OCEAN NETWORKS CANADA

# Ocean Observing Workshop Ocean Networks Canada Overview

Adrian Round, Director Observatory Operations
3 January 2017



#### Ocean Networks Canada Overview



- Not-for-profit society under the University of Victoria
- Management and operation of ocean science infrastructure (hardware and digital)
- 100 plus staff
  - User Engagement
  - Operations
  - Finance and Administration
  - Innovation





- NEPTUNE Cabled Ocean Observatory
  - Regional scale observatory on Juan De Fuca Plate
  - 5 primary science sites
  - Diverse ocean environments
- VENUS Cable Ocean Observatory
  - Coastal scale observatory in Saanich Inlet and Strait of Georgia
  - 3 primary science sites
  - Diverse coastal environments





- Smart Ocean Community Observatories
  - 5 community observatories
  - BC coastal locations
  - Range of sub-sea and surface observing systems
- Cambridge Bay
  - Shallow water Arctic observatory
  - Under ice operations
  - Limited data "pipes"

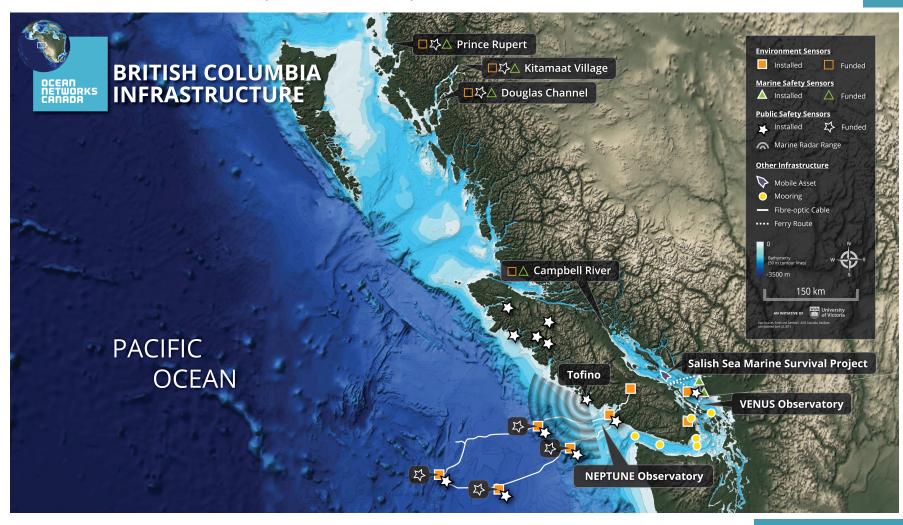




- Churchill Marine Observatory
  - Shallow water Arctic observatory
  - Installation planned for 2017
  - Under ice operations
- Three instrumented Coastal Ferries (BC Ferry Corporation)
- Webb Glider

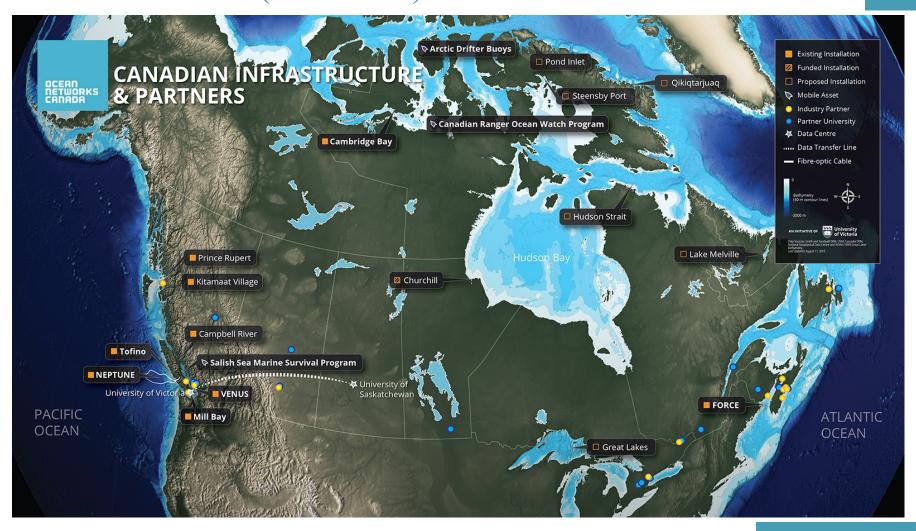








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- Ocean 2.0
  - Integrated data capture, data QA/QC, data delivery and observatory control system
  - Meta-data capture and archive a key component
  - Video capture and annotation onboard or from shore (remote logging)
  - Direct ingestion of shipboard/ROV sensor data into data archive



# Ocean Networks Canada Key Issues



- Maximize the probability of a successful instrument deployment
- Life cycle considerations in design, implementation and maintenance phases
- Standardization of sub-sea infrastructure (cables, connectors)
- Sub-sea infrastructure in hostile environments (hot vents, spreading ridges)



# Ocean Networks Canada Workshop Goal



You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself.

