



Taylors Lake Recreation Facilities Plan



November 2009

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1. Foreword

Completion of the Wimmera Mallee Pipeline will mean that some of the bulk water supply reservoirs and in-stream assets servicing the region's existing water distribution system will no longer be required for water supply purposes.

The GWMWater Board signed off on the preferred future operating scenarios for 32 of these assets following completion of the pipeline in September 2008. The preferred scenarios, which were endorsed by a special Reservoirs Review Stakeholder Working Group, followed consideration of 165 written submissions received in response to discussion papers released for community comment in July 2007.

GWMWater has now moved into the second stage of the process which is the development of Implementation Plans for identified assets in consultation with key stakeholders.

One of these assets is Taylors Lake, which has been identified as a future major recreational facility for the region given its high security status as a major water supply source for the Wimmera Mallee Pipeline.

A special Taylors Lake Recreation Plan stakeholder working group was formed in February 2009 and since this time has been working closely with GWMWater to develop both short and long term recreational plans for the lake.

A key outcome has been the development of this Recreation Plan for Taylors Lake which has been revised following the working group review of the submissions from interested members of our regional community.

I would like to personally thank working group chairman Frank McClelland and members Laurie Pearson, Robin Hinch, Mark Johns, Ken Flack, Steve Parish, Tim Mintern, Hamish Mines, Gary Jelly, Keith Fischer, David Eltringham, Di Trotter, Gail Harradine, Geoffrey Swanton and Rob Loats for their invaluable insights and contribution to the development of the Recreational Plan for Taylors Lake.

We look forward to continuing to work with them to implement this plan.

This plan will then provide the basis for seeking funding for the implementation of any required works, commencing from 2010.

Jeff Rigby
Managing Director

2. Introduction

Taylors Lake is located approximately 20 kilometres south east of Horsham. It can be reached via the Western Highway or Horsham Lubeck Road. Taylors Lake has been an important part of the Wimmera-Mallee water supply system in the past and is an important component of the nearly completed Wimmera Mallee Pipeline system.

Taylors Lake is also used as a recreational lake, particularly for fishing, water skiing and swimming. This popularity has increased in recent years due to the dry seasons.

Taylors Lake was constructed in the period 1914-1923. It was named after William Taylor, who had the lease on the Longerenong squatting run until 1856 when he sold it to Samuel Wilson.

Its importance as a local fishery was highlighted in 1932, when the first consignment of Murray Cod from the Murray River was released into the lake. From April to June 1993 the lake first closed due to a blue-green algae outbreak

At the new (2009) full supply level (144.66 m AHD) the lake has a water surface area of 490 hectares, a maximum depth level of 8.3 metres and a capacity of 26,060 ML.

Taylors Lake receives water from the upper reservoirs of the Grampians from both the Wimmera Inlet channel and the Rocklands (Burnt Creek) channel. In addition, Wimmera River flows can be harvested to Taylors Lake from the Wimmera Inlet channel and it has a small natural catchment to the northern Grampians area. This natural catchment area is 80.6 km², with Potters Creek the main watercourse.

There are currently limited public facilities including a concrete boat ramp and gravel car park at Taylors Lake.

2.1. Project Aim

The aims of this Taylors Lake Recreational Facilities Plan project are to:

- develop a long term plan for the development of recreation facilities at Taylors Lake which meet the range of preferences of the community; and
- seek funding for implementation of this plan.

2.2. Taylors Lake Recreation Facilities Working Group

The Taylors Lake Recreation Facilities Working Group has been formed to provide advice to GWMWater about improving recreation facilities at the lake, with the broad objective being:

“To make the lake what the community wants it to be.”

In December 2008, GWMWater advertised for expressions of interest from members of the community interested in participating on a working group to assist GWMWater with the development of a recreation plan for Taylors Lake.

The working group participants are:

Dimboola Ski Club - Laurie Pearson
Natimuk Lake Ski Club - Robin Hinch
Sailing - Mark Johns
Wimmera Anglers Association - Ken Flack
Horsham Angling Club - Steve Parish
Environmental - Tim Mintern
General Community - Frank McClelland, Hamish Mines, Gary Jelly and Keith Fischer
Horsham Rural City Council - David Eltringham
VRFish - Rob Loats
Marine Safety Victoria - Glen Forster/Geoffrey Swanton
Wimmera Regional Sports Assembly - David Terry
Barenji Gadjin Land Council - Gail Harradine

The working group does not provide any advice in relation to water supply or operational aspects at Taylors Lake.

2.3. Future Use of Reservoirs

The operation of the reservoirs in the Wimmera-Mallee area was reviewed recently to determine the future operating arrangements for the GWMWater system and related assets taking into account:

- the implementation of the Wimmera Mallee Pipeline and other likely water resource developments;
- broader community and environmental values of the reservoir system; and
- Government policy relating to reservoirs and their management.

The preferred scenarios (or preferred operating regime) for the 32 bulk water reservoirs and associated infrastructure have been developed in consultation with the Reservoirs Review Stakeholder Working Group, following consideration of feedback from six community information sessions and 165 written submissions received in response to discussion papers released for community comment in July 2007.

The reservoirs and weirs to be maintained as primary supply sources or infrastructure for the Wimmera Mallee Pipeline include Bellfield, Moora Moora, Rocklands, Taylors, Wartook, Distribution Heads, most headworks channels and Huddleston's Weir (with modifications for environmental flow requirements).

Implementation plans will now be developed for each asset in consultation with key stakeholders. The strategy will be reviewed after five years to assess initial experiences with operation of the Wimmera Mallee Pipeline.

The implementation plan for Taylors Lake is the first of these implementation plans.

GWMWater convened a Taylors Lake Recreation Facilities Working Group of community representatives to provide advice to GWMWater about improving recreation facilities at the lake. This plan will become a model of how similar plans might be developed for other facilities.

2.4. Taylors Lake Water Supply Functions – Past and Future

Prior to the Wimmera Mallee Pipeline Project (WMPP), Taylors Lake had the following major functions:

- Supplied two-thirds of the Wimmera-Mallee channel area
- Annual releases were typically 80,000 ML/year
- Working range typically 15,000 ML
- Most of the releases were for domestic and stock supplies
- About 7,000 ML per year of releases were for irrigation in the Murtoa/Coromby area
- Harvested water from the Wimmera and Mackenzie Rivers/Burnt Creek catchments
- Received transfers from the upper reservoirs of Lonsdale and Rocklands
- Received flows from western Grampians catchment through Potters Creek

With the WWMP, Taylors Lake will have the following major functions:

- Backup supply to WMPP (Bellfield should supply most of demand for Supply Systems 1 – 4)
- WMPP demands 4,000 ML/year
- Irrigation demands – 27,000 ML/year
- Environmental demands – 15,000 ML/year
- Harvesting to maximise water quality – (Mackenzie River, then Rocklands, then Wimmera River)



Photo 1: Taylors Lake Channel

3. Strategic Directions

3.1. Vision for Taylors Lake

A future visitor to Taylors Lake will easily find the lake when travelling from any direction. When they arrive they will find one of Western Victoria's premier multi-purpose recreational lakes and a family friendly environment with well maintained facilities.

3.2. Objectives

- Provide clear, safe designated areas for recreational users.
- Improve access to and around the lake for all users.
- Protect and enhance the natural environment.
- Protect cultural heritage values.
- Improve the visual amenity of the lake.
- Develop facilities to cater for user needs.
- Manage visitor use to achieve the stated objectives.

3.3. Taylors Lake Existing Values

Natural Values

- Water with a large surface area and good depth.
- Currently is the only water body in the area holding water.
- Sandy beach.
- Beautiful backdrop of the Grampians mountain range.
- Habitat values for native species including bird species such as sea eagles, waders.
- Diversity of bird life.

Water Supply Values

- Backup supply to WMPP.
- Bellfield should supply most of demand for Supply System 1 – Supply System 4.
- WMPP demands.
- Irrigation demands.
- Environmental water demands.

Cultural Values

- Cultural Heritage values are associated with the lunette on the east side and historically it has been an Aboriginal occupation area.
- Aboriginal Affairs Victoria (AAV) registered Aboriginal Cultural Heritage places identified at Taylors Lake reserve area include scarred trees, earth features and artefacts, particularly in the southern part of Lake.
- Home of the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia, Jupagulk people.

Recreational/Tourism Values

- Centrally located in the region to major population centres – Horsham, Stawell and Warracknabeal.
- Great location for families, great for lifestyle with a range of potential uses/activities.
- Suitable for a range of water based recreation activities including water skiing, sailing and canoeing.
- Prime fishing location at both north and south end with a variety of desired angling species including Murray cod, yellowbelly and redfin.
- Duck shooting.



Photo 2: Taylors Lake, with Grampians in the background



Photo 3: Wakeboarding at Taylors Lake

4. Existing Legislation and Guidelines

4.1. Crown Land Reserves Act 1978

The land status at Taylors Lake is currently unreserved crown land for the majority of the lake area (C/A 179 B, C and D, Parish of Drung Drung) and also freehold land with title owned by GWMWater. The freehold title includes additional land that was acquired when the reservoir was created.

The unreserved crown land is under the jurisdiction of the Department of Sustainability and Environment (DSE), although DSE recognise it is required for water supply and GWMWater is the implied manager. The Land Conservation Council Recommendation E 29, South West Study Area was for the lake to remain as a water supply reserve under existing tenure and control by the water authority (now GWMWater).

Action 1: GWMWater to request to DSE that the currently unreserved crown land at Taylors Lake (C/A 179 B, C and D, Parish of Drung Drung) be reserved for Water Supply and Recreational Purposes and that GWMWater be appointed as the Committee of Management for this area.

4.2. Water Act 1989

Taylors Lake is managed under the *Water Act 1989*.

Under the *Water Act 1989*, GWMWater is empowered to make by-laws, which regulate activities at its reservoirs. In terms of Taylors Lake these by-laws include:

- A number of by-laws that relate to the negation of a right for a person to inconvenience another person, act dangerously or disturb the environment
- Boat races and setting up of slalom buoys, etc requires written permission from GWMWater
- Fires only lit in designated areas and put out completely before leaving
- A person must not shoot within 1 km of a GWMWater structure, house or other building
- Dogs must be effectively restrained, only allowed to enter water for purpose of retrieving dead ducks
- Camping requires written permission by GWMWater unless in designated camping area (currently none at Taylors Lake)

Action 2: Review and amend by-laws for Taylors Lake to reflect any changes recommended by this plan.

4.3. Marine Act 1988

One of the main purposes of this Act is to provide for the efficient and safe operation of vessels on State waters. GWMWater is the boating authority with respect to Taylors Lake

Marine Act 1988 – Vessel operating and zoning rules for Victorian waters March 2001:

- Vessel must not operate above five knots within 50 metres of a person in water or another vessel or 100 m of vessel or buoy displaying ‘diver below’ flag, 50 metres of waters edge or 50 metres of fixed or floating structure
- Access lanes used by vessels towing water skier and exceeding five knots
- Vessel operates in anti-clockwise direction unless schedule prescribes clockwise direction, operating in access lane or under five knots
- Bathing must not occur within 50 metres of a boat ramp or within an access lane

Specific to Taylors Lake:

- Five knots restriction to 30 metres radius around boat ramp and within 50 metres of embankment
- Water skiing prohibited south of line between two beacons inscribed ‘Water Skiing and Personal Water Craft Prohibited’, located approximately 2 km south of outlet works
- Vessels prohibited from 50 metres radius of Outlet Works and Inlet Channel where two beacons inscribed with ‘Stop’ and ‘Prohibited Water Beyond This Point’ located on opposite shores of approach to channel

4.4. Planning and Environment Act 1987

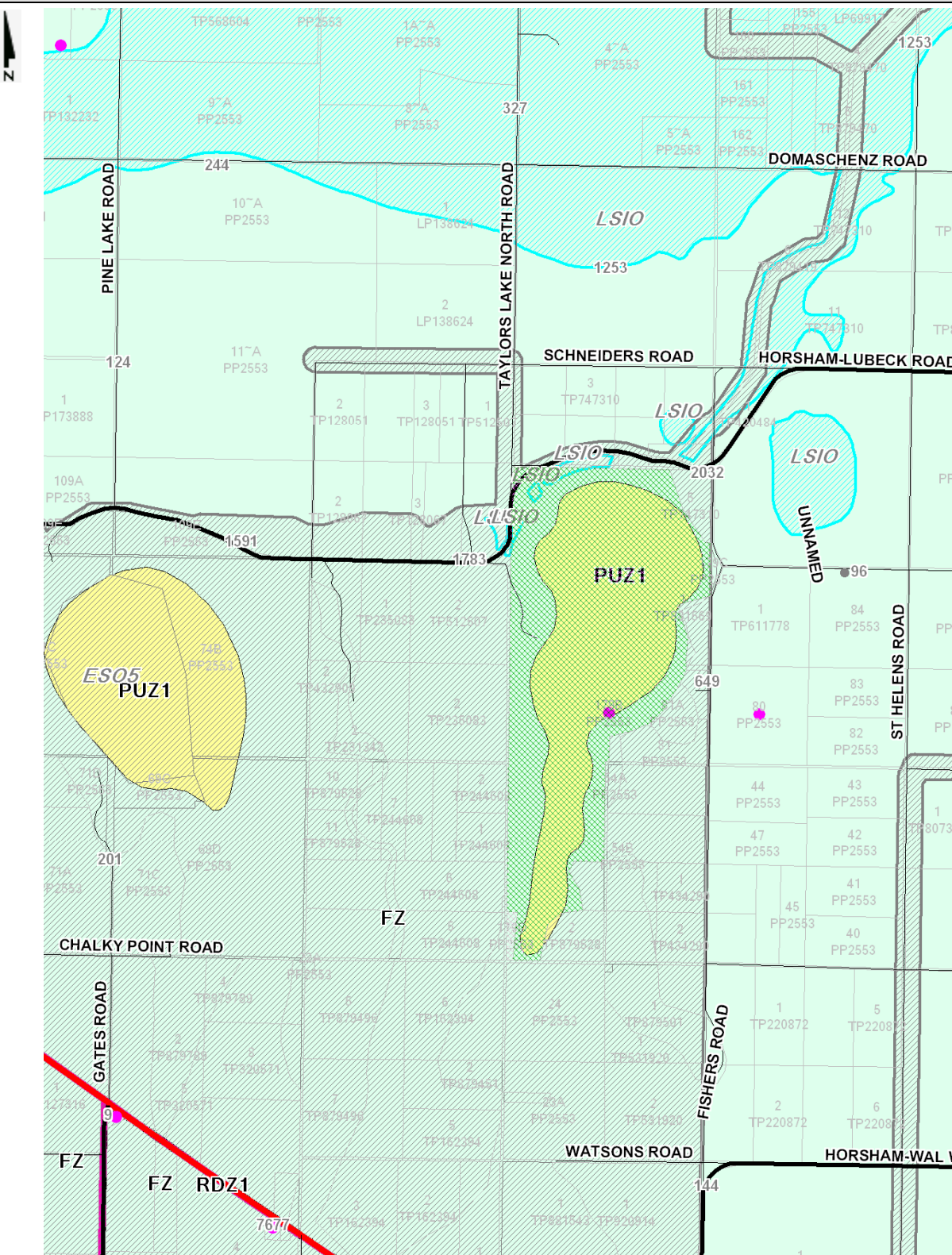
The purpose of this Act is to establish a framework for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians.

At a municipal level planning schemes are established including zones which determine permitted and prohibited to implement the State Planning Policy Framework and the Local Planning Policy Framework including the Municipal Strategic Statement and local planning policies.

The waterbody of Taylors Lake is zoned Public Use Zone which has the aim to recognise public land use for public utility and community services and facilities. The surrounding Taylors lake Reserve land is zoned Farming Zone. With each of these zones there are a range of permitted and prohibited activities i.e. camping not allowed in the farming zone.

<p>Action 3: GWMWater to request that Horsham Rural City Council consider rezoning the entire Taylors Lake Reserve as Public Use Zone 1 (PUZ 1)</p>
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Title : Excerpt from HRCC Planning Scheme



4.5. Aboriginal Heritage Act

The aim of this act is to provide for the protection of areas or items of cultural heritage significance within Victoria.

Aboriginal Affairs Victoria (AAV) is the primary agency that provides advice to the Victorian Government on Aboriginal issues and administers the legislation that protects Aboriginal cultural heritage.

Barengi Gadjin Land Council (BGLC) is a Registered Aboriginal Party (RAP) who has the jurisdiction over a large portion of the Wimmera Mallee area. BGLC is the RAP applicant for the area east of Horsham containing Taylors Lake.

Taylors Lake and surrounding reserve land is mapped as an area of Cultural Heritage Significance. AAV has provided information to GWMWater from their databases on known sites of Cultural Heritage at Taylors Lake Reserve. There are 21 registered Aboriginal cultural heritage places including artefact scatters, earth features and scarred trees.

In terms of implementation of the recommendations of this Taylors Lake Recreational Facilities Plan to comply with the Act:

- A Cultural Heritage Management Plan (CHMP) must be undertaken if proposed works or activity are a 'high impact activity' according to the Aboriginal Heritage Act Regulations (i.e. road or bicycle track that extends for more than 500 metres, construction of three or more dwellings on a lot) and/or is within an 'area of cultural sensitivity' (i.e. lunette on eastern side of lake, 50 metres from registered cultural heritage place, 200 metres from waterway or prior waterway). GWMWater mapping indicates Taylors Lake is within a Cultural Heritage Sensitive Area. Some activities are only high impact if they result in 'significant ground disturbance'.
- If a CHMP is not required, depending upon the impact other courses of action include a voluntary Cultural Heritage Plan, a basic agreement with the RAP on the management of Aboriginal Heritage Issues for the project may include actions such as a site monitor present during works.

<p>Action 4: A Cultural Heritage Management Plan to be developed for Taylors Lake recreation facilities plan implementation.</p>

4.6. Other Acts

Biodiversity State Acts include:

- *Fisheries Act 1995* and *Wildlife Act 1975*
- *Flora and Fauna Guarantee Act 1988* (FFG Act) is the key piece of Victorian legislation for the conservation of threatened species and communities and for the management of potentially threatening processes

Biodiversity Federal Acts:

- *Environment Protection and Biodiversity Conservation Act 1999* provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places – defined in the Act as matters of national environmental significance. Murray Cod is a species introduced to Taylors Lake and is listed as ‘vulnerable’ in the EPBC Act list of Threatened Fauna.

Catchment and Land Protection Act 1994

Aims to set up a framework for the integrated management and protection of catchments;
Set up a system for the control of noxious weeds and pest animals

Environment Protection Act 1970

Litter Act 1983

CFA Act 1958

5. Recreational Uses and Facilities Development

5.1. Fishing

Taylors Lake is recognised as a prime fishing location from either the bank or boat. There are a variety of desired angling species including Murray cod, yellowbelly and redfin. Native species including Murray cod and yellowbelly are part of the Department of Primary Industry (DPI) restocking programs and the Wimmera Angling Association believes the restocking should be increased in the future. Future events at Taylors Lake could include fishing competitions.

With improved access and facilities for both bank and boat fishermen and a suitable fish restocking program, Taylors Lake could become a prime fishing location in any season.

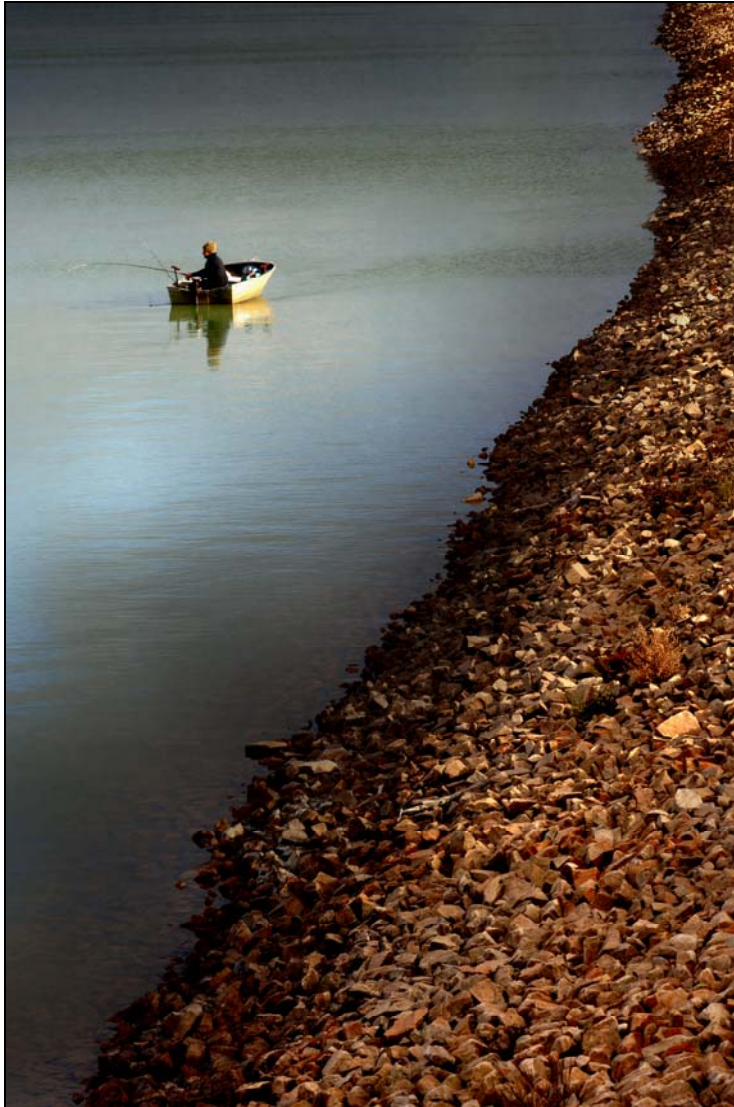


Photo 4: Fishing at Taylors Lake

5.1.1. Boat Fishing

The popular fishing areas in the southern part of the lake would be easily accessed by boat fishermen with a boat ramp constructed on the western side of the lake (Refer map - Location No 15). There is potential for this boat ramp and associated floating pontoons to be designed to cater for people with disabilities and also the aging community members who need a safe place to launch boats. This development would include a boat ramp car park, visitor facilities including toilet and day visitor shelter.

Action 5: Construct boat ramp, car park, toilet facilities and day visitor facilities to a standard suitable for disabled access (Location No 16).

Action 6: Upgrade access track to all weather access standard on western side of lake (Location No 14).

5.1.2. Bank Fishing

Bank fishing is a popular activity at Taylors Lake. Upgraded access to an all weather standard is required on the western side of the lake from the northern end (Location No 14). This access should remain as close as practical to the full supply level and cater for people with disabilities and access for people with restricted mobility ie. where they can park their car and fish very close. Natural rock outcrop features could also be incorporated into access points. Design of these disabled and restricted access facilities needs to consider the varied lake water operating levels.

Action 7: Construct all weather standard access track on the western side of the lake from the Horsham Lubeck Road to Location No 19.

Bank fishing in the lake inlet area in the south western part of the lake is a popular local fishing area. The existing access from the Western Highway to the south western end of the lake is to be upgraded to all weather access. Usage and desire to continue all weather access further to the north will be reviewed in the future. Due to its entry point on the Highway it will be managed as it is now for more local access (Location No 22) and would not be a signposted access point.

Action 8: Upgrade access track to all weather (Location No 22).

Vehicle access along the entire western edge from north to south would not be desirable due to the need to protect high value conservation areas, birdlife - eg white breasted sea eagles, waders and limit access to protect high value cultural heritage areas.

This track on the western side of the lake will be constructed to a standard for pedestrian access and management vehicles only (Location No 21).

Action 9: Construct track to standard for pedestrian access and management vehicles only (Location No 21)

5.2. Water Skiing

For the purpose of this plan waterskiing includes the use of water skis, wakeboards, and ski-tubes. Taylors Lake is currently used for all these activities.

There is potential for future events including speed boat racing and national wakeboarding competitions to be held at Taylors Lake.



Photo 7: Taylors Lake has become a popular wakeboarding area

In the identified ski zone area hazards include trees, stumps and fallen timber identified at the northern end of the lake that is referred to as the inner or third row of trees (Location No 9). These immediate works were undertaken in May 2009 to take advantage of low water levels with trees relocated south of the boat ramp and placed to provide a 'reef' habitat area for fish.



Photo 8: Tree line showing tree lines in three rows on northern area

An upgrade of the existing boat ramp including an extension and widening to cater for two lanes and larger boats is planned. The planned extension includes an extension of 1200 mm in width (600 mm either side) to allow for safe launching of boats down to the 138.4 mAHD level and extension of the boat ramp to the base of the existing gravel (Location No 1). Funds have been sought from Marine Safety Victoria to undertake these works.

On windy days launching and retrieving boats can be difficult. The appropriate use of pontoons to reduce this risk and to facilitate easier boarding of boats has been identified as part of this boat ramp upgrade. Funding has been received from Marine Safety Victoria for this jetty upgrade.

Action 10: Widen and extend the existing boat ramp and locate associated pontoons with consideration of varying water levels (Location No 1)

5.3. Sailing

Taylors Lake has not been used a great deal for sailing until recent years. For the purposes of this recreation plan sailing includes sailboards, sailing dinghies, catamarans and small trailer sailing boats. The following actions will improve the suitability of Taylors Lake for this purpose and future events such as sailing regattas.

In terms of launching sailing vessels the larger boats can utilise the boat ramp and the smaller boats can be launched from sandy beach sections, although this is restricted by existing trees and stumps.

There were trees and stumps in the boat ramp area which made it difficult for sailing boats to enter the lake area from the boat ramp. Trees and stumps spanning from the boat ramp were removed in May 2009 to allow for safe access of sailing craft and relocated to provide fish habitat reefs south of the boat ramp. (Location No 3)

In addition to these completed works and the proposed 150-200 metres of trees/stumps at front of the multi purpose community facility (Location No 9), Horsham Yacht Club members have identified that the removal of all trees and stumps, below the full supply level from the boat ramp to the pines would be desirable. The logistics of the removal of trees and stumps in the water is very difficult and some trimming of branches may be an acceptable compromise. A pre planning permit application to DSE can ascertain the response to a planning permit application prior to any detailed planning and seeking of funds to do work.

Action 11: Investigate the practicality and likelihood of permission to remove all trees and stumps between the boat ramp and the pines area”.

Accessibility via tracks around the lake to make it easier to rescue stranded boats has been identified as an issue that will be addressed through the improved track upgrades identified in this plan.

Sailability is a sailing program for people with disabilities. Currently there is a Sailability Grampians Club based at Lake Fyans. There is potential for this program to be delivered at Taylors Lake.



Photo 9: Existing boat ramp

The power line at the top of boat ramp in the car park area is a risk if hit with raised masts (Location No 2). This has been identified by an internal GWMWater risk review. The preferred option to address this risk is to loop the line to the east side of the road.

Other options considered to remove the risk were to install the power line underground and also the installation of visual markers on the line however these do not remove the risk. There is a need to consider future power requirements at the boat ramp area.

Action 12: Liaise with Powercor to relocate power line from top of boat ramp to remove hazard (Location No 2).

The construction of a multi-purpose community facility including boat storage at Taylors Lake is desirable. With weather patterns over the last 10 years including drought years there is limited recreational water and associated facilities for Wimmera residents to enjoy. A multi-purpose community facility with the view of the lake with the Grampians backdrop could become a popular social and corporate venue in close proximity to Horsham.

A facility such as this including boat storage, air conditioned meeting rooms and a sealed ramp for lighter boats to the waters edge would give sailors the ability to go out to the lake and make a decision whether to rig up for sailing on-site.

Sailors have identified the following criteria for a good site for this facility:

- Clear of trees for 100-200 metres, particularly important for learners and less experienced sailors
- Sandy beach, not gravel or rock for rigging up
- Facing prevailing winds
- View of the lake sailing area

The ideal location initially identified is the 'Pines' area at the north end of the lake (Location No 7). The west side of the lake is too rocky and the boat ramp area has too many trees and the bank is not sandy. Once a site has been agreed then an application for removal or realignment of 150-200 metres of trees/stumps at front of the multi purpose community facility (Location No 9) would be required.



Photo 10: View from the Pines area across Taylors Lake to the Grampians

Action 13: Develop detailed plans, establish management structure and seek funding to develop a multi purpose community facility in the Pines area at the north end of the lake (Location No 7).

Improved access to the Pines area from the boat ramp along the foreshore, close to the toe of the embankment will provide access for two wheel drive vehicles and also concentrate vehicle traffic from the number of tracks between the water and the full supply level.

The location of this track along the Lake Foreshore from boat ramp (Location No 6) to the Pines area is just above the new full supply level however there may be occasions when the track goes under water. The design of this track upgrade will require passing zones and car parking areas.

Action 14: Develop all weather access track on foreshore from boat ramp to Pines area (Location No 6).

5.4. Swimming

There are many areas suitable for swimming at Taylors Lake due to the gentle grade and the exclusion of boats in some areas due to the density of trees on the shoreline, such as the current popular swimming area between the boat ramp and Pines area. In the future this will be enhanced by having toilets close by.

Swimming will be prohibited within 50 metres either side of the boat ramp, in the vicinity of the outlet structures and the water ski zone at Pines area. Swimming will be permitted in all other areas of the lake.

Action 15: Erect signs at boat ramp and outlet area designating these as no swimming areas (Location No 12)

5.5. Non-Powered Boating

The southern areas of the lake are ideal for canoeing. The upgraded access track on the western side of the lake will provide a number of locations for launching a canoe and the five knot buoys will provide a buffer between canoeists and powerboats.

5.6. Safe Boating

One of the main purposes of the *Marine Act 1998* is to provide for the efficient and safe operation of vessels on State waters. Under the *Marine Act 1988* GWMWater is the boating authority for Taylors Lake. In order for GWMWater to meet its obligations as the boating authority, an upgrade of the navigational aids is required under the Schedule for the waterway. An upgrade of the signage at the lake is also required to ensure compliance with Marine Safety Victoria standards.

Marine Safety Victoria has advised that in the future, water based operations on the lake will depend on establishing a water level at which a five knot speed limit should be applied. A detailed depth survey was undertaken by GWMWater staff in April 2009 (refer to Appendices 1, 2, 3). The Australian Height Datum referred to in this section is the surveyed height above sea level. In the future it is proposed that the lake will be declared a 5 knot zone when the water level drops below 138.5 metres AHD.

This has been determined based on the following information:

- On 1 November 2008 the water level was 138.28 metres AHD. Users found this too low to launch boats coupled with the added issue of prolific aquatic weed growth
- Survey results from field work undertaken on 21 April 2009 indicated the lake has a relatively flat bottom and at 137.4 metres AHD the lake depth was at 0.8-1 metres in the middle deepest sections. (refer to Appendices 1, 2, 3)
- New Full Supply Level is 144.6 metres AHD
- In order fulfil its role as a backup supply to the Wimmera Mallee Pipeline - the minimum operating target at Taylors Lake is 8500ML, (139.7 m AHD) at the start of summer to meet Wimmera Mallee pipeline demands and evaporation losses

Action 16: Erect signs at boat ramps to declare Taylors Lake a five knot zone when the water level drops below 138.5 metres AHD and monitor and adjust where needed.

Determining where the five knot zone should be around the lake's edge. In many of the existing schedules this distance is stated as so many metres from the shore, however in the case of Taylors Lake the area could be marked by approximately 12 buoys around the perimeter of the tree line. The number of buoys is subject to advice from Marine Safety Victoria. This zone would remain regardless of the water level.

Action 17: That approximately 12 yellow buoys designate the five knot zone inside the perimeter of the existing tree line with buffer of 40 metres on tree line in west and south west.

There are currently two prohibited areas at Taylors Lake - the outlet works and the inlet channel.

Action 18: That buoys and two signs designate the outlet works and inlet channel as prohibited zones.

The southern section of the lake has been identified as a passive recreation/conservation zone. It has therefore been identified as a five knot zone, south of Location No. 19.

Action 19: That two yellow buoys designate the area south of Location No. 19 as a five knot zone.

5.7. Duck Shooting

Shooting of game birds is a permitted activity at Taylors Lake during the open season declared under the provisions of the *Wildlife Act 1975*. There is a tradition of groups of shooters travelling from Melbourne and camping at Taylors Lake for duck opening weekend. An annual review of this activity should determine if the by-law requires amendment.

Action 20: Undertake an annual review of duck shooting at Taylors Lake to determine if the by-law requires amendment.

5.8. Visitor Use and Management

5.8.1. Facilities

Rubbish collection services should only be provided in high use areas such as the boat ramp area or future constructed facilities. The policy should remain that in all other areas - take your rubbish home.

Action 21: Rubbish collection at boat ramp area and to be considered on the western side of the lake as part of developments in that area.

Visitors and campers currently have fires around the lake foreshore. This can pose a risk if not managed properly for reserve land and neighbouring properties. The *CFA Act (1958)* requires GWMWater 'to take all practicable steps (including burning) to prevent the occurrence of fires on, and minimise the danger of the spread of fires on and from any land vested in it or under its control or management'. To meet this responsibility fires are only to be permitted in designated camp fire areas.

Action 22: Develop and implement an operational fire plan for Taylors Lake.

Action 23: Develop designated fire place areas to regulation standards and publicise and enforce regulations and restrictions on the use of fire within the Taylors Lake Reservoir area.

Good, permanent toilet facilities which are properly serviced and in close proximity to the main recreational areas are important to the future development of Taylors Lake as a recreational area. These should be incorporated into day visitor facilities such as BBQ, all weather and car parking areas.

These day visitor areas are to be located near the existing the boat ramp area (Location No 1) and the western side of the lake (Location No 17).

Action 24: Construct day visitor facilities including toilet facilities at the east side boat ramp area (Location No 1).

Action 25: Construct appropriate toilet facilities on the western side of lake, after the boat ramp, car park and track upgrade (Location No 17).

Camping is currently not permitted, however there has been some camping occurring at Taylors Lake, particularly for events such duck opening weekend.

In the future camping will be permitted in designated areas on the north western side of the lake. The camping experience will be bush camping with limited facilities.

Camping will be permitted in the south eastern part of the lake for duck season.

Action 26: Establish bush camping sites in the north western area of the reserve (Location No 15).

5.8.2. Access

Access to designated recreational areas will be upgraded from the boat ramp to Pines area (refer Action 12) and on the western side of the Lake (refer Action 6). Access on the eastern side of the lake will be via existing access tracks. Due to the conservation and cultural significance this area will be managed as a low usage area. (Location No 25).

There are currently issues at the reserve with people driving in restricted areas such as the dam wall and all over the beach. Prohibited areas for the public should be clearly designated and managed with appropriate barriers, fencing, signage – this includes the dam wall and outlet area.

Action 27: Prohibited areas at the dam wall and outlet area to be clearly signed and appropriate barriers and fencing erected and maintained.

To provide for access for people with disabilities the following things need to be considered:

- Accessible hard tracks for wheelchairs (wide enough for a chair also)
- Beach access
- Possibility of the Wimmera Sports Assembly and Horsham Rural City Council looking into an accessible wheelchair for people to transfer from their chair into one with wide inflatable tyres so that they can swim away from the chair
- Change facility and accessible toilets for transfer from personal chair to inflatable tyre chair
- Hard path to access picnic areas, leave space for wheelchair at the tables and ensure tables are a certain height for chairs to fit under.
- Accessible flat pier which is solid and wide enough to travel along in a wheelchair and turn around at the other end, allows for fishing and the possibility of Sailability program being facilitated at Taylors Lake in the future.

In addition to these points, consideration also needs to be given to walking tracks suitable for disabled access such as on the west side (Location No 17).

5.8.3. Visitor Information

The range of natural, cultural and recreational values and permitted and prohibited activities need to be clearly communicated at Taylors Lake. Good signage and information needs to be designed and erected at the main visitor's areas.

Action 28: Develop visitor interpretation signage including recreational, cultural heritage and conservation values.

5.9. Protecting and Enhancing the Natural Environment.

The southern area of the lake has high conservation values, particularly habitat for endangered species including white bellied sea eagle, blue billed duck and freckled duck. (Refer Appendix 4 and 5 for flora and fauna databases and bird species list).

Revegetation with locally indigenous vegetation will further improve the biodiversity values of the lake and is consistent with the objectives of local vegetation priorities such as the Grampians to Little Desert Biolink.

Action 29: Undertake revegetation on western side of lake between Location No 24 in the south west and Location No 23.

Pedestrian access only to protect biodiversity values in southern area such as the western boundary (Location No 21). Where trees and stumps are to be removed below the full supply level for safety reasons, this material is to be relocated to provide fish habitat.

Erosion control is required including improved track construction, culverts and earthworks to repair the erosion gullies such as the area to the north of the boat ramp (Location No 1).

Existing cropping and grazing licences result in a situation where livestock (sheep) currently have access to waters edge which can result in water quality issues. However, stock also assist in reducing levels of plant growth and hence fire risk.

Action 30: Review stock access to the foreshore area as part of annual licence reviews.

5.10. Improving Access to Lake

An improved road network and attractive signage is required from the Western Highway and other directions to the east side and the existing car park and boat ramp area. Access to the North West end from the Horsham Lubeck Road needs upgrading and signposting.

Action 31: Erect clear signage on Western Highway and on Horsham Lubeck Road to Taylors Lake.

Action 32: Review adequacy of existing road network from the Western Highway to Taylors Lake.

6. Taylors Lake Reservoir Reserve Protection

6.1. Pest Plants and Animals

There are a number of introduced plants at Taylors Lake reserve area. There are also native species such as fairy grass (*Lachnagrostis filiformis*) which, when its seed heads detach, can cause problems due to fire hazard and general nuisance.

Introduced animals such as rabbits, hares, foxes and feral cats pose a threat to native plants and animals. GWMWater has responsibilities under the *Catchment and Land Protection (CALP) Act 1994* to control and/or eradicate pest plant and animal species.

Action 33: Undertake pest plant and animal responsibilities as per *CALP Act, 1994*.

6.2. Soil Conservation

The movement of soil affects water quality (particularly turbidity and colour) and causes siltation of the reservoir. Minor erosion scours exist, such as just north of the existing boat ramp which require repair.

Currently access to GWMWater's existing and new assets on the northwest wall is a concern. This includes:

- 4WD vehicles are traversing the reservoir wall risking personal injury if the vehicle rolls
- Vehicles driving on reservoir walls are causing damage in the form of erosion to the structure
- Public are accessing GWMWater restricted areas beyond the reservoir wall that contain critical infrastructure risking damage from vandalism or accidents

Action 34: Undertake control measures including signage and fencing identified in January 2009 Risk Review.

7. Implementation Plan

Implementation of this plan will be primarily based on seeking external funding from a range of grants programs.

Priority

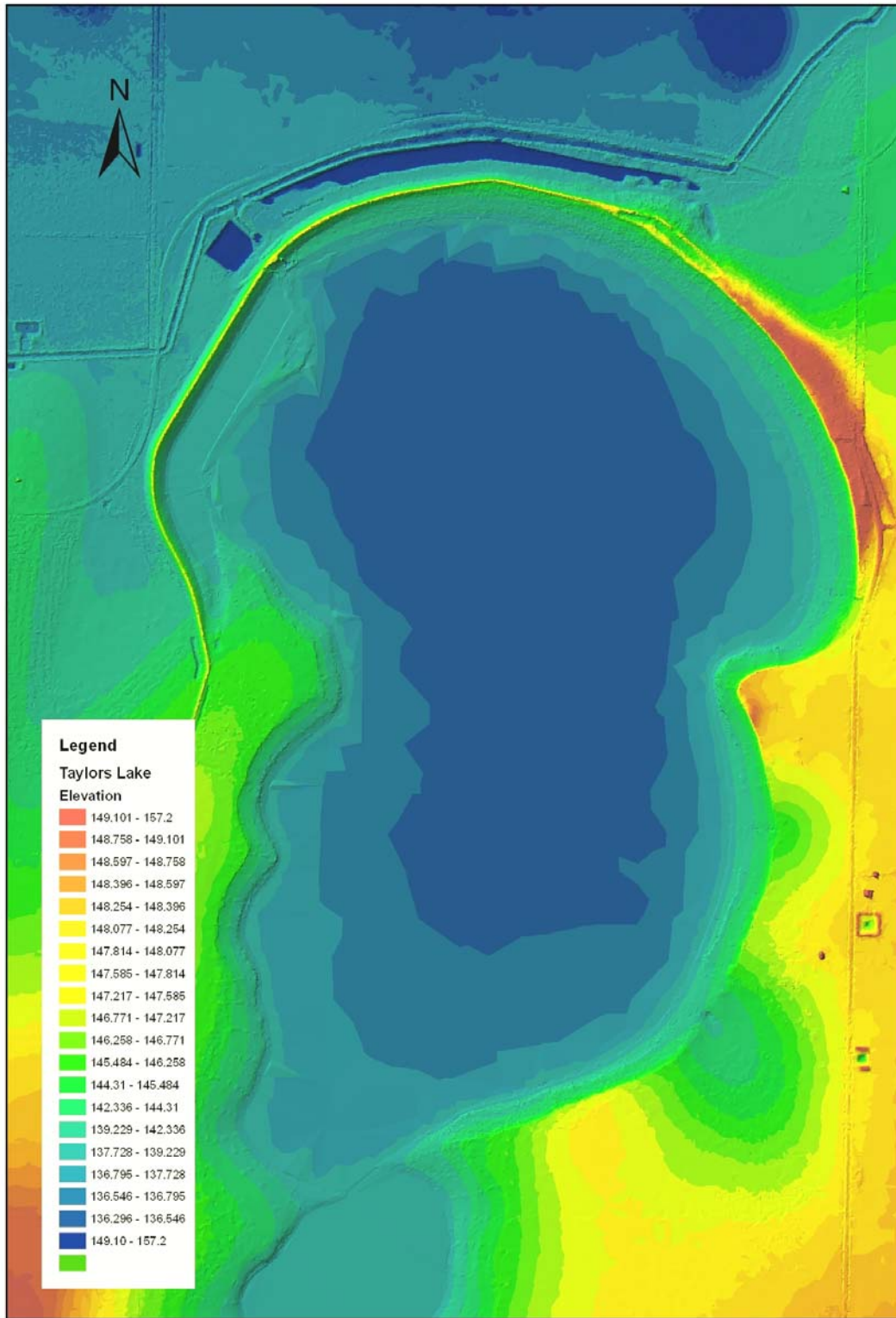
- Short term - in next 12 months
- Medium term - next one to two years
- Long term - three to five years

Action	Priority (S, M,L)
Action 1: GWMWater to request to DSE that the currently unreserved crown land at Taylors Lake (C/A 179 B, C and D, Parish of Drung Drung) be reserved for Water Supply and Recreational Purposes and that GWMWater be appointed as the Committee of Management for this area.	Short
Action 2: Review and amend by-laws for Taylors Lake to reflect any changes recommended by this plan	Short
Action 3: GWMWater request that HRCC consider rezoning the entire Taylors Lake Reserve as Public Use Zone 1 (PUZ 1)	Short
Action 4: Cultural Heritage Management Plan to be developed for Taylors Lake recreation facilities plan implementation	Short
Action 5: Construct boat ramp, car park, toilet facilities and day visitor facilities to a standard suitable for disabled access (Location No 15)	Medium
Action 6: Upgrade access track to all weather access standard on western side of lake (Location No 14)	Short
Action 7: Construct all weather standard access track on the western side of the lake from the Horsham Lubeck Road to Location No 19	Short
Action 8: Upgrade access track to all weather (Location No 22)	Short
Action 9: Construct track to standard for pedestrian access and management vehicles only and (Location No 21)	Short
Action 10: Widen and extend existing boat ramp and locate associated pontoons with consideration of varying water levels (Location No 1)	Short
Action 11: Investigate the practicality and likelihood of permission to remove all trees and stumps between the boat ramp and the pines area".	Medium
Action 12: Liaise with Powercor to relocate power line from top of boat ramp to remove hazard (Location No 2)	Short

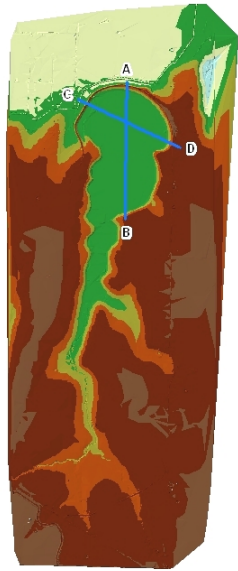
Action 13: Develop detailed plans, establish management structure and seek funding to develop multi purpose community facility in the Pines area at the north end of the lake (Location No 7)	Medium
Action 14: Develop all weather access track on foreshore from boat ramp to Pines area (Location No 6)	Short
Action 15: Erect signs at boat ramp and outlet area designating these as no swimming areas (Location No 12)	Short
Action 16: Erect signs at boat ramps to declare Taylors Lake a five knot zone when the water level drops below 138.5m AHD and monitor and adjust where needed	Short
Action 17: That 12 yellow buoys designate the five knot zone inside the perimeter of the existing tree line with buffer of 40 metres on tree line in west and south west	Short
Action 18: That buoys and two signs designate the outlet works and inlet channel as prohibited zones	Short
Action 19: That two yellow buoys designate this area as a five knot zone	Short
Action 20: Rubbish collection at Boat ramp area and to be considered on the western side of the lake as part of developments in that area	Short to Medium
Action 21: Undertake an annual review of duck shooting at Taylors Lake to determine if the by-law requires amendment.	Medium
Action 22: Develop designated fire place areas to regulation standards and publicise and enforce regulations and restrictions on the use of fire within the Taylors Lake Reservoir area (Location No 15)	Short
Action 23: Construct day visitor facilities including toilet facilities at the east side boat ramp area (Location No 1)	Short
Action 24: Develop and implement an operational fire plan for Taylors Lake.	Short
Action 25: Construct appropriate toilet facilities on the western side of Lake, after the boat ramp, car park and track upgrade (Location No 17)	Medium
Action 26: Establish bush camping sites in the north western area of the reserve (location No 15)	Medium to Long
Action 27: Prohibited areas at the dam wall and outlet area to be clearly signed and appropriate barriers and fencing erected and maintained.	Short
Action 28: Develop a visitor interpretations signage including recreational, cultural heritage and conservation values.	Short

Action 29 : Undertake revegetation on western side of Lake between Location No 24 in the south west and Location No 23.	Short to Long
Action 30: Review stock access to the foreshore area as part of annual licence reviews.	Short
Action 31 : Erect clear signage on Western Highway and on Horsham Lubeck Road to Taylors Lake.	Short
Action 32: Review adequacy of existing road network from the Western Highway to Taylors Lake.	Medium
Action 33: Undertake pest plant and animal responsibilities as per CALP Act.	Short to Long
Action 34: Undertake control measures including signage and fencing identified in January 2009 Risk Review.	Short

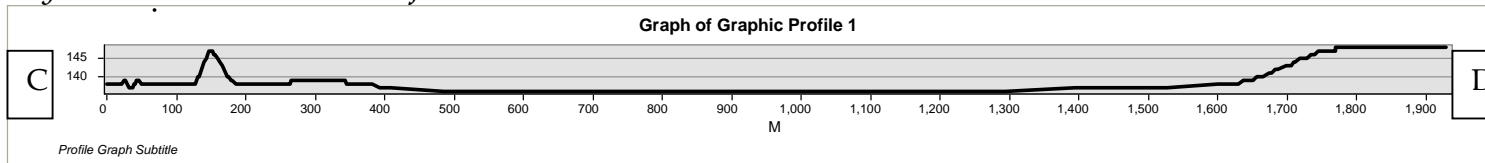
Appendix 1: Taylors Lake Depth profiles



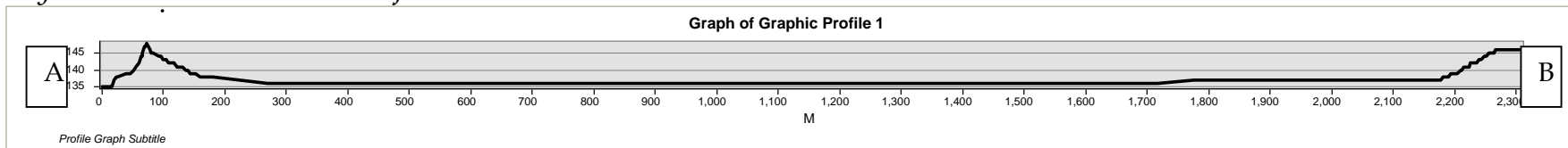
Appendix 2: Taylors Lake Depth Cross Sections



Taylors Lake: East - West Profile



Taylors Lake: North - South Profile



Appendix 3: Taylors Lake - Fauna Database

(10km x 10km grid reviewed from database, species have been removed that were not relevant to the area)

L N S Common Name	Scientific Name
<i>f e</i> Blue-billed Duck	Oxyura australis
<i>f v</i> Diamond Firetail	Stagonopleura guttata
<i>f e</i> Freckled Duck	Stictonetta naevosa
<i>f v</i> Great Egret	Ardea alba
<i>f V,e</i> Murray Cod	Maccullochella peelii peelii
<i>f v</i> White-bellied Sea-Eagle	Haliaeetus leucogaster

Taylors Lake - Flora Database

(10km x 10km grid reviewed from database, species have been removed that were not relevant to the area)

L NS Scientific Name	Common Name
<i>f Ee</i> <i>Caladenia xanthochila</i>	Yellow-lip Spider-orchid
<i>f Ee</i> <i>Prasophyllum suaveolens</i>	Fragrant Leek-orchid
<i>f Vv</i> <i>Pterostylis cheraphila</i>	Floodplain Rustyhood
<i>f Ee</i> <i>Sclerolaena napiformis</i>	Turnip Copperburr
<i>f Ve</i> <i>Swainsona murrayana</i>	Slender Darling-pea

Data Source: Flora Information System: Biodiversity and Natural Resources: DSE - 2004

L	= Listed Species
f	=Flora and Fauna Guarantee
N	= National Status
R	= Rare
V	= Vulnerable
E	= Endangered
X	= Extinct
K	= Poorly Known
N	= Near Threatened
S	= State Status
r	= Rare
v	= Vulnerable
e	= Endangered
x	= Extinct
k	= Poorly Known
n	= Near Threatened

Appendix 4: Bird List

Provided by Horsham Bird Observers Club sited birds as at 13 April 2009.

Stubble Quail	Dusky Moorhen	New Holland Honeyeater
Brown Quail	Black-tailed Native-hen	White-fronted Chat
Musk Duck	Eurasian Coot	Flame Robin
Black Swan	Common Greenshank	Restless Flycatcher
Australian Shelduck	Red-necked Stint	Magpie-lark
Australian Wood Duck	Sharp-tailed Sandpiper	Willie Wagtail
Pacific Black Duck	Black-winged Stilt	White-breasted Woodswallow
Australasian Shoveler	Red-necked Avocet	Dusky Woodswallow
Grey Teal	Red-capped Plover	Australian Magpie
Chestnut Teal	Black-fronted Dotterel	Australian Raven
Pink eared Duck	Red-kneed Dotterel	Little Raven
Hardhead	Masked Lapwing	White-winged Chough
Australasian Grebe	Silver Gull	Singing Bushlark
Hoary-headed Grebe	Whiskered Tern	Skylark
Great crested Grebe	Common Bronzewing	Richard's Pipit
Little Pied Cormorant	Crested Pigeon	House Sparrow
Little Black Cormorant	Galah	European Goldfinch
Great (Black) Cormorant	Long-billed Corella	Welcome Swallow
Australian Pelican	Sulphur-crested Cockatoo	Tree Martin
Great Egret	Cockatiel	Fairy Martin
White-faced Heron	Rainbow Lorikeet	Rufous Songlark
White-necked Heron	Musk Lorikeet	Brown Songlark
Australian White Ibis	Purple-crowned Lorikeet	Common Blackbird
Straw-necked Ibis	Eastern Rosella	Common Starling
Whistling Kite	Red-rumped Parrot	
White-bellied Sea Eagle	Blue-winged Parrot	
Swamp Harrier	Laughing Kookaburra	
Little Eagle	Striated Pardalote	
Brown Falcon	Yellow-rumped Thornbill	
Australian Hobby	Yellow Thornbill	
Peregrine Falcon	Red Wattlebird	
Nankeen Kestrel	Noisy Miner	
Purple Swamphen	White-plumed Honeyeater	