Workflows

**Hawaii Big Island Boundary** - downloaded HI census block shapefiles, selected by location (big island only), created layer from selected features, dissolved based on state ID to create boundary for the big island of HI

**Big Island Rain Gauges** - downloaded all HI rain gauges, clipped gauges using the big island boundary, select by features - selected currently in use stations (filtered out discontinued stations). “Find and replace” for attribute table - replaced -9999 (no data) with 0.

**Thiessen Polygons** - used big island rain gauges to create Thiessen Polygons using the hydrology geoprocessing “Create Thiessen Polygon” tool. Adjusted extent to be the same as the big island boundary. Clipped polygons with big island boundary

**Government Lands** - downloaded Government Lands Ownership (detailed version), clipped to big island, select by “likely to be used as training area” based on owner (Department of Hawaii Home Lands, State of Hawaii, United States of America). Dissolved based on “owned by” into the three categories.

**Map 1 - Cover land vs fire perimeters**

Write up

1. Download data:

a. Land cover (raster) sourced from

b. Fire perimeters (polygons) sourced from

2. Explore attribute tables and reclassify more than 40 different land covers into 4 categories ( table 1)

3. Report the statistics on fire perimeters and land cover involved

a. Land cover burned by year

b. Total land cover burned

Table 1.

| Detailed\_L | Reclassify | Description |
| --- | --- | --- |
|  | 1 | Wet and mesic |
|  | 2 | Dry |
|  | 3 | Agricultural |
|  | 4 | Developed |