















#### 4. Conclusions & Future Work

Initial results indicate that during normal operation at 25kW the screw would be barely perceptible beyond 60m, and adds just 3dB to the background environment and thus in many cases have negligible urban environmental impact running at 25kW. The weir has a significant masking effect on the RAS sound output. Further to this, the results indicate a directional aspect to the sound propagation from a RAS. However, whether this is a feature of the site or a feature of the RAS design is yet to be determined.

The RAS is not operational below 20kW, and therefore this study demonstrates the noise propagation at low flows. Future work will consider a range of flows from this increasing to the RAS design capacity of 53kW. Future work will also include a more detailed study of the RAS at New Mills with greater near field sampling and over shorter sampling periods to limit any extraneous noise sources from the results. Evaluation of other RAS sites will be carried to enable modeling and validation of the sound propagation. This will be used to assess the effect of various interventions in reducing noise nuisance from a RAS in an urban setting. Some further results will be presented at the conference.

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