

Overland Flow Path (OLFPs)

An Overland Flow Path layer provides a high-level understanding of routes where surface stormwater may flow during rainfall events. They are created using mapping software and high-resolution aerial survey data referred to as LiDAR.

This layer identifies a potential flood risk hazard associated with surface water flooding. This is an indicative tool only and any building works (including earthworks in any property), intersecting with an Overland Flow Path shall require specific flood assessment by a suitable qualified engineer.

In simple terms it's a layer mapping the potential location of concentrated flow within catchments. It should be noted that the use and interpretation of the layer, is subject to the following limitations:

- In some locations, change to landforms since LiDAR was generated will have altered the course of overland flow paths from those displayed on the layer. This dataset represents the OLFP associated with the 2017 DTM (Refer Advisory Note 5).
- This layer identifies a potential flood risk hazard associated with surface water flooding. This is an indicative tool only and any building works (including earthworks in any property), intersecting with an overland flowpath shall require specific flood assessment by a suitable qualified engineer.
- The layer uses a surface generated by LiDAR only and does not account for the stormwater reticulation network or for any surface obstructions such as buildings or fences or for any effects due to momentum or velocity of flows.
- The layer is subject to limitations in the LiDAR data. These include lower precision under dense foliage and lack of LiDAR data in some rural areas in the District.
- The layer is generated through a GIS analysis process which divides terrain into a grid of squares. The process creates a "flowpath" generated from each grid square to the lowest adjacent grid square. This method means that fine features such as kerbs may not be accurately represented.
- The layer does not include any assessment of depth, width, or rate of flows.
- The layer does not provide an indicative upstream catchment area.

In addition for the purposes and information useful for technical users:

- OLFPs represent a synthetic flow path network and do not necessarily indicate where water will flow under specific storm events or represent specific flow rates.
- Delineated flow paths have one-dimensional geometry, i.e., they represent the centreline of potential surface flow routes and do not provide information on flow width, depth, or velocity.
- OLFPs are derived from a bare-ground DEM and therefore do not account for the effects of buildings or other built structures such as fences which may deflect surface flows. Ground truthing of delineated flow paths should be undertaken in areas of particular concern to inform decision-making.
- The current OLFP network is the result of extensive modification of the DEM. However, further burning-in of the spill points of smaller depressions is likely to modify the route of some of the lower order flow paths within the depression footprints.