these products. Registration and products are free.</p> <p><a href="http://www.onlinepublications.austroroads.com.au">http://www.onlinepublications.austroroads.com.au</a></p> <p><b>International Mountain Bicycling Association trail difficulty rating system</b></p> <p><a href="http://www.imba.com/resources/freeriding/trail-difficulty-rating-system">http://www.imba.com/resources/freeriding/trail-difficulty-rating-system</a></p>
<p><b>Recreation</b></p>	
<p>Fishing and boating</p>	<p><b>Fishwatch:</b> Report suspected illegal fishing and fishing offences.</p> <p>0427 655 557</p> <p><b>Recreational Sea Fishing Guide</b></p> <p>Produced annually by DPIPWE and available on the DPIPWE website</p> <p><b>Leave no wake: Minimal impact sea kayaking</b></p> <p>Brochure available from Parks and Wildlife Service and information on the website</p> <p><a href="http://www.parks.tas.gov.au">www.parks.tas.gov.au</a></p> <p><b>Stow it don't throw it</b></p> <p>Guidelines for minimising risk of rubbish and pollutants for boating activities</p> <p>Australian Maritime Safety Authority (AMSA)</p> <p><a href="http://www.amsa.gov.au/publications/Marine_Environment_Protection/Stow%20it.pdf">http://www.amsa.gov.au/publications/Marine_Environment_Protection/Stow%20it.pdf</a></p>
<p>Horseriding and dog walking</p>	<p>Local Council</p>

# Glossary

**Note:** The definitions of terms apply specifically to this document.

<b>Aboriginal heritage sites/values</b>	There are numerous places on the coast where there is evidence of Aboriginal life before white settlement. The Aboriginal Relics Act 1975 protects Aboriginal Relics, sites and objects. For example shell middens, rock markings, stone quarries, stone arrangements, rock shelters and fish traps.
<b>Accretion</b>	Sand build up
<b>Acid sulphate soils</b>	Soils containing iron sulfides, found in low-lying waterlogged areas, generally less than 5 metres above sea level. When exposed to air (e.g. when drained), the sulfides oxidise to produce sulfuric acid which corrodes infrastructure and pollutes waterways.
<b>Aesthetic values</b>	For example (and these are entirely subjective) a beautiful sea and landscape view from a hillside viewing area with medium to long range views (eg D'Entrecasteaux Channel from Woodbridge Hill); a place where the vegetation has been protected and meets the high-water mark (e.g. Mt William National Park); and scenic drives such as the east coast highway to Swansea.
<b>Amenity</b>	The natural or physical characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic values and cultural and recreational attributes.
<b>Annual Exceedance Probability</b>	The probability of at least one exceedance event happening during a period of time. See exceedance event.
<b>Armour</b>	A protective layer of rock or concrete units.
<b>Australian Height Datum (AHD)</b>	Mean sea level reference point. A level reference point, uniform throughout Australia, based on observations of mean sea level at over 30 tide gauge stations along the coastline. Note that the AHD for Tasmania was established at the mean sea level measured in 1972 at Burnie and Hobart. The subsequent sea level rise means that the AHD at Hobart now lies 38mm below mean sea level (assuming an average linear rate of sea level rise relative to the land of 1.2 mm/year for south-east Tasmania since the late 1800s).
<b>Average Recurrence Interval (ARI)</b>	The long-term average number of years between the occurrence of a flood as big as (or larger than) the selected event. For example, floods with a discharge at least as great as the 5-year ARI design flood will occur on average once every 5 years. The ARI expresses the average period between extreme events.

<b>Batter</b>	An earth slope formed from placed fill material or cut into the natural hillside (e.g. during road construction). A cut batter is an exposed sloping surface cut by excavation during earthmoving operations. A fill batter is an exposed sloping surface created by deposition of fill.
<b>Batter drain</b>	A reinforced drain that carries water down a batter without causing erosion.
<b>Batter toe drain</b>	A drain constructed at the base of a slope to direct runoff away from exposed areas.
<b>Beach nourishment</b>	The process of replenishing sand on a beach artificially by delivery of sediment dredged or excavated elsewhere.
<b>Beach replenishment</b>	The process of replenishing sand on a beach either naturally by longshore transport or artificially. See beach nourishment.
<b>Beach Ridge</b>	Beach ridges are linear, symmetric or asymmetric convex ridges formed of sand, gravel or shell debris. There are 2 types of beach ridges, storm built or wind built.
<b>Berm</b>	The nearly horizontal part of the beach, formed by wave action dumping material, finishing at the high tide mark.
<b>Biodiversity</b>	The variety of life forms: different species of plants, animals and micro-organisms, the genes they contain and the ecosystems they form.
<b>Black water</b>	Wastewater containing faecal matter and urine.
<b>Blowout</b>	Bare sand on a sand dune subject to wind erosion and prone to movement. Results when vegetation has been disturbed on a sand dune and sand becomes mobile.
<b>Boat launching ramp</b>	(Boat ramp) A structure designed for launching trailer-borne recreational vessels.
<b>Box culvert</b>	A culvert of rectangular cross-section.
<b>Breakwater</b>	A structure aligned parallel to shore, sometimes connected to the shore, to provide protection from waves.
<b>Bund</b>	A low barrier to divert water off a slipway or similar structure.
<b>Burra Charter</b>	Defines the basic principles and procedures to be followed in the conservation of Australian Heritage Places. It was adopted at a meeting in the town of Burra, South Australia in 1979.

<b>Caisson</b>	A concrete box-type structure used for structural purposes such as retaining walls.
<b>Catch drain</b>	A diversion channel constructed above a road or batter to intercept runoff water and divert it to a stable water disposal area or channel before it reaches the road or batter.
<b>Catchment</b>	The area of land from which water drains to form creeks, rivers, lakes, wetlands and aquifers.
<b>Causeway</b>	A natural or constructed crossing that enables vehicles to ford a drainage feature. The pavement may be of concrete, gravel, bitumen, rock, logs or the natural surface.
<b>Climate Change</b>	An increase in the average temperature of the air and oceans due to burning of fossil fuels and deforestation. Also known as global warming. Greenhouse gases such as carbon dioxide trap solar radiation causing an increase in temperature.
<b>Coast</b>	As defined in the <i>State Coastal Policy 1996</i> 'coastal area' means: <ul style="list-style-type: none"> <li>a) the area of land and state waters identified in a planning scheme or any other instrument required to manage or control use or development, which encompasses the coastal assets, values and processes which are to be conserved, used or developed; or, in the absence of an area so identified;</li> <li>b) all land to a distance of one kilometre inland from high water mark and State waters.</li> </ul>
<b>Coastal landforms</b>	In earth science or geology fields, a landform is a distinct physical feature. They are defined by their location in the landscape and their terrain. For example a beach, cliff, estuary, lagoon, sand spit, dune, tombolo, barrier island, bay, cove, gulf, wave cut platform, headland, peninsula etc.
<b>Coastal processes</b>	The action of natural forces (wind, waves, tides, currents) on the shoreline and near-shore seabed. These include the effects of storms, erosion and deposition, movement of dunes, longshore drift and inundation.
<b>Coastal reserve</b>	An outdated but commonly used term for reserved land under the <i>National Parks and Reserves Management Act 2002</i> between the low water mark and approximately 30 metres inland. Now coastal reserves are reclassified into the new terms: State Reserve, Nature Reserve, Conservation Area or Nature Recreation Area depending on the values and objectives for the area.



<b>Coastal values</b>	A component of the coastal environment for example vegetation communities (mud flats, heath, sandy beaches), wildlife habitat (eg the endangered swift parrot prefers grassy forest dominated by <i>Eucalyptus globulus</i> ), and coastal landform types (eg hard rock shorelines, cobble beaches).
<b>Community engagement</b>	The process by which community organisations and individuals build ongoing permanent relationships for the purpose of applying a collective vision for the benefit of the community.
<b>Consolidation</b>	The process by which sand or soil reduces in volume under load over a period of time (due to drainage of water from the pores between the grains).
<b>Consult</b>	A common mistake is to inform a group of people of what you are doing. Consulting means to ask advice from or refer a project idea for information and input. It means being open to changing your project to suit the needs and interests of others.
<b>Corridor</b>	The land area to accommodate road, rail, pipelines, services and utility infrastructure.
<b>Critical habitat</b>	Under the <i>Threatened Species Act 1995</i> , management options to protect listed species include declaring areas of land as critical to listed flora or fauna.
<b>Cross-drain</b>	A culvert, pipe or shallow channel laid diagonally across the surface of a road or track to divert water from the surface or from the roadside ditch.
<b>Culvert</b>	One or more adjacent pipes or enclosed channels for conveying a stream underneath a roadway or other structure.
<b>Cultural heritage</b>	The value that a place has in terms of its aesthetic, historic, scientific or social significance for the present community and for future generations.
<b>Cultural heritage value</b>	Aboriginal relics, artefacts, paintings, middens, lighthouses, buildings, ship wrecks, are examples of cultural heritage values in both Aboriginal and European cultures.
<b>Cut or cutting</b>	A construction produced by the removal of the natural formation of earth or rock, whether sloped or level.
<b>Deposition</b>	Sand build up through the action of wind and waves.
<b>Design wave height</b>	The wave height adopted for the purposes of designing coastal structures such as breakwaters and seawalls. It is chosen to ensure that the structures are not at undue risk of wave damage.



<b>Diversion drain</b>	An open channel or swale constructed to divert stormwater runoff around exposed areas.
<b>Drainage line</b>	A channel down which surface water naturally concentrates and flows, conveying water only during or immediately after periods of heavy rainfall.
<b>Drainage pit</b>	An in-ground structure, usually with a covered inspection opening, used for collection and transfer or redirection of drainage water into an underground pipe drain.
<b>Downdrift</b>	Direction of alongshore movement of sediments.
<b>Dune</b>	Hill, bank, ridge, or mound of loose, wind-blown sand. Often stabilised by vegetation.
<b>Ecosystem</b>	All the biological, chemical and physical entities and the inter-relationships and dependencies that occur between these entities in a specific environment, e.g. an estuary.
<b>Ecotourism</b>	(Ecological Tourism) responsible travel to fragile, pristine and usually protected areas that strives to be low impact and small scale. It purports to educate the traveller, provide funds for ecological conservation, and directly benefit the economic development and political empowerment of small communities and foster respect for different cultures and human rights.
<b>Embankment</b>	Fill material, usually earth or rock, placed with sloping sides and usually longer than it is high.
<b>Endemic/Endemism</b>	Not found anywhere else in the world.
<b>Energy dissipater</b>	A structure that slows fast-moving flows to prevent erosion of a channel.
<b>Environmental harm</b>	An adverse effect on the environment where the effect on the environment and humans is wide scale or high impact.
<b>Environmental hazard</b>	A potential source of harm, injury or difficulty.
<b>Environmental risk</b>	The level of risk to causing harm to the environment.
<b>Erosion</b>	Removal of soil particles by wind and water.
<b>Established foredunes</b>	A single dune or series of dunes behind the swash zone and incipient dune(s) at the back of a beach. They may be vegetated to some extent but are active landforms, i.e. not stable within a 50 year timeframe.
<b>Estuary</b>	The semi-enclosed tidal part of a river where salt water meets fresh water.

<b>Exceedence event</b>	A climatic event that exceeds a given threshold, such as a storm wave height that exceeds existing levels. Such events have the potential to be extreme weather or storm events.
<b>Exit pad</b>	An elevated pad of coarse gravel overlaying a geotextile fabric. A timber or metal shaker ramp is often located on top of the gravel pad. Used at road exits to reduce sediments leaving a construction site.
<b>Filter strip</b>	A band of closely-growing vegetation, usually grass, planted between a pollution source and a receiving waterbody.
<b>Flood</b>	Temporary covering of land by water in an area not normally covered by water.
<b>Foredunes</b>	The dunes nearest the sea in a dune system. Foredunes run parallel to the beach, they can be symmetric or asymmetric dune ridges (located at the landward edge of the beach). They are formed by windblown sand deposited within vegetation. Generally, they occur as two main types, incipient and established foredune(s).
<b>Foredune complex</b>	The active part of the shore-parallel coastal dune system that has a natural tendency to significant physical change within periods of less than 50 years (i.e. is unstable within planning timeframes) given the existing and predictable geomorphic context (landform processes). The foredune complex includes the incipient dune (where it exists) and one or more established foredunes (depending on the area's geomorphic context). Established foredunes are not stable within the 50 year timeframe, but may be vegetated to some extent.
<b>Foreshore</b>	The area of land adjacent to a waterbody; a shoreline.
<b>Footing</b>	The widening at the base of a structure to spread the load to the foundation material.
<b>Frontal dune</b>	The most seaward ridge of sand in the dune system. The frontal dune may or may not be naturally vegetated with plants. In areas where smaller ridges of sand are forming in front of an established dune ridge, the frontal dune may include more than one ridge. It may be an incipient or established foredune. However, there can be broad morphological and ecological variations within these two types, dependant on the amount of sediment available, wind and wave conditions, bay plan form and plant species. The term should never be used to indicate stability or otherwise of a dune complex, and should not be confused with foredunes, as defined above.

<b>Funnel fencing</b>	Fencing designed to direct animals into a road underpass or culvert. The fences are set at a 45 degrees angle in both directions from the road (rather than parallel to it) to guide animals into the underpass. The fences stretch out to the roadside vegetation.
<b>Gabion</b>	A wire basket(s) usually filled with stone used for structural purposes such as retaining walls.
<b>Gabion mattress</b>	Gabions comprising larger baskets, much longer than they are deep, divided into compartments.
<b>Geoconservation/geoheritage value</b>	Some coastal dunes and other sandy landforms are protected for their values for example fossil dune forms, fossil shorelines provide evidence of old coastlines circa 125,000 years ago.
<b>Geomorphic</b>	Of or relating to geomorphology.
<b>Geomorphology</b>	The study of landforms, their forms, origins, development and processes. The shape of land surface forms and the processes producing them.
<b>Geotextile</b>	A thin, flexible permeable sheet of synthetic material used to allow the movement of water through the pores of the material while holding soil particles in place.
<b>Gross Pollutant Trap</b>	A traditional structure that intercepts and retains coarse sediment, rubbish and debris from runoff water.
<b>Groundwater</b>	Water stored underground in the pore spaces between soil particles or rock fractures. The water below the water table.
<b>Groyne</b>	Barriers that are built across or perpendicular to the beach and into the water to trap sand. They can be used to provide sheltered waterways and to increase the width of the beach.
<b>Habitat</b>	The place or type of site where an organism or population naturally occurs.
<b>Hard engineering techniques</b>	Structural techniques that use permanent concrete and rock constructions to stabilise the coastline and protect assets located behind. For example sea walls, groynes, breakwaters and revetments.
<b>Hazard</b>	A potential source of harm, injury or difficulty.



<b>High conservation value</b>	Specialist input is required to determine if land has a high conservation value for example an Aboriginal Heritage survey may provide evidence of Aboriginal artefacts. A coastal geomorphologist will survey a site for aspects of geoheritage. A vegetation specialist can identify plants and habitats where threatened, vulnerable or rare species may be present. These are all examples of high conservation values.
<b>Hind-dune complex</b>	Dunes lying behind the foredune complex, which have a natural tendency to stability in planning time-scales.
<b>Hydraulic regime</b>	Water level fluctuations in a waterbody (e.g. changes in river flows).
<b>Hydrology</b>	The study of the distribution and movement of water.
<b>Hydrostatic pressure</b>	The pressure exerted by a fluid at rest due to gravity.
<b>Impervious</b>	A solid surface that does not allow water to penetrate.
<b>Incipient dune</b>	Small ephemeral dune(s) located in front of established foredunes at the upper margin of the beach. Their duration can be seasonal, annual, or they may remain intact for long periods (e.g. more than 10 years). The durability of incipient dunes depends on a number of factors, including whether they form around seasonal, annual or perennial pioneering plant species, seaweed or flotsam.
<b>Integrated management</b>	A shortened version of the term Integrated Coastal Zone Management (ICZM) which means a holistic approach to looking at issues in the coastal zone. For example being inclusive of all the relevant legislation, integrating decisions across all relevant sectors to the issue and developing consistency and cooperation across government levels to achieve better outcomes for the environment.
<b>Intertidal foreshore</b>	Also known as the intertidal zone or foreshore, is the area exposed to the air at low tide and underwater at high tide.
<b>Jetty</b>	A horizontal decked walkway built on piers or piles, which provides access from the shore to a waterway.
<b>Kelp forest</b>	Underwater areas of high density kelp, smaller areas are called kelp beds.
<b>King tide</b>	On Australia's east coast the highest tides occur in summer and winter months due to the gravitational pull of the sun and moon combined. The highest of these is the king tide.

<b>Landslip</b>	The group of slope movements wherein shear failure occurs along a specific surface or combination of surfaces (eg rock falls, failure of slopes). Can occur in offshore, coastal and onshore environments.
<b>Level spreader</b>	A bank or mound constructed sideways across a slope to convert a concentrated runoff flow into a slower-moving, shallow, widespread flow (to reduce erosion).
<b>LiDAR</b>	Light Detection and Ranging, a remote sensing technology that uses light from a laser and measures properties of scattered light from vegetation communities, land surfaces, buildings etc. This method has also been used to accurately map the contours of land along the coastline accurate to within 25cm.
<b>LIST</b>	Land Information System Tasmania. Central Tasmanian Government land information (e.g. topographic mapping) data system, operated by DPIPWVE.
<b>Litter trap</b>	A stormwater gross pollutant trap. A form of barrier such as a net or filter is placed under a street gutter or at the end of a pipe to reduce leaf litter, cigarette butts and general street litter from entering a waterway or bay.
<b>Littoral drift</b>	See longshore drift.
<b>Local provenance (of plants)</b>	Native plants that grow locally from local genetic stock.
<b>Longshore</b>	Parallel to and near the shoreline: the same as alongshore.
<b>Longshore current</b>	The movement of waves coming in to shore at a slight angle, returning down the beach and then repeating the process with the general progression of sand in one direction called longshore drift.
<b>Longshore drift</b>	Movement of sand along the shore, in the near-shore zone, usually resulting from alongshore currents generated by wave action. Also called littoral drift or longshore transport.
<b>Mean High Water Mark</b>	The mean of high water (high tide level) over a long period of time.
<b>Meiofauna</b>	Tiny animals living within the sand.
<b>Migratory birds</b>	Include shorebirds and waders migrate 26,000 km each year between their breeding grounds in the northern hemisphere (Arctic Circle) and the non-breeding areas in the southern hemisphere (Australia and New Zealand). They travel along the East-Asian - Australasian Flyway one of 8 flyways in the world. There are internationally recognised agreements to protect them such as JAMBA (Japan Australia Migratory Bird Agreement), CAMBA (China Australia Migratory Bird Agreement) and ROKAMBA (Republic of Korea Australia Migratory Bird Agreement).

<b>Mooring</b>	A wire, chain, or other structure placed in or on the shoreline or seabed for securing a vessel, excluding an anchor.
<b>National environmental significance</b>	Under the Environment Protection Biodiversity Conservation Act 1999, actions that are likely to have a significant impact on matters of national environmental significance require approval from the Australian Government Minister for the Environment. The Minister will decide whether approval is required under the Act. The 8 matters of national environmental significance protected under the Act are: world heritage properties, national heritage places, wetlands of international importance, listed threatened species and ecological communities, migratory species, Commonwealth marine areas, the Great Barrier Reef Marine Park, nuclear actions.
<b>Natural values</b>	The variety of different plant communities, animal habitats and coastal landforms, land and seascapes, water quality and quantity. Also called natural resources.
<b>Nearshore currents</b>	Currents created by winds, waves, tides and river flows.
<b>Natural Resource Management (NRM)</b>	The management of natural resources such as land, water, soil, plants and animals.
<b>NRM regions</b>	Natural resource management regions are based on catchments or bioregions. The Australian Government, in association with state and territory governments, has identified 56 regions covering all of Australia. Tasmania has 3 NRM regions: NRM North, NRM South and Cradle Coast NRM.
<b>Parabolic dune</b>	U-shaped dunes with elongated arms pointing downwind because they have been fixed by vegetation and their crests point upwind.
<b>Parallel ridge/Parallel dunes</b>	Also known as longitudinal dunes. Some dunes elongate parallel to the prevailing wind, possibly caused by a larger dune having its sides blown away.
<b>Pavement</b>	The portion of the road, excluding shoulders, placed above the design sub-grade level for the support of, and to form a running surface for, vehicular traffic.
<b>Perched culvert</b>	A culvert where the inlet or outlet is above the waterway. This can obstruct fish passage because it requires a fish migrating upstream to leap into the culvert.
<b>Permeable</b>	Porous material that allows the passage of water.
<b>Permian</b>	A geological period of time from 299 to 251 million years before present. The time when all land masses formed a single continent - Pangea.

<b>Photopoints</b>	An established (defined) point from which a series of photos can be taken over time to illustrate change.
<b>Physical processes</b>	On the coast, these are the wind, waves, currents and tides that all influence the shape of the coast.
<b>Pier</b>	(1) An intermediate support in a bridge or jetty. (2) A structure to which a vessel is secured for loading and unloading cargo.
<b>Pile</b>	A long, heavy section of timber, concrete or metal driven into the earth or seabed as a support or protection.
<b>Pontoon</b>	A floating structure used for access to the water or a vessel.
<b>Progradation</b>	The process of sand accumulation on a beach and shoreline build up or growth seawards.
<b>Protected object</b>	The specific relic to which a Ministerial order declaring a protected site relates.
<b>Protected site</b>	Land where a relic is situated which the Minister has declared ought to be protected and preserved.
<b>Provenance</b>	Source (e.g. of plant seeds or cuttings).
<b>Quay</b>	A docking area built for loading/unloading of vessels. Docks are parallel allowing loading/unloading from one side of the ship.
<b>Ramsar site</b>	The Ramsar list of wetlands of international importance now includes 1,888 sites. The Ramsar Convention is an international treaty for the conservation and sustainable use of wetlands. The first meeting of nations involved was at Ramsar, a town in Iran in 1971 and came into force in 1975.
<b>Recession</b>	Ongoing erosion with no sediment replenishing the shoreline resulting in the landward retreat of the shoreline.
<b>Refraction (of waves)</b>	(1) Process by which the direction of a wave moving in shallow water at an angle to the seabed contours is changed. Part of the wave advancing in shallower water moves more slowly than the part still advancing in deeper water, causing the wave crest to bend toward alignment with the underwater contours. (2) Bending of wave crests by currents.


<b>Relic</b>	The <i>Aboriginal Relics Act 1975</i> protects Aboriginal relics, protected sites and protected objects in Tasmania. Relic is defined to mean any artefact, painting, carving, engraving, arrangement of stones, midden or other object made or created by any of the original inhabitants of Australia or their descendants before 1876; any object site or place that bears signs of the activities of the original inhabitants; or the remains of the body of an original inhabitant or of a descendant who died before the year 1876 that are not buried in a marked grave or cemetery.
<b>Resident shorebird</b>	Year round resident birds who breed and feed in one area for example pied oyster catchers, terns and gulls.
<b>Reserve Activity Assessment</b>	An assessment undertaken by PWS for reserves managed under the <i>Tasmanian National Parks and Reserves Management Act 2002</i> .
<b>Revetment</b>	A facing of stone, concrete, etc., built to protect an embankment or shore structure against erosion by waves or currents.
<b>Retaining wall</b>	A wall constructed to maintain in position a mass of earth or to resist sideways pressure from the adjoining ground.
<b>Riparian vegetation</b>	Riverside vegetation.
<b>Rip current</b>	Also known as riptide, a strong channel of water flowing seaward from near the shore through the surf line. Typical flow is 0.5 metres per second up to 2.5 metres per second.
<b>Rip rap</b>	A layer, facing, or protective mound of stones, randomly placed to prevent erosion or scour at a structure or embankment; also the stone so used.
<b>Riser</b>	The vertical portion of a step, between two steps.
<b>Risk assessment</b>	Understanding the hazard or threat, the likelihood of occurrence, vulnerability to that hazard and the likely consequence or impact.
<b>Rock armour</b>	A protective layer of rock.
<b>Rookery</b>	A penguin or shearwater rookery is a colony of breeding birds where there are nests, burrows, chicks etc.
<b>Rubble</b>	Rough, irregular fragments of broken rock or concrete.
<b>Rubble-mound structure</b>	A mound of stones (randomly placed) protected with a cover layer of selected stones or specially shaped concrete armour units (e.g. a breakwater).



<b>Rumble strip</b>	A series of small ridges placed across the lane of a road to warn the driver to slow down (e.g. if a stop sign is ahead).
<b>Runoff</b>	Water from rain or other water that flows over the land surface. See stormwater.
<b>Sand blow</b>	Or blowouts are caused when protective dune vegetation is damaged (by vehicles, livestock and pedestrian traffic, burning and grazing) and sand becomes mobile.
<b>Saltmarsh</b>	An intertidal vegetation community where the waves are subdued and sediments accumulate in estuaries and inlets. Where the water is highly saline at the mouth of a river the saltmarsh is dominated by succulent herbs and shrubs such as glasswort. Where inflowing rivers and streams make the water less saline, tussock rushes, tussock sedges, tussock grasses and non-succulent herbs are more prominent.
<b>Scour</b>	Removal of material under water (e.g. by waves or currents at the base or toe of a shore structure).
<b>Sea Level Rise</b>	<p>Current sea level rise is due significantly to global warming and in Tasmania recent analysis from CSIRO and the Antarctic Climate and Ecosystems Cooperative Research Centre shows current observed sea level rise of around 3mm per year (this is consistent with the upper level of projected sea level rise. As temperatures increase from global warming, there will be further sea level rise from thermal expansion of the oceans, melting of ice caps, glaciers and ice sheets. The Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (2007) projections for sea level rise for the twenty first century is 18-59cm with a potential addition of 10-20cm depending on the ice melt from Greenland and Antarctica.</p> <p>Ordinarily, average local sea level (where tide and wave influence is smoothed out) is influenced by atmospheric pressure, ocean currents and local ocean temperature. Short term changes to sea level include astronomical tides, storm surges and atmospheric pressure, El Nino/Southern Oscillation, seasonal variations such as salinity and flooding, and earthquakes and tsunamis.</p>
<b>Seawall</b>	A structure separating land and water areas, mainly to prevent erosion and other damage by wave action.
<b>Sediment budget</b>	The amount of sediment available in both onshore and offshore landforms for movement onshore and offshore by coastal processes.

<b>Sediment trap</b>	A structure (or vegetative barrier) designed to intercept contaminated run-off from disturbed areas and retain the sediment so it does not enter stormwater pipes or waterways.
<b>Sedimentation</b>	Deposition of eroded sediments, usually by wind or water.
<b>Sedimentation basin</b>	An area where run-off water is detained to allow the settling of sediment particles.
<b>Sediments</b>	Particles (mineral and organic) of varying size that are being moved (or have been moved) by the action of wind, water or gravity, which come to rest on the Earth's surface (either on land or in water).
<b>Shorebird</b>	Also referred to as migrant shorebirds, nesting shorebirds and breeding shorebirds. Includes species such as plovers, sandpipers, snipe and curlews. They often nest just above high water and are vulnerable to human use of the beach.
<b>Shoreline</b>	The area of land adjacent to a waterbody; foreshore.
<b>Slipway</b>	A structure with parallel rails for drawing a vessel out of the water for maintenance and repair.
<b>Skid</b>	A small inclined ramp used for the launching of boats, which does not include a slipway.
<b>Soft engineering techniques</b>	Building with natural processes and relying on natural elements such as sand, dunes and vegetation or brush to prevent erosive forces from reaching the backshore. These techniques include beach nourishment and sand dune stabilisation.
<b>Sponge garden</b>	A group of marine animals occurring in large, complex plant-like colonies (phylum <i>Porifera</i> ) and have a porous structure and a silica or calcium based skeleton.
<b>Spring tide</b>	The highest tide occurring approximately every 14 days when the gravitational pull of the sun and moon are combined at the new and full moon
<b>Stakeholder</b>	Someone from community, business, industry or government who has an interest or an investment in a project
<b>Storm surge</b>	An area of elevated sea level at the coast caused by a low pressure system and intense winds from offshore storms. There is a temporary rise in sea level of about 10mm per hectopascal due to a fall in atmospheric pressure.

<b>Storm tide</b>	The final water level resulting from a combination of storm surge, wave set up and wave run up.
<b>Stormwater</b>	Water that runs off land, frequently carrying various forms of pollution, such as rubbish, animal droppings and dissolved chemicals. It is carried in stormwater channels and discharged directly into creeks, rivers, the harbour and the ocean.
<b>Stormwater detention</b>	Temporary storage of stormwater, with controlled release into the drainage system.
<b>Straddle carrier</b>	A vehicle specially constructed to lift and move a boat in a dock area.
<b>Sub-grade</b>	The trimmed or prepared portion of the formation on which a road pavement is constructed.
<b>Sustainable development</b>	A pattern or resource use that aims to meet human needs for generations to come while preserving the environment. Coined by the Brundtland Commission as meeting the needs of the present without compromising the ability of future generations to meet their own needs.
<b>Sustainable management</b>	The application of sustainable practices in the areas of business/industry, society/community and the environment by managing activities in each area so that they will benefit current and future generations.
<b>Swale</b>	(1) A grassed open drainage channel designed to intercept and convey surface runoff to a drainage network inlet and to promote infiltration of water and interception of sediment by the vegetation. (2) A depression between two coastal dunes.
<b>Swell</b>	Wind-generated waves travelling out of their generating area.
<b>Table drain</b>	The drain beside and parallel to a road, with its lowest portion below the pavement base. It is part of the road formation.
<b>Threatened species</b>	A plant or animal listed as endangered (Schedule 3), vulnerable (Schedule 4) or rare (Schedule 5) of the Tasmanian <i>Threatened Species Protection Act 1995</i> . Endangered listings mean the species is in danger of extinction and long term survival is unlikely unless the factors causing it to be so are corrected. Vulnerable listings are likely to become endangered while the factors causing it to be vulnerable continue operating. A species is listed as rare if it has a small population in Tasmania that is at risk.
<b>Tidal inundation</b>	Flooding at high, spring or king tide with sea water moving up through the stormwater systems.




<b>Tidal prism</b>	The volume of water moving in and out of an estuary.
<b>Transgressive dune</b>	Principally unvegetated sand dune or sand sheet moving landward (ie transgressing a former landscape).
<b>Treatment train</b>	A series of treatment systems that together remove a variety of pollutants from stormwater and reduce peak flows in a catchment.
<b>Tsunami</b>	A series of ocean waves with very long wave lengths caused by large-scale disturbances of the ocean (eg earthquakes, landslides, volcanic eruptions, explosions, meteorites).
<b>Turbidity</b>	Cloudiness in water caused by suspended sediments.
<b>Visual Amenity</b>	People visually relate to and place value on their surroundings and then derive a benefit from how it looks. The enjoyment of the coast can be from within a car driving through or between coastal towns or on a beach as much as from a viewing platform.
<b>View field</b>	The siting and design of structures or removal of trees can alter a perspective that many people have built a relationship with over time. For example, a development application to change a two story building to a five story building may alter the view field of the coastline and estuary that has been available to people who live in or have visited the area for many years.
<b>Vegetated swale</b>	Open shallow channels with vegetation used to filter and convey stormwater run-off.
<b>Water bar</b>	A water diversion device (e.g. a log) used on constructed trails to divert water off the trail and prevent erosion.
<b>Water Sensitive Urban Design</b>	Stormwater management systems that conserve water and remove sediments and pollutants.
<b>Wave return wall</b>	A wave located at the top of a seawall, designed to throw back the waves.
<b>Wave run up</b>	When a wave breaks it can also run up the shoreline to an even greater height depending on the size of the wave and slope of the shore.
<b>Wave setup</b>	Where seawater is pushed up into bays and estuaries and piles up against shores due to wind blowing across water creating waves and currents.
<b>Wetland</b>	A permanently or intermittently wet area, shallow water or land/water margin that supports a natural ecosystem of plants and animals adapted to wet conditions.


<b>Wharf</b>	A structure (including quays, piers and jetties) from which passengers or goods may be taken on board or landed from vessels.
<b>Wrack</b>	Seaweed/seagrass or other vegetation cast onto the shore by wave action.

## Acronyms

<b>ACECRC</b>	Antarctic Climate Ecosystems Cooperative Research Centre
<b>AEP</b>	Annual Exceedance Probability
<b>AHD</b>	Australian Height Datum
<b>AHT</b>	Aboriginal Heritage Tasmania (unit of DPIPW E)
<b>AHO</b>	Aboriginal Heritage Officer (endorsed by TALSC)
<b>ARI</b>	Average Recurrence Interval
<b>ARQ</b>	Australian Runoff Quality (guidelines)
<b>ASS</b>	Acid Sulfate Soils
<b>CAMBA</b>	China–Australia Migratory Bird Agreement
<b>CLS</b>	Crown Land Services
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation
<b>DEP</b>	Derwent Estuary Program
<b>DIER</b>	Department of Infrastructure, Energy and Resources
<b>DPIPW E</b>	Department of Primary Industries, Parks, Water and Environment
<b>EEMSS</b>	Estuary Entrance Management Support System
<b>EIA</b>	Environmental Impact Assessment
<b>EMP</b>	Environmental Management Plan
<b>EMPCA</b>	<i>Environmental Management and Pollution Control Act 1994</i>
<b>EPA</b>	Environment Protection Authority (Tasmania)
<b>EPBC</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
<b>GPS</b>	Global Positioning System



<b>GPT</b>	Gross Pollutant Trap
<b>IMBA</b>	International Mountain Bike Association
<b>IPCC</b>	Intergovernmental Panel for Climate Change
<b>JAMBA</b>	Japan–Australia Migratory Bird Agreement
<b>LiDAR</b>	Light Detection And Ranging
<b>LIST</b>	Land Information System Tasmania
<b>LUPAA</b>	<i>Land Use Planning and Approvals Act 1993</i>
<b>MAST</b>	Marine and Safety Tasmania
<b>MBO</b>	Monosulfidic Black Ooze
<b>MRT</b>	Mineral Resources Tasmania
<b>NRM</b>	Natural Resource Management
<b>OH&amp;S</b>	Occupational Health and Safety
<b>PASS</b>	Potential Acid Sulfate Soil
<b>PCAB</b>	Policy and Conservation Assessment Branch (DPIPWE)
<b>PEV</b>	Protected Environmental Value
<b>PPE</b>	Personal Protective Equipment
<b>PWS</b>	Parks and Wildlife Service
<b>RAA</b>	Reserve Activity Assessment (PWS assessment process)
<b>RBF</b>	Recreational Boating Fund
<b>RMPAT</b>	Resource Management and Planning Appeal Tribunal
<b>RMPS</b>	Resource Management and Planning System
<b>ROKAMBA</b>	Republic of Korea-Australia Migratory Birds Agreement
<b>SCAT</b>	Southern Coastcare Association of Tasmania
<b>SMP</b>	Stormwater Management Plan
<b>SPRATS</b>	Sea Spurge Remote Area Teams



SWMP	Statutory Weed Management Plans
SWMP	Soil and Water Management Plan
TALSC	Tasmanian Aboriginal Land and Sea Council
TASI	Tasmanian Aboriginal Site Index
TASMARC	Tasmanian shoreline monitoring and archiving project
TASVEG	A Tasmanian-wide vegetation map
TCCO	Tasmanian Climate Change Office
TCT	Tasmanian Conservation Trust
TFS	Tasmania Fire Service
TLCA	Tasmanian Landcare Association
TMP	Traffic Management Plan
TPC	Tasmanian Planning Commission
TVMMP	Tasmanian Vegetation Mapping and Monitoring Program
VCA	Vegetation Condition Assessment
WMP	Weed Management Plan
WoNS	Weeds of National Significance
WSUD	Water Sensitive Urban Design

