

Progress Report STP 2023-023 (FY 2022-2023)

**Investigating wind and wave impacts on the Swan
Estuary Marine Reserve foreshore – Nedlands**

BCS Rivers and Estuaries Science

Project Core Team

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Project status as of July 5, 2023, 10:05 a.m.

X X Update requested

Document endorsements and approvals as of July 5, 2023, 10:05 a.m.

X X
Project Team granted
Program Leader required
Directorate required

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S Adiyanti

Progress Report

Data retrievals from pressure loggers deployed since 20 December 2022 were done in four times: 2 March, 21 April, 3 May, and 9 June 2023. In total there are 8 loggers (including 3 inshore loggers) utilized for the project with some variations of date start and end of recording. All loggers will be retrieved on 6 July 2023.

Tasks completed include: (1) selection of significant durations of observed boat wakes, (2) selection of durations of inshore and offshore loggers data points for wave attenuation calculation, (3) creation of matlab routine for calculating wave properties including wave energy.

Tasks to be done in the next coming month include: (1) selection of duration for wave attenuation from inshore and offshore loggers data points from June data retrieval, (2) application of appropriate window durations for analysis of durations of storms and boat wakes, (3) calculation of wave energy using wave by wave analysis.