



PRINCE WILLIAM SOUND
OIL SPILL RECOVERY INSTITUTE

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Sponsored Project

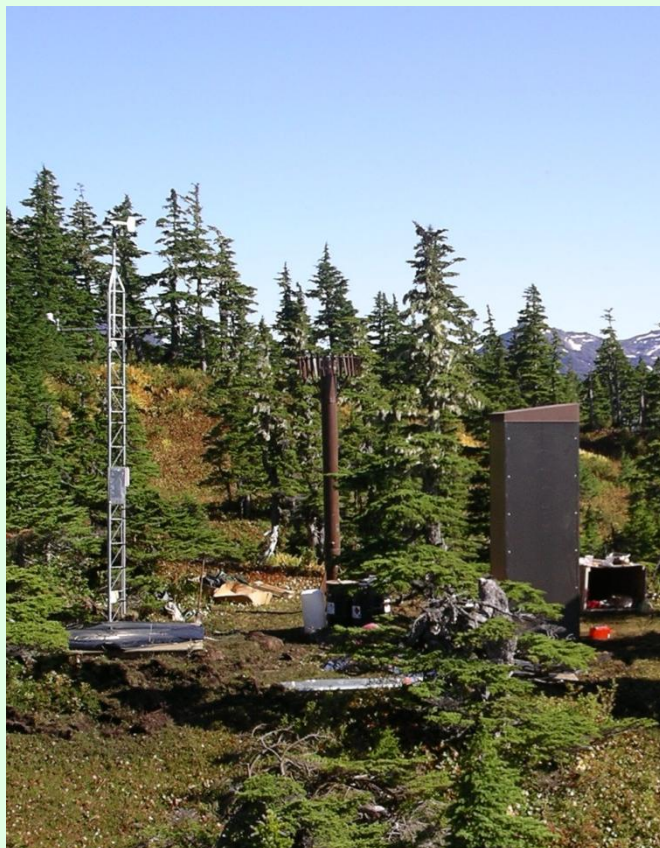
Operation and Maintenance of SNOTEL Sites

Lead Investigator: R. McClure

Project Duration 2005 -2010

Surface circulation of Prince William Sound is determined by the wind and rain. Despite having an area the size of Connecticut and over 150 inches of precipitation a year, there are very few locations that measure these important parameters. To improve our understanding of circulation in Prince William Sound and the associated potential impacts of an oil spill, the Oil Spill Recovery Institute (OSRI) is funding the maintenance of ten new Snowpack Telemetry (SNOTEL) sites that are being installed as part of the Alaska Ocean Observing System. SNOTEL sites are operated by the National Resources Conservation Service to measure weather conditions needed to forecast water availability. The addition of these ten stations will double the number of meteorological measurements in Prince William Sound and greatly increase our understanding of precipitation throughout the Sound.

The meteorological measurements will be used as inputs to new atmospheric and oceanic models that OSRI has helped develop. The precipitation information will provide a basis for developing a seasonal hydrological model of the Sound that will also be used as an input to the new oceanic models. These efforts will lead to improved spill trajectory models and provide the backbone for improved ecological models of the Sound. More information about SNOTEL systems can be found at <http://www.wcc.nrcs.usda.gov/snow/about.html>



SNOTEL sites measure weather and precipitation data including: wind speed and direction, air temperature, barometric pressure, solar radiation, precipitation, snow depth, and snow water content.

Partners:

- ❖ Prince William Sound Science Center
- ❖ Alaska Ocean Observing System
- ❖ National Resources Conservation Service
- ❖ Prince William Sound Regional Citizens Advisory Council