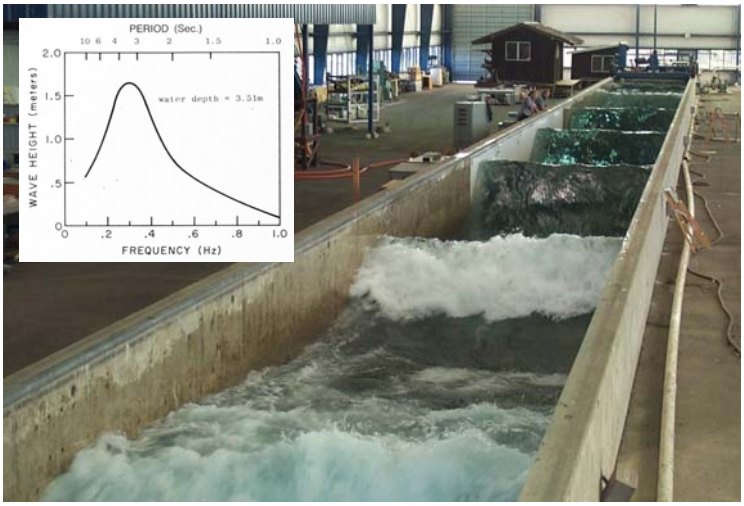
O. H. Hinsdale Wave Research Laboratory
Oregon State University • College Of Engineering

Large Wave Flume

The Large Wave Flume is one of the largest in North America. Because of its size and ability to operate in high Reynolds regimes, the flume is ideally suited for

- Cross-shore sediment suspension and transport
- Wave forces on floating and fixed structures
- Wave breaking, swash dynamics, and undertow
- Pollutant mixing and transport
- Scour, pipeline stability and outfalls
- Liquefaction, cohesive sediments
- Wave runup, reflection, and overtopping
- Ocean wave energy systems

Projects involving steady flow can be considered using the tow carriages or large pump rental.



Wave Basin

• Length:	104 m	342 ft
• Width:	3.7 m	12 ft
• Depth:	4.6 m	15 ft

Wavemaker

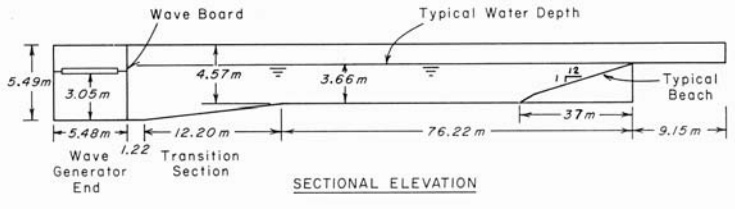
- Type: Hinged-type, hydraulic ram
- Wave types: Regular, Irregular, User defined
- Period range: 0.5 to 10 seconds
- Max Wave: 1.6 m (5.2 ft) @ 3.5 sec

Instrumentation Carriages

- Powered carriage with full traverse for instrumentation
- Carriage tow speed: 0 – 0.5 m/s (1.5 ft/s)

Model construction and materials

Variety of fixed and floating structures or moveable bed models



Floating Breakwaters

Sediment Transport

Nearshore Processes

Runup and Overtopping

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Web: http://wave.oregonstate.edu
Tel: +1 (541) 737 – 3631 • Fax: +1 (541) 737 – 6974