The following White Papers and Technical Papers provide additional detail about defining resources for an owning team.

- <u>Understanding Dozers, Tractor Plows, and Airboats in Fire Program Analysis Initial</u> <u>Response Simulation Module</u>
- <u>Understanding Engine Use in Fire Program Analysis (FPA) Initial Response Simulation</u> (IRS) Module
- <u>Understanding Fixed-Wing Aircraft Delivery of Water and/or Fire Retardant in the Initial</u> Response Simulation (IRS) Module
- <u>Understanding Helicopter Use in Fire Program Analysis (FPA) Initial Response Simulation</u> (IRS) Module
- <u>Understanding Smokejumper Deployment in Fire Program Analysis (FPA) Initial Response Simulation (IRS) Module</u>

Data Requirements for Defining Resources

Enter the following information into FPA before managing resources:

- FPU/FMG/FWAs as entered in Set Up FPU > FPU Attributes, Set Up FPU > FPU Agencies, Set Up FPU > Define Team screens.
- Team IDs, Names, Planning Year, and Owner as entered in the **Set Up FPU > Define Team**.

In This Chapter

This chapter discusses:

- Defining Resources
- Managing Resources
 - Editing a Resource for the Owning Team
 - Adding a Resource to the Owning Team
 - Copying a Resource from an Owning Team
 - Creating a New Resource Version for an Owning Team
 - Deleting Selected Resources from an Owning Team
 - Deleting Shoulder Season Resources
 - Adding Another Team's Resources to the Owning Team
 - Editing Available Resources Owned by Other Teams
 - Removing Available Resources Owned by Other Teams

Defining Resources

Defining Resources

The FPA system uses the concept of "libraries" for resources. One library is nationwide in scope and contains all the resources entered by the FPUs in the previous version of FPA. The nationwide library also contains national resources (airtankers, Type 1 and 2 helicopters, smokejumper aircraft and hotshot crews). FPA identifies all national resources with a unit identifier (Unit-ID) that begins with "DC_" and international resources with a Unit-ID that begins with "IN_." The nationwide library is available to all FPUs, allowing an FPU to borrow a resource from another FPU.

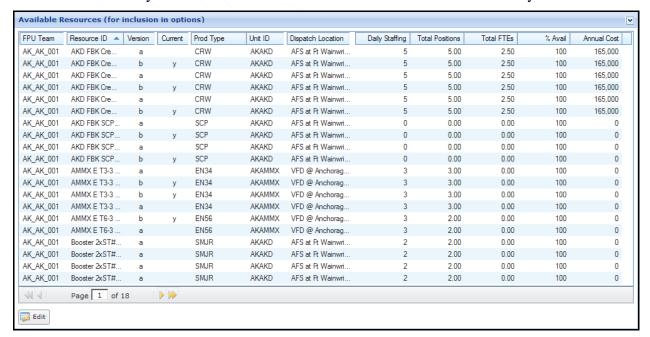
The second type of resource library is specific to the FPU's analyses. It will automatically be populated with the FPU's resources imported from the previous FPA system, and contain all revisions and additions the FPU team makes to each analysis. Resources owned by the FPU, defined by the Unit-ID being included as a member of the FPU, may be edited, copied, added, deleted, and individually defined as multiple versions. The **Current** designation on a resource version indicates to the system that it is the resource to be included in the nationwide library. Another FPU can only borrow the **Current** version of a resource.

Beginning with budget planning year 2012, FPA no longer models the use of Shoulder Season fire resources. If you have resources that respond only to fires before or after the preparedness staffing season, you should delete them. See <u>Deleting Shoulder Season Resources</u> for more information.

Required fields have an asterisk (*) before the field name.

Select **Input Data > Define Resources**. This action displays the default view of the Available Resources, Resource Producer Type, and Available Resources Owned by Other Teams tables. It takes the system server time to retrieve and display the set of resources defined by the FPU for the selected analysis.

Displays the Available Resources table. This table contains the FPU-owned resources defined for inclusion in this analysis. The default view enables the Add Resource button only.





The bottom of this screen displays the total number of pages that contain available resources and the number of the current page. Use the single arrow to move one page ahead previous. Use the double arrows to move to the end of the pages, or the first page of this list.

Column Title Definitions

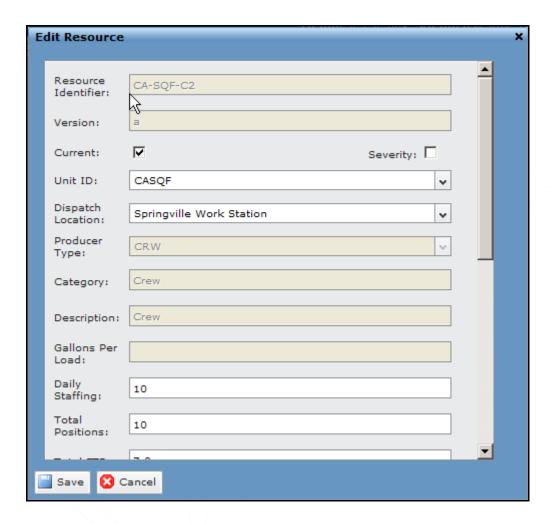
- **FPU Team**: The name of the FPU that owns and/or funds the resource.
- **Resource Identifier**: The unique name supplied by the FPU (or from the nationwide library) for that resource.
- **Version**: The version for that resource. When only one instance of a resource exists, it will always be version "a." As you create new versions, FPA adds version letters sequentially.
- **Current**: A check box to indicate which version of a resource is in the current organization. We recommend that you mark the version of the resource that was funded in 2007 ("had wheels in the parking lot") as the current version.
- **Producer Type**: A system provided drop-down list of the NWCG type for the resource. You may modify the producer type field only when using the Add Resource button.
- Unit ID: The unique identifier for the agency unit that owns the resource.
- **Dispatch Location**: The dispatch location where this version of the resource is assigned. FPUs can edit the dispatch location by selecting the resource and clicking the Edit Resource button.
- **Daily Staffing**: User entered number of people who staff the resource each day; this value is used for fireline production rate determination.
- **Total Positions**: User entered total number of permanent, WAE and temporary positions required to staff the resource. For instance, an engine may have two WAEs and five temporary employees assigned to ensure seven-day availability; a handcrew may have one permanent, four WAEs, and fifteen seasonal employees for five-day availability.
- **Total FTEs**: User entered total Full Time Equivalents (FTEs) positions needed to staff the resource. To calculate FTEs determine the total number of funded position/crew days for each resource. Example: (one fully funded crew supervisor = 260 days) + (one WAE 13/13 = 130 days) + (eight seasonal firefighters for 86 days = 688 days.) Next, divide the total number of funded position days for the resource by 260. Example continued: 1078 / 260 = 4.15 FTEs.
- **% Available**: The percentage of time the resource is available to the FPU. The system default for all the FPU team resources is 100%. Federal partner agency, participant resources (such as those from state agencies), or Cooperator resources (such as those from fire protection districts) may not be available to respond to wildland ignitions 100% of the time. Consider the typical response to the ignition workload from participant and cooperator agency resources from particular dispatch locations and set the percent availability

Defining Resources

accordingly. This setting may have an effect on the initial response-success performance measure.

• Annual Cost: The annual cost for the resource, including preparedness funded staffing.

The boxes for editing, adding, copying, creating a new version, and deleting selected resources contain these fields.



Field Definitions

- *Resource Identifier: The unique name supplied by the FPU (or from the nationwide library) for that resource.
- **Version**: The version for that resource. When only one instance of a resource exists, it will always be version "a." FPA sequentially letters additional versions as they are created.
- *Current: A marked check box indicates the version of this resource is in the current organization. We recommend that you mark the version of the resource that was funded in the last analysis year ("had wheels in the parking lot") as the current version. Checking the Current box also includes the resource in the Nationwide Library of resources and allows other FPU Teams to borrow the resource.



• *Severity: A marked check box indicates the version of this resource is part of the organization's severity resources. When you complete information in the Run All Models page, you must also specify whether or not you want to include severity resources in the model run.

You may not check both the Current and Severity checkboxes.

- *Unit ID: The unique identifier for the agency unit that owns the resource. Checking the Current box also includes the resource in the nationwide library of resources and allows other FPU teams to borrow the resource.
- *Dispatch Location: A drop down-list populated from entries in the Input Data > Define Dispatch Locations screen. A dispatch location is the location where the resource typically resides. When the required Dispatch Location does not display, users must add the Dispatch Location on the Input Data > Define Dispatch Locations screen.
- *Producer Type: A system provided drop-down list of the NWCG type for the resource. FPA enables the Producer Type textbox only when using the Add Resource button.
- Category: A system provided drop-down list of the NWCG category for the producer type. FPA automatically populates this field when the Producer Type is set.
- **Description:** A system provided definition for the resource based on either the NWCG classification, or the combining of NWCG types specific to FPA. FPA automatically populates this field when the Producer Type is set.
- Gallons Per Load: User entered gallon capacity of this engine. This field is for engines only. Gallons for aircraft are system provided. Water tenders are assumed to have unlimited capacity. When there is no value in this field, the engine uses only a dry production rate.
- **Daily Staffing:** User-entered number of people who staff the resource each day. This value is used to determine the fireline production rate. With the exception of dozers, tractor plows, helicopters, and water tenders, enter a minimum of two resources.
- **Total Positions:** User entered total number of permanent, WAE and temporary positions required to staff the resource. For instance, an engine may have two WAEs and five temporary employees assigned to ensure seven-day availability; a handcrew may have one permanent, four WAEs, and fifteen seasonal employees for five-day availability.
- **Total FTEs:** User entered total Full Time Equivalents (FTEs) positions needed to staff the resource. To calculate FTEs, determine the total number of funded position/crew days for each resource. Example: (one fully funded crew supervisor = 260 days) + (one WAE 13/13 = 130 days) + (eight seasonal firefighters for 86 days = 688 days). Next, divide the total number of funded position days for the resource by 260. For example, 1078 / 260 = 4.15 FTEs.
- **% Available**: The percentage of time the resource is available to the FPU. Percent (%) Availability is applied to the time period identified by Season, Days of Week, and Hours Begin and End. The system default for all FPU team resources is 100%. Federal partner agency, participant resources, (such as those from state agencies), or Cooperator resources, (such as those from fire protection districts), may not be available to respond to wildland ignitions 100% of the time. Consider the typical response to the ignition workload from

Defining Resources

participant and cooperator agency resources from particular dispatch locations and set the percent availability accordingly. This setting may affect the initial response success performance measure.

- **Hours Begin:** Use the drop-down list to set the hour of day the resource staffing begins each day.
- **Hours End:** Use the drop-down list to set the hour of day the resource staffing ends each day.

Do not set the helicopter duty-day above 14 hours

- **Day of Week Start:** Use the drop-down list to set the first day of the week the resource is staffed.
- **Day of Week End:** Use the drop-down list to set the last day of the week the resource is staffed.
- **Season Begin:** Enter the typical season start month and day the resource-staffing season begins.
- **Season End:** Enter the typical season end month and day the resource-staffing season ends.
- **Annual Cost:** Enter the annual cost for the resource for staffing and vehicle(s).
- **Vehicle Capital Cost:** Only complete this field when the vehicle resource is a new purchase. This cost tracks with an option, but is not included in the option cost and does not count against the preparedness budget.
- **Comments:** Use this optional field to enter comments about the settings applied to this resource for this analysis (250 characters maximum).

Displays the Resource Producer Type table. The Resource Producer Type Table displays the system look-up data for each producer type. Edits are not allowed.



Column Title Definitions

- **Prod Type**: A system provided list of the NWCG producer types.
- Category: A system provided NWCG category for the producer type.
- **Description**: A system provided definition for the producer type based on either the NWCG classification, or the combining of NWCG types specific to FPA.
- **Avg. Speed**: A system provided average speed for the producer type based on NWCG producer types.

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- Travel Mode: Defines a resource as ground or air.
- Unit Type: Describes whether the unit flies or works on the ground.
- Gal/Load: The gallon or load capacity of this resource. Gallons for aircraft are system provided and cannot be user-edited. Water tenders are assumed to have unlimited capacity.
- Workshift Length: The hours a resource is available to work, beginning at the time
 of first deployment on the day. Daylight means the resource is available from Civil
 Daylight to Civil Twilight.

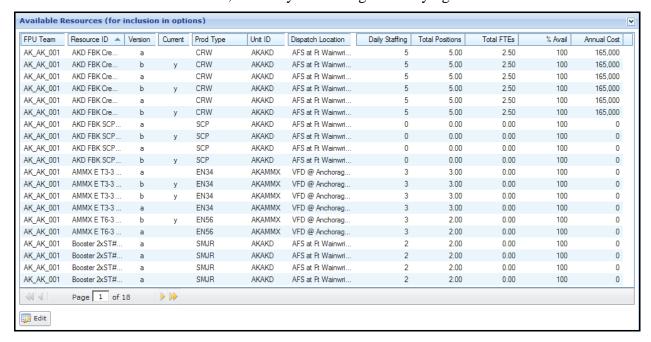
A field bordered by a red line or a red exclamation mark (!) next to a field means it is a required data entry field.

Tips

- Single Engine Airtankers (SEATS), Scoopers (SCPs) and Large Airtankers (ATTs), when a fire event occurs outside the Hours, Days, and Months defined here, these fire resources will not be available for dispatch even with a Callback Delay.
- When setting the availability time on resources in the FPA model, consider aircraft availability. Set the End of day for agency tactical aircraft based on maximum duty day (14 hrs) rather than the normal office work shift (8 hr day). This avoids a callback delay on the aircraft itself. It also better models fire situations where tactical aircraft extend through civil twilight whenever there is reasonable risk of fire response need. This avoids the legal issue of "callback" on a pilot once they are released.

Managing Resources

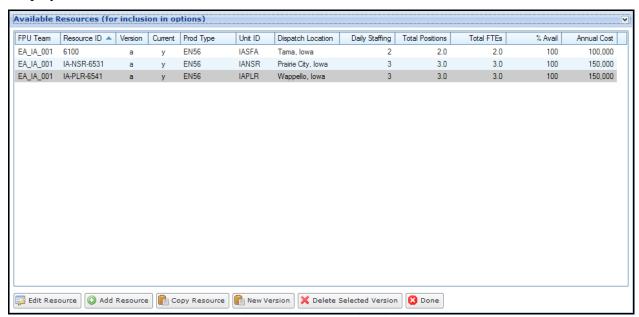
1. On the Available Resources table, click any row to begin modifying the resource.



Defining Resources

2. Click Fedit

Displays the Available Resource table edit box.



3. Select the appropriate button to complete the intended modification. Each button prompts a specific system action accomplished within a dialog box:

opens a dialog box containing information about the resource selected. The user may make edits to any field that is not grayed out.

opens a dialog box allowing the user to add a new resource to the FPU or nationwide resource libraries. The system will indicate all required field entries.

allows you to copy any resource (including versions) owned by the FPU team, and edit available fields and uniquely name the copied resource before you save it.

allows the user to make another instance of an existing resource. This can be used to populate options at budget ranges above or below the current funding level by adjusting:

- The cost and/or the staffing count,
- Days of the week staffed, and/or
- Length of staffing season.

Then edit the cost to account for these changes. You can use versions to evaluate how changes to staffing and period of staffing affect performance measure outputs. You may only create versions of resources owned by your team.

Only one version of a resource can be included in each Preparedness Option.

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allows you to permanently remove the resource from its library and any analysis it was used in. **Use great care when determining whether to delete a resource**. If a resource is accidently deleted, it must be recreated.



allows you to exit the edit box and return to screen's the pre-edit mode.

Editing a Resource

1. Select **Input Data > Define Resources**.

Displays the Available Resources table.



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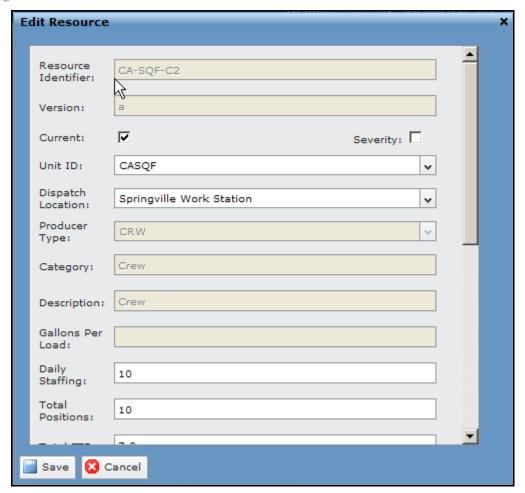
Displays the Available Resource table edit box.

- 3. Click to select the row of the resource you want to edit. The row highlights with a blue background. This click enables all table action buttons.
- 4. Click Edit Resource

FPA grays out all other tables or navigational tools until editing is complete.

Displays the Edit Resource box.

Defining Resources



Scroll to enter values for additional fields in the dialog box using the scroll bar at the right side of the box, or resize the box.

5. Accept the displayed values, or enter a modified value as required into fields that are not grayed out.

For FPU Partner-owned resources:

- Disassociate or delete "Shoulder Season" resources.
- Update the resource's Annual Cost field. Annual Costs include any associated personnel costs, and vehicle fixes operating rates (FOR). Use the .current baseline budget figures that your agency provides.
- Reflect adjustments to resource configurations in Daily Staffing, Total Positions, and Total FTEs.
- 6. Click save the modified resource information and update the database.

Users return to the Available Resources table.

Click Click to return to the Available Resources table. No database updates occur.

Adding a Resource to an Owning Team

1. Select **Input Data > Define Resources**.

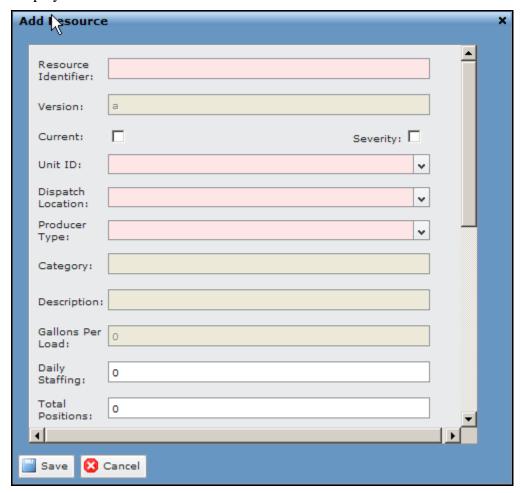
Displays the Available Resources table.

2. Click Fedit.

Displays the Available Resource table edit box.

3. Click Add Resource

Displays the Add Resource box.



Boxes shaded pink are mandatory fields and must have entries.

4. Change existing value, or selecting a value from a drop-down list into fields that are not grayed out.

The Resource Identifier may not exceed 15 characters. FPA recommends using the alphanumeric numbering painted on the vehicle, or the resources' common name as the Resource Identifier. This helps find particular resources when searching, and when sorting tables.

Defining Resources

5. Click save the modified resource information and update the database.

Users return to the Available Resources table.

Click Click to return to the Available Resources table. No database updates occur.

Copying a Resource

1. Select **Input Data > Define Resources**.

Displays the Available Resources table.

2. Click Fedit

Displays the Available Resource table edit box.

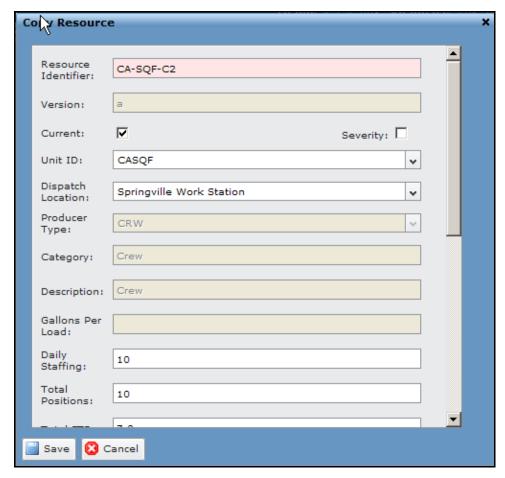
- 3. Click to highlight the row displaying the appropriate Owning Team.
- 4. Click copy Resource to copy information for the selected resource. The user must enter a unique name within the Owning Team in the **Resource ID** field.

Displays the Copy Resources dialog box.

Scroll to enter values for additional fields using the scroll bar at the right side of the dialog box.

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Any field bordered in red requires user input.

5. For fields that are not grayed out, review the values and add or modify as required following the explanations provided in Edit Resource above.

The Resource Identifier may not exceed 15 characters. FPA recommends using the alphanumeric numbering painted on the vehicle, or the resources' common name as the Resource Identifier. This helps find particular resources when searching, and when sorting tables.

6. Click save the new resource and update the database.

Users return to the Available Resources table.

Click Click to return to the Available Resources table. No database updates occur.

Creating a New Resource Version

1. Select **Input Data > Define Resources**.

Displays the Available Resources table.

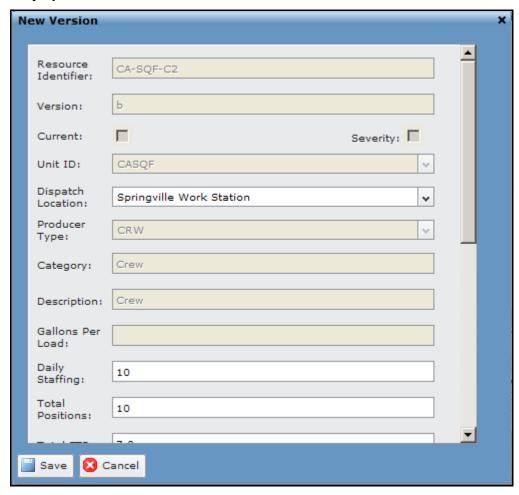
2. Click Fedit

Defining Resources

Displays the Available Resource table edit box

- 3. Click to highlight the row displaying the desired resource.
- 4. Click New Version...

Displays the New Version Resource box for the resource selected.



Scroll to enter values for additional fields using the scroll bar at the right side of the dialog box.

- 5. Review the values and add or modify as required into fields that are not grayed out. The system automatically adds the version letter identifier, which is not user editable. The system will automatically mark the new version as Current. If the resource is not the Current version, remember to uncheck this box before saving.
- 6. Click save the modified resource information and update the database.
 Users return to the Available Resources table.

Click Cancel to return to the Available Resources table. No database updates occur.

The system automatically checks the Current box for the new version. This deselects the Current box on the original version when you press save. Only one version of a resource can be Current.

Deleting Selected Resources from an Owning Team

FPA recommends that FPUs do not delete current resources; other FPUs may be borrowing from this resource as part of their analysis. Set the **% Availability** field to 0% when not using this resource.

1. Select **Input Data > Define Resources**.

Displays the Available Resources table.

2. Click Fedit

Displays the Available Resource table edit box.

3. Click to highlight the row displaying the appropriate Owning Team.



Displays the Delete Selected Version box warning. Deleting a resource permanently removes it from the nationwide and/or FPU resource library. You cannot undo the deletion.



4. Click to complete the deletion and return to the Available Resources table.

Click Cancel and return to the Available Resources table.

Deleting Shoulder Season Resources

Beginning with budget planning year 2012, FPA no longer models the use of Shoulder Season fire resources. If you have resources that respond only to fires before or after the preparedness staffing season, you should delete them. You can delete resources using the steps in <u>Deleting Selected Resources from an Owning Team</u>, or use this more conservative approach which allows the resource to remain in the system if you want to use it in a future analysis.

- 1. Select Alternatives > Preparedness > Preparedness Options.
- 2. From the Resource Assignment per Preparedness Option, click
- 3. Highlight the resource you want to delete.

Defining Resources

- 4. Change the fire resource status from a (for available) to "-" (for unavailable.)
- 5. Click to complete the deletion and return to the Available Resources table.

See Managing Preparedness Options in the FPA User Guide for further information.

Adding Available Resources Owned by Other Teams

This feature allows an FPU to borrow the Current version of a resource a nationwide resource library. This resource can be available from another team or from the system provided national resource set. When you borrow one of these resources, you may only edit the percent availability.

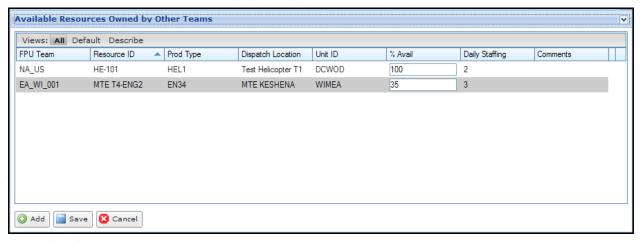
After FPUs borrow and save another team's resources, the FPU must navigate to the **Input Data > FWAs > Dispatch Associations** screen and associate the borrowed resource's dispatch location with the appropriate FPU/FWAs.

1. Select **Input Data > Define Resources**.

Displays the Available Resources Owned by Other Teams table.

2. Click From the selected view.

Displays the Available Resources Owned by Other Teams edit table. For example:



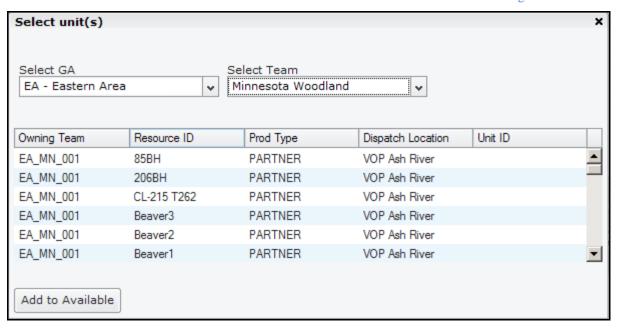
FPA grays out all other tables or navigational tools until editing is complete.

3. Click Add

Displays the Select Unit(s) box.

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2. Highlight one or more rows containing the appropriate resource(s) owned by another team. The row highlights with a blue background.

Highlight more than one resource by pressing the CTRL key.

3. Click to close out of this box and return to the Available Resources Owned by Other Teams table.

Users return to the Available Resources Owned by Other Teams table.



4. Click to save the modified resource information and update the database.

Click Cancel to return to the Available Resources Owned by other Teams table. No database updates occur.

Column Title Definitions

- Select GA: Click the drop-down list and select a geographic area. NA denotes national resources and IN denotes international resources (Canada and Mexico).
- **Select Team**: Click the drop-down list and select the desired FPU team.

Editing Available Resources Owned by Other Teams

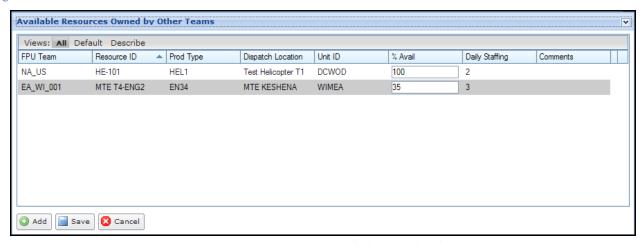
1. Select **Input Data > Define Resources.**

Displays the Available Resources Owned by Other Teams table.

2. Click Edit

Displays the Available Resources Owned by Other Teams edit dialog box.

Defining Resources



The % Avail field is the only editable field on this table.

- 3. Accept the displayed value or enter modified values.
- 4. Click save the modified resource information and update the database.

Users return to the Available Resources Owned by Other Teams table.

Click Cancel to return to the Available Resources by Owned by Other Teams table. No database updates occur.

Removing Available Resources Owned by Other Teams

Once added, FPUs cannot remove or delete resources owned by other teams from this table. If your FPU no longer wants to use one or more of those "borrowed" resources, then do not include them when building your preparedness options. See <u>Managing Preparedness Options</u> for more information.

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