



Case study 1

The value of clean beaches

Sydney Water

This case study showcases

The broader economic benefits of effective water and sewerage provision

Problem

Beaches contribute to the 'liveability' of a city. Beaches provide plentiful opportunities for recreation for people from all walks of life, and cater to varying interests. Beaches are a place to swim, surf, play, relax, spend time with friends and family or simply enjoy the view.

If water quality at the beach is poor, swimmers may become ill, biodiversity may suffer, and the beach experience would be less enjoyable overall.

Sydney Water has made a number of infrastructure investments which have improved water quality in key beaches over the years. For example, the old cliff-face outfalls at Manly, Bondi and Malabar were decommissioned and replaced with the Deepwater Ocean Outfall, alongside other changes to wastewater treatment, beneficial reuse and trade waste.

In order to fully understand the value in this investment, the economic and social value generated from the improvements in water quality must be taken into account. These impacts are challenging to measure.

Solution

A report by Deloitte Access Economics considers the wider benefits and contributions improved water quality has on Sydney beaches. A range of economic

modelling and other estimation techniques were used to get a sense of the quantum of benefits associated with beaches, and with cleaner water at beaches.

This study considered five potential benefits and contributions

Tourism contribution – domestic and international

Health benefits (e.g. reduced absenteeism) with a reduction in sewage pollutants

Value for Sydney residents – direct uses, amenity for future generations

Biodiversity benefits (not quantified)

Brand benefits (not quantified)

The study estimated that

the value attributable to coastal beach water quality – for Sydney residents alone – is in the order of \$137 million per year or a lifetime value of around \$2 billion.

the net value added associated with beach water quality is worth around \$332 million per year to the NSW economy through domestic and international tourism

the health benefits associated with beach water quality due to the avoidance of illness for beach users is estimated at \$140 million per year from avoided absenteeism

In addition to the economic benefits there were also intangible benefits associated with biodiversity and brand value.

Business case

Sydney Water makes a significant infrastructure investment to improve water quality in Sydney beaches. This study can help to justify future investment in this area by making decisions commensurate to actual benefit.

Key drivers

Understanding the broader benefits that Sydney Water can provide through their infrastructure investments.

Benefit/outcome

The broader benefits Sydney Water provides to the community by maintaining good water quality at Sydney beaches include:

Ability to keep beaches open for recreational activities for local residents

Amenity of beaches and knowing the water is clean and pristine (even for those that don't swim or visit).

Enhanced tourism from both domestic and international visitors

Decreased incidence of gastrointestinal, respiratory, eye and ear conditions related to sewage pollutants.

Improved biodiversity at the shore, reduction in pollutants.

Brand value for Sydney.