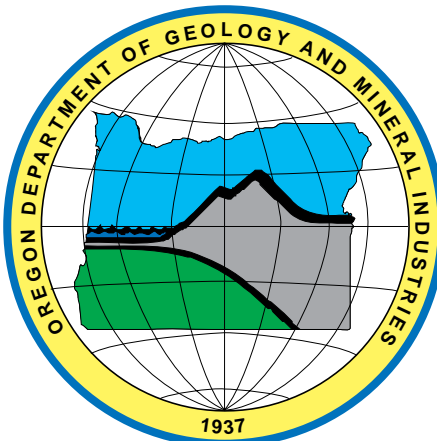


BARE EARTH HILLSHADE IMAGE

Lidar Imagery of the Southwest Quarter of the Camas 7.5' Quadrangle

HIGHEST HIT HILLSHADE IMAGE

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
VICKI S. MCCONNELL, STATE GEOLOGIST
www.dgimathweb.org



Lidar Imagery Series

LIS-2010-45122E4-Camas
Lidar Imagery of the Camas 7.5' Quadrangle,
Multnomah County, Oregon

2010

0 640 1,280 2,560 3,840 5,120
feet

0 0.25 0.5 1
miles



Cartography by Ted Roberts and Sarah Robinson, Oregon Department of Geology and Mineral Industries.
Additional cartography and data processing by John English, Katherine Hughes, Matthew Tietze, and Rufe
Waring, Oregon Department of Geology and Mineral Industries.

Data Source: Lidar data from DGIM and Puget Sound Lidar Consortium.
Lidar from 2005 and 2007.

Hydrology features digitized from lidar data by DGIM. Feature names from Google Maps.
U.S. Bureau of Land Management, U.S. Geological Survey, and ESRI.

Contours derived from bare earth elevation model smoothed by 40' x 40' averaging kernel.
Map projection: Universal Transverse Mercator Zone 10 North, North American Datum 1983.

Scale: 1:8,000

1 inch = 667 feet

Contour interval: 20 feet

UTM grid: 1 kilometer

Water features

Bare Earth Image



The bare earth image is a representation of the earth's
surface stripped of man-made objects and vegetation.
This is achieved by post-processing lidar point data.

Highest Hit Image



The highest hit image is a representation of the
landscape at the time of the lidar flight. Unlike the
bare earth image, this image shows features such as
trees, buildings, and even cars.

Lidar Data Origins and Map Image Limitations

These maps were created using data derived from lidar (light
detection and ranging) technology. A lidar measurement system
collects huge quantities of three-dimensional point data where laser
pulses have been reflected off opaque objects such as buildings,
trees, bushes, and the ground surface.

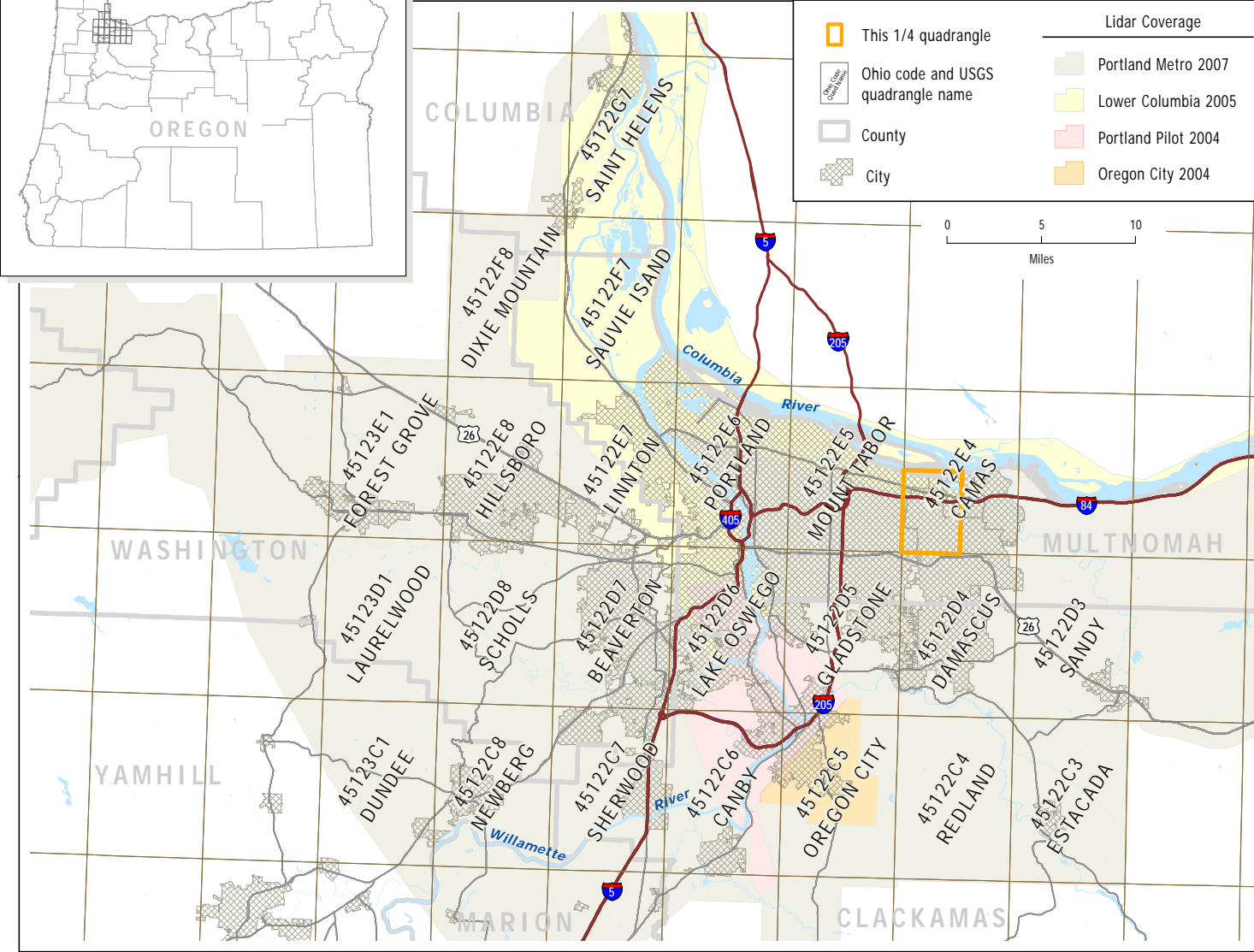
The lidar all-returns point cloud data that are the original basis for
these images were collected by Watershed Sciences Inc., TerraPoint,
LLC, and Murrice and Company. The point cloud is a remotely sensed
collection of three-dimensional point data that are systematically
calibrated relative to GPS ground control points.

The services provided and map products produced by Watershed
Sciences Inc. and TerraPoint, LLC were performed under the
supervision of a State of Oregon registered and certified Registered
Land Surveyor. The bare earth and highest hit digital elevation
surface models (DEM) produced by the three companies and made

available by DGIM as the Lidar Data Quadrangle (LDQ) series, are
georeferenced raster grids (ESRI format) interpolated from the point
cloud data.

The map images depicted here are examples by DGIM using GIS
techniques to extract and emphasize selected features. These map
images, the interpretive content displayed, and this lidar image
series are for general information purposes and are not intended to
indicate the authoritative location or definition of real property
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Quadrangle Location Map



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