Case study Environment



77

"WWT visited the RSPB Grey Lake Reserve to learn how they manage the sward for breeding and wintering waders. We saw several PowTechnology solar-powered IoT devices there. I was impressed by their simple design, ease of installation and use and how well they had fared in very demanding outdoor conditions.

The RSPB advised that PowTechnology have been hugely accommodating. They have made the whole process hassle free, with support whenever I needed it. Following the initial installations, we intend to roll this IoT solution out to other parts of the site."

ALYS LAVER
Site Manager, WWT Steart Marshes

The task

WWT (Wildfowl & Wetlands Trust) is the UK's leading wetland conservation charity. It restores, creates and protects habitats to favour breeding of wetland waterbirds and the wider ecosystem. Managing water levels and salinity is integral to success in brackish lagoons, but covering the 488 hectare Steart Marshes site by vehicle to check levels was extremely time-consuming and disruptive to wildlife.

## The result

Remote data collection takes less time and is less disruptive, assisting employees and the ecosystem. Better environmental conditions improve visitor experience. Effective water management also allows ditch capacity to be quickly increased in emergencies, to accommodate local flood water, helping the wider community.

## The solution

A self-sufficient, solar-powered digital transformation solution monitors water and salinity levels. Hourly readings are sent to PowTechnology cloud, visible to authorised users, on any web-enabled device. It enables rapid control of tilting weirs and stop log structures to maintain the feeding and breeding habitat of multiple wetland species, including avocet, marsh harriers and dragonflies.

## Summary

Habitats are protected

Breeding is encouraged

Creates time for other tasks

Improves visitor experience

Flood effects can be mitigated

