

## *DPH-12 Report on Use of the LAS Withheld Flag*

The USGS Lidar Base Specification Version 2.1 states: "The withheld bit flag, as defined in LAS specification version 1.4–R15 (ASPRS, 2011), shall only be used to identify points that cannot be reasonably interpreted as valid surface returns. Examples include outliers, blunders, geometrically unreliable points, aerosol back-scatter, laser multi-path, airborne objects, and sensor anomalies. The withheld flag may be used in conjunction with other classification codes (low/high noise for example), but it should be used in all cases where the previously mentioned criteria are met."

The purpose of this section is to list the presence and quantities of points flagged as Withheld for all lidar data files.

Total Withheld points (all classes, all files)

9972