

LANDFIRE Fuel and Fuel Disturbance Rulesets Database:

The attached database is organized in a Microsoft Access Form format to display LANDFIRE fuel rules by Existing Vegetation Type (EVT), non-disturbance or disturbance type, and LANDFIRE map zone. Fuel rulesets are comprised of the described EVT, combinations of ranges of cover and height, and Biophysical Setting (BpS) within each EVT.

Once the database downloads double click on Master_Disturbance_Transition.mdb and if Microsoft Access is installed on the computer it will open to a tabbed page called LFTFC Rulesets. There are three filters at the top of the page: EVT and Disturbance Type (DIST) both with a drop down menu, and Zone Filter with a text box. The default EVT is Water and DIST is Not Disturbed. The user may select the EVT and Disturbance Type of interest by using the drop down menus. An additional filter is provided to restrict the search to a selected map zone by typing in the map zone number and pressing enter. On the rulesets tab other options are available by selecting the drop down in the column heading. The columns on the Rulesets Tab include:

- Map Zone
- Range of Cover
- Range of Height
- BPS
- FM 13 assignment (Fuel Model 13; Anderson 1982)
- FM 40 assignment (Fuel Model 40; Scott, Burgan 2006)
- CanFM; Canadian Fuel Models only in Alaska EVT's
- CG; Canopy Guide
- Pixel Count; for the selected rulesets and fuel models
- Acres; for the selected rulesets and fuel models

The Disturbance drop down menu (DIST Type) allows the user to sort the vegetation within a map zone area by disturbance type, severity, and time since disturbance, and displays the resulting fuel model transition and acres affected by the disturbance. The number on the left side of the drop down corresponds to the code used in FDist (Fuels Disturbance) where the 3 digits correspond to type, severity, and time since disturbance. The rest of the drop down verbally explains the disturbance in type, severity, and time since (TSx).

With vegetation time since disturbance has three stages; immediately following the disturbance (TS1), 2 to 5 years after the disturbance (TS2), and 5 to 10 years post disturbance (TS3). For surface fuel models TS2 and TS3 are used in the transitions. The four primary types of disturbance are Fire, Mechanical Add, Mechanical Remove, and Wind, and Unknown Mechanical (See LF Fuel Disturbance Attribute Data Dictionary for definitions). Each has fuel model transitions for three severity classes (high, moderate, low) and TS2 and TS3 time disturbance classes.

Other disturbance types include Insect and Disease, which captures a very limited number of insect and pathogen effects, Exotics which are currently only developed for Hawaii, and Other, which is not currently being used.