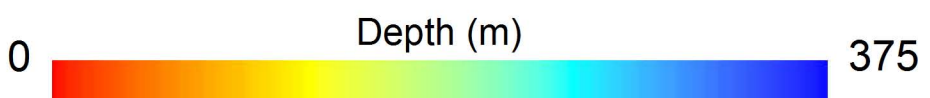
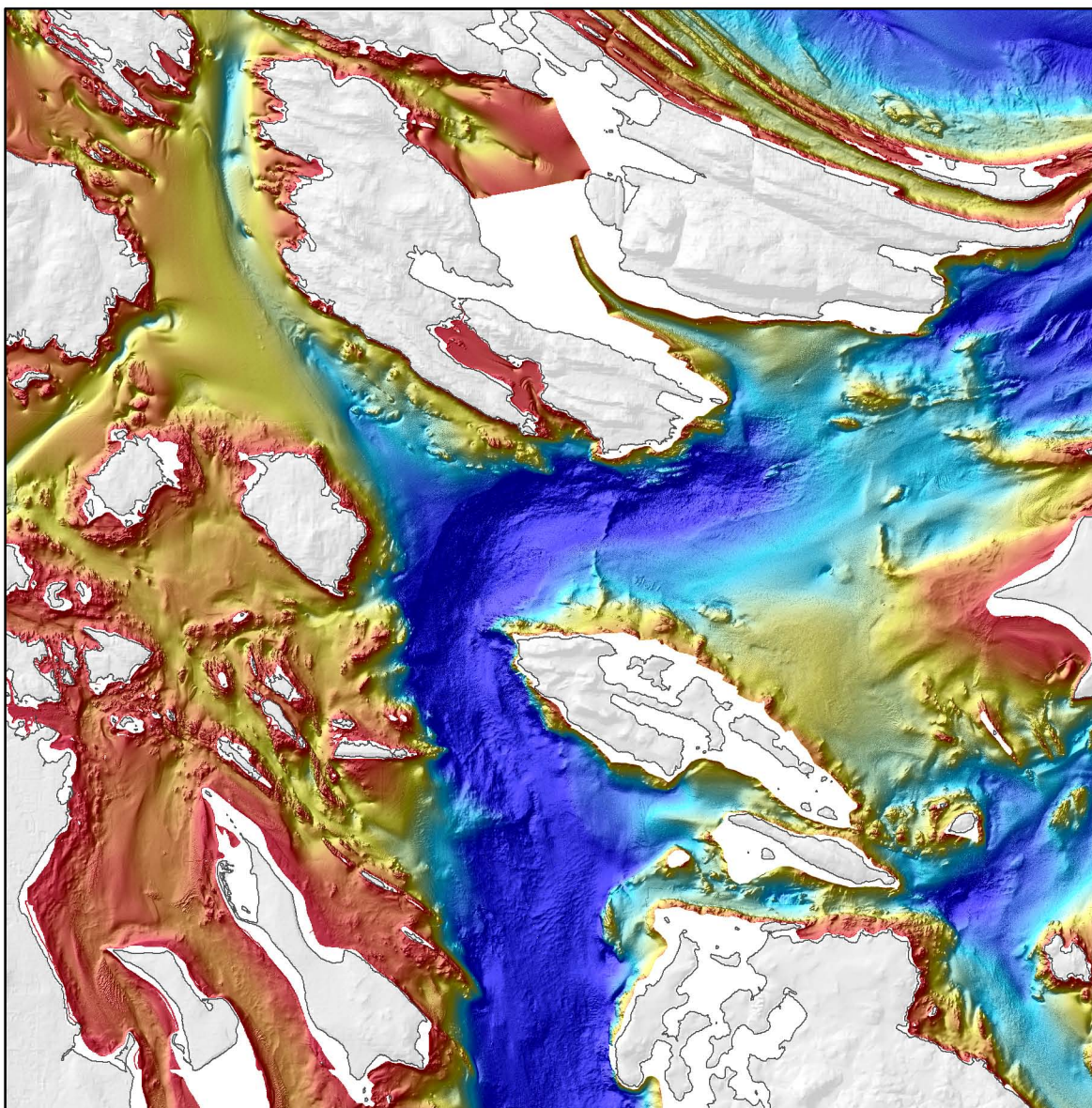


DESCRIPTIVE NOTES

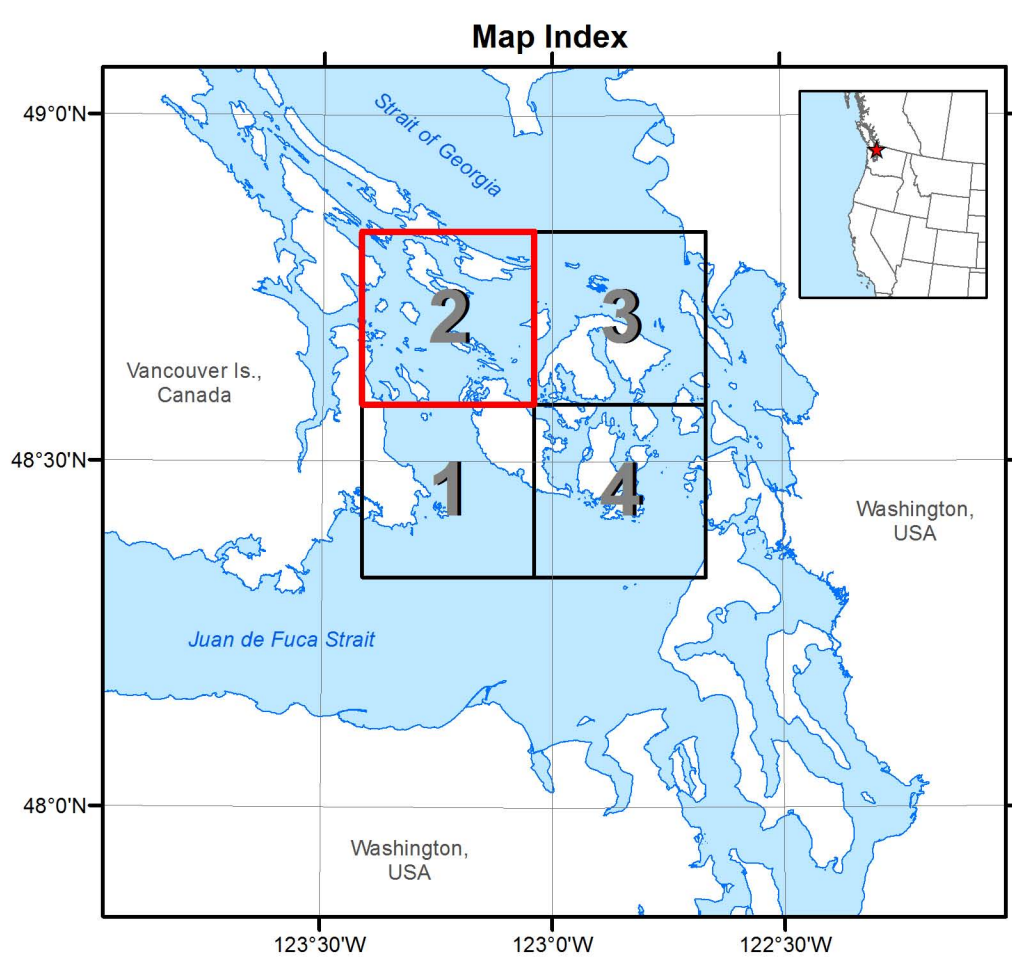
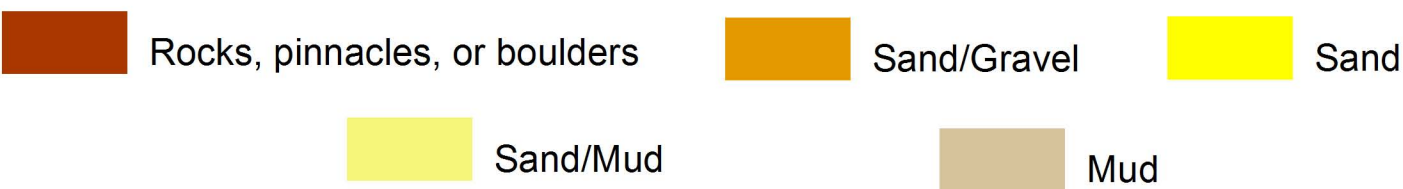
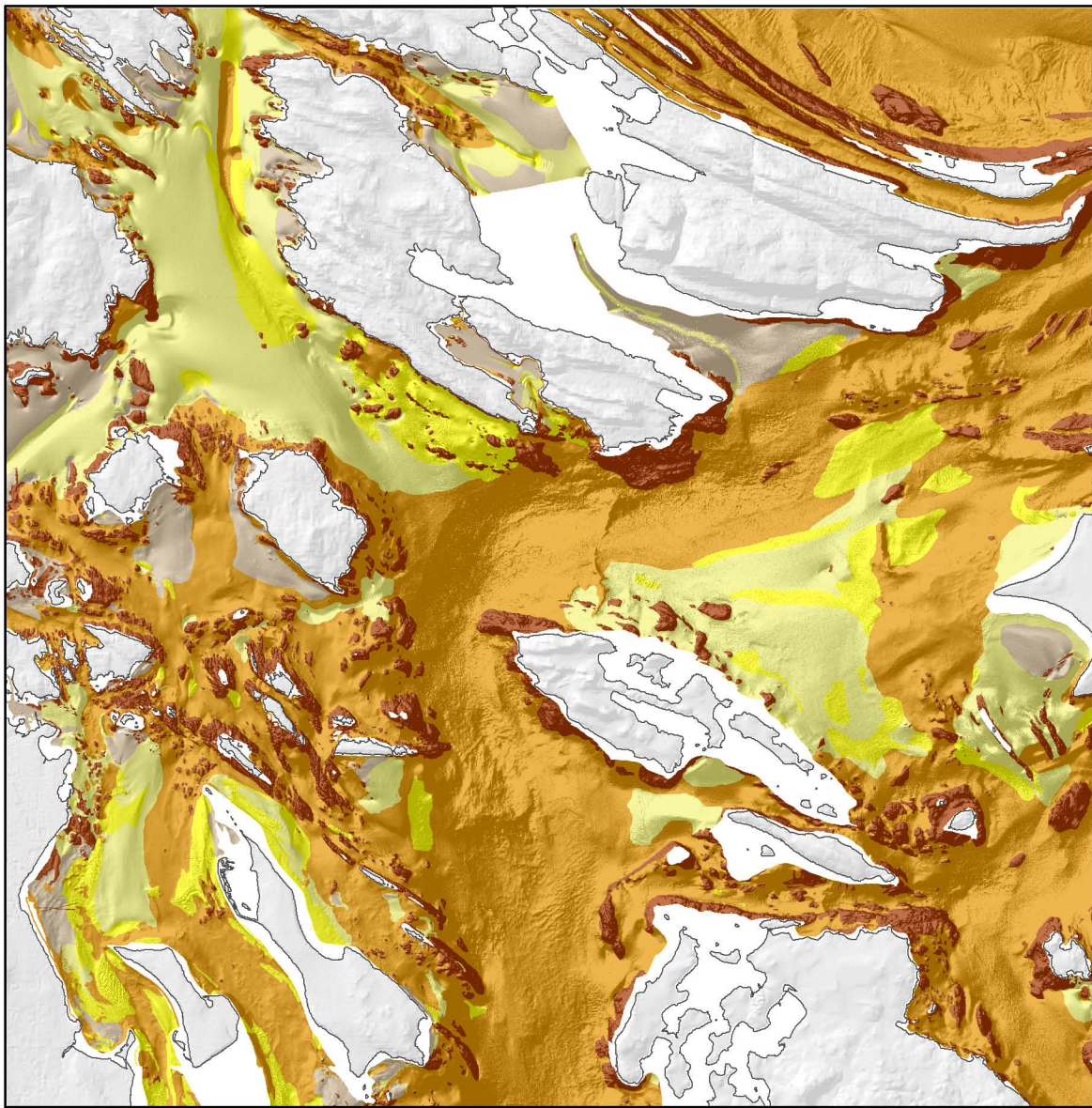
Backscatter intensity is a measure of sound that is scattered back toward the transmitter by acoustic reflection and scattering, both at the sediment-water interface and within the sediment (volume scattering). Many factors influence the intensity value, among them are: the angle of incidence of the beam, the volume scattered, the seabed slope and the surficial sediment type and roughness. With these factors in mind, backscatter strength datasets are used to determine relative sediment differences with in one or many datasets and aid the interpretation of the benthic habitat types. To assure the best interpretation, backscatter images are used in conjunction with other multibeam echosounder bathymetry derivative datasets, such as seafloor shaded relief, slope analysis and bathymetric contours. The multibeam echosounder bathymetry and backscatter raster datasets, as well as the benthic habitat layer were processed using ESR™ ArcGIS tools.

The Transboundary region covered by this map series has been divided into four quadrants and this sheet (Sheet 2 of 4; Southern Gulf Islands) covers the Boundary Pass area between Saturna, South Pender and southern Saltspring Islands to the north and northern San Juan, Stuart, Spieden and Waldron Islands to the south. Backscatter intensities vary from high (darker areas in mosaic) representing bedrock and coarse-grain sediment (pebbles, cobbles, boulders) to low intensities representing fine-grain sediment (sand and mud). Bedrock is comprised predominantly of hard differentially eroded sedimentary bedrock and medium to low intensities of backscatter represent dynamic bedforms and other sediment deposits in the Boundary Pass, northern Haro Strait, Spieden and President channels area.

Sun-Illuminated Bathymetry

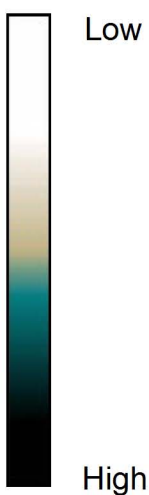


Sediment Type



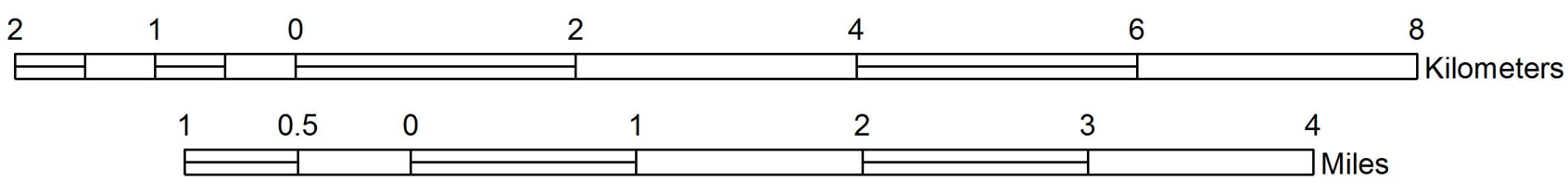
SEAFLOOR CHARACTERISTICS and SUN-ILLUMINATED BATHYMETRY of the Southern Gulf Islands and San Juan Archipelago, Canada and USA

Backscatter Intensity



Map Sheet 2 of 4

Scale 1:50,000



Universal Transverse Mercator Projection, Zone 10 North
North American Datum 1983

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Digital Cartography by Charlie Endris, Center for Habitat Studies

