

Methodology for Digitizing Landuse Polygons (Luckiamute Project)

The following methodology uses Digger 4.0 to create landuse polygons from georegistered, historic photos of the Luckiamute Riparian Zone

- (1) digitize stream channel
- (2) create 500 m buffer, around channel
- (3) Import buffer polygon into digger, overalaying historic, georegistered air photo
- (4) Convert buffer polygon to polyline
- (5) Overlay buffer *.shp file on photo (resolution = 300 dpi)
- (6) Zoom in to ~800 x 800 m field of view
- (7) Pan/traverse the boundary of the buffer in a clockwise direction
 - a. Systematically select buffer line segments
 - b. Identify landuse break points along buffer
 - c. Select buffer line segments, use Rt-click / break line tool at each class boundary that intersects the bounding poly-line

TIP: in digger, after selecting a line or multiple objects, hit F3 to clear all selections / select none.

- (8) Once all bounding lines and nodes are established, heads-up digit internal land-use boundaries, within the bounding buffer zone
 - a. To avoid future leaky polygons, make sure to snap all end nodes of line segments
 - b. Use a snap tolerance of 10 m for conventional 9 x 9 air photo georegistered in UTM-meters
 - i. File-project settings – set snap tolerance = 10 m; check the “show snap circles” box
- (9) To smooth digitized lines, use the smooth line function – option vertex averaging, every 2 works well.
- (10) Once all internal polylines are digitized and snapped to external bounding lines of the buffer zone, create another layer and digitize “polygon locator” symbols, with appropriate attributes