Editing Resources in WFIPS

There are two methods for editing the resources used during a WFIPS run. The first method allows for the temporary exclusion of individual resources or all the resources at a dispatch location from a WFIPS run without making permanent changes to a resource database. The second method allows WFIPS to use an alternate resource database that is created by editing an existing resource database or creating a resource database from scratch. The alternate resource database is saved so it can be used in multiple WFIPS runs and/or it can be edited to creating new resource databases.

Excluding Resources from a WFIPS run:

Resources and Dispatch Locations that are **excluded** are not used in the current WFIPS run but are still in the database so the modifications need to be made for each WFIPS run. When an analysis area is selected the associated dispatch locations are shown on the map and listed in the menu. A dispatch location can be excluded from the analysis by right clicking on the dispatch location point on the map and selecting “Exclude”,

![Map of WFIPS with Exclude option]

by right clicking on the dispatch location’s name in the side menu and selecting “Exclude”,

![Side menu with Exclude option]
or by selecting “Properties” from either of these popup menus and checking the “Excluded” box in the properties dialog for the dispatch location.

Groups of dispatch locations can be excluded by drawing a box around them and selecting “Exclude Dispatch Locations”.

Individual resources can be excluded from the analysis by checking the resource’s “Excluded” box in the properties dialog for the dispatch location.

The names of the dispatch locations and resources that are excluded from the analysis are displayed in the “Run Summary”, under Results in the side menu, and are saved with the run results.
Using an alternate resource database:

WFIPS can use a resource database other than the Master resource database. The steps to creating and using this database are:

- Create a new resource database.
- Add and remove resources and/or edit the individual resource’s information.
- Save the resource database.
- Select the new resource database during the WFIPS run.

Create a New resource database by selecting “Resources” in the WFIPS menu then “New”. You have the choice of creating an empty database, copying a resource database that already exists, or copying the Master resource database. Dialogs will prompt you to name your new database and if “Copy...” is selected the name of the database to copy will need to be provided.
Because the Master resource database contains a daunting amount of information, several filters are provided to make viewing and editing easier.

The data in the resource table can be sorted on any of the fields in the displayed table by clicking the header for the field. In the resource table a single resource is selected by clicking on it and multiple resources can be selected by clicking on them using the “shift” and “Ctrl” keys in the usual Windows manner. The “Edit”, “Copy”, and “Delete” functions work on single and multiple selections.

Clicking the “Add New Resource” button brings up the Create New Resource dialog. Each resource must have a unique name. The drop down boxes provide the choices available and prevent erroneous values from being entered. The numerical boxes contain place holder values, some of which may even not be
acceptable. Error messages will ensure that appropriate values are entered in these fields. Some fields that need additional descriptions are:

- **Dispatch Location** – Only dispatch locations in the Master dispatch location database can be used. There is currently no way to change this database. The drop down box contains the dispatch location names associated with the Geographic Area specified in the filter.
- **Staffing** – The staffing number should indicate the number of crew members that are generally deployed for initial attack, so crews should be broken down into these units. Multiple groups will be sent to fires if they are needed. (i.e., smokejumpers are entered as 2 person crews.)
- **FPU** – is the FPU where the resource is located. This value is not used in the WFIPS run. It is used to help distribute the data when it has to be manually updated. “NA_US” is used to indicate national resources.
- **Borrowable** – indicates if the resource can be moved to other dispatch locations for either prepositioning or large fires.
- **Helicopter** – Entered for HELI (helitack) only. Provides the name of the helicopter that the helitack crew primarily uses. In WFIPS it is used to move helicopters and helitack crews to different dispatch locations as one unit.

The “Edit” and “Copy” buttons for single resource selections bring up the same dialog as above with the values filled with the current values that can be edited. The name for the copied resources have been changed to ensure uniqueness. As before messages will indicate if there are any errors in the entered information when OK is clicked.
When multiple resources are selected the dialog is modified to accommodate the selected items having different values.

The numerical values in this dialog are initially just place holders and are not related to the selected resource’s true values. When the “Apply To All” box is checked for any data values the data value can be changed and the change will be applied to all the selected items. Unchecking “Apply To All” returns to values to their original state.
When you have finished making changes to the resource database save the changes before closing the window. Additional editing of a resource database can be initiated by selecting “Resources” then “Edit” from the menu and selecting the database to edit.

Using an Alternate Resource Database:

In order to use an alternate resource database in a WFIPS run it must be selected in the “Run” dialog. This is accomplished by selecting “Alternative Resources” on the “Resources” tab and choosing the desired file name.

The name of the selected resource database will be saved with the WFIPS results and displayed in the Results Summary.
Run: Run 1

Analysis Area Entities (State):

Montana


Season Start: 1/1

Season End: 12/31

Ownership: All

Percent Modified Response: 0.00

Prepositioning:

- Air Tankers: 0.00
- Regional Crews: 0.00
- Regional Helicopters: 0.00
- USFS Engines: 0.00
- USFS Crews: 0.00
- USFS Helitack: 0.00
- DOI Engines: 0.00
- DOI Crews: 0.00
- DOI Helitack: 0.00

Fuel Treatments:

- None

Fire Ignition Generator File: C:\WAND\data\history\figs.db

Resources File: D:\WAND\Res\Doc\Data\Copy1.db

Excluded Dispatch Locations:

- None

Excluded Resources:

- None

Summaries
Rules for Resource Database

The resource database contains resources that are used for the initial attack of fires. Resources that are never used for initial attack should not be entered in the resource database. Resources that work at different dispatch locations based on the time of year should be considered to be separate resources with their start_season and end_season date reflecting their time at each dispatch location. Thru Prepositioning in the Resource tab, WFIPS can be set to automatically move resources to new dispatch locations based on fire activity.

Name: Each resource must have a unique name

Type: There are 23 resource types

- ATT: Large airtanker. National airtankers not entered into database because they move around the country
- SEAT: Single engine airtanker. If there is a large airtanker that works only out of one base it should be entered as a SEAT. Needs volume entry
- SCP: Water Scooper. Needs volume entry
- FBDZ: Air Boat.
- CRW: Handcrew. Be sure to enter crews with the number of people (staffing) that will be dispatched for initial attack. For higher intensity fires multiple handcrews may be dispatched to the same fire. National 20 person crews should be entered as CRW20 as a single crew.
- HEL1: Helitack crew. Be sure to enter crews with the number of people (staffing) that will be dispatched for initial attack. For higher intensity fires multiple helitack crews may be dispatched to the same fire. Each Helitack crew will need to be paired up with its primary helicopter so that helitack crews and their helicopter can be moved as one unit. This helicopter may be located at a different dispatch location.
- HEL1: Type 1 Helicopter. The volume carried by a helicopter is calculated based on the elevation of the fire.
- HEL2: Type 2 Helicopter. The volume carried by a helicopter is calculated based on the elevation of the fire.
- HEL3: Type 3 Helicopter. The volume carried by a helicopter is calculated based on the elevation of the fire.
- SMJR: Smoke Jumper. Enter multiple smoke jumper crews with staffing of 2. Multiple Smoke Jumper crews will be deployed for higher intensity fires.
- DZR1: Type I Dozer.
- DZR2: Type II Dozer.
- DZR3: Type III Dozer.
- EN12: Engine Type 1 or 2. Enter staffing < 6 and volume.
- EN34: Engine Type 3 or 4. Enter staffing < 6 and volume.
- EN56: Engine Type 5 or 6. Enter staffing < 6 and volume.
- EN70: Engine Type 7. Enter staffing < 6 and volume.
- TP12: Tractor Plow 1 or 2:
- TP34: Tractor Plow 3 or 4:
- TP56: Tractor Plow 5 or 6:
- WT: Water Tender.
- CRW20: National 20 person crew. Enter as 20 person (staffing). Since these crews are mobile they are automatically broken into 4 crews with staffing of 5 for initial attack dispatch, but moved to new dispatch locations as a single crew.

**Staffing:** The number of people actively participating in fireline construction. Required for resource types: FBRT, EN12, EN34, EN56, EN70 values 1-5, resource types: HELI, CRW break crew down into the size to be deployed for initial attack (multiple crews may be deployed to a fire if the intensity is large enough), and for resource type SMJR staffing equals 2.

**Start Time:** (hhmm) Time of day when the workshift starts. Resources can be used outside their normal workshifts but a delay is applied.

**End Time:** (hhmm) Time of day when the workshift ends.

**Start Day of Week:** (1-7 where 1 = Sunday) Day of week for beginning of normal workshift.

**End Day of Week:** (1-7 where 1 = Sunday) Day of week for end of normal workshift.

**Season Start:** (1-365) Julian day for beginning of work season. Resources are not used outside their work season. If resources work a split non-overlapping season enter as separate resources.

**Season End:** (1-365, end season may be smaller than start season) Julian day for end of work season.

**Dispatch Location:** Unique name of the dispatch location where the resource is normally deployed from. Must be in the dispatch location database.

**Volume:** Volume of water, foam, or retardant that the resource carries. Required for EN12, EN34, EN56, EN70, SEAT, SCP, and ATT. Helicopters do not require a volume entry because their volumes are calculated in WFIPS using the elevation of the fire.

**FPU:** (example - CA_CA_001) the Fire Planning Unit where the resource is located. Use “NA_US” if the resource is a national resource.

**Borrowable:** Equals 1 if the resource can be relocated based on fire severity (prepositioned) or used on large fires outside its normal dispatch area. Else equals 0.

**Agency:** The agency funding the resource. Must be STATE/LOCAL, FS, BIA, BLM, FWS, or NPS.

**Helicopter:** For helitack we also need the name of the helicopter that helicopter normally uses so we can move helicopter and helitack crews as a single unit.