## VALUING THE BENEFITS OF WATER SENSITIVE PROJECTS: AN APPLICATION TO TARRALLA CREEK RENATURALISATION

Rita Chandra











## 

- 1. Project Background & Drivers
- 2. **Economic Evaluation Tools**
- 3. Engagement Process
- 4. Next Steps











### ECONOMIC EVALUATION TOOLS



**INFFEWS Value Tool** 



**INFFEWS Benefit: Cost Analysis Tool** 

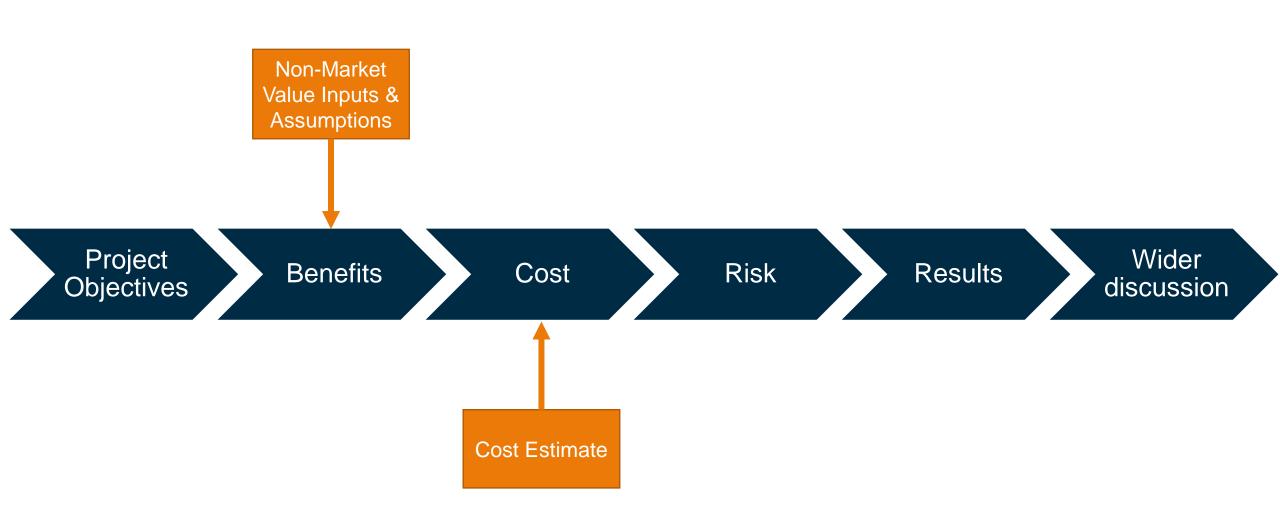




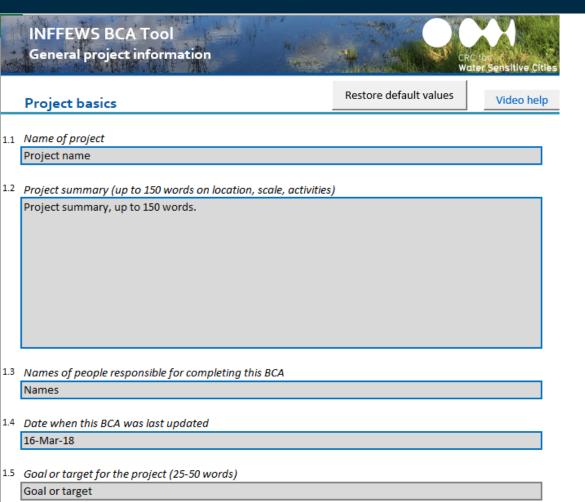
## HEALTH BENEFITS FROM WATER CENTRIC LIVEABLE COMMUNITIES

A REPORT PREPARED FOR THE WATER SERVICES
ASSOCIATION OF AUSTRALIA (WSAA)

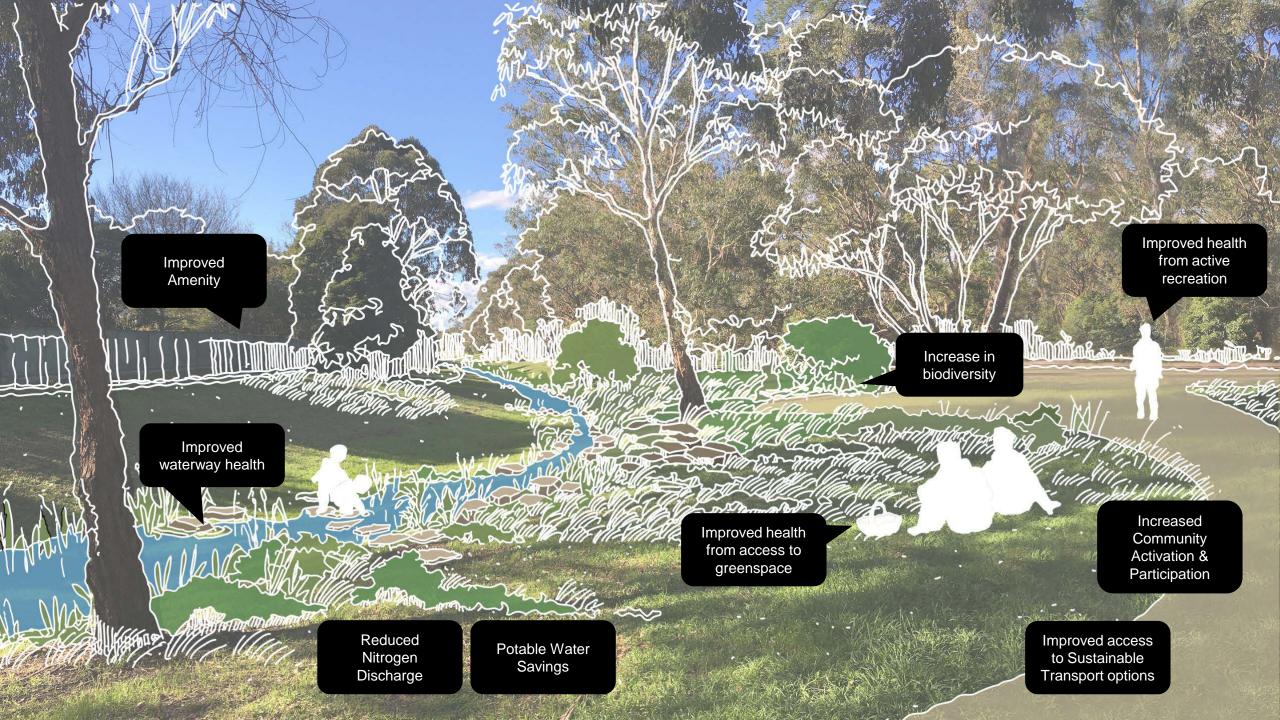
### THE DISCUSSION PROCESS



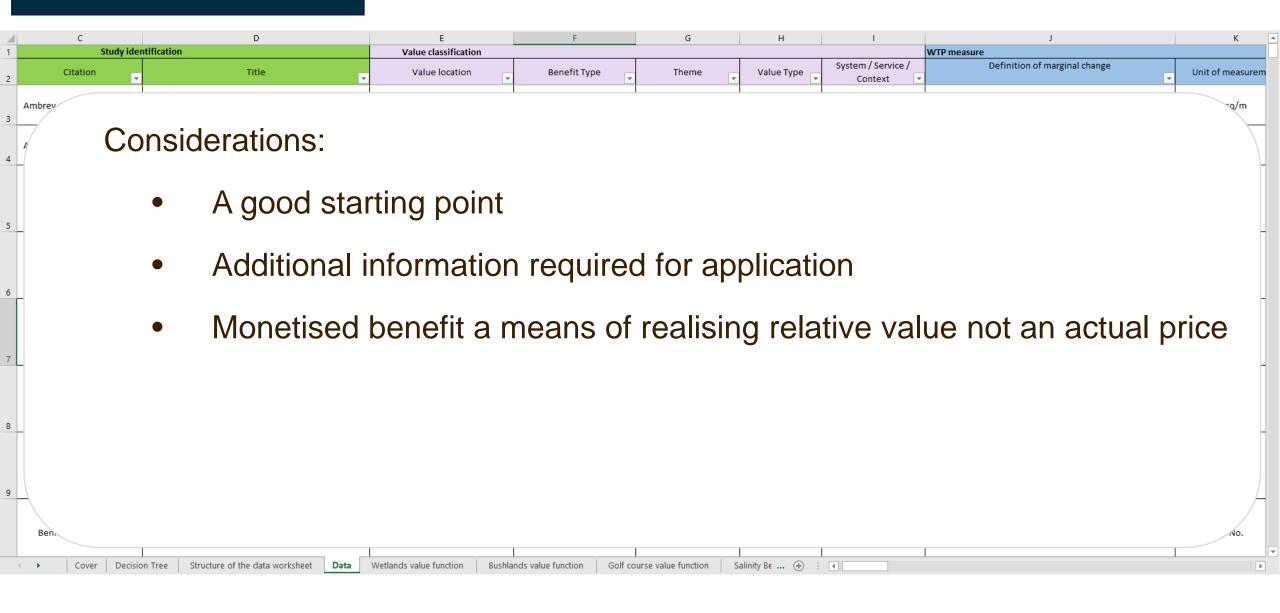
### CETTING EVERYONE ON THE SAME PACE



- Clear project objectives
- Project activities
- Understand impacts on the community with and without the project



#### Non-Market Value Tool



# EXAMPLE BENEFIT: ECCLOGICAL IMPROVEMENT – STREAM HEALTH

Measure	Value	Payment				
Willingness-to-pay	\$88 per household	Annual				
32,000 = Croydon Population						
2.4 = Average Household Size						

\$1.2M of benefit generated per year

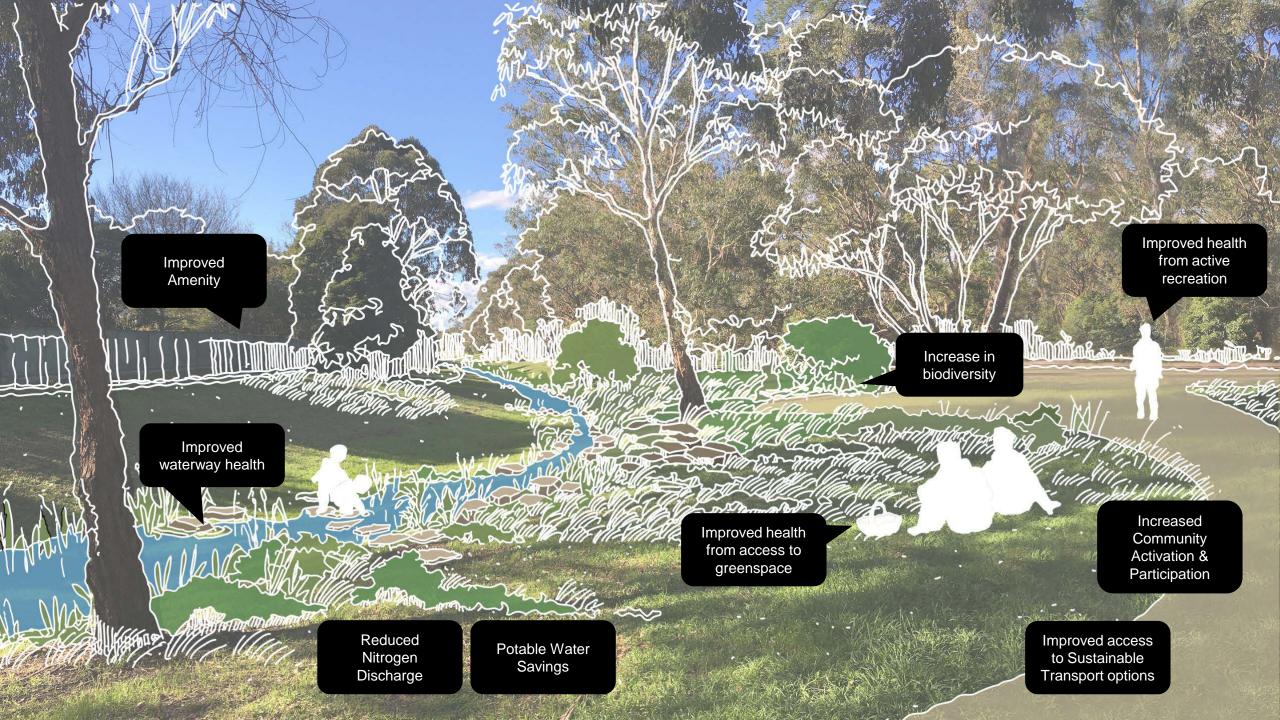
### EXAMPLE BENEFIT: IMPROVED AMENITY

Measure	Value	Payment
% changes in property prices from proximity to a wetland per affected house	0.14%	Once-off

\$770,000 = Croydon Median House Price

1886 Houses Impacted by future wetland within 400m radius

\$1.8M of benefit generated



### OVERALL BCA RESULTS

Benefits (present value)	\$19.4M
Costs (present value)	\$15.5M
Net Present Value (NPV)	\$3.9M
Benefit: Cost Ratio (BCR)	1.25

### WHAT IS THE VALUE TO DIFFERENT STAKEHOLDERS?

Benefit	Total PV	Melbourne Water	aroondah City Council	Yarra Valley Water	Potential other partners
Improved stream health	\$16.4M	?	?	?	?
Improved human health	\$1.3M	?	?	?	?
Improved amenity	\$1.8M	?	?	?	?
Reduced Nitrogen to Port Phillip Bay	\$2.9M	?	?	?	?
Drinking Water Savings	\$0.4M	?	?	?	?

### WHAT DOES THIS MEAN FOR YWY?



WE SUPPORT THRIVING COMMUNITIES





### KEY PANTS

- BCAs can be used as a process to facilitate discussions
- Many tools can be used but these tools are user-friendly and robust
- Monetised benefits can help realise the value of projects
- We all have an increasing role to play but clear benefits can provide links back to organisational priorities

