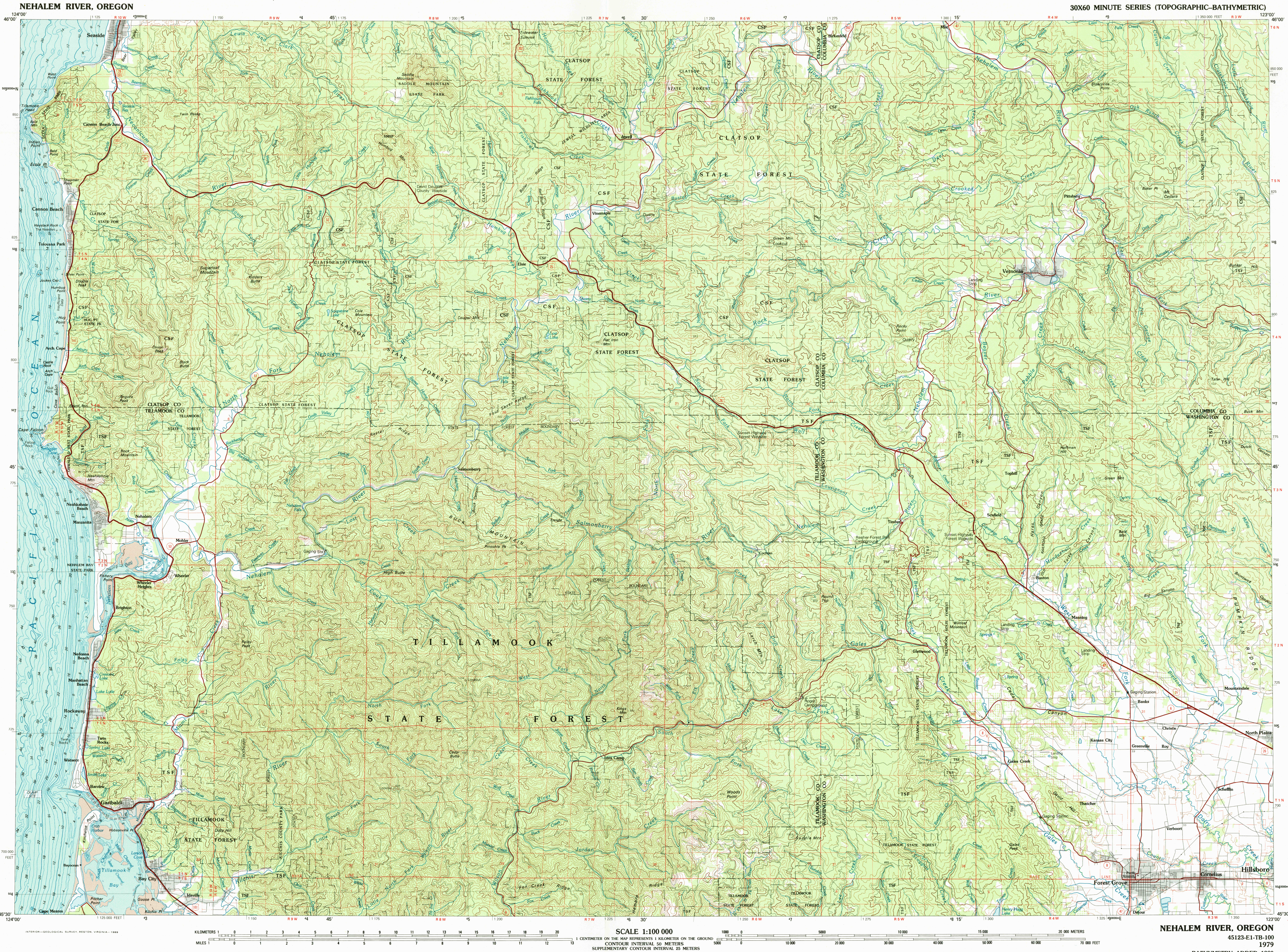


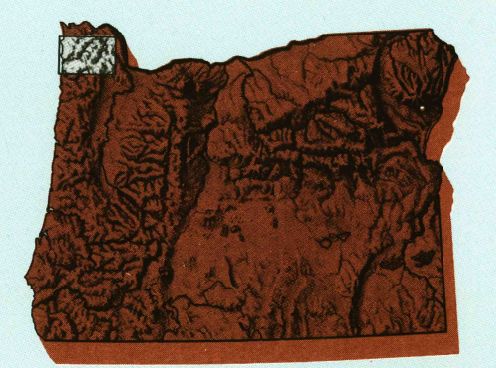




Nehalem River

OREGON

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 areas
- Geographic names
- Bathymetric contours in meters



U. S. GEOLOGICAL SURVEY
NATIONAL OCEAN SURVEY

1979

Produced by the United States Geological Survey and the National Ocean Service
Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1945-1975
Planimetry derived from aerial photographs taken 1975 and other source data. Revised information not field checked. Map edited 1979
Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes
Mean low water (dashed) line and mean high water (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 Oregon coordinate system, north zone 1927 North American Datum
To place on the pre-1983 North American Datum 1983 move the projection lines 24 meters north and 96 meters east
There may be private inholdings within the boundaries of 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 INTERVAL 10 METERS WITH SUPPLEMENTARY 2 METER CONTOURS-DATUM IS MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

BATHYMETRIC SURVEY DATA COMPILES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND/OR STANDARDS USED AS OF THE DATE OF THE SURVEYS

FOR SALE BY U.S. GEOLOGICAL SURVEY
P.O. BOX 25286, DENVER, COLORADO, 80225

CONVERSION TABLE	
Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

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

DECLINATION DIAGRAM	
GN	SN
0° 11' 15" E	0° 11' 15" E

ITM grid convergence (GN) and 1983 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS		
1	2	3
4	5	
6	7	8

1 Buxco
2 Astoria
3 Mount St Helens
4 Vancouver
5 Vancouver
6 Yamhill River
7 Yamhill River
8 Oregon City

RECEIVED
JUN 30 2000
USGS NWD
HISTORICAL MAP ARCHIVES

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, protracted	
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, stony mine, low, 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, wooded	
Scrub, mangrove	
Orchard, vineyard	

A pamphlet describing topographic maps is available on request



USGS

80%
TOTAL RECOVERED FIBER

Meters 0 Exposed at low tide 0 Feet

DEPTH GRADIENT

Maximum Depth

HYDROGRAPHIC SURVEY INFORMATION			
SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY DEPTH (NAUT. MILES)
H-4612	1926	1:20,000	05-25
H-4613	1926	1:20,000	05-25
H-4614	1926	1:20,000	04-15
H-4615	1926	1:40,000	03-30
H-4616	1927	1:40,000	03-30
H-4617	1927	1:20,000	10-15
H-4618	1927	1:40,000	20-40
H-4619	1926	1:10,000	03-11
H-4620	1927	1:10,000	01-05
H-4621	1927	1:10,000	03-14
H-4622	1927	1:10,000	02-14

HYDROGRAPHIC SURVEY INDEX	
H-4623	H-4624
H-4625	H-4626
H-4627	H-4628
H-4629	H-4630
H-4631	H-4632
H-4633	H-4634
H-4635	H-4636
H-4637	H-4638
H-4639	H-4640
H-4641	H-4642
H-4643	H-4644
H-4645	H-4646
H-4647	H-4648
H-4649	H-4650
H-4651	H-4652
H-4653	H-4654
H-4655	H-4656
H-4657	H-4658
H-4659	H-4660
H-4661	H-4662
H-4663	H-4664
H-4665	H-4666
H-4667	H-4668
H-4669	H-4670
H-4671	H-4672
H-4673	H-4674
H-4675	H-4676
H-4677	H-4678
H-4679	H-4680
H-4681	H-4682
H-4683	H-4684
H-4685	H-4686
H-4687	H-4688
H-4689	H-4690
H-4691	H-4692
H-4693	H-4694
H-4695	H-4696
H-4697	H-4698
H-4699	H-4700
H-4701	H-4702
H-4703	H-4704
H-4705	H-4706
H-4707	H-4708
H-4709	H-4710
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H-4993	H-4994
H-4995	H-4996
H-4997	H-4998
H-4999	H-5000

Photographic copies of the above and prior surveys may be obtained, at the cost of reproduction, from the Director, National Ocean Service, National Oceanic and Atmospheric Administration, Rockville, Maryland 20852