



**Trimble  
Connected Farm™  
Irrigate website  
User Guide**

**Irrigate-IQ software version 1.0**

**0980288\_0**

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## Overview

The Connected Farm™ Irrigate website allows you to remotely manage pivot irrigation systems that are equipped with Irrigate-IQ communications and hardware components.

Once your pivots are equipped with the Irrigate-IQ solution and a connection is established, the system will receive information from your pivot. The system processes the pivot data via secure databases, and you can access and view the data on demand.

The site can be accessed via the Apple Safari, Mozilla Firefox, or Google Chrome™ web browsers.

*Note - The Microsoft® Internet Explorer web browser is not supported.*

# Using the Website

## Selecting Units of Measure

1. On the Connected Farm website, click the drop-down menu below your user name and then select My Settings: Refer to Figure 4-1.

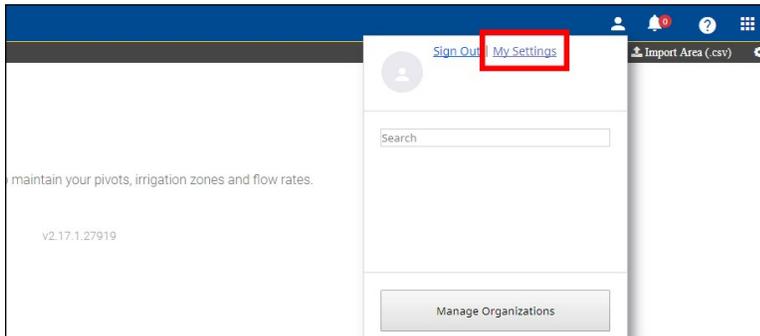


Figure 4-1

2. In the Unit System field, select your unit of choice from the drop-down menu. Refer to Figure 4-2.  
*Note - Irrigate-IQ does not support Customize Unit System, choose either U.S. or Metric.*
3. Click **Save**. All units of measure will now be in your selected unit of choice.

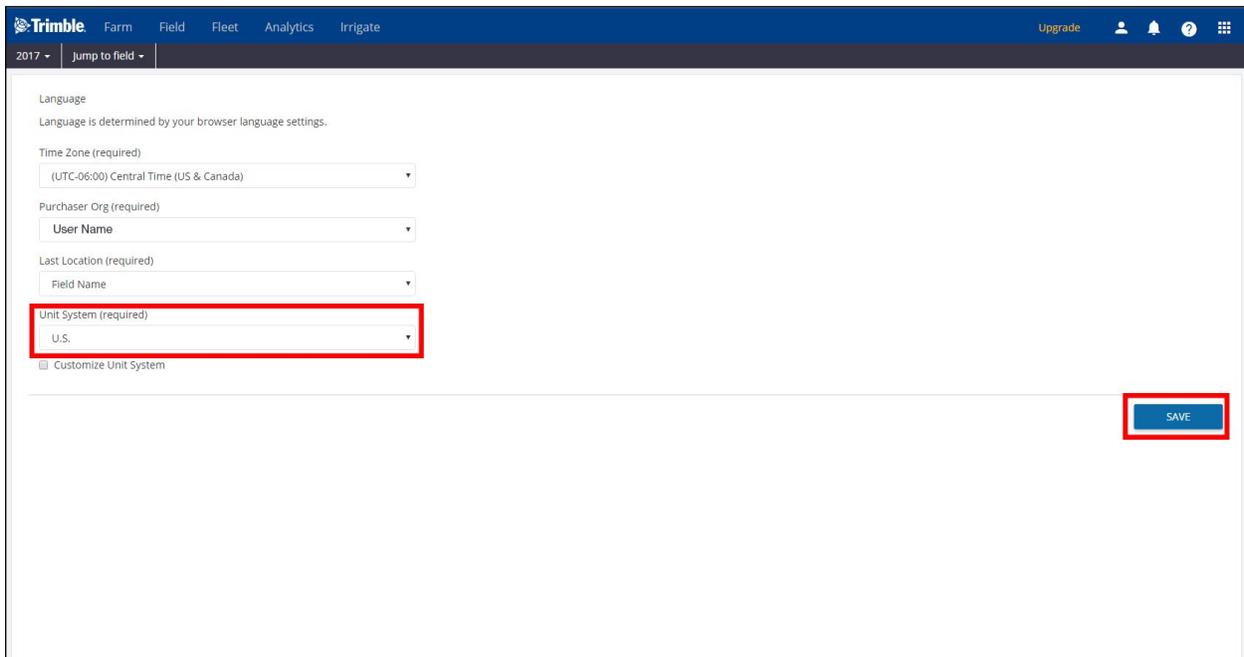


Figure 4-2

# Using the Website

## Clusters View

A cluster is a group of pivots. The Clusters view enables you to view a list of all the clusters for which you have access.

If you have access to more than one cluster of pivots, the Clusters view screen appears when you click Pivot Clusters in the grey header bar. Refer to Figure 5-1.

In this view, you can see a list of all your clusters as well as their locations on a map. Click on a cluster in the list or on the map to open the farm control view.

If you have access to only one cluster, you are taken directly to the farm control view. Refer to Farm Control View on the next page.

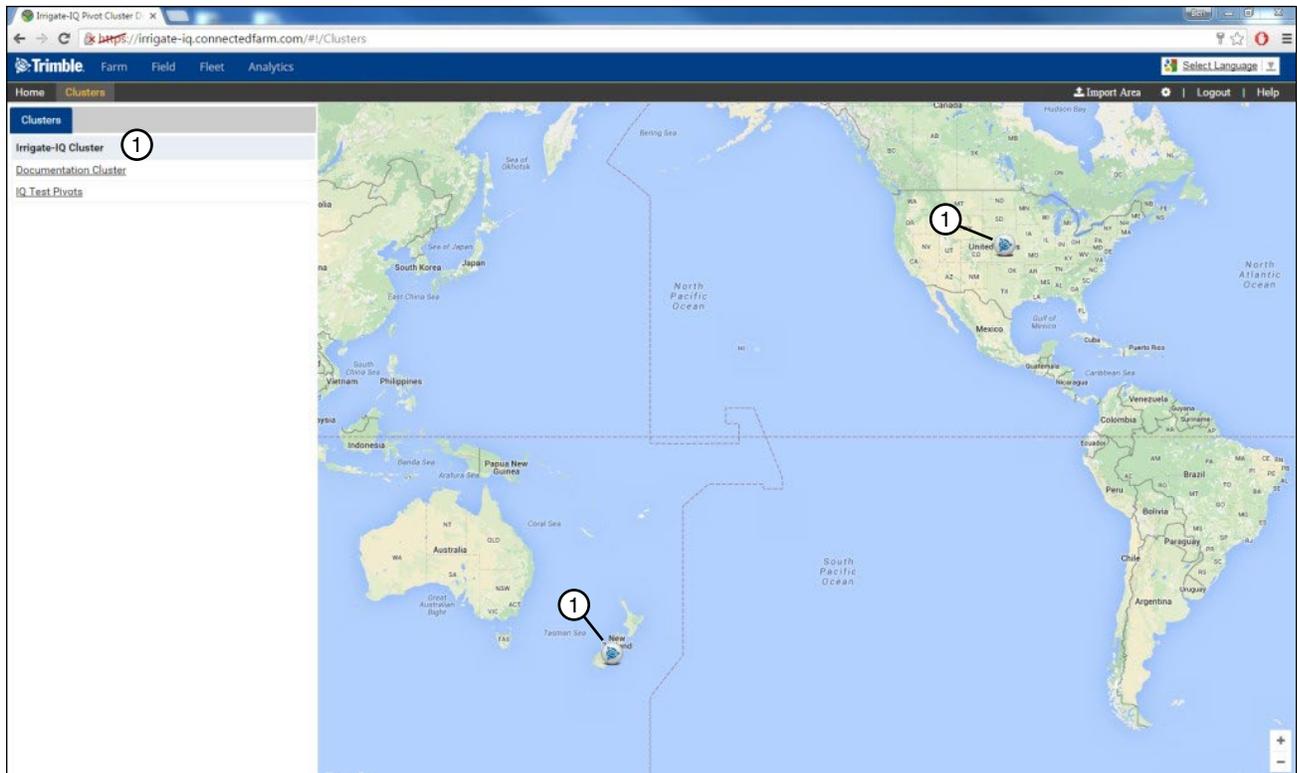


Figure 5-1 1. Cluster

# Using the Website

## Farm Control View

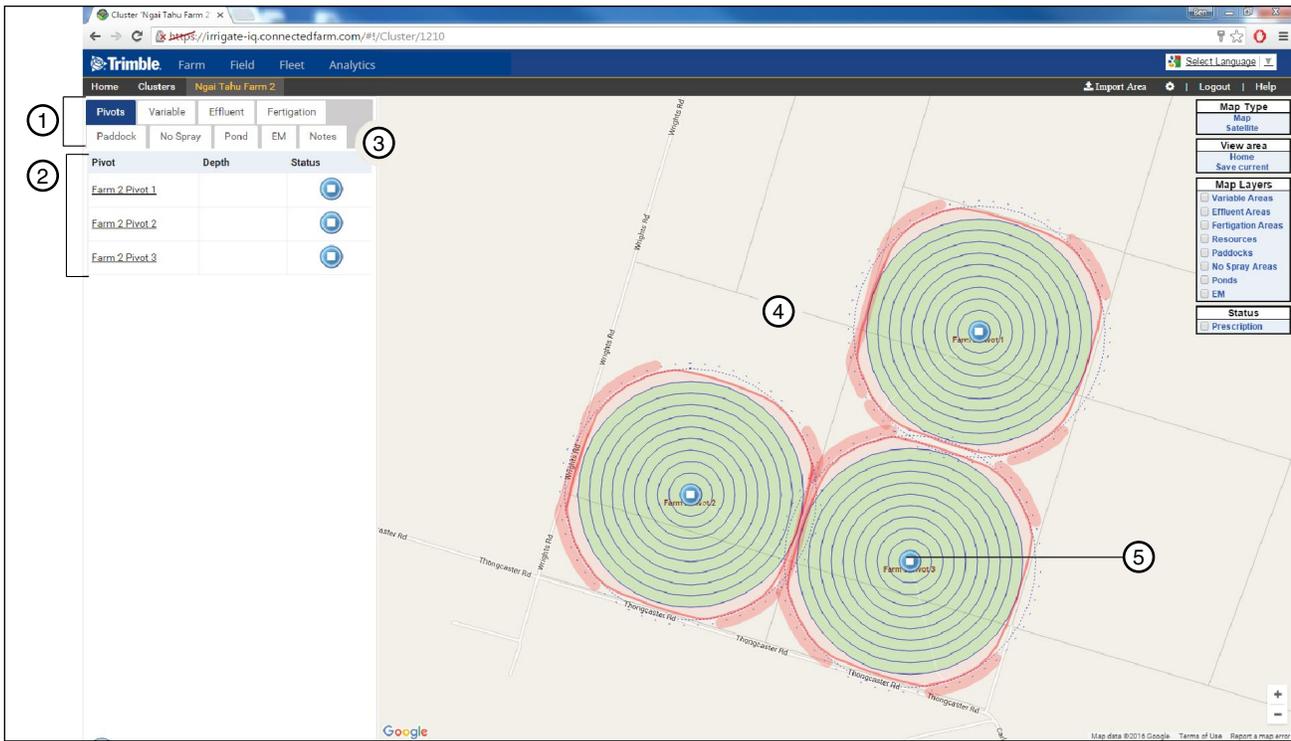


Figure 6-1

The farm control view shown in Figure 6-1, enables you to view or do the following:

Item Number	Description
1	<p>Area tabs (Variable, Effluent, Fertigation, Paddocks, and so on).</p> <p>To create an area, select an area tab and click the <input type="button" value="+"/> Add button.</p> <p>The type of area created depends on the selected tab, for example, if you click the <input type="button" value="+"/> Add button in the Paddock tab, a paddock is created, and if you click the <input type="button" value="+"/> Add button in the No Spray tab, a no spray area is created.</p>
2	A list of the pivots available for the cluster.
3	The Note tab. To enter a note, click <input type="button" value="+"/> .
4	Map view of the pivots available for the cluster.
5	View high-level pivot status by clicking on the center point of the pivot.

*Note - This menu allows you to create areas, not Import them or control them. To import areas, use Import Area. To control areas, use the Pivot Control view.*

## Pivot Control View

### Accessing Pivot Control View

1. In the grey header bar, select Pivot Clusters to access the Cluster view. Refer to Figure 7-1.

*Note - if you have access to more than one cluster of pivots, the Clusters view screen appears. If you have access to only one cluster, you are taken directly to the farm control view.*



Figure 7-1

2. To navigate to the Farm Control view, refer to Figure 7-2 and do one of the following:

- Select the cluster name on the status pane.

- Select the cluster icon  on the map.

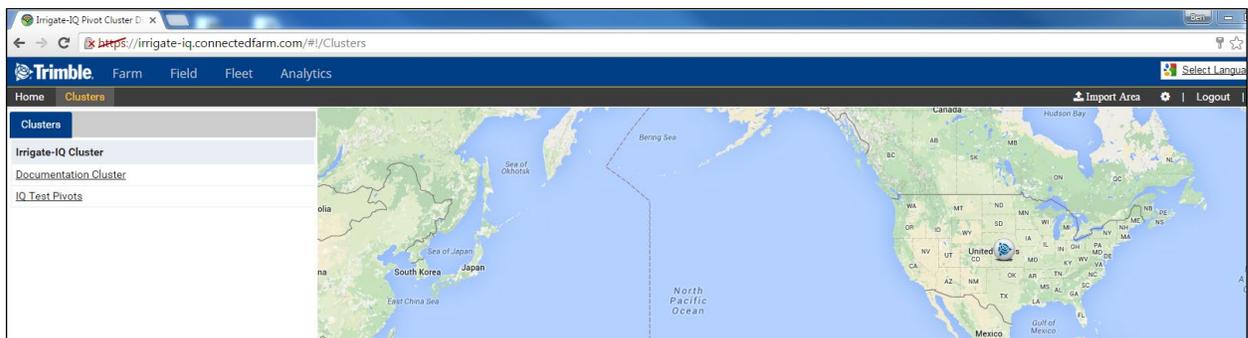


Figure 7-2 Clusters View

3. Select any of your pivots from the farm control view Status pane. Refer to Figure 7-3.

Pivots	Variable	Effluent	Fertigation	
Paddock	No Spray	Pond	EM	Notes
Pivot	Depth	Status		
<a href="#">Farm 2 Pivot 1</a>				
<a href="#">Farm 2 Pivot 2</a>				
<a href="#">Farm 2 Pivot 3</a>				

Figure 7-3 Farm Control View

# Using the Website

## Pivot Control View

### Viewing Status Information

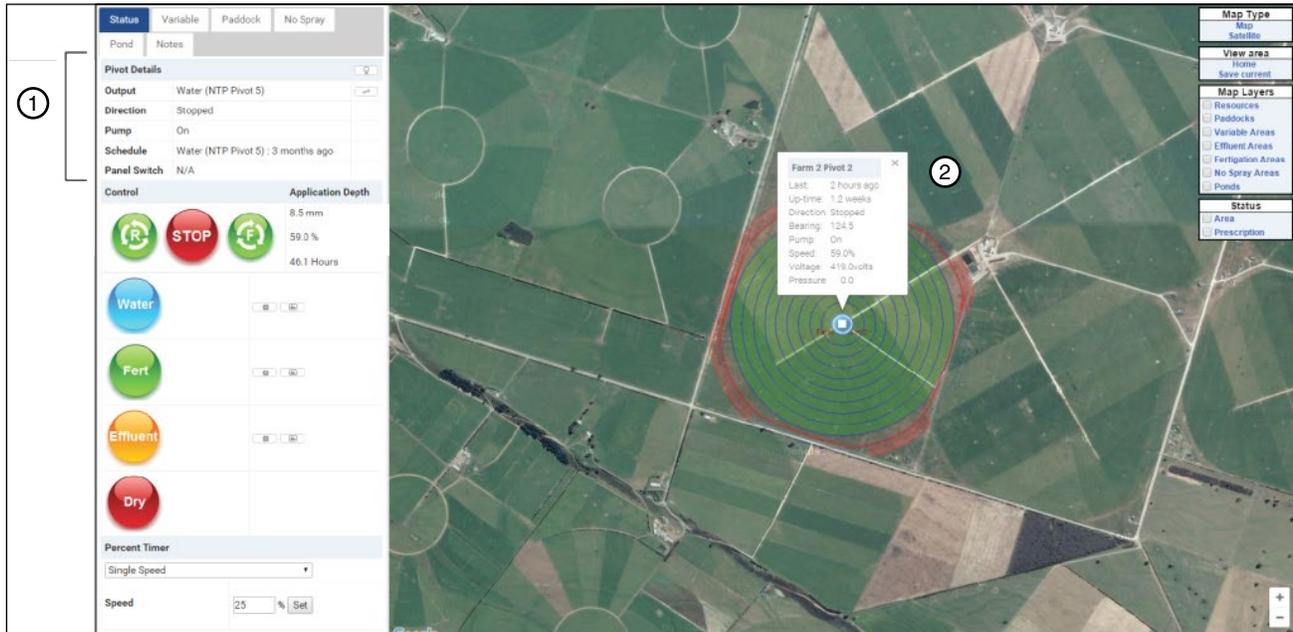


Figure 8-1

On the status pane, you can view the following information:

Item Number	Description
1	Current schedule
2	Click on the center of the pivot to display additional status information, including:
	<ul style="list-style-type: none"><li>• Time of last update</li><li>• Operating uptime</li><li>• Direction</li><li>• Bearing position</li><li>• Pump status</li><li>• Speed percentage</li><li>• Pressure</li></ul>

## Pivot Control View

### Pivot Symbols

Symbol Description

	The pivot has not reported a valid status. Contact your Valley dealer.
	The pivot's last reported status is over 12 hours old.
	The pivot's last reported status is less than 12 hours old, but no information on its motion has been provided. Contact your Valley dealer.
	The pivot is currently moving in a forward (clockwise) direction.
	The pivot is currently moving in a reverse (counter-clockwise) direction.
	The pivot has stopped.
	The pivot has reported an invalid status. Contact your Valley dealer.

### Updating Status

Pivot status will update automatically:

- Every 10 degrees or 3 hours.
- When there is a change in the pivot status.
- When an operation occurs at the pivot panel or via the software.

### Display, Output, and Schedule

- Display: Indicates the scenario you have chosen to edit and applies only to editing areas within that scenario. It will not alter the current scenario running on the pivot.
- Output: Both the substance and chosen scenario of the pivot.
- Schedule: Both the substance and chosen scenario and indicates how long this has been running.

# Using the Website

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## Scenarios

A scenario is a group of settings for the pivot. A scenario consists of:

- Material to be applied
- End gun controls (if applicable)
- Areas to be controlled
- Application depths for each area

## Scenario Symbols

Symbol	Description
	Cancel
	Add
	Delete
	Publish
	Edit the name of the scenario.
	Scenario edit. This enables the user to edit his areas and application depths while running a different scenario.
	Coverage report
	Scenario menu

## Scenarios

### Changing Scenarios

To change scenarios do the following:

1. Navigate to the Scenario menu. Refer to Figure 11-1.
2. To change scenarios, click  Publish next to the desired scenario. In this example we are changing from Winter 2015 (Water) to High Flood 2015.

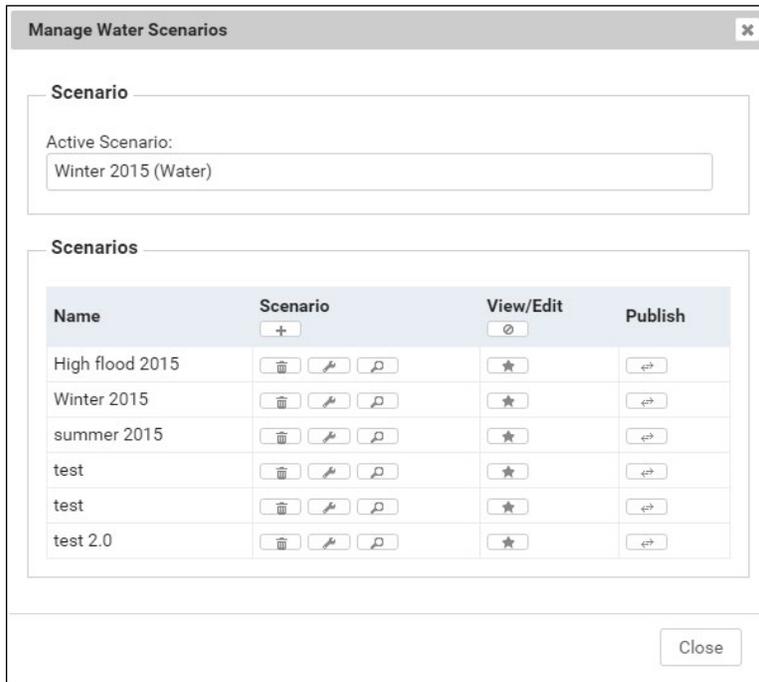


Figure 11-1 1. Publish

3. In the Publish Scenario Schedule screen, click **Calculate a new schedule** and then click **Next**. Refer to Figure 11-2.

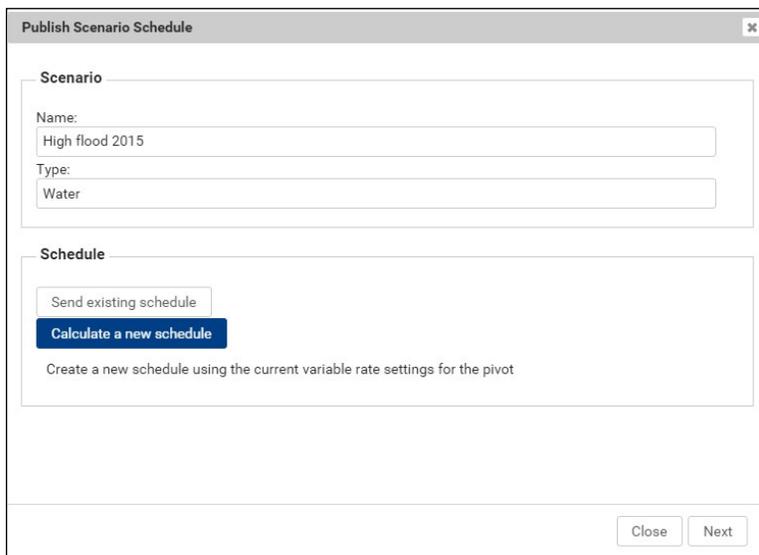


Figure 11-2 1. Calculate a new schedule 2. Next

# Using the Website

## Scenarios

### Changing Scenarios (continued)

4. Check the Pivot pump flow information to verify that the flow rate is within the defined range, and then click **Publish**. Refer to Figure 12-1.

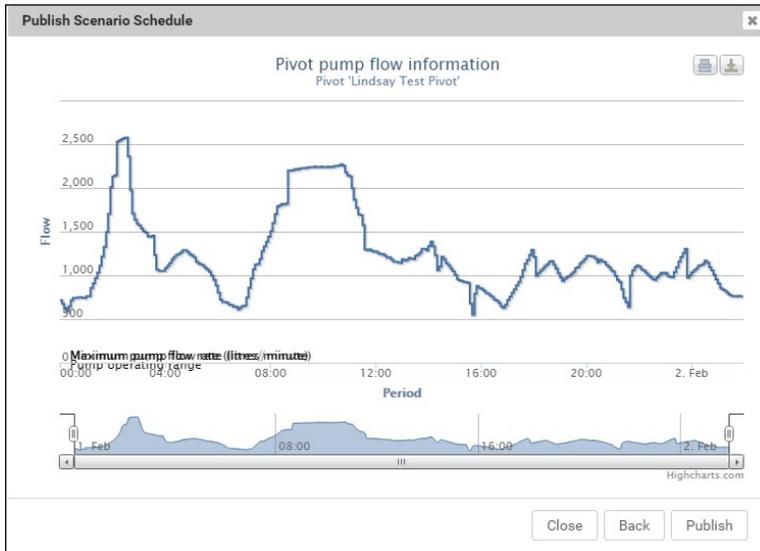


Figure 12-1

## Scenarios

### Adding Scenarios

To create a new scenario, do the following:

1. Select the  Scenario menu next to the desired application material. Refer to Figure 13-1.

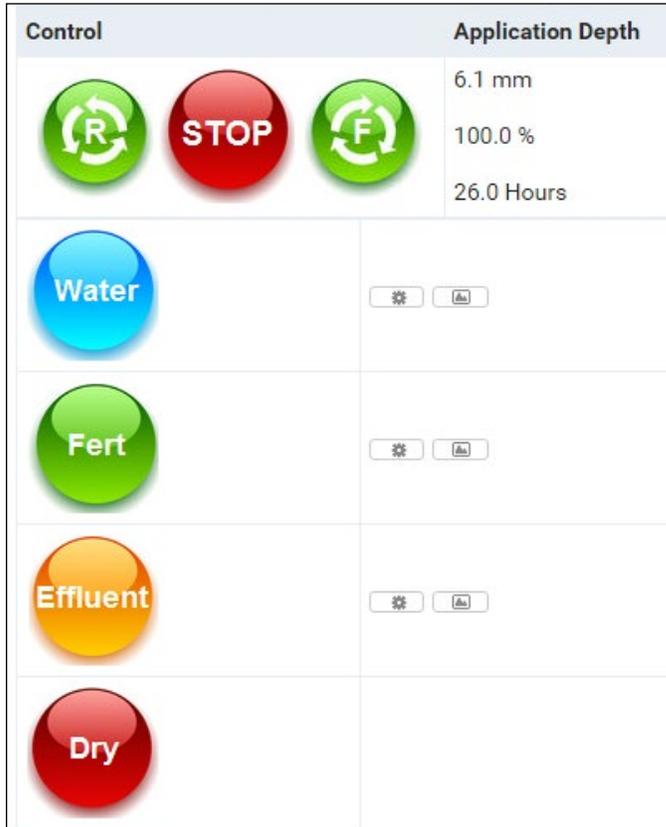


Figure 13-1

A dialog appears showing the scenario menu, this shows a list of all scenarios that you have created:

2. To add a new scenario, click the  Add button. Refer to Figure 13-2.

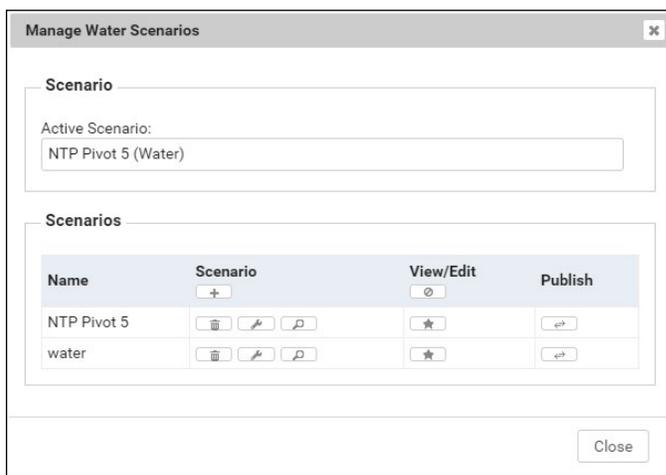


Figure 13-2

# Using the Website

## Scenarios

### Adding Scenarios (continued)

3. Enter a Name, Description and select the desired Options. When finished click **Add**. Refer to Figure 14-1

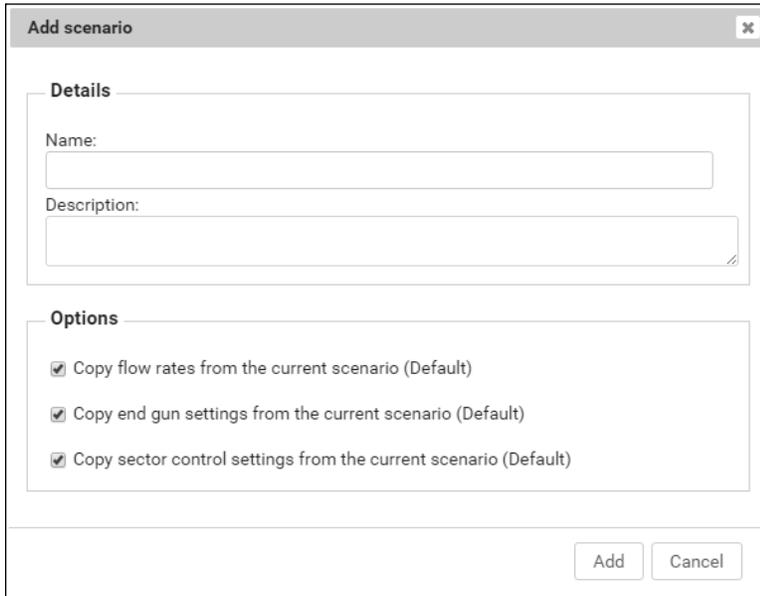


Figure 14-1

4. Once you have added the new scenario, you can define the areas, depths, and end gun settings.

## Cloning Scenarios

To clone the currently running scenario, in the Add Scenario dialog, select the **Copy flow rates from the current scenario** checkbox. This copies all the areas and depths from the currently running scenario. Refer to Figure 14-2.

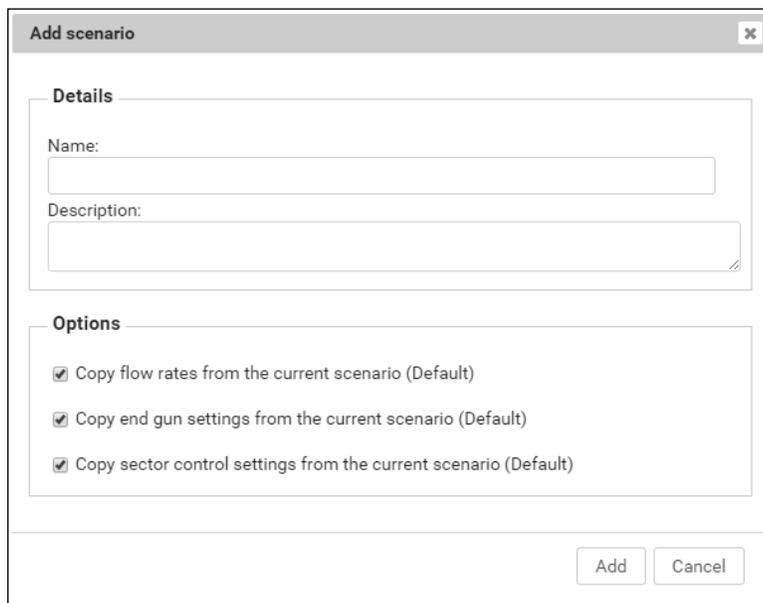


Figure 14-2

## Scenarios

### Editing Scenarios

You can edit a scenario at any time, regardless of the output of the pivot. To edit a scenario do the following:

1. Click the  Scenario menu button that's associated with the desired application material, in this example, water. Refer to Figure 15-1.



Figure 15-1 1. Scenario Menu

2. Click the  Scenario edit button that's aligned with the scenario that you want to edit. Refer to Figure 15-2.

Scenarios			
Name	Scenario	View/Edit	Publish
High flood 2015	  		
Winter 2015	  		
summer 2015	  		

Figure 15-2 1. Scenario Edit

# Using the Website

## Scenarios

### Editing Scenarios (continued)

- The status and map pane change to show the display scenario, which can be edited without affecting the active scenario. Refer to Figure 16-1.
  - To assign depths to areas, navigate to the area types. Refer to “Assigning Depths” on page 25.
  - To edit existing areas, navigate to the clusters tab.

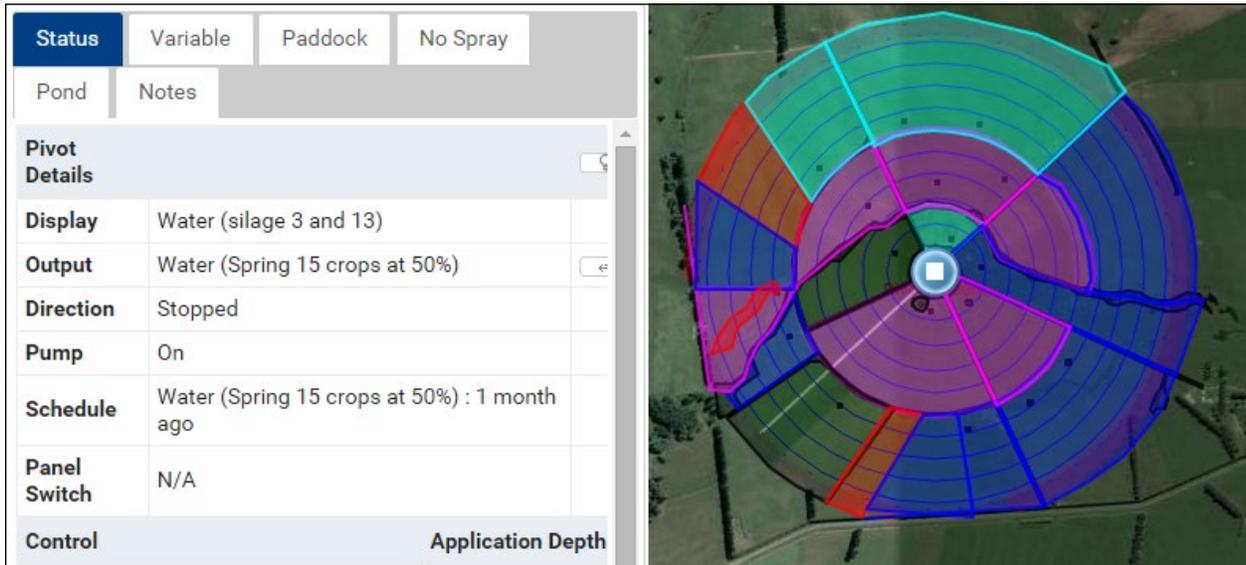


Figure 16-1

## Areas

### Area Types

**No Spray:** Areas in which nozzles are shut off so that no material is applied. No spray areas can be used with any material type.

**Paddock:** Controlled areas in which application can be set as either on or off. The state of each paddock is controlled separately by each material. For example, if your paddocks are turned off for water application, when you switch to effluent the paddocks may need to be switched off, depending on your use.

**Variable:** Areas that control the application rate of water, ranging from zero to the irrigator's maximum application rate.

**Effluent:** During effluent, these areas determine the effluent rate. If the area is designated as a effluent exclusion zone (set application rate of zero), no effluent will be applied by any nozzles which enter the area.

**Fertigation:** During fertigation, these areas determine the fertigation rate. If the area is designated as a fertigation exclusion zone (set application rate of zero), no fertilizer will be applied by any nozzles which enter the area.

**Ponds:** Areas that will not be irrigated when applying effluent or fertigation. For these substances, any nozzle passing through a pond is turned off. Water can be applied on ponds.

### Viewing Areas

The Map Layers feature allows you to view current areas under your pivot. Select the checkboxes in the Map Layers menu to display selected areas. Refer to Figure 17-1.

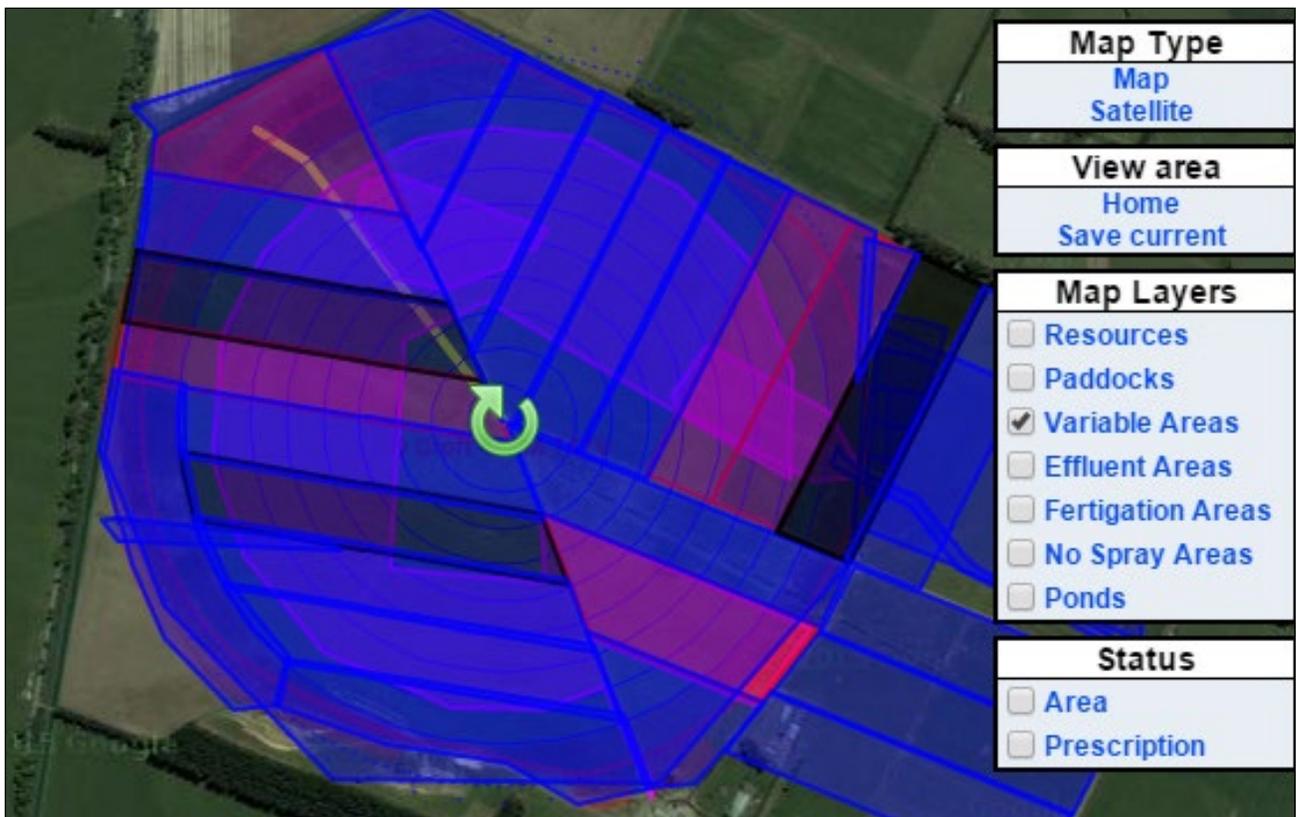


Figure 17-1

# Using the Website

## Areas

### Importing Areas

You can import shapefiles (.shp) or .csv files. When importing .csv files, only one area per file is supported.

1. Click one of the Import Area buttons on the grey navigation bar at the top of the screen. Either Import Area (.shp) or Import Area (.csv). Refer to Figure 18-1.



Figure 18-1

A dialog appears to guide you through the area import process. Refer to Figure 18-2.

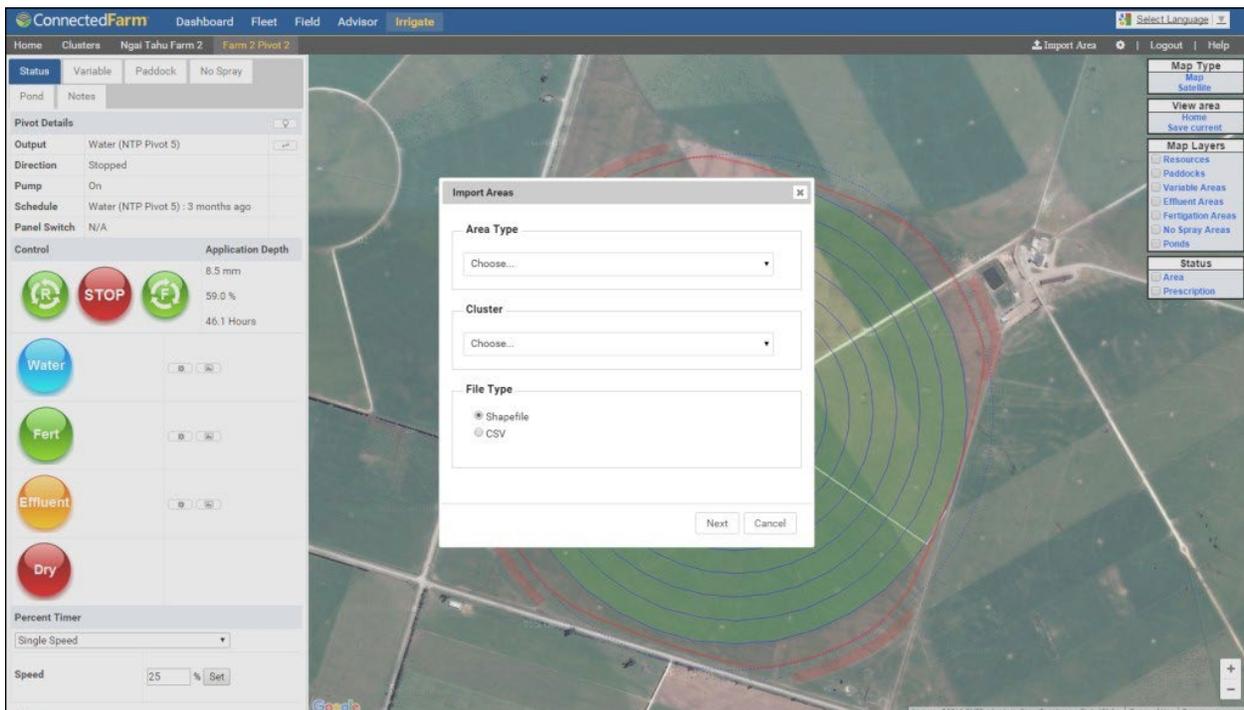


Figure 18-2

## Areas

### Importing Areas (continued)

2. Select the Area Type and Cluster from the drop-down menus. Refer to Figure 19-1.

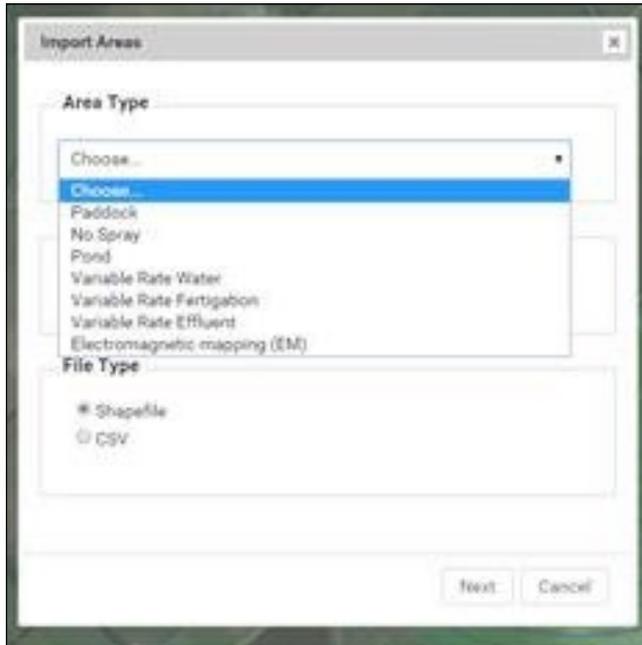


Figure 19-1

3. Select the file type that you want to import (Shapefile or CSV) and then click **Next**. Refer to Figure 19-2.
  - To import Shape files:
    - (a) Click **Choose File** and then select the **.shp** and **.dbf** files from your computer for the defined cluster. Both files are required.
    - (b) Click **Import** to import the areas.

Once you have completed the import, navigate to your defined cluster and area type to see the imported areas.

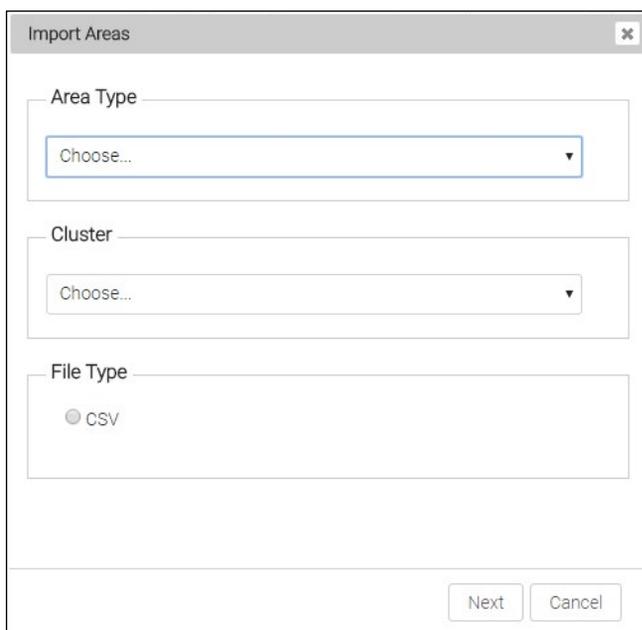


Figure 19-2

# Using the Website

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## Areas

### Importing Areas (continued)

- To import CSV files:
  - (a) Click **Choose File** and then select the .csv file from your computer for the defined cluster. Refer to Figure 20-1.

The .csv file should have the Latitude label in the first row of column A and the Longitude label in the first row of column B. If the labels are not present, the software will assume that the first column (A) is Longitude and the second column (B) is Latitude.

- (b) Click **Import** to import the areas. Refer to Figure 20-1.

Once you have completed the import, navigate to your defined cluster and area type to see the imported areas.

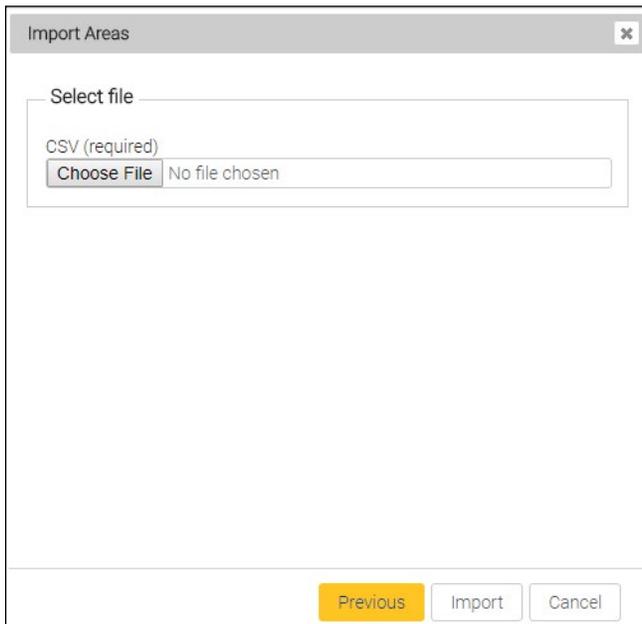


Figure 20-1

## Areas

### Drawing Areas

1. On the Status pane select the tab that corresponds to the area you want to make (variable, effluent, paddock, no spray, or pond) Refer to Figure 21-1.
2. Click the  Add button.

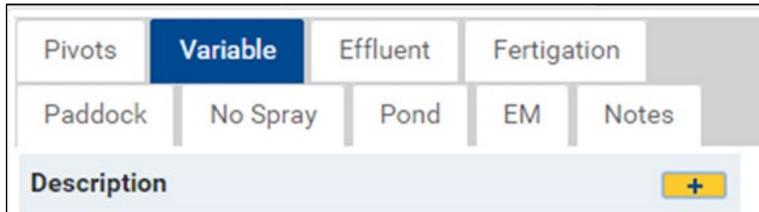


Figure 21-1

A screen showing your pivots appears – this screen is known as the Area Editor. Refer to Figure 21-2.



Figure 21-2

3. You can now do the following:
  - To draw an area, click the mouse on the screen – the area completes itself as it is drawn.
  - To edit an area, click the white dots and then drag them to a new position.
  - To name an area, select Details and edit the description.
  - To complete the area, select Complete Drawing.
4. Click **Save**.

# Using the Website

## Areas

### Configuring Area Groups

Area grouping allows you to add areas with similar properties into a group and define one depth for the entire group, rather than area-by-area.

1. Go to the Pivot Control view and then click on the area tab in which you want to create groups. Refer to Figure 22-1.



Figure 22-1

## Areas

### Configuring Area Groups (continued)

2. To add a new group, click the **+ Group** Add Group button. Refer to Figure 23-1.
3. In the dialog that appears, enter the Group Name, select the areas that you want to include in the group and then click **Save**. Refer to Figure 23-1.

*Note - You must have at least two areas assigned to a group.*

Group Name:  
Group 2

Areas

- mzgroupid: 5, id: 0
- mzgroupid: 2, id: 3
- mzgroupid: 2, id: 5
- mzgroupid: 6, id: 2
- mzgroupid: 5, id: 1
- mzgroupid: 3, id: 4
- mzgroupid: 7, id: 6
- mzgroupid: 1, id: 7
- mzgroupid: 4, id: 8
- mzgroupid: 4, id: 9

Save Cancel

Figure 23-1

A new group now appears in the area tab with the corresponding areas and one slider bar to define the depth. All areas that have not been assigned to a group appear at the top of the list. Refer to Figure 23-2.

Status **Variable** Paddock No Spray Pond

Notes End Gun

+ Group

Scenario: Test Scenario

Description	Flow Rate
<a href="#">mzgroupid: 3, id: 4</a>	25.4 mm Off 4.23 8.47 12.70 16.93 21.17 25.4
<a href="#">mzgroupid: 7, id: 6</a>	25.4 mm Off 4.23 8.47 12.70 16.93 21.17 25.4
<b>Group 1</b>	25.4 mm Off 4.23 8.47 12.70 16.93 21.17 25.4
<a href="#">mzgroupid: 6, id: 2</a>	
<a href="#">mzgroupid: 1, id: 7</a>	

Figure 23-1

# Using the Website

---

## Areas

### Editing an Area Group

1. To edit a group, select the group name in the list. A dialog appears showing the Group Name and a list of areas. Refer to Figure 24-1.
  - The areas that have check marks next to them are areas that are currently assigned to the group.
  - The remaining areas are those that have not been assigned to a group.
  - To remove areas from the group, clear the checkbox next to the area name.
  - To add areas to the group, select the checkbox next to the area name.
2. Click **Save**.

*Note - If you need to add an area to your group that already belongs to another group, you must first remove the area from the other group.*

The screenshot shows a dialog box titled "Edit Area Group". At the top, there is a "Group Name:" label followed by a text input field containing "Group 1". Below this is a section titled "Areas" which contains a list of four items, each with a checkbox and text: "mzgroupid: 6, id: 2" (checked), "mzgroupid: 3, id: 4" (unchecked), "mzgroupid: 7, id: 6" (checked), and "mzgroupid: 1, id: 7" (checked). At the bottom right of the dialog are three buttons: "Delete", "Save", and "Cancel".

Figure 24-1

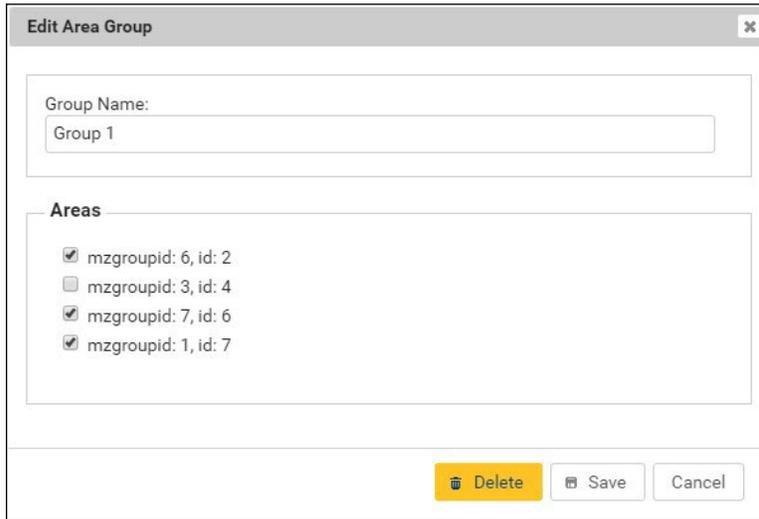
## Areas

### Deleting an Area Group

1. To delete a group, select the group name in the list. A dialog appears showing the Group Name and a list of areas. Refer to Figure 25-1.

When you select Delete, only the group name is deleted. Any areas that belonged to the group are returned to an unassigned group.

2. Click **Delete**.



The screenshot shows a web-based dialog box titled "Edit Area Group". At the top, there is a "Group Name:" label followed by a text input field containing the text "Group 1". Below this, there is a section titled "Areas" which contains a list of four items, each with a checkbox and a label: "mzgroupid: 6, id: 2" (checked), "mzgroupid: 3, id: 4" (unchecked), "mzgroupid: 7, id: 6" (checked), and "mzgroupid: 1, id: 7" (checked). At the bottom right of the dialog, there are three buttons: a yellow "Delete" button with a trash icon, a grey "Save" button with a floppy disk icon, and a grey "Cancel" button.

Figure 25-1

# Using the Website

## Areas

### Assigning Depths

#### Assigning Depth to an Area

1. Navigate to the area tab in which you would like to assign a depth. Refer to Figure 26-1.
2. Use the slide bars to alter application depths for each area. The flow rate is displayed two ways depending on application. With monitoring, the flow rate displays a numerical value representing inches or millimeters. Without monitoring the flow rate displays the fractional value in 1/6 increments. Refer to Figure 26-1.

Note - The application depth is in 1/6 increments and will change relative to the speed.

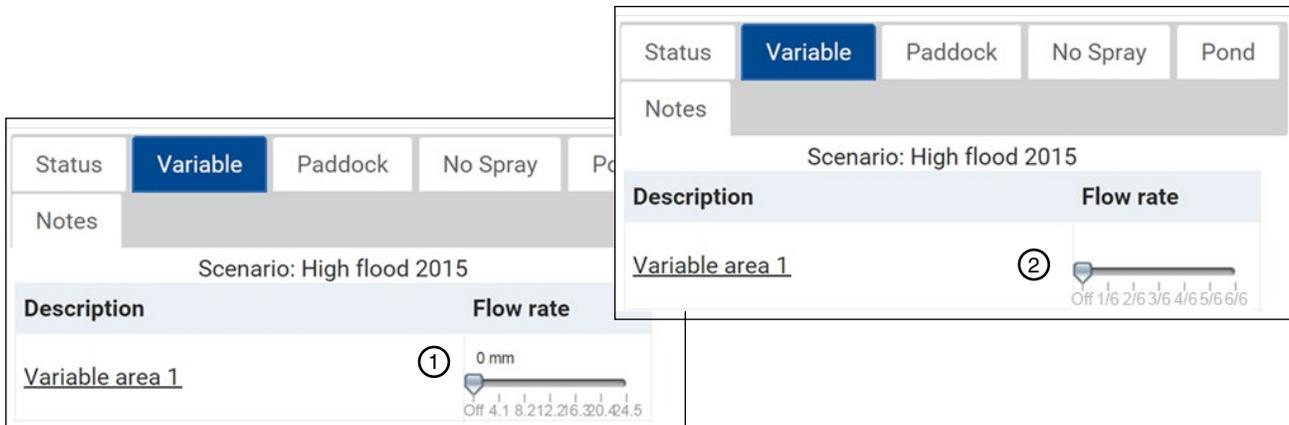


Figure 26-1 1. Flow Rate with Monitoring 2. Flow Rate without Monitoring

#### Assigning Depth to a Group

1. Navigate to the area tab in which you would like to assign a depth. Refer to Figure 26-2.
2. Use the slide bars to alter the application depths of each group. The areas that are assigned to a group will inherit the depth assigned to the group.

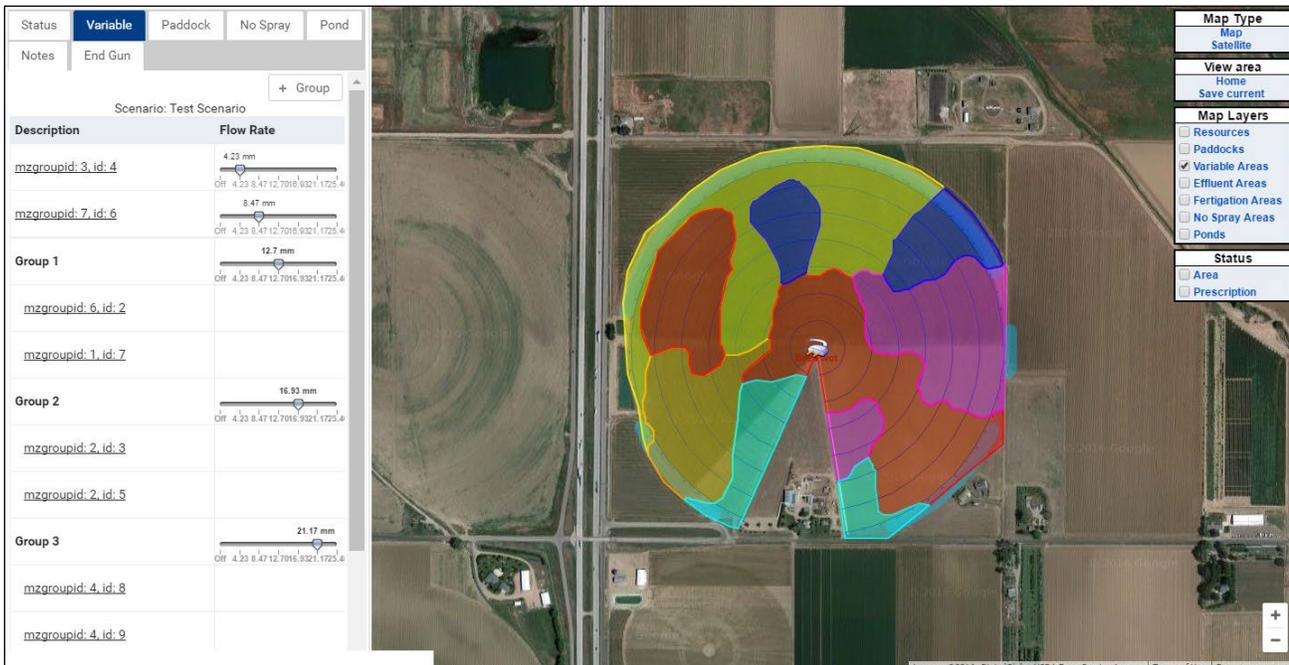


Figure 26-2

## Areas

### Area Legend

Color range for Variable, Effluent, and Fertigation depths are shown below. No Spray and Ponds are permanently zero application and are black. Paddocks are either Black (Off) or Blue (On). Their application rate is controlled only by the speed. Refer to Figure 27-1.

*Note - The application depth is in 1/6 increments and will change relative to the speed.*

Application rate	Color
Off	Black
1/6	Yellow
2/6	Orange
3/6	Red
4/6	Magenta
5/6	Cyan
6/6 Maximum	Blue

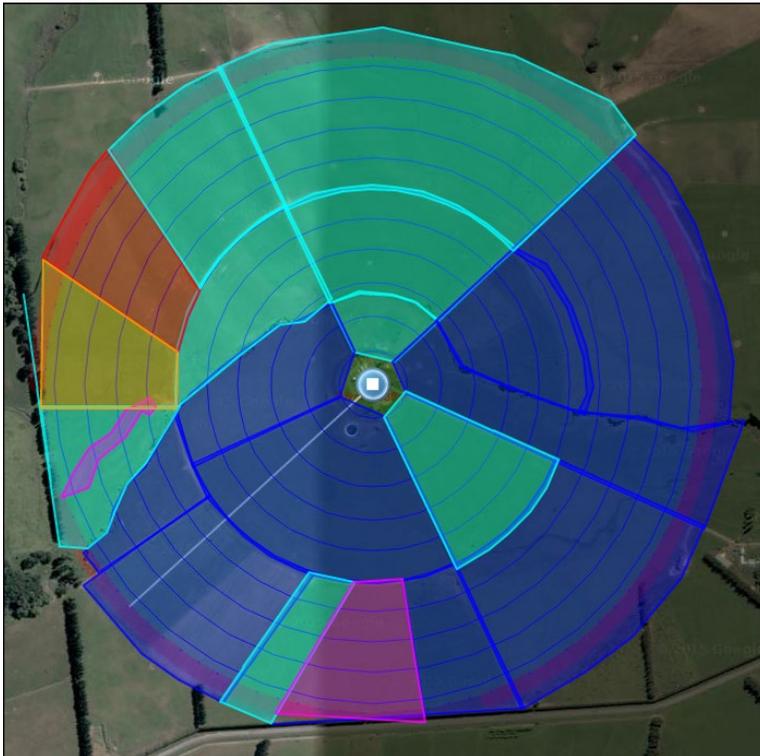


Figure 27-1

### Area Overlap

When areas overlap, the pivot will implement the lowest application depth. In some cases, the lowest application depth may be zero.

# Using the Website

## Areas

### Schedules

Sending a group of preset areas to the pivot is known as “publishing a schedule”. The schedule will ensure it has no overlaps and the pivot defaults to the lowest application depth for any overlap.

The following image shows overlapping areas under a pivot prior to the scenario being published. Refer to Figure 28-1.

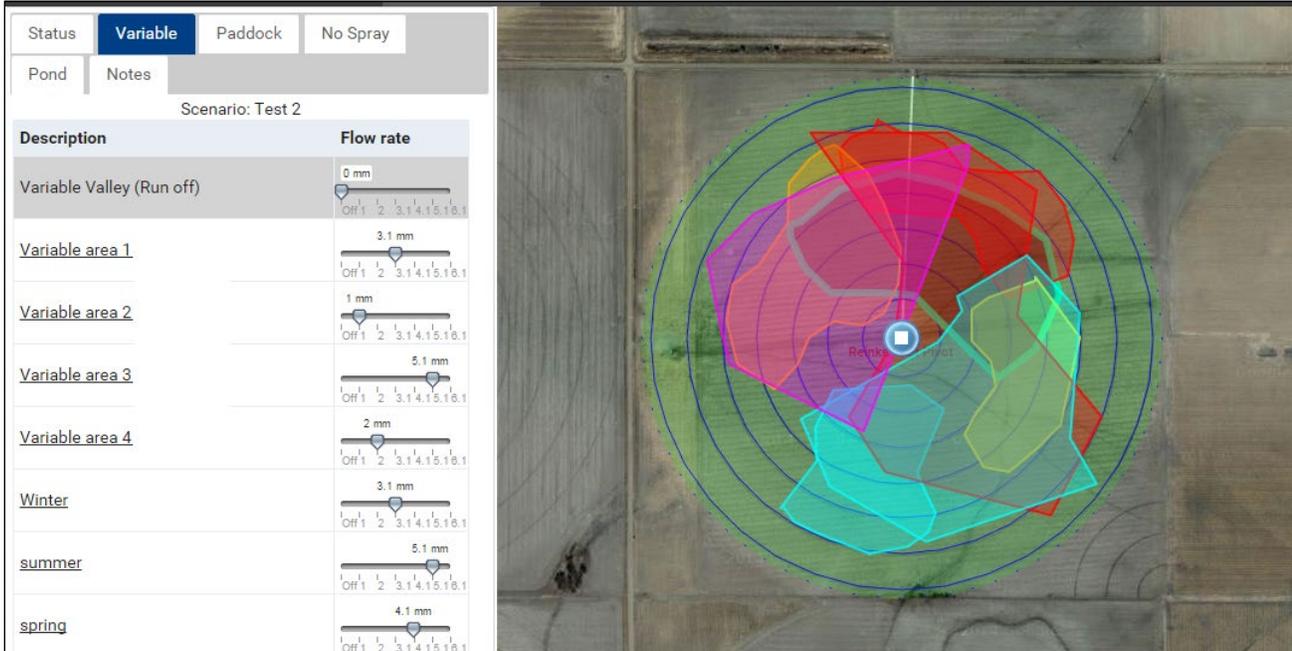


Figure 28-1

The next image displays a published scenario. There is now no overlap present. Refer to Figure 28-2.

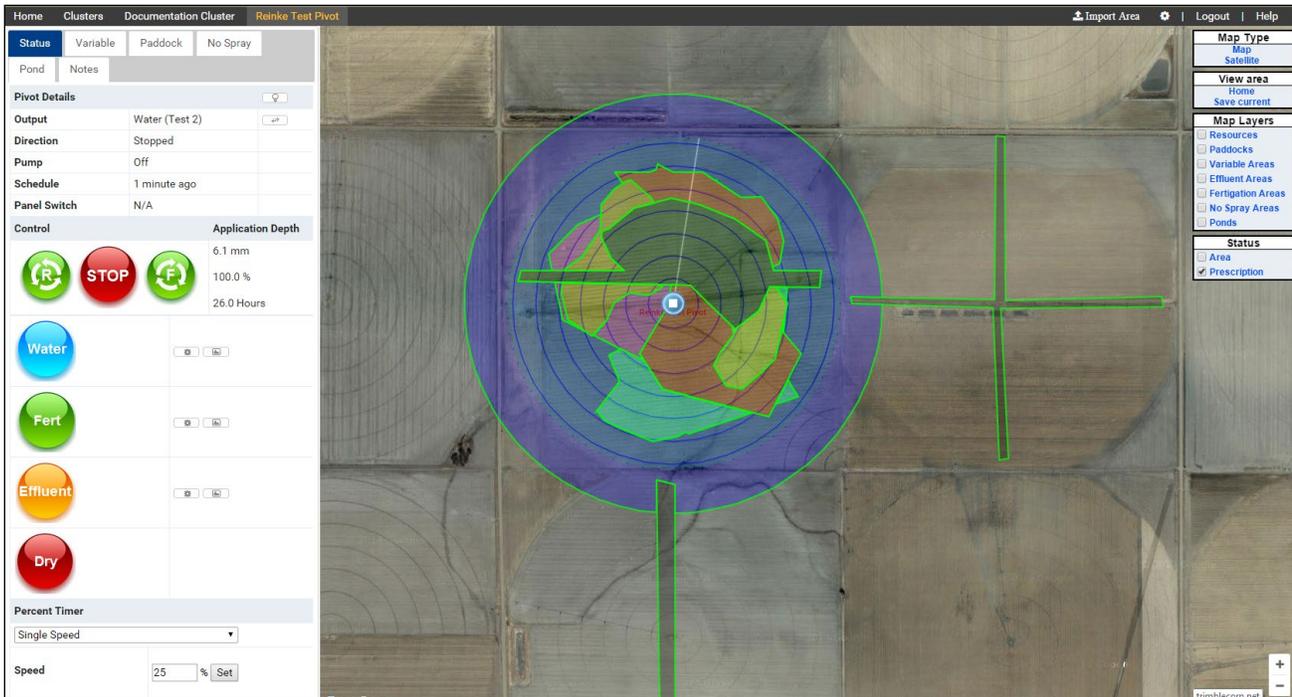


Figure 28-2

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# Using the Website

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**Valmont Industries Inc.**  
**2880 Ida Street**  
**Valley, Nebraska 68064-0358 U.S.A.**  
**(402) 359-2201**