



# NOAA FISHERIES SERVICE



TSMRI is a critical facility needed to meet the expanding information needs of the NMFS Ecosystem Approach to Management and the Magnuson Stevens Act.

## Alaska Fisheries Science Center

The mission of the Alaska Fisheries Science Center is to plan, develop, and manage scientific research programs which generate the best scientific data available for understanding, managing, and conserving the region's living marine resources and the environmental quality essential for their existence.

### Ted Stevens Marine Research Institute

- Opened May 2007 in Sitka, Alaska
- Features 2,000 square feet wet lab with 1,200 gallons per minute (gpm) of filtered sea water capacity
- Offices for 84 scientists and staff, adjacent to administration area
- Includes laboratories for chemistry, genetics, and biology
- 2,000 square feet wet lab with 1,200 gallons per minute (gpm) of filtered sea water capacity
- Necropsy room equipped to handle marine mammals, large fish, and sharks up to 3,000 pounds

### TSMRI New Heat Pump System

- Last of three projects to reach zero carbon utilization from a starting point of 120,000 gallons/year of fuel oil usage: (1) reduced laboratory air flows through recommissioning; (2) heat recovery of fume and canopy hood exhaust in the laboratory; and (3) installation of heat pump.
- The heat pump takes advantage of the existing seawater system by using 3-4° heat from 38° seawater effluent to heat the entire building.
- Official transition to fully green energy occurred at about 3 p.m. on Wednesday, April 13, when TSMRI shut off the facility's two oil-operated boilers, resulting in the new heat pump system solely heating the entire research facility.
- Project was designed by Jim Rehfeldt of Alaska Energy Engineering, LLC, in Sitka, Alaska
- The heat pump alone replaces 60,000 gallons of fuel oil annually, saving an estimated \$130,000 of taxpayer dollars a year.