

EQUIPMENT LEASING & FIELD SERVICES NEWSLETTER

Metocean Equipment Leasing

<http://aslenv.com/lease.html>

SPRING 2018

Wave Measurement

Current Measurement

Ice Measurement

Sediment Transport

Fish Habitat Studies

Coastal Engineering



#1-6703 Rajpur Place
Victoria, British Columbia
V8M 1Z5 Canada
Phone: 250.656.0177
Fax: 250.656.2162
Web: www.aslenv.com
Email: Leasing@aslenv.com

Contact Rick Birch,
Senior Oceanographer at:
rbirch@aslenv.com
cell 1-250-514-9009

ASL Environmental Sciences has the largest lease pool of metocean equipment in Canada. We offer ADCPs (2MHz to 75 kHz), CTDs, acoustic releases, acoustic profilers including the [Ice Profiling Sonar \(IPS5\)](#) and the [Acoustic Zooplankton Fish Profiler \(AZFP\)](#), wave and tide gauges, pingers and transponders, mooring cages and frames, flotation, drogued drifters, sediment grab samplers and traps, and water quality (DO, Tu, Chlorophyll). We can help you choose the best instruments for your application and advise you on how to deploy them. We also have experienced personnel to support you in the field and with data processing as required. Our field services group has over 50 years of combined experience. We use the equipment for our projects and know these instruments well. Many of our clients are repeat customers and look to us first for their equipment and mooring requirements. We don't just lease, we provide comprehensive advice on equipment selection, rigging, etc.

Recent Leases of Our Equipment

Over the past year, equipment from the lease pool has been used for various projects ranging from the Arctic to the tropics, over much of the western hemisphere including the Canadian Arctic, Alaska, the east and west coasts of North America, the United States, and Africa. Our clients are largely consulting firms, but have also included universities and Government.

ASL's large inventory of ADCPs (over 60) enabled a cost-effective program of measurements at multiple fish farm sites for a major aquaculture company. The number of deployments were minimized, resulting in savings in time and personnel/boat costs. This also allowed the company to meet upcoming deadlines.



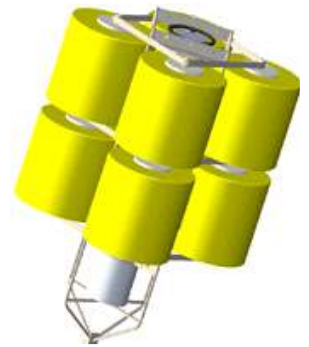
Ten taut-line current meter moorings ready to deploy for a major aquaculture company. Most of the moorings had both upward- and downward-looking ADCPs, allowing full water column current profiles, including near-surface and near-bottom.

Reliable Rentals at Reasonable Rates
[Check out our inventory at www.aslenv.com/lease.html.](http://www.aslenv.com/lease.html)

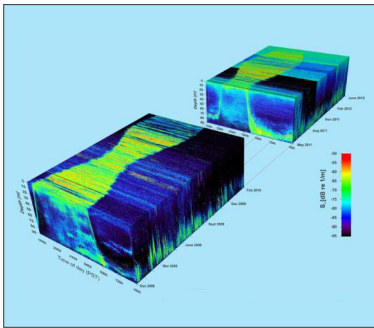
New Additions to the Lease Pool

A new 6000 m rated WHS 600 kHz ADCP has been added to the lease pool. The ADCP will be well equipped with 4 GB of memory, high accuracy bottom tracking and will have an external battery case to house two additional battery packs. This instrument is well suited to deep water programs such as deep-sea mining, and turbidity flow studies.

We have also purchased eight more “dual” cages for the lease pool. These accept either two WH ADCPs, one upward- and one downward-looking, or one ADCP and an external battery pack. The IPS5 and AZFP instruments can also fit the dual cage. The dual cages generally come with Viny floats but, for deeper deployments, cylindrical syntactic floats can be used.



ASL's Acoustic Profilers <http://aslenv.com/azfp.html>



ASL continues to develop new applications using our line of acoustic profilers. The multi-frequency [Acoustic Zooplankton Fish Profiler \(AZFP\)](#) is used primarily to obtain in situ long-term profile measurements of fish and plankton distribution throughout the water column. A new high frequency unit, the Multifrequency Ultrasonic Device (MUD), is being developed specifically for sediment applications, both suspended and at the water/sediment interface. This 4-frequency instrument (200, 769, 1200, 2000 kHz) is initially planned for use during a large study of turbidity flows in Bute Inlet March–November 2018. It is expected to then be used on the Fraser River delta slope in collaboration with PGC/NRCan. ASL also provides the [Ice Profiling Sonar \(IPS5\)](#)—an upward-looking sonar device mounted on the ocean floor to accurately measure ice draft.

Raft-mounted Multifrequency Acoustic Zooplankton Fish Profiler (AZFP) with Cellular Modem [\(read full press release\)](#)

The National Research Institute of Fisheries Engineering (NRIFE, Kamisu) of the Japan Fisheries Research and Education Agency (FRA, Yokohama) has deployed an ASL Environmental Sciences Inc. multifrequency Acoustic Zooplankton Fish Profiler (AZFP 125, 200, 455 and 769 kHz) in Yamada Bay, 450 km north of Tokyo since 2013. The collected data are being used to understand seasonal variations of zooplankton in the water column and are assisting in the scheduling of the release of hatchery reared juvenile salmon to increase their survival in the sea.

The raft-mounted system includes a solar panel, a charge controller, rechargeable batteries, a datalogger with AZFP data software, serial connections to the CT sensor and AZFP, and a cellular modem— all in two weather-proof enclosures.



Test mooring of raft-mounted AZFP equipped with cellular modem used to study zooplankton in the water column, Yamada Bay, Japan, June 2016.

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Plastic Cages and Frames

Oceanographic moorings components are often made of metal, either stainless steel or aluminum. Over the past few of years ASL has made various cages and bottom frames out of ABS plastic. Water-jet cutters can easily cut the sheets of plastic into intricate shapes for the base, instrument clamps, and other components. These are then assembled using stainless fittings. The advantages include lightweight, and non-corrosive and the cost can be less than using stainless steel. We now offer plastic cages with our lease CTDs at no additional cost.



Custom Moorings



ASL oceanographers have extensive experience in the design of metocean moorings. We can make custom moorings to meet your requirements, designed according to your instrumentation and measurement needs and the oceanographic conditions expected. A recent request was for a light weight bottom frame for deployment from a small inflatable boat. We designed and built a small plastic frame to house the [Ice Profiling Sonar \(IPS\)](#) and CTD.

ASL Now Represents DeepWater Buoyancy

ASL has recently been assigned as [sales representative for DeepWater Buoyancy](#) products for British Columbia (BC), Alberta and Alaska. This builds on our previous experience using DeepWater Buoyancy's flotation in the field and adds to our comprehensive range of oceanographic instruments, mooring design, deployment considerations and data analysis.

We believe that DeepWater Buoyancy offers some of the best flotation solutions in the world and we are here to help you integrate practical methods to meet your deployment goals. We would be happy to discuss your requirements.

Deep WaterBuoyancy joins product lines already represented by ASL of [Teledyne RD Instruments](#), [Teledyne Ocean Sciences](#), [Teledyne Benthos](#), and [Wera Northern Radar](#).



ASL Attending Upcoming Conferences

ORCA 2018

April 24–25, 2018
Ottawa, Ont

Oceans 2018

May 28–31, 2018
Kobe, Japan

CWRA 2018

May 28–June 1, 2018
Victoria, BC

ASLO Aquatic Sciences

June 10–15, 2018
Victoria, BC

CMOS

June 10–14, 2018
Halifax, NS

ISOPE

June 10–15, 2018
Sapporo, Japan

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