

An Integrated Water Management Approach for the Monash National Employment and Innovation Cluster

Valued and Timely Collaboration

Rianda Mills & Chris Tancheff

Water Technology & South East Water

Stormwater Victoria Conference 2018

June 2018

Monash National Employment and Innovation Cluster

Monash NEIC

- core health, education and research precinct
- high density employment area Monash Technology Precinct
- supporting employment areas
- strategic sites: jobs, housing & servicing local needs
- cluster core and accessible residential areas
- public open space and recreation
- focal point for intensification and high-capacity public transport
- Westall Road preferred freight route
- proposed Westall Road extension
- Mile Creek corridor upgrade
- investigate high capacity PT
- Cranbourne-Pakenham rail corridor upgrades and shared use path
- PT modal interchange connect to key destinations
- Cranbourne-Pakenham linear parkland
- priority shared path
- new priority pedestrian and cyclist safe crossing point
- key destination
- activity centre - including supporting services, employment and housing
- enhanced / future activity centre
- future business town centre (indicative preferred location)
- existing road network
- urban growth boundary



What the community want in Monash NEIC



Public Engagement Outcomes Report

"Broad Support for improvements to amenity..."

"Destinations which help foster relationships and innovation..."

"Amenity is also about the aesthetic appeal of the areas, the character of buildings and quality of streetscapes"

"...ensure public open space is retained"

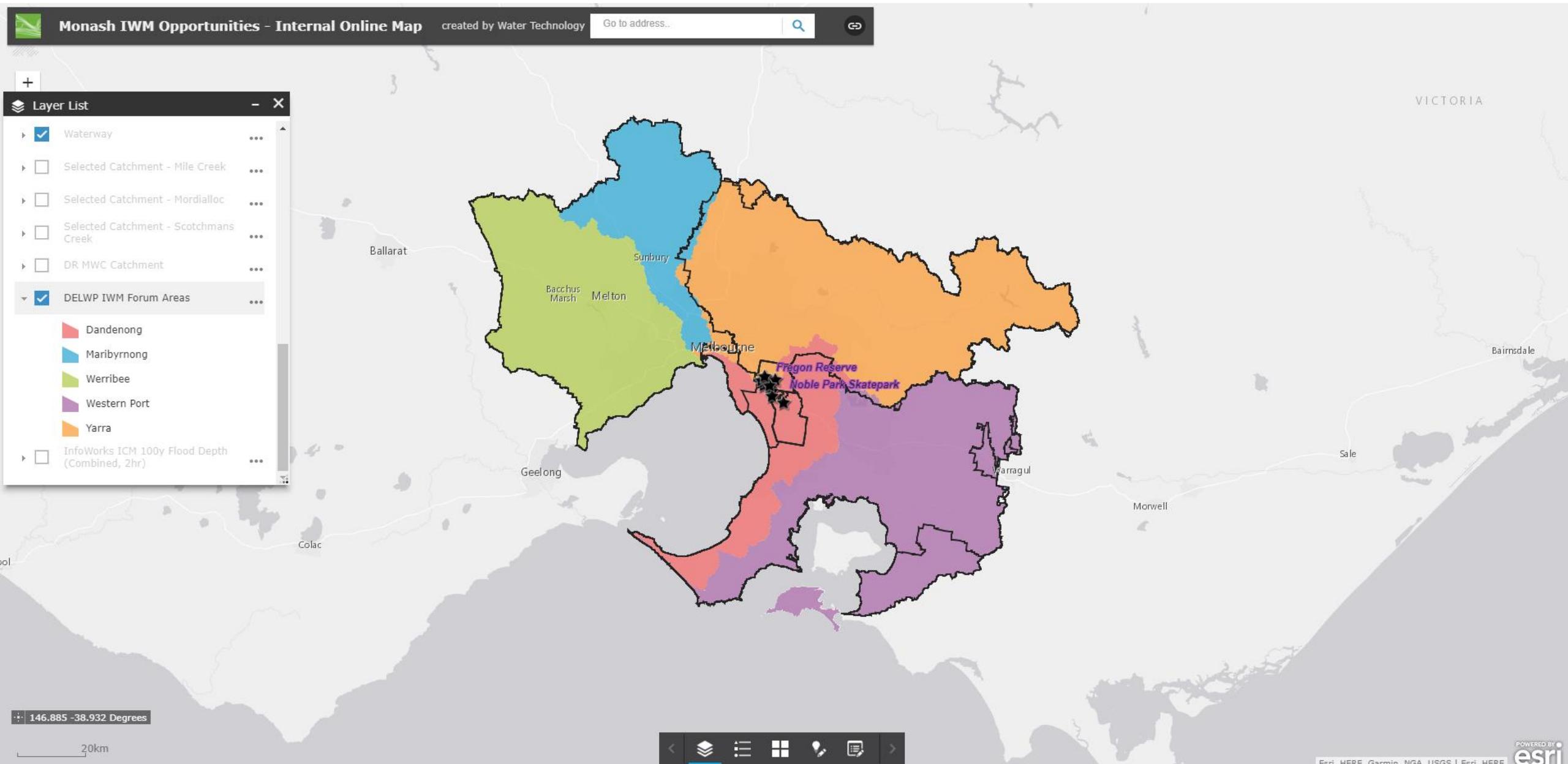
"I think it all sounds great as long as the green / environmental parts of the vision are not left out..."

"Monash does not reflect the modern business or their needs, buildings and access to services are not reflecting a good 'brand'..."

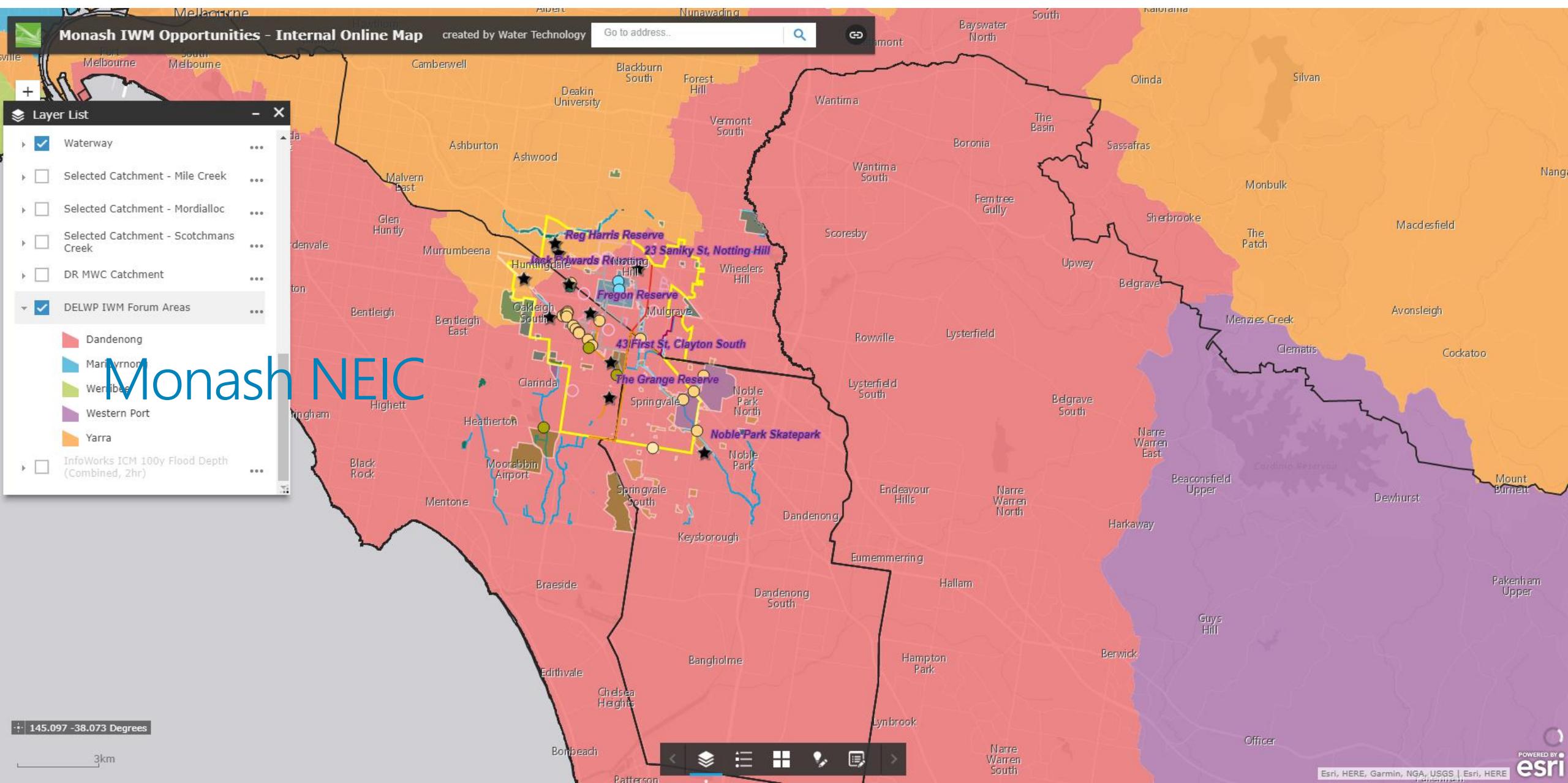
"The availability of open space close to workers is important..."

"...Open spaces need structure, activity and safety"

Monash National Employment and Innovation Cluster



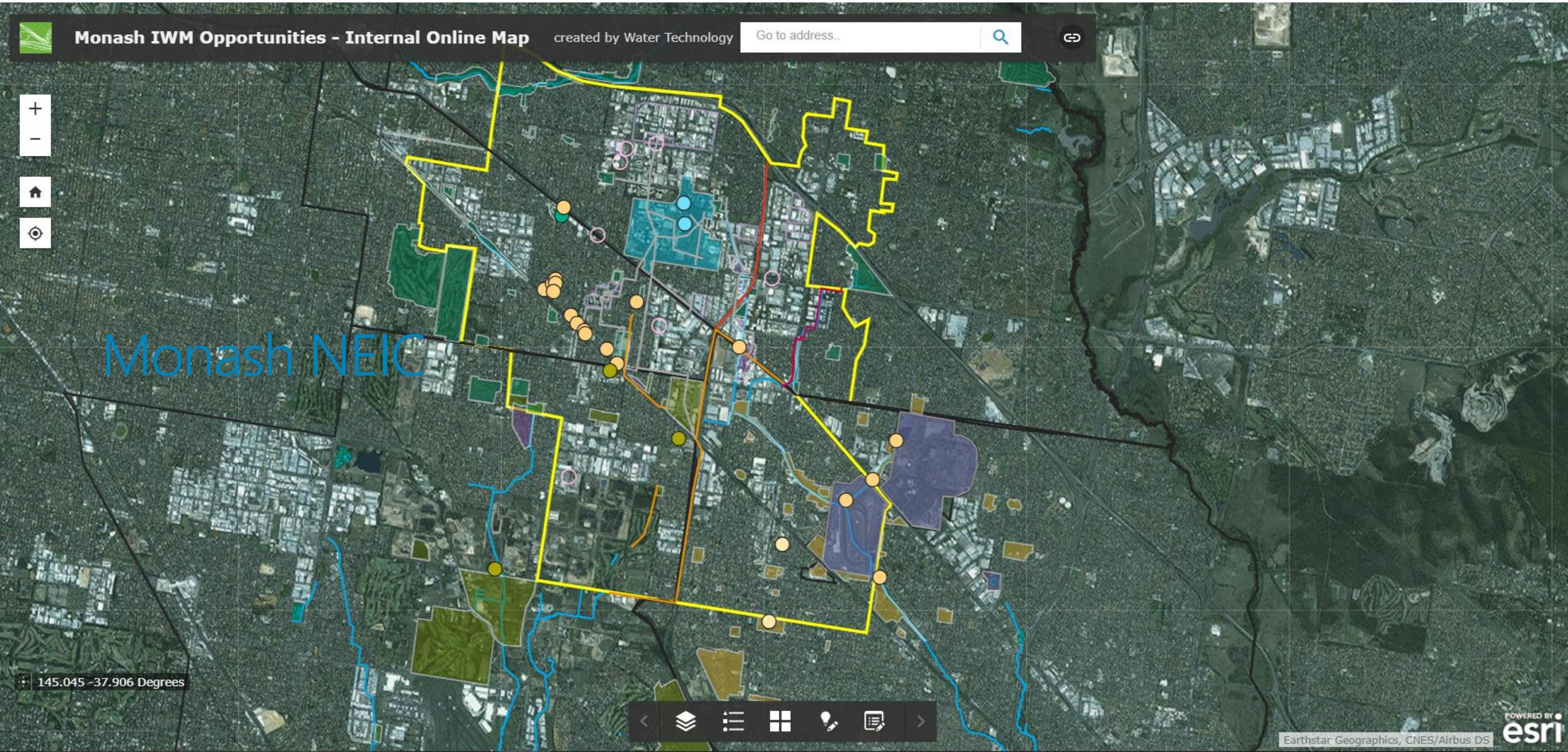
Monash National Employment and Innovation Cluster



Monash National Employment and Innovation Cluster

Monash
National Employment
and Innovation Cluster

Draft Framework Plan
March 2017



Monash National Employment and Innovation Cluster

Monash
National Employment
and Innovation Cluster

Draft Framework Plan

Monash IWM Opportunities - Internal Online Map created by Water Technology Go to address..

MONASH University

CITY OF MONASH

City of KINGSTON

Greater Dandenong City of Opportunity

VPA Victorian Planning Authority

South East Water

Yarra Valley Water

Melbourne Water

Department of Environment, Land, Water & Planning

State Government Victoria

FOUNDRY FORCE AHEAD

CRC for Water Sensitive Cities

clearwater

WATER TECHNOLOGY WATER, COASTAL & ENVIRONMENTAL CONSULTANTS

The map displays the cluster area with a grid overlay. Various local government and utility logos are placed across the map, indicating their presence or involvement in the cluster. These include:

- City of Greater Dandenong
- City of Kingston
- City of Monash
- Melbourne Water
- Monash University
- ParksVic
- South East Water
- VicRoads
- Yarra Valley Water
- Other
- T.B.C.

Logos for the Victorian Planning Authority, South East Water, Yarra Valley Water, Melbourne Water, Department of Environment, Land, Water & Planning, State Government Victoria, and Water Technology are also visible on the right side of the map.

Map - Projects

- [Link](#)

NOTE: The above link is to a restricted site. Please see the following slides for a example of what you would see.



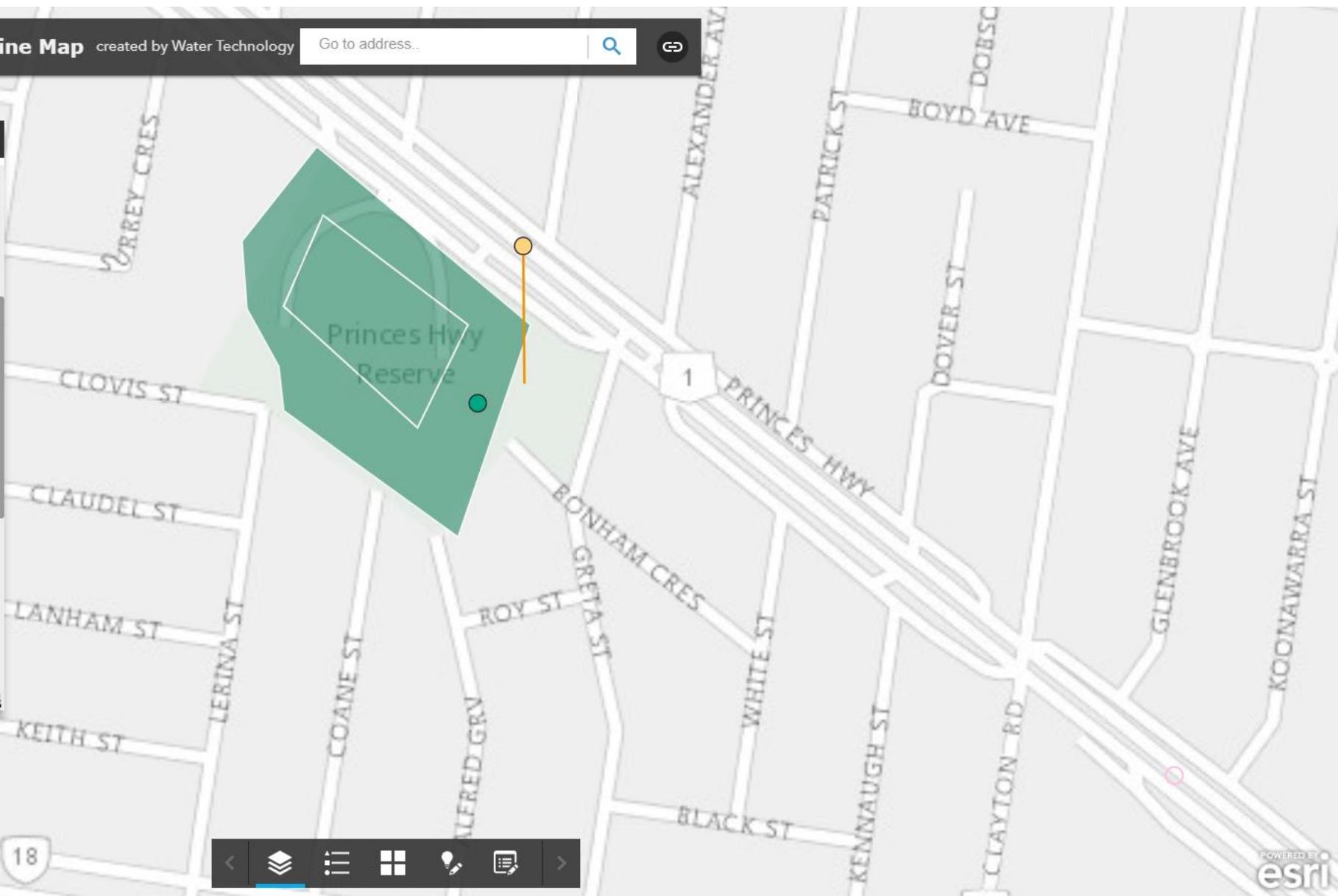
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Home

Location

- Layer List
- Monash PTF
 - Dandenong PIPE
 - Kingston CAPITAL WORKS
 - Kingston LOW POINTS
 - Kingston PIPE
 - Monash PIPE
 - Sewer - Existing
 - Water Main - Existing
 - Reports & Benefits
 - Monash Employment Cluster
 - MW - DR Retarding Basin



145.110 -37.907 Degrees

100m



+

-

**Layer List**

- MONASH FLT
- ...
- Dandenong PIPE
- ...
- Kingston CAPITAL WORKS
- ...
- Kingston LOW POINTS
- ...
- Kingston PIPE
- ...
- Monash PIPE
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- ...

145.117 -37.913 Degrees

100m

18



(1 of 2)

IWMS Opportunity: Public Open Space Master Planning

IWM Project	Public Open Space Master Planning
Project Name	Public open spaces - alternative water sources
Contact Organisation	City of Monash
Contact Details	Rianda Mills (WT)
Initiating Organisation	City of Monash - From a List
Initiating Organisation	- Free Text
Final Asset Owner - From a List	City of Monash
Final Asset Owner - Free Text	

[Zoom to](#)



Layer List	
<input type="checkbox"/>	Monash IWM
<input type="checkbox"/>	Dandenong PIPE
<input type="checkbox"/>	Kingston CAPITAL WORKS
<input type="checkbox"/>	Kingston LOW POINTS
<input type="checkbox"/>	Kingston PIPE
<input type="checkbox"/>	Monash PIPE
<input type="checkbox"/>	Sewer - Existing
<input type="checkbox"/>	Water Main - Existing
<input type="checkbox"/>	Reports & Benefits
<input checked="" type="checkbox"/>	Monash Employment Cluster
<input type="checkbox"/>	MW - DR Retarding Basin

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(2 of 2)

IWMS Opportunity: WSUD Installation

IWM Project	WSUD Installation
Project Name	Princes Highway Reserve
Contact Organisation	Luke Wait
Contact Details	Luke.Wait@melbournewater.com.au
Initiating Organisation - From a List	Melbourne Water
Initiating Organisation - Free Text	
Final Asset Owner - From a List	City of Monash
Final Asset	

[Zoom to](#)



(1 of 2)

IWM Opportunity: Sewer Duplication

IWM Project	Sewer Duplication
Project Name	SEW Sewer Upgrade
Contact Organisation	TBC
Contact Details	TBC
Initiating Organisation - From a List	South East Water
Initiating Organisation - Free Text	
Final Asset Owner - From a List	South East Water
Final Asset Owner - Free Text	
When was Work Last Done on the Project	
Zoom to	...

- Layer List
- MONASH FTL
 - Dandenong PIPE
 - Kingston CAPITAL WORKS
 - Kingston LOW POINTS
 - Kingston PIPE
 - Monash PIPE
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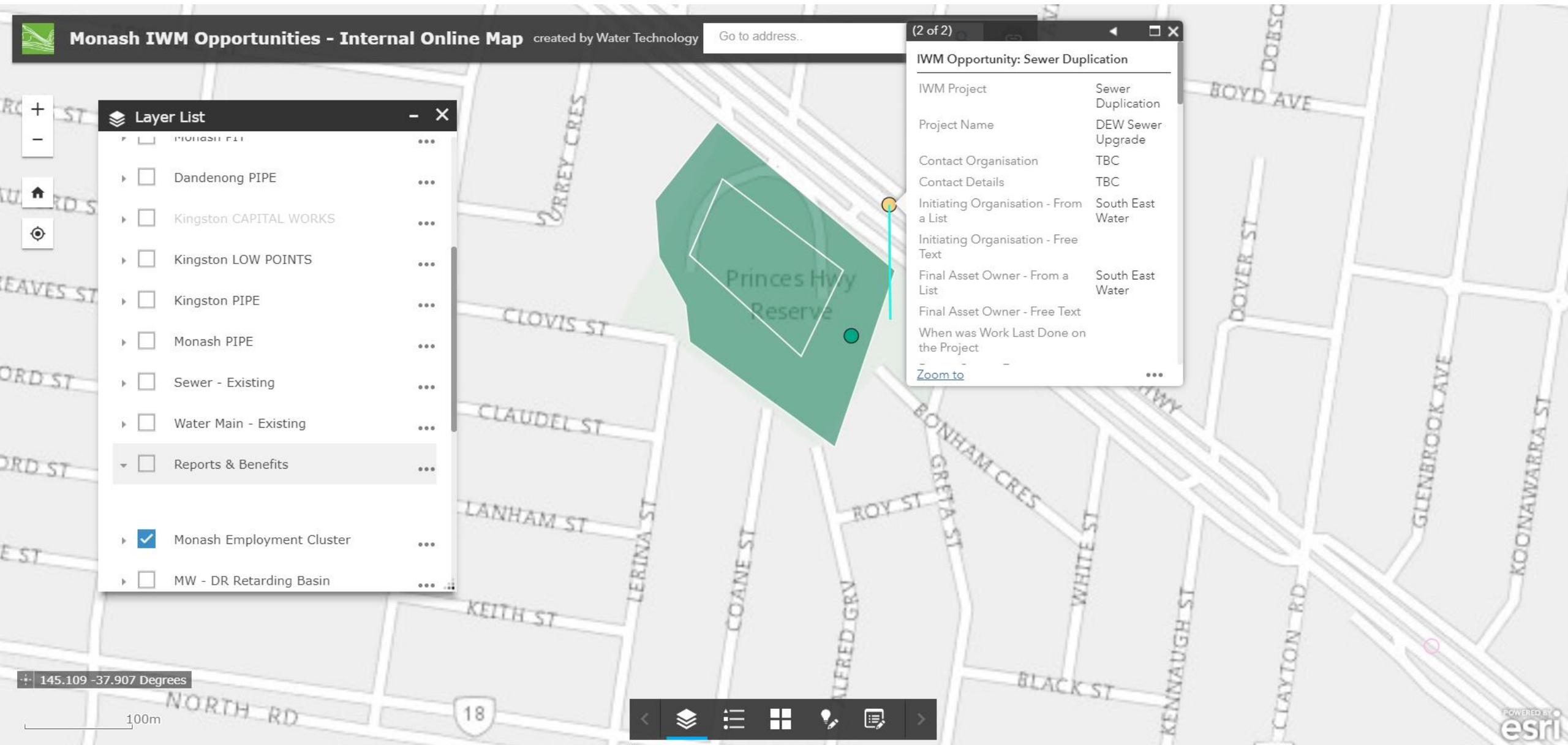
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(2 of 2)	
IWM Opportunity: Sewer Duplication	
IWM Project	Sewer Duplication
Project Name	DEW Sewer Upgrade
Contact Organisation	TBC
Contact Details	TBC
Initiating Organisation - From a List	South East Water
Initiating Organisation - Free Text	
Final Asset Owner - From a List	South East Water
Final Asset Owner - Free Text	
When was Work Last Done on the Project	
Zoom to	...



**Layer List**

- MONASH ST
- Dandenong PIPE
- Kingston CAPITAL WORKS
- Kingston LOW POINTS
- Kingston PIPE
- Monash PIPE
- Sewer - Existing
- Water Main - Existing
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(1 of 2)	
IWM Opportunity: Sewer Duplication	
IWM Project	Sewer Duplication
Project Name	Princess Highway Reserve Storage
Contact Organisation	South East Water
Contact Details	Chris Tancheff
Initiating Organisation - From a List	Other-Enter
Initiating Organisation - Free Text	E2Designlab
Final Asset Owner - From a List	City of Monash
Final Asset Owner - Free Text	
When was Work Last Done on the Project	
Zoom to	

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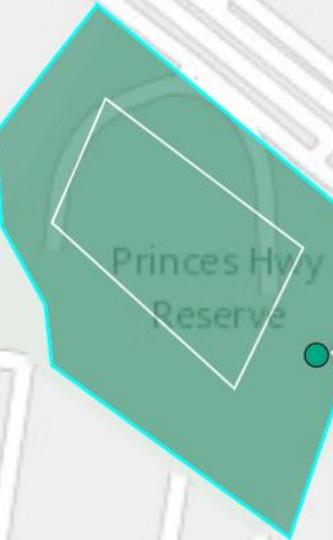
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**Layer List**

- Monash PTI
- ...
- Dandenong PIPE
- ...
- Kingston CAPITAL WORKS
- ...
- Kingston LOW POINTS
- ...
- Kingston PIPE
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(2 of 2)	
IWMS Opportunity: Public Open Space Master Planning	
IWM Project	Public Open Space Master Planning
Project Name	Public open spaces - alternative water sources
Contact Organisation	City of Monash
Contact Details	Rianda Mills (WT)
Initiating Organisation	City of Monash - From a List
Initiating Organisation	- Free Text
Final Asset Owner -	City of Monash
Final Asset Owner -	From a List
Final Asset Owner -	Free Text
Zoom to	

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Layer List

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(3 of 10)

Reports & Benefits: 1=Direct Link;
2=Potential Link; 0=No Link

Organisation	City of Monash
Document ID	CoM_01
DocumentName	Monash IWM Plan
Year	2014
Document Author	City of Monash (E2Design Lab)
Community Health	1
Irrigation Demand	1
Amentiy and Landscape	1
Flood Resilience	1
Waterway Health	1
Biodiversity	1

[Zoom to](#)

**Layer List**

- Monash PIPE
- Dandenong PIPE
- Kingston CAPITAL WORKS
- Kingston LOW POINTS
- Kingston PIPE
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(6 of 10)

Reports & Benefits: 1=Direct Link;
2=Potential Link; 0=No Link

Organisation	South East Water
Document ID	SEW_01
DocumentName	Monash Precinct Growth Projections Study
Year	2015
Document	SEW
Author	
Community Health	2
Irrigation Demand	0
Amenity and Landscape	0
Flood Resilience	0

[Zoom to](#)

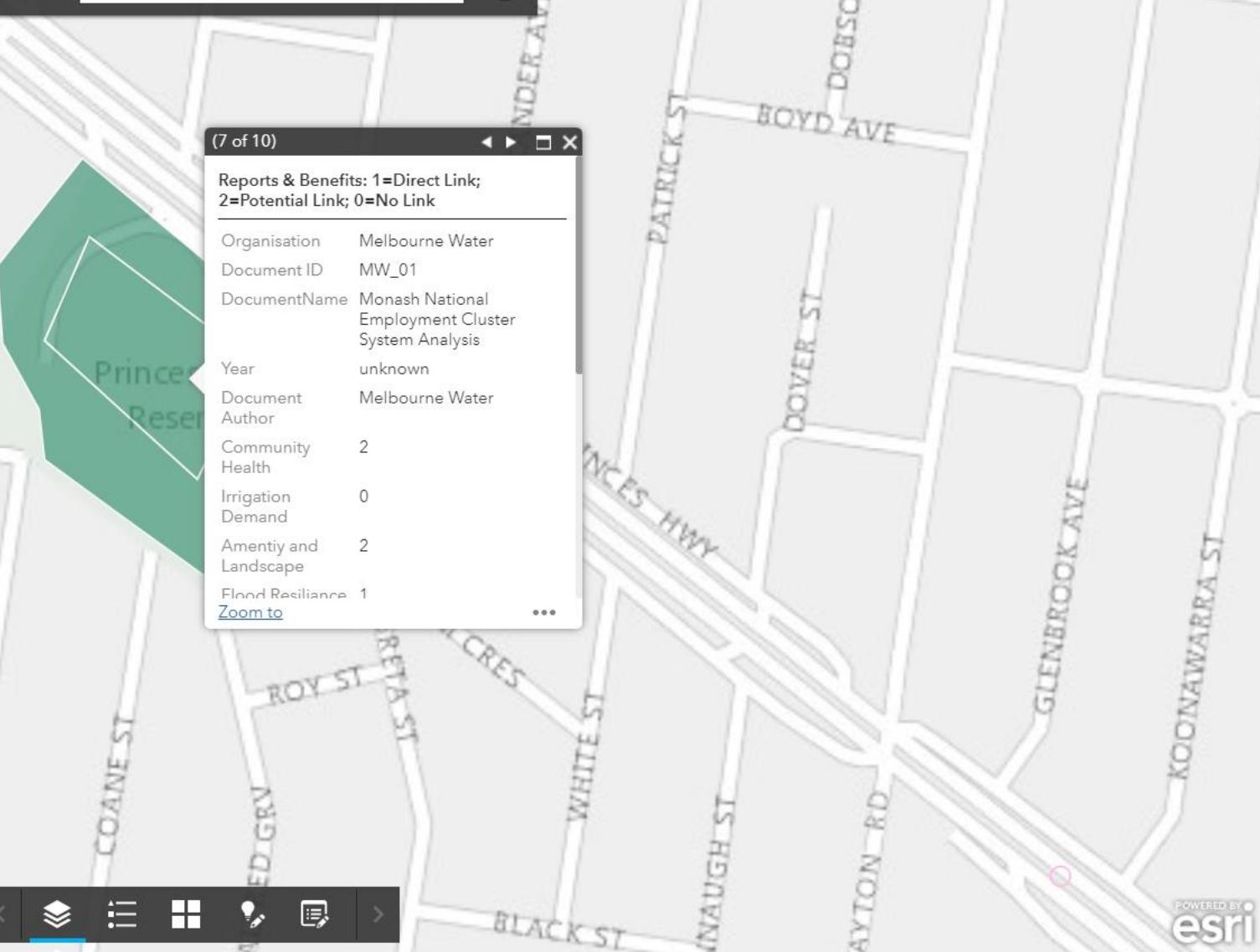
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- Layer List
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Layer List



- MUNICIPAL PIPE
- Dandenong PIPE
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- Kingston LOW POINTS
- Kingston PIPE
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(8 of 10)

Reports & Benefits: 1=Direct Link;
2=Potential Link; 0=No Link

Organisation	Victorian Planning Authority
Document ID	VPA_01
DocumentName	Monash National Employment and Innovation Cluster Draft Framework Plan
Year	2017
Document Author	Victorian Planning Authority website
Community Health	2
Irrigation Demand	0
Amenity and	1
Zoom to	...



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Layer List

MONASH ST

- Dandenong PIPE
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Map

(9 of 10)

Reports & Benefits: 1=Direct Link;
2=Potential Link; 0=No Link

Organisation	Victorian Planning Authority
Document ID	VPA_02
DocumentName	Monash National Employment Cluster Future Planning Ideas Map
Year	2016
Document Author	Victorian Planning Authority website
Community Health	2
Irrigation Demand	0
Amentiy and	1

[Zoom to](#)



Map – Reports and Benefits

	Document name	Community Health	Irrigation Demand	Amentiy and Landscape Improvement	Flood Resilience	Waterway Health	Biodiversity	Indigenous connections	Community Connection/Engagement	Water use reduction	Housing Affordability	Micro-Climate	FuturePlanning	Harvesting	Asset Management
CoM	Monash IWM Plan	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Indirect	Direct	Indirect
CoM	Review of Environmental Sustainability Road Map 2011- 2015		Direct	Indirect		Direct				Direct		Indirect		Direct	
CoM	Community Spaces Strategy City of Monash Caulfield to Dandenong Level Crossing Removal Project	Direct		Direct			Direct								Direct
MW	Monash National Employment Cluster System Analysis	Indirect		Indirect	Direct	Indirect	Indirect		Indirect	Direct				Indirect	Direct
SEW	Monash Precinct Growth Projections Study	Indirect								Indirect			Direct		Indirect
VPA	Monash National Employment and Innovation Cluster Draft Framework Plan	Indirect		Direct		Indirect			Direct	Indirect	Indirect	Indirect	Direct	Indirect	
VPA	Monash National Employment Cluster Future Planning Ideas Map	Indirect		Direct		Indirect	Indirect		Direct	Indirect	Indirect	Indirect	Direct		
VPA	Current plan in your area (online Map)	Indirect	Indirect	Indirect	Indirect	Indirect	Indirect		Indirect	Indirect	Indirect	Indirect	Direct	Indirect	

Bring those 2 things together...

- WORKSHOP PREPAREDNESS

- Find the stakeholders



- Show we understand

Document name	Community Health	Irrigation Demand	Amenity and Landscape Improvement	Flood Resilience	Waterway Health	Biodiversity	Indigenous connections	Community Connection/Engagement	Water use reduction	Housing Affordability	Micro-Climate
CoM Monash IWM Plan	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct	Direct
CoM Review of Environmental Sustainability Road Map 2011- 2015		Direct	Indirect			Direct					
CoM Community Spaces Strategy City of Monash Caulfield to Dandenong Level Crossing Removal Project	Direct		Direct				Direct				
MW Monash National Employment Cluster System Analysis	Indirect		Indirect	Direct	Indirect	Indirect		Indirect	Direct		
SEW Monash Precinct Growth Projections Study	Indirect								Indirect	Direct	Indirect
VPA Monash National Employment and Innovation Cluster Draft Framework Plan	Indirect		Direct								
VPA Monash National Employment Cluster Future Planning Ideas Map	Indirect		Direct								
VPA Current plan in your area (online Map)	Indirect	Indirect	Indirect	Indirect							

- Bring them together

- Let them assess together what everyone has going on



Identify Projects



What everyone thought

Monash NEC IWM Stakeholder Workshop

presented by:

South East Water, WATER TECHNOLOGY, FOUNDRY

Represent!
28 attendees from...

CITY OF MONASH, Melbourne Water, clearwater, City of KINGSTON, MONASH University, VPA, DELWP, Yarra Valley Water, South East Water, GREATER DANDENONG

72% of attendees struggled to find parking (sorry!)

3 example study areas workshoped

Clayton Business Park, Sandown Racecourse, Princess Hwy Reserve

Group Sessions x 3

Three groups were formed to focus on each of the study areas to discuss and develop IWM opportunities for each site using the Online Mapping

100% of attendees found the online map useful
62% found it extremely useful

How should we go about setting objectives and targets for the NEC?

Existing: 56% Synthesising the existing objectives from stakeholders
Place Based: 33% Set place based targets
Specific: 11% Develop specifically for NEC

The group work was:

useful	76%
somewhat useful	18%
not useful	6%

At the end of the workshop, opportunities were identified for all organisations to continue collaborating

For further information or to discuss opportunities:

Chris.Tancheff@sew.com.au
9552 3175
Rianda.Mills@watertech.com.au
8526 0800

and... Since the workshop, more opportunities have been identified!

Next (current) steps

- Further Monash

Sandown <https://youtu.be/1hJb4EjB3jl>

Clayton BP <https://youtu.be/M8AfN6hFpHM>

Princes Hwy <https://youtu.be/2AclyKhTuRk>