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Prices for Sydney Water Corporation from 1 July

Background to Clean Ocean and the Economics of Wastewater

Clean Ocean Foundation is an environmental charity focussed on reducing ocean pollution to ensure the ongoing health of the marine ecosystem and those who rely up on it. Established as a community group in 2000 we play a pivotal role in addressing ocean pollution issues related to wastewater treatment plants. This has included influencing the Victorian government to deliver a $412 million upgrade of the Eastern Treatment Plant, now producing recyclable water at Class A enhanced.

Over the past several years we have delivered and maintained the federally funded National Outfall Database (2020) under the auspices of the NESP Marine Biodiversity Hub and also produced an independent assessment of upgrading all coastal outfalls in Australia to a Class A enhanced quality – worth at least between $12 billion and $28 billion in net benefits to the nation (Blackwell and Gemmill, 2019, p. 7).

Sydney Water's Pricing Draft Report

Thank you for opportunity to respond to your draft report on Sydney's Water's Pricing (IPART 2020). While the report provides a new flexible arrangement for Sydney Water customers through a higher usage charge that better reflects scarcity, we are concerned that the report misses a significant economic opportunity to enhance Sydney's water markets and environmental performance. Specifically, the new pricing arrangement continues previous failures to properly account for systemic factors that have significantly contributed to Sydney's water shortages over the last two major drought cycles:

- A distorted ratio of the price of water to that of recycled water (IPART 2020, p. 101) that has created major impediments to the uptake of rainfall independent non-potable water recycling projects within the city - the price of recycled water is too low, providing little incentive for Sydney Water to upgrade treatment plants to improve the amount and quality of water available for reuse (e.g. see Blackwell and Gemmill, 2020, p. 50 for a potential net benefit from upgrading Malabar outfall of at least $8.2 billion).
- A water pricing arrangement that underestimates the cost of externalities from a system that delivers a low level of wastewater treatment relative to other states;

externalities from a poor quality of wastewater disposed that significantly stresses both inland river systems and coastal areas (Pinto-Maheshari-Olerton 2013).

- A continued lack of institutional transparency that rejects long-standing evidenced-based science that water recycling to a potable standard is safe, economical and environmentally responsible. (Leong, C. and Lebel, L., 2020.)

We believe that with the reality of climate change, including more frequent and severe heatwaves, droughts and bushfires, failing to properly value wastewater water can no longer be considered a sustainable practice, particularly where most of the state is drought affected (NSW DPI 2020).

The failure to properly value wastewater has resulted in continuation of policies that cause discharges of unacceptably high levels of nutrient levels into, for instance, the Nepean and Hawkesbury river system (Pinto-Maheshari-Olerton 2013) and the discharge of low quality primary treated effluent through Sydney's deep-sea outfalls (Rohmana et al. 2019, p. 7).

The outfalls at Malabar and North Head are the largest and dirtiest in Australia (NOD 2020). Each year they discharge significant amount of pollutants into the ocean including heavy metals and microfibre and microplastics some of which has value as re-useable resources.

Our peer reviewed research (Blackwell and Gemmill, 2020) identified very large net benefits to the Australian economy if the two outfalls were upgraded to recycle Class A enhanced water – as a comparison with other states, the quality that is discharged from Melbourne major ocean outfall at Boags Rock in Victoria.

We believe that the current recommendations will lock in a distorted water market by failing to properly include the cost of externalities of wastewater disposal and then benefits of the potential reuse from high grades of treatment. Such a market will come at significant cost to the economy and the coastal environment and communities of NSW.

Moreover, it will unfairly bias against a wastewater reuse market that is independent of a rainfall event and can provide up to two thirds of Australia's current urban water use – further distorting water supply more generally. In addition, this pricing distortion will inefficiently favour desalination which is the most energy intensive and ocean polluting technology of water supplies. This pricing arrangement will lock-out more economically responsible and rainfall independent infrastructure that could be adopted through upgrades to treatment facilities across the state's coastal regions. This plan of priority infrastructure upgrades (Blackwell and Gemmill 2020) presents an ideal opportunity to stimulate the regional economies of NSW during the economically depressive times of COVID-19.

We are happy to meet with IPART to discuss these matters further.

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John A Gemmill - CEO Clean Ocean Foundation [redacted].

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