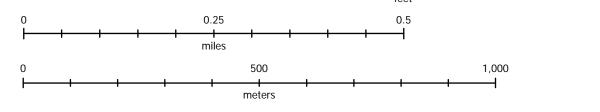
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
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## **Lidar Imagery Series**

LIS-2010-45122D5-Gladstone Lidar Imagery of the Gladstone 7.5' Quadrangle, Clackamas and Multnomah Counties, Oregon



Cartography by Jed Roberts and Sarah Robinson, Oregon Department of Geology and Mineral Industries. Additional cartography and data processing by John English, Kaleena Hughes, Mathew Tilman, and Rudie Watzig, Oregon Department of Geology and Mineral Industries. Data Source: Lidar data from DOGAMI, Puget Sound Lidar Consortium, and City of Oregon City. Lidar flown 2004 and 2007.

Hydrology features digitized from lidar data by DOGAMI. 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 60' x 60' averaging kernel. Map projection: Universal Transverse Mercator Zone 10 North, North American Datum 1983.







surface stripped of man-made objects and vegetation. landscape at the time of the lidar flight. Unlike the bare earth image, this image shows features such as trees, buildings, and even cars. This is achieved by post-processing lidar point data.

Lidar Data Origins and Map Image Limitations

These maps were created using data derived from lidar (light available by DOGAMI as the Lidar Data Quadrangle (LDQ) series, are detection and ranging) technology. A lidar measurement system georeferenced raster grids (ESRI format) interpolated from the point collects huge quantities of three-dimensional point data where laser cloud data. pulses have been reflected off opaque objects such as buildings, trees, bushes, and the ground surface. The map images depicted here are examples by DOGAMI using GIS

techniques to extract and emphasize selected features. These map The lidar all-returns point cloud data that are the original basis for images, the interpretative content displayed, and this lidar image these images were collected by Watershed Sciences Inc., TerraPoint, series are for general information purposes and are not intended to LLC, and Merrick and Company. The point cloud is a remotely sensed indicate the authoritative location or definition of real property collection of three-dimensional point data that are systematically boundaries, the precise shape or contour of the earth, or the precise calibrated relative to GPS ground control points.

location of fixed works of humans. No warranty, expressed or implied, is made regarding the accuracy or utility of the information The services provided and map products produced by Watershed described and/or contained herein, nor shall the act of distribution Sciences Inc. and TerraPoint, LLC were performed under the constitute any such warranty. This disclaimer applies both to supervision of a State of Oregon registered and certified Registered individual use of the data and aggregate use with other data. The Land Surveyor. The bare earth and highest hit digital elevation Oregon Department of Geology and Mineral Industries shall not be surface models (DEM) produced by the three companies and made held liable for improper or incorrect use of this information.

## Quadrangle Location Map quadrangle name