



Hobsons Bay Wetlands Centre Feasibility Study Part A

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EXECUTIVE SUMMARY

Access to nature and associated opportunities for recreation and community connection have direct and indirect positive impacts on individual and community health and wellbeing. Accessible natural environments promote active lifestyles, lifelong learning and community resilience. Wetlands are among the most important and productive natural systems in the world, providing diverse environmental, social and economic services. However, the value of these services are not well recognised in the broader community or necessarily fully considered in development planning and decision-making.

Increased chronic disease (associated with insufficient physical activity among other factors), young people's mental health and social exclusion are major issues impacting Hobsons Bay and the five other municipalities in Melbourne's west. Wetlands and their flora and fauna are under increasing threat worldwide, and the need to effectively conserve them is paramount, especially where high value wetlands occur adjacent to large and growing human populations. Hobsons Bay and Wyndham share an interface with an extremely highnatural value set of wetlands. With their combined large and growing populations, wise management of these natural assets is paramount.

Hobsons Bay Wetlands Centre Inc. was founded in 2018 with the purpose of establishing an accessible and inclusive wetlands centre in Melbourne's West. The vision is to create a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious *natural environment.* The proposed Hobsons Bay Wetlands Centre builds on an earlier proposal (Lane & Wood, 1989), and on successful wetland centres in Victoria and internationally. Strategic partners include: Hobsons Bay City Council, Deakin University, Ecolinc Science & Technology Innovations Centre (Department of Education & Training), Melbourne Water, City West Water, Cirqit Health, and BirdLife Australia.

A purpose-built wetlands centre incorporating sustainable, climate resilient and biophilic design principles is proposed, with facilities and service oriented toward health and recreation, and natural environment education and conservation. This will likely include: flexible indoor and outdoor public spaces, education and research space and flexible office spaces (for professionals, researchers and volunteers). A café and public restrooms also form part of the wetlands centre proposal.

HD Graham Reserve in Altona Meadows has been identified as the proposed location for the Wetlands Centre, consistent with community support for a 'place for nature' within the reserve which is also home to the Altona Sports Centre. The proposed location is adjacent to the 100 Steps of Federation (in Truganina Park), Laverton Creek and shared paths connecting Point Cook. Altona Meadows and Altona. It is also adjacent to Cheetham Wetlands – the northernmost part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.

HBWC Inc. has proposed a sustainable operational business model underpinned by strategic business and research partnerships based at the Wetlands Centre, together with short and medium-term leasing of

professional and community spaces within the centre. Discussions to confirm capital, operational and in-kind contributions of strategic partners are underway. Funding from Commonwealth and State Governments, and philanthropic trusts to support construction of the Wetlands Centre and delivery of innovative programs to address health inequity issues and climate change impacts will also be sought. Potential economic, social and environmental risks to the success and sustainable operation of the Wetlands Centre have been identified, together with strategies to manage these risks.

Hobsons Bay Wetlands Centre aims to provide local and regional communities in Melbourne's West with an inspiring place for active and passive recreation, environmental education, nature conservation and research, and connection with others.



1. Introduction

Hobsons Bay Wetlands Centre (Incorporated) is a not-for-profit community group passionate about connecting people with nature.

Our vision is for a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious natural environment.

HBWC Inc. was incorporated in August 2018 with the purpose of creating an accessible and inclusive wetlands centre in Melbourne's West that provides opportunities for:

- recreation for health and wellbeing
- education and learning in our natural environment
- conservation and research programs to care for nature
- connection with others at an inspiring meeting place.

The feasibility of a Hobsons Bay Wetlands Centre located at HD Graham Reserve (290 Queen Street, Altona Meadows; see Figure 1) is presented in this two-part document. Part A is the Feasibility Study, with supporting information presented in Part B. The Feasibility Study builds on the vision and concept for the Wetlands Centre developed by HBWC Inc. through a series of roundtable sessions involving all the project partners.

HBWC Inc. and the proposed Hobsons Bay Wetlands Centre are introduced in Section 1 (Feasibility Study Part A). Section 2 describes the rationale for wetland centres (generally) and for the proposed Hobsons Bay Wetlands Centre (specifically), with further information on the proposed Wetlands Centre presented in Section 3. An outline of the proposed partnership-based sustainable business model for the Wetlands Centre is provided in Section 4 and a desktop risk assessment is presented in Section 4.5. The feasibility of establishing the proposed Hobsons Bay Wetlands Centre and its sustainable operation into the future is summarized in Section 5.



Figure 1. Proposed hobsons Bay Wetlands Centre location: H D Graham Reserve, 290 Queen Street, Altona Meadows (Image: Google Earth January 2018)

Strategic partners of HBWC Inc. include: Hobsons Bay City Council, Deakin University, Ecolinc Science and Technology Innovations Centre (Department of Education and Training), Melbourne Water, City West Water, Cirqit Health and BirdLife Australia.

HBWC Inc. operates with a strong emphasis on good governance. The Executive Committee, chaired by Dr. Marilyn Olliff (Hobsons Bay Citizen of the Year, 2019), is supported by four working groups: governance and revenue; feasibility

study and sustainable business model; public relations and events; and citizen science. Executive Committee members have diverse professional experience spanning business management, environmental management, volunteer management, and education and community engagement.

2. Wetlands Centre Rationale

2.1 Wetlands and Community

Wetlands are natural or constructed areas where water is the primary factor controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land, or where the land is covered by water (RCS 2016). Wetlands are among the most important and productive ecosystems in the world (DoE 2016).

Australia is a signatory to the Ramsar Convention on Wetlands, an intergovernmental treaty that provides the

framework for local and national action and international cooperation for the conservation and wise use of wetlands, as a contribution towards achieving sustainable development throughout the world (RCS 2016).

A series of wetlands extending from Hobsons Bay to the Bellarine Peninsula were designated as a Wetland of International Importance under the Ramsar Convention on Wetlands in 1982. The Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site covers 22,650 hectares and comprises six distinct areas: Point Cooke/Cheetham, Werribee/Avalon, Point Wilson/Limeburners Bay, Swan Bay, Mud Islands, and the Lake Connewarre complex (DELWP 2018).



Figure 2. Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site (Source: DELWP 2018).

The Ramsar site includes various wetland types ranging from shallow, marine waters and estuaries to freshwater lakes, seasonal swamps and seagrass beds. Over one-hundred and fifty species of birds have been identified at Cheetham wetlands (Herman 2019) with many birds returning year after year. Tens of thousands of ibis roost in the area and up to 65,000 migratory waders occur in summer, making it the sixth most important site for waders in Australia. The area also supports rare bird species, notably the critically endangered Orange-bellied Parrot (RSIS 1998). Further information about the Port Phillip (Western Shoreline) and Bellarine Peninsula Ramsar Site and associated management plan is provided in Appendix B.

Wetlands provide diverse environmental, social and economic services. They improve water quality, provide flood and storm mitigation, act as a carbon sink, provide habitat for biodiversity and threatened species and provide communities with recreation and tourism.

However, important economic, social and environmental values provided by wetlands are not well recognised in the broader community or necessarily fully considered in development planning and decision-making. Population growth and associated peri-urban development is a major cause of wetland degradation or decline. Other current and increasing future risks to wetlands and the diverse services they provide include the regulation of flows, climate change, invasive species and unmanaged human access (DEE nd.; Antos et al. 2007).

Building community awareness, interest and participation in wetlands conservation is an important part of sustainable wetland planning and management (DEE nd.). The actions and decisions of individuals and local communities, industry, and all levels of government are critical to ensuring wetlands are used wisely.

2.2 Wetland Centres

Wetland centres are places for interaction between people and wetland environments. They support regular communication, education, participation and awareness activities that advance wetland conservation. Wetland centres usually provide supporting facilities for visitors (RS 2014).

There are wetland centres in every Australian state and territory ranging from small, non-staffed interpretation facilities to dedicated centres with trained staff. Several are associated with Ramsar sites and some present opportunities for new or diversified economic enterprises (DEE nd.).

There is currently no centre accessible to the public for learning about the Port Phillip Bay Western Shoreline Ramsar site and the importance of wetlands more generally, even though it is the Ramsar site closest to the largest population in Victoria.

The proposed Hobsons Bay Wetlands Centre would address this gap and also help to promote and leverage services provided by existing wetland centres in Victoria which include:

- Serendip Sanctuary, Lara (Parks Victoria).
- Edithvale-Seaford Wetland Education Centre, Seaford (Melbourne Water)
- The Briars Wetlands and Visitors Centre, Mount Martha (Mornington Peninsula Shire Council)
- Coolart Wetlands and Homestead, Somers (Parks Victoria)
- Winton Wetlands, Chesney Vale (Winton Wetlands Committee of Management).

Wetland centres provide a hub for building community awareness, interest and capacity in the conservation and wise use of wetlands. They also provide a base for passive and active recreation, connecting with nature, and connecting with community.

2.3 Health, Wellbeing and the Environment

'People with access to nearby natural settings have been found to be healthier overall than other individuals. The longer-term, indirect impacts [of access to nearby natural settings] also include increased levels of satisfaction with one's home, one's job and with life in general' (Kaplan & Kaplan 1989).

Access to nearby natural settings benefits community health by enabling healthy and active lifestyles and lifelong learning. Healthy Parks Healthy People is a global movement, supported by Parks Victoria¹, that acknowledges the scientific evidence linking nature with positive health outcomes (Parks Victoria 2015).

Public health and wellbeing benefits associated with access to open space, nature and greenery include:

- Promoting regular physical activity has become a public health priority worldwide, and the design of our buildings, open spaces and streets all have the potential to increase human activity. Destinations such as a new wetlands centre is an example of an attractor that will help to initiate walking and cycling (Koojsari et al. 2013).
- Improving people's local connection to nature helps to improve their connection to the biosphere too (Kirkpatrick et al. 2012). This can result in greater advocacy and support for a wide range of environmental outcomes.
- Participatory approaches are critical for the success of vegetation in general (Dobbs et al. 2014). The groundup participation by the Hobsons Bay Wetlands Centre members provides valuable community stewardship that will benefit the ongoing health of the Ramsar wetlands, waterways and parklands.
- Students with natural landscapes for play, learning and view show positive moods and reduced stress, anger, inattention and problem behavior (Chawla 1998).

Analysis in USA (Browning *et al.* 2017) identified four types of values that community members believe their nature centres provide. These include:

- environmental connection
- leisure provision
- community resilience
- civic consciousness.

Environmental connection, which included providing access to nature, encouraging pro-environmental behaviour, and increasing environmental awareness, was considered the most important service nature centres provide. Leisure provision (e.g. providing a place to exercise, relax, and participate in outdoor recreation) and community resilience (e.g. contributing to the local economy, making the community more beautiful, developing a sense of community pride) were also identified as important services provided by nature centres (Browning et al. 2017).

The attachment that people feel to places and parks is derived from the social relationships these places support, not just their physical characteristics. Further, place / park users will find the attachment in different ways, for example a hiker is more attached to the whole park, and a biker is more attached to the trail within the park. Both are important sources of loyalty to help people return to, care about, and advocate for a place (Plunkett *et al.* 2019).

¹ https://www.parks.vic.gov.au/healthy-parks-healthy-people

2.4 Rationale for a Wetlands Centre in Melbourne's West

Melbourne's western shoreline is unique in that a large and growing human population exists near an extremely highnatural value set of wetlands, whose values rely on wise management (Antos et al. 2007). The local area is recognised as a nationally and internationally important bird area (Birds Australia 2009) and includes important biodiversity sites (HBCC 2017a). A wetlands education and research service in Melbourne's West was first proposed more than thirty years ago, recognizing the significance of wetlands in the area (Lane & Wood 1989).

Our understanding of the value nature and nature centres provide to the health and wellbeing of communities has increased over the ensuing years (refer section 3.3). The population of Hobsons Bay, and of Melbourne's West, has also increased during this time creating an even more compelling rationale for providing greater local access to natural settings for all population groups.

Local research by Weston et al. (2006) showed key segments of local communities in the Altona area had a low awareness of the protected off-limits wetlands yet displayed high awareness of places in which they have a personal connection. Weston et al. concluded that creating a sense of awareness and connection with protected wetlands is likely to grow support for their wise management.

The current proposal for a Hobsons Bay Wetlands Centre builds on the Lane & Wood proposal (1989), and on successful wetland centres in Victoria and internationally. It proposes facilities that enable:

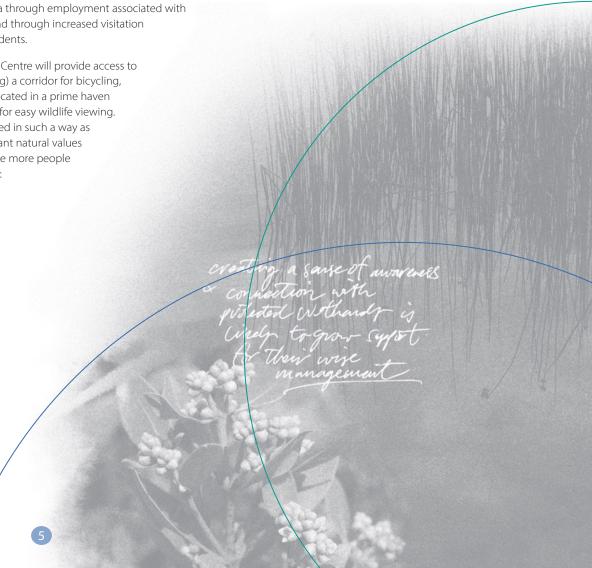
- enhanced active and passive recreation opportunities in the local area, including people with reduced mobility
- increased community connection, including communitybased health and wellbeing programs
- student and community education focused on increasing connection with nature and minimising harmful impacts on conservation values

- access for a wider range of community members to areas adjacent to the wetlands while providing a buffer to the Ramsar-listed Cheetham Wetlands.
- volunteer activities that contribute to protecting local habitat and ecosystem services
- Activation of 'Green Prescription' and 'Nature Dose' public health interventions

These facilities and associated services provide an economic benefit to the local area through employment associated with the Wetlands Centre and through increased visitation by community and students.

Hobsons Bay Wetlands Centre will provide access to (and a destination along) a corridor for bicycling, running and walking located in a prime haven for wildlife and a place for easy wildlife viewing. This will be implemented in such a way as to preserve the important natural values of the area. It will enable more people to connect with nature:

- more people from the local neighbourhood (Hobsons Bay residents) visiting the wetlands and foreshore via more regular walks or special events
- more people from the regional (Melbourne's West) visiting for recreational activities or special events.



3. Proposed Hobsons Bay Wetlands Centre

3.1 Purpose and Partners

A proposal for a wetlands centre in the City of Hobsons Bay is presented in the Hobsons Bay Wetlands Centre Concept Plan (HBWC 2019). The vision is for a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious natural environment.

The aim is to create an accessible and inclusive wetlands centre in Melbourne's West that provides opportunities for:

- recreation for health and wellbeing
- education and learning in our natural environment
- conservation and research programs to care for nature
- connection with others at an inspiring meeting place.

The proposed wetlands centre is supported by strategic partners of Hobsons Bay Wetlands Centre (Incorporated): Hobsons Bay City Council, Deakin University, Melbourne Water, City West Water, Ecolinc Science and Technology Innovation Centre (Department of Education and Training), Cirqit Health and BirdLife Australia.

Western Metropolitan Tourism, LeadWest, Greening the West, and Friends of Skeleton Creek and Altona Bay Wetlands are active supporters. In-principle written support has also been received from more than 20 organisations in the Hobsons Bay area. Engagement with community stakeholders, government and industry stakeholders, and corporate and philanthropic sponsors is continuing (HBWC 2019).

3.2 Strategic Context

The proposed Hobsons Bay Wetlands Centre will support the implementation of international, Commonwealth, State and local regulation and policy through its programs and facilitates (HBWC 2019).

Table 1. International, Commonwealth, State and local regulation and policy supported by the proposed Hobsons Bay Wetlands Centre through its programs and facilitates (Source: HBWC 2019).

	Recreation	Education	Conservation	Connection with others
INTERNATIONAL				
Ramsar Convention on Wetlands		•	•	
UN Sustainable Development Goals	•	•	•	•
COMMONWEALTH				
Environment Protection and Biodiversity Conservation Act 1999		•	•	
National Sports Plan	•			•
STATE				
Victorian memorandum for health and nature	•	•	•	•
Flora and Fauna Guarantee Act 1988			•	
Port Phillip Bay (Western Shoreline) and Bellarine Peninsula RAMSAR Site Management Plan 2018		•	•	
Protecting Victoria's Environment - Biodiversity 2037	•	•	•	
DELWP's Waterways of the West 2020	•	•	•	•
MW's Healthy Waterways Strategy 2018	•	•	•	•
LOCAL				
Hobsons Bay City Council (HBCC) Council Plan 2017-2021	•	•	•	•
HBCC Open Space Strategy 2018	•		•	•
HBCC Biodiversity Strategy 2017-2022		•	•	
HBCC Economic Development Strategy 2015-2020	•	•	•	•
HBCC Tourism Strategy 2019-2024	•	•	•	•
HBCC Living Hobsons Bay Water Management Plan		•	•	

3.3 Proposed Location

The south-east corner of HD Graham Reserve (290 Queen Street, Altona Meadows) has been identified as the preferred site for the Hobsons Bay Wetlands Centre (Figure 3) following discussions with Hobsons Bay City Council. This location is consistent with community support for a 'place for nature' in the south-east corner of the reserve identified through community engagement to inform the HD Graham Reserve Masterplan (HBCC 2018).

The proposed location for the Hobsons Bay Wetlands Centre is adjacent to:

- Laverton Creek and Laverton Creek Trail
- Truganina Wetland and Bay Trail West
- Truganina Park and the 100 Steps of Federation
- Altona Sports Centre (HD Graham Reserve).

Laverton Creek Trail and Bay Trail West (Figure 3) provide direct walking and cycling access to the proposed Wetlands Centre from Altona in the east, Altona Meadows, Point Cook in the west and Laverton in the north west. There is a bus stop on Queen Street adjacent to Andrew Park Drive (approx. distance: 600m) and existing car parking facilities at Truganina Park (approx. distance: 300m) and Altona Sports Centre (approx.

Altona Sports Centre

Queen Street

Proposed Wetlands Centre Location

Laverton Creek Trail

Laverton Creek

Truganina Wetland

Truganina Park

100 Steps of Federation

Bay Trail West

Figure 3. Proposed Hobsons Bay Wetlands centre location within HD Graham Reserve, accessed from Andrew Park Drive via Queen St, Altona Meadows (Image: Google Earth January 2018).

distance: 200m). The provision of additional car parking is not proposed as part of the Wetlands Centre development.

A café, nature-play space and public toilets (accessible when the centre is open) at the proposed Wetlands Centre will also benefit visitors to Truganina Park and the 100 Steps of Federation, who don't currently have access to public amenities. This enhances opportunities for all-ages and all-abilities to access the environmental, recreation and social benefits of this community asset.

The proximity of the proposed location to wetland environments, parks and recreation infrastructure, urban communities in Melbourne's West and Melbourne's CBD is important to the Wetlands Centre proposition and aims to provide opportunities for recreation, education, conservation and community. Laverton Creek and Truganina Wetland (immediately adjacent to the proposed location) provide direct visual and physical access to aquatic landscapes. The adjacent 100 Steps of Federation lookout (in Truganina Park) provides Wetlands Centre visitors with unique elevated views over the Cheetham Wetlands (Figure 4), Port Phillip Bay and the Melbourne CBD skyline.

A preliminary site impact assessment for the proposed Hobsons Bay Wetlands Centre is included in this Feasibility Study as Appendix A.

3.4 Proposed Facilities and Services

Community engagement has been undertaken by HBWC Inc. and its strategic partners to understand community views in relation to the use of HD Graham Reserve and Truganina Park. Findings from these community engagement activities (refer Appendix E) are reflected in the concept design brief for the Hobsons Bay Wetlands Centre (refer Appendix D). The concept design will adopt a staged development approach to enable works to be undertaken as capital and infrastructure funding is secured.



Figure 4. Public land and land managers in the vicinity of HD Graham Reserve (Source: HBCC 2018).

A purpose-built Hobsons Bay Wetlands Centre incorporating sustainable, climate resilient, biophilic and CPTED design principles is proposed, with facilities and services oriented toward recreation for health and well-being, and natural environment education and conservation (including complimentary volunteer activities). This will likely include:

- education and research space (including equipment storage space)
- flexible office spaces (including a centre manager's office, professional/research/volunteer work-areas)
- flexible indoor public spaces (e.g. interpretative space with virtual / augmented reality facilities, community meeting/ activity spaces and gallery spaces)

- outdoor public spaces (e.g. indigenous plantings, paths, Truganina Wetland boardwalk linking the Wetlands Centre to the 100 Steps of Federation, Truganina
- Wetland water sampling platform, shaded seating, nature-play)
- café
- micro-retail outlet (e.g. wetlands/nature based products)
- public restrooms (accessible when the centre is open).

Other outdoor elements may include: freshwater wetlands, rainwater tank(s), raingarden(s), swales; garden beds; predator-proof fencing to protect biodiversity/habitat areas; bicycle parking. Wetlands Centre signs (from vehicular and pedestrian / cycling routes) and ecological and cultural interpretation.

Inclusion of a café as part of the Wetlands Centre is considered an important part of the proposal. An independent café with strong alignment with the vision and principles of HBWC Inc. is preferred over a centre-run operation. The proposed Wetlands Centre location, with north-east facing water and nature views (to Laverton Creek), proximity to Truganina Reserve and the 100 Steps of Federation, and to Laverton Creek Trail / Bay West Trail are important considerations for the sustainability of a café within the Wetlands Centre.

A micro-retail outlet is proposed as a means of promoting the Wetlands Centre and providing an opportunity to sell appropriate wetlands / nature-based products (e.g. Wetlands Centre t-shirts, books, gifts, toys, souvenirs, artwork). Movable display counters and product storage within the general use area of the Wetlands Centre is proposed (rather than a dedicated retail space). This service would be managed by HBWC Inc.

It is proposed to open the Wetlands Centre to the public seven days a week, with no charge for entry to access public services and facilities. Fees will be charged for participation in programmed activities. This outcome will be dependent on achieving a sustainable business model.

4. Partnership-Based Sustainable Business Model

An indicative construction and landscaping cost estimate for the proposed Hobsons Bay Wetlands Centre (700m²) is \$8-10 million over two years. This figure is based on construction costs for a similar centre, 'The Briars' Information Centre at Mount Martha, managed by Mornington Peninsula Shire. The annual operating budget of the Hobsons Bay Wetlands Centre is estimated to be \$170,000.

Funding from Commonwealth, State and Local Government as well as corporate and philanthropic trusts will be sought for construction of the Wetlands Centre and associated infrastructure (e.g. nature playground, landscape features). Funding submissions will seek to align funding opportunities with the various proposed Wetlands Centre services and associated public infrastructure (e.g. research and education spaces, community spaces, boardwalks). Additional program funding will also be sought through other avenues (e.g. Ramsar grants).

The Wetlands Centre will be designed using Hobsons Bay City Council's Environmentally Sustainable Design principles to showcase best-practice development of a community facility. A staged development approach is proposed to enable works to be undertaken as capital and infrastructure funding is secured.

REMPLAN modelling indicates construction of the proposed Wetlands Centre will generate 8 construction jobs, with an additional 12 flow-on jobs in the region (REMPLAN). Post construction, the Centre will generate 3 new fulltime jobs (Centre Manager, Cafe Manager and Teacher). Several new casual roles will be created in the cafe and in program delivery. Some existing roles will be relocated to the Centre (e.g. health promotion officer).

4.1 Governance

Hobsons Bay Wetlands Centre Incorporated (ABN 50 813 083 752; registered 16 September 2018) provides the formal structure to achieve the organisations vision for a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious natural environment. It reflects the collective aspirations of strategic partners and supporters in relation to the establishment and sustainable operation of a Wetlands Centre in Melbourne's West.

The HBWC Inc. Executive Committee, chaired by Dr. Marilyn Olliff, governs the strategic and operational activities of the organisation, supported by four working groups:

- governance and revenue
- feasibility study and sustainable business model
- public relations and events
- citizen science.

Working groups to govern education and interpretation, and health and wellbeing, are under development during 2020.

Strategic partner organisations and the local community are represented on the Executive Committee, with members bringing diverse professional experience spanning business management, environmental management, volunteer management, and education and community engagement and are supported by active financial members of the organisation.

The Executive Committee is currently focused on implementing a sustainable partnership model based on other successful wetlands centres, and developing a robust and compelling funding proposition for the staged development of a purpose-built wetlands centre at HD Graham Reserve, Altona Meadows. A proposed Hobsons Bay Wetlands Centre Charter will outline the organisation's vision and principles

and the commitment of (and to) strategic partners. Individual agreements between HBWC Inc. and Hobsons Bay City Council (as the land manager and proposed building owner), potential Wetlands Centre tenants and program providers will be developed as part of ongoing engagement with HBWC Inc. strategic partners.

HBWC Inc. is also focused on working with its strategic partners to develop and deliver recreation, education, conservation and community programs, building on several successful and well attended sessions in 2019. These included World Wetlands Day and World Mental Health Day events, and workshops and activities spanning: field sketching; aquatic invertebrates; and science, art and birds.

4.2 Strategic Partners

Strategic partners of Hobsons Bay Wetlands Centre (Incorporated) include:

- Hobsons Bay City Council
- Deakin University
- Ecolinc Science & Technology Innovations Centre (Department of Education & Training)
- Melbourne Water
- City West Water
- Cirgit Health
- BirdLife Australia.

Hobsons Bay City Council manages HD Graham Reserve in Altona Meadows (the proposed Wetlands Centre location) and has proposed a multi-year agreement with HBWC Inc. to support the operations of the Wetlands Centre. This agreement would provide financial support for utility and building services expenses in recognition of the contribution the Wetlands Centre will make to local community and environment. HD Graham Reserve is Crown Land with Hobsons Bay City Council having committee of management responsibility.

Deakin University's strategic support for the Wetlands Centre aligns with its commitment to environmental sustainability, wetland-based research (including integrative ecology and blue carbon), and its focus on building partnerships with community, industry and government².

Ecolinc Science & Technology Innovations Centre (established by the Department of Education and Training) is focused on the development and delivery of innovative educational programs focused on environmental sustainability. The Centre runs a range of programs (including wetland education) for primary and secondary school students and teachers aligned with the Victorian Curriculum³. The Centre operates from the Ecolinc Science and Technology Innovations Centre at Bacchus Marsh and delivers offsite, outreach and fieldwork programs through partnership-based satellite sites. Hobsons Bay Wetlands Centre provides Ecolinc with an opportunity to address current capacity constraints at their Bacchus Marsh centre and expand offsite, outreach and fieldwork programs.

Melbourne Water is committed to enhancing life and liveability for the greater Melbourne region, and manages and protects the city's major water resources for the community. Melbourne Water collaborates with state and local government, water corporations and community to support healthy waterways, manage flood risks and increase community flood preparedness. Melbourne Water will be doing habitat restoration and landscaping for the endangered Altona Skipper Butterfly on Laverton Creek, in the immediate vicinity of the proposed site for the wetlands centre. Truganina Swamp (adjacent to HD Graham Reserve) is managed under Melbourne

Water's Sites of Biodiversity Significance program, making it eligible for additional investment beyond the ongoing funding for vegetation management and amenity due to its high natural values. Melbourne Water's Waterwatch program provides opportunities for citizen science and school education through frog, and waterbug censuses, water quality testing and the school River Detectives program⁴. Melbourne Water also manages the Western Treatment Plant and associated wetlands (forming part of the Werribee/Avalon area of the Port Philip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site)⁵.

City West Water provides drinking water, sewerage, trade waste and recycled water services to customers across inner Melbourne and the western suburbs. They manage the Altona Treatment / Water Recycling Plant and associated wetlands (adjacent HD Graham Reserve), and collaborates with government, industry and community through Greening the West to enable healthy liveable communities supported by sustainable water management⁶. A stormwater harvesting concept plan for Truganina Wetland has been developed by City West Water to potentially provide water for irrigation of HD Graham Reserve.

Cirqit Health facilitates a social response to health and wellbeing for people in Melbourne's south-west, complementing general practice services provided by the Altona North Medical Centre. Cirqit Health supports and provides spaces for community-led care initiatives including local health and wellbeing groups, building resilience and fostering social connections⁷.

BirdLife Australia is an independent, not-for-profit organisation dedicated to achieving outstanding conservation results for native birds and their habitats. The organisation, which currently has over 10,000 members and a further 65,000 supporters, has roots back to the Australasian Ornithologist's Union (established in 1901) and Bird Observers Club (1905)⁸. BirdLife Australia indicated their support for the proposed Hobsons Bay Wetlands Centre, offering HBWC Inc. affiliate membership of BirdLife Australia. There are opportunities for the Wetlands Centre to support BirdLife Australia's threatened species programs (e.g. migratory shorebirds, threatened wetland birds, threatened beach-nesting birds, Swift Parrot).

Several other government organisations, in addition to the strategic partners, have supported the work of HBWC Inc. on the Hobsons Bay Wetlands Centre proposal, including the Department of Environment, Land, Water and Planning (DELWP), Parks Victoria, and Port Phillip and Westernport Catchment Management Authority.

Strategic Partner Contributions

Potential strategic, financial and operational contributions from strategic partners to support the establishment and sustainable operation of the Hobsons Bay Wetlands Centre are presented in Table 2. Contributions by HBWC Inc. are summarised in Table 3. Potential contributions will be confirmed through subsequent roundtable sessions and discussions with strategic partners.

Potential involvement and contributions by other organisations (for example, DELWP, Parks Victoria, Catchment Management Authorities, Waterways of the West, health networks) will continue to be explored by HBWC Inc.

- 2 Deakin University: https://www.deakin.edu.au/about-deakin/strategic-direction; https://www.deakin.edu.au/about-deakin/strategic-direction; https://www.deakin.edu.au/about-deakin/strategic-direction; https://www.deakin.edu.au/about-deakin/strategic-direction; https://www.deakin.edu.au/cie; <a href="https://ww
- B Ecolinc: https://www.ecolinc.vic.edu.au/about/about-ecolinc
- 4 Melbourne Water (Waterwatch): https://www.melbournewater.com.au/community-and-education/waterwatch-programs
- 5 Melbourne Water: https://www.melbournewater.com.au/about-us; https://www.melbournewater.com.au/about-us/strategies-achievements-and-policies
- 6 City West Water: https://www.citywestwater.com.au/about_us/what_we_do.aspx; https://www.citywestwater.com.au/about_us/what_we_do.aspx; https://www.citywestwater.com.au/about_us/what_we_do.aspx;
- 7 Cirgit Health: https://cirgithealth.com.au/about-page
- 8 Birdlife Australia: https://birdlife.org.au/who-we-are

 Table 2. Strategic Partner potential contributions to the Hobsons Bay Wetlands Centre.

Organisation	Potential Contribution	Description
Hobsons Bay City Council	Advocacy	Securing capital / establishment funds from State and Commonwealth Governments
	Capital funding (amount to be determined)	Proposed asset owner
	Legal / administrative (to be confirmed)	Lease agreements
	Operational funding (amount to be determined)	Utilities, building services, maintenance
	In-kind support (amount to be confirmed)	Council-run environmental programs
Deakin University	Operational funding	Rent of tertiary education / laboratory spaces, offices, storage
	In-kind support (to be confirmed)	Relevant academics as speakers for events (e.g. World Wetlands Day, World Mental Health Day) Citizen science (e.g. Blue Carbon Lab) Input to design (architecture and landscape / outdoor facilities)
Ecolinc (DET)	Operational funding	Rent of laboratory, teaching spaces, offices, storage
	In-kind support	DET funded teacher (environmental programs) Curriculum development
Melbourne Water	Capex Opex	Truganina wetland sampling platform Plantings for Altona Skipper butterfly Grant to support education or wetland protection
	In-kind (to be confirmed)	Citizen Science: waterwatch, estuary watch, Altona skipper butterfly
City West Water	Capital (infrastructure) (to be confirmed)	Potential H D Graham Reserve stormwater harvesting system
	In-kind (to be confirmed)	
Cirqit Health	Operational funding	Use of centre for green prescriptions and other interventions
Birdlife Australia (BLA)	In-kind (to be confirmed)	The Wetlands Centre will become an Affiliate of BLA and collaborate on threatened species programs including research and citizen science. HBWC Inc. has become the Guardian of the Altona and Cheetham Key Biodiversity Area for BLA

Table 3. HBWC Inc. contributions to the Hobsons Bay Wetlands Centre.

Organisation	Potential Contribution	Description
HBWC Inc.	Governance (in-kind)	Time and expertise of the Executive Committee
	Operations (in-kind)	Time and expertise of the working groups
	Fundraising (in-kind)	Identification and preparation of grant submissions and other fundraising.
		(HBWC Inc. is currently seeking Charity and Deductible Gift Recipient (DGR) status)
	Stakeholder engagement (in-kind)	Engaging with strategic partners, philanthropic organisations and other stakeholders on governance and operational matters.
	Community engagement (in-kind)	Engaging with community through communications and events (e.g. guided walks, birdwatching, art, culture).

 Table 4. Potential Hobsons Bay Wetlands Centre programs and services (subject to formal agreement).

Program / Service	Audience	Organisation
Nature-based events / activities (e.g. walks, birdwatching, art, culture)	Community	Hobsons Bay City Council HBWC Inc. Commercial operators
Nature-based play	Community	Hobsons Bay City Council Commercial operators
Health and wellbeing events / activities	Community	Cirqit Health Hobsons Bay City Council Other providers
Tertiary education / research / conservation	Tertiary students	Deakin University
School education / conservation	Primary/secondary school students	Ecolinc (DET)
Citizen science	Community	HBWC Inc. Blue Carbon Lab
Café	Community / other program participants/ students	(to be determined) ⁹
Micro-retail outlet	Community	HBWC Inc.
Public Toilets	Community / other program participants	Hobsons Bay City Council

⁹ The owners of Birdcage Altona Café and Little Rosebery Café have provided strategic advice on the feasibility and operation of a café at the wetlands centre and have expressed interest in exploring this proposition with HBWC Inc.

4.3 Programs and Services

The proposed Hobsons Bay Wetlands Centre will provide a base for strategic partners to offer programs and services supporting recreation, education, conservation and connection. It will also provide opportunities for other individuals or organisations to run complementary programs and services. A current understanding of potential programs and services (subject to formal agreement) is presented in Table 4.



Visitation

An initial estimate of annual visitation numbers has informed the development of the sustainable business model and operating budget for the Hobsons Bay Wetlands Centre. The estimate is based on the Centre's proposed size, programs and services and relevant information from other wetland / nature-based facilities (refer Appendix D).

Around 35,000 visits per year are anticipated within five to ten years of the establishment of the Wetlands Centre, with the timeframe strongly influenced by the adopted staged-development approach for the Wetlands Centre. This anticipated visitation figure is comprised of an estimated:

 9,000 student and teacher visitors (tertiary education / research / conservation, school education / conservation)

- 3,500 HBWC activity visitors (nature-based events / activities, wetlands/nature conservation events / activities)
- 2,500 attendees of community group meetings or events (community health and wellbeing), and
- 20,000 casual visitors (café, nature-play, public facilities).

The Wetlands Centre will generally attract a different sector of the community to the Altona Sports Centre (also located at HD Graham Reserve). However, implementation of the HD Graham Reserve Masterplan will result in an increase in sports-based visitors accessing the proposed soccer pitches / cricket oval and multi-use training field in the southern part of the reserve (refer draft masterplan; HBCC 2018). This has the potential to increase visitation to the Wetlands Centre and its café, nature play and public facilities.

Table 5. Hobsons Bay Wetlands Centre Annual Revenue Estimate. (Indicative only, will be further developed from the outcomes of Partner Roundtable 3)

Item	Annual Revenue Estimate
Tertiary Education and Laboratory Spaces Area: 265 m² (37% of total floor space) 3 x 90 m² tertiary education / laboratory spaces + storage 1 major partner (assumed vacancy rate: 2%)	\$64,000* (38%**)
School and Community Events Space Area: 240 m² (33%) Flexible open space / meeting rooms; movable furniture Schools revenue (incl. via Ecolinc programs): \$43,560 Community revenue: \$4,740	\$48,300 (28%)
Professional Office Space Area: 175 m² (24% of total floor space) 1 to 2 major partners (assumed vacancy rate: 10%)	\$38,160 (22%)
Café Area: 40 m² (6% of total floor space) 1 partner (assumed vacancy rate: 5%)	\$9,540 (6%)
Retail Sales e.g. wetlands/nature-based items	\$5,000 (3%)
Fundraising, Grants, and Donations	\$5,000 (3%)
Total (ex. GST)	\$170,000 (100%)

^{*} All revenue estimates exclude GST and assume 100% occupancy; a rental multiplier is proposed to account for estimated 10-year vacancy rates.

4.4 Financial Planning

HBWC Inc. proposes a sustainable operational business model underpinned by strategic business and research partnerships based at the proposed Hobsons Bay Wetlands Centre, and rental of professional and community spaces within the Wetlands Centre. Providing in-demand purpose-built research, education and community health and wellbeing facilities will enable the Wetlands Centre to attract strategic, long-term occupancy agreements. This supports a range of community-focused events and activities to be delivered by strategic partners without relying on revenue from community visitation / events for the sustainable operation of the Wetlands Centre.

The proposed financial model for the Wetlands Centre is based on strategic partners and other aligned organisations leasing office and event spaces. A review of national and international Wetlands Centres indicates this approach is considerably more financially sustainable than an entry-fee based model.

Estimated Annual Operating Budget

An annual operating budget for the Hobsons Bay Wetlands Centre has been prepared based on current revenue and expense estimates. HBWC Inc. is seeking charity and deductible gift recipient (DGR) statu to open opportunities for additional revenue through grants and philanthropy. Other funding sources (e.g. corporate programs and events) will also be explored.

Estimated annual revenue and expenses for the Wetlands Centre are presented in Table 5 and Table 6. Revenue estimates are informed by minimum viable rental revenue for sustainable operation of the Wetlands Centre, attractive rental rates for strategic partners, and indicative vacancy rates for the various spaces.

^{**} Proportion of total annual revenue.

Wetlands Centre Operation

The appointment of a full-time manager is considered essential to the effective and sustainable operation of the Wetlands Centre. The Wetlands Centre manager will report to the Executive Committee chair and be responsible for overseeing all Wetlands Centre operations, programs and events, fundraising and promotion, supported by Wetlands Centre volunteers. This includes planning, evaluation and reporting on programs and events, preparing fundraising submissions, managing wetlands access and safety, liaising with Wetlands Centre tenants, individual program leaders, volunteers and visitors, internal and external communications, and general administrative tasks

Long-term and medium-term rental agreements are envisaged for the main Wetlands Centre spaces (tertiary education / research, professional office spaces, café). Fees and associated revenue estimates will be revised based on a review of comparable market rates, with an aspiration for fees to be approximately 15% lower than comparable rates reflecting the public ownership and community focus of the Wetlands Centre.

Fees for use of school education and community spaces will be based on a review of comparable facilities and services and will reflect the public ownership and community focus of the Wetlands Centre.

The proportion of costs associated with utility services (e.g. electricity, gas, water/wastewater), regular maintenance, and security and cleaning to be paid by Hobsons Bay City Council (as the land manager and proposed building owner) will be confirmed through subsequent engagement with strategic partners and will be reflected in subsequent revisions of the annual operating budget.

An expense contingency of 10% is included in the estimated annual operating budget to reflect budget estimate uncertainties and any unaccounted operating costs. Where

Table 6. Hobsons Bay Wetlands Centre Annual Expenses Estimate.

Item	Annual Expense Est.
Salary (Centre Manager)	\$110,0001 (65%2)
Professional Services Accounting, Legal, Consulting, Training	\$15,000 (9%)
Utilities (partial contribution³) Electricity, Gas, Water, Wastewater, Hard Waste	\$10,000 (6%)
Insurances	\$5,000 (3%)
Operational Maintenance ⁴ Regular Maintenance; Minor Repairs	\$4,000 (2%)
Internet Internet charges, IT services	\$3,000 (2%)
Office Supplies and Printing	\$2,000 (1%)
Building Supplies	\$2000 (1%)
Security, Cleaning, Miscellaneous (partial contribution) ³	\$2,000 (1%)
Contingency	\$17,000 (10%)
Total (ex. GST)	\$170,000 (100%)

- 1 All expense estimates exclude GST.
- 2 Proportion of total annual expenses.
- 3 Utility and cleaning expenses are anticipated to be partially funded by Hobsons Bay City Council (as the land manager and proposed building owner).
- 4 Expense estimate assumes any major repairs will be funded by Hobsons Bay City Council (as the proposed building owner).

possible, surplus revenue will be accrued to fund future improvements to the Wetlands Centre.

4.5 Risk Assessment

Potential economic, social and environmental risks to the success and sustainable operation of the Hobsons Bay Wetlands Centre are listed in Table 7. Measures HBWC Inc. has taken to mitigate or manage these risks are identified, together with further work required to manage residual or unmitigated risks. Additional information on identified risks is presented below the table.

Further work during the design development phase of the proposed Wetlands Centre, and as part of ongoing governance and operational developments, is required to quantify risks. However, the identified risks are unlikely to affect the overall feasibility of the proposed Wetlands Centre.

An online Dial Before You Dig query was submitted in January 2020 to identify services near the proposed Wetlands Centre. Refer to the Site Impact Assessment (Feasibility Study Part B) for further information.

Table 7. Identified operational risks and risk mitigation / quantification measures.

Risk Categories	Measures in place / Further work	
Location		
HD Graham Reserve	HBWC Inc. has worked closely with Hobsons Bay City Council (reserve manager) on site identification.	
Governance		
Good governance	HBWC Inc. has been established as a not-for-profit entity and all members of its Executive Committee have experience and skills in managing organisations; strategic partners are represented on the Executive Committee and working groups. Further work (governance): develop, document and internally communicate and monitor governance processes as the organization grows and develop contractual agreements with strategic partners.	
Strategic partner alignment	HBWC Inc. has adopted a collaborative approach to strategic partner engagement. Further work (governance): co-develop a Hobsons Bay Wetlands Centre Charter and implement contractual agreements with strategic partners	
Financial		
Rental vacancies	Vacancy risks have been managed through conservative revenue estimates based on market research and financial modelling. Further work (governance): review medium-term vacancy rates as part of subsequent financial planning and contract negotiations.	
Economic downturn / volatility	Economic risks are mitigated in-part through a multi-sectoral / multi-partnership approach. Further work (governance): undertake market research and financial modelling to understand the impacts of changes in revenue and expenses on the sustainability of the business model; ongoing engagement with strategic partners to understand their medium-long term commitment to HBWC Inc. with respect to potential future economic conditions. The community health and wellbeing sector is particularly sensitive to economic conditions; this sector-specific risk needs to be monitored and managed.	

Risk Categories	Measures in place / Further work	
Operating costs	Further work (governance / design development): ensure operational costs (including utility costs) can be apportioned to individual partners/programs as necessary through building design (e.g. separate meters) and contractual agreements.	
Reputation and Public Liabil	lity	
Social license / reputation	HBWC Inc. has been building its social license through a strong emphasis on good governance and effective stakeholder and community engagement. Further work (governance): continue to focus on good governance, effective communication and engagement, and continuous improvement.	
Public Liability	HBWC Inc currently holds public liability insurance cover for community activities. Further work (governance): implement effective operational risk management policies and practices; arrange the necessary insurance cover (in collaboration with strategic partners).	
Security		
Vandalism, arson and theft	Further work (design development): ensure effective application of crime prevention through environmental design (CPTED) principles in the siting and design of the Wetlands Centre building, associated facilities and landscape; ensure appropriate operational policies and practices are developed, implemented and reviewed.	
Health and safety		
Occupational health and safety	Good governance and culture underpin the health and safety of staff and visitors. Further work (governance): ensure appropriate operational policies and practices are developed, implemented and reviewed.	

Risk Categories	Measures in place / Further work	
Environment and heritage		
Inundation / sea level rise	The location of the proposed Wetlands Centre is: outside the Hobsons Bay Planning Scheme <i>Land Subject to Inundation Overlay</i> (LSIO) area, and outside the area defined by the 1% AEP flood extent plus 0.2 metres sea level rise to 2040; refer site impact assessment (Feasibility Study Part B) for further information.	
	Further work (design development): confirm (via strategic partners) that the proposed location of the Wetlands Centre is outside the area defined by the 1% AEP flood extent plus 0.8 metres sea level rise to 2100.	
Waterway health	The proposed Wetlands Centre will contribute to ameliorating risks associated with increased urban development on waterway health through community education and engagement, wetland monitoring and advocacy; refer site impact assessment (Feasibility Study Part B) for further information. Further work (design development): ensure stormwater management practices at the Wetlands Centre reflect best practice to protect local waterways and Ramsar wetlands.	
Soil contamination	A preliminary site contamination assessment for part of HD Graham Reserve was undertaken in 2016 (ESP) as part of the Altona Sports Centre extension; refer site impact assessment (Feasibility Study Part B) for further information. Further work (design development): Undertake additional soil contamination investigations once the Wetlands Centre concept design is completed and a footprint established? to determine potential soil contamination and required mitigation measures.	

Risk Categories	Measures in place / Further work
Flora and habitat	A flora and fauna assessment, including a no-net-loss analysis and land management plan for HD Graham Reserve was undertaken in 2017 (Practical Ecology) as part of the Altona Sports Centre extension; refer to the site impact assessment (Feasibility Study Part B) for further information. Further assessment should also be undertaken for any proposed study sites or areas of potential impact by visitors in the wetlands.
	Further work (design development) : undertake further flora and habitat investigations to quantify potential risks and associated mitigation measures if native vegetation is likely to be disturbed.
Cultural heritage	A cultural heritage due diligence assessment was undertaken in 2017 (Biosis) as part of the Altona Sports Centre extension; the assessment found a mandatory cultural heritage management plan was required; refer site impact assessment (Feasibility Study Part B) for further information.
	Further work (design development): review the HD Graham Reserve cultural heritage management plan with strategic partners in relation to proposed works associated with construction and operation of the Wetlands Centre to quantify potential risks and associated mitigation measures.

Governance Risks

Good governance is critical to sustainable operation of the Hobsons Bay Wetlands Centre and to achieving the HBWC Inc. vision. From the outset, HBWC Inc. has developed and implemented governance protocols and processes that support these objectives, including an inclusive membership model with strong focus on engaging and mentoring young people who have expressed a strong interest in the vision.

Alignment between HBWC Inc. and its strategic partners is also critical to the successful establishment and operation of the Wetlands Centre. HBWC Inc.'s collaborative approach to engaging with stakeholders (including strategic partners and community) has enabled the Wetlands Centre proposal to reflect and respond to the individual and collective needs and aspirations of all stakeholders. Co-developing a clear Hobsons Bay Wetlands Centre Charter and effective contractual agreements with strategic partners will support ongoing good governance.

Financial Risks

Key financial risks include:

- extended vacancies of primary spaces (e.g. tertiary education and laboratory spaces, school and community events space, professional office space)
- economic downturn / volatility
- increased operating costs.

Vacancy risks are managed through conservative revenue estimates based on market research and financial modelling. Initial revenue estimates presented in this feasibility study include estimated 10-year vacancy rates. These will need to be reviewed and incorporated in subsequent financial planning and contract negotiations.

Future economic conditions may affect the appetite or ability of strategic partners to continue delivering programs from the proposed Wetlands Centre, which would have direct impacts on financial operations of HBWC Inc.. Government and educational sector partners, of which HBWC Inc. has a number, typically (but not always) have a lower risk exposure to negative economic conditions.

The diversity of HBWC Inc. strategic partners (from a range of sectors) is likely to have a positive impact on economic risks for the Wetlands Centre. Strategies to reduce the impacts of these risks on the financial viability of the Wetlands Centre include market research and financial modelling to understand the impacts of changes in revenue and expenses on the sustainability of the business model, and ongoing engagement with strategic partners to understand their medium-long term commitment to HBWC Inc. in relation to potential future economic conditions. The community health and wellbeing sector is particularly sensitive to economic conditions. This sector-specific risk needs to be monitored and managed. However, exposure of the Wetlands Centre to this risk is mitigated in part through multi-sectoral / multi-partnership approach adopted by HBWC Inc.

Increased operating costs could negatively impact rental rates and/or the Wetlands Centre's operating budget. Establishing the ability to apportion operational costs (including utility costs) to individual partners/programs will assist in managing the impact of operating costs on the sustainability of the Wetlands Centre.

Reputation Risks

An effective partnership model requires HBWC Inc. to operate in a way that does not negatively impact its own reputation (social license) or that of its strategic partners. Risks to organisational reputation are managed through good governance and good organisational culture, together with effective contractual agreements.

Strong relationships with strategic partners assists in managing reputational risks, as well as competitive risks (e.g. school education / conservation). The HBWC Executive Committee (or

voluntary board), together with the Wetlands Centre manager, are responsible for developing and maintaining strong strategic relationships.

The Wetlands Centre can also enhance its own reputation through continuous improvement, and by paying close attention to trends in technology and design. The Wetlands Centre and the precinct should not become static, it should be constantly building its reputation and learning from experience about what makes the centre an attractive destination for recreation, education, conservation and connection.

Public Liability Risks

Public liability of HBWC Inc. and its strategic partners is an important risk for the Wetlands Centre to manage by: (i) identifying and removing / minimising risks to Wetlands Centre staff, strategic partner program staff, and visitors through the design and operation of the Wetlands Centre and associated infrastructure/ facilities, and (ii) ensuring appropriate public liability insurance is in place. Hobsons Bay City Council (As the land manager and proposed asset owner) is well placed to advise HBWC Inc. on public liability risks and risk management.

Security Risks

The proposed Wetlands Centre will be exposed to security risks (e.g. vandalism, arson and theft) similar to other public / community assets. The location of proposed Wetlands Centre has the potential to increase these risks. There are also risks to personal safety of staff, program staff and visitors. Asset and personal safety risks are managed through good design of the Wetlands Centre building, associated facilities and landscape (e.g. effective application of crime prevention through environmental design (CPTED) principles), and though appropriate operational policies and practices. Security risks, and active and passive security monitoring, will need to be reviewed and managed throughout the Wetlands Centre design process and during the operation of the Wetlands Centre.

Health and Safety Risks

Occupational health and safety is critical to the success and viability of HBWC Inc. The proposed Wetlands Centre manager, supported by the Executive Committee (or voluntary board) will need to ensure occupational health and safety risks are identified and addressed in a timely and effective manner. Effective occupational health and safety risk management is supported by good governance and culture.

Environment and Heritage Risks

Potential environment and heritage risks associated with the proposed Wetlands Centre are considered in the preliminary site impact assessment (refer Feasibility Study Part B). These include:

- inundation / sea level rise
- waterway health
- soil contamination
- flora and habitat
- · cultural heritage sites and artifacts.

The vision and aims of HBWC Inc. are directly aimed at reducing or avoiding risks associated with a declining local natural ecosystem through direct and/or indirect impacts.

5. Conclusions

Increased chronic disease, young people's mental health and social exclusion are major health issues facing Hobsons Bay and other municipalities across Melbourne's west. (HBCC 2017b, LeadWest 2020). Access to nearby natural settings benefits community health by enabling healthy and active lifestyles and lifelong learning. Hobsons Bay in a growing western region exists near an extremely high-natural value set of wetlands, whose values rely on wise management and conservation.

Wetlands provide diverse environmental, social and economic services. However, the value of wetlands is not well recognised in the broader community or necessarily fully considered in development planning and decision-making. Wetland centres provide a hub for building community awareness, interest and capacity in the conservation and wise use of wetlands. They also provide a base for passive and active recreation, connecting with nature, and connecting with community.

The proposed Hobsons Bay Wetlands Centre will support the implementation of regulation and policy related to environmental conservation and public health and wellbeing through its programs and facilitates (HBWC 2019). A purposebuilt facility for research, education and community health and wellbeing will enable the Wetlands Centre to attract strategic, long-term occupancy agreements. These strategic relationships provide a strong foundation for supporting a range of community-focused events and activities without relying on revenue from community visitation / events for the sustainable operation of the Wetlands Centre.

Capital funding totalling \$8 -10 million over two years is being sought to enable construction of a 700 m² sustainable and climate resilient infrastructure and landscaping demonstrating best-practice design of a community facility. Potential financial contributions totalling \$170,000 per year combined with operational support from strategic partners will support the establishment and sustainable operation of the Wetlands Centre.

Identified risks to sustainable operation of the Wetlands
Centre and potential site impacts associated with construction
and operation of the centre are not anticipated to affect the
overall feasibility of the proposed Wetlands Centre and can
be confirmed and managed through ongoing design and
development. Establishment and successful operation of
the Hobsons Bay Wetlands Centre is contingent on securing
capital funding and confirming primary lease agreements with
strategic partners.



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Hobsons Bay Wetlands Centre

Feasibility Study Part B (Appendices)

Prepared by Hobsons Bay Wetland Centre Inc.

in conjunction with



October 2020



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APPENDIX A Site Impact Assessment

1. Introduction

The Hobsons Bay Wetlands Centre at HD Graham Reserve, Altona Meadows is proposed as

a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious natural environment (HBWC 2019).

Potential impacts of the proposed wetlands centre are identified in this document and assessed based on a desktop review of information provided by Hobsons Bay City Council. This preliminary site impact assessment forms part of the Hobsons Bay Wetlands Centre Feasibility Study.

The aim of the wetlands centre is to create an accessible and inclusive wetlands centre that provides opportunities for:

- · recreation for health and wellbeing
- education and learning in our natural environment
- conservation and research programs to care for nature
- connection with others at an inspiring meeting place (HBWC 2019).

1.1 Purpose and Scope

The purpose of this preliminary site impact assessment is to provide Hobsons Bay City Council (as the manager of HD Graham Reserve) and other strategic partners of Hobsons Bay Wetlands Centre Inc. with information on potential impacts of the proposed wetlands centre, including recommendations for further assessment where required.

This preliminary site impact assessment is based on the following studies prepared for Hobsons Bay City Council as part of the HD Graham Reserve Draft Masterplan and extension of the Altona Sports Centre:



Figure A1. Proposed Hobsons Bay Wetlands Centre location, accessed via Andrew Park Drive, Altona Meadows (Image: Google Earth January 2018)

- HD Graham Reserve Draft Masterplan (HBCC 2018a)
- HD Graham Reserve Title, Feature and Level Survey (Adshead & McQuie 2011)
- Environmental Audit Overlay & Victorian Landfill Register online (Victoria Unearthed)
- HD Graham Reserve Preliminary Site Contamination Assessment (ESP 2016)
- HD Graham Reserve Flora and Fauna Assessment, No Net Loss Analysis, and Land Management Plan (Practical Ecology 2017) and Tree Location Plan and Arborist Rating (Tree Logic 2017)

- HD Graham Reserve proposed wetland draft concept design; Altona Tip Wetland draft concept design (E2D nd.)
- Cultural heritage due diligence assessment for proposed extensions to the Altona Sports Centre (Biosis 2017)
- Piped stormwater infrastructure, Altona Sports Centre (Citywide internal investigation).

2. Site Assessment

2.1 Location

The proposed wetlands centre location (refer Figure A1) is based on the Hobsons Bay Wetlands Centre concept (HBWC 2019). This location enables a north-east aspect overlooking Laverton Creek and is adjacent to the Laverton Creek and Bay West Trails. It is also close to the Truganina Park car park (250 m) and Altona Sports Centre (500 m). A proposed boardwalk across Truganina Wetland (Nolta Estate Main Drain) would provide a scenic nature connection between the Truganina Park car park, 100 Steps of Federation and the proposed wetlands centre.

Potential alternate locations within HD Graham Reserve are shown in Figure A2. A rapid desktop assessment of these alternate locations is presented below.

Alternate location 1 is consistent with the HD Graham Reserve draft masterplan (HBCC 2018a), maximising water views and proximity to the Laverton Creek and Bay West Trail junction. It also allows for the future construction of a stormwater treatment wetland as indicated in the draft masterplan. Removal of vegetation within the designated Bushland Management and Enhancement Area (Practical Ecology 2017; refer Figure A6) would be required.

An alternate location further upstream of Laverton Creek by approx. 100 metres is closer to the Altona sports Centre carpark, maintains water views across Laverton Creek and offers view of Port Phillip Bay.

The proposed wetlands centre location or alternate location (providing impacts of vegetation removal are acceptable) are preferred based on this rapid desktop assessment.

2.2 Culture and Site History

Natural landscape features define the spatial organisation of Aboriginal estates. Traditional land [custodianship] and access rights centred on smaller named groups that formed the broader language grouping. Clark (1990) states that around the time of European arrival, *Bun wurrung* peoples of the Kulin Nation were custodians of the coastal strip of land around Port Phillip Bay and Western port, extending West to (present day) Altona and east to Mornington Peninsula and Wilsons Promontory.

The *Yalukit-willam* [Yalukit Weelam] (meaning river camp or river dwellers) named group lived in the area now known

as the City of Hobsons Bay (Clark, 2011). *Yalukit-willam* Country extended east from the Werribee River, including Williamstown, Sandridge [Port Melbourne] and St. Kilda (Wesson 2000).

Large campsites have been recorded within Truganina [Explosives] Reserve, directly east of HD Graham Reserve within areas of preserved dune ridges. Redeposited Aboriginal cultural heritage material has also been recorded in areas of ground disturbance from the creation of the Laverton drainage channel [along the southern boundary of HD Graham Reserve]. There is potential for cultural heritage material to survive in areas of less ground disturbance within the study area (BIOSIS 2017).



Figure A2. Potential alternate wetlands centre locations within HD Graham Reserve (Image: Google Earth January 2018)

Predominant non-indigenous landuses near and including (present day) HD Graham Reserve included grazing (initially squatting runs from the early 1800s, and formal landholdings from the 1850s and 60s) and an Explosives Reserve from 1896. By 1982 the area had been reserved for a public park and recreational use, although it was fenced off and generally undisturbed for 25 years. The Altona Sports Centre was constructed in the 1980s (various sources: refer BIOSIS 2017).

The 100 steps have been created on the capped former capped hard rubbish landfill site which extended into the current Truganina Park, adjacent to HD Graham Reserve.

Cultural Heritage

A cultural heritage assessment associated with the proposed extension to the Altona Sports Centre at HD Graham Reserve was undertaken by BIOSIS in 2017. BIOSIS provided Hobsons Bay City Council with formal cultural heritage advice based on examination of the requirements of the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*, and historical heritage liabilities under the *Victorian Heritage Act 1995*, in relation to the proposed works.

A mandatory Cultural Heritage Management Plan (CHMP) was determined to be required for the proposed extension to the Altona Sports Centre. Potential for Aboriginal cultural heritage within the study area in areas of less ground disturbance was also identified (BIOSIS 2017).

BIOSIS (2017) advised that no heritage requirements existed under the Victorian *Heritage Act 1995* in relation to the proposed extension of the Altona Sports Centre. However previous land uses including tramways and associated items may still exist within the project area. BIOSIS (2017) recommended that the area be inspected as part of the CHMP to ascertain whether historic remains survive and if they are significant.

The cultural heritage assessment covered the northern part of HD Graham Reserve where the Altona Sports Centre is located (BIOSIS 2017). It did not include the proposed location of the Hobsons Bay Wetlands Centre.

The following legislative amendments made since the 2017 BIOSIS assessment have cultural heritage implications:

- Flora & Fauna Guarantee Amendment Act 2019 (introduces principles including consideration of the rights and interests of Traditional Owners and the impacts of climate change)
- Water & Catchment Legislation Amendment Act 2019 (introduces greater recognition and involvement of Traditional Owners and Aboriginal Victorians in the management of planning of waterways and catchments).

Further Assessment

The Hobsons Bay Wetlands Centre is proposed to be located on land for which the Traditional Owners have not yet been recognised as a Registered Aboriginal Party (RAP). Aboriginal Victoria has advised that the contesting parties seeking RAP status for this land include Wurundjeri & Woi Wurrung Cultural Heritage Aboriginal Corporation, Bunurong Land Council Aboriginal Corporation, and Boon Wurrung Foundation.

It is recommended that HBWC Inc. work with Hobsons Bay City Council (as the land manager and potential building owner), Melbourne Water (as the waterway manager) and DELWP to develop an appropriate Aboriginal engagement process.

A Cultural Heritage Management Plan for the southern / southeastern part of HD Graham Reserve will likely be required as part of design development for the proposed wetlands centre.

2.3 Land and Water

Land (Potential Soil Contamination)

A preliminary site contamination assessment on what was previously a gravel carpark at the Altona Sports Centre in HD Graham Reserve (approximately 400 m north-west of the proposed wetlands centre location; refer Figure A3) was undertaken in 2016 by Environmental and Safety Professionals (ESP). The contamination status of selected soils from the gravel carpark was investigated with respect to human health, and a preliminary waste categorisation for the selected soils was provided. This assessment was undertaken as part of the Altona Sports Centre upgrade based on six 1.5 m deep boreholes within the previous gravel carpark.

Based on background information, the site was used as an explosives reserve between 1901 and 1962. Therefore, the likely primary contaminants of potential concern include heavy metals, total recoverable hydrocarbons (TRH) and polycyclic aromatic hydrocarbons (PAH) (ESP 2016).

Pertinent findings from the preliminary soil contamination assessment include:

- depth of fill soil was identified to be 1.4 metres, although natural clay soil was encountered at 0.35 metres in some locations
- foreign materials such as black ash material were identified in some boreholes
- soils were determined not to be detrimental to human health in a carpark setting or for construction work
- surface gravels were preliminarily categorised as Category B – Contaminated Soil at one location, and fill soils were preliminarily categorised as Category C - Contaminated Soil (further testing would be required to confirm this)
- Category C Contaminated Soil (to be confirmed) was reported to a depth of 0.3 metres, however it may extend deeper (ESP 2016).

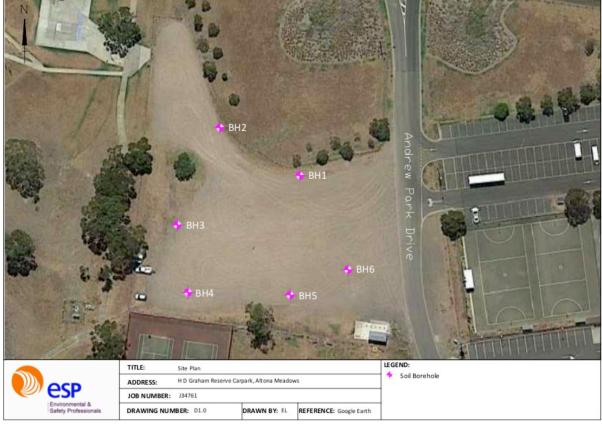


Figure A3. Borehole locations: HD Graham Reserve Carpark, Altona Meadows (Source: Preliminary Site Contamination Assessment: HD Graham Reserve. ESP 2016)

Based on findings of the 2016 assessment, ESP made the following conclusions and recommendations:

- Soils encountered during the assessment were not considered to be impacted by primary contaminants of concern to such an extent that would adversely affect human health in a carpark use exposure setting, or for construction workers (ESP 2016).
- Fill soils in all assessed areas, to a depth of approximately
 0.3 metres, are preliminarily categorised as Category C
 - Contaminated Soil in accordance with EPA Publication
 IWRG621, however, additional testing such as leachability
 testing would be required to confirm this, as well as
 additional soil sampling depending on volume of soil
 removed.

- Surface soils in all assessed areas are preliminarily categorised as Category B Contaminated Soil at one location in accordance with EPA Publication IWRG621, however, additional testing such as leachability testing would be required to confirm this, as well as additional soil sampling depending on volume of soil removed.
- Should offsite disposal be required for fill soils from the proposed carpark area, it must be in accordance with the requirements of the Victorian Environment Protection (Industrial Waste Resource) Regulations 2009. Prior to transport of Category C Contaminated Soil and Category B Contaminated Soil (if confirmed by further testing), the proposed receiving landfill should be contacted to confirm their acceptance of the material.
- Should odorous or discoloured soil, or soil not consistent with that described in this report, be observed during redevelopment or future site use, further advice should be sought from ESP.

Limitations on the use of this information are contained in ESP (2016).

Further Assessment

Additional soil contamination investigations will be required once the wetlands centre concept design is completed to determine potential soil contamination and associated potential impacts on human health at the proposed wetlands centre location.

Water (Flood Risk, Sea Level Rise, Storm Surge and Stormwater Management)

The location of the proposed wetlands centre is outside the Hobsons Bay Planning Scheme Land Subject to Inundation Overlay (LSIO) area identifying land in a flood storage or flood fringe area affected by the 1 in 100 year [1% annual exceedance probability (AEP)] flood or any other area determined by the floodplain management authority (Clause 44.04, HBPS). Laverton Creek and parts of Truganina Park are within the Land Subject to Inundation Overlay.

Melbourne Water's Planning for Sea Level Rise Guidelines, Port Phillip and Westernport Region (2017), supporting the implementation of the *Victorian Coastal Strategy* (VCC 2014), state:

For Port Phillip Bay, the predicted 2040 1% AEP flood level is 1.8 metres AHD [Australian Height Datum]. This assumes 0.2 metres sea level rise above the current adopted 1% AEP flood level of 1.6 metres AHD.

The predicted 2100 1% AEP flood level is 2.4 metres AHD, assuming 0.8 metres sea level rise.

The Victorian Costal Strategy also states that 'It is important to note that these benchmarks are for a [planning] horizon up to 2100. Sea level rise is likely to continue beyond this horizon' (VCC 2014). Consistent with current planning benchmarks, 0.2 metres sea level rise is assumed for developments planned to 2040, whereas 0.8 metres sea level rise is assumed for developments requiring a long-term planning approach, to 2100 (MW 2017).

The predicted 1% AEP flood extend plus 0.2 metres sea level rise to 2040 presented in the background report for the Hobsons Bay Climate Change Adaptation Plan Refresh 2030 (HBCC 2018b) is shown below. The 1% AEP flood extent plus 0.8 metres sea level rise to 2010 is not presented in the background report. However, the beta version of Coastal Risk Australia interactive sea level rise visualization tool (coastalrisk.com.au) developed by NGIS Australia shows that the proposed wetlands centre location is outside the projected 2100 sea level based on a 0.74 metre sea level rise, excluding coincident riverine flooding and storm surge. The Coast Risk Australia interactive website is designed to communicate coastal inundation associated with sea level rise and should not be relied upon for site specific decision making.

The proposed location of the wetlands centre is outside the area defined by the 1% AEP flood extent plus 0.2 metres sea level rise to 2040. The proposed location of the wetlands centre relative to the 1% AEP flood extent plus 0.8 metres sea level rise to 2010 will need to be confirmed.

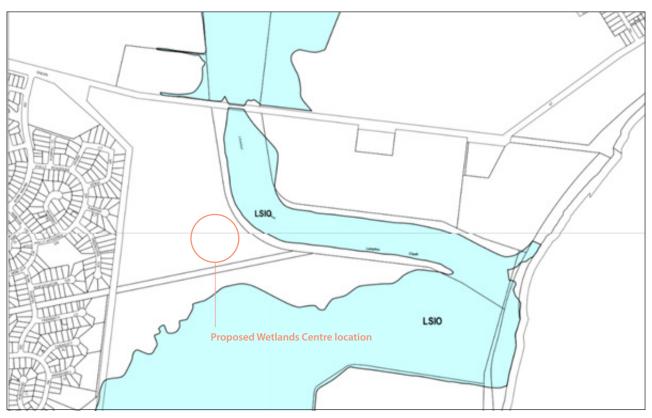


Figure A4. Land Subject to Inundation Overlay (extract from Clause 44.04 Maps 14LSIO and 22LSIO, HBPS) showing the proposed location of the Hobsons Bay Wetlands Centre.

Further information on general development requirements in relation to flood risk, sea level rise and storm surge is provided in:

- Victorian Coastal Strategy (DELWP 2014)
- Guidelines for Development in Flood-prone Areas (MW 2007)
- Planning Practice Note 53: Managing coastal hazards and coastal impacts of climate change (DELPW 2015)
- Siting and Design Guidelines for Structures on the Victorian Coast (DELWP in-development).

The proposed location for the wetlands centre is approximately 500 m north of the northern boundary of Cheetham Wetlands, a Ramsar Site protected under the *Convention on Wetlands of International Importance especially as Waterfowl Habitat*. The Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan identifies increased urban development around the wetlands as a stressor alongside sea level rise, increased storm intensity, litter, invasive species, pollutants from stormwater and increased recreation. Adjacent wetlands are above the inundation projections.

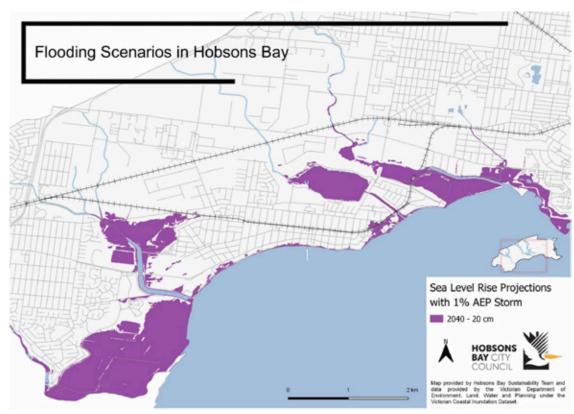


Figure A5. 1% AEP flood extent plus 0.2 metres sea level rise to 2040 (HBCC 2018b) showing the proposed location of the Hobsons Bay Wetlands Centre.

The proposed wetlands centre will contribute to ameliorating risks associated with increased urban development by helping connect community to the value of the wetlands through education, ongoing monitoring and ongoing advocacy for their care and protection.

Stormwater management practices at the proposed wetlands centre are expected to reflect best practice to protect local waterways and Ramsar Wetlands, meeting and likely exceeding updated statewide stormwater provisions set out in the Hobsons Bay Planning Scheme as described in Planning Advisory Note 75 Stormwater Management (DELWP 2018).

Further Assessment

Climate change adaptation and natural disasters resilience (including flood and fire) will need to be addressed through the design of the wetlands centre and associated facilities, and the development of policies and procedures for operation and maintenance of the wetlands centre. This includes general development requirements in relation to flood risk, sea level rise, storm surge and stormwater management based on Hobsons Bay City Council's Climate Change Adaptation Plan 2030 (in development).

2.4 Flora and Fauna

A flora and fauna assessment of HD Graham Reserve was undertaken in 2017 (Practical Ecology) to identify if there are any species or habitat that will be impacted as part of the proposed upgrade of the Altona Sports Centre and other potential works within the reserve. A no net loss analysis and land management plan for the reserve were also undertaken as part of this work.

The flora and fauna assessment considered:

- legislative and policy implications at the local, state and federal levels for any identified flora and/or fauna values within the site, and
- II. Council's Draft Biodiversity Strategy (2016), particularly the potential for the presence of Spiny Rice-flower and significant faunal associations with mature trees. Significant flora and fauna/habitat values were identified across the reserve for future use by Council (Practical Ecology 2017).

Flora

Plains Grassy Woodland (or a salt-affected version of this vegetation type) and Coastal Saltmarsh may have been the dominant Ecological Vegetation Classes (EVCs) prior to European occupation. The following vegetation types (with corresponding EVC number and bioregion conservation status) were identified as currently existing within the reserve (Practical Ecology 2017):

- Plains Grassland (132), endangered
- Plains Grassy Woodland (55), endangered
- Coastal Alkaline Scrub (858), endangered
- Coastal Saltmarsh (9) vulnerable.

The western portion of the reserve and the eastern and western boundaries of the reserve were identified as having the highest flora and fauna/habitat values. The associated Land Management Plan recommended the establishment of a Conservation and Habitat Area (CHA) and Bushland

Management and Enhancement Area (BMEA) with suitable management practices applied. Establishment of a Construction and Intensive Recreation Area (CIRA) and General Parkland Area (GPA) were also recommended based on the recreational purposes of the reserve (Land Management Plan Map 3, Practical Ecology 2017).

The proposed location of the wetlands centre is in the south-east portion of the reserve (Zone 3) within the General Parkland Area (GPA) recommended as the location for any future parkland development scenarios. The adjacent western and southern boundaries of the reserve, including Habitat Zones, are recommended as a Bushland Management and Enhancement Area (Practical Ecology 2017).

Fauna and Habitat

Forty-five bird species were observed within and adjacent to the site by Practical Ecology during their site visit (2017). Two mammal and three invertebrate species (or evidence of the presence of these species) were also observed during this visit.

Seventy-one state or nationally significant fauna species are recorded within a five-kilometre radius of HD Graham Reserve in the Victorian Biodiversity Atlas (DELWP 2017). Of these, all species were considered to have either no or low likelihood of using the habitat within the reserve (Practical Ecology 2017).



Figure A6. Recommended HD Graham Reserve Land Management Zones (Map 3, Practical Ecology 2017) showing the proposed location of the Hobsons Bay Wetlands Centre. Pink shaded area: General Parkland Zone; blue shaded area: Bushland Management and Enhancement Area; yellow dotted line: Conservation and Bushland Management Fencing.

Native and exotic vegetation (including high threat weeds) on site provides a variety of habitats including some areas of very good habitat. The reserve is well connected to broader areas of native vegetation including the Altona Coastal Park and natural systems such as Laverton Creek, Truganina Wetland, Cheetham Salt Works Wetlands and Port Phillip Bay (Practical Ecology 2017).

A variety of medium to large sized large trees and large shrubs within the site provide perching, roosting and foraging opportunities and suitable nesting habitat for many bird and bat species. Leaf litter associated with the patches of trees and shrubs provides some habitat value for smaller fauna species such as lizards, frogs and invertebrates (Practical Ecology 2017). This is expected to increase with the age of the revegetation. (Weston, 2020).

Remnant vegetation and native grasses on the western side of the reserve represents the largest areas of habitat within the site. The eastern side of the reserve (Zones 3 and 4), including the proposed location of the wetlands centre, comprises lower areas of habitat zones and few large old trees. However, isolated individual indigenous species (often planted among Australian native species) within Zone 3 still comprise of some habitat values (Practical Ecology 2017).

Further Assessment

National Significance: Practical Ecology (2017) advise that areas mapped as either Habitat Zones or native grass areas be avoided in future uses of the reserve to ensure no Matters of National Environmental Significance, requiring an approval under the EPBC Act 1999, are impacted upon. The Wetlands Centre will be designed to protect and enhance these conservation values, and in the event the wetlands centre could impact native vegetation in this area, further investigation will be required. Potential impacts beyond the footprint of the centre such as enhanced visitation and disturbance will need to be monitored and actively managed. (Weston 2020).



Figure A7. HD Graham Reserve Ecological Assessment (Map 1, Practical Ecology 2017) showing the proposed location of the Hobsons Bay Wetlands Centre. Black hatched area: Revegetation Zone; green hatched area: Habitat Zone; yellow hatched zone: *Rhagodia candolleana (Seaberry Saltbush)*.

State Planning Provisions: The Hobsons Bay Planning Scheme applies statewide environmental planning provisions to the site including:

- Cl.12 Environmental and Landscape Values setting out biodiversity, native vegetation and coastal area planning principles amongst others
- Cl.13 Environmental Risks and Amenity addressing climate change, coastal inundation and contaminated land planning principles
- Cl.15 Built Environment and Heritage addressing sustainable development and aboriginal cultural heritage planning principles amongst others.

In addition, statewide Particular Provisions that must be addressed include Cl.52.17 Native Vegetation to 'ensure there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation.' It is understood that the wetlands centre concept design will seek to avoid native vegetation removal and enhance vegetation and habitat with appropriate indigenous new plantings. However, should the proposed concept impact on native vegetation additional work will need to be undertaken to meet these requirements (noting there is an exemption to this provision for Crown Land that can be applied for this site).

Local Planning Provisions: The Hobsons Bay Planning Scheme sets out priority local strategies for natural asset protection within open space and coastlines as set out in their Municipal Strategic Statement. Local environmental overlay controls do not apply to the site: there are no applicable Environmental Significance Overlay, Landscape Significance Overlay, or Vegetation Protection Overlay. Notwithstanding this, priority local strategies will need to be addressed in the wetland centre concept design.

2.5 Traffic and Services

The proposed wetlands centre will be accessible from Queen Street via Andrew Park Drive, and from the Laverton Creek Trail and Bay Trail West. Use of existing cark park infrastructure at Altona Sports Centre and Truganina Park is proposed. No requirement for additional car parking capacity is anticipated. However, access for student and reduced mobility visitor dropoff may be required.

An online Dial Before You Dig query was submitted on 20 January 2020 to identify services near the proposed wetlands centre. Services location information was received from CitiPower, City West Water, Melbourne Water, and NBN Co.

Results of the online query indicate the presence of the following services near the proposed wetlands centre:

- a sewer pipe adjacent to the Laverton Creek Trail (CWW 2020)
- Melbourne Water easement (Laverton Creek), extending from the waterway to approximately the Laverton Creek trail (MW 2020).

The online query did not indicate the presence of water supply, NBN assets, or electricity assets near the proposed wetlands centre. The presence of AusNet Gas and Telstra telecommunication assets were not confirmed through the online search.

Further Assessment

Hobsons Bay City Council will advise if additional traffic information related to the Altona Sport Centre upgrade is available that may assist in confirming traffic capacity of the HD Graham reserve and adjacent Truganina Park in relation to the proposed wetlands centre.

Traffic management for the proposed wetlands centre will need to consider:

- vehicle movement and car parking requirements: staff (permanent, casual, and short term) and visitors
- bicycle movement and parking: staff and visitors
- freight and delivery requirements
- school bus drop off zone / parking requirements
- reduced mobility access.

Traffic associated with construction works will also need to be addressed.

Information accessed through Dial Before You Dig is valid for 28 days (until 16 February 2020) and must not be relied on for excavation. The location of assets must be proved in the field prior to the commencement of work.

3. Potential Site Impacts and Recommendations

The proposed Hobsons Bay Wetlands Centre will provide opportunities for:

- recreation for health and wellbeing
- education and learning in our natural environment
- conservation and research programs to care for nature
- connection with others at an inspiring meeting place (HBWC 2019).

A wetlands centre concept design will be developed in 2020. A purpose-built wetlands centre incorporating sustainable, climate resilient and biophilic design principles is proposed. Facilities and service will be oriented toward health and recreation, and natural environment education and conservation (including complimentary volunteer activities). This will likely include:

- education and research spaces (and equipment storage spaces)
- professional office spaces
- indoor public spaces (e.g. interpretative space)
- outdoor public spaces (e.g. paths, indigenous plantings, boardwalks, seating and play area)
- cafe
- public restrooms (accessible when the centre is open).

Other elements may include: constructed wetlands, rainwater tank(s), raingarden(s), swales; garden beds, nature play areas; and bicycle parking.

A preliminary site impact assessment of the proposed wetlands centre has identified potential site impacts including disturbance to:

- cultural heritage sites and artifacts (construction phase)
- potential contaminated soil (construction phase)
- waterway health (including Ramsar wetlands)

- flora and habitat (construction phase; operation phase)
- infrastructure assets and services (construction phase).

The following recommendations are provided in response to potential site impacts to inform subsequent planning and design for the proposed wetlands centre:

- 1 It is recommended that HBWC Inc. work with Hobsons Bay City Council (as the land manager and potential building owner), Melbourne Water (as the waterway manger) and DELWP to develop an appropriate Aboriginal engagement process. A Cultural Heritage Management Plan for the southern / south-eastern part of HD Graham Reserve will likely be required as part of design development for the proposed wetlands centre.
- 2 Undertake soil contamination investigations once the wetlands centre concept design is completed to determine potential soil contamination and associated potential impacts on human health at the proposed wetlands centre location.
- 3 Address climate change adaptation (including sea level rise and storm surge) and natural disasters resilience (including flood and fire) through the design of the wetlands centre and associated facilities based on Hobsons Bay City Council's Climate Change Adaptation Plan 2030 (in development).
- 4 Ensure proposed stormwater management practices at the wetlands centre reflect best practice to protect local waterways and Ramsar Wetlands, as described in Planning Advisory Note 75 Stormwater Management (DELPW 2018).
- 5 Avoid disturbing areas mapped as either Habitat Zones or native grass areas (Practical Ecology 2017) to ensure no relevant Matters of National Environmental Significance requiring an approval under the EPBC Act 1999 are impacted upon. If native vegetation is to be disturbed, further investigation will be required.

- 6 Address State Planning Provisions including:
 - Cl.12 Environmental and Landscape Values (setting out biodiversity, native vegetation and coastal area planning principles amongst others)
 - Cl.13 Environmental Risks and Amenity (addressing climate change, coastal inundation and contaminated land planning principles)
 - Cl.15 Built Environment and Heritage (addressing sustainable development and aboriginal cultural heritage planning principles amongst others.
- 7 Address State Particular Provisions including:
 - Cl.52.17 Native Vegetation to 'ensure there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation'. Should the proposed wetland centre concept impact on native vegetation additional work will need to be undertaken to meet these requirements (noting there is an exemption to this provision for Crown Land that can be applied for this site).
- 8 Address priority local strategies for natural asset protection within open space and coastlines as set out in the Hobsons Bay Municipal Strategic Statement (noting local environmental overlay controls do not apply to the site).
- 9 Address traffic management for the proposed wetlands centre, including: vehicle movement and car parking requirements, bicycle movement and parking, freight and delivery requirements, school bus drop off zone / parking requirements, and initial construction works.
- 10 Confirm the location of assets (e.g. water, electricity, gas, telecommunications, etc.) in the field prior to the commencement of ground disturbing work.

4. Conclusions

The Hobsons Bay Wetlands Centre is proposed as a place where everyone can connect with nature to improve health and wellbeing and be inspired to care for our precious natural environment (HBWC 2019). Public and private facilities and services will be oriented toward health and recreation, and natural environment education and conservation (including complimentary volunteer activities).

This preliminary site impact assessment is based on the following studies prepared for Hobsons Bay City Council as part of the HD Graham Reserve Draft Masterplan and extension of the Altona Sports Centre:

- HD Graham Reserve Draft Masterplan (HBCC 2018a)
- HD Graham Reserve Title, Feature and Level Survey (Adshead & McQuie 2011)
- Environmental Audit Overlay and Victorian Landfill Register online search (Victoria Unearthed)
- HD Graham Reserve Preliminary Site Contamination Assessment (ESP 2016)
- HD Graham Reserve Flora and Fauna Assessment, No Net Loss Analysis, and Land Management Plan (Practical Ecology 2017) and Tree Location Plan and Arborist Rating (Tree Logic 2017)
- HD Graham Reserve proposed wetland draft concept design; Altona Tip Wetland draft concept design (E2D nd.)
- Cultural heritage due diligence assessment for proposed extensions to the Altona Sports Centre (Biosis 2017)
- Piped stormwater infrastructure, Altona Sports Centre (Citywide internal investigation).

It provides Hobsons Bay City Council (as the manager of HD Graham Reserve) and other strategic partners of Hobsons Bay Wetlands Centre Inc. with information on potential impacts of the proposed wetlands centre.

Potential site impacts of the proposed wetlands centre include disturbance to:

- potential cultural heritage sites and artifacts (construction phase)
- potential contaminated soil (construction phase)
- flora and habitat (construction phase; operation phase)
- infrastructure assets and services (asset locations to be confirmed).

Further assessment and investigation is recommended as part of subsequent planning and design for the proposed wetlands centre to confirm potential impacts, assess associated risks, and determine appropriate mitigation measures.

As strategic project partners, Hobsons Bay City Council and Melbourne Water are well placed to determine the required impact assessment activities and appropriately manage potential impacts.



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APPENDIX B Health and Social Impact Assessment

Melissa Butler, School of Health and Social Development, Deakin University, March 2020

Background

Little has been explored regarding the benefits of a wetlands for public health and health promotion. Given previous evidence regarding nature contact and nature's beneficial impact on health and social outcomes it is possible that the proposed wetland centre will be a beneficial human health asset for the Hobsons Bay community (Townsend *et al.* 2015). However, a health and social impact assessment is required to verify and clearly establish this link.

Methodology: Health and Social Impact Assessment Framework

"A Health and Social Impact Assessment (HSIA) is the process of identifying and measuring the impact a policy, proposal, project or event will have on the population" (WHO 2019). A framework for this HSIA was developed, using the enhealth 2017 framework as a model, and nuanced to meet the needs of this assessment. It consisted of eight general steps; including screening, scoping, data collection and data analysis, recommendations, monitoring and evaluation.

The priorities of the impact assessment included: determining the potential impact a wetlands centre can have, determining the positive and negative impacts on the Hobsons Bay community, and finally to determine how this wetlands centre will impact upon the already existing risk factors and current issues affecting residents. The core values of the HSIA assessment and its recommendations were formulated to ensure a priority of health equity, and for perceived impacts to be weighted as just as important as key expert impacts.

Four key experts were recruited to partake in a series of semistructured interviews. These participants were deemed experts if they had specific learned knowledge of the Hobsons Bay population and/or if they had specific learned knowledge of the interaction between one of or all of nature, social interaction or volunteerism and the human health outcomes dictated by the project's objectives.

A comprehensive literature review was conducted. The literature search ultimately produced 10 articles that met the inclusion/exclusion criteria.

Key Findings

Impact Matrix

An impact matrix template was developed to display and categorize the data into identified impacts, based on identifying factors of the impact, in order to make conclusions for the HSIA process.

Identified Positive Impacts

There was an increase in both **social interaction** and **physical activity** resulting from increased green space, as well as the beneficial qualities of nature itself both positively impact different social determinants of health, affecting

- mental health outcomes,
- · physical health outcomes,
- social connection.
- decreased anti-social activity

An increase in social interaction also had a positive impact on **time spent in nature**, on **physical activity** levels and **mental health** outcomes.

Following the construction of the wetlands centre, we can expect to see **social engagement**, a building and hub with a localized **sense of community** and an accessible recreation place for all members of the community. The impact that a centre such as this could have on human health outcomes

includes explicit outcomes such as **reduced loneliness** and an **increased sense of place**.

In addition, we can expect the centre's operations and programs will positively impact different social determinants of health affecting mental health outcomes, positive educational outcomes, physical health outcomes, social connection and decreased anti-social activity.

It was determined that **volunteerism** or social interaction in a conservation/social justice setting can be to be linked to positive human health outcomes. Being involved in volunteering can increase **social interaction**, **physical activity** and attachment of **place** that can all result explicitly in **positive health and social outcomes**. Other impacts that volunteering can have such as **positive educational outcomes**, **decreased anti-social activity** and **positive mental health** outcomes can all affect the social determinants of health.

Identified Negative Impacts

Health Equity issues including the accessibility of such a centre were raised by key experts as a significant cause of potential negative impact, identifying **accessibility issues** (e.g. lacking transportation or money for transportation to the centre) and **perceived accessibility issues** (e.g. perceived social stigma surrounding disability or culture, preventing community interaction). This accessibility, or the lack of, could be cultural, geographical, physical or socio economical. It has a possibility of **affecting mental health outcomes**, increasing an already existing **barrier between health services** for some individuals, as well as feed into pre-existing **social stigma** that marginalized groups who face stigma already experience.

Limitations

HD Graham reserve, the proposed site for the proposed Hobsons Bay wetlands centre, is included in contested land amongst three indigenous groups. Therefore, who would be consulted through this process is contentious and not yet identified. Consultation with first peoples in paramount to the

proposed wetlands centre and it is a limitation of the HSIA assessing a project to not identify the health and social impact of the centre on the indigenous population. This is an issue that going forward must be addressed by the Hobsons Bay wetlands centre committee.

Recommendations

The health and social impact assessment of the proposed wetlands centre demonstrated it's potential and ability to create and maintain positive health and social outcomes, particularly in relation to time spent in nature and social interaction. The HSIA demonstrated a possible link between positive human health outcomes and a wetlands setting both through explicit physical and mental health impacts and other underlying impacts that affect the social determinants of health including volunteering, education, employment etc. However negative impacts were also identified. Accessibility issues such as geographical and physical factors must be mitigated in the planning process. Cultural accessibility including language and inclusivity must be addressed throughout the execution process, as well as awareness of these issues by the HBWC Inc. board, partners and staff. Following the results of the HIA, it is recommended that the proposed development progresses, however, identified negative impacts should be mitigated in the planning process.

Monitoring and Evaluation

To ensure that the negative impacts identified in this document are mitigated before the project is undertaken and then are addressed long term a monitoring program must be undertaken. A significant issue identified is accessibility issues, both real and perceived by the population. To monitor this issue not only should diverse stakeholders be consulted with through the feasibility process, but the future board of the HBWC should be diverse in terms of gender, ethnicity, cultural background and ability to ensure the issue of accessibility and health equity are mitigated and that the centre is a diverse and inclusion friendly environment.

A formal evaluation process, commissioned to a third party, evaluating if the centre is meeting its 4 outlined aims will occur 2 years after opening of the centre. There will then be a formal third-party evaluation every 10 years.

Acknowledgements

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Citation:

Butler M, Patrick R (2020) Health and Social Impact Assessment for Hobsons Bay Wetland Centre: Summary Report, Deakin University, School of Health and Social Development.

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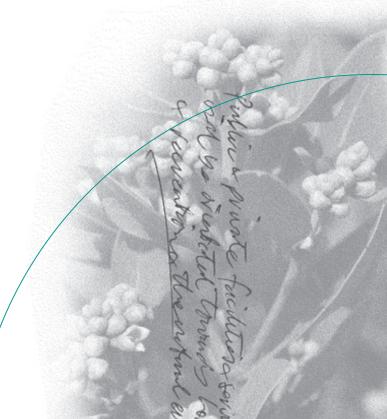
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APPENDIX C Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan Summary

Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site is located on the western shoreline of Port Phillip Bay between the major cities of Melbourne and Geelong and on the Bellarine Peninsula.

The site covers 22,650 hectares and comprises six distinct areas that include Point Cook/Cheetham, Werribee/Avalon, Point Wilson/Limeburners Bay, Swan Bay, Mud Islands, and the Lake Connewarre complex. The site includes freshwater wetlands, estuaries, intertidal shorelines, sub-tidal beds, inland saline wetlands and a wastewater treatment facility.

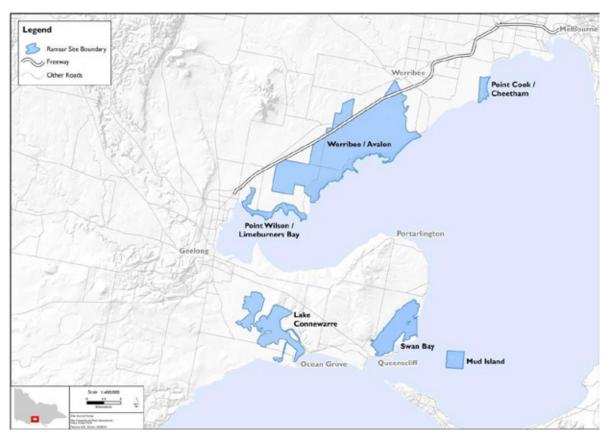


Figure C1. Map of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. Source: Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan

The proposed location of the Hobsons Bay Wetland Centre is approximately one kilometre from the Point Cook / Cheetham area of the internationally-significant Port Phillip Bay (Western Shoreline) & Bellarine Peninsula Ramsar site. The Ramsar site provides a compelling geographic and environmental context for the wetlands centre. Wetlands centre visitors will typically not enter the Ramsar site other than for specific research and stewardship purposes.

Information from the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan relevant to the proposed Hobsons Bay Wetlands Centre are provided below.

Extensive areas of coastal saltmarsh and seagrass occur within the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site, with smaller areas of freshwater vegetation within the Lake Connewarre complex.

The most recent assessment of the site against Ramsar criteria indicated that at the time of listing in 1982, the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site would have met the following (subsequently developed) criteria:

- Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
- Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their lifecycles or provides refuge during adverse conditions.
- Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.
- Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

 Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

The Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site draft ECD (DELWP in prep.) identifies components, process and services that are critical to the ecological character of the Ramsar site. These are described briefly below:

Connectivity between freshwater and estuarine areas and estuaries and the marine environment are an important process for the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site. This connectivity is important for ecosystem functioning and to a number of migratory fish. Fish that are known to migrate through the freshwater, estuarine and marine habitats of the Ramsar site include: short-finned eel, common galaxias, spotted galaxias, tupong, Australian grayling and the pouched lamprey (Lloyd Environmental *et al.* 2006).

There are four sub-components that comprise the hydrology of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site:

- tides (for all coastal and marine areas in the site)
- river flows (Barwon River, Little River, Werribee River and Hovells Creek)
- groundwater (particularly important for maintaining water regimes at the Lake Connewarre complex)
- artificial water regimes (Western Treatment Plant2 and Cheetham Wetlands).

Each of the six areas that form the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site contain coastal saltmarsh, with a total area of 1225 hectares within the Ramsar site boundary. Saltmarsh occupies the area of the site between seagrass and terrestrial vegetation at higher elevation. The saltmarsh of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site is diverse, with the saltmarshes

in Lake Connewarre complex being recognised in particular for their complexity. Coastal saltmarsh is listed as a vulnerable ecological community under the EPBC Act and is important habitat for fish, when inundated as well as for feeding and roosting waterbirds, when tides are low.

In addition to saltmarshes, the Ramsar site provides important seagrass, mangrove and freshwater vegetation habitat that supports fish and waterbird diversity.

The Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site is important for waterbird breeding for a wide variety of species. Beach-nesting birds such as red-capped plover breed at the Cheetham Wetlands (Brett Lane and Associates 2009) and Swan Bay, where there is a nesting colony for the threatened Australian fairy tern on Sand Island. Waterfowl such as Black swans, Pacific black ducks and chestnut teals are known to regularly breed at the Western Treatment Plant, which also supports a breeding colony of pied cormorant (Phalacrocorax varius).

A variety of migratory shorebirds use the Ramsar site, including the Point Cook/Cheetham block. These birds are listed as Matters of national Environmental Significance under the EPBC Act, and are the subject of protection under bilateral agreements between Australia, China, Japan and the Republic of Korea. They are seasonally abundant, and a prominent feature of the fauna of the Ramsar site.

There are multiple management strategies set out to help respond to the above risks to our Ramsar Wetlands.

The proposed Hobsons Bay Wetland Centre will contribute positively to Theme 5: Communication, Education, Participation and Awareness (CEPA) to help grow community appreciation and support for wetland values and functions.



Table 8. Values at each location in the Ramsar site (those shaded are identified as the highest priority.

Values	Location					
Ecological values	Cheetham	Werribee	Pt Wilson	Swan Bay	Mud Island	Lake Conn.
Hydrology (including connectivity)	•	•	•			•
Intertidal flats	•	•	•	•	•	•
Intertidal reefs	•		•			
Seagrass		•	•	•	•	•
Coastal saltmarsh	•	•	•	•	•	•
Mangroves			•			•
Freshwater aquatic vegetation		•				•
Waterbird diversity and abundance	•	•	•	•	•	•
Waterbird breeding	•	•	•	•	•	•
Diversity and abundance of fish		•	•	•	•	•
Threatened species: Australasian Bittern		•				•
Threatened species: beach nesting birds	•	•	•	•	•	•
Threatened species: shorebirds	•	•	•	•	•	•
Threatened species: Orange-bellied Parrot		•	•	•		•
Threatened species: Growling Grass Frog		•				•
Threatened species: Australian Grayling						•
Socio-economic and cultural values						
Recreational fishing			•	•		•
Commercial fishing						•
Water based recreation (swimming, boating)		•	•	•	•	
Beside water recreation (camping, bushwalking, nature observation)	•	•	•	•		•
Aboriginal cultural heritage	•	•	•	•	•	•
Game hunting		•	•			•
Tourism	•	•	•	•		•
Educaiton	•	•	•	•	•	•

Table 9. Priority threats at each location in the Ramsar site (those shaded are identified as the highest priority.

Throats	Location					
Threats	Cheetham	Werribee	Pt Wilson	Swan Bay	Mud Island	Lake Conn.
Climate change: sea level rise impacting on intertidal vegetation and waterbird habitat	•	•	•	•	•	•
Climate change: increased temperature increases the frequency and severity of avian disease	•	•			•	
Climate change: increased intensity of storms resulting in erosion of shoreline habitats	•	•		•	•	
Changed operations at the Western Treatment Plant decreasing nutrients and carbon	•	•	•			
Toxicants from catchment inflows and stormwater	•	•	•	•		•
Emerging contaminates of concern from the Western Treatment Plant	•	•	•			
Stormwater results in decreased salinity and altered water regimes						•
Urban development: direct habitat removal and loss of buffer	•	•	•	•		•
Litter (including micro-plastics) effects biota	•	•	•		•	
Invasive species: foxes and cats predating on waterbirds	•	•	•	•		•
Invasive species: salt tolerant weeds impacting saltmarsh and waterbird habitat	•	•	•	•	•	•
Invasive species: non-native grazing animals (rabbits and deer) impacting vegetation and habitat		•	•			•
Invasive species: silver gulls and ibis impacting breeding of other bird species (terns and petrels)					•	
Recreation: boats, jet skis, kite surfers disturbing waterbird feeding, breeding and roosting	•	•	•	•	•	•
Recreation: walkers, horse-riding disturbing waterbird feeding, breeding and roosting	•	•	•	•	•	•
Recreation: vehicles damaging saltmarsh			•			•
Duck hunting impacts to non-target species		•	•			•

Appendix D Precedents and Insights

Name and location	Asset Owner	Governance Model	Comments / Learnings
Hunter Wetlands Centre Newcastle	Hunter Wetlands Pty Ltd	Board - skills based No paid staff 150 volunteers	\$200k annual income includes \$30k rent from Education Dept and \$25k rent from Parks Service, \$45k from room hire and functions \$10k from café lease, balance made up of entry fees, memberships (\$15/ head includes unlimited entry), corporate sponsorship, retail, donations, school holiday activities and bike / canoe hire. Approx. 8 000 school children annually, \$4 head entry fee.
The Briars Mt Martha	Mornington Peninsula Shire Council	Mornington Peninsula Shire Council 7 Council staff including one Centre manager and conservation rangers. Delivery by Friends, volunteers	Conservation rangers are co-located in the information / education centre. Benefit: enables rangers to connect with their key markets and for their work to be profiled well. Centre redevelopment proposal includes a café and nature play area.
Winton Wetlands Winton	State Government	Committee of Management (appointed by relevant State Government Minister) CEO and several part-time staff	Very affordable building. \$1.4 million in 2014. Functional design, the conference space is usually opened for the café. Now planning a separate education/interpretation centre. Had to redesign kitchen to be able to fry chips etc.
Deep Creek Reserve Pakenham	Cardinia Shire Council	Partnership Cardinia Shire, Cardinia Golf Club, CEC (Cardinia Environment Coalition - Ecolinc)	\$2.4m State Government grant available for growth areas \$10 mill Cardinia Shire
Altona Sports Centre Altona	Altona Sports Centre Pty Ltd. (building only)	Board; Employs Centre manager and canteen staff. 'Council would like a say on what activities are run, and to attend board meetings'	ASC pays for all operating expenses (power, sewerage, cleaning, centre manager) from monies raised from competition fees. HBCC does the external maintenance i.e. gardens. New revenue streams will include children's parties and merchandise. Canteen is not in competition with our Café. Canteen staff also do security and first aid. Historically a 'peppercorn lease' with Council for the footprint /land. Transitioning into a 'management agreement' for 15 years (3x5 years) which is the loan period for centre extension.
Louis Joel Arts & Community Centre Altona	Hobsons Bay Community Advancement Co-operative (on behalf of the Altona Community)	Community owned and operated not-for-profit organization with Board of Directors. Paid Centre Manager, two part time admin staff, volunteers.	The Louis Joel Centre shares some of the same local networks as the HBWC. They operate a similar sized centre, with back to back activities and projects, well attended and valued by the community. LJC demonstrates how an organisation with a comparable structure can be successful in this suburb. The most important learning is how having a strong commercial partner paying roughly market space fees is an ideal foundation.

Appendix E Proposed Wetlands Centre Design Elements

The architecture and landscape design brief for the proposed Hobsons Bay Wetlands Centre is currently being developed based on the design elements and functional requirements listed below

Environmental Conservation

Fences Weed

Plantings

Management Trails
Tools and Equipment

Conservation Supplies Depot

Conservation Signage

Litter Traps

Environmental Monitoring Equipment

Native Plant Nursery Natural Mulching

Raingardens and Swales

Retaining walls Culverts

Drains

Open Space, Trails & Signage

Benches

Outdoor Shade Cloth

Lawn

Revegetation or bush garden areas

Walking Trails

Wheelchair/motorchair trails

Boardwalks Viewing tower Bike Trail Linkages Directional Signage Educational Signage Bird Screening

Open air sculpture Natural play features

Gates

Ramsar border area

Council reserve border areas

Bridges

Retaining walls Culverts

Drains

Buildings

Large central space Small meeting rooms Wet Bench and rack space

Lockable lab space

Dark room
Natural lighting
Theatrette
Computer room
Cloak room
Valuables lock-up

First Aid room Eating Area

Counters, Benches, Cupboards, Shelves

Bathrooms Showers Kitchen Offices

Food Prep areas

Truck or van loading door

Turning circle

Covered or walled-in outdoor areas

Viewing windows

Skylights

Lockers

Storage closets

Tool room
Garden
Refrigerators
Containers
Portable offices

Wheelchair ramps

Patio Verandah Open decking

Chairs, benches and other seating

Gazebos

Paved area floor drains

Barbeques Picnic Tables Picnic shelter Shade cloth

Flood or spot lighting

Landscaping and Parking

Screening Trees Flowering Natives

Planters

Frog ponds and water plant pools

Native Grasses Garden Beds Gardens with Paths Infant Play areas

Lawn Gravel, Sand Sleepers

Decking Railings

Entryway Sculpture

Sensitive overhead lighting Sensitive foot-level lighting

Fencing Gates

Lockable barriers

Staged Development

Health Conservation

Education Community

Appendix F Community and Stakeholder Engagement

1. Government Stakeholders

1.1 Commonwealth Government

Tim Watts MP (Federal member for Gellibrand) has indicated his support for the wetlands centre.

Victorian Government and Government Agencies

The following State Government organisations are strategic partners of HBWC Inc.:

- Melbourne Water
- · City West Water
- Ecolinc Science and Technology Innovation Centre (Department of Education & Training)

Parks Victoria and Port Phillip Bay and Bellarine Peninsula Ramsar Coordinating Committee have indicated their support for the wetlands centre

HBWC Inc. have briefed DELWP (Crown Land Management division) and plan to brief the Waterways of the West Ministerial Advisory Committee.

Truganina Explosives Reserve Advisory Committee (TERAC) have provided enthusiastic and practical support to HBWC Inc., including:

- provision of the Truganina Explosives Reserve historic Underkeeper's Cottage to serve as the interim HBWC Inc. office and event space
- acting as auspicor to HBWC Inc. for grants and insurance prior to HBWC obtaining its own insurance.

Port Phillip CMA provided a small grant and promoted HBWC Inc. educational events and Corangamite CMA provided a small grant for community education.

1.2 Local Government

Hobsons Bay City Council is a strategic partner of HBWC Inc. and has provided significant and ongoing support for the proposed wetland centre.

2. Other Stakeholders

The following non-government organisations are strategic partners of HBWC Inc.:

- Deakin University
- Cirqit Health
- BirdLife Australia

Small grants or in-kind support for HBWC Inc. have been provided by the following business organisations:

- Altona and Laverton Bendigo Community Bank board (small grant)
- Altona Traders Association (catering support at community events in 2019).

Active support for the wetlands centre has been received from the following government / not-for profit / community organisations:

- Western Metropolitan Tourism
- LeadWest
- · Greening the West
- · Friends of Skeleton Creek
- Altona Bay Wetlands.

In-principle support has also been received from more than 20 organisations in the Hobsons Bay area. This includes:

- Altona Meadows Community Association (formally noted their support in Jan 2019 following a presentation by HBWC Inc.)
- eight local Friends groups.

HBWC Inc. is continuing to engage with local health planners and providers through the MetroWest Primary Prevention Taskforce, Western Metro Active Aging Network and local community health promotion service providers. HBWC Inc. have engaged with various other local community groups, schools and community networks.

3. Community Engagement

Early community engagement for the Hobsons Bay Wetlands Centre has been undertaken and the feedback below has informed our design brief. Further consultation will take place once the design plans are developed through to concept and design level.

Hobsons Bay Wetlands Centre Inc. and Hobsons Bay City Council undertook stakeholder and local community engagement regarding the wetland centre concept during 2017 and 2018 as part of broader engagement to inform the HD Graham Reserve Masterplan.

Community engagement identified a need for public toilets in the area, more water stations, greater walking / cycling connections and improved wayfinding signs. There was also interest in a local café. Shaded seating, accessible water views, assessable nature experiences and refreshment facilities were identified as important for elderly and high-needs community members.

Deakin University's Freelancing Hub conducted a market research project for HBWC Inc. in 2018. Over two Saturdays in November and December 2018, sixty-three visitors were interviewed at the 100 Steps of Federation to gain additional community insights. The most frequently requested facilities were: public toilets (42%), café (32%), more water stations (32%) and more interpretation (20%). Regular visitors to the site (weekly frequency) were four times more likely to request a café than monthly visitors. Only one in five visitors were familiar with what a Ramsar site was.

In addition to the above activities seeking insights on the site, the HBWC group undertakes regular engagement activities with the local and regional community to support community awareness of the importance of the Hobsons Bay wetlands. During the first full year of operation (2019), HBWC Inc. held two open days (both attracted over 100 people) and three workshops (all fully booked).

