

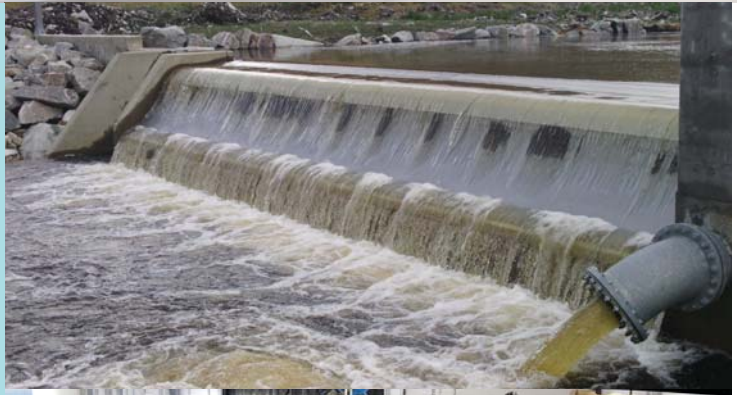
Operations Services

Why?

Although small hydro schemes are designed to be autonomous, they do require a certain level of management and maintenance to prolong equipment life and ensure effective operation within regulatory parameters.

There are three key areas to consider when operating a hydro scheme:-

- 1 **Operation & Performance** - to ensure the scheme makes the most of the resource available and is producing what it is expected to produce
- 2 **Compliance** - to ensure that the scheme does not cause any environmental damage and operates within its licenced parameters
- 3 **Maintenance** - to ensure longevity and to reduce risk to the owner and operator.



Hydroplan provides a timely & efficient service that will ultimately help to protect your investment.

Our Services

With bases in the Highlands of Scotland, Loch Lomond, Northern Ireland and the south of England, the Hydroplan Operations team is well placed to assist with the management of your hydro scheme.

We aim to offer a flexible service tailored to the specific requirements of the scheme and or operator. This can range from cleaning the intake screens and submitting annual returns to full management and scheme optimisation.

Take a look overleaf to see what Hydroplan can offer your hydro scheme.



Level of Service

Hydroplan is able to offer 3 Service Level Agreements (Bronze, Silver & Gold), with varying levels of cover, response time and deliverables. The list below details the difference between each of the options offered.

PROCESS	BRONZE	SILVER	GOLD
A. MONITORING & OPERATION		DAY TO DAY	
A1. Hydro Scheme Monitoring	Monthly	Weekly	Daily
A2. High Voltage System Monitoring	Monthly	Weekly	Daily
A3. Communications System Monitoring		Annual	Monthly
A4. Scheme walkover	Annual	6 monthly	Monthly
A5. Client Reporting	Monthly	Weekly	Weekly + Analysis
A6. Remote response	Next working day	Within 24 hours	Within 12 hours
A7. Onsite response (Hydro)	Within 2 working days	Within 24 hours	Within 12 hours
A8. Onsite response (High Voltage)	Within 2 working days	Within 24 hours	Within 12 hours
B. PERFORMANCE OPTIMISATION		OVERALL SYSTEM PERFORMANCE	
B1. Scheme performance report	Quarterly Basic	Quarterly Regional	Monthly Local
B2. Weir calibration			Calibrated Intakes
B3. Turbine performance report		Annual	Annual + Analysis
C. REGULATORY COMPLIANCE		REGULATORY COMPLIANCE	
C1. Compensation Flow Check	✓	✓	✓
C2. Environmental Monitoring	✓	✓	✓
C3. Fish Monitoring	✓	✓	✓
C4. Annual SEPA Return	✓	✓	✓
C5. Reservoir Act Inspections	✓	✓	✓
C6. Sediment Management	✓	✓	✓
C7. OFGEM Output Data & Declarations	✓	✓	✓
C8. Health & Safety Compliance	✓	✓	✓
D. PREVENTATIVE MAINTENANCE		LONG TERM MAINTENANCE OF KEY EQUIPMENT AND INFRASTRUCTURE	
D1. O&M Checklists	Provide overall annual O&M schedule, and check sheets for regular maintenance including training of site operative		
D2. Turbine Maintenance	Arrange M&E service report and provide engineering comment		
D3. Earth Study		Every 2 years	Annual
D4. High voltage equipment		Annual	Annual + Organisation of 4 yearly Inspections
D5. Building maintenance		Annual	Annual + Organisation of trades
E. ROUTINE MAINTENANCE		MAINTENANCE TASKS	
E1. Visual inspection & O&M checklist	Bi-Weekly	Weekly	Daily
E2. Intake Screen Cleaning	Bi-Weekly	Weekly	Daily
E3. Spear valve / Guide Vane cleaning	Bi-Weekly	Weekly	Daily
E4. Equipment greasing	As per equipment service interval requirement		

Any of the options above can be customised to suit our client's individual requirements.

For more information, or to speak to us about your maintenance requirements, please contact Adam Veitch on **01202 886622** or send an email to operations@hydroplan.co.uk