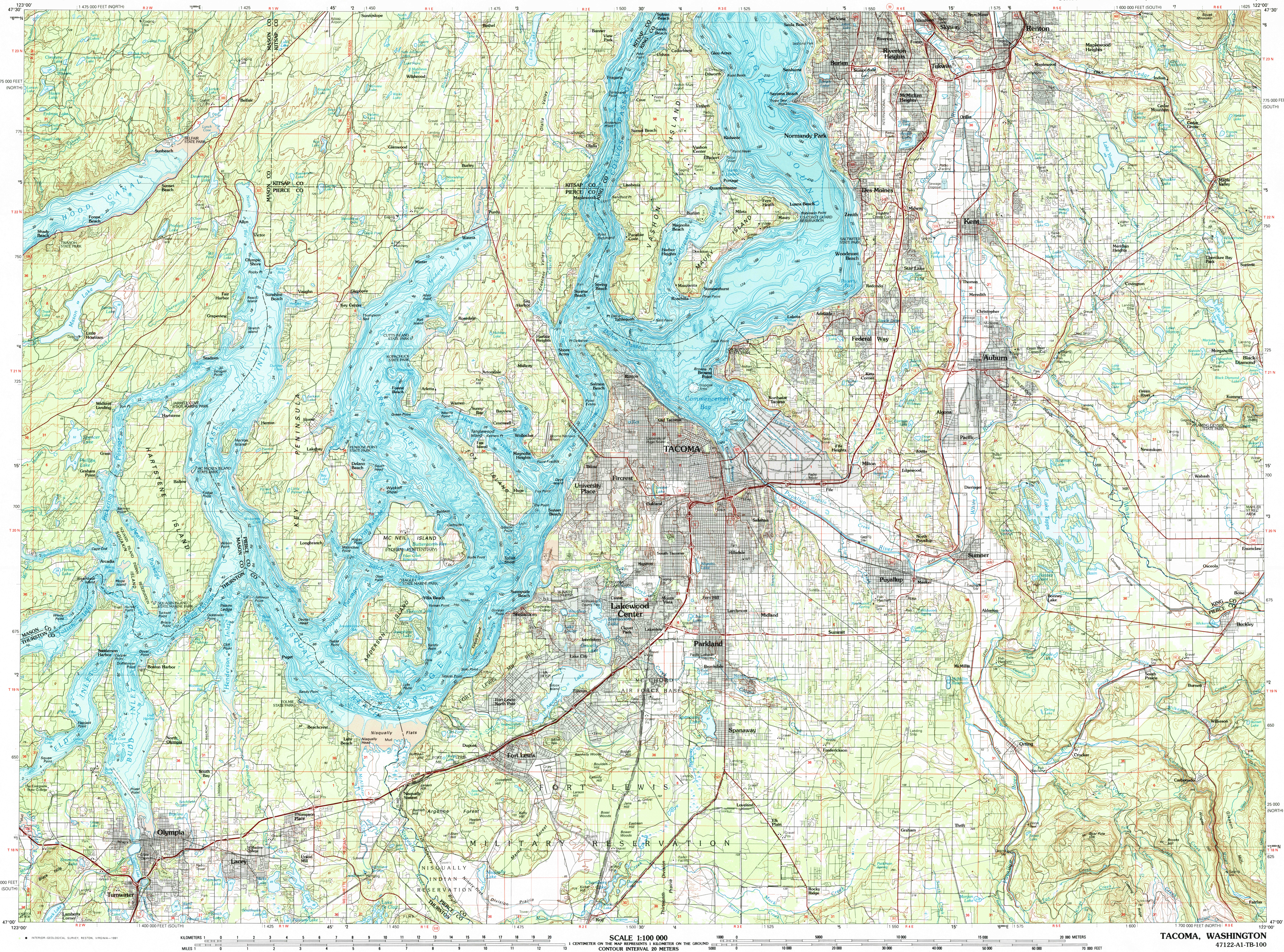
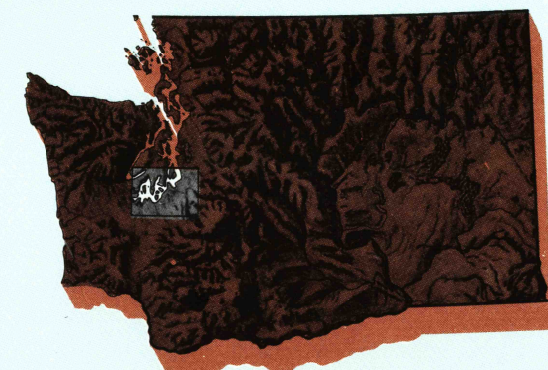
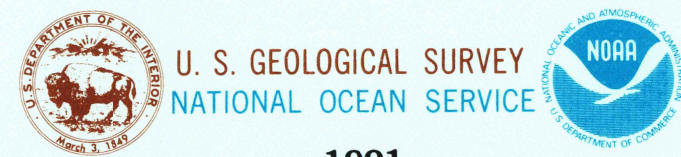


TACOMA, WASHINGTON

30X60 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)

Tacoma
WASHINGTON1:100 000-scale metric
topographic—bathymetric map30 X 60 MINUTE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names
- Bathymetric contours in meters



1991

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

Compiled from USGS 1:24 000-scale topographic maps dated 1968-81. Bathymetry derived from aerial photographs taken 1980 and other source data. Revised information not field checked. Map edited 1991.

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. Projection and 10 000-meter grid, zone 10 Universal Transverse Mercator 25 000-foot grid ticks based on Washington coordinate system, south and north zones. 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 23 meters north and 94 meters east. There may be private inholdings within the boundaries of National or State reservations shown on this map.

CONTOUR INTERVAL 20 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METERS
BATHYMETRIC CONTOUR INTERVALS 10 METERS TO 200 METER DEPTH
SUPPLEMENTED BY 1 METER INTERVALS TO 10 METERS DEPTH
DEPTHS SUPPLEMENTED BY 10 METER INTERVALS. 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) SPECIAL PUBLICATION 44
ACCURACY STANDARDS AND/OR STANDARDS USED AT THE DATE
OF THE SURVEY.

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS								
Meters	Feet				1	2	3	4	5	6	7	8
1	3.2808									1	Mount Olympus	
2	6.5617									2	Seattle	
3	9.8425									3	Skokholm River	
4	13.1234									4	Shelton	
5	16.4042									5	Sequim Bay	
6	19.6850									6	Chablis River	
7	22.9659									7	Centralia	
8	26.2467									8	Mount Rainier	
9	29.5276											
10	32.8084											
To convert meters to feet multiply by 3.2808		UTM grid convergence (200 and 180 magnetic declination) at center of map. Diagram is approximate.										
To convert feet to meters multiply by 0.3048												

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225 OR RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20855

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 gage, narrow gage	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	Wetland, water well, spring	Mine shaft, pit or cave, mine, quarry, gravel pit	Campground, picnic area, U. S. location monument	Rules, cliff dwelling	Distorted surface, strip mine, lava, 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	South meadows	Orchard, vineyard
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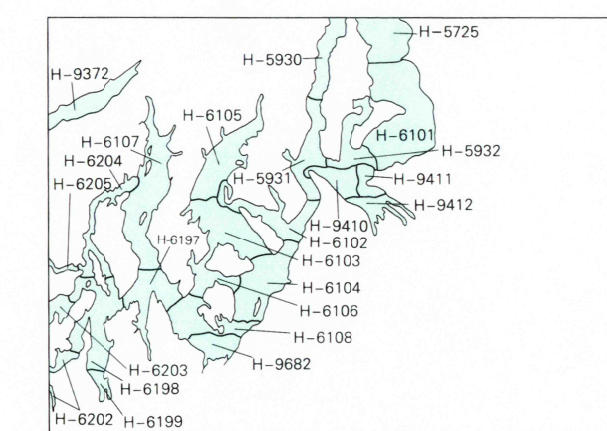
A pamphlet describing topographic maps is available on request.

TACOMA, WASHINGTON
47122-A1-TB-100

1991

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)
H-5729	1934	1:30,000	04-20	H-6197	1936	1:10,000	01-10
H-5730	1935	1:10,000	05-10	H-6198	1936	1:10,000	02-06
H-5931	1935	1:10,000	10-20	H-6199	1936	1:10,000	01-04
H-5932	1935	1:10,000	01-14	H-6200	1936	1:10,000	02-07
H-6101	1935	1:20,000	05-26	H-6201	1936	1:10,000	01-06
H-6102	1935	1:10,000	01-08	H-6202	1936	1:10,000	01-07
H-6103	1935	1:10,000	01-08	H-6203	1936	1:10,000	01-08
H-6104	1935	1:10,000	01-10	H-6204	1936	1:10,000	01-09
H-6105	1935	1:20,000	02-16	H-6205	1936	1:10,000	02-08
H-6106	1935	1:10,000	01-08	H-6206	1936	1:10,000	02-11
H-6107	1935	1:20,000	01-10	H-6207	1936	1:10,000	01-07
H-6108	1935	1:10,000	02-12	H-6208	1936	1:10,000	01-03



Photographic copies of the above and prior surveys may be obtained, at the cost of reproduction, by addressing the Director, NCIC243 National Ocean Service, National Ocean Service, Department of Commerce, Washington, D.C. 20540.

