

National **Environmental Science** Programme

# Upper Stony Creek Transformation Project: A Socio-Ecological Study

# Background

Upper Stony Creek in Sunshine North is being transformed from a concrete channel into an accessible urban wetland and park.

This project is funded by the Australian Government, Department of Environment, Land, Water and Planning, Melbourne Water, City West Water, Development Victoria, Brimbank City Council and Greenfleet. A multidisciplinary team from RMIT University and the University of Melbourne are conducting a longitudinal study which aims to determine the impact of the Upper Stony Creek Transformation project on residents, with a focus on psychological, social and physical health outcomes as well as biodiversity benefits.

Baseline data collection over 2016/17 has been completed to assess the impact of this greening intervention and waterway restoration on residents' health and wellbeing, and plant and animal biodiversity. Selected results are provided overleaf.



## The Location

- 14 kilometres west of Melbourne's CBD
- Population is about 11,700 people (ABS, 2016)
- Average 3 people per household (ABS, 2016)
- Over 50% of residents born overseas (ABS, 2016)





**Australian Government** 















### **ECOLOGICAL FINDINGS**

### **Frogs**

Frog species found at the Stony Creek transformation site: Pobblebonk, Striped Marsh Frog, Spotted Marsh Frog.

Frog species found in the neighbourhood: Common Eastern Froglet.

Frogs were often heard calling from the concrete channel, particularly where plants grew through cracks in the concrete.



### **SOCIAL FINDINGS**

Results from surveys and interviews with residents:

- 65% of survey respondents say the area is a good place to live.
- Only 35% of survey respondents feel they have many opportunities to be physically active.
- Survey respondents rated their subjective wellbeing as 65 on a 0-100 rating scale which is lower than the Victorian average of 77.
- The current Stony Creek site in Sunshine North is used by less than 2% of residents.
- The site is currently unloved and underused.
- Residents have concerns about safety and maintenance.

"We don't go there because of the weed problem and there's no pathway."

 Residents are observant of local biodiversity and perceive native species favourably.

"We're slowly seeing ...a lot of our native birds coming back to this area."



# Insects Insect pollinators found: 7 native and 3 non-native. Pollinators interacted mostly with non-native herbaceous weeds. The most common pollinators were native bees, followed by non-native European honeybees.

### Bats

Bats detected: 8/14 species of insect-eating microbat found across Greater Melbourne.

Number of calls recorded: 7,000.

More common species: Gould's Wattled Bat and the Southern Free-tailed Bat.



- There are some concerns about snakes and mosquitoes.
- Most people are excited about and looking forward to the transformation.

"We're very grateful, and [it] feels like Christmas has come [laughs]."