



Creating ArcGIS Shapefiles for Fire Workload Areas (FWAs) (IR_005_TP)

Fire Program Analysis (FPA) uses two separate boundary files as discrete ArcGIS shapefiles. The two separate shapefiles are:

- **The National Fire Planning Unit (FPU) shapefile.** The National FPU shapefile is the primary GIS boundary file in FPA and contains the edge matched polygons of all the individual FPU.
- **The Fire Workload Area (FWAs) shapefile.** Some or all of the FWA polygons may be identical to the FMU polygons. The FWA polygons for each FPU are stored as a single FWA shapefile. The FMU is an aggregation of individual FWAs.

FPA requires that each of these boundary files be available as a shapefile before running analyses, even when there is no subdivision from the larger unit boundary. When there is only one FWA per FMU, the FWA boundaries coincide with the FMU boundaries.

“Unassigned” Lands in the FPU

If there are lands unassigned to the five participating federal Fire agencies (i.e., USDA-Forest Service, Bureau of Indian Affairs, Bureau of Land Management, National Park Service, or US Fish and Wildlife Service) or *participating* State agencies, those lands must be included in a separate FWA and corresponding FMU. The FMU_Name and FWA_Name attributes (described below) may be used to identify unassigned lands. These unassigned lands polygons can be discontinuous.

Bottom Line: all land within the FPU boundary must be accounted for in the FWA shapefiles.

FWA Shapefile Attributes

As of May 27 2008, the FPA Project’s definition guidance has changed. FWA shapefiles must be submitted with the following Shapefile attribute definition:

<i>Attribute Name</i>	<i>Data Type</i>	<i>Length</i>	<i>Example</i>
<i>FPU_ID</i>	<i>Text</i>	<i>50</i>	<i>CA_CA_012</i>
<i>FMU_ID</i>	<i>Text</i>	<i>50</i>	<i>FMU_001</i>
<i>FMU_NAME</i>	<i>Text</i>	<i>30</i>	<i>FMP Name for the FMU</i>
<i>FWA_ID</i>	<i>Text</i>	<i>50</i>	<i>FMU_001_FWA_001</i>
<i>FWA_Name</i>	<i>Text</i>	<i>20</i>	<i>Local FWA name</i>

- All five attributes are mandatory.
- The FMU_NAME may be the local use name or the name used in the unit’s Fire Management Plan. This is the name that displays on maps as labels.



Creating ArcGIS Shapefiles for Fire Workload Areas (FWAs) (IR_005_TP)

- The FWA_NAME may be the local use name. This is the name that displays on maps as labels. FMUs that are *unassigned*, as described above, should be labeled *Unassigned*.
- There may be spaces in the FMU names and FWA names entered into the FMU_NAME and FWA_NAME fields in ArcGIS. Once the Shapefile is submitted to the FPA Project office via the FTP site, as described below, all references to the FMU_NAME and FWA_NAME attributes must be spelled consistently using the same combination of upper and lower case letters, spaces, and/or numbers used in the Shapefile.
- FWA polygons are to be sequentially identified in the FWA_ID field, using the “underscore” character to separate name elements.
- The FWA shapefiles must be in NAD83 decimal degrees format.

If you have already submitted your FWA shapefiles with the 50-character string for the FMU_NAME and FWA_NAME fields, FPA will shorten them to the required 30 characters. FPA will contact you if there are problems with this process.

Creating ArcGIS FWA Shapefiles

1. Use standard ArcMap editing techniques to subdivide the FPU shapefile’s polygon to create FWA polygons.
2. Create attributes for the FWA; including the five attributes in the table, as shown above.
3. The map projection and datum are to conform to the FPA standard of geographic coordinates (i.e. *decimal degrees*), NAD 83.
4. Ensure that each shapefile is topologically correct before submitting it to the FPA project office.
5. Create a zipped file containing each of the shapefiles.
Use WinZip or the WindowsXP/Windows Vista file compression utility to create a zipped file for each of the shapefiles submitted to FPA.
6. Name the zipped file with the same name as the FMU or FWA shapefile, using the naming convention above. Example: CA_CA_012_FWA.zip.



Creating ArcGIS Shapefiles for Fire Workload Areas (FWAs) (IR_005_TP)

7. Submit the zipped file to the FPA Project Office using following:

Open an *MS-Windows Explorer* window
(not Internet Explorer) and paste the following information into the Address Window.:

ftp.fpdata.org/public_ftp/incoming

Note that you are not typing the usual form, where you enter “ftp://”

Go to the File menu, select the “Login As:” menu item, and enter the following (and *do check the save password checkbox*). See Fig. 1:

Username: fpdatao (where the “o” is the lower case letter o).

Password: fpaftp2008 (where the “0”s are zeros)

When you are in the FTP site, navigate to the Fire_Workload_Areas directory where you will find each Geographic Area in a directory with the associated FPU IDs in subdirectories underneath. These are the locations in which to upload your ZIP files.

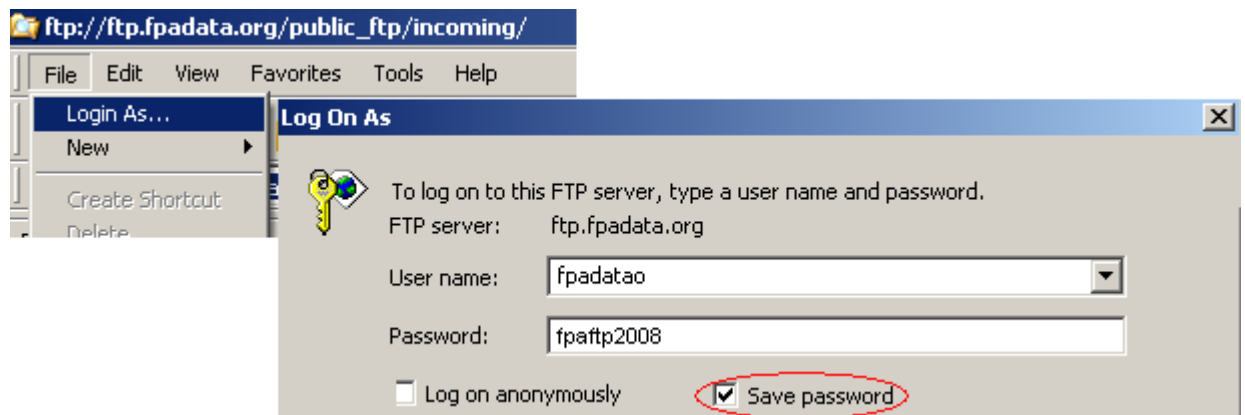


Figure 1: Showing “Login As...”

For BIA units submitting shapefiles, email your zipped file to: gerald.barnes@bia.gov

Jerry Barnes’ Trustnet email address at NIFC.

Jerry will submit your shapefiles to the project.

FPA Office GIS Contact: Craig Thompson
(208) 947-3763
Craig_Thompson@nps.gov