

Prioritising Kayak Access on the Yarra River

Dwyer C¹, Green D²

1 Jacobs, 54 Ovens St Wangaratta, 3676. Chris.dwyer@jacobs.com

2. Melbourne Water, 990 La Trobe Street, Docklands, VIC 3008, dan.green@melbournewater.com.au

Key Points

- Prioritising kayak access points for the Yarra River
- Uses a complexity map to determine planning complexity

Abstract

The Yarra River is considered by many to be a natural icon of Melbourne. The river flows from the rural outskirts of Melbourne, through the sprawling eastern suburbs then through the heart of Melbourne. It is well utilised by a large number of its residents for walking, fishing relaxing in the natural environment and importantly for kayaking and other non-powered water craft. Despite its high use it is recognised by Melbourne Water, Canoeing Victoria, local government and a large number of other stakeholders, that planning of where and how kayakers should enter and exit the river has never been considered over its length. A regional plan for recreational paddling along the Yarra River would encourage a larger diversity of users to access the river safely, and also considers the environmental impacts by reducing the pressure on habitat and river bank erosion.

This paper looks at a project Jacobs completed with Melbourne Water and supporting stakeholders identifying priority access points for non-powered water craft along the river. Through stakeholder workshops and online surveys the project identified the aspirations and needs of stakeholders for access. Priority sites were then determined by rating factors including the complexity of planning and ecological protection zones, the ability to add to existing resources such as toilets, and the breadth of users likely to use the resource. Previous experience in the constructability and design of kayak launches added to our knowledge of when and how access could be constructed. From this a five-year plan for implementation has been determined which provides for the formalisation of access at a number of priority sites for safe public access and environmentally sensitive design at regular intervals along the river, across a number of local government areas.

Keywords

Access, Prioritise, Planning, Mapping

Introduction

The objective of the project was to work collaboratively with stakeholders involved in canoeing and kayaking on the Yarra River, to determine the location and prioritisation of access points for these recreational boating opportunities. In addition, the study has produced an agreed plan and program of works that outlines the location and prioritisation of access points (launches), wayfinding resources, design principles and an implementation plan.

A systematic and robust method was devised to successfully complete this project in accordance with the project objectives. Key features of the project methodology include:

- significant and meaningful consultation, working in partnership with Melbourne Water and a variety of stakeholders from initial project commencement and throughout the study;
- a first stage assessment focused on a multi-criteria ranking process for ecological, planning and heritage constraints;
- stakeholder workshops to consult on preferred locations, wayfinding opportunities and design considerations; and
- a multidisciplinary approach to reporting encompassing consultation findings, preliminary designs and a five year implementation plan.

Site complexity Assessment

Prior to beginning the engagement and consultation process, a site screening and mapping exercise was undertaken. The mapping exercise identified planning zones and areas of particular cultural or environmental significance that may represent constraints to the construction of new launch sites.

The focus of this exercise was to identify potential constraints at locations along the river which make them inappropriate or less desirable for the construction of launches. The aim of developing this tool is to provide guidance on the potential constraints that exist at any point along the Yarra River and its riverine environment within the study reach. Key potential issues identified include culturally sensitive sites, sites of high conservation value (flora and fauna), sites on private land, and sites where planning provisions may limit the construction of boating infrastructure, or require significant effort to obtain planning approval.

Three key constraints were identified:

1. Planning schemes, planning provisions and waterway management obligations that place restrictions on launch construction or operation in specific zones.
2. Cultural Heritage significance – Aboriginal Places and historical heritage sites which may be impacted by launch construction or operation.
3. Ecological/environmental significance – Identifying locations of species and/or communities. As part of this project a Complexity Tool (scoring and ranking summary tool) was applied in order to understand the now ranked planning, ecological, community and heritage complexities within the analysis area and mapped as Cumulative Constraints. The methodology the tool applies is based on multi-criteria analysis where the criteria are scored and weighted in relation to each other. The key result of the tool is a heat map showing higher complexity areas (high risk overlays, zones, cultural heritage etc.) along the Yarra River. This allows for easy identification of “hot spots” that require further investigation as well as areas of potential.

The following map shows a number of the final priority sites overlain over the overall reach ‘heat’ map.

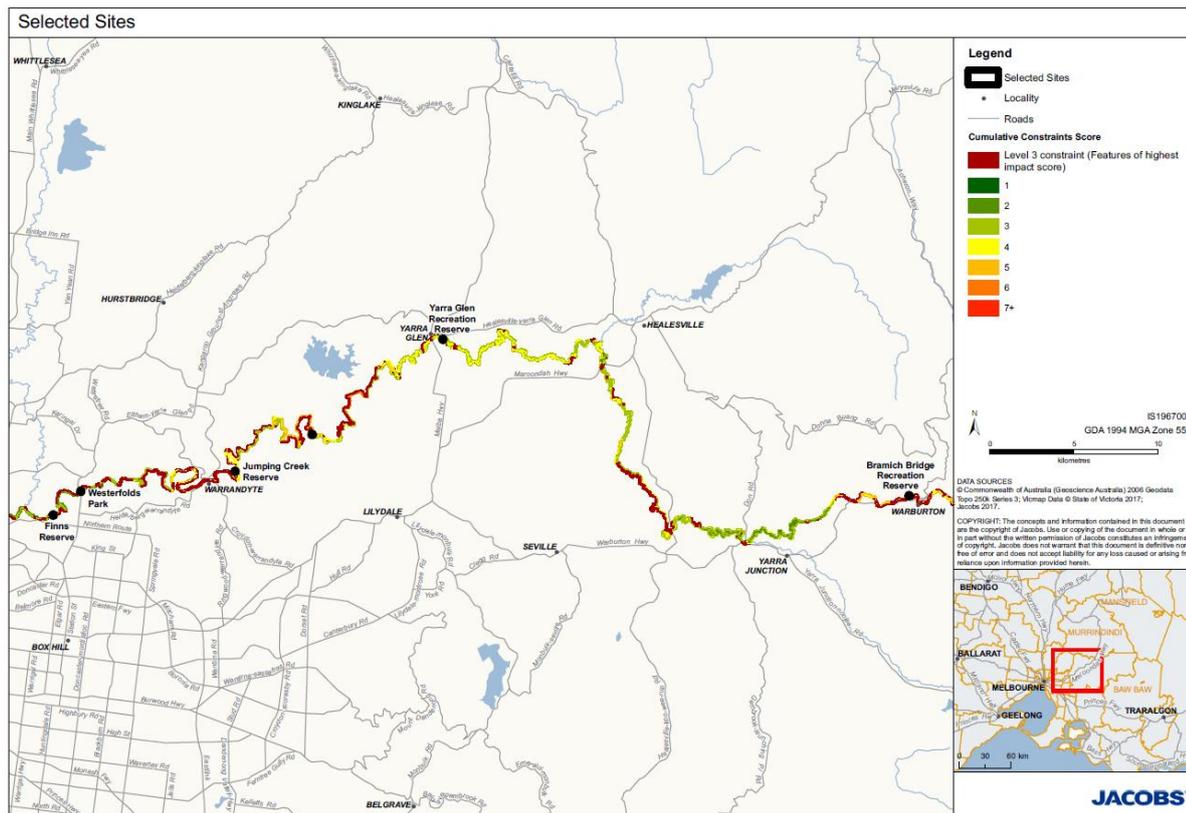


Figure1: Priority Sites on Heat Map

Consultation

Consultation was undertaken with primary stakeholders including Local Government, Parks Victoria, DELWP, school user groups and Canoe Victoria to assist in determining their needs for improved kayak access. A workshop was held in the middle to lower reaches and another in the upper catchment to best capture a range of geographic needs. At these workshops, the following issues were addressed:

What does the Yarra River mean to us? Why is it important to improve opportunities for paddling along the river?
Boat Ramp locations filtering criteria. How mapping was undertaken, and how this data assists in determining the complexity for placing launches in specific locations.
Identifying possible locations for launches
What are the important elements we need to capture and consider for the boat ramp designs?
Wayfaring - What information is important to provide for people using these launches?

In addition to the workshops a Survey Monkey survey was made available to the broader community. The Survey Monkey Survey elicited a significant response from the community, with a total of 332 responses received. Detailed comments were provided for a large number of questions and responses, providing valuable information from community members with excellent technical and local knowledge, who are in a good position to understand the relevant issues.

The questions addressed were:

- Q1. From a kayaking/canoeing perspective, please select from the list below who you are representing for this survey; kayak and/or canoe club member, school group, outdoor education operator, commercial operator, personal user, site manager, land manager, local property owner, interested community member.
- Q2 - If you are representing a paddling group (such as a club, commercial operator or school), please select as many answers from the list below to indicate the ages and skill levels that apply to your group.
- Q3 - How often do you, or your organisation, currently use the Yarra River for paddling activities?
- Q4 - What time of year do you generally prefer to paddle? Please select from the list below. Multiple choices are allowed
- Q5 - Are there any particular weather conditions that you prefer to go paddling?
- Q6 - If you or your group do paddle along the Yarra River, which sites/locations do you currently like to visit?
- Q7 - If you or your group do paddle on the Yarra River, why do you like to use these areas? Please describe briefly in the comment box below. For example: "I like that there's parking near by", or "The area is safe and easy to use for beginners" or "There is access to tap water so I can clean my boat" or "There's no willows or fallen trees."
- Q8 - For any sites on the Yarra River that you currently visit for paddling, are there features of these sites which could be upgraded to improve your experience in using them?
- Q9 - Do you, or members of your organisation/group, have any disabilities? Are you aware of any particular issues for people with disabilities in using the Yarra River for paddling? Please provide a brief description of these in the comment box below. Examples could include safety, facilities, ease of access or signage.
- Q10: What design elements do you suggest would be important for Melbourne Water to incorporate into new and/or upgraded ramps? Please describe in the comment box below. (For example the slope of the ramp, type of finish on walking surfaces, width, etc.)
- Q11: From your own perspective and knowledge, can you suggest any locations that you think would be desirable or suitable for new paddling ramps along the Yarra River? Please specify these locations and your reasons in the comment box below. (For example: close to other paddling facilities; close to existing road access; located in an area of particular beauty and/or remoteness; suitable for all ages/abilities; close to café/park/toilet/change facilities.
- Q12: From your own perspective and knowledge, can you suggest any locations along the Yarra River that you think should not be developed for new paddling ramps? Please specify these locations and your reasons in the comment box below. (For example: close to sensitive environmental or cultural features that should be protected from access; areas without shelter or facilities; in areas where river conditions are typically unsuitable for paddling such as low hanging vegetation and/or dangerous submerged branches and logs.
- Q13: Hypothetically, if new kayak/canoe ramps have been constructed at the locations and with the design features that you have suggested, would you change the frequency at which you paddle the Yarra River?
- Q14: What information do you think is important to provide paddlers about ramps and their locations along the Yarra River? (This type of information is sometimes referred to as 'wayfaring information', and for example can include communications about paddling safety, journey planning, and interesting features about a waterway and its surroundings.)?

- Q15: If you would like to send us any relevant documents, maps etc, please let us know in the comment box below.

Prioritisation

From the consultation meetings and Survey Monkey a broad range of information was gained regarding existing facilities available on the Yarra River and the needs of users. Coupling this information with the site complexity enabled the development of the prioritisation of upgrading existing sites and providing new access points on the river.

For each of the identified sites the level of complexity for development has been identified and colour coded. Key issues associated with each site have also been determined. It should be noted level 3 complexity refers to sites where multiple site issues are identified.

Upper Reaches	Complexity colour code	Issues based on Planning Complexity
Bramich Bridge Recreation Reserve	4	<ul style="list-style-type: none"> • Public park and recreation • Wildfire management overlay
Mayer Bridge	4	<ul style="list-style-type: none"> • Public Conservation and Resource Zone • Special use zone • Heritage overlay in vicinity of the bridge • Wildfire management overlay
Damman's Road / Lincoln Road	Level 3	<ul style="list-style-type: none"> • Public Conservation and Resource Zone • Significant landscape overlay • Green wedge zone • Road zone • Erosion Management overlay
Ronald Grove	4	<ul style="list-style-type: none"> • Rural living zone • Heritage overlay • Wildfire management overlay
Station Road, Wesburn	2	<ul style="list-style-type: none"> • Public Conservation and Resource Zone • Green zone • Heritage overlay
Doon Reserve	3	<ul style="list-style-type: none"> • Threatened fauna • Land subject to inundation • Green wedge zone • Public Conservation and Resource Zone
Launching Place	Level 3	<ul style="list-style-type: none"> • Register of National Estate • Land subject to inundation • Heritage overlay • Rural conservation zone
Woori Yallock	3	<ul style="list-style-type: none"> • Public Conservation and Resource Zone • Green wedge zone • Land subject to inundation • Wildfire management overlay
Warramate Hills off Yarraloch Way	5	<ul style="list-style-type: none"> • Rural conservation zone

Upper Reaches	Complexity colour code	Issues based on Planning Complexity
		<ul style="list-style-type: none"> Public Conservation and Resource Zone Green wedge zone Land subject to inundation Erosion Management overlay Heritage overlay
Everard Park Coldstream	3	<ul style="list-style-type: none"> Land subject to inundation Green wedge zone

Middle to Lower Reaches	Complexity colour code	Issues based on Planning Complexity
Yarra Glen Recreation Reserve	3	<ul style="list-style-type: none"> Land subject to inundation Green wedge zone Public Conservation and Resource Zone
Spadoni's Reserve	3	<ul style="list-style-type: none"> Land subject to inundation Green wedge zone Public Conservation and Resource Zone
Homestead Road	Level 3	<ul style="list-style-type: none"> Register of national estate Heritage overlay Public Conservation and Resource Zone Bushfire overlay Rural conservation zone
Witton's Reserve	Level 3	<ul style="list-style-type: none"> Public Conservation and Resource Zone Bushfire overlay Special use zone
Jumping Creek Reserve	4	<ul style="list-style-type: none"> Register of national estate Wildfire overlay zone Public Conservation and Resource Zone
Warrandyte Bridge	Level 3	<ul style="list-style-type: none"> Victorian heritage register Road zone category 1 Heritage overlay
Westerfolds Park	Level 3	<ul style="list-style-type: none"> Threatened fauna Threatened flora Road zone category 1 Bushfire management overlay Land subject to inundation
Finns Reserve	3	<ul style="list-style-type: none"> Public park and recreation zone Land subject to inundation Public Conservation and Resource Zone
Yarra Flats, Banksia Street	3	<ul style="list-style-type: none"> Public park and recreation zone Land subject to inundation

Middle to Lower Reaches	Complexity colour code	Issues based on Planning Complexity
		<ul style="list-style-type: none"> Public Conservation and Resource Zone
Fairfield Park	Level 3	<ul style="list-style-type: none"> Neighbourhood residential zone Register of National Estate Victorian Heritage Inventory Public park and recreation zone Land subject to inundation
Dights Falls	Level 3	<ul style="list-style-type: none"> Neighbourhood residential zone Register of National Estate Victorian Heritage Inventory Public park and recreation zone Design and development overlay

The priority of each ramp is determined by adding a score for each of planning and construction complexity, breadth of users likely to utilise, potential to utilise existing infrastructure and cost of construction. The higher the score, the higher the priority.

Planning and construction complexity	
Score	Definition
3	Straightforward 1-3: Limited planning permits, hazards etc.
2	Average 4-6: Some planning permits and hazards but simple mitigations
1	Complex >6: Numerous permits required and risk mitigations are complex

Breadth of users likely to utilise facility	
Score	Definition
3	Broad range of abilities and high numbers
2	Medium range of abilities and medium numbers
1	Limited user groups mainly to complexity and remoteness

Potential to utilise existing infrastructure	
Score	Definition
3	High – toilets, parking, and/or existing ramps
2	Medium - minor facilities including parking
1	Limited existing infrastructure – no infrastructure

Cost of Construction	
Score	Definition
3	Low -less than \$80,000
2	Medium - \$80-170,000
1	High - greater than \$180,000

Each site was prioritised, with the highest priority sites' planning, design and construction progressing to the five year plan.

Five Year Plan

The five year plan is the final outcome of the project. It will enable Melbourne Water and other key stakeholders to prioritise sites for potential future construction of launch sites, to achieve priority outcomes for kayak users.

An annual budget has been estimated for each year. It includes up front planning and design. The complexity of the planning is well understood given the up front site complexity mapping. The latter years of the plan are characterised by capital works construction and wayfaring opportunities, once initial planning and design have been completed.

Key Outcomes

This kayak access prioritisation plan does not rely on the views of the consultant or the local and state government agencies involved. It draws upon the knowledge and needs of the broader community. Understanding of complex planning constraints can now also be determined for any point along the Yarra River.

The end result is a targeted five year plan which can now be implemented to deliver much needed improved access for Kayakers on the Yarra River.