

Bedford Pumps provide Fish Friendly Flood Protection for Pitt Polder Pumping Station

Bedford Pumps Ltd have successfully completed the commissioning of two of their Fish Friendly pumpsets at Pitt Polder Pumping Station (P.S.) in British Columbia, Canada.

Pitt Polder P.S. is located within the City of Pitt Meadows which lies at the confluence of the Fraser and Pitt Rivers. Approximately 86% of the city is located within a flood plain and the city relies on a continuous dyke system, comprising of a network of ditches, flood boxes and pumping stations for flood protection. This system was built as a response to the devastating Fraser River Flood of 1948, one of the largest recorded floods in the lower mainland.

The original Pitt Polder P.S was constructed in 1952 and consisted of two vertical pumps with no backup power. The station had since reached an end to its service life and was allocated federal funds towards the \$6.9M cost of a new station as it is an essential piece of infrastructure for the local agricultural industry. The new pumping station will provide protection to 1650 ha.

Bedford Pumps, manufacturers of robust pumping plant for the flood control industry, supplied two of their Submersible Axial Fish Friendly pumpsets for the new Pitt Polder P.S. The pumps are part of Bedford Pumps Fish Friendly pump range, which have been rated as “Excellent” in an independent trial designed to assess their ability to comply with legislation brought into force to tackle the rapid decline in global populations of the European Eel. The two pumpsets will each provide a duty of 3560 l/s at 6.5m head. Each submersible pumpset includes an integral 350 kW (465 hp) 16 pole motor suitable for operation on a VSD.

Bedford Pumps supplied and commissioned the pumps with CSA approval. The canisters, which are configured for below floor discharge, were manufactured in Canada to Bedford Pumps’ exact specification.

Bedford Pumps are a leading supplier of Fish Friendly pumps not only to the UK market but also to a thriving export market which currently comprises 27% of all installations. For Canada specifically this is the company’s 6th order to date with the very first order being delivered 7 years ago to another pumping station in the region, Hatzic Lake, in order to assist with annual winter flooding problems along the Fraser River associated with Freshet.



Fig 1. Aerial view of Pitt Polder P.S.



Fig 2. Fish Friendly pump installation at Pitt Polder P.S.



Fig 3. Fish Friendly pump installation at Pitt Polder P.S.