

HYDROLOX SOLUTION REDUCES LABOR HOURS, MAINTENANCE COSTS BY MORE THAN 93%

Leading UK energy supplier SSE faced a unique set of challenges at its intake site on Scotland's Loch Glashan. The remote site—which abstracts 356.6 gal (1.35 m³) of water per second—relied on a series of 10 removable intake screens to prevent entrapment and entrainment of salmon smolts.

SSE was using mesh smolt screens that had to be manually removed, cleaned, and reinstalled at least once a day during the smolt migrating season (February through November). This process, which required a team of three laborers working for 2-3 hours at a time, presented health and safety concerns. Access to the screens for large vehicles was limited, and communicating with workers out in the field was challenging.

Seeking to reduce labor hours and maintenance costs, protect salmon smolts, and ensure the security of their water supply, SSE chose to replace their screens with a Hydrolox™ solution. The company had previously found success with a Hydrolox screen at its intake site on Beannachran Dam. In March 2015, four Hydrolox Series 1800 Flush Grid traveling water screens were installed at the Loch Glashan site. The screens, equipped with 4-in (100-mm) debris flights, were delivered and installed to the faraway location via helicopter.

Before implementing the Hydrolox solution, SSE expended roughly 900 labor hours and \$52,000 (£40,000) in maintenance costs per year. Their current outlays—approximately 60 labor hours and \$3200 (£2500) per year—represent reductions of more than 93% in both areas. The site has continued to hit high marks for smolt protection and water abstraction. According to Andrew McMurdo, SSE HPA Hydraulic Plant Attendant, “The difference, in terms of manpower and maintenance costs, has been night and day. The Hydrolox screens have greatly simplified our operations while also helping us conform to regulations and hit our production goals.”

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