



Produced by the United States Geological Survey  
Topography compiled 1943 by the National Imagery and Mapping Agency. Planimetry derived from imagery taken 1981 and other sources. Photoinset using imagery taken 1996; no major culture or drainage changes observed. PLSS and survey control current as of 1953 boundaries, other than corporate, verified 1999. Supplemental control by Pacific Power and Light Company. Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes. Mean low water (dotted) line and mean high water (heavy solid) line compiled by NOS from tide-coordinated aerial photographs. Apparent shoreline (outeredge of vegetation) shown by light solid line. Information shown in purple may not meet USGS content standards and may conflict with previously mapped contours. North American Datum of 1927 (NAD 27). Projection and 1000-meter grid: Universal Transverse Mercator, zone 10 10 000-foot ticks; Oregon Coordinate System of 1927 (north zone) and Washington Coordinate System of 1927 (south zone). North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift intersections are obtainable from National Geodetic Survey NADCON software. There may be private inholdings within the boundaries of the National or State reservations shown on this map. Where omitted, land lines have not been established.

**NATIONAL OCEAN SERVICE HYDROGRAPHIC SURVEY INDEX**

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-5976	1935	1:10,000	01-05
H-8417	1958	1:20,000	03-35
H-8421	1958	1:10,000	01-17
H-8422	1958	1:10,000	01-17
NOS CHART 18521	MARCH 27, 1982	1:40,000	

**HYDROGRAPHIC SURVEY INFORMATION**

**SCALE 1:24 000**

**CONTOUR INTERVAL 50 FEET**  
DASHED LINES REPRESENT 25 FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
TO CONVERT FROM FEET TO METERS, MULTIPLY BY 0.3048  
BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS - DATUM IS MEAN LOWER LOW WATER  
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE  
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.4 METERS

**ROAD CLASSIFICATION**

Primary highway hard surface	Light-duty road, hard or improved surface
Secondary highway hard surface	Unimproved road

**ROAD CLASSIFICATION**

- Interstate Route
- U.S. Route
- State Route

**WARRENTON, OR-WA 1996**  
NIMA 1276 III NW-SERIES V892

**ADJOINING 7.5' QUADRANGLE NAMES**

1	2	3
4	5	6
7	8	

1 Cape Disappointment  
2 Chinook  
3 Knappahton  
4 Clatsop Spit  
5 Astoria  
6 Gearhart  
8 Olney

BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS AND/OR STANDARDS USED AT THE DATE OF THE SURVEY  
FOR SALE BY U.S. GEOLOGICAL SURVEY, P.O. BOX 25286, DENVER, COLORADO 80225  
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

**UTM GRID AND 1999 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET**

0°38' 11" N  
18° 329' N

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**TOTAL RECOVERED FIBER**