



## Topic:

Updating Fire Planning Unit (FPU) boundaries.

## Introduction

The Fire Program Analysis (FPA) system requires topologically correct Fire Planning Unit (FPU) boundary GIS data for each FPU that is *edgematched* with adjacent FPUs. FPA uses the FPU boundary GIS layer (shapefile) to model and simulate fire response actions. For further information about FPU boundaries, see

[http://www.fpa.nifc.gov/Library/Papers/Docs/FPA\\_2/Determining\\_FPU\\_Boundary\\_2007\\_09\\_27\\_final.pdf](http://www.fpa.nifc.gov/Library/Papers/Docs/FPA_2/Determining_FPU_Boundary_2007_09_27_final.pdf).

## Discussion

Each FPU must review, and if required, update or correct their FPU boundaries. Submit corrections or boundary changes to the FPU's Geographic Area (GA) Lead, who reviews and forwards the information to the FPA GIS Specialist in Boise. The FPA Project then reviews and enters modifications into the FPA Enterprise Boundary Data Layer.

All FPU boundary corrections and changes must be reviewed and received by the FPA GIS Specialist ([craig\\_thompson@nps.gov](mailto:craig_thompson@nps.gov)) before April 1, 2008.

[Figure 1](#) is a graphic representation of the FPU boundary update process. The numbers at the lower left side of each shape refer to a process step.





## Procedures for Updating Boundaries

1. Each FPU downloads the national FPU shapefile from the FPA website ([http://www.fpa.nifc.gov/Implementation/TechInfo/Docs/fpa\\_fpu\\_18JAN08.zip](http://www.fpa.nifc.gov/Implementation/TechInfo/Docs/fpa_fpu_18JAN08.zip)). Using the agency-current GIS system (e.g. ArcGIS 9.x,) display, print, and evaluate the shapefile. When GIS capability is not available to the FPU, the FPU lead Fire Planner should contact their GA Lead for further direction.
2. The FPU reviews the boundary data currently existing in the FPA Enterprise Boundary Data Layer.

If the FPU's boundaries in the FPA Enterprise Boundary Data Layer are correct, the FPU emails the GA Lead that the current boundaries are correct. FPU's should also copy the FPU's Implementation Coordination Group (ICG) representative (<http://www.fpa.nifc.gov/Contacts/icg.html>) on the email.

When reviewing the Enterprise Boundary Layer, modification may be required when, for example:

- A river's east bank is a boundary line rather than a river centerline.
  - A highway's boundary is approximated instead of being delineated at the highway centerline.
  - Topology considerations have changed.
  - A boundary is incorrect and does not follow one of the features in this listing, for example.
    - State, County, Agency, Unit or other administrative boundary.
    - Highway, Road, Railroad, or other transportation corridor.
    - Existing topographical boundary such as a mountain ridgeline or river centerline.
3. If the initiating FPU determines a boundary requires modification, they should notify affected neighbors FPU's by:
    - Preparing initial documentation describing the change. This can include maps, narrative description, air photos, or other appropriate media, or information about how the proposed change affects existing partnership agreements.



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- Sharing draft documentation with affected FPUs, who review the proposed change.
4. Affected FPUs review the draft documentation and decide if the change is consistent with their policies.

When there are disagreements about boundary changes, the initiating FPU negotiates with neighboring FPUs to resolve disputes.

Affected FPUs must approve any boundary modifications via email to the FPU (with a copy to the GA Lead) initiating the modification.

5. When all affected FPUs agree to the boundary change, the initiating FPU finalizes the documentation.

When a) boundary change(s) require corrections to existing lines without substantially changing current boundary alignment and, b) all neighboring FPUs agree to the boundary change, the FPU uses maps, text descriptions, air photos, or other appropriate media to document the boundary change.

When boundary changes result in substantial boundary realignment, FPUs need to determine if the modification involves existing features.

- When yes, the FPU uses existing data and adds modifications to update the boundary in ArcGIS and ArcCatalog metadata.
- When no, the FPU updates boundaries in ArcGIS and ArcCatalog metadata.

Refer to [Creating or Modifying Fire Planning Unit \(FPU\) GIS Shapefiles for Fire Program Analysis \(FPA\)](#) for further information on modifying features.

The FPU updates boundary information in ArcGIS (agency current version), along with ArcCatalog metadata.

6. When changes in the documentation are final, the initiating FPU emails or sends a FAX to the GA Lead and FPA Project GIS Specialist ([craig\\_thompson@nps.gov](mailto:craig_thompson@nps.gov)), with a copy to the FPU's Implementation Coordination Group (ICG) graphic representative. The email should include:
  - Reasons for boundary modification, and
  - A narrative description of proposed boundaries. The initiating FPU should also submit a modified shapefile and updated map products in .jpeg, .bmp, or .pdf format clearly showing proposed changes, and
  - A shapefile containing the updated boundaries.



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- The GA Lead reviews the documentation to make sure all effected parties' understanding of the change are included in the modifications being submitted.

The GA Leads review the documentation to ensure that a dialog has taken place with full agreement and understanding between affected FPUs.

When clarification or modification is required, the GA Lead and/or FPA Project GIS Specialist (craig\_thompson@nps.gov) emails the FPU to supply the required information.

- The GA Lead ensures agreement between FPUs regarding any updated boundary information. The GA Lead also sends an email or FAX to the FPA Geographic Representative notifying them the new boundary information is ready for processing.
- The FPA GIS Specialist (craig\_thompson@nps.gov) ensures the new boundary information format is according to FPA standards.
- FPA integrates the updated boundaries into the Enterprise Data Layer.

### Review History:

Date	Initials	Change Summary
February 22, 2008	KSH	Spoke with Craig about Donna's comments and made edits.
February 20, 2008	DKS	Edits and clarifications recommended.
February 15, 2008		Incorporated edits per Donna's 2.15.08 email request from Brian Bischof.
January 24, 2008	DS	Approved.
January 24, 2008	KSH	Incorporate final comments.
January 17, 2008	CT	Respond to review comments.
January 16, 2008	DS	Review with comments.
January 15, 2008	KSH	Incorporate review comments.
January 13, 2008	ED	Review comments.
December 11, 2007	KSH	Initial edit.
December 3, 2007	CT	Initial draft