

### 3. CFEV assessment of the Little Swanport catchment

The freshwater ecological values of the Little Swanport catchment have been derived from an interrogation of the Conservation of Freshwater Ecosystem Values (CFEV) database developed by the Tasmanian State Government. A summary of these values is presented in this section.

The CFEV database provides an integrated *Conservation Management Priority* of river reaches, waterbodies, wetlands, karst, groundwater-dependent ecosystem, estuaries and saltmarshes based on the condition (naturalness), distinctiveness and representativeness of these freshwater-dependent ecosystems, as well as their current level of management protection. The *immediate* conservation management priority refers to the level of priority for immediate improvement to current conservation management. The *potential* conservation management priority refers to proposed development(s), which may contribute to a change in ecological condition. Only the immediate conservation management priority classification has been used and reported in this assessment.

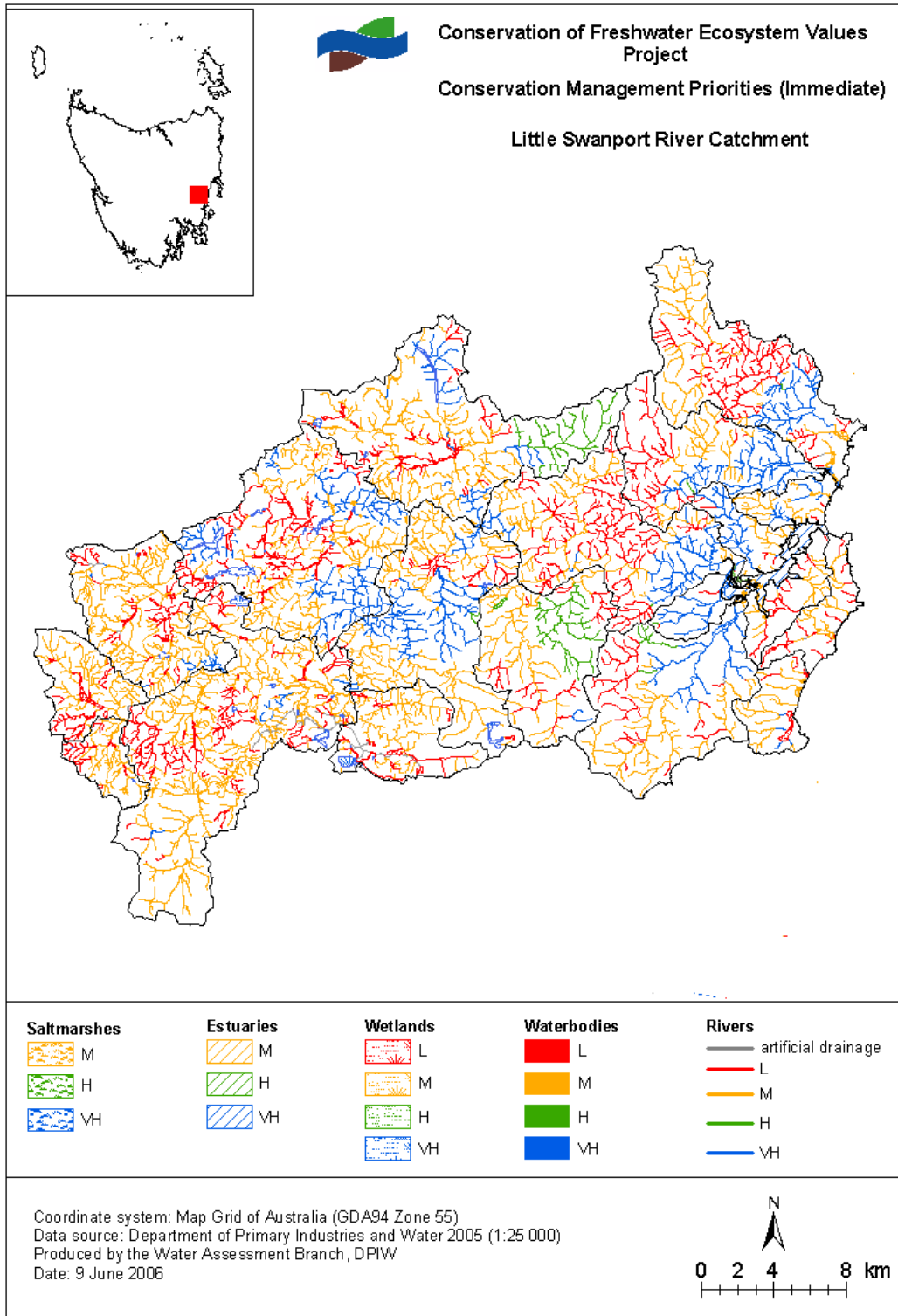
Only the freshwater-dependent systems classified as having a ‘Very High’ or ‘High’ conservation management priority are discussed in this assessment. However, it is important to remember that systems rated as having a ‘Medium’ or ‘Low’ conservation management priority are not necessarily degraded (although they may be modified). Systems that are given these classifications may not be the best example of their biophysical class or may already be protected by an appropriate land tenure type (e.g. formal reserve).

### **3.1 Catchment overview**

As outlined in Chapter 2 (Hydrophysical Characterisation), the Little Swanport catchment drains an area of approximately 600 km<sup>2</sup> to Tasmania's east coast. It lies in a rain shadow from the westerly rains that prevail in southern Tasmania, and flows in an easterly direction, discharging into the Little Swanport Estuary at Tasman Highway.

For the purposes of characterisation, the catchment has been divided into 20 subcatchments ranging in size from approximately 6 km<sup>2</sup> to 118 km<sup>2</sup>, including the small coastal creeks that drain directly to the estuary or Great Oyster Bay (e.g. Buxton and Lisdillon rivulets). There may be some small differences between the subcatchment boundaries in the CFEV database to those delineated in the hydrophysical characterisation of the catchment. Both characterisations have the same drainage network, but the subcatchments in the hydrophysical characterisation were defined for a rainfall-runoff model which needed to include water demands and water usage, hence those subcatchment boundaries incorporate an element of water management in their delineation.

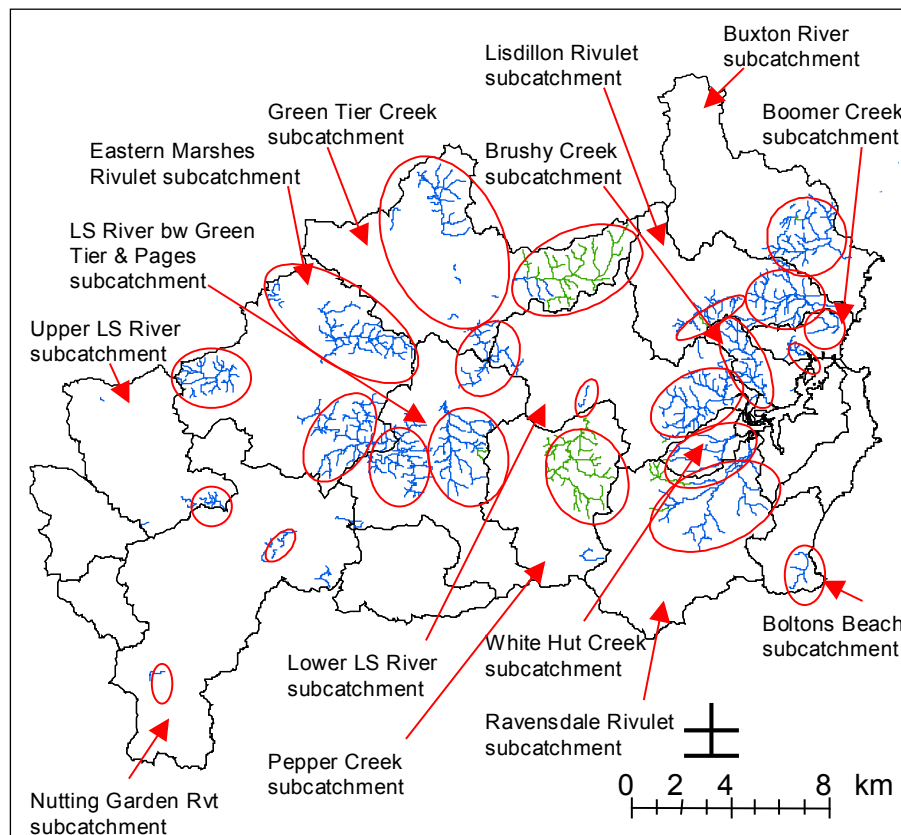
Freshwater-dependent ecosystems in the Little Swanport catchment include rivers, wetlands and waterbodies, saltmarshes and the estuary, and their ecological values are broadly summarised in Figure 17. The following sections are grouped by ecosystem and will provide greater details regarding these classifications. While no detailed discussion is provided in this chapter of how and why these may be spatially distributed throughout the catchment, it is useful to examine the CFEV information alongside the hydrophysical information contained in Chapter 2.



**Figure 17:** Map of the Little Swanport catchment showing features of Very High (blue), High (green), Medium (gold) and Low (red) conservation management priority.

### 3.2 Rivers

The CFEV database has delineated 4,989 river sections for the Little Swanport catchment, with an average length of 446 m, and a combined length of about 2,230 km. The number of river sections classified as having a ‘Very High’ conservation management priority represent 16.5% of the total number of river sections in the catchment, and those having a ‘High’ conservation management priority represent 2.4% of the total. The spatial distribution of river sections in these two classifications is shown in Figure 18, and shows that river sections with ‘Very High’ classification are clustered in the middle and in the very lowest regions of the catchment. Table 9 provides information relating to how and why these river reaches have been classified as having a ‘High’ or ‘Very High’ conservation management priority. There are virtually no reaches with ‘High’ or ‘Very High’ classifications in the southwestern subcatchments.



**Figure 18:** The river sections in the Little Swanport catchment which are classified as having a Very High (blue) or High (green) conservation management priority. For the purposes of this assessment, river section values were summarised according to river cluster, or similar drivers of their classification. The red ellipses represent the level of river section “lumping” as presented in Table 1.

**Table 9:** Summary of conservation management priorities, and their drivers, for the river sections in the Little Swanport catchment which are classified as having a Very High or High conservation management priority (Figure 18). River sections are summarised by river cluster and roughly grouped according to subcatchments. Representativeness indicates how good an example the river section is of its biophysical class. Occasionally there is more than one biophysical class within a subcatchment. This means that there are some river sections or river clusters in the subcatchment that are characterised by a different biophysical class compared to other sections or clusters. Where the biophysical class is a tree or fish assemblage, a species list is given in Appendix 2. Special values drive the Integrated Conservation Value (not presented here), which then contributes to the conservation management priority. Special Values generally refer to the presence of unique or distinctive values (e.g. threatened or priority species and communities). Condition refers to the degree of naturalness, or modification compared to pre-European conditions, and land tenure security gives an indication of whether there are restrictions in place to prevent negative land use impacts on conservation values.

River section / cluster location	Length (km) approx	Conservation Management Priority	Relative representativeness	Biophysical classes	Special Values	Condition	Land tenure security
Buxton River subcatchment							
mid Buxton River at Goanna Hill	34	Very High	High	<ul style="list-style-type: none"> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> <li>East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>Southeastern wet, damp and dry sclerophyll mosaic. A species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta, and in an arc from Little Swanport River to the Swan River west of Bicheno.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened flora species: <i>Baumea gunnii</i> (slender twig rush)</li> <li>Threatened fauna species: <i>Haliaeetus leucogaster</i> (white-bellied sea-eagle)</li> </ul>	Good	Low
Lisdillon Rivulet subcatchment							
lower Lisdillon Rivulet	32	Very High	High	<ul style="list-style-type: none"> <li>East coast escarpment: steep dissected eastern escarpment in upper catchment; granite hills along coast (north); dolerite rolling hills along coast (south).</li> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened fauna species: <i>Prototroctes maraena</i> (Australian grayling)</li> <li>Threatened flora species: <i>Juncus vaginatus</i> (clustered rush)</li> </ul>	Good	Low

mid Lisdillon Rivulet & Percys Gully	13.5	Very High	High	<ul style="list-style-type: none"> <li>East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened flora species: <i>Baumea gunnii</i> (slender twig rush)</li> <li>Threatened flora community: shrubby <i>Eucalyptus ovata</i> forest</li> <li>Priority flora community: riparian</li> </ul>	Good	Low
Boomer Creek subcatchment							
unnamed tributary to Banwell Beach	4.5	Very High	Moderate	<ul style="list-style-type: none"> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Poor - Good	Low
lower Boomer Creek	4.5	Very High	Moderate	<ul style="list-style-type: none"> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: lowland <i>Poa</i> grassland</li> <li>Priority flora community: marginal herbfield/grassland</li> </ul>	Poor - Good	Low
Brushy Creek subcatchment							
Brushy Creek	20	Very High	High	<ul style="list-style-type: none"> <li>East coast escarpment: steep dissected eastern escarpment in upper catchment; granite hills along coast (north); dolerite rolling hills along coast (south).</li> <li>Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae, Planorbidae, <i>Lingora aurata</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Good	Low
Boltons Beach subcatchment							

unnamed tributary to Hermitage Lagoon	4.5	Very High	Moderate	<ul style="list-style-type: none"> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Moderate	Low
Ravensdale Rivulet subcatchment							
lower Ravensdale Rivulet	39	Very High - High	High	<ul style="list-style-type: none"> <li>East coast escarpment: steep dissected eastern escarpment in upper catchment; granite hills along coast (north); dolerite rolling hills along coast (south).</li> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> <li>Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae, Planorbidae, <i>Lingora aurata</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: riparian</li> </ul>	Moderate - Good	Low - Medium
White Hut Creek subcatchment							
White Hut Creek	15	Very High	High	<ul style="list-style-type: none"> <li>Southeastern coastal dry sclerophyll and grassy woodlands. Dry coastal woodland and forest of North Bruny Island, Hobart and environs extending through Orford to the surrounds of Moulting Lagoon.</li> <li>Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae, Planorbidae, <i>Lingora aurata</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor - Good	Low
Little Swanport River between Green Tier Creek and the estuary subcatchment							
Mitchelmore, Larges, and Wineglass Creeks	34	Very High	High	<ul style="list-style-type: none"> <li>East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>Southeastern wet, damp and dry sclerophyll mosaic. A</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: riparian</li> </ul>	Poor - Good	Low

				species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta, and in an arc from Little Swanport River to the Swan River west of Bicheno.			
Little Swanport River at Long Point	1.3	Very High	Low	<ul style="list-style-type: none"> <li>East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened flora species: <i>Pomaderris phyllicifolia</i> subsp. <i>phyllicifolia</i> (narrow leaf pomaderris)</li> <li>Priority flora community: riparian</li> </ul>	Moderate	Low
Little Swanport River and lower Green Tier Creek cluster	18	Very High	Moderate	<ul style="list-style-type: none"> <li>East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>Southeastern wet, damp and dry sclerophyll mosaic. A species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta, and in an arc from Little Swanport River to the Swan River west of Bicheno.</li> <li>Derwent valley lowland dry sclerophyll. Lacks elements such as Oyster Bay pine and <i>Leptospermum grandiflorum</i>. Found in the dry insolated aspects of the Derwent valley and lower midlands, to the Eastern Tiers.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: riparian</li> </ul>	Poor - Good	Low
Green Tier Creek subcatchment							
Rocka Rivulet	33	Very High - High	High	<ul style="list-style-type: none"> <li>Southeastern wet, damp and dry sclerophyll mosaic. A species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta, and in an arc from Little Swanport River to the Swan River west of Bicheno.</li> <li>Dry and wet sclerophyll forest and grassy woodlands of</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened fauna species: <i>Galaxias fontanus</i> (swan galaxias)</li> </ul>	Good	Low - Medium



				<p>the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</p> <ul style="list-style-type: none"> <li>• East coast: broad rolling dolerite and Parmeener hills in upper and mid catchment, reducing in relief towards coast.</li> </ul>			
Green Tier Creek and associated river sections	21	Very High	Low	<ul style="list-style-type: none"> <li>• Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>• Threatened fauna species: <i>Galaxias fontanus</i> (swan galaxias)</li> <li>• Threatened flora community: shrubby <i>Eucalyptus ovata</i> forest</li> <li>• Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Good	Low
Little Swanport River between Pages Creek and Green Tier Creek subcatchment							
Marshalls Creek	31	Very High	High	<ul style="list-style-type: none"> <li>• Derwent valley lowland dry sclerophyll. Lacks elements such as Oyster Bay pine and <i>Leptospermum grandiflorum</i>. Found in the dry insolated aspects of the Derwent valley and lower midlands, to the Eastern Tiers.</li> <li>• East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>• Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>• Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae,</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor - Good	Low

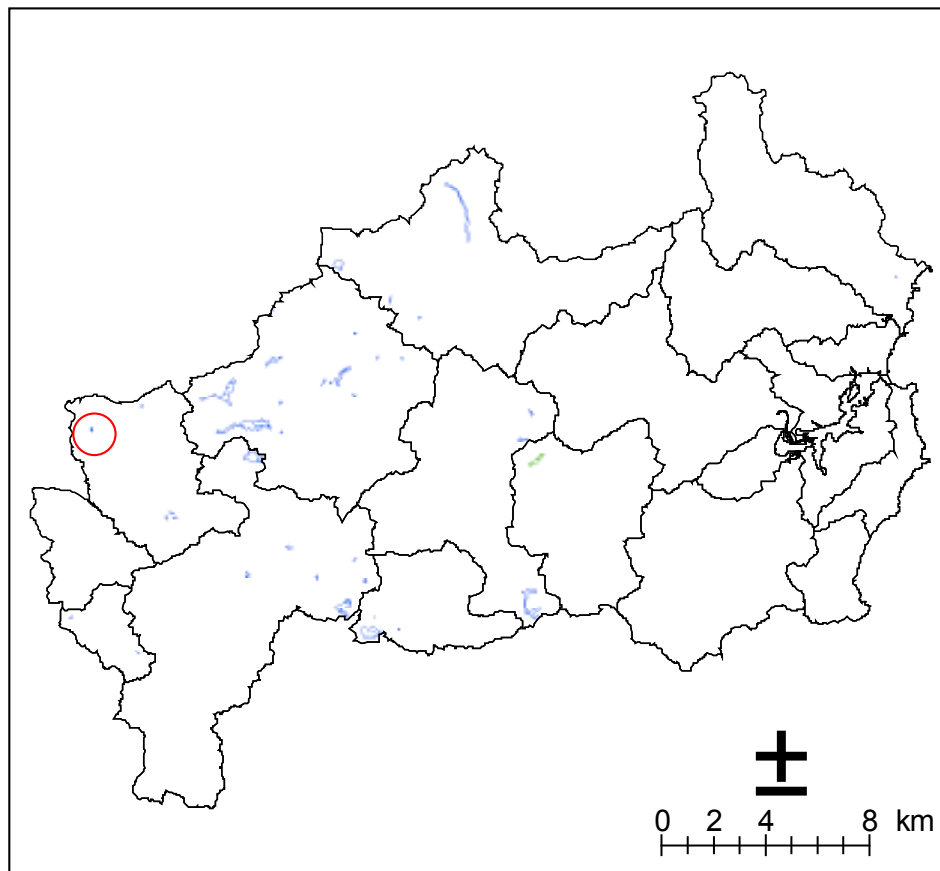
				Planorbidae, <i>Lingora aurata</i> .			
Little Swanport River and Pine Creek cluster	32	Very High	High	<ul style="list-style-type: none"> <li>• East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>• Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>• Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae, Planorbidae, <i>Lingora aurata</i>.</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>• Priority flora community: riparian</li> <li>• Priority flora community: lowland <i>Poa</i> grassland</li> <li>• Outstanding fauna species richness</li> </ul>	Poor - Good	Low
Eastern Marshes Rivulet subcatchment							
lower Eastern Marshes Rivulet	33	Very High	High	<ul style="list-style-type: none"> <li>• Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>• Headwater stream macroinvertebrates assemblages in eastern Tasmania. Indicator taxa include: <i>Tasmanocoenis tillyardi</i>, Ceinidae, <i>Anisocentropus latifascia</i>, Coenagrionidae, Veliidae, Baetid Genus 1 MVsp. 5, <i>Triplectides magnus</i>, Hydrobiidae, Planorbidae, <i>Lingora aurata</i>.</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>• Priority flora community: riparian</li> <li>• Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Poor - Good	Low
Mary Dickson Creek and Govetts Creek cluster	34	Very High	High	<ul style="list-style-type: none"> <li>• Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> <li>• Southeastern wet, damp and dry sclerophyll mosaic. A species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta,</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>• Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Poor - Good	Low

				<p>and in an arc from Little Swanport River to the Swan River west of Bicheno.</p> <ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>			
uppermost Eastern Marshes Rivulet	19	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor - Good	Low
Upper Little Swanport River subcatchment							
Little Swanport River at McGills Marsh	6	Very High	Moderate	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: lowland <i>Poa</i> grassland</li> </ul>	Poor - Moderate	Low
Nutting Garden Rivulet subcatchment							
upper Nutting Garden Rivulet	1	Very High	Moderate	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Threatened flora species: <i>Pomaderris phyllicifolia</i> subsp. <i>phyllicifolia</i> (narrow leaf pomaderris)</li> </ul>	Poor	Low
lower Nutting Garden Rivulet	4	Very High	Moderate	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community:</li> </ul>	Poor	Low

				<i>E. rodwayi</i> .	lowland <i>Poa</i> grassland • Priority flora community: riparian		
Pepper Creek subcatchment							
Canadian, Pigeon and Pepper Creeks cluster	31	High	High	<ul style="list-style-type: none"> <li>• Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>• Southeastern wet, damp and dry sclerophyll mosaic. A species rich assemblage, reflecting the rapid topographic change and diverse geologies in southeastern Tasmania. Found around Hobart and south to Bruny Island and the Huon valley, Wielangta, and in an arc from Little Swanport River to the Swan River west of Bicheno.</li> <li>• East coast lowland dry sclerophyll with Oyster Bay pine. Occurs on the dolerite sandstone and mudstone on the coastal flanks of the Eastern Tiers south of Bicheno.</li> <li>• Derwent valley lowland dry sclerophyll. Lacks elements such as Oyster Bay pine and <i>Leptospermum grandiflorum</i>. Found in the dry insolated aspects of the Derwent valley and lower midlands, to the Eastern Tiers.</li> </ul>	<ul style="list-style-type: none"> <li>• Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>• Priority flora community: riparian</li> </ul>	High	Medium

### 3.3 Wetlands and waterbodies

There are 144 wetlands throughout the Little Swanport catchment, 38 of which have a ‘Very High’ conservation management priority, and one of which is classified as ‘High’ (Figure 19). These wetlands range in size from 0.13 ha to over 63 ha (0.63 km<sup>2</sup>), although half are under 1 ha in area. They are predominantly located in the upper, western half of the catchment, in the Eastern Marshes and Nutting Garden subcatchments. There is one waterbody in the catchment, located on the far western edge of the upper Little Swanport subcatchment (circled, Figure 19). Table 10 provides information relating to the CFEV classification of these wetlands and waterbody, and it can be seen from this table that many have been assessed as being in poor condition.



**Figure 19:** The Little Swanport catchment, showing the location of wetlands and the single waterbody (circled) in the catchment. Wetlands with a Very High conservation management priority are designated as blue, those classified as High are in green.

**Table 10:** Summary of conservation management priorities, and their drivers, for the wetlands (and waterbody) in the Little Swanport catchment which are classified as having a Very High or High conservation management priority (Figure 19). Wetlands are roughly grouped according to subcatchments. Representativeness indicates how good an example the wetland is of its biophysical class. Occasionally there is more than one biophysical class within a subcatchment. This means that there are some wetlands in the subcatchment that are characterised by a different biophysical class compared to other wetlands. Where the biophysical class is a tree or fish assemblage, a species list is given in Appendix 2. Special values drive the Integrated Conservation Value (not presented here), which then contributes to the conservation management priority. Special Values generally refer to the presence of unique or distinctive values (e.g. threatened or priority species and communities). Condition refers to the degree of naturalness, or modification compared to pre-European conditions, and land tenure security gives an indication of whether there are restrictions in place to prevent negative land use impacts on conservation values.

Wetland location	Area (ha) approx	Conservation Management Priority	Relative representativeness	Biophysical classes	Special Values	Condition	Land tenure security
Buxton River subcatchment							
2 wetlands at lower Buxton River	0.1 – 0.2	Very High	High	<ul style="list-style-type: none"> <li>Lowland <i>Poa</i> grassland</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: Lowland <i>Poa</i> grassland</li> </ul>	Poor	Low
Pepper Creek subcatchment							
NW boundary	10	High	High	<ul style="list-style-type: none"> <li>Wetland located east of Tyler corridor, in non-responsive geomorphology, 10-100 ha area, at 100-800 m elevation</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Good	Medium
Little Swanport River between Pages Creek and Green Tier Creek subcatchment							
unnamed on tributary of Marshalls Ck	4.5	Very High	High	<ul style="list-style-type: none"> <li>Wetland located east of Tyler corridor, in non-responsive geomorphology, 1-10 ha area, at 100-800 m elevation</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
unnamed on tributary of Mount Ck	1.6	Very High	High	<ul style="list-style-type: none"> <li>Wetland located east of Tyler corridor, in non-responsive geomorphology, 1-10 ha area, at 100-800 m elevation</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
Dolans Marsh	34	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low

Hobbs Lagoon and Pages Creek subcatchment							
Yorkys Lagoon	39	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
associated with Hobbs	0.7	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
Nutting Garden Rivulet subcatchment							
Charlies Lagoon	28	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: marginal herbfield / grassland</li> </ul>	Poor	Low
4 wetlands associated with the floodplain	0.5 - 4	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
unnamed near Sams Hill	4	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
Upper Crichton Creek subcatchment							
unnamed near Pleasant View	0.5	Very High	High	<ul style="list-style-type: none"> <li>Southern Midlands wet sclerophyll, dry sclerophyll and grassy woodlands. Much of this assemblage has been cleared for farming. Mainly on rolling topography with frost hollows and marshes, on</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low

				sedimentary substrates.			
Unnamed near Martins Rd	1	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
Upper Little Swanport River subcatchment							
3 wetlands near Spring Cottage	0.7 - 1	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
Eastern Marshes Rivulet subcatchment							
Stony Lagoon	36	Very High	High	<ul style="list-style-type: none"> <li>Freshwater aquatic plants</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: Highland <i>Poa</i> community</li> </ul>	Poor	Low
Barwicks Flat	63	Very High	High	<ul style="list-style-type: none"> <li>Freshwater aquatic plants</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: Highland <i>Poa</i> community</li> </ul>	Poor	Low
uppermost Eastern Marshes	50	Very High	High	<ul style="list-style-type: none"> <li>Freshwater aquatic plants</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
2 wetlands near Rises Sugarloaf	0.6 – 0.8	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low



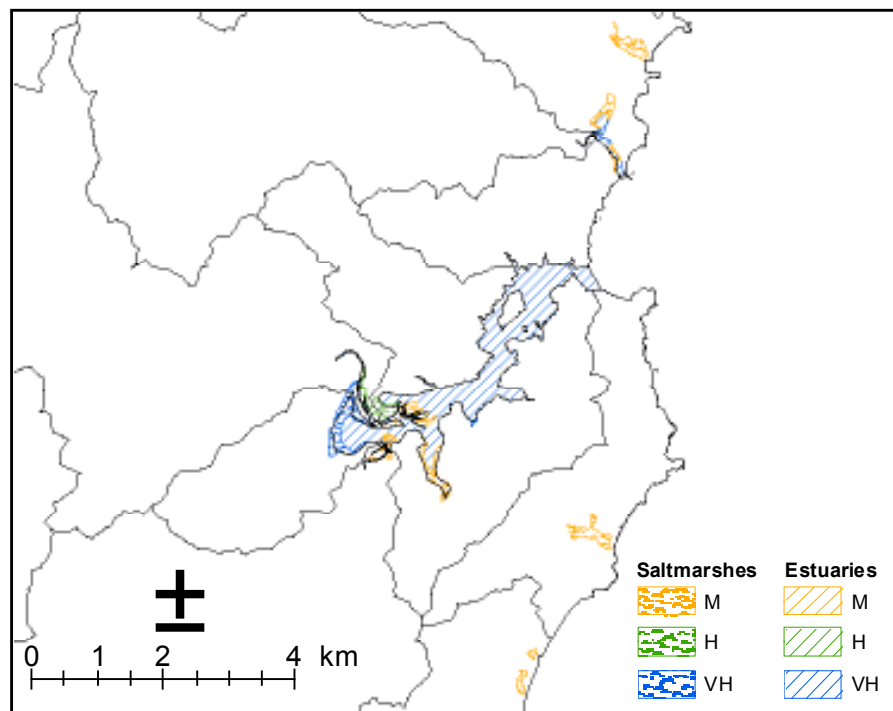
2 wetlands near Montlea	1 - 6	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>Lowland <i>Poa</i> grassland</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
3 wetlands at confluence of Eastern Marshes and Govetts	0.5 - 13	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> <li>Lowland <i>Poa</i> grassland</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
unnamed near Sligo Ck	0.8	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Moderate	Low
2 wetlands near uppermost Govetts Ck	both 0.7	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Moderate	Low
unnamed on Mary Dickson Ck	0.6	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Good	Low
Green Tier Creek subcatchment							
Faddens Lagoon	14.5	Very High	High	<ul style="list-style-type: none"> <li>Lowland <i>Poa</i> grassland</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i></li> </ul>	Poor	Low

					(platypus)		
unnamed on tributary of Stonehouse Ck at Snug Rd	0.8	Very High	High	<ul style="list-style-type: none"> <li>Lower midlands grasslands, dry sclerophyll woodland and forest, mainly on Triassic sedimentary rocks in upland areas and frost hollows. Characterised by the presence of <i>Eucalyptus delegatensis</i>, <i>E. pauciflora</i> and <i>E. rodwayi</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low
unnamed on tributary of Stonehouse Ck	0.6	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: Highland <i>Poa</i> community</li> </ul>	Moderate	Low
uppermost Green Tier Ck	34	Very High	High	<ul style="list-style-type: none"> <li>Dry and wet sclerophyll forest and grassy woodlands of the lower midlands. This assemblage contains some heathy understoreys on more siliceous substrates, and the presence of species such as <i>Eucalyptus tenuiramis</i>, <i>E. globulus</i>, <i>Leptospermum scoparium</i>, <i>Pomaderris pilifera</i>. Much of this assemblage has been cleared.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> <li>Priority flora community: Lowland <i>Poa</i> community</li> <li>Threatened flora community: shrubby <i>Eucalyptus ovata</i> forest</li> </ul>	Good	Low
<b>Waterbody location</b>	<b>Area (ha) approx</b>	<b>Conservation Management Priority</b>	<b>Relative representativeness</b>	<b>Biophysical class</b>	<b>Special Values</b>	<b>Condition</b>	<b>Land tenure security</b>
near Ashgrove Lagoon	1	Very High	High	<ul style="list-style-type: none"> <li>Southern Midlands wet sclerophyll, dry sclerophyll and grassy woodlands. Much of this assemblage has been cleared for farming. Mainly on rolling topography with frost hollows and marshes, on sedimentary substrates.</li> </ul>	<ul style="list-style-type: none"> <li>Phylogenetically distinct fauna species: <i>Ornithorhynchus anatinus</i> (platypus)</li> </ul>	Poor	Low

### 3.4 Saltmarshes and estuaries

There are 19 saltmarshes in the Little Swanport catchment, but only 4 have a ‘Very High’ or ‘High’ conservation management priority (Figure 20). One is located in Lisdillon Lagoon and is classified as ‘Very High’ and the other three are in the Little Swanport estuary. Two of these are classified as having a ‘Very High’ conservation management priority and are located in Watch House Bay and Freshwater Bay, and the one classified as ‘High’ is located where the river enters the estuary around Duck Islands.

All are highly representative of their biophysical class, being good examples of their type, and the Watch House Bay and Duck Islands saltmarshes in particular are in good condition (Table 11). The Freshwater Bay saltmarsh has a ‘High’ rather than ‘Very High’ conservation management priority because it occurs in a coastal reserve and therefore already has a degree of protection from land use impacts.



**Figure 20:** The coastal edge of the Little Swanport catchment, showing the location of the two estuaries and the 19 saltmarshes in the catchment. Estuaries and saltmarshes with a Very High conservation management priority are designated as blue, those classified as High are in green, and Medium is gold.

There are two estuaries in the catchment: the Little Swanport estuary and the Lisdillon Lagoon estuary (Figure 20). Both are classified as having a ‘Very High’ conservation management priority due to the presence of the priority lesser golden plover (*Pluvialis dominica*) in the Little Swanport estuary and the threatened little tern (*Sterna albifrons* subsp. *sinensis*) in Lisdillon Lagoon (Table 11).

**Table 11:** Summary of conservation management priorities, and their drivers, for the saltmarshes and estuaries in the Little Swanport catchment (Figure 20). Representativeness indicates how good an example the saltmarsh or estuary is of its biophysical class (species lists of flora assemblages are provided in Appendix 2. Special values drive the Integrated Conservation Value (not presented here), which then contributes to the overall conservation management priority. Special Values generally refer to the presence of unique or distinctive values (e.g. threatened or priority species and communities). Condition refers to the degree of naturalness, or modification compared to pre-European conditions, and land tenure security gives an indication of whether there are restrictions in place to prevent negative land use impacts on conservation values. LSE stands for Little Swanport estuary.

Saltmarsh/ estuary	Area	Conservation Management Priority	Relative representativeness	Biophysical class	Special Values	Condition	Land tenure security
<b>Saltmarshes</b>							
Lis Dillon Lagoon saltmarsh	0.64 ha	Very High	High	<ul style="list-style-type: none"> <li>Small (&lt; 1 ha) saltmarsh, located on mainland Tasmania, consisting of graminoid saltmarsh vegetation (saline grassland). The coast associated within this saltmarsh is subject to small to intermediate tides and low wave energy.</li> </ul>	<ul style="list-style-type: none"> <li>No special values</li> </ul>	Moderate	Low
Watch House Bay (LSE)	49.86 ha	Very High	High	<ul style="list-style-type: none"> <li>Moderate (1-100 ha) saltmarsh, located on mainland Tasmania, consisting of succulent saltmarsh vegetation (saline herbland). The coast associated within this saltmarsh is subject to small to intermediate tides and low wave energy.</li> </ul>	<ul style="list-style-type: none"> <li>No special values</li> </ul>	Good	Low
Freshwater Bay (LSE)	0.85 ha	Very High	High	<ul style="list-style-type: none"> <li>Small (&lt; 1 ha) saltmarsh, located on mainland Tasmania, consisting of generic saltmarsh vegetation (undifferentiated saline herbfield). The coast associated within this saltmarsh is subject to small to intermediate tides and low wave energy.</li> </ul>	<ul style="list-style-type: none"> <li>No special values</li> </ul>	Moderate	Low
Duck Islands (LSE)	29.63 ha	High	High	<ul style="list-style-type: none"> <li>Moderate (1-100 ha) saltmarsh, located on mainland Tasmania, consisting of succulent saltmarsh vegetation (saline herbland). The coast associated within this saltmarsh is subject to small to intermediate tides and low wave energy.</li> </ul>	<ul style="list-style-type: none"> <li>No special values</li> </ul>	Good	Medium
<b>Estuaries</b>							
Little Swanport Estuary	6.01 km <sup>2</sup>	Very High	Moderate	<ul style="list-style-type: none"> <li>Marine inlets and bays located along the east coast.</li> </ul>	<ul style="list-style-type: none"> <li>Priority fauna species: <i>Pluvialis dominica</i> (lesser golden plover)</li> </ul>	Moderate	Low
Lis Dillon Lagoon	26.38 ha	Very High	Moderate	<ul style="list-style-type: none"> <li>Barred, low salinity estuary located along the east coast.</li> </ul>	<ul style="list-style-type: none"> <li>Threatened fauna species: <i>Sterna albifrons</i> subsp. <i>sinensis</i> (little tern)</li> </ul>	Moderate	Low