

# living brooklyn

## BCRG Presentation

Wednesday 13th November 2013

E2DESIGNLAB



Office of  
Living Victoria



# living brooklyn project

## Office of Living Victoria

The Living Victoria Fund is a \$50 million fund to contribute to the Government's Living Victoria Policy for urban water cycle systems reform in Melbourne and regional cities.

Brimbank City Council received \$405,320 through the fund to prepare an Integrated Water Cycle Management\* (IWCM) Strategy for Brooklyn Industrial Estate.

\**IWCM: A multi-disciplinary and multi-objective approach for the sustainable management of water cycle services*



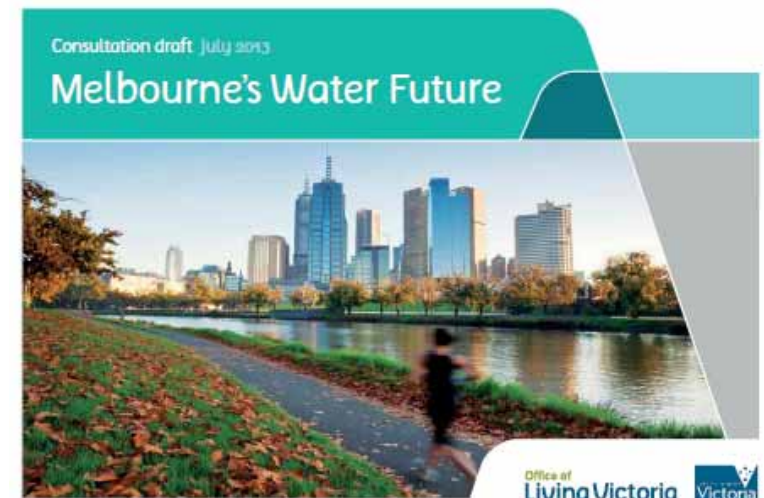
Former Industrial Site, Houtan Park, Shanghai

# integrated water management

Melbourne's Water Future Strategy is a new innovative approach to water planning.

The intention of the strategy is to create an integrated or **whole-of-water-cycle-approach to water** that will secure:

- Safe and plentiful water supply
- Manage our stormwater runoff
- Manage our waste water discharge
- Reduce flooding
- Keep our parks and gardens green
- Improve our waterways



# brooklyn evolution

## 6.0 Implementation

Action/Project	Role/purpose/objective	Responsibility	Timing
<b>Further Studies and Planning</b>			
Master planning	Undertake master planning of the sub precincts and large sites to integrate how each site connects to each other to achieve the broader vision and place making within the precinct.	Council and landowners	Medium to long term

Brooklyn Industrial Precinct  
Structure Plan and Urban Design Framework  
September 2012  
Brimbank City Council



## the brooklyn evolution



## key message and project goal

Living Brooklyn is a **solutions focused** project that will use a **collaborative approach** to guide change.

Living Brooklyn will bring to the table the stakeholders who use, influence or are affected by aspects of the water cycle at Brooklyn Industrial Estate to collaborate on a Vision for a healthier, more prosperous future using water as the catalyst for change.



Yarra Park Water Recycling at MCG

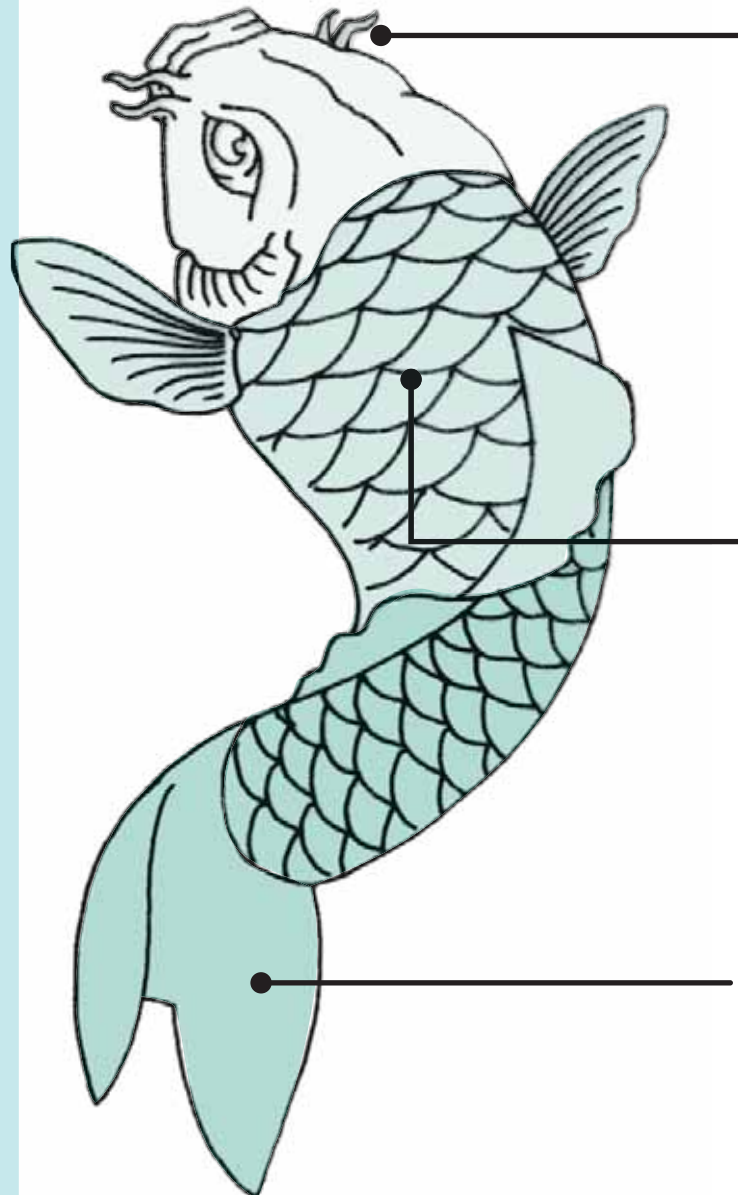


Guilfoyle's Volcano



Grant Street Reserve

# collaboration



## Head: Leadership Team

OLV	Hobson's Bay Council
Victoria University	Maribyrnong Council
City West Water	Wyndham Council
Melbourne Water	Brimbank City Council
EPA	Vicroads
Department of Health	Industrialists
Department of Business and Innovation	Lead West
	Community Representative

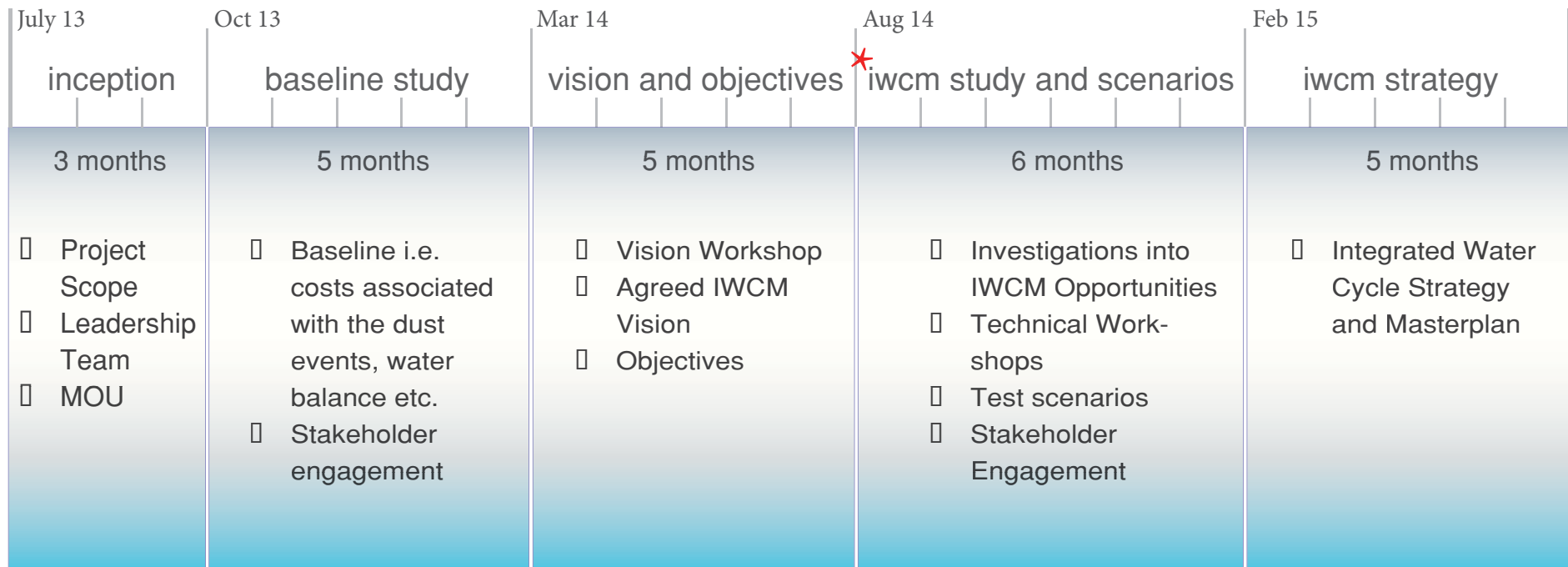
## Body: Council Reference Group

Strategic Planning	Urban Planning
Urban Design	Engineering
Landscape Architecture	Environment
Community Devt.	Public Health/Wellbeing
Compliance	Economic Development
GIS	Administration

## Tail : Technical Working Group

Victoria University	OLV
E2Design Consultants	Leadership Team (to be called upon as needed)
Brimbank City Council	

# project stages



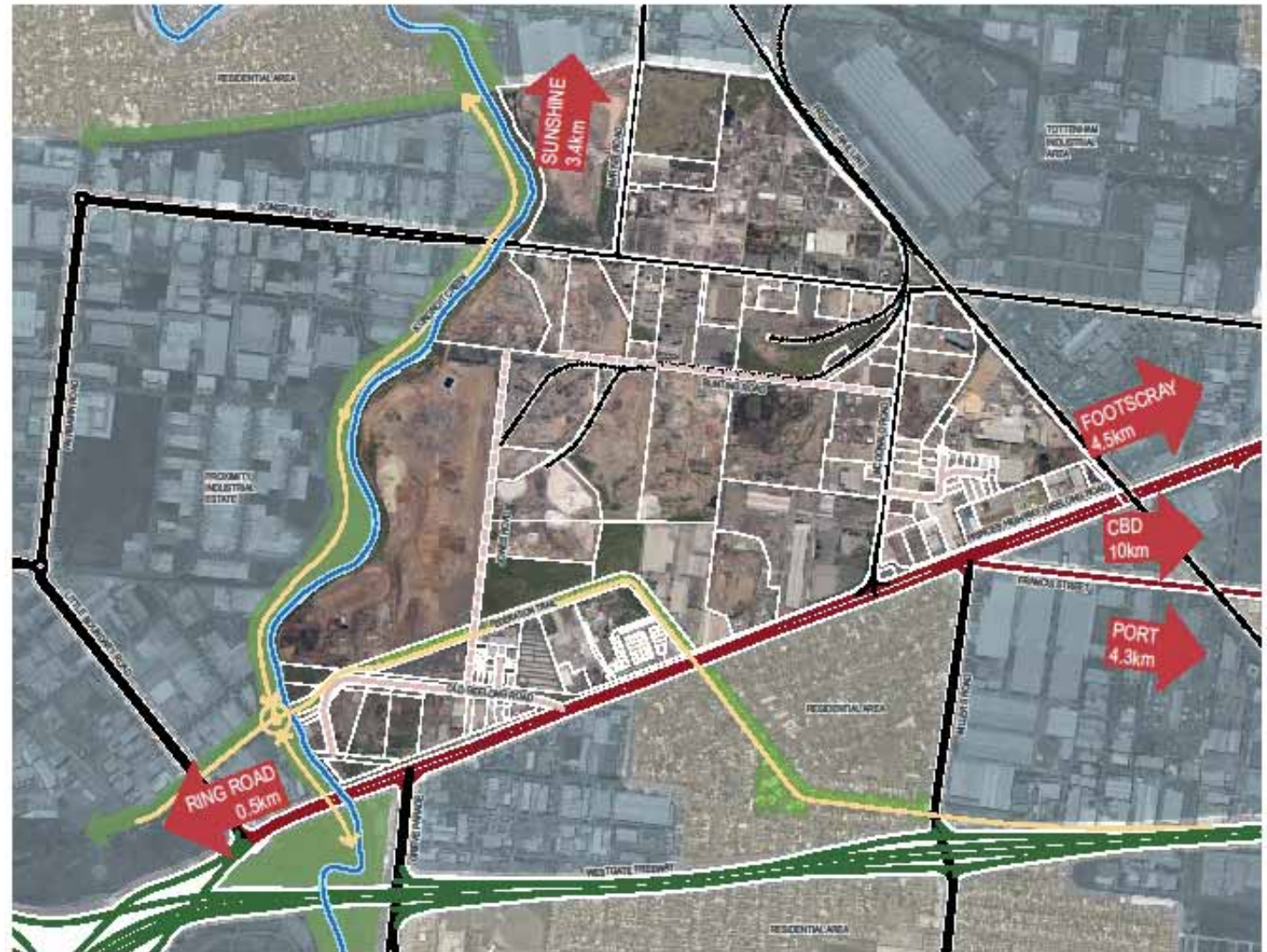
\* *Integrated Water Cycle Management: A multi-disciplinary and multi-objective approach for the sustainable management of water cycle services*



# creating a vision

# living brooklyn: opportunities

1. Localisation
2. Kororoit Creek
3. Federation Trail
4. Engaging industry, building relationships
5. Involving locals, building trust
6. Grouping projects, sharing resources
7. Strengthening agency connections
8. Sustainable industry synergy options  
i.e. industrial ecology



# wellesley, massachusetts



- Wellesley College Carpark 175 CP build on contaminated land
- Contaminated land removed and filled with clean fill, clay liners
- Wetland built over the carpark. It manages excess storm water, stores carbon, substantially increased biodiversity and habitat in the area

# shanghai chemical plant



- Highly polluted, disturbed area used for chemical industrial activity
- New ecological approach including conservation, education and sustainable development.
- 74-acre Natural Wastewater Treatment System, using wetland to purify the treated industrial wastewater for recycling within the industrial park.
- Increased demand for tenancy

# gowanus canal sponge park, NY



- Canal used to capture sewerage overflow. Used as a rubbish dump
- 11.4 acres highly contaminated brownfield land converted into an urban park
- Completed, Gowanus Canal will include greenways, open space, wetlands and treatment tools

# red ribbon, tanghe river park



- This area was previously a neglected dump
- 500m of parkland has been added along the Tanghe River
- Enormous social, economic and environmental (liveability) benefits for residents and tourists



# tangshan nanhu eco park

BEFORE



AFTER



- Former mine later used as a landfill and sewage lagoon
- Materials reuse and recycling, stormwater management, erosion control, and wildlife habitat restoration emphasized through the design.
- Constructed wetlands treat reclaimed water from a nearby sewerage treatment plant saving \$15.4 million per year
- Recreation and rental of park facilities generates \$157,300 annually

# rooftop urban agriculture, Illinois



- Located in a depressed area of Chicago, this roof garden produces 454 kg of organic fruit and veg each year
- Education, learning, and inclusion are the hall marks of this important community node
- Small co-ops employ and train students. 175 students are fed each day.
- The green roof reduces the heat island effect, ecologically manages water, sequesters CO<sub>2</sub>, insulates the building



# shanghai houtan park

BEFORE



AFTER



- Former 2010 Shanghai Expo Pilot Site for green technology
- It treats \$145,000 worth of water each year, cleaning 634,000 gallons of polluted river water each day
- It sequesters 242 tons of carbon annually
- Recreation, education and tourism benefits

outcome

# what would we like to achieve?

- ★ **build knowledge and awareness** around integrated water cycle management and its link to liveability and health
- ★ a **solutions focused approach** that supports constructive input
- ★ increase public and private sector awareness of the issues affecting communities' (business and residential) **health and well being** at Brooklyn
- ★ identify how Brooklyn's current activities have the potential to impact **business productivity**
- ★ recruit **champions from across industry and government to work in collaboration**
- ★ a baseline study that will inform a **business case for change**
- ★ **leverage funding** through the business case

# key project contacts

## Living Brooklyn's Technical Team

- OLV

**Andrew Allan** (Fund Facilitator), **Bridget Wetherall** (IWCM Planning)

- Victoria University:

**Stephen Gray** (Director Institute for Sustainability and Innovation College of Engineering and Science) **Roger Jones** (Professorial Research Fellow, Centre for Strategic Economic Studies),

**Dr Daniel Ooi** (Postdoctoral Research Fellow, College of Arts)

- E2Design Consultants:

**Dr Sara Lloyd** (Director), **Dr Dale Browne** (Senior Engineer)

- Brimbank City Council

**Susan Fitton** (Strategic Planner), **Russell Cadman** (Engineer), **Tashia Dixon** (Urban Design)

- Facilitator: **John Crofts**

## Project Manager

Tashia Dixon (Brimbank City Council)

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