



Astoria OREGON—WASHINGTON 1:100 000-scale metric topographic—bathymetric map



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



1981

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

CONTOUR INTERVAL: 10 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

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

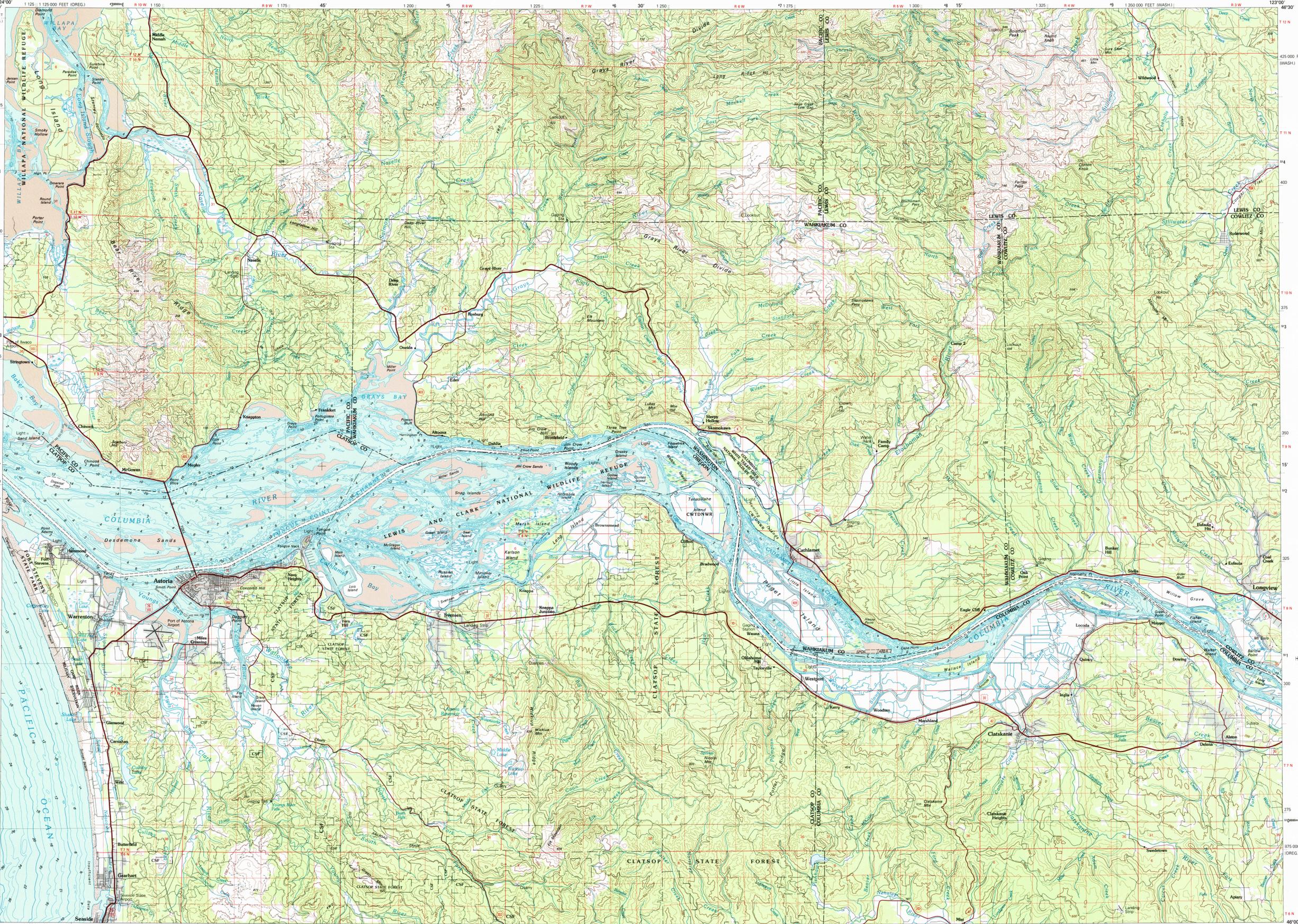
CONVERSION TABLE (Meters to Feet), DECLINATION DIAGRAM, ADJOINING MAPS



RECEIVED MAY 30 2002 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
Wetland; water well; spring
Mine shaft; adit or cave; mine, quarry; gravel pit
Campground; picnic area; U. S. location monument
Ruins; 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
Areas to be submerged; marsh, swamp
Land subject to controlled inundation; woodland
Scrub; mangrove
Orchard; vineyard

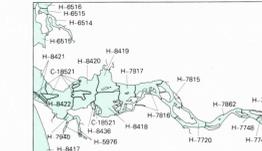


ASTORIA, OREGON—WASHINGTON 46123-A1-TB-100 1981 BATHYMETRY ADDED 1989

HYDROGRAPHIC SURVEY INFORMATION

Table with columns: SURVEY NUMBER, SURVEY DATE, SURVEY SCALE, SURVEY LINE SPACING, SURVEY DATE, SURVEY SCALE, SURVEY LINE SPACING

HYDROGRAPHIC SURVEY INDEX



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