How to successfully set up a user-pay stormwater utility charge

A safe and fair user-pay stormwater utility charge is the lynchpin to raising good revenue for the successful management of stormwater assets by improving water quality, reducing water quantity and maintaining networks, including backlog.

Due to budgetary restraints, new assets required to mitigate flow levels during flooding and reduce the pollution load from plastic and urban pollution are generally put on hold. Larger floods and more flood-prone areas are exposing Local Government to class actions from reduced water quality and loss of life. For example, in 2007, 2-year-old Jasmin Holt drowned alongside her older sister, Madison, 3, her parents, Adam Holt and Roslyn Bragg, and 9-year-old cousin Travis Bragg, when a surge of whitewater washed away the road beneath them and swallowed their car. Corroded stormwater piping caused the road to collapse during torrential flooding, exacerbated by stormwater from the increased impervious surfaces from a new industrial site directly behind the road. A coronial inquiry found Council negligent, and Council paid the Holt family an undisclosed sum of money.[1] The tragic death of Ryan Teasdale in March 2017 when he was swept into an outdated open stormwater inlet and disappeared from heavy rains.[2]

Low confidence surrounds data associated with the useful lives of stormwater assets in stormwater management plans. In NSW, Mosman City Council states 150 years for nearly all stormwater assets,[3] Hornsby Council at 100 years for all assets.[4] In comparison, Mid-Western Regional Council states 80-100 years,[5] and NSW Reference Rates Manual states 30-100 years.[6]

It is of concern that Local Government may turn a blind eye to aged and crumbling assets, believing their useful life is longer than it is.

Pressures to correctly manage stormwater are numerous, but the significant pressure is funding. Other pressures include *Ageing and crumbling infrastructure - every council has a backlog, *Expanded infrastructure responsibility - systems were built too small or not at all, *Lack of capital funding for new infrastructure causing competition within council depts for funding. *A disconnect between a DA dept that approves GPT's and an Assets Dept that reduces the number of GPT's, low-cost maintenance being preferred over required maintenance, *Development pressures, *Extent of plastic litter and *More severe one in one-hundred-year weather events

Most German cities with a 100,000+ population charge a user-pay stormwater utility charge. They have done so since 2000, which calculates impervious areas - concrete, asphalt and roofs at $2.6 per m2. German authorities established the system because they saw a user-pay charge as being fair. The charge was <u>not</u> driven by environmental and human health issues or the dangers from flash flooding.

It is noted that many of Germany's cities adopt water harvesting from stormwater that prevent cities from flooding during significant rain events.

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[1] https://www.dailytelegraph.com.au/newslocal/central-coast/decade-of-tragedy-for-family-of-piles-creek-disaster/news-story/cc005906be7f0fd9585488f2e9563a55

[2] https://www.illawarramercury.com.au/story/6103715/wollongong-mayors-plea-over-stormwater-drains-in-wake-of-flood-tragedy/

[3] Asset Management Plan, Stormwater 2020-29, adopted 6 Oct 2020m pg.48

[4] Hornsby 2013StormwaterDrainageAMP.pdf, pg.13

[5] Mid-western Regional Council Stormwater Asset Management Plan, pg.26

[6] https://www.water.nsw.gov.au/__data/assets/pdf_file/0004/549598/nsw-reference-rates-manual-valuation-of-water-supply-sewerage-and-stormwater-assets.pdf, pg.64

The USA has successfully implemented a user-pay system across the country, with nearly 3,000 municipalities on board. The preferred user-pay model is a tiered system, and private residences are classed as small, medium or large. The model includes credit programs for businesses and recognition programs for residential. However, some municipalities provide credits for private homes by moving the occupier down to the next cheaper level.

The first task is a feasibility study - *What are the significant problems stemming from stormwater? (Include modelling of flood-prone areas and any tragic stories), *How do we resolve the problems *Who will solve the problems? *What is the cost to solve the problems? backlog, maintenance, capital works, admin and *How will we pay for the problems? (This is where you should arrive at a fair user-pays system)

The model is successful because it is adopted as a new business with its own department/agency. A unified department brings all administrative and customer service areas of stormwater under the same roof, with many benefits, *Increased revenue to correctly manage all areas of stormwater, *Increased employment, *Ensures sufficient staffing and resources *Administrative fee, *Ensures funds are not commandeered to other utilities/services, *Customer Service provides answers quickly and clearly, *Community engagement prepares landowners for the new charge and *Home visits help home and business owners understand or how to correct stormwater flow and erosion,

Setting up a Stormwater Utility Dept requires the following, *Dept structure, operational plan, policies, SOP's, training etc., *Determine overall costs and prepare a budget to manage stormwater, backlog, maintenance, new assets, admin, *Determine new utility charge to cover overall costs & billing processes, *Develop legal parameters to increase defensibility, *Collection of data – GIS, billing and customer, Marketing – Community Engagement & Education, *Develop a recognition and credit program, including home visits, rain garden incentives etc. and Customer service area.