

Onshore elevation data from U.S. Geological Survey's National Elevation Dataset (available at <http://ned.usgs.gov/>). Offshore shaded-relief bathymetry from map on sheet 2. This report's California's State Waters limit from NOAA Office of Coast Survey.

Universal Transverse Mercator projection, Zone 10N

NOT INTENDED FOR NAVIGATIONAL USE

## Seafloor Character, Drakes Bay and Vicinity Map Area, California

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2015



**DISCUSSION**

This seafloor-character map of the Drakes Bay and Vicinity map area in northern California was produced using video-supervised, maximum-likelihood classification of the bathymetry and backscatter (intensity of return) signals from sonar systems (a summary of the video data collected for the purpose of supervising the classification is shown on sheet 6). Rugosity (a GIS-derived characterization of roughness) and backscatter intensity were used as variants in the classification. The interpreted classifications were then draped over shaded-relief bathymetry (see sheet 2).

The substrate classes mapped in this area have been divided into the following California Marine Life Protection Act depth zones: Depth Zone 2 (interstitial to 30 m), and Depth Zone 3 (30 to 100 m). In addition, the following slope classes are represented on this map (Coastal and Marine Ecological Classification Standard slope zones are shown in parentheses): Slope Class 1 (0° to 5° (flat), and Slope Class 2 (5° to 30° (steep)). Depth Zone 1 (interstitial), Depth Zones 4 and 5 (greater than 100 m), and Slope Classes 3 to 5, greater than 30° (steeply sloping to overhang) are not present in this map area.

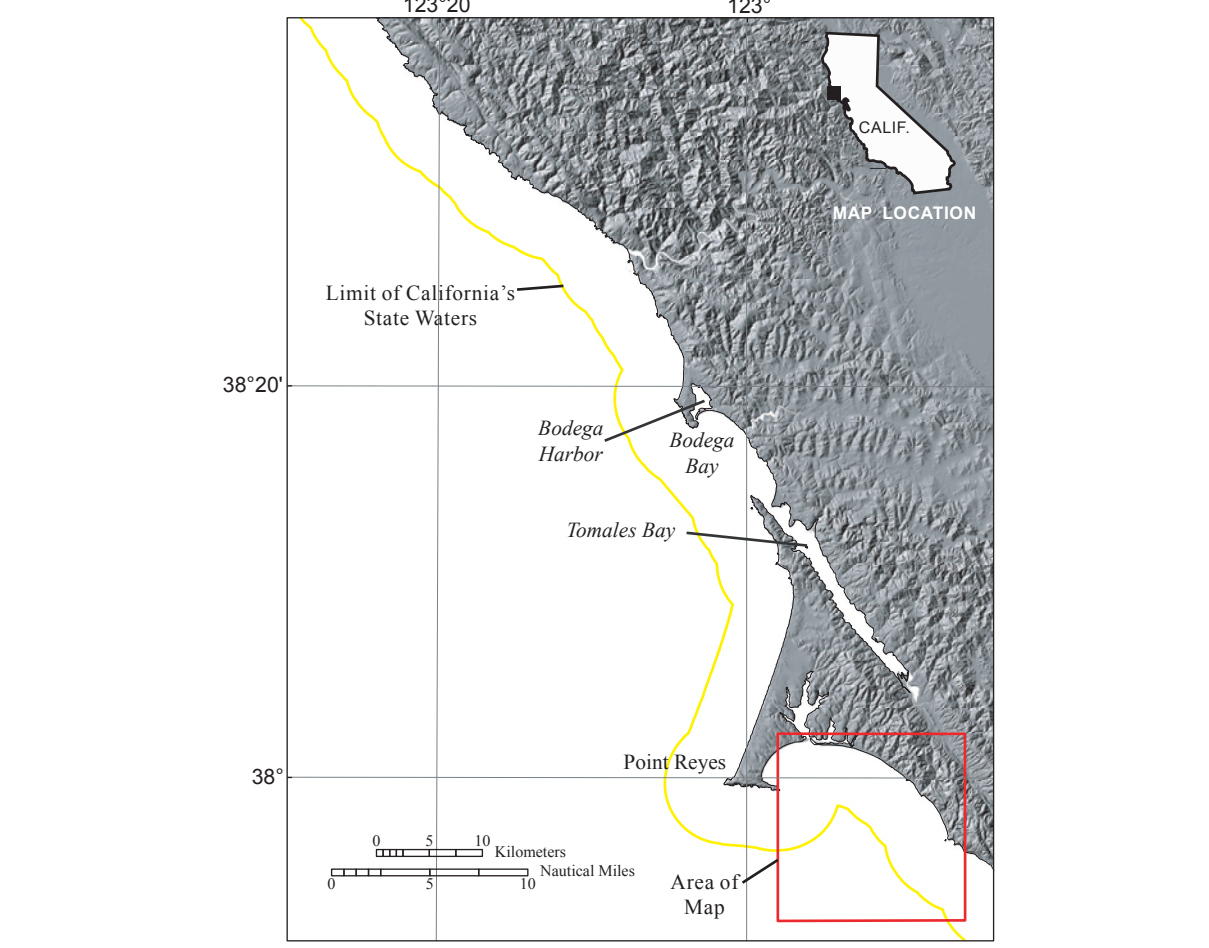
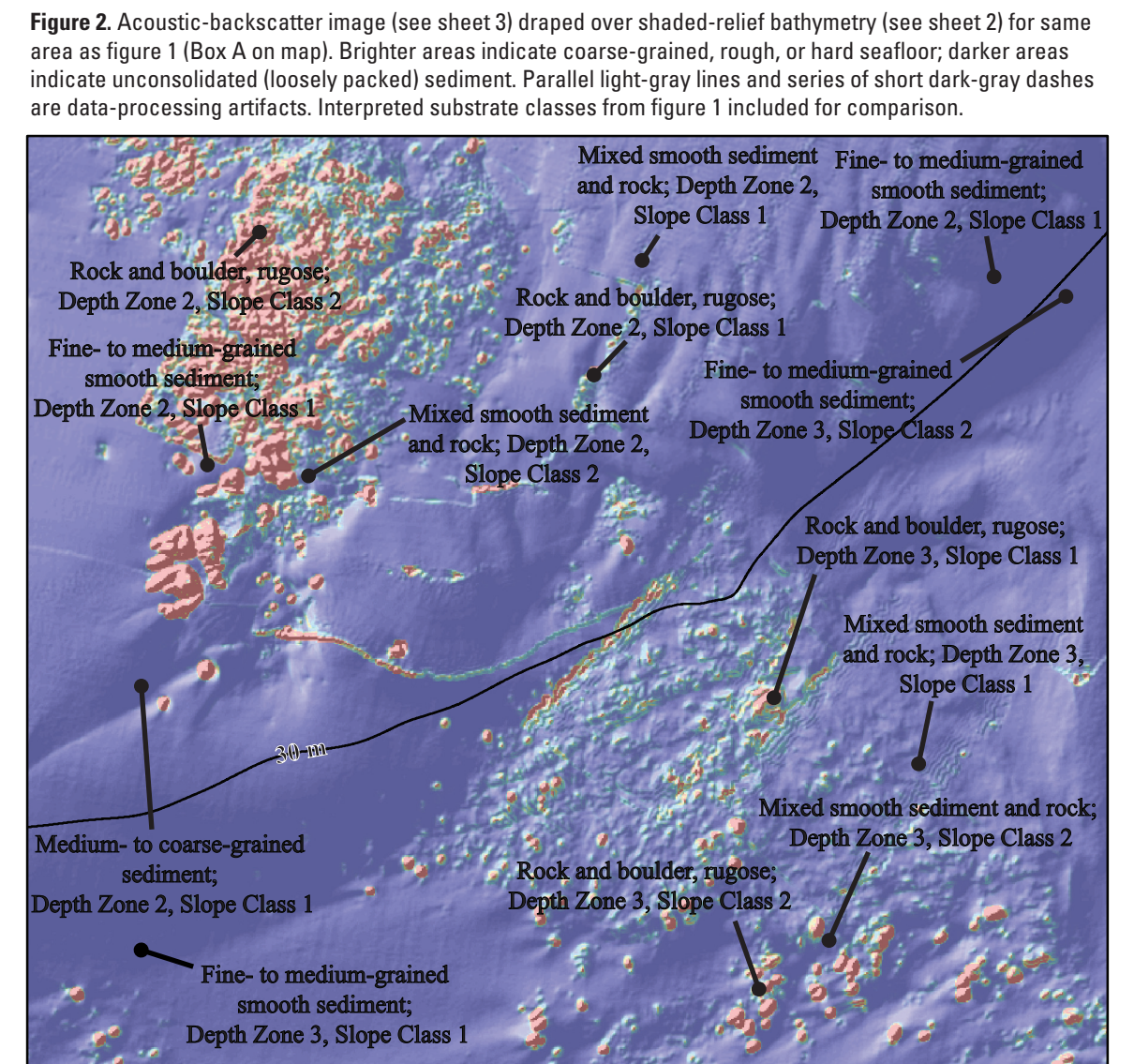
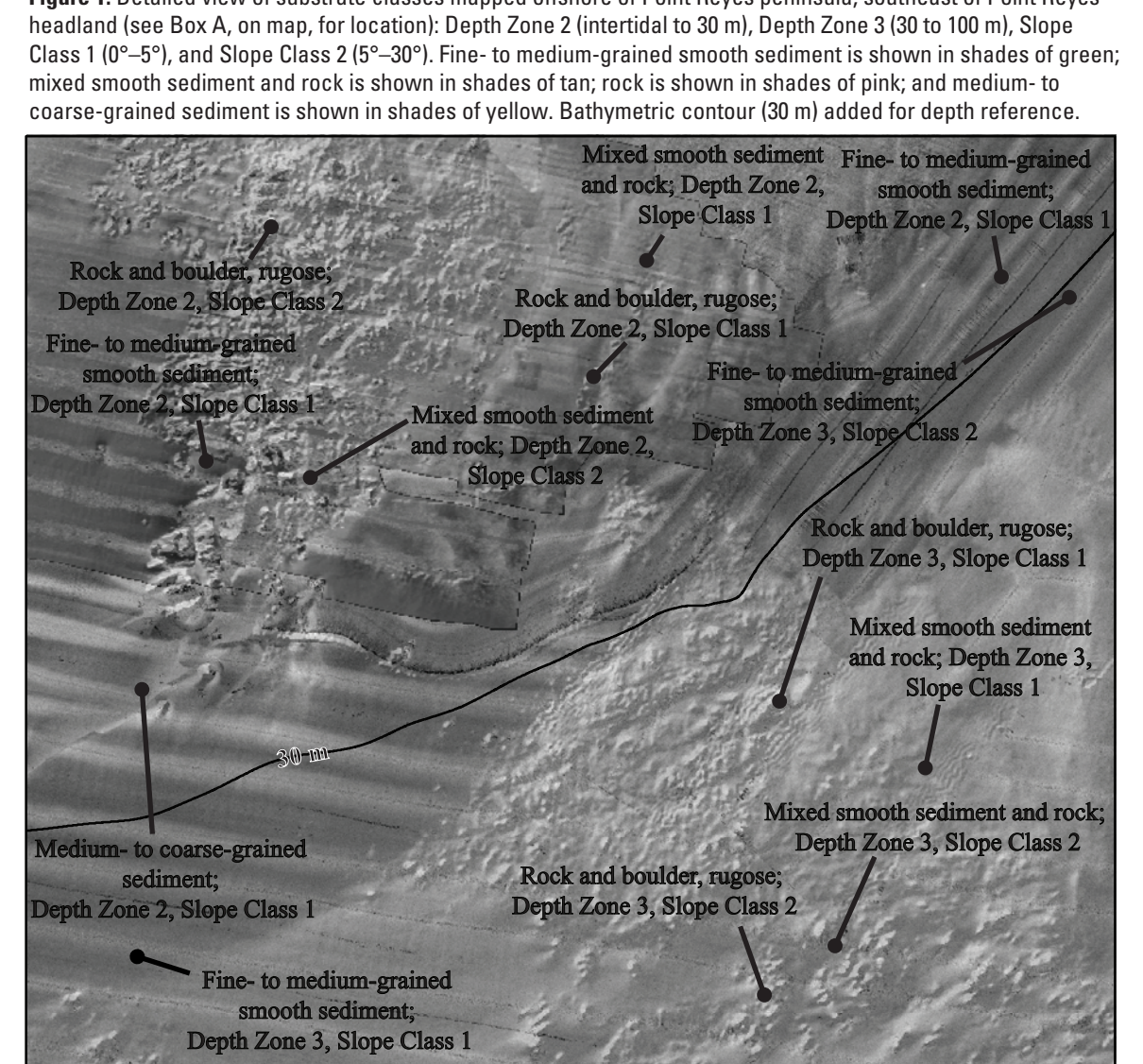
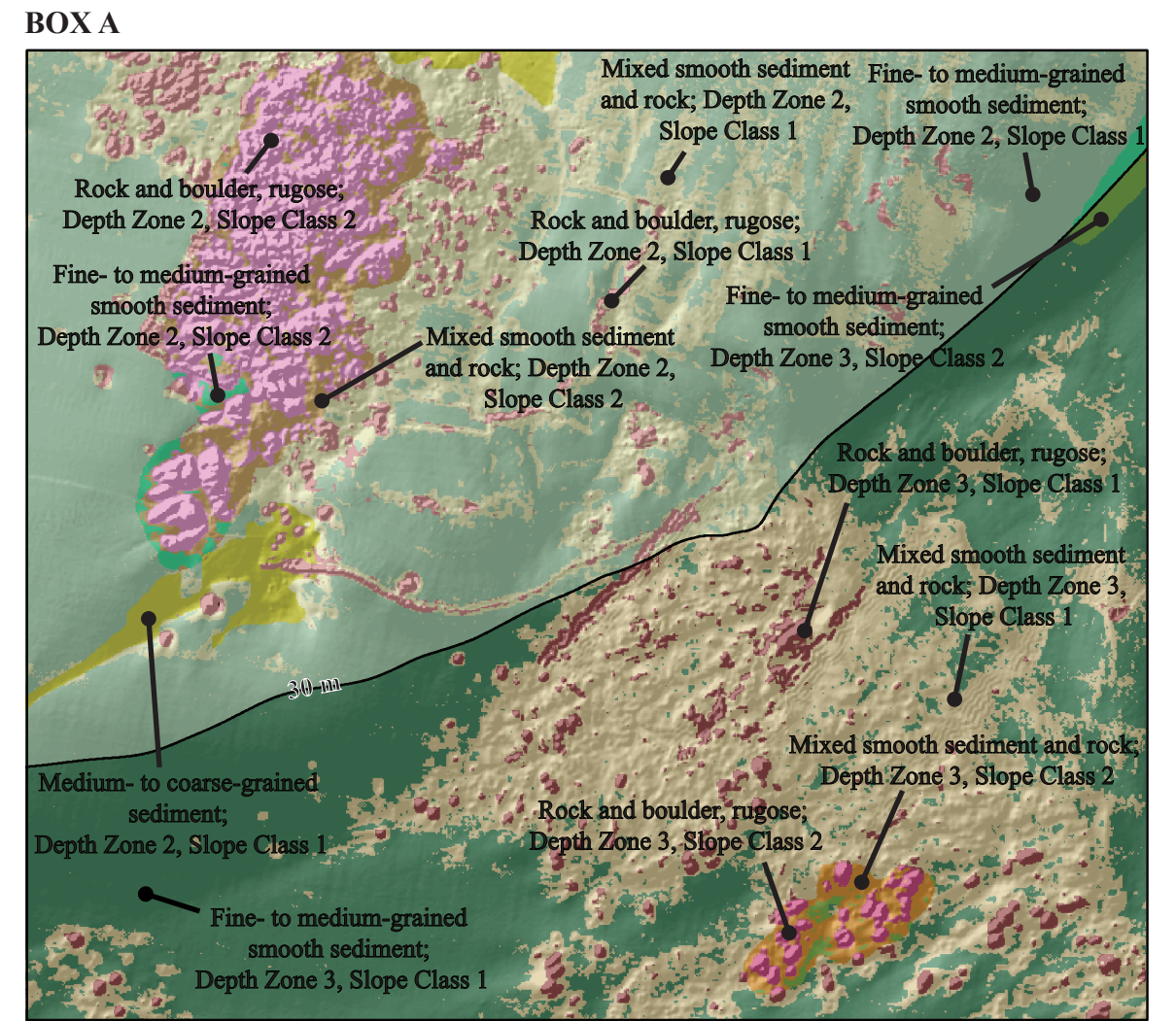
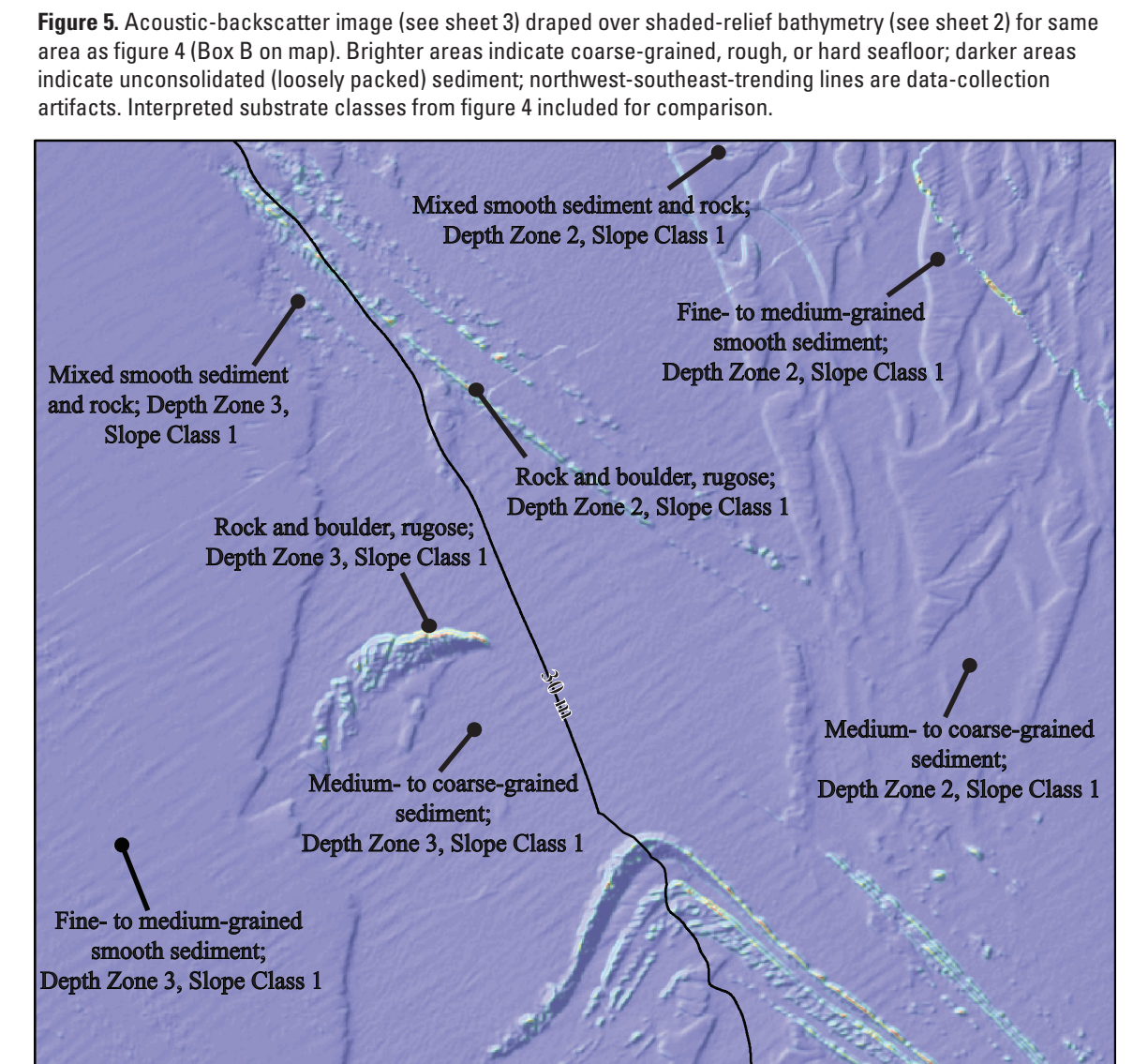
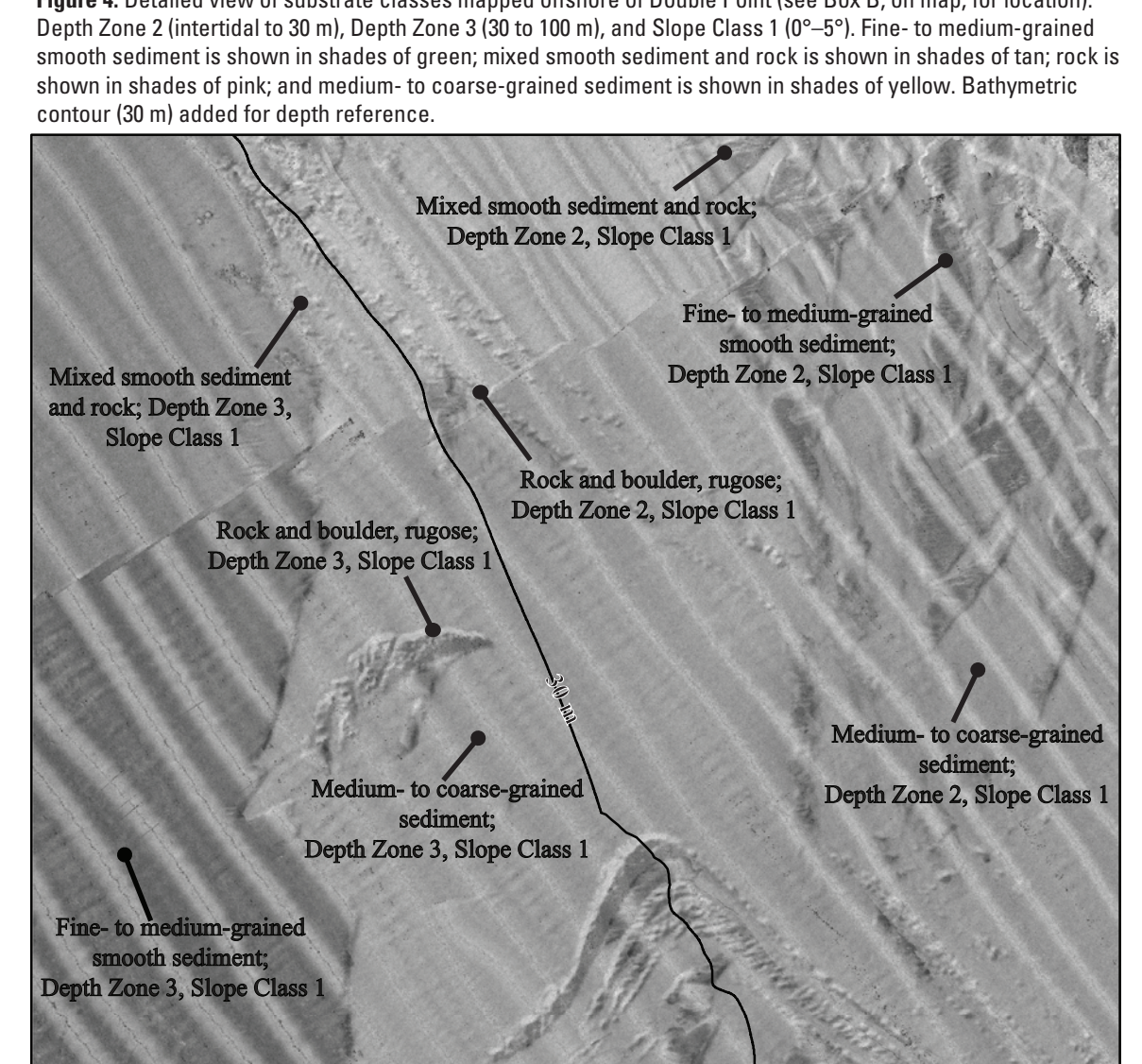
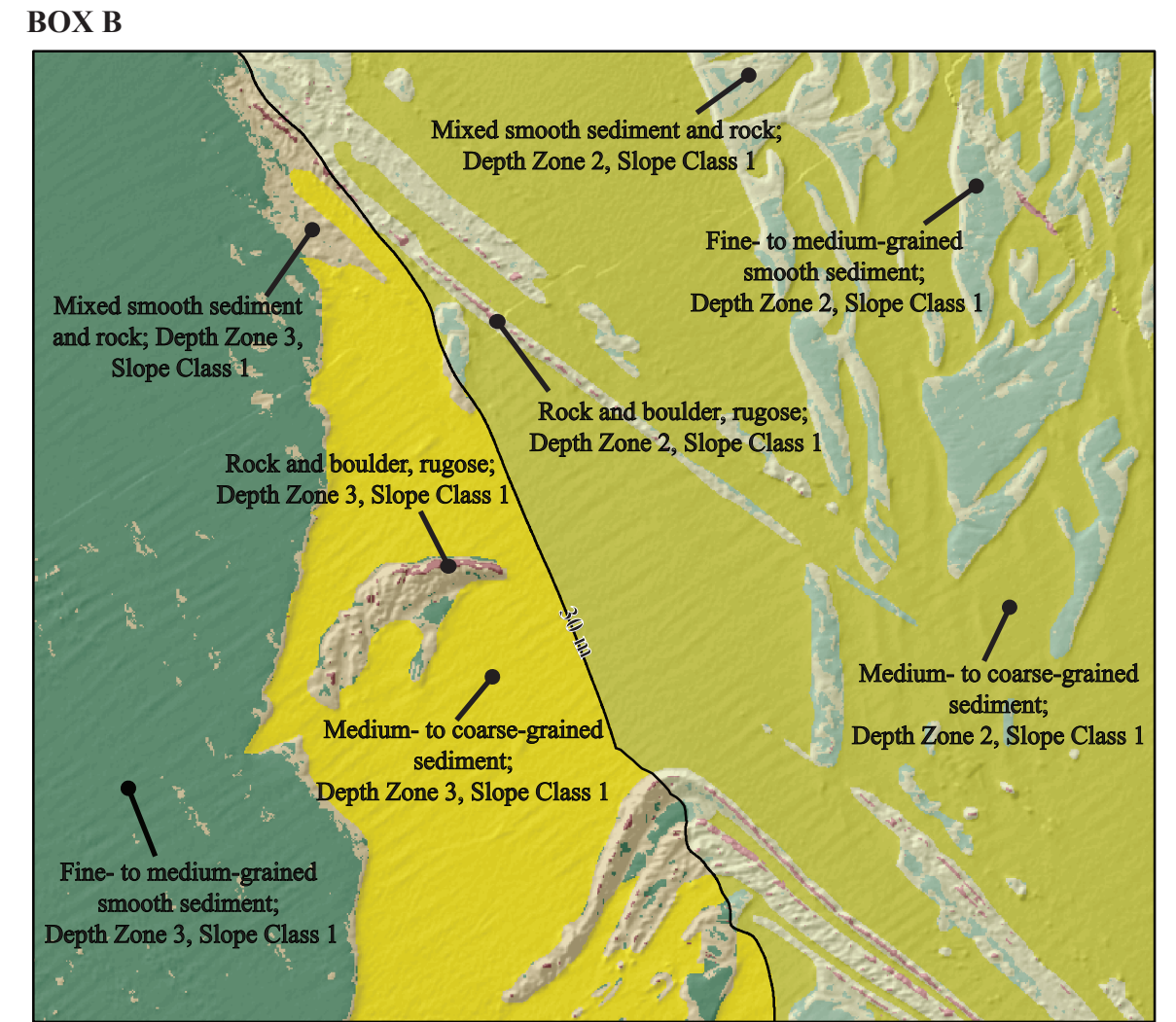


Figure 4. Detailed view of substrate classes mapped offshore of Double Point (see Box B, on map, for location). Depth Zone 2 (interstitial to 30 m), Depth Zone 3 (30 to 100 m), and Slope Class 1 (0°–5°). Fine- to medium-grained smooth sediment is shown in shades of green; mixed smooth sediment and rock is shown in shades of tan; rock is shown in shades of pink; and medium- to coarse-grained sediment is shown in shades of yellow. Bathymetric contour (30 m) added for depth reference.

**Table 1.** Coverage of classified seafloor, in square kilometers (sq km) and percent of total area, broken into California Marine Life Protection Act Depth Zones 2 and 3.

	Total		Depth Zone 2 (water depth 0–30 m)		Depth Zone 3 (water depth 30–100 m)	
	percent	sq km	percent of total	sq km	percent of total	sq km
Fine- to medium-grained smooth sediment	87.8	127.5	24.6	35.7	63.2	91.8
Mixed smooth sediment and rock	6.3	9.2	4.8	7.0	1.5	2.2
Rock and boulder, rugose	2.6	3.7	2.3	3.3	0.3	0.4
Medium- to coarse-grained sediment	3.4	4.9	2.9	4.2	0.5	0.7



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Supporting Coastal Ecology, M.D., and Cochran, G.R., 2015, Seafloor character, Drakes Bay and Vicinity map area, California, sheet 5 of 10, in: Erdey, M.D., Cochran, G.R., and Cochran, G.R., eds., Seafloor character, Drakes Bay and Vicinity map area, California, sheet 5 of 10, U.S. Geological Survey, Open-File Report 2015-1041, 10 p., 1:100,000 scale, 1041000, <http://dx.doi.org/10.3133/ofr201510410005>