



Campion's Innovative Contingency Pumping Solution maintains flow on the River Lee and secures drinking water supply for Cork during record-breaking hot summer

SUMMARY

Campion were contacted by Irish Water to help them design a pumping solution to safeguard the flow of the River Lee during one of the hottest summers on record. A rapid response was required for this project as the water requirement for Cork City and surrounding areas would be affected including Cork's major pharma industry.

THE CHALLENGE

The lack of rainfall during the Summer of 2018 reduced the reservoir at Inniscarra dam to fall to levels not previously recorded in the history of Cork Harbour & City water scheme. The Inniscarra water treatment plant serves about half the needs of Cork City and surrounding areas and the hydroelectric dam is critical to supplying large pharmaceutical companies in Cork Harbour. If the water level dropped below the crest level of the dam this would impact Cork's water supply and the integrity of the River Lee.

KEY FACTS

CLIENT NAME
Irish Water

INDUSTRY
Water Utility

LOCATION
Inniscarra, Co. Cork

CUSTOMER SINCE
Campion are an approved service provider to Irish Water

CAMPION SERVICES
**Emergency Response
Pump Services
Connect**



Irish Water is a water utility company whose remit is to provide "safe, clean and affordable water and wastewater services" to water users in Ireland.

KEY DATA POINTS

- **Two-week** turnaround time from conception to completion.
- **Fish life saved.**



250,000

customers and
pharma industry
unaffected by
dangerously low
water levels



THE SOLUTION

Having previously demonstrated engineering ingenuity, responsiveness and a collaborative approach Irish Water asked Campion to help them identify a solution to maintain the water flow at the Inniscarra Dam. Together with Irish Water, Campion designed a floating pump solution which consisted of a 16-tonne steel plate pontoon on which a bespoke steel frame was fitted which held three pumps. The pumping solution was floated into

position at the centre of the dam and remained in position for 6 weeks providing compensation flows and thus guaranteeing continued access to raw water and flow of the downstream river. Campion Connect provided monitoring of the site which enabled the customer to monitor pump runs, volume of water pump, operational status of the system and remote access to engage /disengage the pump system.

THE OUTCOME

Maintaining flow in the channel below the dam was vital for the health of the river Lee in order to sustain fish life and ensure raw water supply to the treatment plant and therefore unaffected the 250,000 customers in the surrounding areas. Within a two-week period from conception to completion Campion successfully delivered a fully bespoke solution while adhering to stringent environmental, legal, health and safety regulations. As a result of their specialist engineering works at Inniscarra Dam, Campion and Irish Water won "Project of the Year" at the 2019 Pump Industry Awards which celebrates and rewards the very best within the industry.



The work carried out at Inniscarra last summer in response to drought conditions was extraordinary. The emergency measures put in place helped to secure water supplies for a population of 250,000 as well as significant industry across the wider Cork area. Efforts like this became priority number one for Irish Water as the dry weather severely impacted our ability to maintain supplies to communities and businesses across the country. While the award recognises the significant work at Inniscarra, I think it's symbolic of the enormous contribution by all water services staff in response to the extreme weather conditions of 2018

- Neil Smyth, Regional Operations Lead, Irish Water

