CRC for
Water Sensitive Cities

INFFEWS Value Tool

Industry Note
Project IPR2

The CRCWSC has developed a comprehensive database of dollar values for non-market benefits generated by water sensitive systems and practices, and a set of user guidelines that explain how the information in the database can be used to support business case development using benefit transfer.

Introduction

The CRC for Water Sensitive Cities (CRCWSC) Comprehensive Economic Evaluation Framework (IRP2) has developed a database tool known as the Investment Framework For Economics of Water Sensitive cities (INFFEWS) Value tool. The core of the INFFEWS Value tool is a comprehensive database of Australian non-market valuation studies, where each study in the database contains a dollar value estimate of the non-market benefits generated through the use of water sensitive systems and practices. To populate the database a comprehensive search and review process was used, and this process has ensured that only the most suitable studies have been included in the database. The design of the tool was informed by industry stakeholder consultation and industry experts provided feedback on the design and functionality requirements of the tool.

The tool is relevant for both public and private sector organisations seeking dollar values for the non-market benefits generated from investment in water sensitive systems and practices. A comprehensive set of user guidelines for the tool are also provided, which have been designed to walk the non-expert user through all stages of using the tool.

What values are available?

The current version of the INFFEWS Value tool contains 336 non-market benefit values from 76 Australian studies that are specifically related to investment in water sensitive systems and practices.

There are over 20 different benefit types represented, with a spread of values available, including:

- Ecological improvement and biodiversity (89 values)
- Reduced recurring costs (24 values)
- Improved security of water supply (51 values)
- Reduced morbidity/improved health from extreme heat (5 values)
- Improved aesthetics (6 values), and
- Many more…..

How can organisations use these values?

Developing a business case for investment in water sensitive systems and practices is often strengthened when both the traditional market benefits and the non-market benefits of the investment are incorporated as part of the analysis. Obtaining a monetary value for non-market benefits is complex, and ideally requires a primary non-market valuation study to be conducted.

Completing a primary study can be both expensive and time consuming. When organisations do not have the time or resources to conduct a primary study, the ***benefit transfer method*** can be used to provide a reasonable approximation of the non-market benefits associated with the proposed investment.

The INFFEWS Value tool includes a set of guidelines for users on how to conduct benefit transfer using the values in the database, including guidelines for choosing appropriate methods of adjustment for any given context.

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The INFFEWS Value Tool consists of the following components:

- ***INFFEWS Value Tool*** – excel-based spreadsheets comprising a comprehensive set of information about non-market valuation studies with useful filter and search options
- ***INFFEWS Value Tool Guidelines*** – outlines the features and functions of the Value tool, and provides demonstrated examples on how to conduct benefit transfer using values from the database
- ***Training resources and opportunities are currently under development***

The INFFEWS Value tool is part of a broader package of economic tools and resources.

The **INFFEWS Benefit: Cost Analysis (BCA) tool** is another tool developed by IRP2, to support balanced and systematic decision making about water sensitive investments, and to provide evidence for use in business cases.

Values from the INFFEWS Value tool can be used as inputs to the INFFEWS Benefit: Cost Analysis (BCA) tool.

Features of the INFFEWS Value tool:

- A comprehensive list of up- to- date values related to water sensitive systems and practices in Australia
- Excel-based tool compatible with Windows and Mac operating systems
- Easy to use filters and search functions to identify relevant values
- Benefit values classified in a range of ways to assist with identification of relevant benefit types for a given context
- Supporting information about the source of the value, for example each value is supplemented with contextual information, and details of the method used to derive value
- Direct weblinks and full citation of all original studies
- Indication on the level of robustness of the original study based on the review process
- Multiple value functions and look-up tables to assist with the process of generating a context specific benefit transfer value
- A Decision Tree that provides a quick summary on how to use the tool
- Comprehensive guidelines on how to navigate the tool and how to use the tool for benefit transfer applications
- Comprehensive fully worked examples that demonstrate how to use values from the database and apply these values to new contexts.

Further Reading

Gunawardena, A., Zhang, F., Fogarty, J., Iftekhar, M. S., (2017). *Review of non-market values of water sensitive systems and practices: An update.* Melbourne, Australia: Cooperative Research Centre for Water Sensitive Cities.

Further information

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