



## Water Industry Operators Association of Australia Submission of Abstract

Platform or Poster: **Platform**

Title of Abstract: **Influent changes at the Yass STP**

Abstract (200 words): **The current Yass STP includes an IDEA style reactor rated for 6,800 EP but currently servicing approximately 7,500 EP. This paper briefly discusses the journey taken from the original design of the current STP, through the last 11 years of operation, troubleshooting and maintenance, and investigations currently underway by NSW Public Works to augment its capacity. A number of factors have contributed to the challenges facing the STP since its commissioning, including operating beyond its nameplate capacity in recent years, at times higher than expected per capita nitrogen and TSS contributions, and a number of key equipment failures and extreme weather events. Despite these challenges, the STP has performed relatively well. This can be attributed to unexpected reduction in per capita flows and loads to below design levels, and a robust and conservative design. Due to a reduction in per capita sewer flows and loads, a simpler duplication of the current IDEA tank will satisfy the requirements of the 2077 design horizon. BioWin and in-house Excel hydraulic modelling has allowed NSW Public Works to confirm this proposed solution despite the influent characteristics changing since the original design.**

### Contact Details

Name of Principal Author: Jesse Wood

Organisation: NSW Public Works

Postal Address: 117 Bull Street, Newcastle West NSW 2302

Email: jesse.wood@pwa.nsw.gov.au

Telephone: N/A

Mobile: 0411755247

Fax: N/A

Do you hold a qualification at bachelor level or above (Yes or No)

Yes

Do you identify yourself as working in an operational role (Yes or No)

Yes

Do you want to be considered for awards given to presenters at the conference (Yes or No)

Yes

Email abstract to [info@wioa.org.au](mailto:info@wioa.org.au)