



INFRASTRUCTURE SUPPORT

Inspections by SEAMOR's Steelhead ROV are essential to Saskatchewan's drinking water and wastewater treatment.

Situation

More than 100,000 residents throughout Saskatchewan rely on SaskWater for safe, reliable drinking water and for wastewater treatment. And SaskWater relies on SEAMOR Marine. By deploying the Steelhead inspection-class 1000ft/300m depth-rated ROV with a rear camera, SaskWater can conduct inspections in clear-wells, pump-wells, rivers, and lakes all year round. This gives the SaskWater team an advantage in creating a much more effective inspection scheduling plan.



Problem

Many issues can impact the water safety and flow, including pipeline leaks, plugged intakes, silting build-up, and holes in the infrastructure. Strong currents in the rivers and silt or debris in the water cause poor visibility and create unsafe conditions for divers. The ROV visual inspection allows SaskWater to quickly assess situations where critical may be needed – no matter repairs what the conditions.



Solution

Because of the water's turbidity, SaskWater conducts about half of its inspections in winter. The Steelhead ROV works well in water temperatures that can fall as low as -1 in the winter and is lowered through an ROV-sized hole cut in the ice. The long tether allows the control panel equipment to remain on shore, avoiding the risk of bringing it or the ROV pilot onto the ice.

SaskWater also deploys the Steelhead ROV for tank inspections. An operator is able to perform water tank inspections without having to discharge or refill the tank. The ROV is lightweight enough for the crew to hand-over-hand submerge and remove it from 7.5-meter (25-foot) tanks. For other applications it easily fits into awkward spaces and small tunnels.



“The ROV inspection video footage helps identify the issue immediately and inform better planning in the future,” says Anthony Cherwenuk, Supervisor of Special Services at SaskWater. “A thorough inspection plan with supporting data is necessary for SaskWater’s regional health and stability management programs, and our Steelhead ROV plays a key role.”

SaskWater deploys the Steelhead in their service areas throughout the province. Sturdy and rugged, the ROV travels in the back of a truck or trailer, often on rough roads to serve Saskatchewan customers in both urban and remote locations of the province.

From top to bottom

1. SaskWater logo
2. The SEAMOR Steelhead ROV being prepared for deployment on a lake in Saskatchewan
3. Frozen Lake, Saskatchewan

Photo 2 credit: Anthony Cherwenuk, SaskWater

Photo 3 credit: SEAMOR