

30 July 24 - Attachment 9.5.1a

"A weed is simply a plant in the wrong place" - George Washington Carver.



"So it's always keeping that sustainability of everything from the birds to the fish to the animals. Like the fire stick farming, it's all the same thing and all goes into the seasonal cycles and how you manage the land." Dr Wayne Wonitji Webb Elder custodian Pibulmun Wadandi



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The Shire of Denmark respectfully acknowledges the Minang and Pibulmun people of the Noongar nation who have cared for these lands and waters around Denmark for thousands of years. The Shire pays its respects to Minang and Pibulmun Elders past, present and emerging, and extends those respects to all First Nations people living, working or visiting in our Shire.

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Photo Left: The South Coast Bushcare Services Inc fieldwork team on foot in a Shire of Denmark reserve assessing the bush for weed occurrence and density, bushland condition and threats to biodiversity values.

South Coast Bushcare Services team from left to right in photo: Dianne Harwood, Bob Fenwick and Jaevar Adams.

Photo credit: Rhian Thomas 2024

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Contributions from members of the community, Green Skills Inc (Helen Heydenrych, Louise Duxbury, Rhian Thomas), South Coast Bushcare Services (Diane Harwood, Bob Fenwick, Nadine Lapthorne, Andrew Dickinson, Tanya Garvin, Jaevar Adams, Jason Dunbar), and the Shire of Denmark (Yvette Caruso, Damian Schwarzbach, Bohdan Davies) have been integral to the development of this Strategy and are greatly appreciated in contributing towards effective weed control action across our Shire.

1 INTRODUCTION

WEED MANAGEMENT IN SHIRE OF DENMARK BUSHLAND RESERVES

The Natural Environment is touted as the Shire's 'most valuable asset' in the Shire of Denmark Strategic Community Plan: Our Future 2033. The Denmark community has identified that one of the three Community Priorities for key focus and management action under by this plan is environmental conservation and protection, which includes:

- to safeguard our natural reserves, national parks, coastline, flora and fauna
- protection of wild, untouched places that set Denmark apart.

Environmental weeds in bushland reserves can have major impacts on native biodiversity and natural landscapes, displace native plant species, degrade habitat and food availability for native animals, harbour pests and increase fuel load increasing wildfire threats. Weed infestations affect the structure and function of ecosystems, which can impact negatively on native fauna populations, increase flood erosion impacts and reduce the natural recreational amenity of a bushland reserve and important cultural values of areas by changing vegetation type and visually smothering or displacing native plants. Weeds management is a complex issue for land managers and landowners and requires long-term joint commitment to ensure success. To meet the priorities expressed in the Strategic Community Plan, actions need to be taken to manage weeds and protect natural areas.

The Shire of Denmark Council recognises their responsibility to identify and control highly invasive weed species identified under the WA Biosecurity and Agriculture Management Act 2007, and those included under the Shire of Denmark Local Law Pest Plant Schedule. Most weeds in urban and peri-urban reserves are spread by human activity, however weeds will naturally invade into disturbed soils through dispersal of seed by animal vectors, wind-drift and along waterways. Weeds are often introduced to bushland reserves by illegal dumping of garden refuse, on from vehicle tyres or in animal droppings (e.g. horses and feral pigs) and are commonly found emerging along road verges, tracks, paths, drains and firebreaks, or other locations that people frequent, such as picnic areas or adjacent to residential/industrial land.

Preventative measures to minimise native vegetation disturbance or soil movement are an essential aspect of weed management. Where bushland disturbance has occurred from factors such as clearing of native vegetation, fire and machinery movement for track or drainage maintenance work, post-disturbance monitoring is essential to determine if follow-up weed control is necessary. Soil and debris should not be pushed onto living native vegetation when clearing for firebreaks or access.

Ongoing commitment to effectively managing weeds within the Shire of Denmark's reserves has resulted in an overall improvement in bushland condition over time. The Denmark community has clearly voiced that their local natural environment is highly valued and groups such as the South Coast Bushcare Services have been undertaking hand weeding in most of the Shire's bushland reserves for the past 20 years. However, to maintain improvement in bushland condition, consistent, targeted weed management is essential. Although comprehensive weed removal needs to remain the aim, site managers must be strategic to get the best result and it can sometimes be appropriate to temporarily tolerate problem plants, provided they can be contained.

The Shire of Denmark undertakes a Weed Control Program to manage invasive weeds on Council road verges and within Council reserves for numerous purposes including: infrastructure maintenance, targeted noxious weed management for biodiversity conservation, protection of cultural values and for fire mitigation and post-burn weed control. Weed control activities include mechanical and manual weed removal, and chemical spraying, which is undertaken at different times of the year dependent upon weeds species targeted, weather considerations, and works programming.

WEEDS STRATEGY AIM

The Shire of Denmark Bushland Reserves Weeds Strategy (2024-2034) supports the Shire of Denmark Strategic Community Plan: Our Future 2033, the WA Local Government reserve best practice management priorities, and at a national scale, the National Australian Government bushland management goals (see <u>Australian Weeds Strategy 2017-2027</u>). The over-arching aim of this Shire of Denmark Bushland Reserves Weeds Strategy is to prioritise strategic bushland management actions in Shire of Denmark reserves spanning the next ten years, for the following on-ground outcomes:

- To assess, identify and monitor the occurrence of priority environmental weed species in bushland reserves.
- To undertake appropriate action to control environmental weeds.
- To improve bushland condition using the Principles of Bush Regeneration.
- To prioritise and reduce the long-term impacts of environmental weeds on bushland condition within reserves for the conservation of threatened flora and fauna, rare plant communities and cultural values.
- To identify and prevent new emergent weed species from establishing in reserves.
- To monitor and identify threats from neighbouring properties or degraded edges that lead to a decline in bushland condition within reserves and to address these threats appropriately.
- To identify and reduce disturbance factors that lead to a decline in cultural values and bushland condition.
- To monitor and identify illegal actions within Shire of Denmark reserves that lead to weed spread and a decline in cultural values and bushland condition.

This Strategy also identifies priority areas where community input has the potential to reduce instances of emerging environmental weeds establishing and spreading in the Shire of Denmark, across the boundaries of privately owned land and State and National Agency/Shire Council managed lands. It is a working document subject to regular review, as new information and priorities may arise during the life of the Strategy.

2 PRINCIPLES OF WEED MANAGEMENT

INTEGRATED WEED MANAGEMENT

The <u>Australian Weeds Strategy 2017-2027</u> details the following seven principles that underpin effective weed management in Australia, and which should be used to guide planning, investment and actions:

- 1. Effective weed management is a responsibility shared between landholders, community, industry and government.
- 2. Evidence-based decision-making should underpin the approach to weeds.
- 3. Risk-based prevention and early intervention is generally the most cost-effective approach for managing weeds.
- 4. Prioritisation of weed management must be informed by a risk-based approach, considering feasibility, likelihood of success and impact.
- 5. Coordination amongst landholders, community, industry and government is necessary to manage weeds at a landscape scale.
- 6. Sustaining capability and capacity across landholders, community, industry and government is fundamental to effective weed management.
- 7. Individuals, organisations and industry groups that create risks that may result in a weed entering, emerging, establishing or spreading in Australia have a role in minimising the impacts and contributing to the costs of management.

Effective weed management involves the implementation of an integrated and adaptive approach that may include biological, physical, fire, chemical and cultural control mechanisms (Weeds Australia 2021), and requires long-term, ongoing management commitment. The field assessment and weed distribution mapping of individual reserve sites detailed in this document includes an assessment of reserve bushland condition and the identification of high conservation value native plant communities, threats and neighbouring land-use - this information is essential for informing an optimal weed management program.

Bushland reserves in the Shire of Denmark are a component of regional reserves and natural landscapes which have significant and very important cultural values, including for the carrying out of cultural obligations. Disturbance to natural bushland areas can cause disturbance to cultural sites. The Denmark Shire Council is obliged to acknowledge these cultural connections and committed to the protection of cultural sites and values across the Shire.

Long-term, successful weed management can require a range of treatment approaches, as weeds are seasonally occurring and weed populations will be at different stages of development and density of infestation. When managing weeds, a recommended process is the **invasive species adaptive management framework** as described in the visual description below:

From: Weeds Australia



Integrated weed management needs to be collaborative, so it is essential to have good communication between land managers, contractors, landowners and community. South Coast Bushcare Services Inc. (formerly the Denmark Weed Action Group) has a Memorandum of Understanding with the Shire of Denmark to facilitate co-ordinating long-term community weed management effort in Denmark's reserves. The Shire of Denmark sustainability officers work within a regional Interagency Weed Management Group to ensure communication across agencies engaged in weed management for local weed control programs.

PRINCIPLES OF BUSH REGENERATION

In natural bushland reserves the overall aim of controlling weeds is to improve bushland condition. The Bradley method of bush regeneration has proven to be an effective method of achieving this aim. The key three principles are:

- 1. Work from areas of native plants to weed infested areas.
- 2. Make minimal disturbance.
- 3. Let native plant regeneration dictate the rate of weed removal.

From: Bringing back the Bush - The Bradley Method of Bush Regeneration by Joan Bradley

HERBICIDE USE IN SHIRE RESERVES

There are numerous bushland reserves vested in the Shire of Denmark and most bushland reserves are predominantly in good to excellent condition. The bushland in these reserves has been managed long-term using non-chemical, manual weed control techniques by South Coast Bushcare Services. These techniques have proved to be effective in improving bushland condition over time, in particular using the Bradley <u>Principles of Bush Regeneration</u> that allows for the natural regeneration of native species to occur without the need to revegetate. It has been observed that when chemical techniques are applied the natural regeneration of bushland is unlikely to occur. It is more likely that another more invasive weed will colonise the disturbed area.

Herbicide use is not appropriate in high conservation bushland areas or where manual weed control techniques are already being used. To mitigate against negative impacts on the condition of native vegetation, chemical use in good condition bushland should be avoided. However, the appropriate herbicide can be used for large infestations of weeds in degraded areas. When costing for chemical weed control method the cost of revegetating and ongoing maintaining the site needs to be considered.

BEST WEED MANAGEMENT PRACTICES AND PUBLIC HEALTH & SAFETY

The use of any chemical pesticides to control weeds must be in accordance with established health and safety standards. Herbicides are applied in a safe and responsible manner and in accordance with label directions and recommendations from the Western Australian Department of Health. Chemical control of weeds is necessary for the Shire of Denmark to meet its obligations under the WA Biosecurity and Agriculture Management Act 2007, and WA Road Traffic Act 1974.

The WA Department of Health administers the Health (Pesticides) Regulations 2011, which provide for the safe use and application of pesticides, including herbicides, requiring appropriate registration and licensing of businesses and persons involved in weed control. All Shire employees and contractors that use herbicides for weed control must adhere to these regulations. In addition, the Department of Health's A Guide to the Management of Pesticides in local government pest control programs in Western Australia provides advice on when and how herbicides should be used.

The Shire of Denmark also allows for public to register on the "No Spray Register" in accordance with the Shire of Denmark No Spray Register Policy. The objective of this policy is to allow property owners and residents to request that vegetation on Council managed road reserves and/or on Council reserves directly abutting their property not be sprayed with chemical herbicides. Council reserves the right to reject any application on grounds that it is not within the overall interest of Council to include the area within the No Spray Register. It is important for the Weeds Strategy to embrace community concerns and promote the mechanisms where the community can have input to ongoing and long-term weed management and community well-being.

Preventing the establishment and spread of weeds by using hygienic work practices is a very effective means of ensuring existing weed infestations do not become a bigger problem. Weed seeds and weed material, if left on equipment and earth moving machinery, can spread to new areas resulting in new weed infestations. Using clean equipment and machinery in Shire-managed reserves and parks is an important requirement for reducing the risk of weeds being introduced or spread to new areas by seed transfer.

DIEBACK AND RESERVE FIRE MANAGEMENT

Phytophthora dieback is one of the biggest threats to biodiversity in Western Australia and has now spread throughout the south-west from Eneabba to Esperance. Strict soil hygiene and effective management are essential to minimise the risk of dieback spread. In most cases, reducing vehicle movement and soil disturbance in bushland reserves minimises the risk of spreading the plant pathogen, and soil disturbance or moving soil between bushland reserves on machinery tyres must be a primary consideration when undertaking weeding activities in native bushland reserves.

Certain weeds in native bushland reserves can become a fire risk hazard due to fuel loads, and conversely poorly managed bushland fuel reduction control burns can create opportunities for weed invasion into good bushland. This is an important consideration when assessing the type of weed infestation, the methods for weed control, and the priorities for fuel reduction control burns in bushland reserves. The interaction between fire management and weed management is a complex one. Some weeds are sensitive to fire, where fire can either be lethal or can suppress growth. Other weeds can benefit from fire where fire reduces competition and produces an environment in which weeds can spread rapidly. In these cases, the new flush of weed growth following a fire can add to the available fuel load for future fires, potentially creating a cycle of high-fuel, intense burns followed by a period of immense weed growth. Regeneration planning and work following clearing of weeds needs to factor in the risk of future bushfires and aim to ensure a lower fuel load near assets and road access ways.

Because of the wide range of interactions that weeds and fire can have, the coordination of fuel load management and weed management in bushland reserves is complex and very important. Fuel reduction control burns in Shire of Denmark bushland reserves needs careful research and planning in collaboration with bushland management groups such as the South Coast Bushcare Services with input from First Nations custodians. Manual weeding alone may not achieve sufficient reduction in the bushfire risk, and effective weed management requires consideration of hand

weeding in conjunction with other treatments to achieve a suitable fuel load reduction in bushland fire risk near assets. It was not the purpose of this strategy to identify fuel loads or bushfire mitigation strategies in bushland reserves. It is recommended that fuel load assessment be conducted with consideration of bushland condition, and cultural and biodiversity conservation values of reserves. Standards exist for the creation and maintenance of fire access for the safety of community and fire fighters in the response to a bushfire. This includes the clearances needed and the frequency of passing and turnaround bays, to ensure the needs of fire access are not just limited to a single width track. These standards need to be considered in any revegetation works.

DFES provides a guide for the mechanical bushfire mitigations https://publications.dfes.wa.gov.au/publications/guide-to-mechanical-bushfire-mitigation

WEEDS, BIODIVERSITY AND BUSHLAND CONDITION MAPPING

Best-practice bushland reserve management requires that land managers consider the ecological context of each reserve overall bushland condition and its location in the landscape. This determines the biodiversity values of each reserve, and it is important to recognise, identify and control the occurrence of locally significant environmental weed species and reduce the spread of environmental weeds into good condition, high biodiverse value bushland.

To achieve this, a primary component of the Shire of Denmark Bushland Reserves Weeds Strategy has been to conduct an intensive field-based mapping of our bushland reserves and set priority actions in bushland according to its condition. Detailed mapping assists with identifying and locating weed populations, prioritising reserves for weed management, and developing a targeted, integrated weed control works program for implementation over the next 10 years. The field assessment maps presented in this document are essential for planning effective on-ground weed management actions and are vital in monitoring the spread or control of weeds over time. Comparisons over time with baseline maps enables assessment of the resource effectiveness of long-term weed control programs.

"Factoring in the ecological context of weed management can provide further opportunities for refining control programs. Weeds are just one of a number of threats impacting on biodiversity values, alongside factors such as climate change, landscape fragmentation and destruction, and altered natural disturbance regimes (e.g. fire, floods). Considering multiple weed impacts in a given area, as well as the diverse web of other interacting ecosystem threats, can provide a different perspective to control options." From B.L.Webber (2021) Addressing-weed-threats-to-biodiversity.pdf (wabsi.org.au)

3 SHIRE OF DENMARK BUSHLAND RESERVES WEEDS STRATEGY 2024

THE WEEDS STRATEGY AND ACTION PLAN

The Shire of Denmark Bushland Reserves Weeds Strategy 2024-2034 is a full revision of the <u>Shire of Denmark Weeds Strategy and Action Plan (2005-2010)</u>, with a detailed mapping assessment of 40 Shire of Denmark bushland reserves, and a prioritised recommended action plan for reserve weeds management. Consideration is given to the potential threat from invasive weed species to each reserve's bushland condition, whilst ensuring continued community access and recreational amenity. The recommended reserve *weed control action* provides a best practice, integrated weed management approach, and highlights opportunities for community involvement and environmental education.

A collaborative and inter-agency approach is needed to ensure effective weed and bushland condition management of bushland areas across management boundaries, and engaging with adjacent landholders will improve the likelihood of controlling invasive weed species and emergent weeds which often encroach from privately owned land. Bushland reserves have known high cultural values for First Nations communities, and often these cultural values go unrecognized or undetermined. It is recommended that the Shire of Denmark incorporates opportunities for inclusion

of Indigenous Ranger programs and First Nations consultation when undertaking bush care activities, or any future determination of bushland condition conservation values, in Shire managed reserves.

This Strategy aims to provide a realistic Action Plan for successful outcomes of an integrated weed management program over the next 10 years, considered within operational works programs and budget resource limitations, and with the inclusion of a practical, collaborative approach to weed management through building working partnerships with other agencies and community.

COMMUNITY EDUCATION AND ACTION

Although this Strategy is intended for Shire of Denmark Council weeds management works programs guidance, the spread of weeds from adjacent land and illegal green waste dumping continuously undoes weed works undertaken in reserves. An important component of this Strategy is to educate the public on environmental weed management, and to encourage local landholders and residents to undertake weed control works on private lands for which they are responsible, or to notify the Shire of Denmark Sustainability Officer of emergent weed infestations occurring in reserves and road reserves via <u>online feedback communication</u>. Residents and landscapers have a major part to play in their selection of garden plants. Knowing which plants may become environmental weeds if they escape is important for avoiding introducing weeds or being able to control existing invasive weeds in residential areas.

Some methods of weed control that the community can actively perform include:

- Learn to identify invasive weeds and pest plants observe and report. There are numerous <u>resources</u> available from the Shire of Denmark to begin to be able to identify weeds
- Remove pest plants and consider establishing alternative native plants in your garden. (Local native plants require less gardening maintenance, less watering requirements and provide for native fauna.)
- Dispose of garden waste safely (proper composting ensures weed seeds do not spread)
- Avoid plants which have prolific seed or are spread by birds (e.g. Agapanthus and Polygala, Bleeding Heart)
- Avoid plants which spread easily by layering (e.g. Honeysuckle)
- Remove seed heads to help prevent further spread
- Participate in working bees on weed control in your local area.

RESERVE ASSESMENT METHODOLOGY AND DEFINITIONS

RESERVE ASSESSMENT METHODOLOGY

4

Forty Shire of Denmark bushland reserves were surveyed on the ground in the preparation of this strategy. The reserves were accessed along designated footpaths, vehicle tracks and boundaries by a team of South Coast Bushcare Services personnel who are qualified and experienced in weed identification and bush regeneration. Weed species occurrence, distribution and density were recorded. The condition of bushland was assessed and recorded on printed maps in the field using the scale developed by Greg Keighery. The threats and values relating to each reserve were noted on the assessment sheets. The assessment data was collated, and digital maps of the reserves were created.

WEED SPECIES IDENTIFICATION AND INFESTATION ASSESSMENT

Weed species distr below:	ution and density of weeds in bushland reserves was recorded onto maps using the densit Weed Species Density Key Symbol	ty key
Very Dense	\Diamond	
Dense	Ď	
Scattered		

Isolated

BUSHLAND CONDITION RATING SCALE (ADAPTED FROM KEIGHERY 1994 AND TRUDGEN 1988)

Vegetation Condition Scale refer to <u>Technical Guidance Flora and Vegetation Surveys for Environmental Impact</u>
Assessment, Environmental Protection Authority, December 2016.

- **1= Pristine** Vegetation is pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.
- **2 = Excellent** Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
- **3 = Very Good** Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
- **4 = Good** Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
- **5 = Degraded** Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.
- 6 = Completely Degraded Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing. Completely Degraded may include area of developed or unvegetated land eg. Carparks, playgrounds or grassed recreation areas not requiring weed control action

CURRENT THREATS TO BUSHLAND CONDITION

The primary categories of current and potential future threats to long-term bushland condition were assessed and recorded onto the reserve map using the following key:

Threats Key:

C = Clearing P = Phytophthora Dieback G = Grazing R = Rubbish dumping V = Vegetation Dead

T = Tracks or Minor Services (e.g. telephone cables)

LIMITATIONS TO RESERVE ASSESSMENT METHODOLOGY

- All field-based reserve assessments were conducted in the spring/summer of 2023-2024 (September to February), and some seasonal weed species may not have been observed at the time of assessment, as they would be dormant in summer months e.g. Arum lily
- The maps are only a snapshot in time, the information on weeds occurrence and bushland condition is limited to the map assessment date given, and some information may not be captured due to the whole of reserve not being accessible on the assessment date. Cleared areas such as car parks, playgrounds and ovals are referred to as "completed degraded" (category 6) and can be confused on maps with bush areas that are degraded and in poor condition.
- Only 40 reserves were assessed. The Shire of Denmark has management responsibilities for up to 80 reserves, 65 with known good condition bushland. It is recommended that all other reserves have similar ecological investigations undertaken to assess bushland condition, weeds species occurrence and conservation values.
- In the very large coastal reserves and Mt Hallowell reserve, only areas of high visitor impact and sections of the reserves along accessible footpaths/tracks were assessed. For a complete knowledge of weeds occurrence in these reserves, further assessment of the inaccessible areas for emerging weeds is required.

HIGH CONSERVATION VALUE PRIORITY RESERVES

The following criteria has been considered for determining High Conservation Value (HCV) Reserves:

- The bushland is in Pristine/Excellent Condition
- The use of the reserve for Public Use, Recreation and Enjoyment. The facilities available such as walk trails, playgrounds, views, landscape values (e.g. entrance to Denmark)
- The reserve is actively managed the history of weed control, track maintenance and fuel management
- Protection of Waterways
- Connectivity with other bushland areas
- Presence of weed/s of limited distribution that are highly invasive and have severe environmental impacts.

High Conservation Value reserves worthy of note include Mount Hallowell (R46618), Wilson Inlet Foreshore and Coastal Reserves. For management recommendations relating to Coastal Reserves, refer to *Coastal Reserves Management Plan (2024-2034) developed* concurrently with the Weeds Strategy Review.

THE BUSHLAND RESERVES, LOCATIONS & HIGH CONSERVATION VALUE PRIORITIES

HCV = High Conservation Value Priority Reserves in the Shire of Denmark Landscape – Biodiversity, Landscape Linkages, Public Use and Cultural Values are considered when determining High Conservation Value classification.

RESERVE NUMBER	RESERVE NAME	CLASS *	LOCATION DESCRIPTION	PURPOSE	ASSESS- MENT NO.	HCV Yes
R12232	Beaufortia Gardens	С	Between foreshore and golf course	Parklands & Recreation	A3012	
R12344	Poison Point	С	Poison Point to Harper Road	Recreation	A3013	
R12995	Denmark River – Riverbend Lane	С	Riche Road to north, Riverbend Lane to South Scotsdale Brook	Parklands	A3017	
R13039	Denmark River - North	С	Upstream from traffic bridge, both sides of river	Parklands	A3018	
R14376	Denmark River West Bank	Α	West side of Denmark river south of traffic bridge	Parklands & Recreation	A3027	
R15513	McLean Park Reserve	А	Part 1: Between Barnett and Haire Street Part 2: Between Crellin and Haire Street	Recreation & Showground	A3035	
R15700	Norm Thornton Park	С	Corner of Jon Glade and Horsley Rd	Parklands	A3037	
R18821	Kordabup Road Reserve	С	Corner of Kordabup Road north of South Coast Highway	Stopping Place & Public Utility Facility	A3051	
R20403	Morgan Road Reserve	А	East side of Fyfe Road, south of Sth Coast Hwy	Recreation	A5589	
R20928	Parry Beach Reserve	Α	Coastal Reserve: Parry Road	Camping & Recreation	A3073	
R22944	Denmark River South Coast Highway	A	Opposite Fyfe Street	Recreation	A3090	
R23067	McIntosh Rd Transfer Station	С	McIntosh Rd Waste Transfer Station and Denmark Tip Shop	Sanitary Site / Transfer Station	A3092	
R24175	Harington Park	С	Off Minsterly Rd	Recreation	A3100	

RESERVE NUMBER	RESERVE NAME	CLASS *	LOCATION DESCRIPTION	PURPOSE	ASSESS- MENT NO.	HCV Yes
R24452	Denmark Rivermouth - East	A	South of Heritage Trail at Rivermouth	Recreation	A3102	
R24510	Peaceful Bay Reserve	Α	Coastal Reserve: Peaceful Bay Road	Recreation, Camping, Caravan Park and Holiday Cottages	A3104	
R24913	Wilson Head	А	Coastal Reserve: Ocean Beach to Lights Beach. Bounded by Lights Beach Road to the north	Parklands & Recreation	A3108	
R25347	Poddyshot	С	Poddyshot off Minsterly Road	Foreshore Protection	A3110	
R26480	Wilson Inlet Foreshore – Minsterly Rd	А	South of Little River along Minsterly Rd to Poddyshot	Recreation	A3119	
R28922	Peter Gros Park	С	Top of Weedon Hill Road	Public Recreation	A3129	
R28998	Harper Street	С	End of Harper Street	Public Recreation	A3131	
R29561	East River Rd	С	West of Sheoak Drive	Gravel	A3134	
R30277	Railway Heritage Precinct	С	2 Inlet Drive – behind Spirit of Play and Machinery Restoration Group Shed	Historical precinct, Recreation & Community Purposes	A3140	
R32279	Walters Reserve	С	Campbell Road - north and south of Berridge Rd	Public Recreation	A3149	
R32861	Iluka Avenue	С	Iluka Ave Reserve	Public Recreation	A3150	
R34742	Wilson Inlet Foreshore – The Cove	A	North of Little River, near Inlet Drive, south of Poison Point	Recreation	A3158	
R36026	Happy Valley Road	С	East of Happy Valley Rd near Bullich Rd intersection	Recreation	A3166	
R36714	Ricketts Reserve	С	Yacht Club Reserve	Toilets	A3171	
R37391	Little River Reserve	С	Both sides of Little River confluence	Public Recreation	A3177	
R37695	Beveridge Road Reserve	С	Beveridge Rd to South, Bayley Rd to North	Parklands & Recreation	A3180	
R37702A	Paterson Street	С	3 separate parcels along Paterson Street	Park	A3181	
R37702B	Buckley Street	С	West of Middleton Road	Park	A3199	
R38440	Pioneer Park	С	Corner of Sth Coast Hwy and Ocean Beach Rd	Parklands	A4059	
R39066	Denmark River East Bank	С	Denmark River east side of bank, south of Denmark River traffic bridge to Denmark River heritage bridge	Park	A3188	
R41224	Blue Wren Lane	С	West of Blue Wren Lane and north of Crowea Road	Public Recreation	A2502	
R41456	Kwoorabup Community Park	С	Includes nature playground and artificial wetland area	Recreation & Parkland	A5366	
R42724	Tysoe Park	С	Both sides of Tysoe Close	Public Recreation	A3257	
R45623	Waterfall Park	С	Morgan Richards Community Centre/ Millers Creek	Civic Purposes	A3020	

RESERVE NUMBER	RESERVE NAME	CLASS *	LOCATION DESCRIPTION	PURPOSE	ASSESS- MENT NO.	HCV Yes
R46256	Hamilton Reserve	С	Big Karri/ Teesdale Street	Public Recreation	A3164	
R46618	Mount Hallowell Reserve	А	Bounded by Ocean Beach Rd and Lights Rd	Conservation & Recreation	A3011	
R46688	Peace Street Reserve	С	Bordered by Christina Cres to south	Parklands	A3814	

^{*} Reserve Class Definitions as under the WA Land Administration Act 1997 (LAA):

Class A: Class A reserves afford the greatest degree of protection for reserves of Crown land created under the LAA. The A classification is used solely to protect areas of high conservation or high community value. Class A reserves are afforded a high level of ministerial protection against changes to use or purpose.

Class C: Class C reserves are treated as a reserve but are not a Class A reserve. These can still be HCV due to high community value or scenic value and sense of place (entrance scenic value). These reserves contribute to open greenspace in urban centres or form buffer zones between residential and industrial areas.

PRIORITY WEED SPECIES

Priority weeds for control fall in the following categories:

Weeds of National Significance (WoNS): WoNS can be characterised as priority non-native invasive plants that:

- pose a high impact to Australia's environmental, economic and/or social and cultural values
- affect multiple land managers with potential to affect many more and are considered a priority weed by many
- are naturalised to the point that eradication is unfeasible, yet further spread is still possible
- have feasible means to improve their management
- their management will benefit from national coordination
- elicit support, willingness and motivation amongst community and industry stakeholders to act.

There are currently 32 WoNS. Further information on WoNS can be found at weeds.org.au/weeds-profiles/.

<u>WA State Declared Plants</u>: Plants may be declared as pests under Western Australian legislation. If a plant is declared, landowners and other persons are obliged to control that plant on their properties. Declaration specifies a category, or categories, for each plant according to the control strategies or objectives that are appropriate in a particular area. Among the factors considered in categorising declared plants are:

- the impact of the plant on individuals, agricultural production and the community in general
- whether it is already established in the area
- feasibility and cost of possible control measures.

Shire of Denmark Pest Plants – See list of Local Pest Plants in Appendix 3

<u>Shire of Denmark Environmental Weeds:</u> To date, there have been 112 environmental weeds identified in the Shire of Denmark bushland reserves, which are listed and categorised in Appendix 4.

Most sites have more than one weed species, so decisions must be made to prioritise control based on the following factors:

- Invasiveness: ability to rapidly colonise new areas (e.g. Bleeding heart, Arum lily, Taylorina)
- Impacts: ability to smother native vegetation, change soil chemistry, form impenetrable thickets, cause health problems, increase fire hazard (e.g. Dolichos, Wonga vine, Sweet pittosporum, Lantana)
- Current and potential vectors for distribution of weed seed, especially on sites with long-lived, soil-stored seed.

PRIORITISATION OF SITE

Factors to consider when prioritising sites:

- Bushland condition (as per maps)
- Existing Management Plans and Strategies and listing in Municipal Heritage Inventory
- Recent work history
- Position in the landscape such as riparian zones, connectivity between remnant bushland (allows movement of plants, animals, birds and insects), landscape amenity or sense of place (approach into Denmark scenery)
- Accessibility steepness, waterlogging, remoteness
- Seasonal/weather factors
- Size of work crew available on the day
- Severity of weed threat: ideally all sites should be monitored annually to identify any emerging weed issues

New weeds can appear - Bleeding heart, Wonga vine, whilst others once common are now rare — Pampas grass, Sydney golden wattle. When a site is remote (e.g. Peaceful Bay), or is small and steep (e.g. Weedon Hill), it is recommended to combine monitoring and weeding when scheduling a works program.

SHIRE OF DENMARK LOCAL LAW PEST PLANT SCHEDULE

The Local Law Shire of Denmark Pest Plant Schedule requires updating to include emerging weed species that have been shown to be highly invasive since the last Weeds Strategy update. These include:

Wonga Vine Bleeding Heart Garden/basket asparagus Asparagus Fern Pandorea pandorana Homolanthus novo-guineensis Asparagus aethiopicus Asparagus scandens

Some weed species that are currently on this schedule have been identified as low risk as populations of these species are very limited. It is worth noting that the potential for these plants to be a high risk still exists if new populations arise. These include:

Angels trumpet Caster oil tree Doublegee Onehunga Tree of heaven Datura suaveolens Ricinus communis Emex australis Soliva pterosperma Ailanthus altissima

6 SHIRE OF DENMARK BUSHLAND RESERVES WEEDS ACTION PLAN AND TARGET WEED PRIORITIES

RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
R12232	Beaufortia Gardens	Acacia longifolia, Asparagus scandens, Dipogon lignosus, Polygala sp. Psoralea pinnata, Rubus sp.	Control of woody weeds: manually remove <i>Pinus sp</i> and seedlings of <i>Acacia longifolia, Polygala myrtifolia</i> and <i>Psoralea pinnata</i> . Manually remove <i>Asparagus scandens</i> .Control <i>Rubus sp</i> (Blackberry) with Metsulfuron methyl.	Target priority weeds when flowering before seed set. Check status of <i>Dipogon lignosus</i> . Continue revegetation programme with local species. Target blackberry to reduce spread into other reserves. Avoid spray drift onto non-target area.	Medium
R12344	Poison Point	Lonicera japonica, Thunbergia alata.	Continue with manual weed control.	Degraded section (ceded to Foreshore Reserve as part of subdivision) may need follow-up revegetation. Any future fuel load mitigation works to include discussion with First Nations representatives or Indigenous Ranger groups, as reserve has important cultural values.	Low
R12995	Denmark River – Riverbend Lane	Genista monspessulana Pandorea pandorana	Continue with manual weed control. Wonga Vine high priority for manual removal.	Emerging <i>Pandorea pandorana</i> (Wonga Vine) infestation in both sections – high priority for control.	High
R13039	Denmark River - North	Asparagus aethiopicus, Genista monspessulana. Eucalyptus globulus	Continue with manual weed control in bushland areas. Lop and remove from site Eucalyptus globulus	Revegetate southern section from Town end to pedestrian bridge. Discontinue lopping Melaleucas adjacent to Community Park and revegetate riverbank with endemic ground cover and understorey species. (As per Community Park Management Plan).	High
R14376	Denmark River West Bank	Anredera cordifolia, Rubus sp (Opposite Karriglen Way. Not evident at time of survey).	Continue with manual weed control in bushland areas.	Revegetate area opposite Karriglen Way following removal of <i>Anredera cordifolia</i> , <i>Rubus sp</i> and other garden escapees.	Medium
R15513	McLean Park Reserve	Anredera cordifolia Asparagus aethiopicus Dipogon lignosus Genista monspessulana Lantana camara Pandorea pandorana Zantedeschia aethiopica	Continue with manual weed control in bushland areas.	Develop a regime for managing the edges between mown areas and native vegetation. In the past, the Shire have mown to an agreed edge, and encroaching Kikuyu has been pulled back by hand. Note: Bracken is not a weed in bushland. Arum Lily - seasonal priority for removal.	Medium

RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
R15700	Norm Thornton Park	Pennisetum clandestinum	Continue with mowing and edge maintenance around park assets.	Continue with mowing. Avoid damaging bases of established trees. Manual or careful whipper snipping to control grasses around trees. Limit herbicide application to lawn management and asset edge maintenance.	Medium
R18821	Kordabup Road Reserve	Eragrostis curvula	Herbicide control of <i>Eragrostis curvula,</i> Pennisetum clandestinum and Watsonia spp. Manual removal of <i>Psoralea pinnata</i> and Phytolacca octandra.	Electricity substation in Reserve: access off Kordabup Rd.	Medium
R20403	Morgan Road Reserve	Dipogon lignosus	Continue with manual weed control.	Revegetate along riverbank under existing Melaleucas.	Medium
R20928	Parry Beach Reserve	Dipogon lignosus Typha orientalis	Control <i>Typha</i> in roadside drain by slashing or possibly herbicide. Continue manual control of <i>Dipogon lignosus</i> and <i>Watsonia sp</i> .	Do not spray <i>Dipogon lignosus</i> . Off target damage has occurred recently.	High
R22944	Denmark River South Coast Highway	Vinca major	Vinca major is a persistent ground cover plant not easily controlled with herbicide. Other weeds are being controlled manually.	Consider scalping to remove <i>Vinca</i> at eastern end, followed by revegetation.	Medium
R23067	Denmark Waste Management and Reuse Facility	Leptospermum laevegatum Eucalyptus globulus Pinus sp Cortaderia selloana Ricinus communis	Manually remove <i>Leptospermum laevegatum</i> and burn in greenwaste pile. Lop and remove <i>Pinus sp</i> .	Consider removal of <i>Eucalyptus globulus</i> Number of other weed species present in eastern sector (not on map) that require ongoing treatment action e.g. Pampas grass and Castor oil plant	High (Leptosperm um)
R24175	Harington Park	Acacia longifolia Dipogon lignosus Pandorea pandorana	Continue with manual weed control	Adjoining neighbours actively involved in manual weed control.	Medium
R24452	Denmark Rivermouth - East	Acacia longifolia Rubus sp	Monitor for regrowth and continue with manual weed control	Primary work carried out on <i>Acacia longifolia</i> and <i>Rubus sp</i> in recent years.	Medium
R24510	Peaceful Bay Reserve	Asparagus aethiopicus Polygala myrtifolia	Continue with manual weed control especially after fire.	Some weeds escaping from loppings dump.	Medium
R24913	Wilson Head	Acacia longifolia Morea flaccida	Continue with manual weed control before flowering.	Morea flaccida is difficult to control with herbicides. Manual removal is proving	High

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RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
		Senecio elegans Zantedeschia aethiopica		successful. Arum Lily encroaching along bordering farmland edges. Seasonal priority for removal before flowers mature.	
R25347	Poddyshot	Lantana camara Pandorea pandorana Zantedeschia aethiopica	Continue with manual weed control.	Adjoining neighbour/s doing unsanctioned mowing of Foreshore Reserve. Large mature Marri at risk. Arum Lily present - seasonal priority for removal before flowers mature.	High
R26480	Wilson Inlet Foreshore – Minsterly Rd	Acacia longifolia Asparagus aethiopicus Dipogon lignosus Genista monspessulana Homolanthus novoguiniensis Ipomea indica Pandorea pandorana	This section of foreshore has had manual weed control carried out since before the walk trail was established. The primary weeding was done in 2005 mostly Leptospermum laevegatum and Psoralea pinnata. Since then there has been continuing but sporadic weeding of priority species.	This section of foreshore has had unsanctioned clearing carried out over many years. Efforts to involve local residents in weeding have mostly been futile. Suggest contacting adjoining residents again to discuss overclearing and presence of serious weed species on their properties. Appropriate chemical treatment of weed species may be required.	High
R28922	Peter Gros Park	Asparagus scandens Pandorea pandorana	Continue with manual weed control. Watch for Asparagus and Pandorea seedlings.	Adjoining landowner carries out maintenance of fire access ways.	Medium
R28998	Harper Street	Asparagus spp Lonicera japonica Pittosporum undulatum	Assess revegetation site for need for additional planting. Continue with manual weed control.	Difficult access. Steep slope; take care to prevent erosion. Consider path construction to allow maintenance access. Follow-up weed management is required if any fuel reduction work in reserve is undertaken.	Medium
R29561	East River Rd Reserve	Garden escapees	Monitor for intrusions from adjoining residential properties.	Excellent condition bushland worthy of monitoring for emerging weed species.	Low
R30277	Railway Heritage Precinct	Dipogon lignosus Ipomea indica Lonicera japonica Robinia pseudoacacia	Students from Koorabup Nature School will continue to work with SCBS to control weeds and possibly do more planting of local natives.	Building proposed for Lions organisation will require removal of major stand of <i>Robinia pseudoacacia</i> . Eucalyptus patens and Melaleuca stand will remain.	Low

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RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
R32279	Walters Reserve	Acacia longifolia Dipogon lignosus Homolanthus novoguiniensis Ipomea indica Pandorea pandorana Rubus sp Zantedeschia aethiopica	Continue with chemical control of <i>Rubus sp</i> when water levels are low. Continue with manual weed control of Wonga Vine and other species.	Area at end of Simmonds Place needs assessing for possible revegetation following removal of mature Eastern States acacias. Some adjoining residents have recently been engaged in weed control near Hard Place. Arum Lily - seasonal priority for removal before flowers mature.	Medium
R32861	Iluka Avenue	Acacia longifolia Cyathea cooperi Dipogon lignosus Genista monspessulana Homolanthus novoguiniensis Lantana camara Pandorea pandorana	Continue with manual weed control. Wonga Vine and Lantana priority for manual removal.	Consult with Bushfire Mitigation Officer regarding maintenance of Fire Access ways, especially through wet area behind Heavitree Rd. Some adjoining residents are mowing edges of the Reserve with varying degrees of competence. Garden refuse dumped in Reserve behind Heavitree Rd, and unsuitable species planted in mown section. Adjoining resident has been spraying native sedges in Reserve.	High
R34742	Wilson Inlet Foreshore – The Cove	Dipogon lignosus	Continue with manual weed control. Monitor for Cortaderia selloana seedlings as has been removed in the past.	Two adjoining landowners are actively involved in manual weed control. Continue with revegtation below former Holiday Park. Large dead Marri is an important roosting site for birds, retain as habitat and prune if necessary.	Medium
R36026	Happy Valley Road	Cortaderia selloana Eucalyptus globulus	Cortaderia seedling has been removed from Reserve. Monitor for seedlings of both species.	Eucalyptus globulus spreading from surrounding properties, germinating after fire. Manually pull bluegum seedlings and cut and paint larger plants. Removed plants can be left on site.	Low
R36714	Ricketts Reserve	Asparagus spp, especially aethiopicus Zantedeschia aethiopica	Continue with manual weed control.	Arum Lily - seasonal priority for removal before flowers mature	Low

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RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
R37391	Little River Reserve	Homolanthus novoguiniensis Pandorea pandorana Rubus sp	Spray dense <i>Watsonia</i> opposite Maraveen Place. Continue with manual weed control of other species.	Revegetate areas south of Little River that have been cleared by adjoining landowners. Prepare detailed weed control and reveg plan for river bank adjacent to Karri Bay Estate.	High
R37695	Beveridge Road Reserve	Acacia melanoxylon Dipogon lignosus	Continue with manual weed control. Do not spray. Acacia mel may require stumps to be painted with herbicide.	Local resident assists with monitoring and manual weed control. Reserve contains old growth forest.	High
R37702A	Paterson Street	All Eastern States Acacias, except mature specimen at southern end	Consider slashing <i>Watsonia</i> outbreaks. Continue with manual weed control of other species.	Important buffer between Light Industrial and Residential areas. Site of Community busy bees.	Medium
R37702B	Buckley Street	Rubus sp Pittosporum undulatum	Recommend on-site assessment to determine future weed control, bushfire mitigation and drainage works.	Important buffer between Light Industrial and Residential areas.	Medium
R38440	Pioneer Park	Dipogon lignosus Genista monspessulana	Spraying herbicide is not recommended in this Reserve. Maintain manual weed control - ongoing.	Pioneer Park has been the site of a trial of the Bradley Method since 1999. Good recruitment of native species in all areas except where herbicides were used several years ago. Local residents do volunteer weeding.	High
R39066	Denmark River East Bank	Eastern States Eucalypts along southern boundary of Trotting Track (Mistaken for Euc globulus)	Consider removal of Eastern States Eucalypts along southern boundary of Trotting Track. Continue with manual weed control of other species.	The Eastern States Eucalypts are starting to seed out into adjacent native forest.	Medium
R41224	Blue Wren Lane	Acacia longifolia Dodonea viscosa	Mature Acacia were removed several years ago. Continue monitoring and removing seedlings.	Local residents assist with manual weed control. Dodonea viscosa (previously planted) has been removed. Dieback present to south. Hygiene measures to be observed.	Medium
R41456	Kwoorabup Community Park	Reserve has no remnant native bushland -Mown grass with isolated Karris.	Agree with recommendation that this Reserve be removed from the document.	Consider planting local understorey under the group of Karris in circular car park for habitat.	Low

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RESERVE NUMBER	RESERVE NAME	PRIORITY TARGET WEEDS FOR CONTROL ACTION	RECOMMENDED WEED CONTROL ACTION/ONGOING MAINTENANCE	COMMENTS AND CONSIDERATIONS	WORKS PRIORITY
R42724	Tysoe Park	Acacia longifolia Genista monspessulana	Monitor for and remove seedlings. Spray <i>Watsonias</i> in mown section.	Adjacent landowner has been advised of presence of <i>Genista monspessulana</i> on their property.	Medium
R45623	Waterfall Park	Dipogon lignosus Rubus sp	Very wet site - is a difficult site for access and weed management. Potential for a community led weed control and revegetation plan to be developed.	Setting up a Friends of the Reserve Group is being discussed. This Reserve is an important stepping stone in the Urban Reserve system but has nutrient loading issues. Target blackberry removal.	Medium
R46256	Hamilton Reserve	Dipogon lignosus Zantedeschia aethiopica	Continue with manual weed control. Do not spray.	Important element in the landscape. Property to the West is contributing to weed burden. Arum Lily present - seasonal priority. Local resident holds weekly weeding sessions. Discuss further weed management or proposed fuel load reduction targets with local residents.	High
R46618	Mount Hallowell Reserve	Acacia longifolia Dipogon lignosus Genista monspessulana Ipomea indica	Friends of Kooryunderup and Bibbulmun Track hold regular weeding sessions. Do not spray.	Dipogon lignosus (Dolichos pea) and Leptospermum laevegatum not marked on map as not evident at time of survey. Community comment that Dolichos is present in cleared areas. Further survey work recommended. Management Plan for this Reserve is due for a review.	High
R46688	Peace Street Reserve	Typha orientalis	Area between Mt Shadforth Rd and Peace St contains old town dam and section of Millars Creek. Possible site for understorey regeneration burn. Degraded area near corner of Jill St has had Leptospermum laevegatum, Rubus sp, Cotoneaster sp and Dipogon lignosus controlled by volunteers over past years.	Typha orientalis, although now considered endemic, should not be allowed to proliferate. There are several small infestations in the vicinity. This Reserve will continue to be manually weeded by volunteers. No need to spray. Watsonia sp in former gravel pit is being controlled.	Medium

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RESERVE ASSESSMENT MAPS & RECOMMENDATIONS

RESERVE R12232 BEAUFORTIA GARDENS

Date of Assessment: 4.1.2024	Reserve number: R12232 Assessment No. A3012
Reserve name: Beaufortia Gardens	Location: Between foreshore and golf course - Town
Reserve Purpose: Parklands and Recreation	Reserve class: C

Area (ha): 68.10

Vegetation Type: Mosaic: Medium Forest

Vegetation Description: Jarrah/casuarina woodland on elevated ground. Swampy heath/paperbarks on low ground.

Bushland condition: Mostly Pristine. Small degraded area noted on map.

Weeds – See map for weed list

Access (and existing trails; potential vectors)- The Rail Trail bisects the reserve from west to east. Access tracks connect from the rail trail (bollarded), north to the golf course (chained, with two padlocks, only one of which opens with a shire key). Another track runs off this north/south track, up to the Springdale beach/Woodward heights estate.

Values (environmental sensitivities, threatened flora, fauna habitat: This reserve provides feeding resources for both Red-tailed, and White-tailed black cockatoos, as seen at time of survey. Large trees in the woodland would provide potential nesting hollows for these cockatoos, as well as numerous other species. Numerous Proteaceae species occur within the reserve. This reserve protects a large section of inlet foreshore.

Geology; terrain/slope: The majority of the reserve is low lying winter wet swamp on peaty, sandy soil. There is laterite on the higher elevations to the east.

Hydrology (potential vector) - Water courses drain the low lying areas from North to South.

Current use -Access tracks exist within the reserve for fire suppression vehicles.

Threats- Invasive weed species; Feral animals including cats and foxes

Surrounding land use: Rail trail, Golf Course, Agricultural farm land and Residential properties.

Links to other reserves, corridors: This reserve adjoins other reserves and bushland east and west around the inlet foreshore and to the Denmark river.

History of reserve: The reserve was bisected by the railway running East to Springdale beach. This now forms the Rail Trail. East of the North-South access track has been used as a Shire dump for rocks and lopping's, some weed control by shire staff has been carried out recently in this area.

Recommended weed control actions against each reserve – Manual weed control is recommended throughout the reserve, as weed density is not high. Blackberry control with chemical spray, ensure limit of off target damage.

Resourcing requirements: approx. 10hrs annually

Community involvement: participatory action and opportunities for environmental education -Kwoorabup Nature School regularly uses the Rail Trail for environmental education.



RESERVE R12344 POISON POINT

Reserve name: Poison Point Loc	cation: Poison Point to Harper Rd
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Reserve Purpose: Parklands Reserve class: C

Area (ha): 9.37

Vegetation type: Mosaic: Medium Forest: Marri/Low Woodland: Paperbark

Vegetation Description: Melaleuca spp along foreshore, Marri woodland on upper slopes

Bushland condition: Excellent in Western section, to degraded in Eastern section

Weeds – See map for weed list

Access (and existing trails; potential vectors): By foot only from Harper St and 4wd only to Poison Point from Inlet Cres

Values (environmental sensitivities, threatened flora, fauna habitat: High native fauna and bird habitat values as includes significant section of foreshore of Wilson Inlet

Geology; terrain/slope: Steep slopes, gravels and granite outcrops

Hydrology (potential vector): Downslope drainage into Wilson Inlet

Current use: Boat launching for professional fishers only. Bird watching, passive recreation.

Threats - Minor rubbish dumping and clearing.

Surrounding land use: Residential.

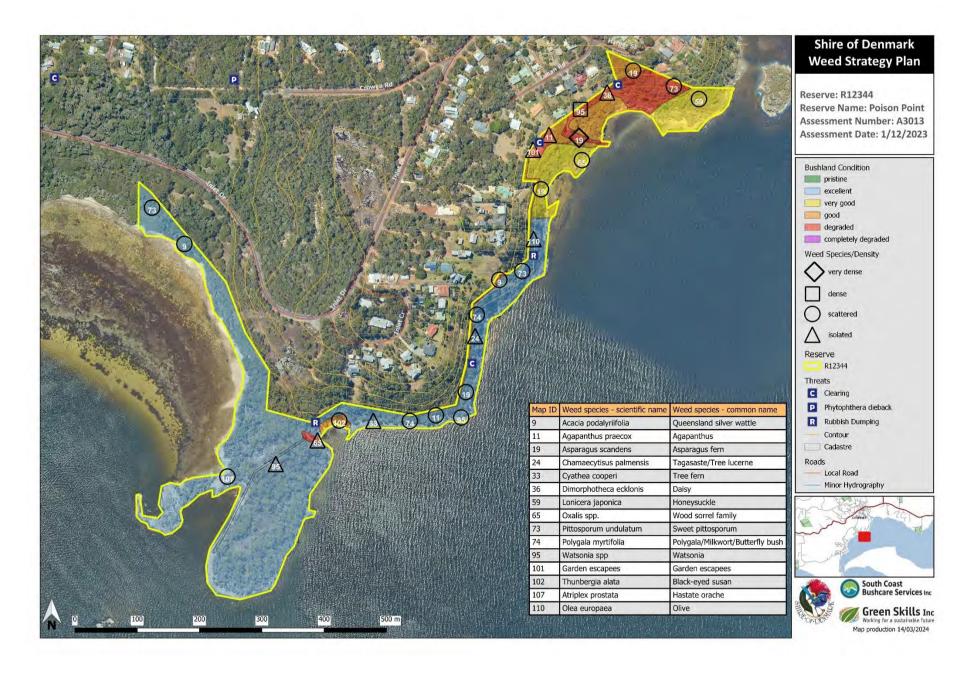
Links to other reserves, corridors: Adjoins Foreshore Reserves R28998 and R34742.

History of reserve: Manual weed control carried out since 2010

Recommended weed control actions against each reserve –per weed species identified: Continue with manual weed control. No spraying required - scattered weed populations.

Resourcing requirements: approx. 40 hrs annually

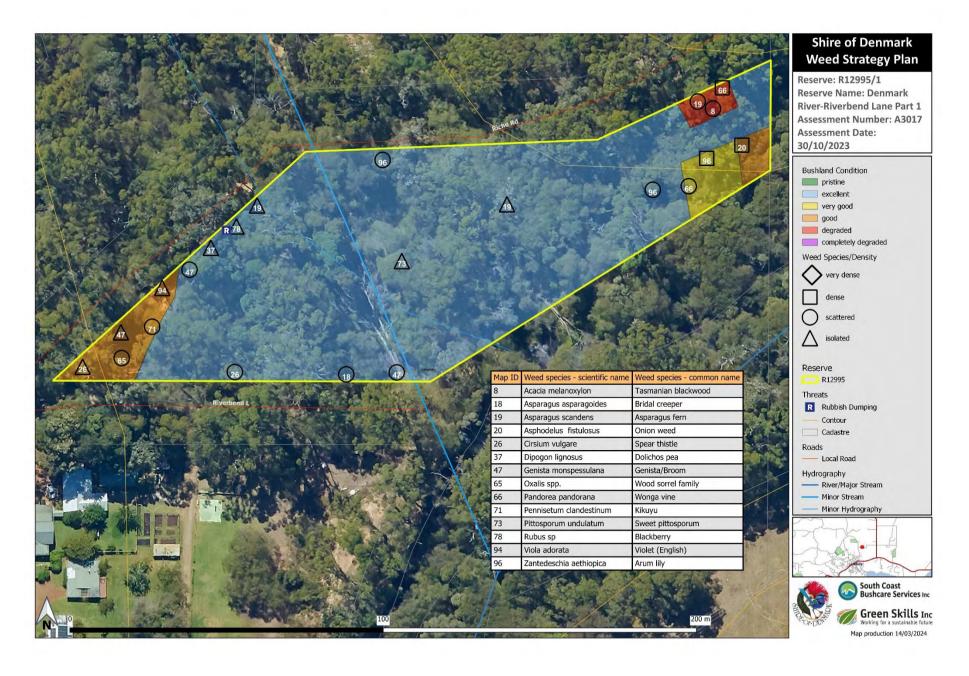
Community involvement: participatory action and opportunities for environmental education: Contact landowners regarding Olives invading from private property on Inlet Dr.



Date of Assessment: 30/10/2023	Reserve number: R12995 - part 1	
Reserve name: Denmark River – Riverbend Lane	Location: Riverbend Lane/Denmark R/Scotsdale Brook confluence	
Reserve Purpose: Parklands	Reserve class: C	
Area (ha): 2.28		
Vegetation Type: Tall forest – Karri/Riparian vegetation		
Vegetation Description: Karri woodland, riparian vegetation.		
Bushland condition: Mostly Excellent; small area degraded from green waste dumping.		
Weeds – See map for weed list.		
Access (and existing trails; potential vectors): Riverbend Lane and Riche Road.		
Values (environmental sensitivities, threatened flora, fauna habi	tat: Riparian vegetation provides habitat and acts as a buffer from surrounding areas. Karris provide nesting	
hollows for many birds and animals, including the threatened Black cockatoos.		
Geology; terrain/slope: Mostly level, with a slope at the north-ea	ast section of the reserve.	
Hydrology (potential vector): the Scotsdale Brook runs through this reserve to join the Denmark River.		
Current use: Recreation, walking, Bird Watching		
Threats (eg. Dieback, ferals, illegal clearing, dumping): Low, some garden green waste dumping		
Surrounding land use: School, residential and caravan park.		
Links to other reserves, corridors: R44107 adjoins to the north-east corner of this reserve, and R13039 connects to the south and east.		
History of reserve: Manual weed control since 2010		
Recommended weed control actions against each reserve – manual weed control to continue in this reserve; control of blackberry regrowth by manual removal		

Community involvement: participatory action and opportunities for environmental education: Steiner school uses the Scotsdale Brook for environmental learning.

Resourcing requirements : approx. 40hrs annually



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RESERVE R12995 DENMARK RIVER - RIVERBEND LANE PART 2

Date of Assessment: 30/10//2023	Reserve number: R12995- pt2
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Reserve name: Denmark River – Riverbend Lane Location: Scotsdale Road/Denmark River

Reserve Purpose: Parklands Reserve class: C

Vegetation type: Tall Forest: Karri

Bushland condition: Excellent to degraded.

Weeds – See map for weed list

Access (and existing trails; potential vectors): Scotsdale Road to the west, along the Denmark river.

Values (environmental sensitivities, threatened flora, fauna habitat): High native fauna and bird bush habitat, river foreshore continuous with Denmark River riparian corridor

Geology; terrain/slope: Steeply sloping up to the west.

Hydrology (potential vector): Denmark river.

Current use: Limited by use by public

Threats (eg. Dieback, ferals, illegal clearing, dumping): serious infestation of Wonga Vine

Surrounding land use: residential to the north.

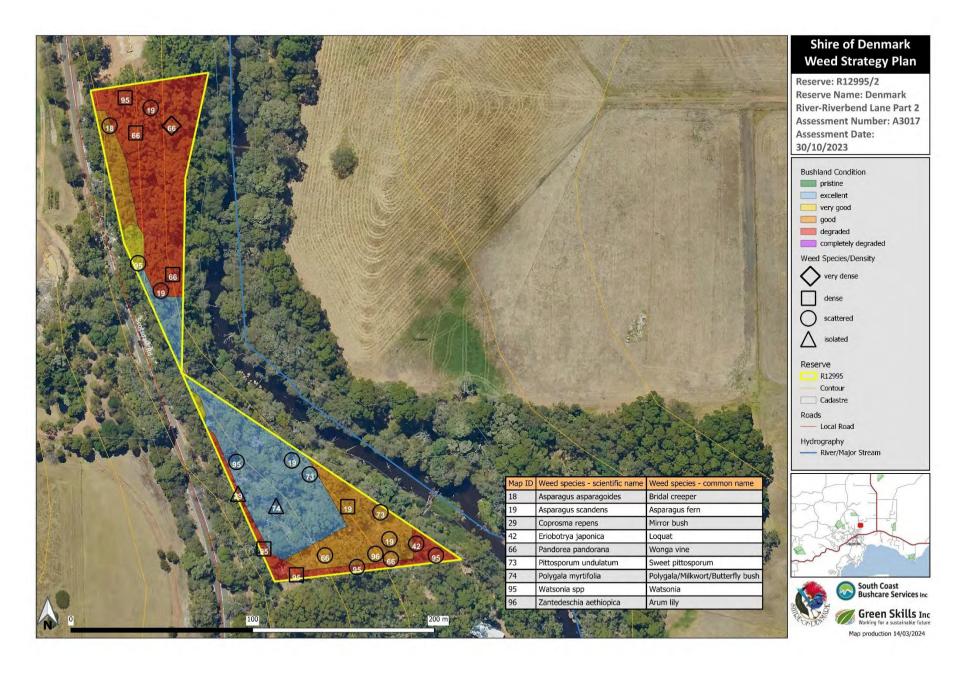
Links to other reserves, corridors: R13039 runs along the eastern edge of this reserve.

History of reserve: Bushland reserve on river corridor

Recommended weed control actions against each reserve – Wonga Vine manual removal and follow-up seedling removal. Continue manual weed control in this reserve.

Resourcing requirements – including total estimates hrs required annually: 40hrs/year

Community involvement: participatory action and opportunities for environmental education:



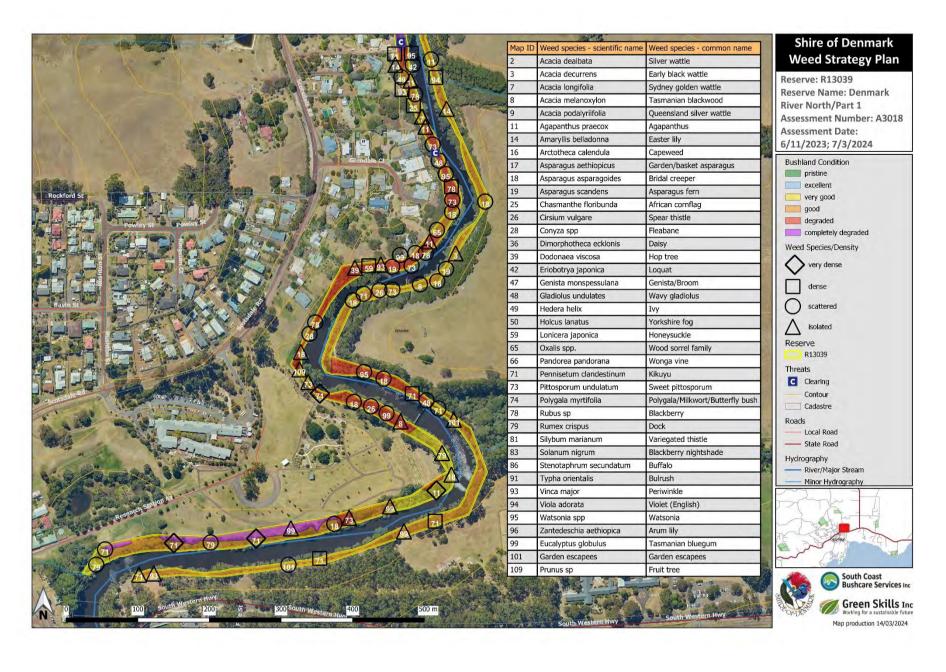
RESERVE R13039 DENMARK RIVER NORTH

Resourcing requirements – approx. 40 hrs annually

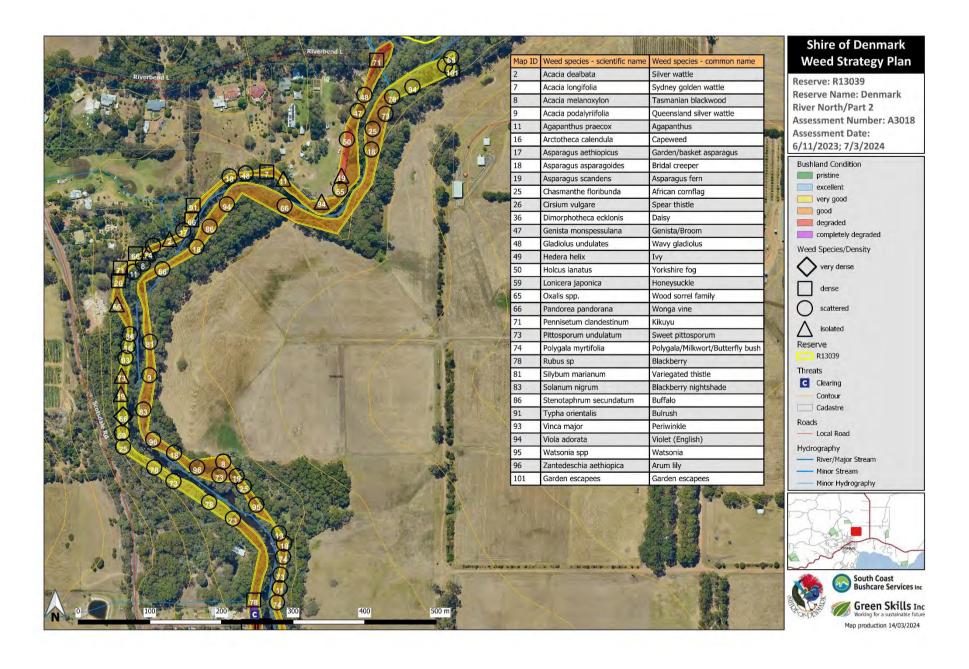
Date of Assessment: 07/03/2024	Reserve number: R13039
Reserve name: Denmark River – North	Location: Upstream from traffic bridge, both sides of River
Reserve Purpose: Parklands	Reserve class: C
Area (ha): 5.38	
Vegetation type: Tall Forest - Karri	
Bushland Description: Karri forest and Melaleuca fringing	vegetation
Bushland condition: Ranges from Very Good to Degraded	
Weeds – see maps part 1 (south) and part 2 (north) for we	reds list
Access (and existing trails; potential vectors): Walk trail on	eastern side
Values: environmental sensitivities, threatened flora, faur	na habitat - Denmark river, good native fauna and bird habitat, bush walk trail.
Geology: terrain/slope up and down alongside river	
Hydrology (potential vector): Denmark river running throu	gh entire reserve
Current use: scenic walk trail; recreation; bike path	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Inva	asive weeds; riparian vegetation understory degradation
Surrounding land use: Farm land, agricultural school land,	roads and residential housing
Links to other reserves, corridors: Adjoins R 22944 on sout	h western side
Recommended weed control actions – Hand weed remova	al; revegetation with riparian native spp. of section of riverbanks both sides of river, from town-end of the reserve to the

Community involvement: participatory action and opportunities for environmental education

pedestrian bridge. Riverbank revegetation recommendation consistent with Kwoorabup Community Park management plan.



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RESERVE R14376 DENMARK RIVER WEST BANK

Date of Assessment: 16.10.23	Reserve number: R14376
Reserve name: Denmark River West Bank	Location: West side of Denmark R south of traffic bridge
Reserve Purpose: Parklands and Recreation	Reserve class: A
Area (ha): 13.76	

Vegetation Type: Mosaic: Tall Forest: Karri/Riparian vegetation

Vegetation Description: Melaleuca, Marri, Karri woodland, Riparian vegetation.

Bushland condition: Mostly Excellent to Completely degraded (car park, grassed parkland, jetty facilities and playground)

Weeds – see maps R14376 Part 1 (north) and Part 2 (south) for weeds list

Access (and existing trails; potential vectors): The Mokare Heritage Trail extends the length of the reserve.

Values (environmental sensitivities, threatened flora, fauna habitat): Marri provides nesting hollows and feeding resources for threatened Black cockatoo species. Karri provides nesting hollows for threatened Black cockatoos. Riparian vegetation filters nutrients from surrounding area and provides habitat for water birds.

Geology; terrain/slope: Riverbank, mostly level

Hydrology (potential vector): Denmark river, drainage line from dam in R15513.

Current use: Playground, Public toilets, walking, cycling; boat launching facilities at river mouth

Threats (eg. Dieback, ferals, illegal clearing, dumping): Weeds, foot traffic, edge effects along dual-use walk/cycle pathway

Surrounding land use: Roads, residential, caravan park, school

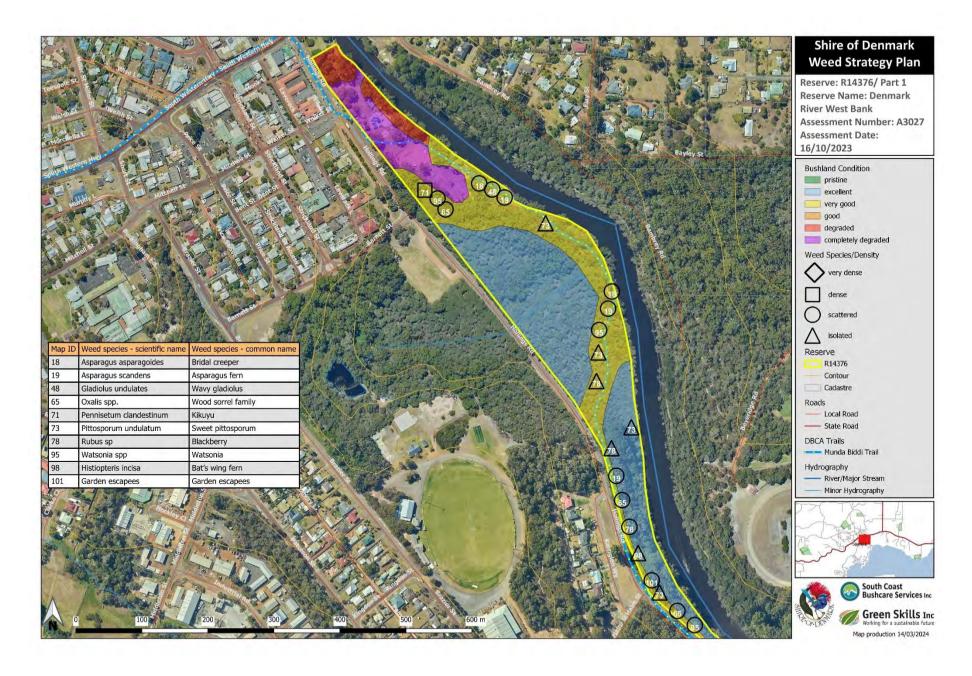
Links to other reserves, corridors: Hollings Road separates R14376 from R15513 and R14376 to the west. On the eastern side of the Denmark river is R39066.

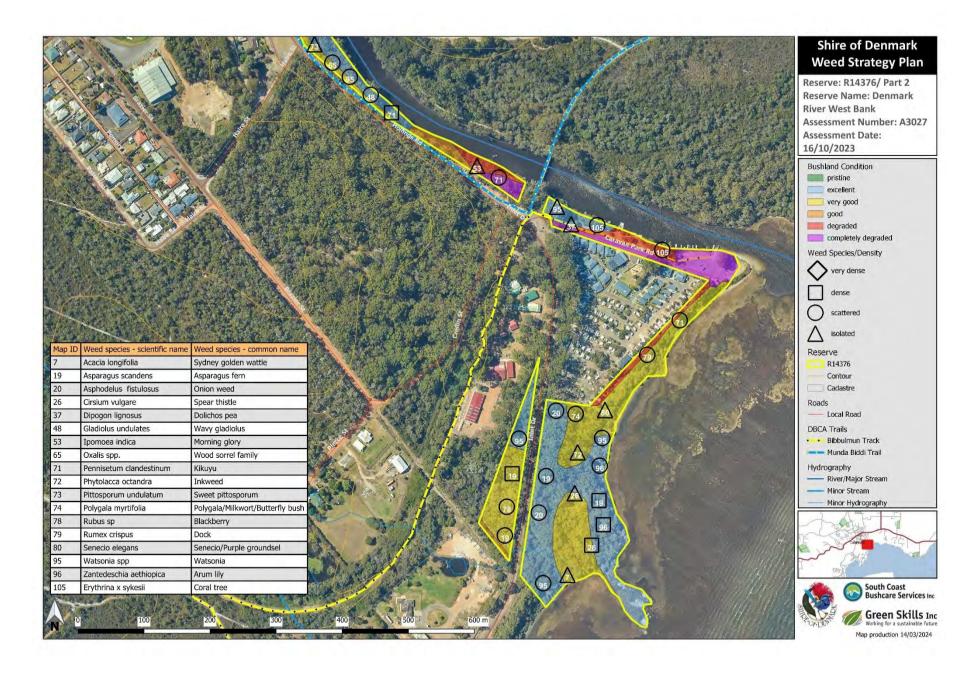
History of reserve: Long-term public recreational use, previous location of public tennis courts and skate park at the northern part of the reserve. Southern end has rail trail passing through which historically was an active railway line.

Recommended weed control actions against each reserve: Continue manual weed control throughout the reserve. Ongoing path edge maintenance with brushcutter. No herbicide applications required. Revegetation plan required for reserve section opposite Karriglen Way, include pyhsical removal of blackberry and Madeira Vine (not shown on map) in this section of reserve.

Resourcing requirements – including total estimates hrs required annually: 40 hrs/year

Community involvement: Participatory action and opportunities for environmental education: an information leaflet for the Mokare Heritage trail has been created by SCBS and is an excellent resource for self-guided walks through this reserve.

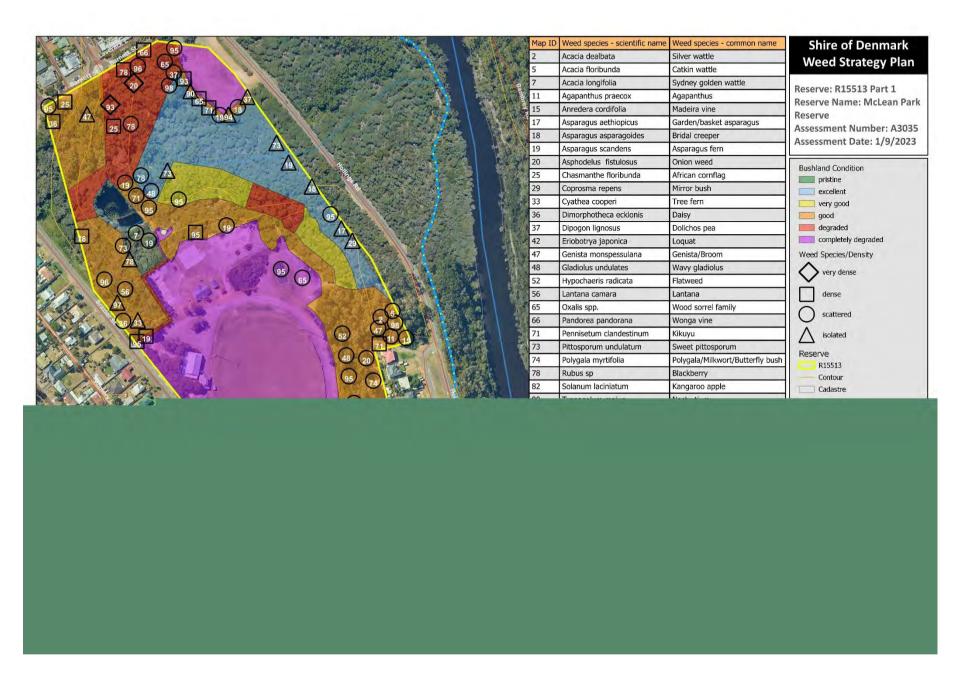


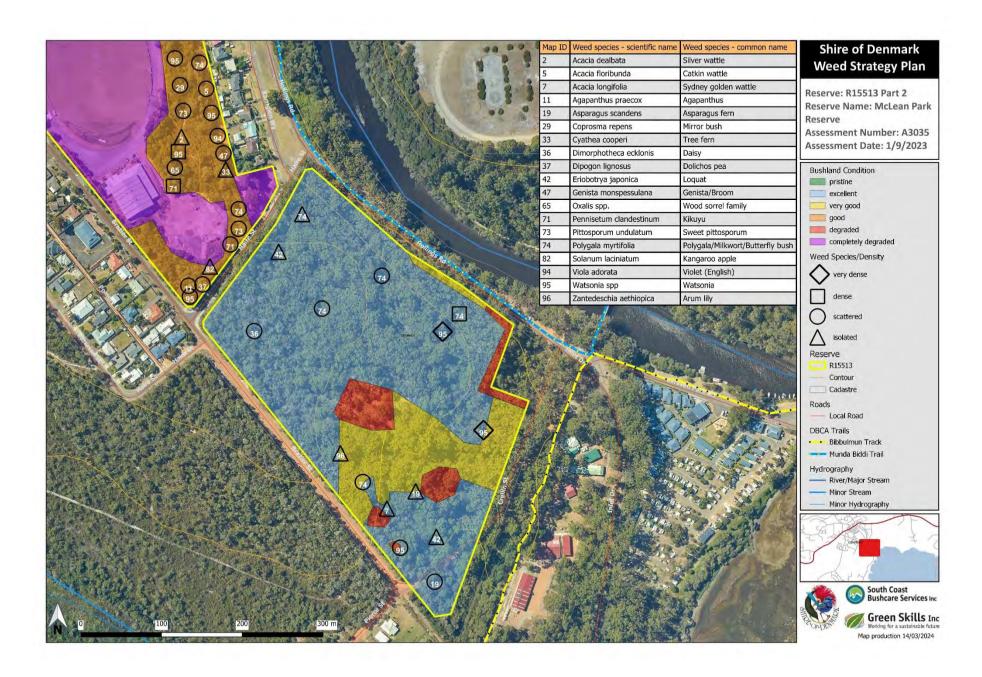


RESERVE R15513 MCLEAN PARK

site for youth education of values of native bushland in urban settings.

Date of Assessment: 1/09/2023	Reserve number: R15513
Reserve name: McLean Park	Location: Between Barnett and Crellin Sts.
Reserve Purpose: Recreation and Showground	Reserve class: A
Area (ha): 28.89	
Vegetation type: Medium Forest: Karri-Marri-Jarrah/ Low Woodland:	Paperbark and Cultivated areas: Mown grass – Planted trees- Garden beds
Vegetation description: Karri, Marri, Jarrah forest; Paperbark wetland	d. Oval lawns and carpark.
Bushland condition: Ranges from Excellent to Completely degraded	
Weeds : see weed maps R15513 Part 1 and Part 2 for weeds list	
Access (and existing trails; potential vectors): Walk trail traverses the	Reserve.
Values (environmental sensitivities, threatened flora, fauna habitat):	Good bird roosting and nesting habitat. Native bushland corridor to Denmark River and Wilson Inlet.
Geology; terrain/slope: Flat parkland	
Hydrology (potential vector): Wastewater treatment dam supplies irr	igation of sports fields. Potential for nutrification of groundwater. Ongoing testing of groundwater required.
Current use: Recreation Centre, Scout Hall, football oval, Skate Park,	Mountain bike pump track, Youth House.
Threats (eg. Dieback, ferals, illegal clearing, dumping): Edge effects for	rom surrounding residential areas and along walk path.
Surrounding land use: Residential	
Links to other reserves, corridors Adjoins UCL bushland on Brazier St	and R14376 on Denmark River.
History of reserve: Walk trail constructed under Community Youth P	roject in 1994. Manual weed control carried out since 1990. Previously a Rubbish Dump Site (prior to 1970)
Recommended weed control actions against each reserve –per weed	species identified – continue manual weed control and monitoring
Resourcing requirements – including total estimates hrs required ann	ually 40 hrs/year
Community involvement: participatory action and opportunities for e	nvironmental education - Walk trail constructed under Community Youth Project in 1994. Possible to use this

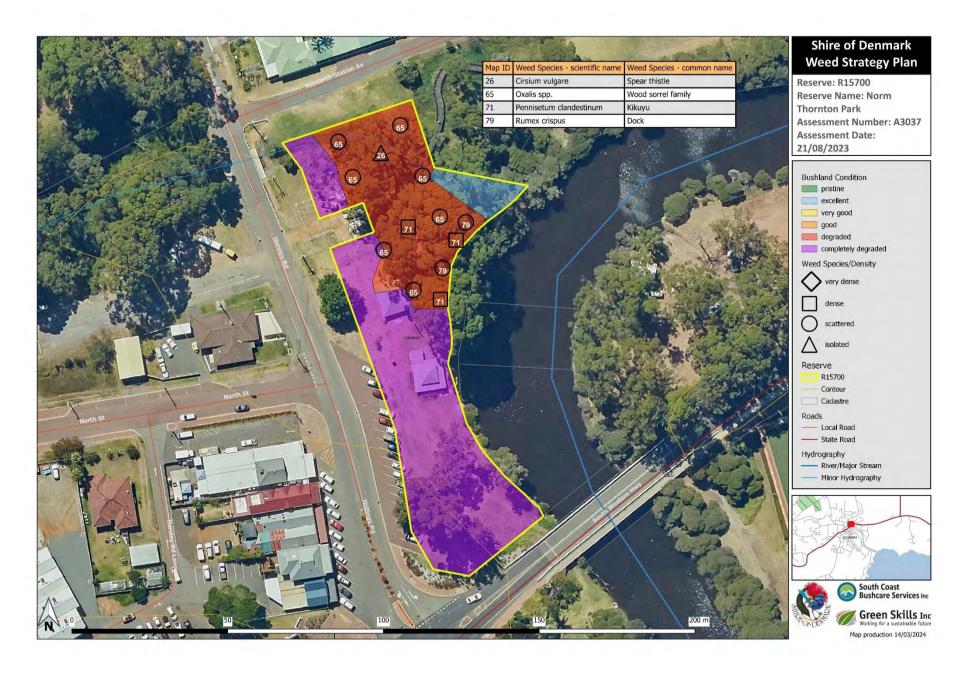




RESERVE R15700 NORM THORNTON PARK

Date of Assessment: 21/08/2023	Reserve number: R15700
Reserve name: Norm Thornton Park	Location: Corner of Horsley Rd and Research Station Rd
Reserve Purpose: Parklands	Reserve class: C
Area (ha): 0.54	
Vegetation Type: Mosaic: Tall Forest: Karri/Riparian vegetation	
Vegetation description: Karri remnant and mown area.	
Bushland condition: Excellent – completely degraded	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Footpath	
Values (environmental sensitivities, threatened flora, fauna habit	cat) : River bank riparian bushland and wetland habitat - creekline drainage into Denmark River
Geology; terrain/slope: Level	
Hydrology (potential vector): Denmark River	
Current use: Recreation, BBQ Shelter, Public toilets.	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Recreatio	nal use of area can encroach into wetland and foreshore vegetation
Surrounding land use: Residential and Commercial (Shops).	
Links to other reserves, corridors: Adjoins R41456 and R13039 De	enmark River.
History of reserve: Recreational reserve in town center.	
Recommended weed control actions against each reserve – mecl	nanical / hand removal / chemical – per weed species identified
Resourcing requirements – including total estimates hrs required	annually- 10 hrs/ year

Community involvement: participatory action and opportunities for environmental education: Possible site for educational signage boards at start of boardwalk



RESERVE R18821 KORDABUP ROAD

Date of Assessment: 5.2.24 Reserve number: R18821

Reserve name: Kordabup Road Reserve Location: Corner of Kordabup Rd north of South Coast Hwy

Reserve Purpose: Stopping Place and Public Utility Facility Reserve class: C

Area (ha): 9.20

Vegetation type: Mosaic: Medium Forest: Marri/ Riparian vegetation Vegetation description: Marri woodland, creek line riparian vegetation.

Bushland condition: Degraded- Excellent

Weeds: Inkweed, Taylorina, etc. see map for weeds list.

Access (and existing trails; potential vectors): Creek runs north to south through reserve. A Western Power line track bisects the southern portion of the reserve from west to east.

Values (environmental sensitivities, threatened flora, fauna habitat: Landscape values, buffer to water way, possible Boorna Gnamma in southwestern corner. Recommend consultation with relevant Noongar community to confirm.

Geology; terrain/slope: Gentle slope towards creek line. Mostly sandy soil.

Hydrology (potential vector): Creek runs north to south through reserve.

Current use: Riparian bushland remanant

Threats (eg. Dieback, ferals, illegal clearing, dumping): Weeds. Dead vegetation has been pushed up into heaps post 2022 fire in the SW corner. This practice has resulted in native vegetation being smothered and allowed kikuyu to move in.

Surrounding land use: Farmland, blue-gum plantation.

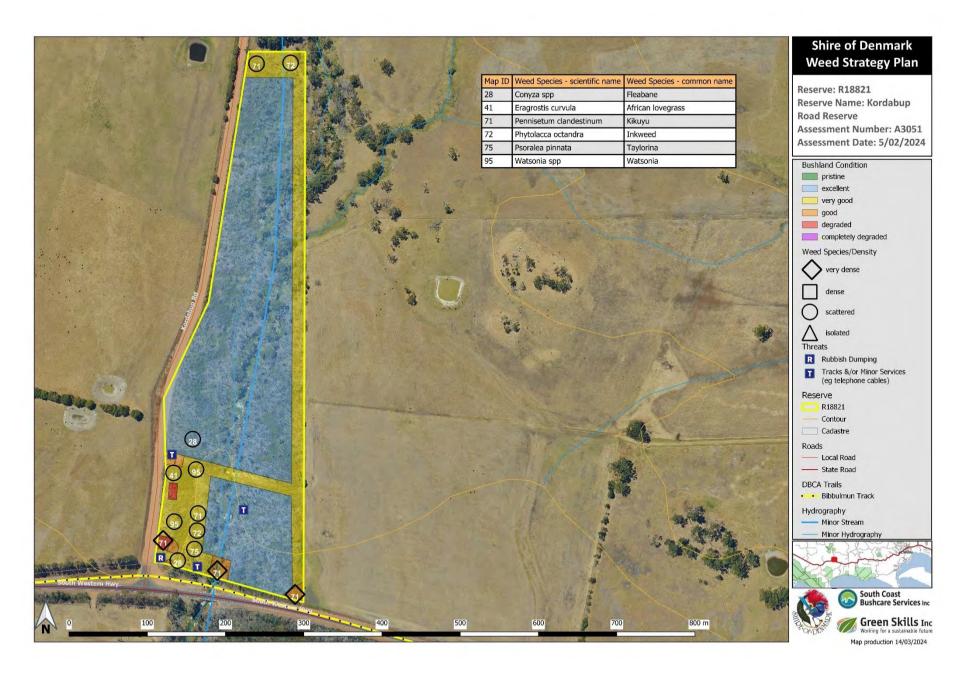
Links to other reserves, corridors: Creek line provides corridor to bushland south of the highway.

History of reserve: riparian bushland reserve

Recommended weed control actions against each reserve – mechanical / hand removal / chemical – per weed species identified: Recommend chemical spraying of dense kikuyu infestations and of the African love grass around Western Power infrastructure. Continue with manual weed control throughout the rest of the reserve.

Resourcing requirements – including total estimates hrs. required annually: 20hrs annually for manual weed control.

Community involvement: participatory action and opportunities for environmental education – none – rural location not accessed by public



RESERVE R20403 MORGAN ROAD

Date of Assessment:	Reserve number: R20403	
Reserve name: Morgan Road Reserve	Location: East of Fyfe Street, south of South Coast Hwy	
Reserve Purpose: Recreation	Reserve class: A	
Area (ha): 1.42		
Vegetation type: Tall Forest: Karri. (Eucalyptus diversicol	our)	
Bushland condition: very degraded- excellent.		
Weeds – See map for weed list	Weeds – See map for weed list	
Access (and existing trails; potential vectors) – Road side and walk trails		
Values (environmental sensitivities, threatened flora, fauna habitat) – golf club, good native bush habitat for fauna and birds		
Geology; terrain/sloping east to west on western side		
Hydrology (potential vector) : western side backs onto Denmark river		
Current use: bowling club and access to Denmark River		
Threats (eg. Dieback, ferals, illegal clearing, dumping)		
Clearing, pruning on western edge along side grass area, invasive weeds		
Surrounding land use: Road side, residential housing.		
Links to other reserves, corridors: R14376 along Denmark River and R22944 opposite on Highway		
History of reserve: Used as an outdoor classroom for TAFE Conservation students from 2001		
Manual weed control by volunteers and SCBS from 1998 – present day. Yearly weeding done		
Recommended weed control actions against each reserve per weed species identified: Continue hand weeding		

Community involvement: participatory action and opportunities for environmental education: Ongoing use for teaching conservation management students



RESERVE R20928 PARRY ROAD

Reserve name: Parry Beach Reserve	Location: Parry Road
Reserve Purpose: Camping and Recreation	Reserve class: A

Area (ha): 262.74

Vegetation type: Shrublands: Peppermint (Agonis flexuosa) – Coastal heath

Vegetation description: Bullich/Agonis woodland. Coastal heath.

Bushland condition: Pristine-degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors)

Values (environmental sensitivities, threatened flora, fauna habitat); High conservation value reserve - Seasonal wetlands may be potential Australasian Bittern habitat. Coastal heath provides White-tailed black cockatoo with feeding resources. Large wetland and coastal native bushland will support good populations of Australian marsupials and reptiles.

Geology; terrain/slope: Undulating vegetated sand dunes, and low lying seasonal swamps.

Hydrology (potential vector): numerous swamps and creeklines draining into Parry Inlet.

Current use: Fishing shacks, 4WDriving

Threats (eg. Dieback, ferals, illegal clearing, dumping): Weeds, unnecessary herbicide spraying within the reserve.

Surrounding land use: Farm land, NP and nature reserve.

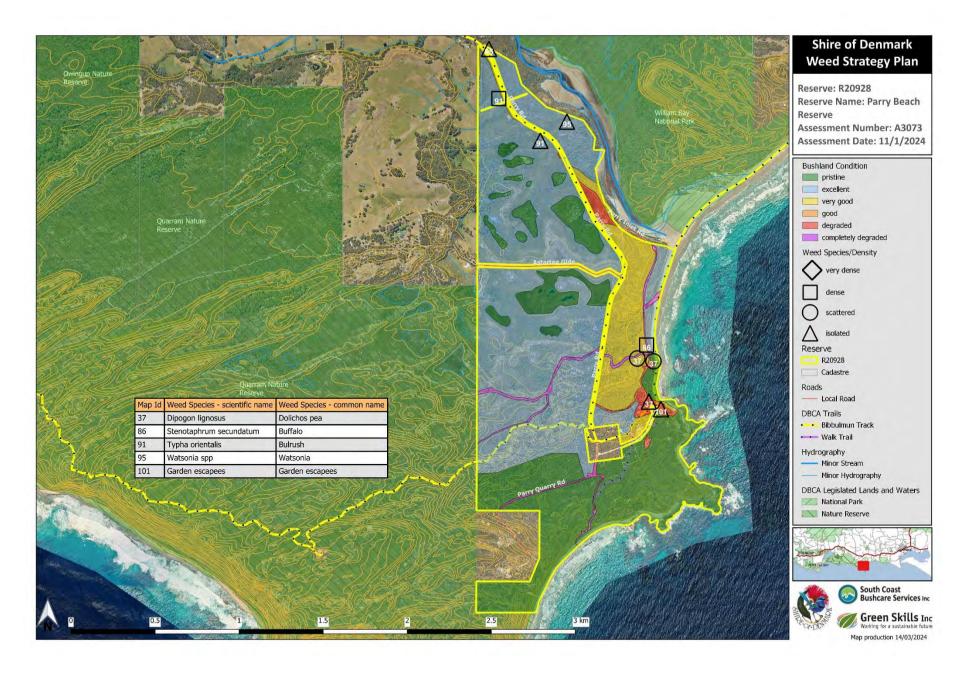
Links to other reserves, corridors: Quarram Nature reserve adjoins to the west and William Bay NP lies to the north-east.

History of reserve: Salmon fishing camp. Manual weed control by SCBS.

Recommended weed control actions against each reserve – mechanical / hand removal / chemical – per weed species identified: Continue with manual weed control.

Resourcing requirements: 20hrs annually.

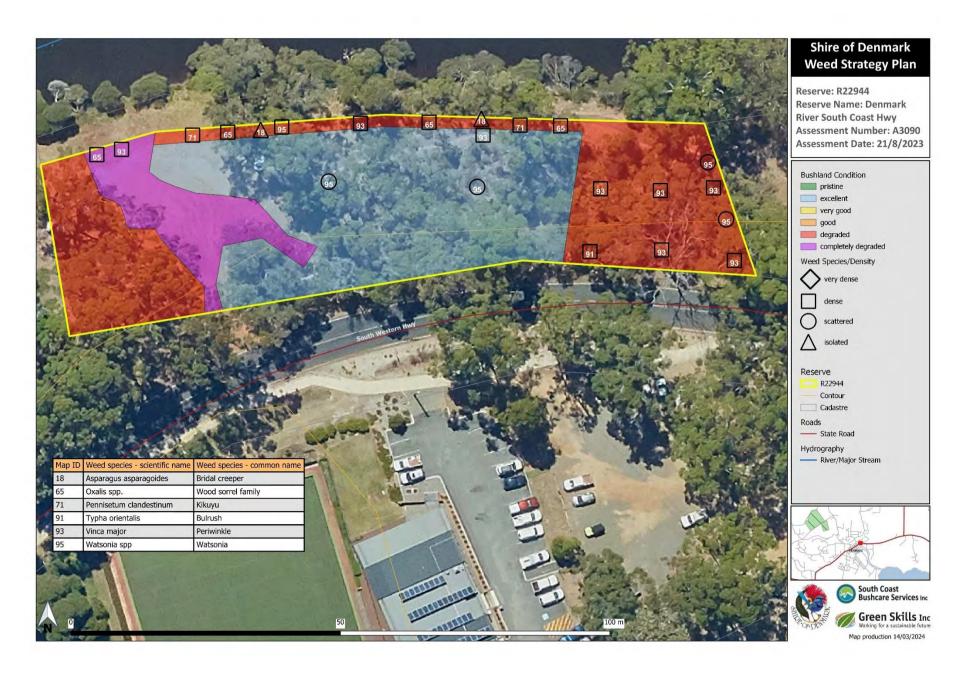
Community involvement: participatory action and opportunities for environmental education – opportunity to provide education pamphlets about environmental weeds at the Parry Beach caravan park visitor sign-in



RESERVE R22944 DENMARK RIVER SOUTH COAST HIGHWAY

Date of Assessment: 21/08/2023	Reserve number: R22944
Reserve name: Denmark River South Coast Highway	Location: South Coast Hwy opposite Fyfe St
Reserve Purpose: Recreation	Reserve class: A
Area (ha): 0.38	
Vegetation type: Low Woodland: Marri – Casuarina (Allocasuarina	spp) and Car Park
Bushland condition: Excellent condition to Degraded (Car Park and	l trail)
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Vehicle access from H	Highway. Denmark River walk track traverses the Reserve.
Values (environmental sensitivities, threatened flora, fauna habita	t - Important link. Remnants of midden adjacent to walk track. High cultural values - Historical Corroboree and
camp ground.	
Geology; terrain/slope – Level river bank	
Hydrology (potential vector): Riparian bushland	
Current use: Vehicle parking, Walk trail	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Impacts on	understorey vegetation from visitors and walkers/cyclists on trail.
Surrounding land use: Reserve between Denmark River and South	Coast Hwy, Links to other reserves, corridors: R41456, R13039, R20403
History of reserve: Manual weed control has been longterm and is	ongoing
Recommended weed control actions against each reserve – mecha	anical / hand removal / chemical – per weed species identified in Action Plan

Community involvement: participatory action and opportunities for environmental education – continue community education via Shire of Denmark resources



Reserve Purpose: Sanitary Site/Transfer Station

EAST RIVER ROAD WASTE TRANSFER STATION SITE

Date of Assessment:	Reserve number: R23067
Reserve name: East River Rd Transfer Station	Location: East River Road Waste Transfer site

Reserve class: C

Area (ha): 13.96

Vegetation type: Mosaic: Low Woodland: Jarrah- Casuarina/ Shrublands: Tea tree thicket

Bushland condition: Excellent-Completely degraded: large area of car park and disturbed tipsite

Weeds – See map for weed list. Priority for controlling weeds along the fence line.

Access (and existing trails; potential vectors): A perimeter track exists inside the fence. Main access is through gate off East River Road. Other tracks occur within the site.

Values (environmental sensitivities, threatened flora, fauna habitat: The woodlands contain known feeding resources for the three species of black cockatoo. Very tall specimens of flowering *Beaufortia sp* were observed (3m tall)

Geology; terrain/slope: The reserve slopes from north to south. Soils comprise mainly of sand.

Hydrology (potential vector): No drainage lines exist in this reserve.

Current use: Waste transfer station.

Threats (eg. Dieback, ferals, illegal clearing, dumping): Feral cats are known to frequent rubbish dumps. Rubbish was observed within the bushland. Weeds are a major threat to the bushland at this site.

Surrounding land use: Agricultural land to the east. Road reserve to the west. North and south adjoins bushland.

Links to other reserves, corridors: North and south of the reserve adjoins to existing bushland, however the perimeter fence may inhibit the movement of some native animals into the reserve.

History of reserve: Formerly, this site was part of a DBCA reserve, then excised for use as a shire rubbish dump.

Recommended weed control actions against each reserve – mechanical / hand removal / chemical – per weed species identified: Manual weed control is recommended in the pristine-very good condition areas of the reserve. This will allow for the condition of the bushland to improve over time.

Resourcing requirements – including total estimates hrs required annually: 10hrs annually.

Community involvement: participatory action and opportunities for environmental education:



RESERVE R24175 HARRINGTON PARK

Date of Assessment: 16.2.2024	Reserve number: R24175
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Reserve name: Harington Park	Location: Off Minsterly Rd
Reserve Purpose: Recreation	Reserve class: C

Area (ha): 0.596

Vegetation type: Medium Forest: Marri – Jarrah and Cultivated areas: Mown grass – Planted trees- Garden beds

Bushland condition: Very good to Completely degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Access track to residence runs along Northern boundary. ROW (Lane) runs from Western boundary through to Hawes Rd.

Values (environmental sensitivities, threatened flora, fauna habitat): Community value of urban bushland with shade trees, bird habitat.

Current use: Playground

Threats (eg. Dieback, ferals, illegal clearing, dumping)

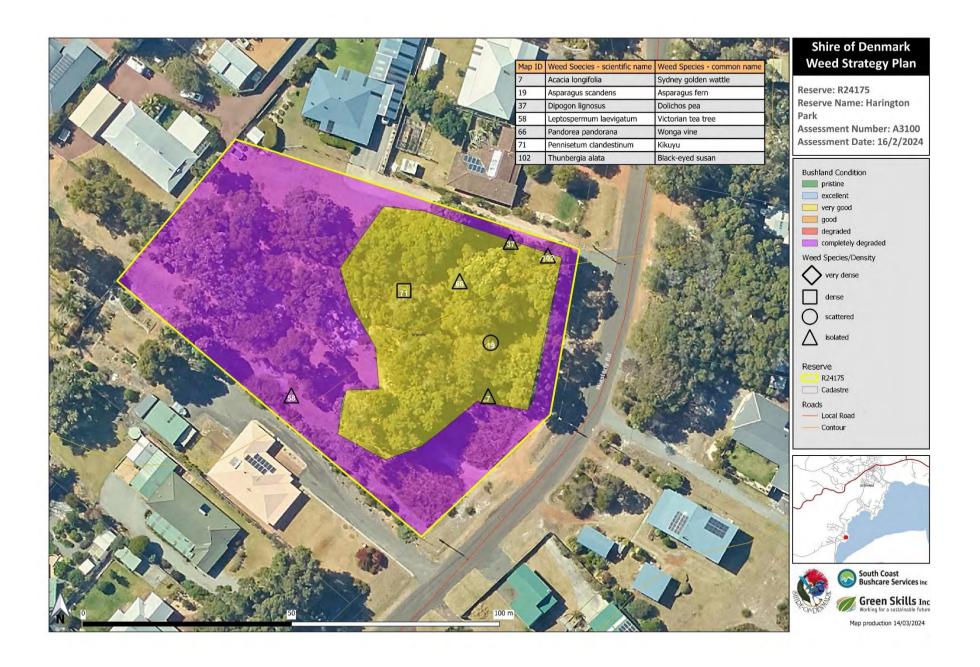
Surrounding land use: Residential

Links to other reserves, corridors: Stepping stone between R46618 (Mt Hallowell) and R26480 (Wilson Inlet Foreshore Reserve).

Recommended weed control actions against each reserve per weed species identified: Continue with manual weed control.

Resourcing requirements: 10 hrs annually

Community involvement: participatory action and opportunities for environmental education: Adjoining neighbours are actively involved in manual weed control.

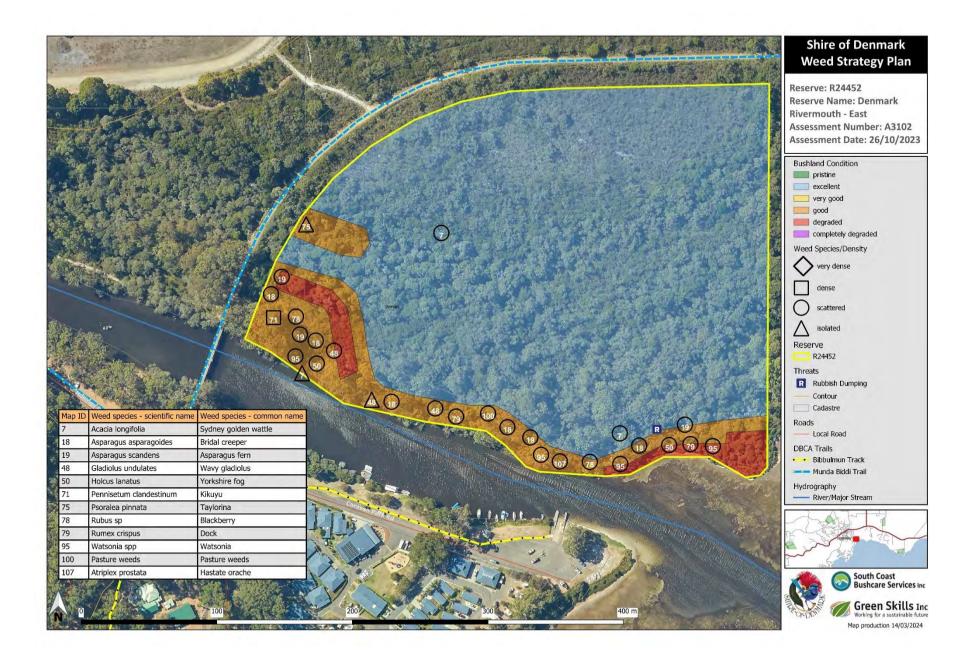


RESERVE R24452 DENMARK RIVER MOUTH EAST

Date of Assessment:	Reserve number: R24452
Reserve name: Denmark River mouth East	Location: South of Heritage Trail at River mouth
Reserve Purpose: Recreation	Reserve class: A
Area (ha): 6.94	
Vegetation Type: Low Woodland: Paperbark (Melaleuca spp)	
Bushland condition: Excellent to Degraded	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Walk trail on northern and western side	
Values (environmental sensitivities, threatened flora, fauna habitat): Bu	uffer for river, high conservation value bush and riparian habitat for native fauna and flora, nesting
cormorants and wetland foreshore biota	
Geology; terrain/slope: low swamp land	
Hydrology (potential vector): drainage into the Denmark river and Wils	on Inlet.
Current use: riparian habitat conservation	
Threats (eg. Dieback, ferals, illegal clearing, dumping) - Rubbish, diebac	k
Surrounding land use: Walk trail, pony club reserve	
Links to other reserves, corridors: north eastern edge adjoins R12232	
History of reserve: Manual removal of Acacia longifolia and Rubus sp si	nce
Recommended weed control actions against each reserve : Hand remo	val of weeds

Community involvement: participatory action and opportunities for environmental education – reserve forms part of Wilson Inlet foreshore, continue with Wilson Inlet community

forums.



RESERVE R24510 PEACEFUL BAY RESERVE

Date of Assessment: 11.1.2024 Reserve number: R24510

Reserve name: Peaceful Bay Reserve Location: Peaceful Bay Road

Reserve Purpose: Recreation, Camping, Caravan Park and Reserve class: A

Holiday Cottages

Area (ha): 214.83

Vegetation type: Mosaic: Low Woodland: Bullich- Agonis/ Shrublands: Acacia/Coastal Heath and Cultivated areas: Mown grass - Planted trees- Garden beds

Bushland condition: Pristine- Completely degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Bibbulman track traverses the reserve. Numerous fire access tracks exist within the reserve.

Values (environmental sensitivities, threatened flora, fauna habitat): Potential white-tailed black cockatoo feeding resources in coastal heath. Good condition coastal dune habitat for fauna, flora and birdlife.

Geology; terrain/slope: Undulating vegetated sand dunes.

Hydrology (potential vector): Numerous water courses, seasonal wetlands.

Current use: Green waste dump, waste transfer station, recreational, and a caravan park.

Threats: Weeds escaping from the green waste site and gardens. 4WD vehicles straying off the main track. Off-target herbicide damage.

Surrounding land use: Residential, NP.

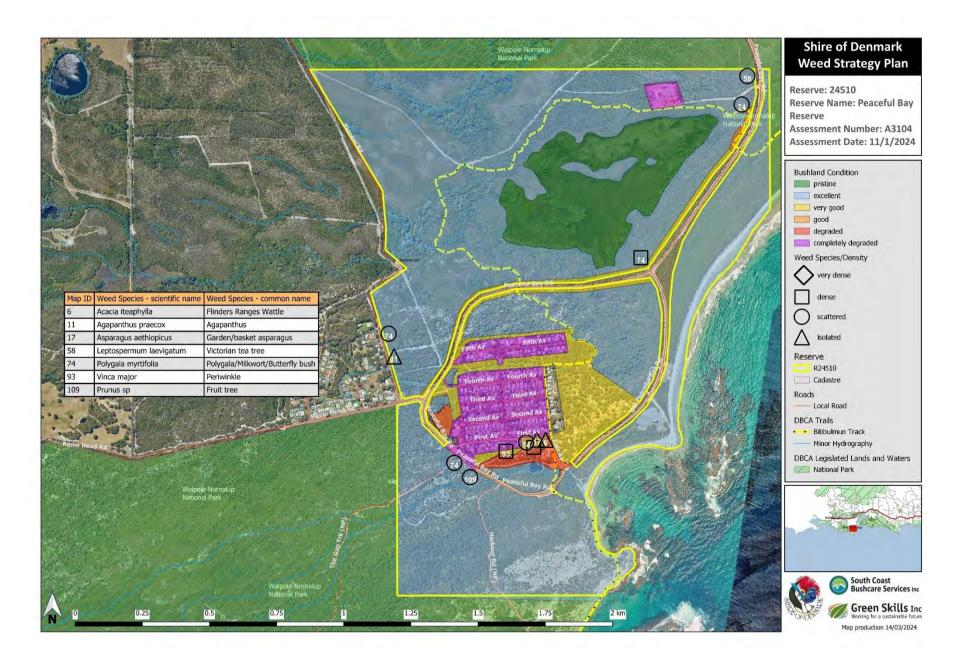
Links to other reserves, corridors: Walpole-Nornalup NP adjoins the reserve to the north and south.

History of reserve: Camping accommodation and coastal recreation activities

Recommended weed control actions against each reserve; continuation of manual weed control in this reserve

Resourcing requirements: 20hrs annually.

Community involvement: participatory action and opportunities for environmental education: In the past SCBS has liaised with the Peaceful Bay Progress Association regarding weed control in surrounding bushland.



RESERVE R24913 WILSON HEAD

Reserve name: Wilson Head	Location: Ocean Beach to Lights Beach
Reserve Purpose: Parklands and Recreation	Reserve class: A

Area (ha): 488.57

Vegetation type: Mosaic: Low Woodland and Shrublands: Peppermint (Agonis flexuosa) – Coastal heath

Bushland condition: Excellent

Weeds – See map for weed list

Access (and existing trails; potential vectors): 4wd tracks. WOW Trail traverses. WOW trail has been re-aligned from wind farm.

Values (environmental sensitivities, threatened flora, fauna habitat: Very high conservation values for coastal native flora, fauna, and birds (terrestrial and seabird). Likely to have good populations of small marsupials and variety of reptile species. High floral diversity.

Geology; terrain/slope: varied, coastal cliffs and undulating dune slacks

Hydrology (potential vector): drainage from dune slacks along coast

Current use: nodes of high impact coastal recreation with Ocean Beach Precinct, Lights Beach Precinct, scenic walktrails and bike trails traversing reserve, cliff areas of reserve accessible by 4X4 tracks

Threats (eg. Dieback, ferals, illegal clearing, dumping): recreational use, sand blowouts with impacts from off-road 4x4 trails. Potential for weed introduction along walk and cycle trail. Trail re-alignment creates new opportunities for weed introductions, requires regular maintenance checks to keep tracks weed free and close any new tracks from path.

Surrounding land use: Lime pit, Agricultural land, Caravan Park.

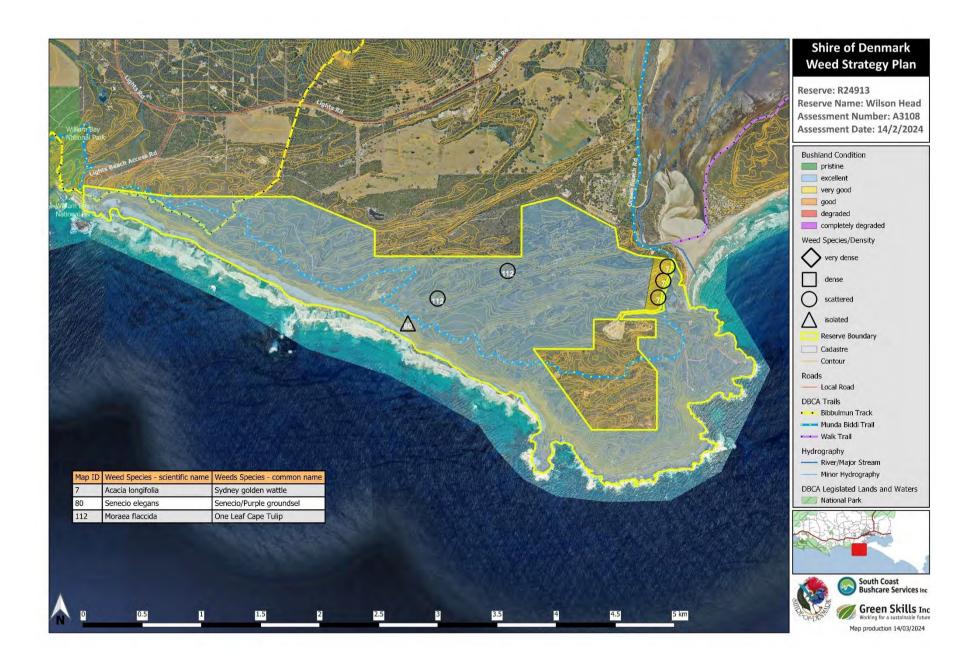
Links to other reserves, corridors: Adjoins William Bay National Park to West.

History of reserve: coastal reserve with high use nodes (Ocean Beach, Lights Beach, windfarm, WOW trail, Munda Biddi and Bibbulmun Track)

Recommended weed control actions against each reserve per weed species identified: Manual removal annually.

Resourcing requirements: 40hrs annually

Community involvement: participatory action and opportunities for environmental education - opportunity for Friends of Reserve group to be formed. Continue with community education of value of coastal reserves, with signage and resources on Shire of Denmark website.



RESERVE R25347 PODDYSHOT

Date of Assessment: 16.2.2024	Reserve number: R25347
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Reserve name: Poddyshot	Location: Poddyshot off Minsterly Rd
Reserve Purpose: Foreshore Protection	Reserve class: C

Area (ha): 3.77

Vegetation type: Mosaic: Medium Forest: Marri/ Sedgeland: Paperbarks over sedges with understorey of native riparian species and Cultivated areas: Mown grass – car park

Bushland condition: Excellent to Completely degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Vehicle access to carpark, toilets and boat launching via Poddyshot Place off Minsterly Rd.

Values (environmental sensitivities, threatened flora, fauna habitat: Potential feeding and nesting habitat for Black Cockatoos. Inlet foreshore habitat for riparian biota and wildlife.

Geology; terrain/slope: Generally level. Sloping up away from Inlet at Northern end of Reserve.

Hydrology (potential vector): Storm water drainage off private property into inlet

Current use: Boat launching, bird watching.

Threats (eg. Dieback, ferals, illegal clearing, dumping): Clearing of native vegetation, both recent and historically, for access and views, has led to garden plants escaping into the bush.

Surrounding land use: Residential

Links to other reserves, corridors: Adjoins R26480 to the North and R43490 to the South west.

History of reserve: Bush care events held in recent years to engage with local residents. School children have participated in weed control sessions.

Recommended weed control actions against each reserve –per weed species identified: Continue with manual weed control of WONS and other weed species.

Resourcing requirements: 40 hrs annually

Community involvement: participatory action and opportunities for environmental education: Regular monitoring of Foreshore Reserves by relevant authorities to control illegal clearing. Public Open Days to engage local community in bush care activities.



RESERVE R26480 WILSON INLET FORESHORE – MINSTERLY ROAD

Date of Assessment: 16.2.2024	Reserve number: R26480
Reserve name: Wilson Inlet Foreshore – Minsterly Rd	Location: South of Little River along Minsterly Rd to Poddyshot

Reserve name. Wilson met i oresnore Willisterry Ru	Location. South of Little River along willisterry Ru to Founyshot
Reserve Purpose: Recreation	Reserve class: A
Area (ha): 8.82	Perimeter (m)

- 1 -----

Vegetation type: Mosaic: Medium Forest: Marri/Riparian vegetation

Vegetation Description: Marri woodland and Melaleuca spp with understorey of native riparian species.

Bushland condition: Excellent – completely degraded.

Weeds – See map for weed list

Access (and existing trails; potential vectors): Pedestrian access from Maraveen Pl via Bibbulmun Track over Little River, and from Rainbow Close.

Values (environmental sensitivities, threatened flora, fauna habitat): High native fauna and bird habitat values as includes significant section of foreshore of Wilson Inlet. Potential feeding and nesting habitat for Black Cockatoos.

Geology; terrain/slope: Generally level

Hydrology (potential vector): Little River flows into Wilson Inlet

Current use: Walk track and access to Wilson Inlet foreshore

Threats (eg. Dieback, ferals, illegal clearing, dumping): Illegal clearing for views and access to Inlet. Off-target damage from herbicide use.

Surrounding land use: Residential

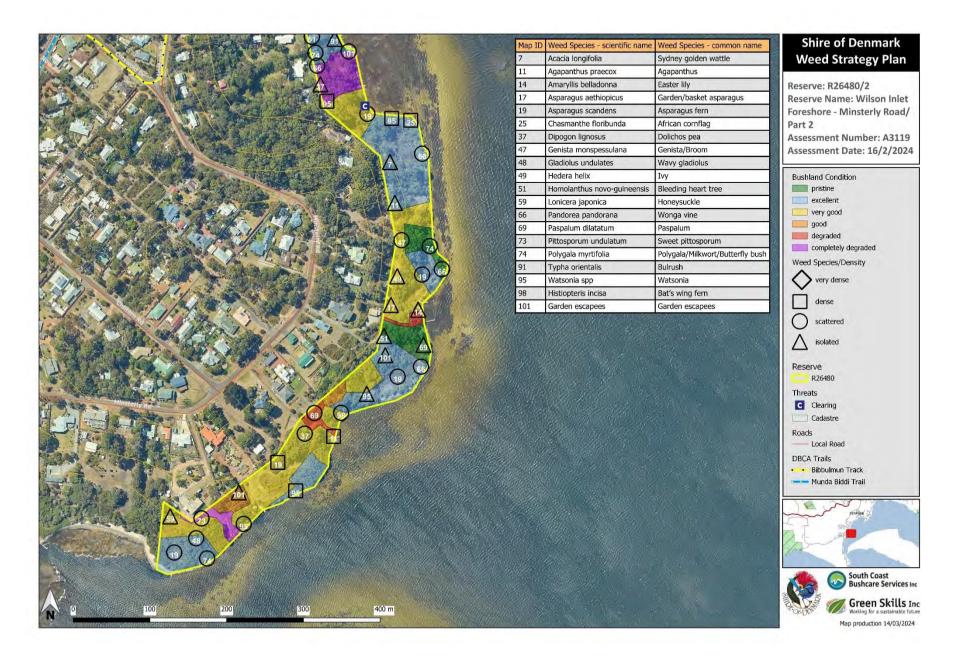
Links to other reserves, corridors: Adjoins R34742 to the North, R37391 to the North-west, and R25347 to the South.

History of reserve: Walk trail, Bibbulmun track

Recommended weed control actions against each reserve per weed species identified: Continue manual weed control of WONS and other weed species.

Resourcing requirements: 60 hrs annually

Community involvement: participatory action and opportunities for environmental education: Monitor Foreshore Reserve for illegal clearing and dumping. Inform local community of manual weed control works, and encourage participation in working bees.



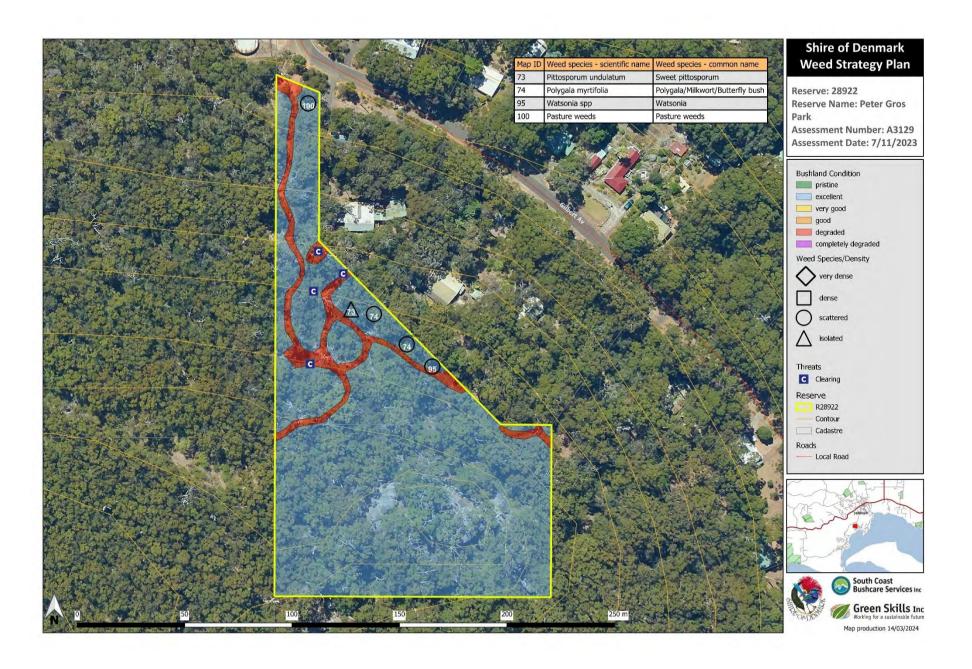
RESERVE R28922 PETER GROS PARK – WEEDON HILL

Date of Assessment: 7/11/23	Reserve number: R28922
Reserve name: Peter Gros Park	Location: Top of Weedon Hill Road
Reserve Purpose: Public Recreation	Reserve class: C
Area (ha) : 1.71	
Vegetation type: Tall Forest: Karri (<i>Eucalyptus diversicolour</i>)	
Bushland condition: excellent	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Fire break and walk trails throughout reserve	
Values (environmental sensitivities, threatened flora, fauna habitat - Excellent condition bush, range of habitat for flora and fauna.	
Geology; terrain/slope steep north facing slope with granite outcrops.	
Hydrology (potential vector): n/a	
Current use: walk trails and habitat.	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Clearing unnecessarily along fire breaks, foot traffic	
Surrounding land use: Private residential land	

History of reserve: Environmental weed control carried out once a year.

Recommended weed control actions against each reserve per weed species identified: Hand removal of weeds

Community involvement: participatory action and opportunities for environmental education – consider encouraging a Friends of Reserve group with local residents as reserve is small and weed burden is low

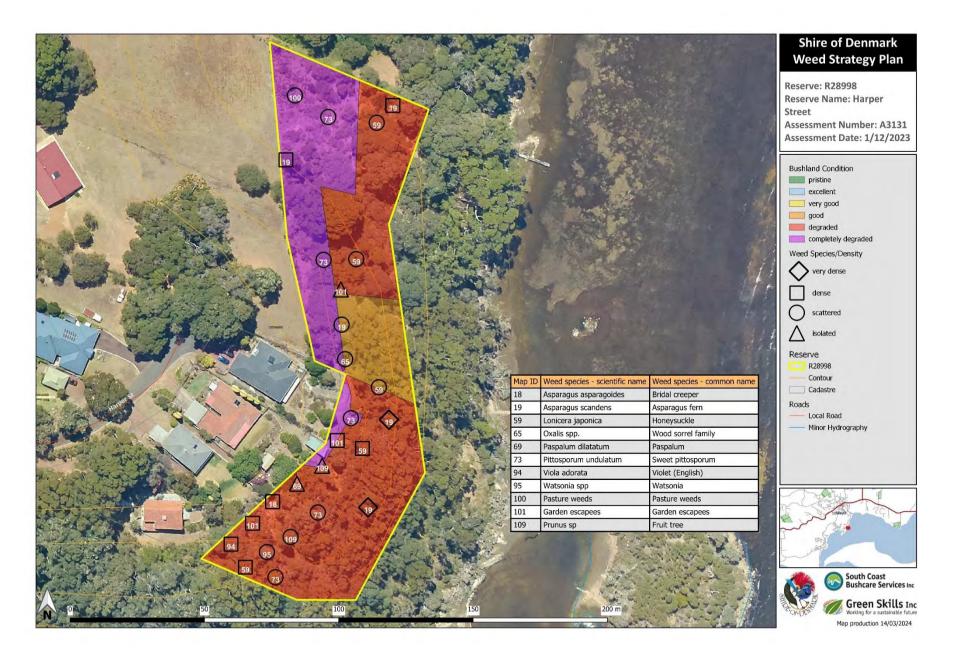


RESERVE R28998 HARPER STREET

Date of Assessment: 1.12.2023	Reserve number: R28998
Reserve name: Harper Street	Location: End of Harper Street
Reserve Purpose: Public Recreation	Reserve class: C
Area (ha): 0.65	
Vegetation type:	
Bushland condition:	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Access by foot through R1	.2344 at end of Harper St.
Values (environmental sensitivities, threatened flora, fauna habitat):	
Geology; terrain/slope:	
Hydrology (potential vector):	
Current use:	
Threats (eg. Dieback, ferals, illegal clearing, dumping)	
Surrounding land use: Adjoins residential and Inlet Foreshore Reserve.	
Links to other reserves, corridors: R12344.	
History of reserve: North-west section resumed from private property. Revegetation carried out	
Recommended weed control actions against each reserve – mechanical / hand removal / chemical – per weed species identified	
Resourcing requirements :	

Community involvement - participatory action and opportunities for environmental education:

Note: this assessment form is incomplete and information can be provided by South Coast Bushcare Services as required.

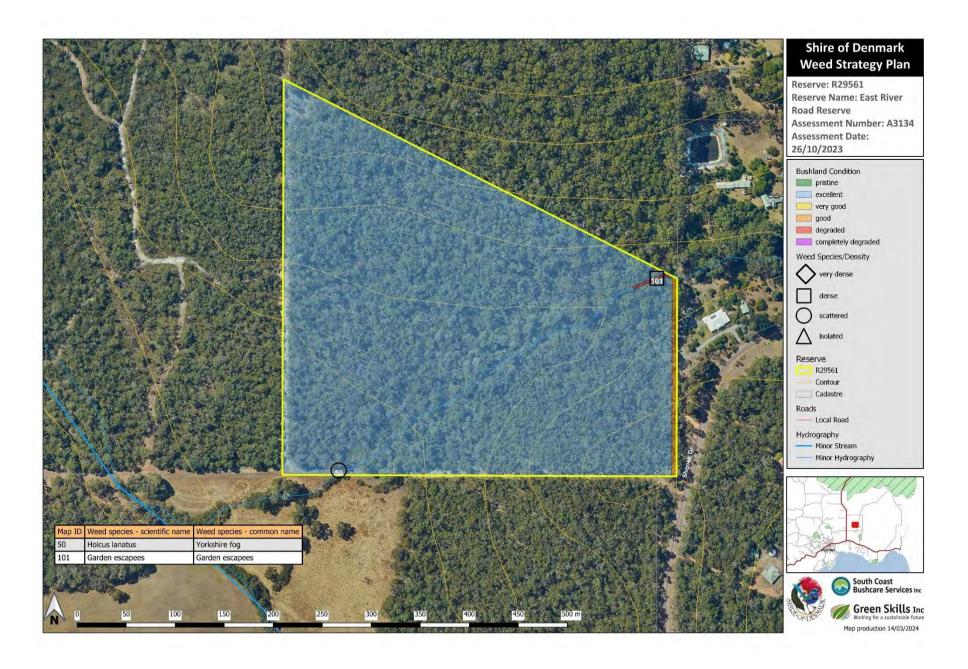


RESERVE R29561 EAST RIVER ROAD RESERVE

Resourcing requirements: low, maintain dieback hygiene if entering reserve

Date of Assessment: 26/10/23	Reserve number: R29561
Reserve name: East River Road Reserve	Location: West of Sheoak Drive
Reserve Purpose: Gravel	Reserve class: C
Area (ha): 12.13	Perimeter (m)
Vegetation type: Tall Forest: Karri– Marri (<i>Corymbia calophylla</i>) and Medium Forest: Marri – Jarrah – Blackbutt (<i>E patens</i>)	
Vegetation description: karri, jarrah, and black butt forest	
Bushland condition: Excellent to Pristine	
Weeds – See map for weed list	
Access (existing trails; potential vectors): Fire break around perimeter	
Values (environmental sensitivities, threatened flora, fauna habitat): Old forest, creek line through centre, diverse vegetation, potential black cockatoo nesting site	
Geology; terrain/slope gradual slope from NE-SW	
Hydrology (potential vector) creek through centre from NE-SW	
Current use: natural bushland habitat	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Dieback, clearing alongside eastern edge from residents, fire wood collection	
Surrounding land use: Residential housing, farms	
Links to other reserves, corridors: Linked to reserve on northern edge.	
History of reserve - Fire been through in last 5-10 years	
Recommended weed control actions against each reserve per weed sp	pecies identified - Hand weed control

Community involvement: participatory action and opportunities for environmental education: Shire officer to approach residents on eastern edge about clearing into reserve.



RESERVE R30277 RAILWAY HERITAGE PRECINCT

Date of Assessment: 26/10/23	Reserve number: R30277
Reserve name: Railway Heritage Precinct	Location: 2 Inlet Drive
Reserve Purpose: Historical Precinct, Recreation &	Reserve class: C

Community Purposes

Area (ha): 3.72

Vegetation type: Tall Forest: Karri– Marri (Corymbia calophylla) and Cultivated areas: Mown grass – Planted trees- Garden beds/Car Park

Bushland condition: good - very degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Surrounding roads (Inlet Dr and Crellin St), Heritage Rail Trail and access tracks to buildings.

Values (environmental sensitivities, threatened flora, fauna habitat): Narrow bush section is very good native fauna and flora habitat, but high weed burden for size of reserve.

Geology; terrain/slope wetland: flat.

Hydrology (potential vector): drain along southern and western edge

Current use: School, Lions shed, Old Machinery Shed, Men's Shed.

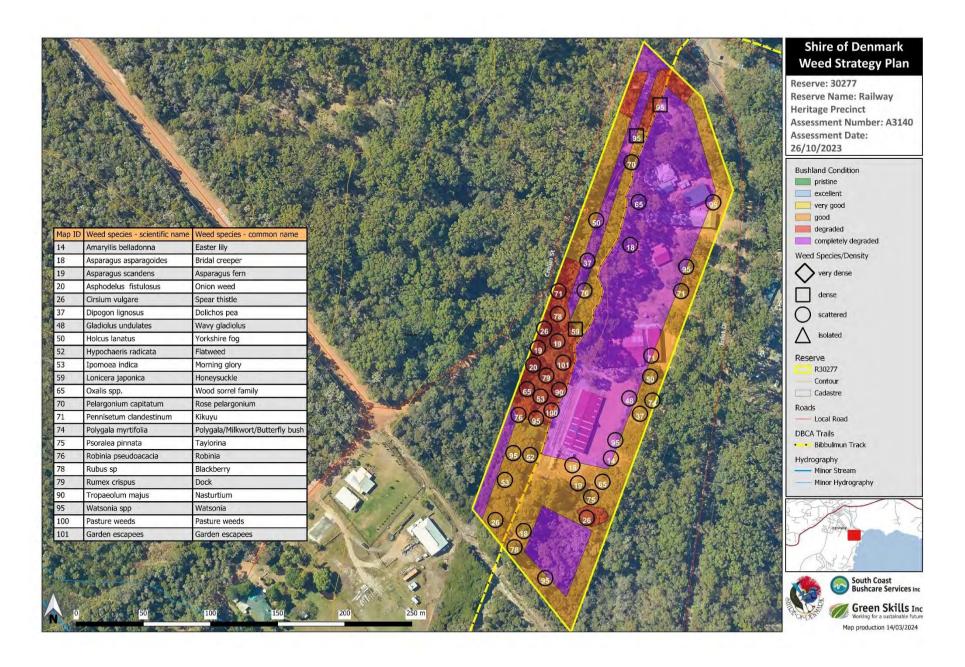
Threats (eg. Dieback, ferals, illegal clearing, dumping): Dieback, clearing and invasive weeds

Surrounding land use: Caravan Park and industrial site.

Links to other reserves, corridors: Western edge connects to R14376 and eastern edge across road to R15513.

History of reserve: Community groups and individuals have been involved in the development of this Historical Precinct.

Recommended weed control actions against each reserve per weed species identified: Mechanical removal of tall woody weeds, hand remove weeds



RESERVE R32279 WALTERS RESERVE

Date of Assessment: Reserve number: R32279

Reserve name: Walters Reserve	Location: Campbell Rd – north and south of Berridge Rd
Reserve Purpose: Public Recreation	Reserve class: C

Area (ha): 5.012

Vegetation Type: Mosaic: Low Woodland: Paperbark/Riparian vegetation and Mosaic: Tall Forest: Karri/Sedgeland – Paperbarks over sedges and Cultivated areas: Mown grass – Planted trees- Garden beds

Vegetation description: Creek line riparian vegetation, karri/taxandria woodland, paperbark wetland.

Bushland condition: Very good-completely degraded.

Weeds – See map for weed list

Access (and existing trails; potential vectors): The reserve is bounded on the west by Cambell road and Berridge street bisects the reserve from west to east.

Values (environmental sensitivities, threatened flora, fauna habitat: Riparian vegetation along the creek line acts as a buffer for nutrients flowing in from surrounding areas. Creates buffer against traffic noise. Provides a linking corridor to other bushland reserves.

Geology; terrain/slope: The reserve slopes gently from north to south.

Hydrology (potential vector); A creek flows through part of the reserve from north to south.

Threats (eg. Dieback, ferals, illegal clearing, dumping): Weeds are a major threat to the diversity of this reserve. Clearing along sections of the creek adjacent to private property. Overly enthusiastic fuel reduction work by contractors is impacting on native vegetation.

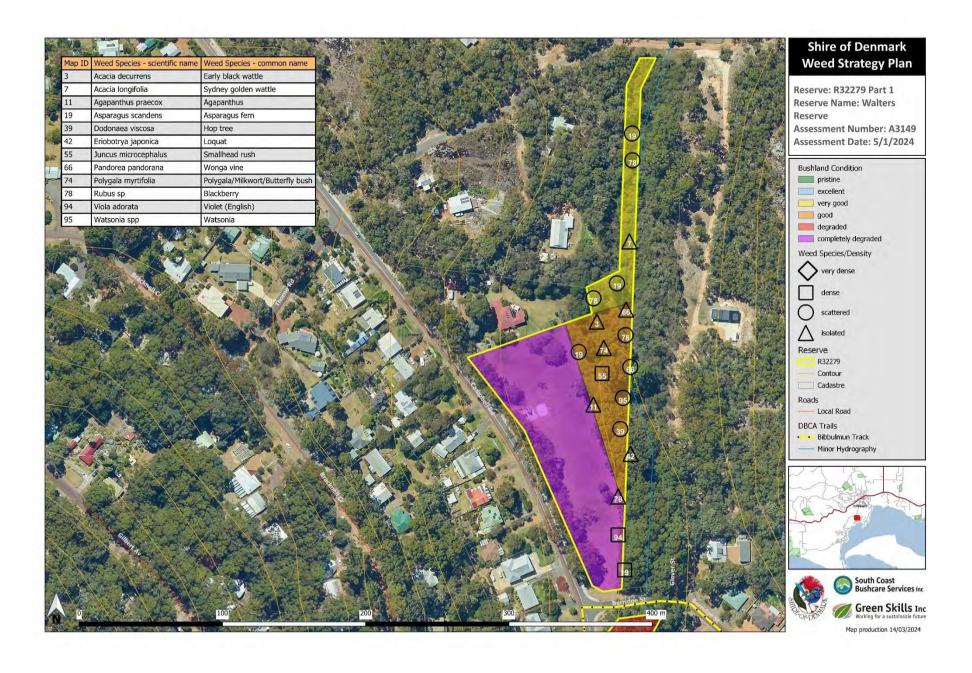
Surrounding land use: Residential, playground.

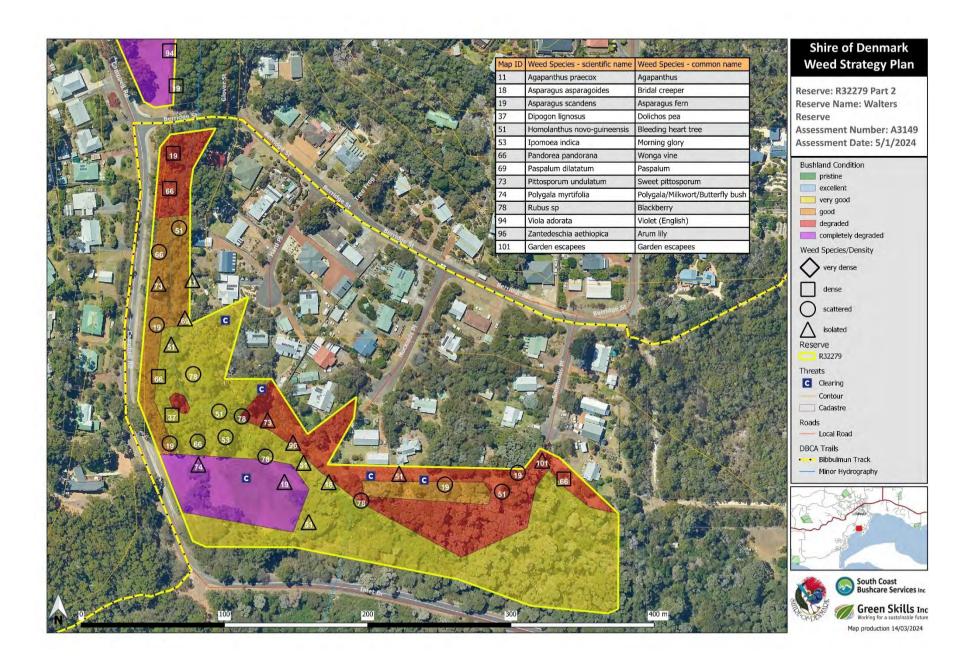
Links to other reserves, corridors: Foreshore reserve lies to the south. Anning road reserve adjoins to the southeast.

Recommended weed control actions against each reserve per weed species identified: Dense vegetation in the north of the reserve means access for machinery would be very difficult and spraying chemicals in the riparian vegetation is not recommended so manual weed control methods are more applicable in this reserve.

Resourcing requirements: 20hrs annually

Community involvement: participatory action and opportunities for environmental education: Some local residents have shown interest in caring for the reserve.





RESERVE R32861 ILUKA AVENUE

Date of Assessment: 2023.12.12 Reserve number: R32861

Reserve name: Iluka Avenue Reserve Location: Iluka Avenue

Reserve Purpose: Public Recreation Reserve class: C

Area (ha): 4.77

Vegetation type: Eucalyptus patens/Taxandria parviceps

Bushland condition: Ranges from Pristine to Completely degraded

Weeds known and target species: See map for list of weeds

Access (and existing trails; potential vectors): Bounded by Lights Rd, Iluka Ave, Alundora Way, Heather Rd and fire access ways.

Values (environmental sensitivities, threatened flora, fauna habitat): Corridor linking Mt Hallowell Reserve to Coastal area.

Geology; terrain/slope: Ranging from level to gentle incline.

Hydrology (potential vector): Creekline passes through two sections. Section to the east acts as a drainage sump and contains standing water.

Current use: recreation and green space

Threats (eg. Dieback, ferals, illegal clearing, dumping): Illegal clearing and dumping of garden waste, and herbicide use on several boundaries. Exotics planted on Reserve. Edge effects from residential and recreational pressures along perimeter encroaching into good core bushland.

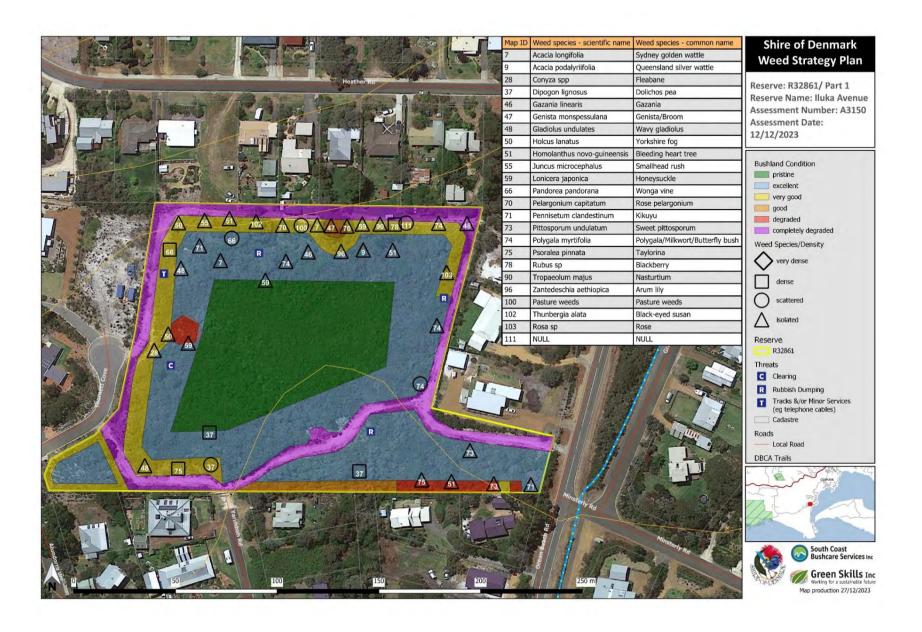
Surrounding land use: Residential

Links to other reserves, corridors: Mt Hallowell Reserve to NW. Coastal/Inlet Reserves to SE.

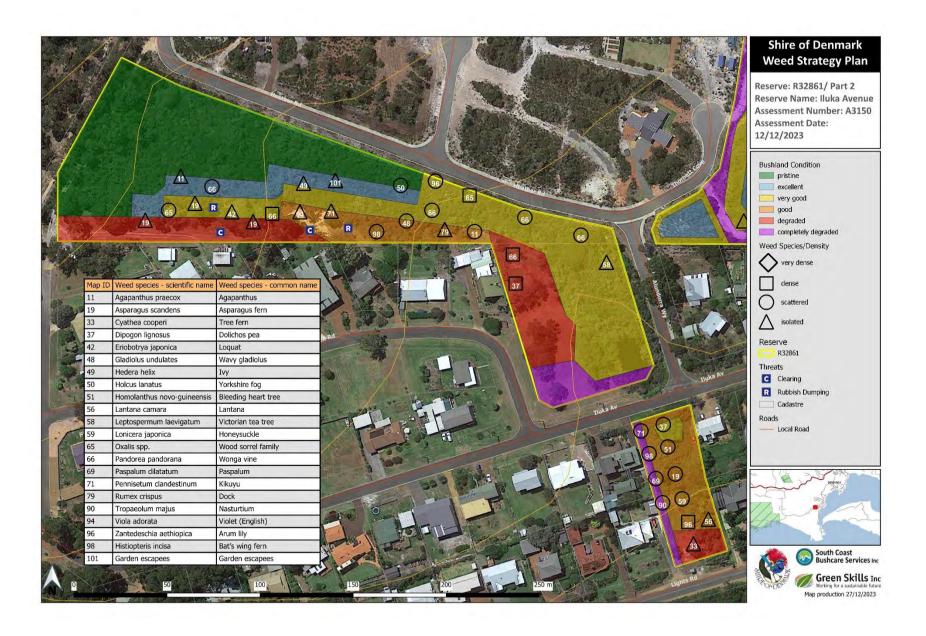
History of reserve: Manual weed control in the past

Recommended weed control actions against each reserve per weed species identified: Continue manual weed control & monitoring.

Resourcing requirements: 20hrs annually.



24 June 2024 - Final



RESERVE R34742 WILSON INLET FORESHORE – THE COVE

Date of Assessment: 1.12.2023 Reserve number: R34742

Reserve Purpose: Recreation Reserve class: A

Area (ha): 13.5

Vegetation type: Karri/Melaleuca spp.

Bushland condition: Pristine to degraded.

Weeds – See map for weed list.

Access (and existing trails; potential vectors): Walk trail from Campbell Rd to Little River. (Part of Bibbulmun Track).

Current use: Recreation and access to Wilson Inlet foreshore

Threats (eg. Dieback, ferals, illegal clearing, dumping): Edge effects from walk trail and residential access

Values (environmental sensitivities, threatened flora, fauna habitat): High conservation value for native fauna and bird habitat as includes significant section of foreshore of Wilson

Inlet in excellent to pristine bushland condition

Surrounding land use: Residential

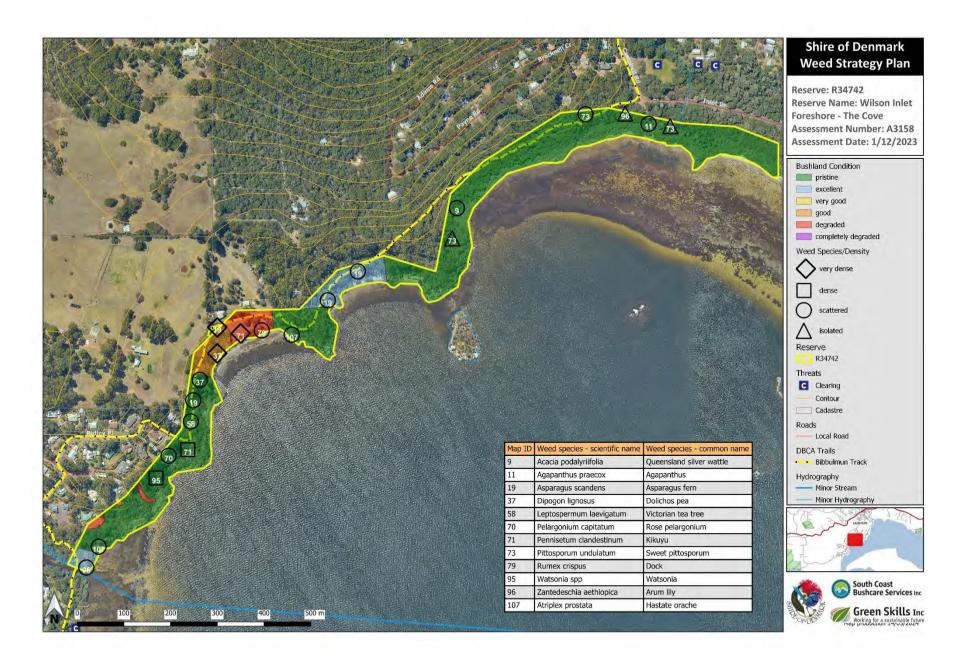
Links to other reserves, corridors: Adjoins R26480 & R37391 to the SW, and R28993 & R12344 to the NE.

History of reserve: Contains original road alignment for access to The Cove residential property.

Recommended weed control actions against each reserve per weed species identified: Continue manual weed removal and monitoring.

Resourcing requirements: 20hrs annually

Community involvement - participatory action and opportunities for environmental education: Bibbulmun track walkers and residents learning about environmental weeds along walk trail



RESERVE R36026 HAPPY VALLEY ROAD

Date of Assessment: 30.01.2024	Reserve number: R36026
Reserve name: Happy Valley Road	Location: East of Happy Valley Rd near Bullich Rd intersection

Reserve Purpose: Recreation Reserve class: C

Area (ha): 14.87

Vegetation type: Medium Forest: Marri

Bushland condition: Very Good

Weeds – See map for weed list: Acacia dealbata, Watsonia, Inkweed

Access (and existing trails; potential vectors): From Happy Valley Rd fire access through centre of reserve.

Values (environmental sensitivities, threatened flora, fauna habitat): Habitat for native fauna in cleared bushland agricultural zone

Geology; terrain/slope: Level, lateritic/gravelly/loam

Current use: Recreation

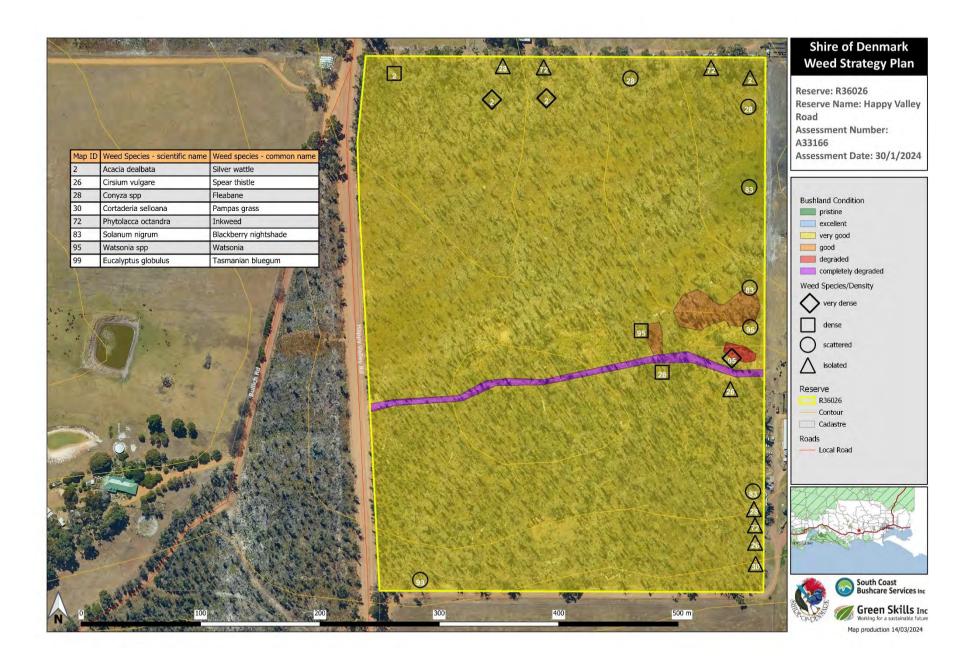
Threats (eg. Dieback, ferals, illegal clearing, dumping): Inkweed on adjacent farmland (east of Reserve)

Surrounding land use: Agricultural

History of reserve: Manual weed control previously to current. Recent bushfire (Feb 2022); Previously logged

Recommended weed control actions against each reserve per weed species identified: Continue manual control.

Resourcing requirements: 40 hours annually



RESERVE R36714 RICKETTS RESERVE

Links to other reserves, corridors: R14376 to north

Date of Assessment: 6/11/23	Date of Assessment: 6/11/23 Reserve number: R36714	
Reserve name: Ricketts Reserve	Location: Yacht Club Reserve off Inlet Drive	
Reserve Purpose: Toilets (Recently removed)	Reserve class: C	
Area (ha): 1.195		
Vegetation type: Mosaic: Low Woodland: Paperbark	/Riparian vegetation and wetlands/ and Car Park	
Bushland condition: Excellent - very degraded (car park)		
Weeds – See map for weed list		
Access (and existing trails; potential vectors): Inlet Dr and car park		
Values (environmental sensitivities, threatened flora, fauna habitat): Foreshore habitat for shore birds and other riparian flora and fauna.		
Geology; terrain/slope wetlands: Flat		
Hydrology (potential vector): Wilson Inlet on eastern border and drain on northern edge.		
Current use: car park		
Threats (eg. Dieback, ferals, illegal clearing, dumping) - Invasive weeds: edge effects from car park use		
Surrounding land use - Road side and foreshore reserves		

Recommended weed control actions against each reserve per weed species identified: Hand weed removal

History of reserve: Intended for Yacht Club; Use not pursued as water level too low.



RESERVE R37391 LITTLE RIVER RESERVE

Date of Assessment: 5.10.2023	Reserve number: R37391
Date of Assessment, 5.10.2025	Reserve number, RS7331

Reserve name: Little River Reserve	Location: Both sides of Little River from Ocean Beach Road to Wilson Inlet
Land manager: Shire of Denmark	Reserve class: C
Area (ha)	Perimeter (m)
Reserve Purpose: Public Recreation	

Vegetation type: Karri / Marri / Melaleuca.

Bushland condition: Ranging from pristine to completely degraded.

Weeds – See map for weed list.

Access (and existing trails; potential vectors): Cycle path runs in reserve parallel to Ocean Beach Road. Walk trail (Bibbulmun track) runs through eastern end of reserve.

Values (environmental sensitivities, threatened flora, fauna habitat): Good habitat values for native fauna and birds, and corridor to adjacent good bushland and Wilson Inlet

Geology; terrain/slope: Generally level.

Hydrology (potential vector): Litte River runs length of the reserve.

Current use: Recreation.

Threats (e.g. Dieback, ferals, illegal clearing, dumping): Illegal clearing

Surrounding land use: Residential.

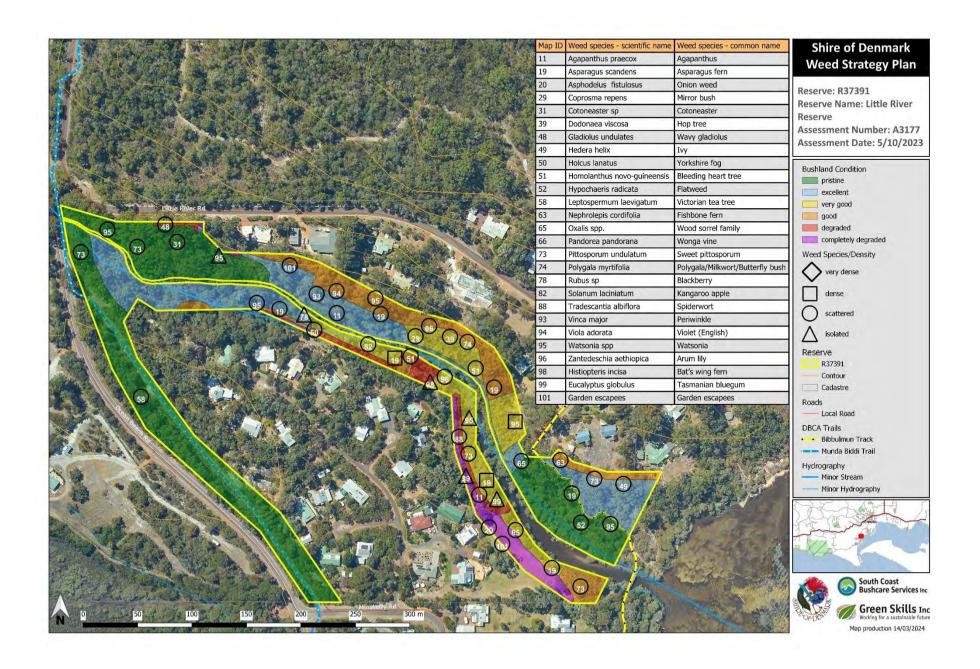
Links to other reserves, corridors: Adjoins R34742 & R26480 to SE.

History of reserve: ...

Recommended weed control actions against each reserve per weed species identified: Continue manual weed control & monitoring.

Resourcing requirements: 20hrs annually

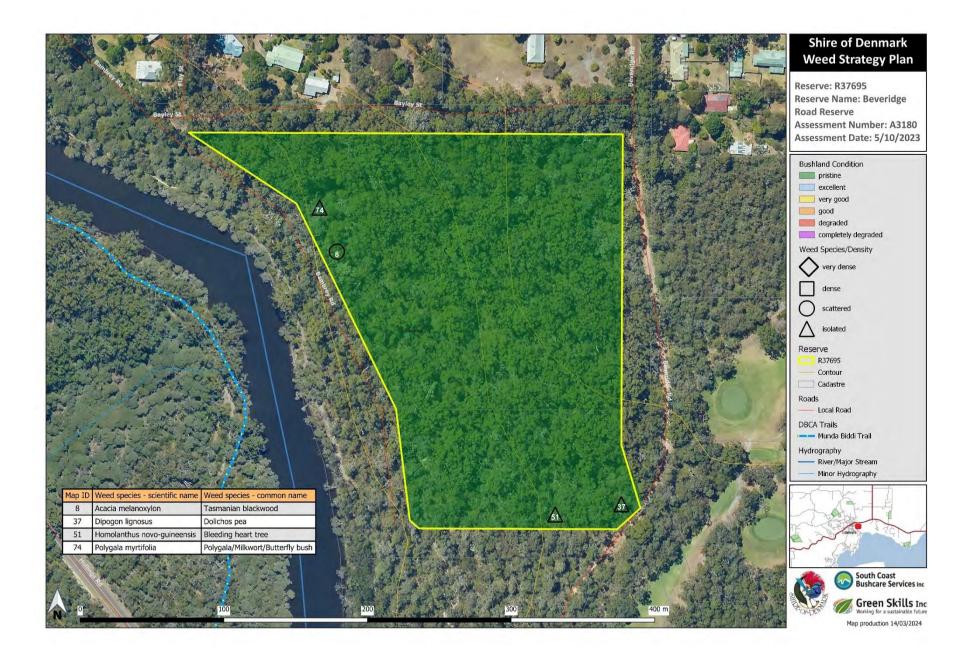
Community involvement: participatory action and opportunities for environmental education: Encourage Friends of Reserve group, continue with Wilson Inlet Public Forums



RESERVE R37695 BEVERIDGE ROAD RESERVE

Date of Assessment: 5.10.2023 Reserve number: R37695		
Reserve name: Beveridge Road Reserve	Location: Beveridge Rd to south, Bayley Rd to north	
Reserve Purpose: Parklands and Recreation	Reserve class: C	
Area (ha): 5.32		
Vegetation type: Tall Forest: Karri. (Eucalyptus diversicol	lour)	
Bushland condition: Pristine		
Weeds – See map for weed list		
Access (and existing trails; potential vectors) By foot from adjoining roads.		
Values (environmental sensitivities, threatened flora, fauna habitat): Old growth forest.		
Geology; terrain/slope- flat		
Hydrology (potential vector): drains into Denmark River		
Current use: Bushland conservation reserve		
Threats (eg. Dieback, ferals, illegal clearing, dumping): low		
Surrounding land use: Golf course, residential and Denmark River reserve.		
Links to other reserves, corridors: Adjoins R 39066 and R22886 (Golf course)		
Recommended weed control actions against each reserve per weed species identified: see action plan		
Resourcing requirements – including total estimates hrs required annually: 20 hrs annually		

Community involvement - participatory action and opportunities for environmental education: general community education with information



RESERVE R37702A PATERSON STREET

Date of Assessment: 5.10.2023	Reserve number: R37702A
Date of Assessment, 5.10.2025	neserve mumber, nazzak

Reserve name: Paterson Street	Location: 3 separate parcels along Paterson St
Reserve Purpose: Park	Reserve class: C
Area (ha): 3.47	

 $\label{thm:condition} \textit{Vegetation type: Low Woodland: Marri-Casuarina} \ (\textit{Allocasuarina spp})$

Bushland condition: Excellent to degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Road

Values (environmental sensitivities, threatened flora, fauna habitat): Buffer zone between residential and light industrial

Current use: greenspace urban bushland reserve

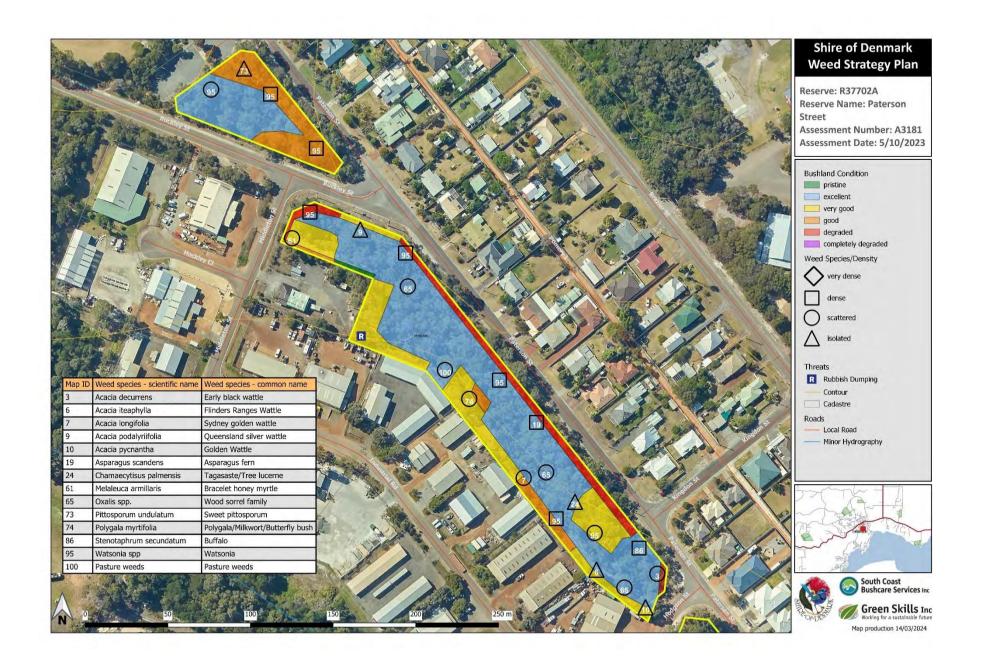
Threats (eg. Dieback, ferals, illegal clearing, dumping): edge effects from residential area

Surrounding land use: Residential, Light industrial.

Recommended weed control actions against each reserve – mechanical / hand removal / chemical – per weed species identified: see action plan

Resourcing requirements: 20hrs annually

Community involvement: participatory action and opportunities for environmental education: low



RESERVE R37702B BUCKLEY STREET

Date of Assessment: 5.10.2023 Reserve number: R37702B

Reserve name: Buckley Street Location: West of Middleton Rd

Reserve Purpose: Park Reserve class: C

Area (ha): 0.331

Vegetation type: Low Woodland: Eucalyptus patens/ Agonis juniperina woodland

Bushland condition: Very good - degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): By foot from Buckley St

Values (environmental sensitivities, threatened flora, fauna habitat): Buffer between residential and light industrial.

Geology; terrain/slope: flat

Hydrology (potential vector): Drainage line from Buckley St.

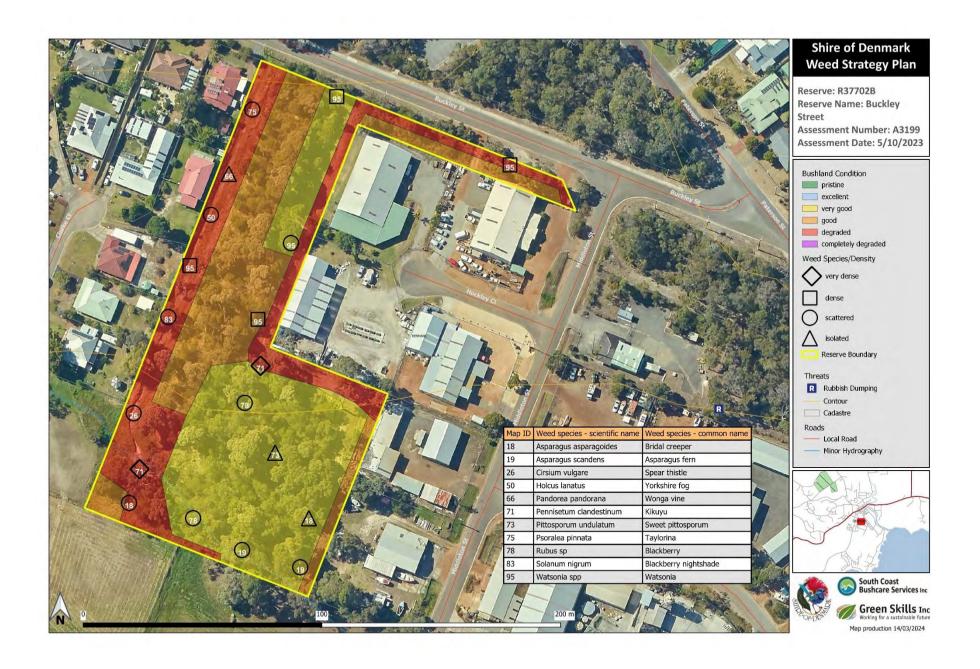
Current use: greenspace urban bushland reserve – separation of light industrial area from residential area

Threats (eg. Dieback, ferals, illegal clearing, dumping): edge effects

Surrounding land use: Residential and Light industrial.

Recommended weed control actions against each reserve per weed species identified: see action plan

Resourcing requirements: 20 hrs annually



RESERVE R38440 PIONEER PARK

Date of Assessment: 1.09.2023	Reserve number: R38440
Reserve name: Pioneer Park	Location: South Coast Hwy/Buckley St
Reserve Purpose: Parklands	Reserve class: C

Area (ha): 1.35

Vegetation type: Medium Forest: Jarrah- Marri-Yellow tingle

Bushland condition: Ranges from Excellent to Completely degraded

Weeds – See map for weed list; target species: Asparagus scandens, Coprosma repens, Dipogon lignosus, Eriobotrya japonica, Genista monspessulana, Gladiolus undulatus, Oxalis spp, Watsonia spp, Zantedeschia aethiopica.

Access (and existing trails; potential vectors): By foot from Highway, Buckley St and Ocean Bch Rd.

Values (environmental sensitivities, threatened flora, fauna habitat): Nesting site for Blue wrens, roosting for Black cockatoos, grazing and resting for Kangaroos.

Geology; terrain/slope: Level throughout site

Hydrology (potential vector): Stormwater from Church drains into Reserve

Current use: Passive recreation such as forest bathing, photography, bird watching

Threats (eg. Dieback, ferals, illegal clearing, dumping): Edge effects from surrounding residential areas/dogs

Surrounding land use: Church, Childcare Centre, Visitor Centre, residential

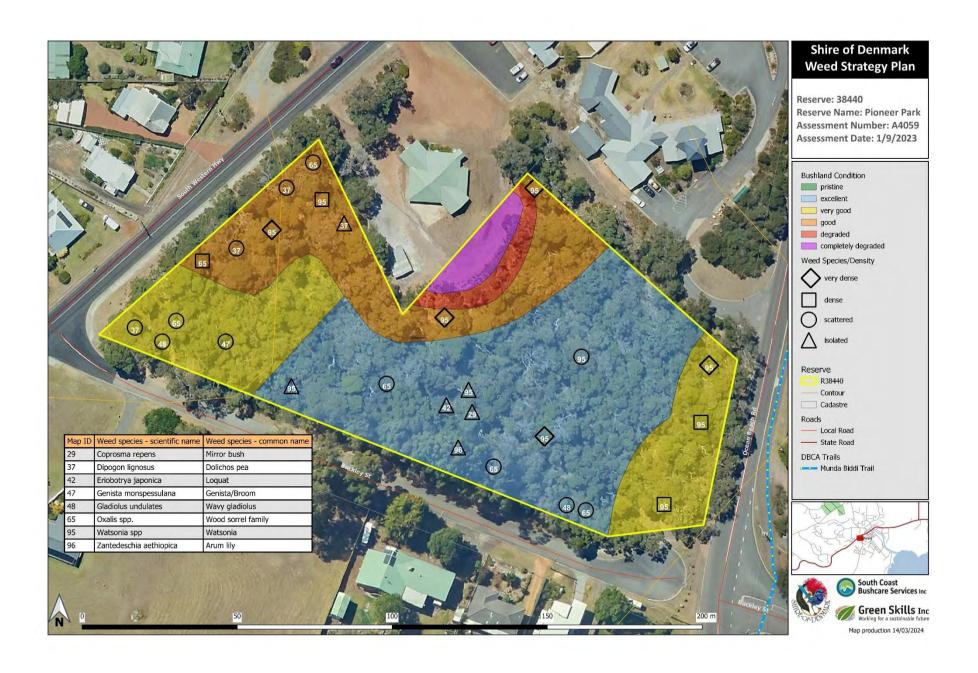
Links to other reserves, corridors: R 46688, R 46256, and Primary School bush.

History of reserve: Clearing around Church for fuel reduction. Last burnt December 1989. Long term community weeding in reserve.

Recommended weed control actions against each reserve per weed species identified. Continue with manual control.

Resourcing requirements: 60 hrs annually

Community involvement: participatory action and opportunities for environmental education: Volunteer bush care sessions twice a year.

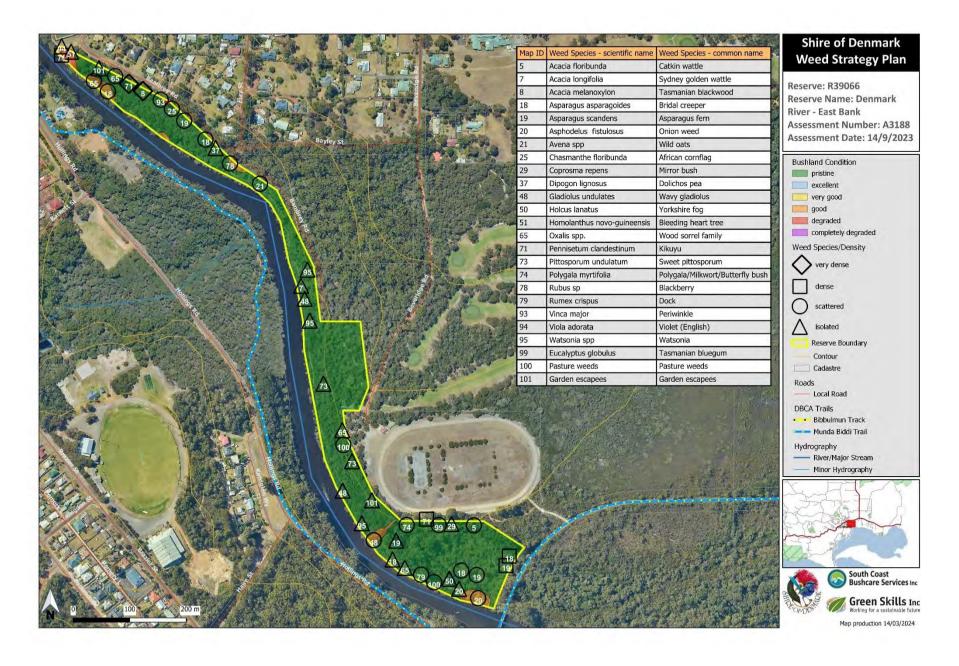


RESERVE R39066 DENMARK RIVER EAST BANK

Date of Assessment: 14.9.2023	Reserve number: R39066
Reserve name: Denmark River East bank	Location: Denmark River east side, south of traffic bridge to Denmark River Heritage Trail bridge
Reserve Purpose: Park	Reserve class: C
Area (ha): 6.63	
Vegetation type: Mosaic: Tall Forest: Karri – Low Wood	lland: Paperbark/Riparian vegetation
Bushland condition: excellent	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Walk trail traverses entire length	
Values (environmental sensitivities, threatened flora, f	auna habitat): High bushland conservation values as important river foreshore bushland reserve with rich flora species mix:
good native animal habitat. Used for high scenic walk trail values along river – significant community value	
Geology; terrain/slope: gentle slope	
Hydrology (potential vector): Denmark river foreshore	reserve
Current use: Walking	
Threats (eg. Dieback, ferals, illegal clearing, dumping): edge effects on understorey along walkpath	
Surrounding land use: Residential,	
Links to other reserves, corridors: Adjoins R37695	
History of reserve: longterm effort in hand weeding by	community
Recommended weed control actions against each rese	rve per weed species identified: see action plan

Community involvement: participatory action and opportunities for environmental education; continue community education in riparian bushland values and Wilson Inlet

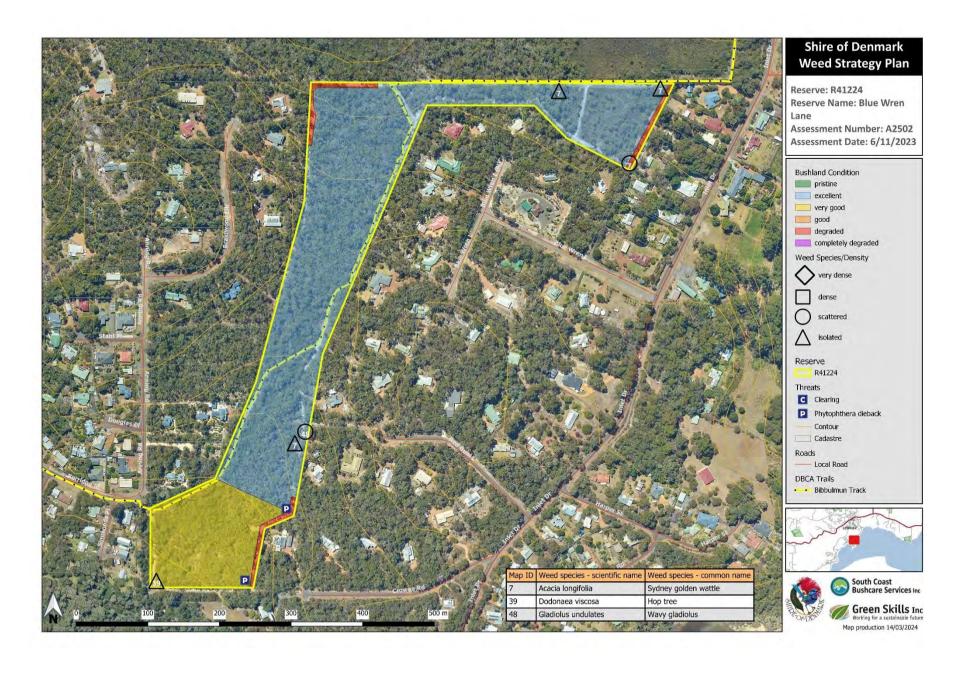
Resourcing requirements: 40 hrs annually



RESERVE R41224 BLUE WREN LANE

Date of Assessment: 6/11/23	Reserve number: R41224	
Reserve name: Blue Wren Lane	Location: West of Blue Wren Lane and north of Crowea Rd	
Reserve Purpose: Public Recreation	Reserve class: C	
Area (ha): 10.6		
Vegetation type: Low Woodland: Jarrah – Marr	i – Banksia (<i>Banksia</i> spp)	
Bushland condition: mostly excellent		
Weeds – See map for weed list		
Access (and existing trails; potential vectors): F	re break and walk trails surrounding it	
Values (environmental sensitivities, threatened	flora, fauna habitat): Walk trails, pristine bush, very high bushland conservation value habitat	
Geology; terrain/slope: gradual sloping from so	uth upwards north	
Hydrology (potential vector) n/a		
Current use: walk trail and habitat		
Threats (eg. Dieback, ferals, illegal clearing, dumping): Dieback, invasive weeds, foot traffic.		
Surrounding land use: Residential property.		
Links to other reserves, corridors: significant areas of bushland along reserve borders.		
History of reserve: Weeded yearly		
Recommended weed control actions against ea	ch reserve per weed species identified: see action plan, Hand weed removal	

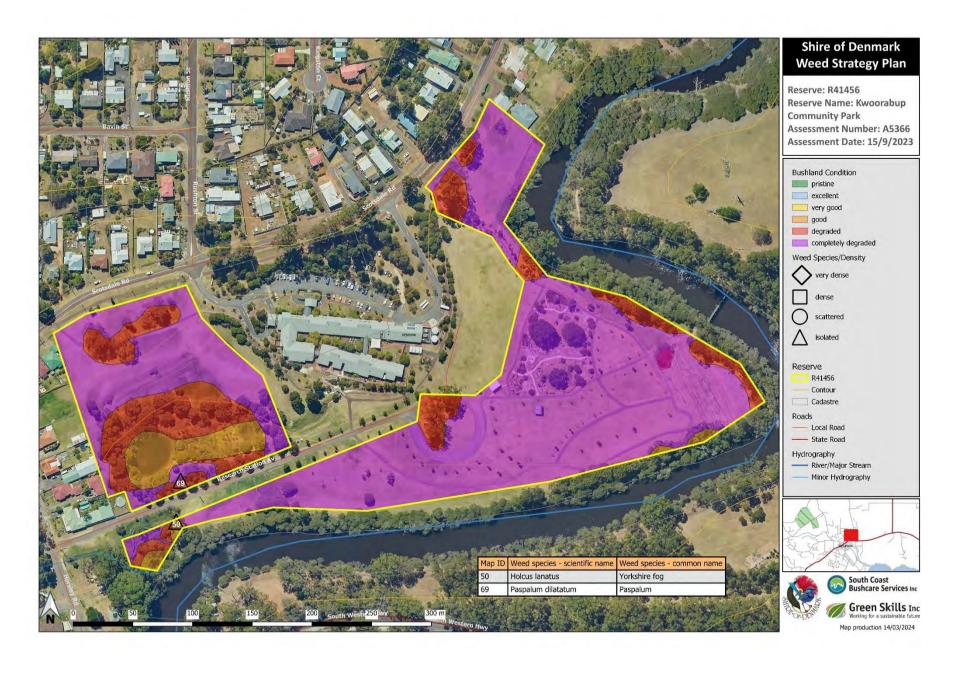
Community involvement: participatory action and opportunities for environmental education: opportunity to encourage a Friends of Reserve group – low weed burden



RESERVE R41456 KWOORABUP COMMUNITY PARK

Date of Assessment: 15.9.2023 Reserve number: R41456	
Reserve name: Kwoorabup Community Park	Location: Includes nature playground and artificial wetland area
Reserve Purpose: Recreation and Parkland	Reserve class: C
Area (ha): 7	
Vegetation type: Cultivated areas: Mown grass – Planted trees- Garden beds with isolated tall Karris.	
Bushland condition: N/A	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): open grassed recreational spaces and walktrails	
Values (environmental sensitivities, threatened flora, fauna habitat): low conservation value, high community recreation value	
Geology; terrain/slope: flat	
Hydrology (potential vector): Denmark river foreshore	
Current use: parkland and dog exercise	
Threats (eg. Dieback, ferals, illegal clearing, dumping): n/a	
Surrounding land use: residential	
Links to other reserves, corridors: foreshore reserves	
History of reserve: longterm use for community recreation	

Recommended weed control actions against each reserve per weed species identified: recommended that this park is not considered a bushland reserve

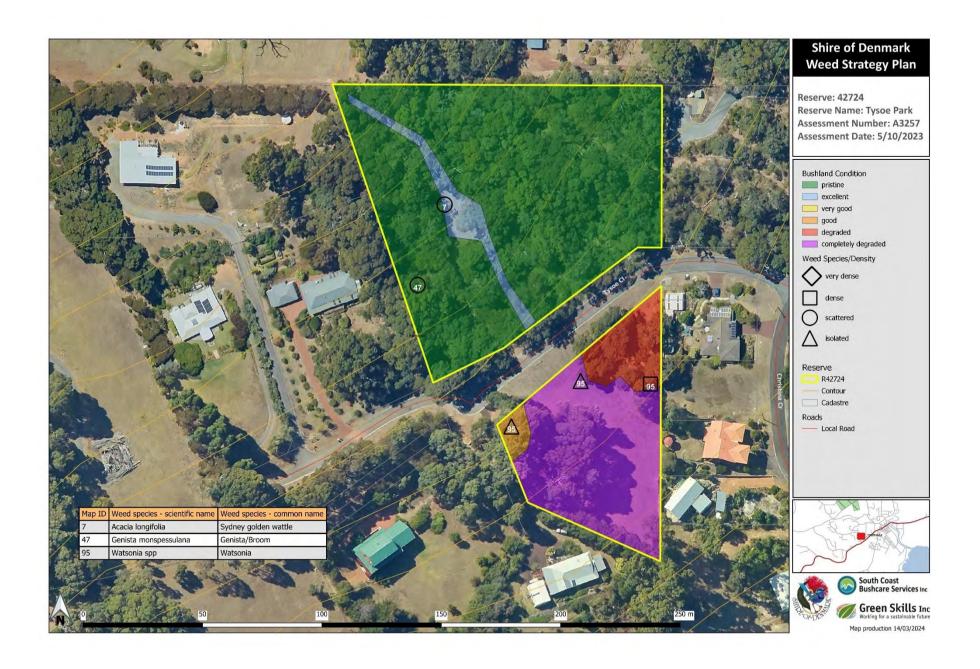


RESERVE R42724 TYSOE PARK

Date of Assessment: 5.10.2023	Reserve number: R42724
Reserve name: Tysoe Park	Location: Both sides of Tysoe Close
Reserve Purpose: Public Recreation	Reserve class: C
Area (ha): 1.64	
Vegetation type:	
Bushland condition: Pristine – completely degraded	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Walk trail traverses north/south	
Values (environmental sensitivities, threatened flora, fauna habitat)	
Geology; terrain/slope	
Hydrology (potential vector)	
Current use	
Threats (eg. Dieback, ferals, illegal clearing, dumping)	
Surrounding land use: residential (larger properties)	
Links to other reserves, corridors	
History of reserve	
Recommended weed control actions against each reserve per weed species identified: see action plan	

This assessment form is incomplete

Resourcing requirements: 10hrs annually



RESERVE R45623 WATERFALL PARK

Reserve name: Waterfall Park	Location: Morgan Richards Community Centre/Millers Creek

Reserve Purpose: Civic Purposes Reserve class: C

Area (ha): 1.1

Vegetation type: Tall Forest: Karri. (Eucalyptus diversicolour)

Bushland condition: very degraded-excellent

Weeds – See map for weed list

Access (and existing trails; potential vectors): Road around entire reserve perimeter, walk trail through middle.

Values (environmental sensitivities, threatened flora, fauna habitat - Millars Creek running through centre, habitat for flora and fauna.

Geology; terrain/slope: slight valley with creek running east to west.

Hydrology (potential vector) creek running east to west through middle of reserve.

Current use: walk trail, habitat, town aesthetic

Threats (eg. Dieback, ferals, illegal clearing, dumping): Invasive weed species, walkers, and surrounding residents

Surrounding land use: Residential and Community purposes and roads. Residential and roads

Links to other reserves, corridors: R46256 and R15700 and Denmark River.

Recommended weed control actions against each reserveper weed species identified: see action plan - Hand weed back to healthier ecosystem then regular weed management



RESERVE R46256 HAMILTON RESERVE

Date of Assessment: 15.9.2023	Reserve number: R46256
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Reserve name: Hamilton Reserve	Location: Teesdale Street
Reserve Purpose: Public Recreation	Reserve class: C

Area (ha):2.57

Vegetation type: Tall Forest: Karri. (Eucalyptus diversicolour)

Bushland condition: Pristine to completely degraded

Weeds – See map for weed list

Access (and existing trails; potential vectors): Walkway traverses centre East-West

Values (environmental sensitivities, threatened flora, fauna habitat): good forest habitat in urban residential area for birds and native animals

Geology; terrain/slope: gentle slope

Hydrology (potential vector): creek through middle towards Shadforth road

Current use: urban green space reserve

Threats (eg. Dieback, ferals, illegal clearing, dumping): edge effects and weed infestation from residential properties encroaching into good condition core bushland areas

Surrounding land use: Residential

Links to other reserves, corridors: R38440 and R45623

Recommended weed control actions against each reserve per weed species identified: see action plan

Resourcing requirements – including total estimates hrs required annually: 40hrs

Community involvement: participatory action and opportunities for environmental education: Local residents hold regular volunteer weeding days.

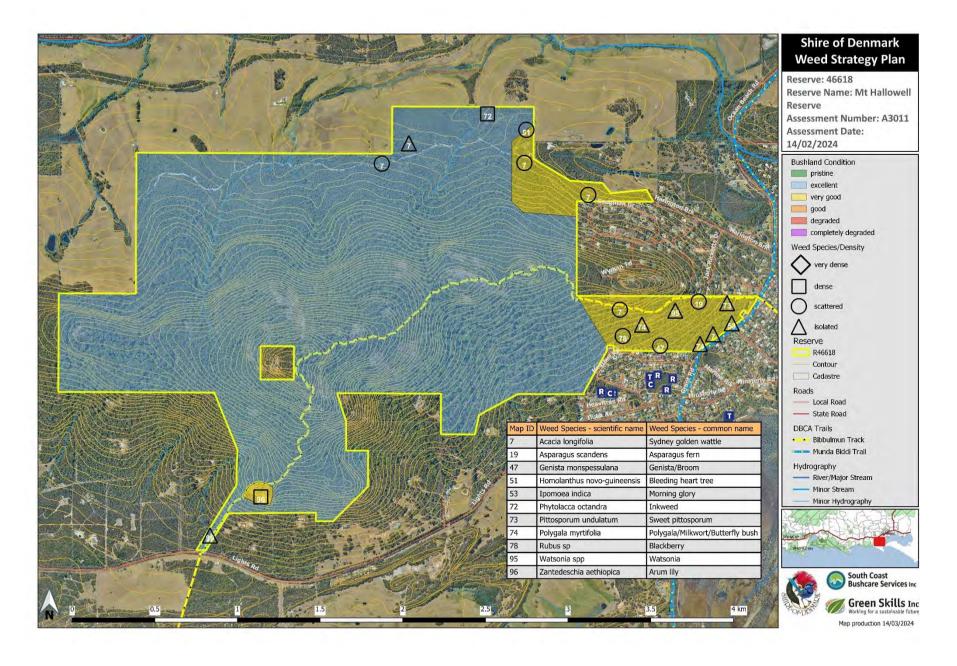


RESERVE R46619 MOUNT HALLOWELL RESERVE/KOORYUNDERUP

group to encourage the formation of similar groups for other high conservation value bushland reserves.

Date of Assessment: 14.02.2024	Reserve number: R46618
Reserve name: Mount Hallowell Reserve/Kooryunderup	Location: Bounded by Ocean Beach Rd and Lights Rd
Reserve Purpose: Conservation and Recreation	Reserve class: A
Area (ha): 532.25	
Vegetation type: Tall Forest: Karri-Jarrah-Marri (E marginata)	
Bushland condition: Excellent	
Weeds – See map for weed list	
Access (and existing trails; potential vectors): Bibbulmun Track trave	erses Reserve.
Values (environmental sensitivities, threatened flora, fauna habitat)	: Very high and significant conservation and cultural value bushland. Excellent habitat for native flora and fauna
with variety of ecosystem types. Bench mark for long unburnt veget	ration.
Geology; terrain/slope: Steep slopes to North and South. Granite bo	oulders and sheets throughout.
Hydrology (potential vector): Drainage lines to Little River	
Current use: Outdoor recreation and scenery. Multiple walk trails.	
Threats (eg. Dieback, ferals, illegal clearing, dumping): Weed invasion	on, unauthorized track building, Dieback.
Surrounding land use: Residential	
Links to other reserves, corridors: R32861 to South east. R48429 to	North east.
History of reserve: First Management Plan adopted by Denmark Shir	re Council in 1995. Plan reviewed in 2006
Recommended weed control actions against each reserve per weed	species identified: see action plan
Resourcing requirements – including total estimates hrs required an	inually: priority reserve for management of invasive weeds along edges

Community involvement: participatory action and opportunities for environmental education – Friends of Reserve group assisting with reserve management. Opportunity for this



RESERVE R46688 PEACE STREET RESERVE

Date of Assessment: 25/01/2024	December DACCOO
Date of Assessment: 25/01/2024	Reserve number: R46688

Reserve name: Peace Street Reserve	Location: Bordered by Christina Crescent to south and Peace St to north

Reserve Purpose: Parklands Reserve class: C

Area (ha): 19.84

Vegetation type: Mosaic: Jarrah/Banksia/Sheoak Woodland and Tall Forest: Karri- Marri (Corymbia calophylla)

Bushland condition: Excellent in most of the Reserve, some disturbance in Gravel Extraction area

Weeds – See map for weed list

Target weeds: Acacia longifolia, Asparagus scandens, Tree Ferns, Watsonia, Chasmanthe floribunda, Blackberry, Fleabane, Spear Thistle, Eastern States Eucalypts, Kikuyu grass,

Agapanthus

Access (and existing trails; potential vectors): Fire access Trails through and around the sections above Peace St. access from Jill St and Peace St

Values (environmental sensitivities, threatened flora, fauna habitat): Banksia woodlands sensitive to *Phytophthora cinnamomi*, high cultural value bushland and good habitat values for native animals and birds. Strong bushland linkages to reserves in lower and higher landscape areas.

Geology; terrain/slope; Laterite soils in upper section.

Hydrology (potential vector): Scotsdale Brook runs through lower section of reserve

Current use: Recreation

Threats (eg. Dieback, ferals, illegal clearing, dumping): Dieback (Phytophthora cinnamomi) present throughout Reserve

Surrounding land use - Residential

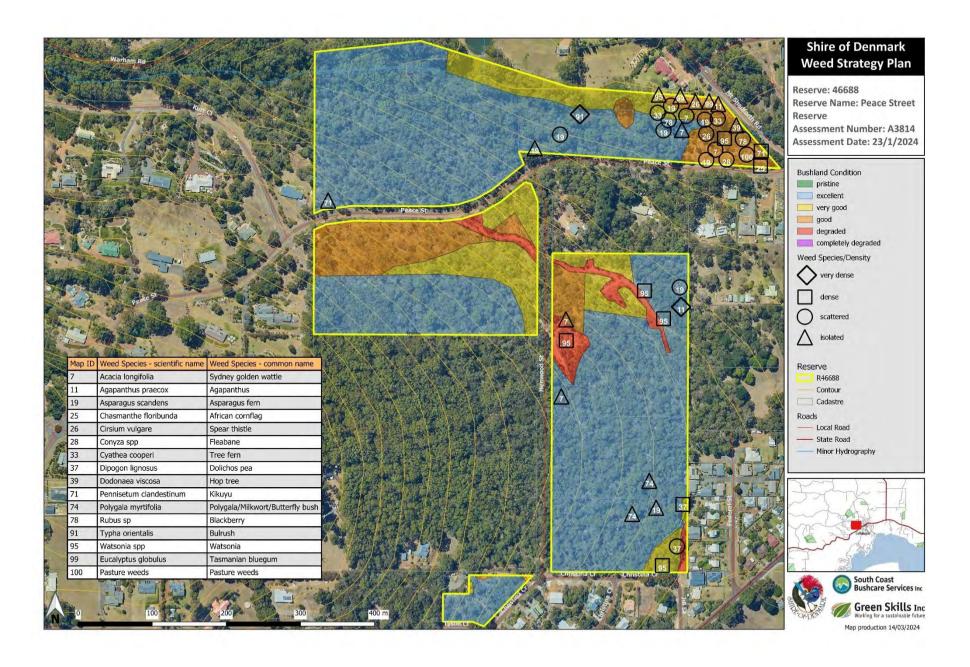
Links to other reserves, corridors: Links to Reserve 27224

History of reserve: Previous use as Gravel Extraction area, revegetated after operations ended. Site has had previous treatment for Dieback disease mitigation (Phosphite spraying and tree injections).

Recommended weed control actions against each reserve per weed species identified: see action plan. Continue with manual Weed Control of Watsonia, Acacia longifolia, Tree ferns.

Resourcing requirements: 40 hours annually

Community involvement: participatory action and opportunities for environmental education – opportunity for Friends of Reserve group



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STAKEHOLDER ENGAGEMENT

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COMMUNITY ENGAGEMENT FOR WEEDS STRATEGY DEVELOPMENT

Green Skills Inc, guided by <u>The Community Engagement Handbook - Protocol and Guidelines</u>, has undertaken community consultation and engagement during the development of this Strategy, with the following objectives in preparation of the Shire of Denmark Reserve Weeds Strategy:

- Gather information from key stakeholders and community members that will assist Shire of Denmark to implement and improve integrated weed management within the Shire's 40 listed reserves.
- Improve the way the Shire of Denmark communicates with members of the community, by directly inviting them to participate in the development of the Weeds Strategy.
- To work with the community to genuinely seek their feedback and values.
- To seek mechanisms for community involvement in long-term weed identification and ongoing weed management in reserves.

Key stakeholders were informed in August 2023 that the *Shire of Denmark Weeds Strategy and Action Plan (2005-2020)* was under review and community was invited to provide input in writing and/or through attendance at the initial community forum. Key Stakeholders were identified by Green Skills, the Shire of Denmark and South Coast Bush Care Services jointly. A community input portal on the Shire of Denmark Your Denmark webpage provided a further avenue for comment.

The initial Strategy Community Information and Input Forum was held on 31 August 2023 and was attended by 14 people with the majority representing community groups and contractors actively engaged in environmental protection and management.

Stakeholders include the Denmark Bird Group, William Bay National Parks Progress Association, Wilson Inlet Restoration Group, Green Skills, Denmark Environment Centre, Friends of Kooryunderup, South Coast Bushcare Services volunteers, local weed management contractors, as well as interested landholders. Denmark Shire Councillor Donna Carmen also attended. The consultant team of Louise Duxbury and Helen Heydenrych (Green Skills Inc), Di Harwood (South Coast Bushcare Services) and Shire officers Yvette Caruso and Damian Schwarzbach, facilitated and coordinated the event.

The well informed and motivated group provided valuable input at the early stages of the review on specific reserves and weeds of concern to them, what resources and support they need for their ongoing involvement with the review and with management of reserves including weeds, and input regarding the resources both online and in paper form concerning weed identification and management and how useful they are.

The Community Information Forum featuring the Draft Strategy and the Reserve assessment result maps was held on 22 April 2024 at the Denmark Environment Centre. Once again 13 people attending were a mix of representatives from key stakeholder groups and individual landholders. The participants provided positive feedback on the Draft Weeds Management Strategy and the information provided including Yvette Caruso for her succinct outline of why the Review was necessary and how it would inform the Shire and community weed management efforts, and the excellent on ground assessments carried out by South Coast Bushcare Services summarised by Diane Harwood and encapsulated in maps provided to the community for comment. Green Skills facilitator, Louise Duxbury, took comments from the floor including discussion on the need to protect high value low impacted reserves from fire. When there is fire it is essential to undertaken post fire weed management. the integration of fire management and weed management was highlighted during the discussion.



Draft Strategy Community Information Forum with draft weed assessments and maps for comment

The draft document and maps were made available to the public at the Shire of Denmark reception and the Denmark Environment Centre for further input on the assessments and mapping post the Information Forum.

Media coverage: Three articles providing information about the Weeds Strategy review and updates on progress with the on ground survey work was published in the Denmark Bulletin. Paid advertising for the Forums was in prominent places in the Bulletin. Website and newsletter promotion of the review: The Shire of Denmark's website Your Denmark page was regularly updated – several comments were received by residents via this online portal. Information was also included in Green Skills, Denmark Environment, and other e newsletters. Posters for the two Community Input events were placed on notice boards across Denmark (see Appendix 6).

RECOMMENDATIONS FOR ONGOING COMMUNITY INVOLVEMENT, EDUCATION AND COLLABORATION FOR WEED MANAGEMENT IN SHIRE OF DENMARK BUSHLAND RESERVES

Recommendations from the Community Engagement conducted throughout the development of *the Strategy* included broadly opportunities for community involvement, community education, and specific weed management advice across Shire of Denmark Bushland Reserves as follows:

- Continue the Interagency approach to weed management and the wide publicity approach taken to date so the community is aware of this cross-tenure effort.
- Several landholders asked for gatherings in their local area to upskill a group of landholders and put pressure
 on those not doing the right thing. There is the possibility of setting up Friends of Local Reserves and sections
 of local road verges where there is interest.
- While there are community members willing to undertake weed control, there are some large weed species like
 Tagasaste that are difficult for volunteers, and assistance is needed to control large woody weed species.
- South Coast Bushcare Services to continue to be funded to run weed identification and management fieldwork and mentoring. They are willing to have weed samples dropped at the Denmark Environment Centre for identification.
- Publicising online weed identification and management resources is an ongoing need. The paper-based weed
 information materials produced by the Shire and made available in the Shire reception and the Denmark
 Environment Centre shop, are valued and worth reprinting.

- Further education about garden escapees and support for restrictions of weedy species is supported. Weed information could be part of rates notice information, especially for new residents buying in Denmark.
 - Workshops on planting with natives should be supported via community education grant funding.
 - There is community support for protecting long unburnt reserves in good condition from prescribed burning management and for weed and fire control management to be done sympathetically, to maximise long term natural area values.
 - All natural bushland reserves have cultural heritage values and artifacts may be present. Some reserves have been previously surveyed including sections of the Koorabup Beelia (Denmark River) (Goode et al 2008:113).
 That report concluded that riparian zones of all rivers such as those in the Shire of Denmark were nodes for gatherings, ceremonies and land management for food.

"From an analysis of the data collected from research and consultations it can be stated that most major rivers systems running through the study area were occupied by both traditional and historical Noongars in an intensive and continuous manner. This occupation was centred on the customary use of resources obtained within the riparian zones of these systems. Rivers in the study region were also identified as clan boundaries between cultural groups (Hay/Denmark River to Pallinup River bordering the Minang) and as major seasonal paths of migration for traditional Noongar groups travelling to coastal estuaries for ceremonial activities in the summer. Rivers such as the Frankland (Brooke Inlet), the Hay, the Denmark (Wilson's Inlet), the Kalgan (Oyster Harbour) and the Pallinup River (Beaufort Inlet) were identified as traditional paths that connected to fish traps or other coastal areas of significance. A large inventory of recorded archaeological sites associated with these rivers shows intense usage of these systems, as do ethno-historical accounts from the region's first explorers."

It was not in the scope of this Review of the Weeds Strategy to undertake a cultural values inventory of the 40 reserves. This information would contribute to the long-term management of these reserves and the protection of both biological, cultural and amenity values. It is recommended that the Denmark Shire Council consider progressing a cultural values assessment of bushland reserves, in collaboration with Australian First Nations consultants.

BACKGROUND DOCUMENTATION

REFERENCE MATERIALS

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- Shire of Denmark Weeds Strategy and Action Plan (2005-2010)
- Shire of Denmark Local Laws Relating to Pest Plants
- City of Albany Environmental Weed Management Plan
- Shire of Augusta Margaret River Integrated Weed Management Plan
- Shire of Denmark Weed Website Documents, Brochures and WALGA Fact Sheets
- Dept of Biodiversity, Conservation and Attractions Weeds
- Shire of Denmark Invasive Species Information webpage
- <u>Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment, Environmental Protection Authority, December 2016.</u>
- Bradley J 1988: Bringing Back the Bush Bradley Method of Bush Regeneration.
- Goode, B., Greenfeld, P., Irvine, C., Gillies, V., Webb, W., Thomas, M. and Cockman, M. 2008, Aboriginal Cultural Values Study of Water Resources for the South Coast Region of Western Australia, a report prepared for the Department of Water, July 2008.
- Keighery, B.J. 1994. Bushland plant survey. A guide to plant community survey for the community. Wildflower Society of WA (Inc.), Perth.
- Trudgen, M.E. (1991) Vegetation Condition Scale. In: National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth, Western Australia.
- Webber, B.L (2021) Addressing weed threats to biodiversity.

WEED IDENTIFICATION & OTHER RESOURCES

- Brown, K and Brooks, K, 2002: <u>Bushland Weeds A practical Guide to their Management</u>
- Western Weeds: A guide to the Weeds of Western Australia by B.M.J. Hussey 2007
- Southern Weeds and Their Control by John Moore and Judy Wheeler 2008
- The Community Engagement Handbook Protocol and Guidelines, Green Skills Inc/SCNRM 2014
- https://www.agric.wa.gov.au/herbicides/declared-plant-control-handbook
- https://www.agriculture.gov.au/sites/default/files/documents/newp-framework.docx
- Guide to Mechanical Bushfire Mitigation DFES March 2023

10 LEGISLATION AND POLICY RELEVANT TO WEED CONTROL MANAGEMENT

- WA Health (Pesticides) Regulations 2011
- Australian Weeds Strategy 2017-2027
- WA Biosecurity and Agriculture Management Act 2007
- WA Road Traffic Act 1974
- Shire of Denmark Local Law Pest Plant Schedule
- Gvt of WA Department of Health Guide to the Management of Pesticides

11 APPENDIX DOCUMENTS:

- 1. Multi-modal weed control management for target weed species
- 2. Herbicides used by the Shire of Denmark
- 3. Shire of Denmark Pest Plant Schedule Species List
- 4. List of Environmental Weed species identified in Shire of Denmark Bushland Reserves categorised against listing as: WONS (Weed of National Significance), Declared Pest Plant, or listed locally on the Shire's Pest Plant Species (Local Pest Plant)
- 5. List of Vegetation Types referenced in assessment maps
- 6. Community Consultation Process 2024

APPENDIX 1: MULTI-MODAL WEED CONTROL METHODS USED BY THE SHIRE OF DENMARK

Weed Control Method	Suitable for Species such as	Notes	Advantages	Disadvantages
Hand removal or digging	Most species	Good for community busy bees. Not always necessary to remove whole plant; roots may be left to stabilize soil.	No chemicals. Allows selective removal of weeds without damaging native plants.	Training in plant identification, work prioritisation and manual control methods essential for good results.
Spot spray	Grasses and annuals	The second secon	Effective. Selective. Can be done by knapsack or with vehicle mounted spray unit. Can cover a lot of ground. Minimises herbicide wastage.	Not for use in bushland. Weather dependent.
Cut	•	Some species will coppice; coppicing can be hand removed in subsequent seasons when site is checked for seedlings.	If material is removed from site it can be visually pleasing and reduce fuel loads.	Labour intensive. Need to dock up cut material to avoid leaving piles and to keep site accessible; or dispose of material off site.
Basal bark treatment		Diluted herbicide is painted or sprayed on the bark at the base of tree, from ground level to 50 cm. Road verges or within natural reserves.	Allows plant to die in-situ. Less labour involved. Minimal site disturbance. Minimal risk of regrowth. Target weed only affected.	Can be unsightly if in public place. Must be applied around entire trunk when trunk surface is dry. Off target damage can occur.
Brushcutting	Annual species Trail edges Small disturbance sites	Controls and reduces aboveground biomass. To be done before seed set.	Delays production of seed. Will eventually deplete the soil seed store.	Without knowledge of species, native ground covers may be accidentally damaged.

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Weed Control Method	Suitable for Species such as	Notes	Advantages	Disadvantages
Mowing	Annual grasses.	Useful in previously cleared areas. Grass cuttings not to be disposed of in or on edges of bushland. Time work so as not to spread weed seeds.	Covers large area with minimal labour time.	Needs maintenance unless used with other techniques. Can spread weeds.
Mulching using loose particles of organic matter e.g. woodchips from woody weeds.	Woody weeds – only use at site of woody weed infestation.	Suppresses weeds after other techniques used.	Medium-term results; gives natives chance to establish and shade out weed species. Best to use mulched material from same site, even if it contains seeds.	Can be labour intensive. Do not move mulch to other sites.
Biological control	Bridal Creeper Rust	Already established in region; spread by wind; can move around by taking infected leaves to new site.	No works required.	Won't eradicate it, but just prevents it from increasing too quickly.
Mechanical mulching	Woody weeds	Large infestations such as at old resource pits or other highly disturbed sites.	Covers large area with minimal labour time.	Removes most habitat in one hit. Need to be mindful of fauna using the site.
Fire	Species with hard-coated seed.	Suited to small areas. Must have capacity for immediate follow up when weed seedlings emerge	Stimulates mass germination of soil stored weed seeds. Stimulates native plant regrowth.	Needs permission and appropriate planning. Correct timing of burn and follow-up weed control essential.
Drowning	Emergent species e.g. Bullrush and Kikuyu	Used sometimes in conjunction with manual control treatments.	Effective method for emergent species.	Time consuming. Water level dependent.

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APPENDIX 2: HERBICIDES USED BY THE SHIRE OF DENMARK

Herbicide*	Application	Where	Species controlled	Notes	
Glyphosate 450	Hand gun, knapsack, boom spray	Bushland, road reserves, parklands, trails, firebreaks	Broad range of species controlled	Broad spectrum, systemic, general knockdown	
Glyphosate Aquatic 360	Hand gun, knapsack, boom spray	Waterways and drains	Broad range of species controlled	Broad spectrum, systemic, general knockdown. Does not contain surfactants so is suitable for use in sensitive areas such as waterways and wetlands	
Access (Triclopyr, Picloram)	Knapsack	Bushland, road reserves, parklands, trails, firebreaks	Sydney golden wattle (SGW), pittosporum, taylorina, and various wattle species.	Basal bark application for woody weeds	
Dalapon/Allapon/Propon/2,2 DPA	Hand gun, knapsack	Watsonia	Watsonia	Selective herbicide for watsonia	
Brush off (Metsulfuron methyl)	Hand gun, knapsack, boom spray	Bushland, road reserves, parklands, trails, firebreaks	Woody weeds such as: SGW, pittosporum, taylorina, European gorse, blackberry, Victorian tea tree	Broadleaf selective with some residual capacity	
Grazon (Triclopyr, Picloram)	Hand gun, knapsack, boom spray	Bushland, road reserves, parklands, trails, firebreaks	Blackberry and gorse	Broadleaf selective suitable for use in areas that may be used by stock	
Lontrel	Hand gun, knapsack, boom spray	Bushland, road reserves, parklands, trails, firebreaks	Broadleaf selective	Broadleaf selective chemical	

Herbicide*	Application	Where	Species controlled	Notes
Pulse (Adjuvant)	Hand gun, knapsack,	Bushland, road reserves, parklands,	Used for hard to kill species	Pulse is a penetrant that is used in
	boom spray	trails, firebreaks	such as blackberry and gorse	conjunction with herbicides to
				increase efficacy of the chemicals
				in use
Simazine 900 WG	Hand gun, knapsack,	Road reserves and verges, trails and	Pre and post emergent for	Careful consideration of the area
	boom spray	firebreaks	considered use	to be treated is needed as this
				chemical is not for general use
Taskforce (Fluproponate)	Hand gun, knapsack,	Road reserves and verges, trails and	African lovegrass	Clumping grass selective. Provides
	boom spray	firebreaks		excellent residual control of
				lovegrass for 1 – 2 years
Fusilade	Hand gun, knapsack,	Grass selective areas	Grass species	Grass selective herbicide.
	boom spray			Excellent for use
Broadside (MCPA, Dicamba,	Knapsack, boom spray	Grass selective areas	Bindii, cape weed, dandelions etc	For broadside weed control in lawn
Bromoxynil)				areas
Barricade (Prodiamine)	Knapsack, boom spray	Small amounts on McLean oval	Winter grass control	For oval turf management

^{*}All herbicides used as per label and MSDS.

^{**}Residents can request to be put on register if they have a medical reason or are undertaking verge maintenance themselves to avoid chemicals.

APPENDIX 3: SHIRE OF DENMARK PEST PLANT SCHEDULE SPECIES LIST

Known species currently on the Pest Plants Schedule in the Shire of Denmark

Common Name	Botanical Name		
African love grass	Eragrostis curvula		
Angels trumpet	Datura suaveolens		
Caster oil tree	Ricinus communis		
Coastal Victorian tea tree	Leptospermum laevigatum		
Cotoneaster	Cotoneaster spp.		
Dolichos pea	Dipogon lignosus		
Doublegee	Emex australis		
Fleabane	Conyza spp.		
Inkweed	Phytolacca octandra		
Onehunga	Soliva pterosperma		
Pampas grass	Cortaderia selloana		
Sweet pittosporum	Pittosporum undulatum		
Sydney golden wattle	Acacia longifolia		
Taylorina	Psoralea pinnata		
Tree of heaven	Ailanthus altissima		
Watsonia	Watsonia spp.		

Recommended pest plants (weeds) for inclusion on the Shire of Denmark Pest Plant Schedule:

The Local Law Shire of Denmark Pest Plant Schedule requires updating to include emerging weed species that have been shown to be highly invasive since the previous (2005-2010) Weeds Strategy. These include:

Wonga Vine Pandorea pandorana
Bleeding Heart Homolanthus novo-guineensis
Garden/Basket Asparagus Asparagus aethiopicus
Asparagus Fern Asparagus scandens

Some weed species that are currently on this schedule have been identified as low risk as populations of these species are very limited. It is worth noting that the potential for these plants to be a high risk still exists if new populations arise. These include:

Angels trumpet Datura suaveolens
Caster oil tree Ricinus communis
Doublegee Emex australis
Onehunga Soliva pterosperma
Tree of Heaven Ailanthus altissima

APPENDIX 4: LIST OF IDENTIFIED ENVIRONMENTAL WEED SPECIES IN SHIRE OF DENMARK BUSHLAND RESERVES

Map ID	Scientific Name	Common Name	wons	Declared Pest Plant	Local Pest Plant
1	Acacia baileyana	Cootamundra wattle			
2	Acacia dealbata	Silver wattle			
3	Acacia decurrens	Early black wattle			
4	Acacia elata	Mountain cedar wattle			
5	Acacia floribunda	Catkin wattle			
6	Acacia iteaphylla	Flinders Ranges wattle			
7	Acacia longifolia	Sydney golden wattle			Х
8	Acacia melanoxylon	Tasmanian blackwood			
9	Acacia podalyriifolia	Queensland silver wattle			
10	Acacia pycnantha	Golden wattle			
11	Agapanthus praecox	Agapanthus			
12	Agave americana	Century plant			
13	Allium triquetrum	Three-cornered garlic			
14	Amaryllis belladonna	Easter lily			
15	Anredera cordifolia	Madeira vine	Х		
16	Arctotheca calendula	Capeweed			
17	Asparagus aethiopicus	Garden/basket asparagus	Х		
18	Asparagus asparagoides	Bridal creeper	Х	Х	Х
19	Asparagus scandens	Asparagus fern	Х		
20	Asphodelus fistulosus	Onion weed			
21	Avena spp	Wild oats			
22	Brizia spp	Blowfly grass			
23	Centranthus ruber	Red valerian			
24	Chamaecytisus palmensis	Tagasaste/Tree lucerne			
25	Chasmanthe floribunda	African cornflag			
26	Cirsium vulgare	Spear thistle			
27	Cynodon sp	Couch grass			
28	Conyza spp	Fleabane			Х
29	Coprosma repens	Mirror bush			
30	Cortaderia selloana	Pampas grass			Χ
31	Cotoneaster sp	Cotoneaster			Х
32	Crocosmia crocosmiiflora	Montbretia			
33	Cyathea cooperi	Tree fern			
34	Cyperus eragostis	Umbrella sedge			
35	Delairea odorata	German/False ivy			_
36	Dimorphotheca ecklonis	Daisy			
37	Dipogon lignosus	Dolichos pea			Х
38	Dittrichia viscosa	Dittrichia			
39	Dodonaea viscosa	Hop tree			

Map ID	Scientific Name	Common Name	WONS	Declared Pest Plant	Local Pest Plant
40	Ehrharta longiflora	Veldt grass			
41	Eragrostis curvula	African lovegrass			Х
42	Eriobotrya japonica	Loquat			
43	Euphorbia terracina	Geraldton carnation weed			
44	Foeniculum vulgare	Fennel			
45	Freesia alba	Freesia			
46	Gazania linearis	Gazania			
47	Genista monspessulana	Genista/Broom	Х		
48	Gladiolus undulatus	Wavy gladiolus			
49	Hedera helix	Ivy			
50	Holcus lanatus	Yorkshire fog			
51	Homolanthus novo-guineensis	Bleeding heart tree			
52	Hypochaeris radicata	Flatweed			
53	Ipomoea indica	Morning glory			
54	lxia spp	Ixia			
55	Juncus microcephalus	Smallhead rush			
56	Lantana camara	Lantana	Х	Х	
57	Lathyrus tingitanus	Tangier pea			
58	Leptospermum laevigatum	Victorian tea tree			Х
59	Lonicera japonica	Honeysuckle			
60	Lupinus spp	Lupin			
61	Melaleuca armillaris	Bracelet honey myrtle			
62	Myosotis sylvatica	Forget me not			
63	Nephrolepis cordifolia	Fishbone fern			
64	Oenothera glazioviana	Tall evening primrose			
65	Oxalis spp.	Wood sorrel family			
66	Pandorea pandorana	Wonga vine			
67	Parthenocissus quinquefolia	Virginia creeper			
68	Paspalum dilatatum	Paspalum			
69	Passiflora filamentosa	Passion flower			
70	Pelargonium capitatum	Rose pelargonium			
71	Pennisetum clandestinum	Kikuyu			
72	Phytolacca octandra	Inkweed			
73	Pittosporum undulatum	Sweet pittosporum			Х
74	Polygala myrtifolia	Polygala/Milkwort/Butterfly bush			, A
75	Psoralea pinnata	Taylorina			Х
76	Robinia pseudoacacia	Robinia			,,,
77	Rosa	Climbing Rose			
78	Rubus sp	Blackberry	X	X	
79	Rumex crispus	Dock		^	
80	Senecio elegans	Senecio/Purple groundsel			
81	Silybum marianum	Variegated thistle			
	Siry Sairi ilialialia	T VALICACEA CHISCLE		i	

Map ID	Scientific Name	Common Name	WONS	Declared Pest Plant	Local Pest Plant
83	Solanum nigrum	Blackberry nightshade			
84	Sonchus sp	Sowthistle			
85	Sparaxis spp	Harlequin flower			
86	Stenotaphrum secundatum	Buffalo			
87	Trachyandra divaricate	Dune onion weed			
88	Tradescantia albiflora	Spiderwort			
89	Trifolium spp	Clover			
90	Tropaeolum majus	Nasturtium			
91	Typha orientalis	Bulrush			
92	Ulex europaeus	Gorse	Х	Х	
93	Vinca major	Periwinkle			
94	Viola adorata	Violet (English)			
95	Watsonia spp	Watsonia			Х
96	Zantedeschia aethiopica	Arum lily		Х	
97	Yucca aloifolia	Yucca			
98	Histiopteris incisa	Bat's wing fern			
99	Eucalyptus globulus	Tasmanian bluegum			
100	Pasture weeds				
101	Garden escapees				
102	Thunbergia alata	Black-eyed susan			
103	Rosa sp	Rose			
104	Centranthus ruber	Red valerian			
105	Erythrina x sykesii	Coral tree			
106	Syzygium sp	Lilly pilly			
107	Atriplex prostata	Goosefoot			
108	Physalis peruviana	Cape gooseberry			
109	Prunus sp	Fruit tree			
110	Olea europaea	Olive			
111	Pinus sp	Pine			
112	Moraea flaccida	One leaf Cape tulip		Х	

APPENDIX 5: LIST OF VEGATATION TYPES

Vegetation Association Types used in Assessment of Reserves

Tall Forest: Karri. (Eucalyptus diversicolour)

Tall Forest: Karri- Marri (Corymbia calophylla)

Tall Forest: Karri – Yellow Tingle (*E guilfoyleii*)

Tall Forest: Karri-Jarrah-Marri (E marginata)

Medium Forest: Marri

Medium Forest: Marri – Jarrah

Medium Forest: Marri – Jarrah – Blackbutt (*E patens*)

Medium Forest: Jarrah- Marri-Yellow tingle

Low Woodland: Paperbark (Melaleuca spp)

Low Woodland: Marri – Casuarina (Allocasuarina spp)

Low Woodland: Blackbutt – Fine tea tree (*Taxandria juniperina*)

Low Woodland: Jarrah – Marri – Banksia (Banksia spp)

Shrublands: Peppermint (Agonis flexuosa) – Coastal heath

Mosaic: Tall Forest: Karri/Riparian vegetation

Mosaic: Tall Forest: Karri/Sedgeland – Paperbarks over sedges

Mosaic: Tall Forest: Karri – Low Woodland: Paperbark/Riparian vegetation

Mosaic: Tall Forest: Karri-Marri- Low Woodland: Paperbark/Riparian vegetation

Mosaic: Tall Forest: Karri-Yellow Tingle/Low Woodland: Jarrah – Banksia

Mosaic: Medium Forest: Jarrah-Marri- Casuarina/ Sedgeland: Paperbarks over sedges

Mosaic: Medium Forest: Marri/ Sedgeland: Paperbarks over sedges

Mosaic: Medium Forest: Karri-Marri-Jarrah/ Low Woodland: Paperbark

Mosaic: Medium Forest: Marri/ Riparian vegetation

Mosaic: Medium Forest: Marri/Low Woodland: Paperbark

Mosaic: Low Woodland: Bullich- Agonis/ Shrublands: Acacia/Coastal Heath

Mosaic: Low Woodland: Jarrah- Casuarina/ Shrublands: Tea tree thicket

Mosaic: Low Woodland: Blackbutt/Shrublands: Fine tea tree thickets

Mosaic: Low Woodland: Paperbark/Riparian vegetation

Cultivated areas: Mown grass – Planted trees- Garden beds/ Car Park

APPENDIX 6: COMMUNITY CONSULTATION PROCESS 2024



Community Consultation included two Denmark community information public meetings, held for the purpose of:

- Scoping community concerns and issues related to weeds management in the Shire of Denmark reserves and
- Receiving comment and feedback on the draft Shire of Denmark Bushland Reserves Weeds Strategy 2024-2034.

Community information was provided on the Shire of Denmark's online <u>Your Denmark</u> website, with opportunity for accessing more information regarding environmental weeds and regular updates on the progress with the Weeds Strategy Review.

Feedback was also sought on the draft strategy document via a Feedback Form available on the Weeds Strategy Feedback Portal on the <u>Your Denmark</u> webpage.

Community was also encouraged to submit written comment via email to:

denmarkmanager@greenskills.org.au
Or to:

yvette.caruso@denmark.wa.gov.au



All public comment that was received during the public comment period has been respectfully considered in the development of this document. A separate document: "Community Engagement Process Summary Report" collates all the community public input and Shire staff works team comments that were received during the public comment period This document is available from the Shire of Denmark Sustainability Officer on request.

- (7) Where a person fails to comply with a notice under local law (6) of these local laws served upon him/her, the Council may-
 - (a) without payment of any compensation in respect thereof destroy, eradicate or control, as the case may be, any pest plant the destruction, eradication and control of which was required by the notice; and
 - (b) recover in a court of competent jurisdiction from the person to whom the notice is directed the amount of the expense of such destruction, eradication or control.

SCIENTIFIC NAME

First Schedule

Pest Plants

COMMON NAME

African Love Grass Eragrostis curvula

Bridal Creeper Myrsphyllum asparagoides
Pampas Grass Cortaderia selloana
Caster Oil Tree Ricinus communis
Onehunga Soliva pterosperma
Inkweed Phytolacca octandra
Cotoneaster Cotoneaster sp.

Cotoneaster Sp.
Dolichos Pea Dipegon lignosus
Fleabane Conyza sp.

Sweet Pittosporum
Sydney Golden Wattle
Taylorina

Pittosporum undulatum
Acacia longifolia
Psoralea pinnata

Coastal (Victorian) Tea tree Leptospermum laevigatum

Watsonia Watsonia sp.
Tree of Heaven Ailanthus altissima
Doublegee Emex australis
Angels Trumpet Datura suaveolens

INCLUDE: INCLUDE:

Garden / Basket Asparagus Asparagus aethiopicus
Asparagus fern Asparagus scandens
Wonga Vine Pandorea pandorana
Bleeding Heart Homalanthus

Homalanthus novoguineensis

Amendment to include an additional four pest plants.