

Scotland: The Hydro Nation Annual Report 2020

Hydro Nations Report: Scottish Water Trial

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Developing the Water Economy Vision

Introduction by Roseanna Cunningham MSP, Cabinet Secretary for the Environment, Climate Change and Land Reform



I am very pleased to introduce this seventh annual report to the Scottish Parliament on progress in delivering on our vision of Scotland as a Hydro Nation. It goes without saying that 2020 has been an extraordinary year, raising many serious challenges in every aspect of our lives. The water sector is of course not immune to the pressures caused by the global Covid-19 pandemic. Indeed, perhaps more than ever, the importance of water has been heightened in the public mind. The importance of access to safe, reliable sanitation and hygiene has never been clearer and has been illustrated by the role of hand-washing in our fight against the spread of Covid-19.

Scottish Water has again shown that it is a robust and resilient organisation, seamlessly continuing to deliver the essential water services on which we all rely. Elsewhere in the

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- One of Five Scottish Water articles



Surfboard becomes state-of-the-art inspection device: A simple surfboard has been turned into a state-of-the-art automated inspection device to gather information on the condition of infrastructure vital to the supply of Edinburgh's drinking water. Scottish Water worked with partners to develop the unique device to

make it significantly safer, quicker, easier, and cheaper to detect and analyse cracks and other faults in hard-to-reach assets.

The Platypus was developed using a standard surfboard as a platform to support specialist recording equipment. High-definition cameras and lighting were fitted along with sensors which steer it along a pre-programmed alignment and redirect it around obstacles.

The Platypus uses sonar, gathering data below water level and a remote sensing method that uses light in the form of a pulsed laser to measure ranges above water level. The data generates three-dimensional models of the internal surface which is recorded on the device. The footage is then passed through software which cleans up the images and is then able to identify and categorise defects within the asset. Once detected, engineers can carry out more detailed inspections and necessary repairs in these areas.