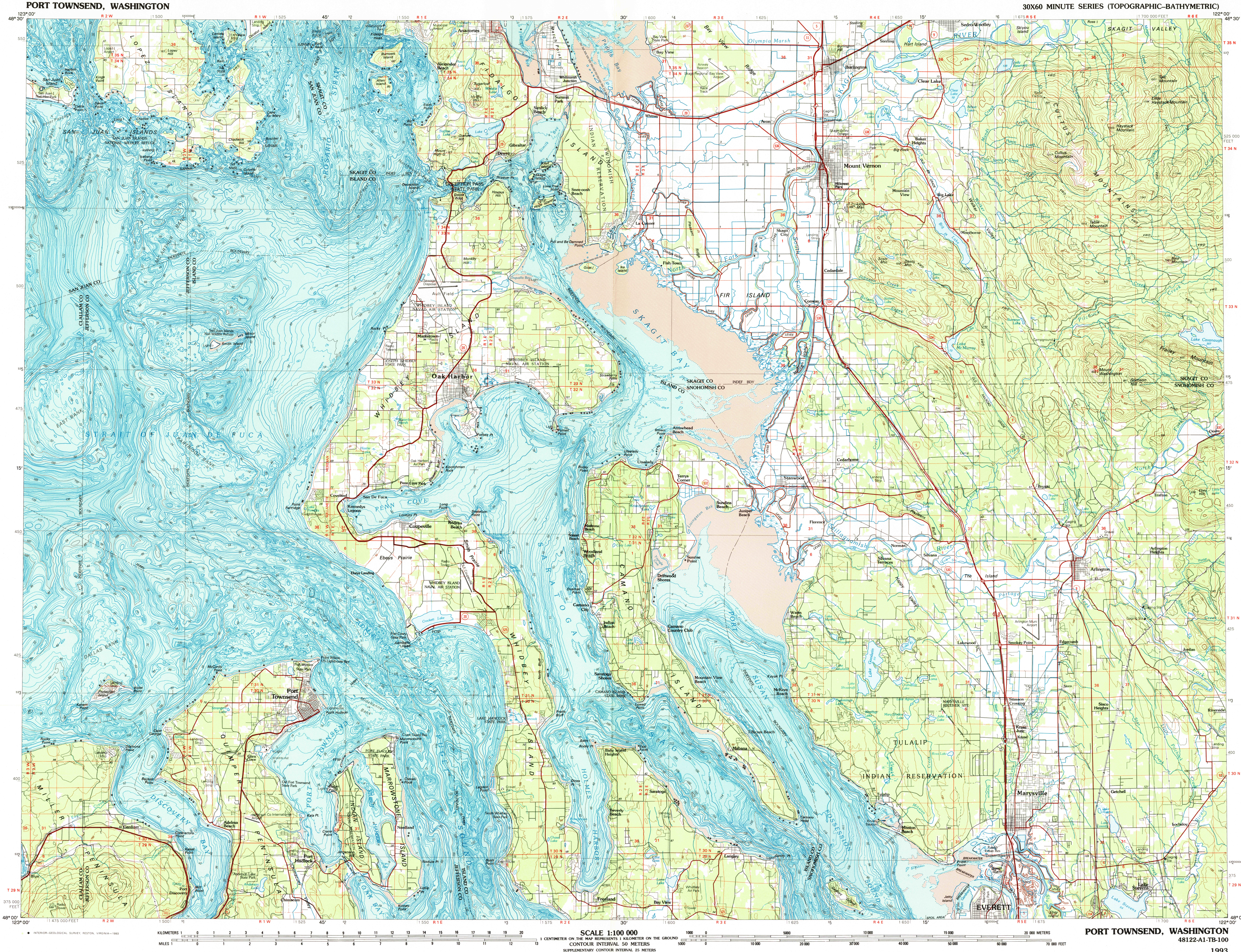
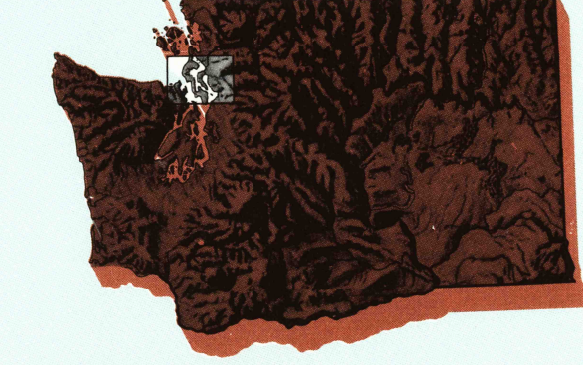


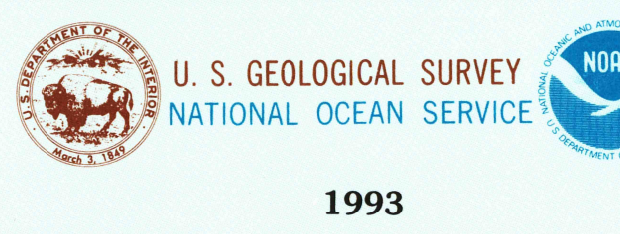


Port Townsend WASHINGTON

1:100 000-scale metric
topographic—bathymetric map



- 30 X 60 MINUTE QUADRANGLE
SHOWING
- Contours and elevations in meters
 - Highways, roads and other manmade structures
 - Water features
 - Woodland features
 - Geographic names
 - Bathymetric contours in meters



Produced by the United States Geological Survey and the National Ocean Service

Compiled from USGS 1:24 000-scale topographic maps dated 1968-1985. Bathymetry revised from aerial photographs taken 1981-1988 and other source data. Revised information not field checked. Map edited 1993.

Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes. Mean lower low water (dotted line) and mean high water (heavy solid line) compiled by NOS from tide-coordinated aerial photographs. Apparent shoreline (outer edge of vegetation) shown by light solid line.

1927 North American Datum (NAD 27). Projection and 10 000-meter grid. Universal Transverse Mercator, zone 10 25 000-foot ticks. Washington coordinate system, north zone. The difference between NAD 27 and North American Datum of 1983 (NAD 83) is too small to show at this scale. The values of the shift between the datums for 7.5-minute intersections are given in USGS Bulletin 1875.

There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 50 METERS
SUPPLEMENTARY CONTOUR INTERVAL 25 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER
BATHYMETRIC CONTOUR INTERVALS 10 METERS WITH 2 METER SUPPLEMENTARY CONTOURS. DATUM IS MEAN LOWER LOW WATER. THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE.

BASE MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS
BATHYMETRIC SURVEY DATA COMPLES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) PUBLICATION 44
ACCURACY STANDARDS AND/OR STANDARDS USED AT THE DATE OF THE SURVEY

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	Diagram		1	2	3
1	3.2808		7° 22' 355 MILS	1	2	3
2	6.5617			4	5	6
3	9.8425			7	8	9
4	13.1234					
5	16.4042					
6	19.6850					
7	22.9659					
8	26.2467					
9	29.5275					
10	32.8084					

To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

UTM grid convergence (GN) and 1983 magnetic declination (MG) at center of map. Diagram is approximate.

1 Roche Harbor
2 Bellingham
3 Mount Baker
4 Port Angeles
5 Sauk River
6 Mount Olympus
7 Seattle
8 Skokholm River

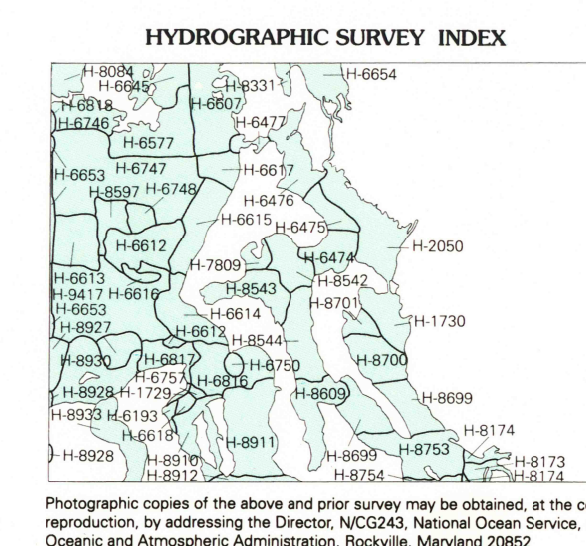
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80262, OR RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852

Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light duty road, principal street, hard or improved surface
- Other road or street, trail
- Route marker: Interstate, U. S. State
- Railroad: standard gauge, narrow gauge
- Bridge: overpass, underpass
- Tunnel: road, railroad
- Built up area, locality, elevation
- Airport: landing field, landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U. S. public lands survey: range, township, section
- Range, township, section line: protected
- Power transmission line, pipeline
- Dam, dam with lock
- Cemetery, building
- Windmill, water well, spring
- Mine shaft, adit or cave, mine, quarry, gravel pit
- Campground, picnic area, U. S. location monument
- Ruins, cliff dwelling
- Disturbed surface: strip mine, levee, sand
- Contours: index, intermediate, supplementary
- Bathymetric contours: index, intermediate
- Stream, lake, perennial, intermittent
- Rapids, large and small, falls, large and small
- Area to be submerged: marsh, swamp
- Land subject to controlled inundation, woodland
- Orchard, vineyard

A pamphlet describing topographic maps is available on request

HYDROGRAPHIC SURVEY INFORMATION											
SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)	SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)	SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-1729	1886-86	1:20,000	04-0.05	H-6645	1939	1:10,000	25-0.50	H-8543	1980	1:10,000	02-0.10
H-1730	1886	1:20,000	03-0.50	H-6650	1903	1:40,000	10-0.20	H-8544	1980	1:10,000	02-0.12
H-2550	1899	1:20,000	02-0.38	H-6654	1940	1:10,000	02-0.12	H-8597	1981	1:20,000	05-0.08
H-4193	1907	1:5,000	01-0.10	H-6746	1941-43	1:10,000	01-0.10	H-8598	1981	1:10,000	02-0.10
H-6474	1939	1:10,000	02-0.11	H-6747	1941	1:20,000	04-0.23	H-8599	1981	1:10,000	02-0.12
H-6475	1939	1:10,000	02-0.10	H-6748	1941	1:10,000	02-0.06	H-8600	1982	1:10,000	02-0.12
H-6476	1939	1:10,000	02-0.07	H-6757	1942	1:5,000	01-0.07	H-8701	1982	1:10,000	02-0.23
H-6477	1939	1:10,000	02-0.05	H-6819	1942-43	1:10,000	01-0.06	H-8702	1983	1:10,000	02-0.07
H-6607	1940	1:10,000	01-0.08	H-6871	1942-43	1:10,000	01-0.08	H-8754	1986	1:10,000	02-0.08
H-6610	1940	1:10,000	02-0.05	H-6872	1942	1:10,000	02-0.06	H-8804	1986	1:10,000	01-0.08
H-6613	1940-41	1:20,000	01-0.08	H-6873	1942	1:20,000	02-0.20	H-8811	1986	1:10,000	02-0.04
H-6614	1941	1:10,000	01-0.08	H-6874	1942	1:10,000	02-0.05	H-8812	1986	1:10,000	02-0.04
H-6615	1940-41	1:10,000	01-0.08	H-6875	1954	1:10,000	01-0.04	H-8827	1987	1:10,000	05-0.12
H-6616	1941	1:10,000	01-0.08	H-6876	1954	1:10,000	01-0.04	H-8828	1987	1:10,000	02-0.20
H-6617	1941	1:10,000	25-0.50	H-6831	1955	1:10,000	06-0.27	H-8830	1987	1:10,000	02-0.07
H-6618	1940	1:5,000	01-0.10	H-6842	1955-62	1:10,000	03-0.10	H-8831	1987	1:10,000	02-0.07
								H-8417	1974	1:10,000	00-0.11



Exposed at low tide

SEPT. GRADIENT

Maximum depth

USGS 1:250 000 HISTORICAL MAP SERIES

JUN 7 1993

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Photographic copies of the above and prior survey may be obtained, at the cost of reproduction, by addressing the Director, NSG&A, National Ocean Service, National Oceanic and Atmospheric Administration, Rockville, Maryland 20852