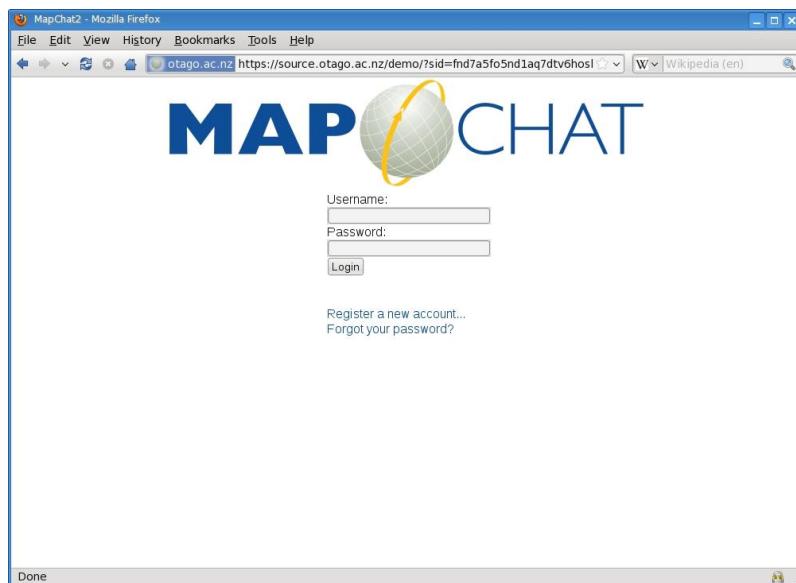


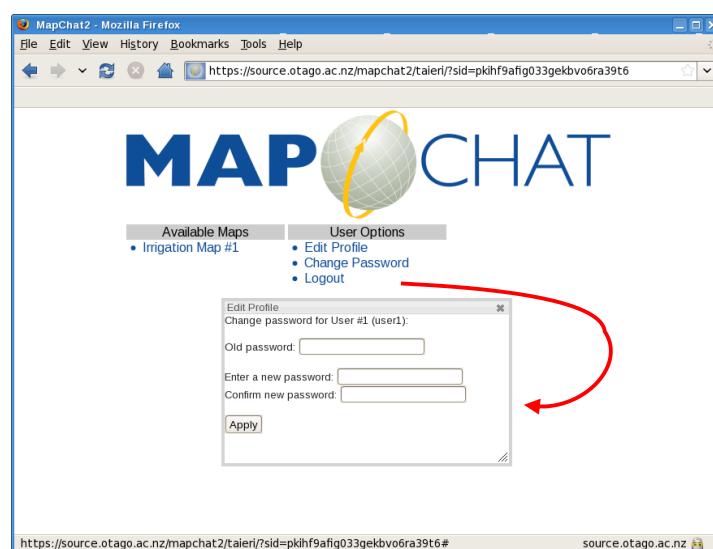
## Accessing the MapChat website:

You can access a demo of the new version of MapChat at <http://source.otago.ac.nz/demo>. A broadband connection is strongly recommended, and a modern browser is required (e.g., Internet Explorer 6 or higher, FireFox 2.x or higher – the most recent versions, 8 and 3.5.3 respectively, are recommended). **If you don't have broadband, you may have to be a little patient as some of the data layers may take some time to load.**

When you initially visit the Web page, you will be prompted to login. If you do not have an account, you can create one by clicking the link to the registration process and following the steps:

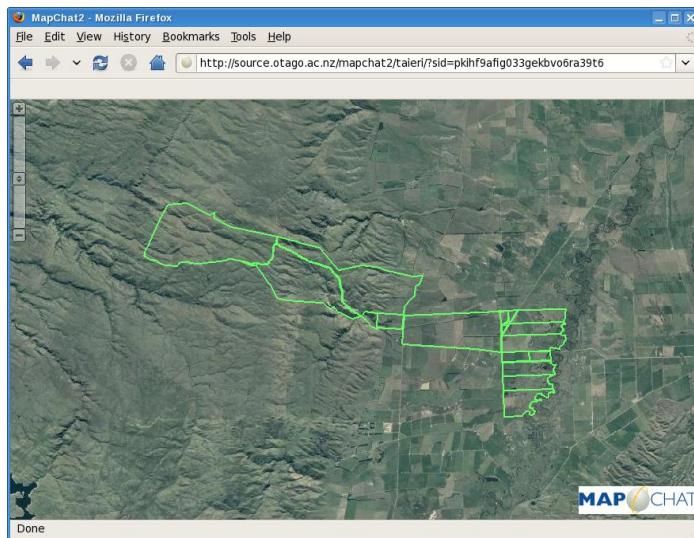


After you login, you can change basic information in your user account, set a new password, or logout by clicking one of the links listed under 'User Options'. The dialog to change your password is shown below. You will see links under 'Available Maps' – these are maps that that you have access to in MapChat, either because they are publicly accessible, or because you have been included as member in a private/group map.



When you click on the link to the map, MapChat will load a default map (note it will differ from the

screens shown in this walkthrough). This may take as little as a few seconds, or up to about one minute depending on your connection speed (or longer if using a dial-up connection). So please be patient.



There are a number of ways to interact with the initial map view:

- Click and hold the left mouse button and move the mouse to drag the map view to shown a different part of the study area from the initial view.
- Move the cursor to another location on the map and double-click the left mouse button to re-centre on that location.
- Move the mousewheel up/down (or move the slider in the top-left corner of the map view) to zoom in (show less area in more detail) or zoom out (show more area and less detail) on the map view.
- Click the right mouse button once (or left-click while pressing any one of the ctrl, shift, or windows keys) to open the main menu of the MapChat software.

The main menu, which you can drag anywhere on the main map view, provides you with the following options:

**Map Controls** – this displays a toolbar (initially in the top-left of the screen), which provides a set of additional controls for interacting with maps. These controls are activated by clicking on the respective icons.

**Map Layers** – this displays a window that contains a list of layers in the map, organized into groups. By left clicking the mouse in the check box beside a layer and clicking on the update button you can change the layers that are visible in the map view.

You can drag and resize this window anywhere on the main map view for ease of use and visibility of the underlying map.

**Chat Messages** – this opens the Chat Dialog that will be used for sending and receiving messages to other people that are viewing the same map as you, and for choosing which user-drawn features to display in the map.

The same dragging and resizing features apply for this tool as for the others.

*Overview of the Map Controls available from the Map Controls toolbar:*

-  **Pan Map** – this is the default control, which allows you to left click+drag or double click the left mouse button to pan/re-centre the map image (as noted above) to the place you double click on the map.
-  **Zoom in to Point/Rectangle** – when this tool is active, left-click will zoom-in to a pre-set level and re-centre the map on a specific location, or left click, hold down+drag to draw a box around an area that you want to zoom to in the map.
-  **Zoom out to Point** – when this tool is active, left-click will zoom-out to a preset level and re-centre the map on a this location
-  **Zoom to Default Extents** – left-click on this icon to return the map to it's original default extent (i.e., the area that was visible when the map initially loaded); the previously active control will remain active.
-  **Zoom to Previous Extents** – left-click on the icon for this tool to return the last extent that you previously viewed in the map (up to 50 previous extents will be stored); the previously active control will remain active.
-  **Refresh Visible Layers** – if a problem occurs while loading parts of the map on the screen, left-click this icon and the software will attempt to reload the layers. The previously active control will remain active.
-  **Identify Features** – by left-clicking on the identify icon (shown to the left) a dialog is displayed for this option which provides a drop-down list of the map layers that are available to you in the map view. Select the name of a layer (or type part of the name of a layer to make the list shorter) by left-clicking the check box. Once a layer is selected, left-clicking features on the map will display the properties of these features and any other data located at the location that you clicked. For this option to work properly you must have the layer open (displayed on the map) to be able to query features on it.
-  **Measure Distance** – select this icon by left-clicking on it. Then left-click on the map and add additional points by clicking again sequentially to form a line to report the line's distance. To finish the line, double click the left mouse button when you add the last point.
-  **Measure Areas** – select this icon by left-clicking on it. Left-click on the map to add points to form an enclosed area shape, with its total area and perimeter reported. To finish drawing the area, double click when adding the last point (note: whenever any of the lines around the outside of the polygon cross each other, the area will not be reported)

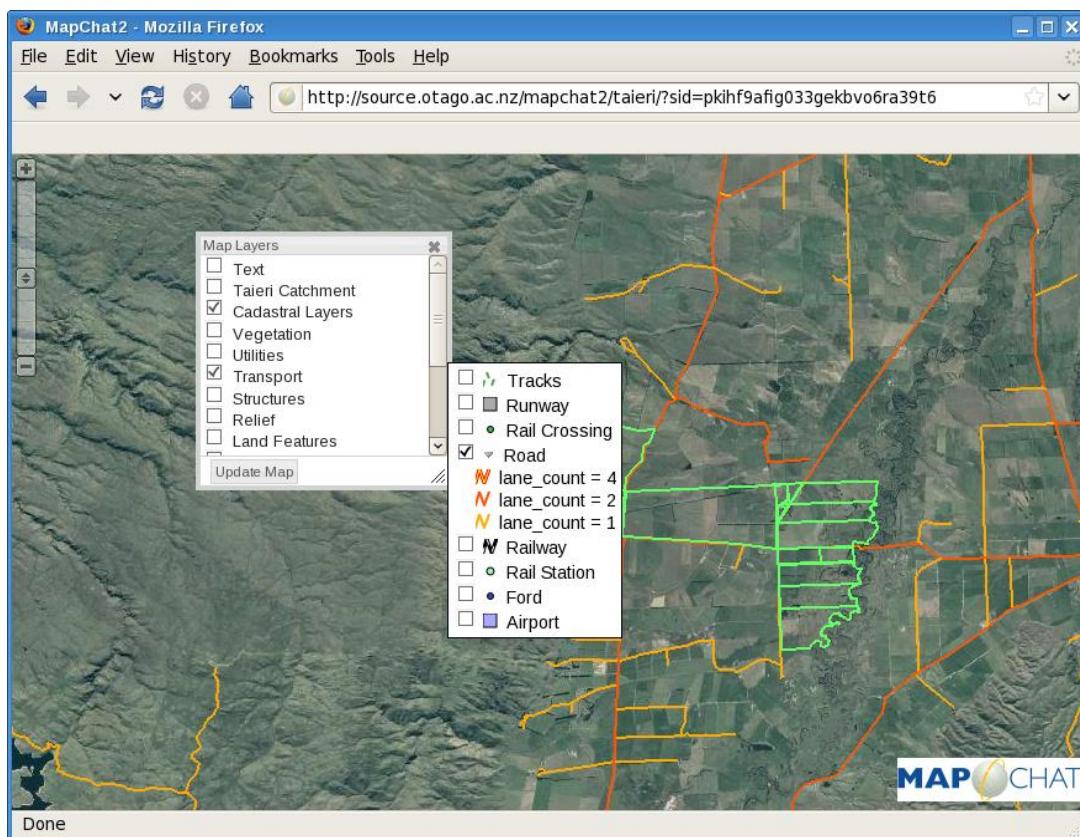
-  **Select Features** – left-click this icon to open (or activate if already open) a resizable dialog that provides options for selecting features. More on this dialog is explained below.
-  **Draw Features** – clicking this icon will open (or activate if already open) a resizable dialog that provides options for drawing features. Again, more on this dialog is explained below.

Note that the Select and Draw tools are displayed as tabs in the same dialog box. You can toggle between them by selecting the tabs in the dialog, or by left-clicking the icons described above.

-  **Show Linked Chat Messages on the Map** – left-click this icon to display small text bubble icons on the map to highlight where people have linked chat messages to map extents, selected features, or drawings. More on this feature is explained below.

#### *Overview of the map layers dialog:*

The map layers dialog will typically list layers organized in groups (but this will depend on how the facilitator has set the project up – in cases with only a small number of map layers they will appear as a single list). In order to view the individual layers along with their legend symbol, line type or colour and shade (for areas), click on the name of a group. In cases where one layer contains different classes of features (points, lines or areas), it will appear in a collapsible list with a small arrow icon next to it – to view the individual classes of features, click on the layer's name to open the list below it.

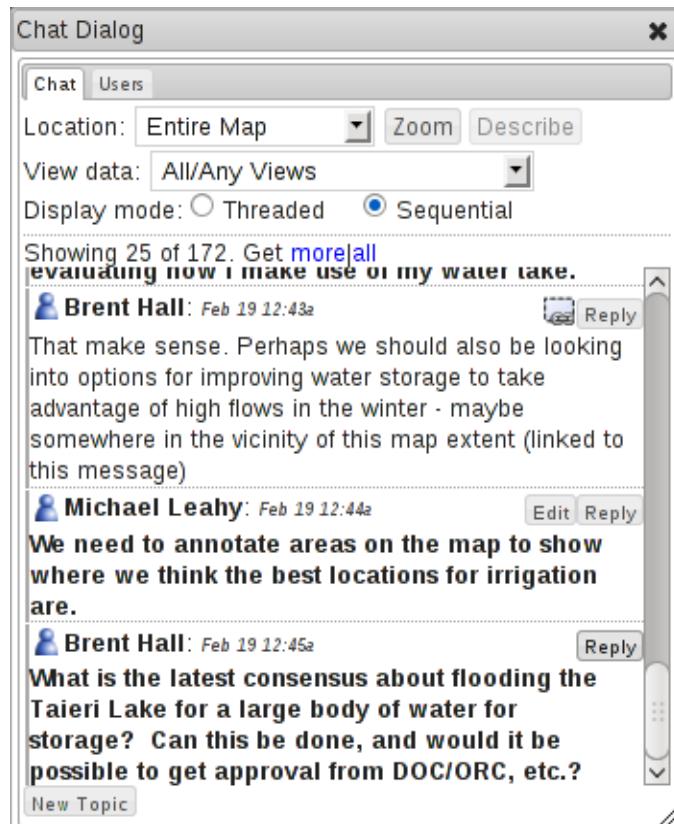


The map layers can be turned on/off to show/hide them in the map that is displayed. This is accomplished by clicking the check-boxes next to the individual layer names, or checking the box next to the name of a group of layers. When you are finished selecting the layers, click the “Update Map” button at the bottom of the Layer Control window and this will refresh the map view with the new

layers that you have selected.

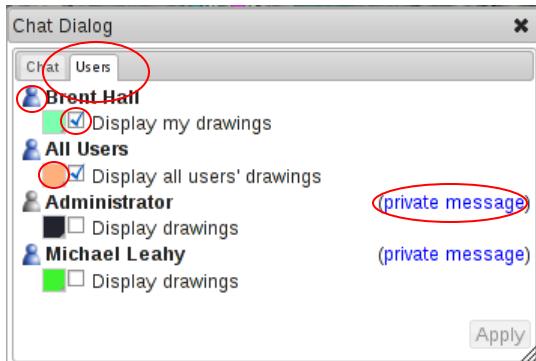
#### *Overview of the Chat Dialog:*

The Chat Dialog (left-click the 'Chat Messages' menu option that is opened by right-clicking anywhere on the main map window) provides the ability to communicate using text messages with other people viewing the same map. The initial view presented in the Chat Dialog will display several options for viewing chat messages:



If any messages have been submitted previously by you or other users viewing this map, the most recent of these will be displayed at the bottom when the dialog is opened (see above). New messages that are sent by anyone while you are currently working on the map will be added automatically to the bottom of the list of messages.

To determine who is online at the same time as you (that is, who is available for you to chat with) left-click on the Users tab in the Chat dialog (see below). Other users who are on-line at the same time as you have a blue icon to the left of their name. Those who are currently offline are coloured grey. There is also a check box immediately below each user's name. If this box is checked the person's drawings are visible in the map view. If you do not want to see a specific user's drawings, left-click on the check box to uncheck it, do the same for 'All Users', then click the 'Apply' button.

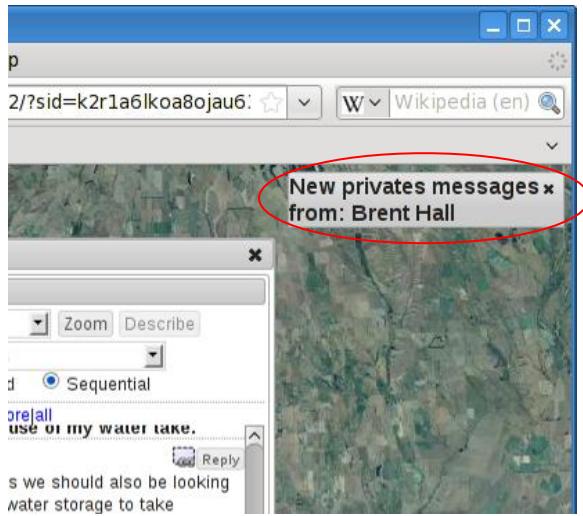


If you want to see only one or more specific user's drawings check their boxes and their map drawings will be visible in the main view. You can also choose a specific colour to use for each individual users' drawings by left-clicking on the colour square next to the Display drawings text, and choosing a custom colour. After selecting a new colour, click the 'Apply' button to update the map and the user drawings will refresh with the new colour(s) you have chosen.

You will also see a link labeled 'private message' listed in blue next to others user's names (see above). If you want to send a private message to someone in the discussion without everyone else being able to see what you are saying, left-click on this link. A new dialog will be opened that will contain only messages between you and the other user you have selected to speak privately with. This dialog has many of the same chat controls as the main chat dialog (discussed below), and can be used in a similar fashion.

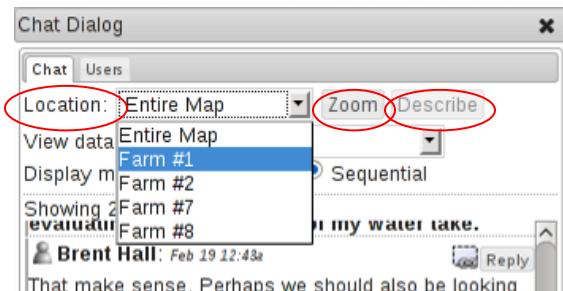


If somebody else sends you a new private message, you will see a notification appear in the top-right corner of the map. You can view this message and reply to this message by left-clicking on it to open a private message dialog with this person, or you can remove the notification by left-clicking on the 'x' in the top-left corner of the notification. Private messages will remain available until you read them at least once. After you have read a private message, it will not be displayed the next time you login.

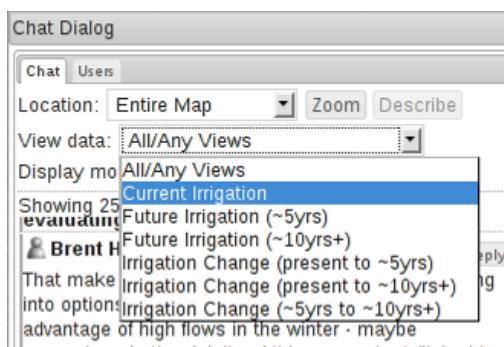


The other controls/options that are available for the main chat dialog are as follows:

- **Location:** if pre-defined locations have been set for the current map discussion, they will be displayed in a list in the chat dialog. Selecting one of the pre-defined locations will limit the messages you see in the chat history to only those messages that were sent by people who have selected the same location (for example, Farm #2 as shown below – note that pre-defined locations may not have been created by the project facilitator for your project. If this is not the case skip the following instructions). Clicking the **Zoom** button to the right of the Location option will zoom the map on the selected farm, while the **Describe** button will open a dialog showing a description for this location. Use of the Entire Map option will allow you to see the chat messages for all farms participating in this study.



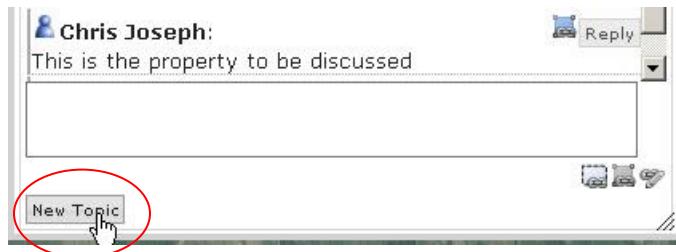
- **View:** if pre-defined views have been set for the current map discussion, they will be displayed in a list in the chat dialog. Selecting one of the views will apply the selected view to the map view by turning off all layers in the other views, and turning on the layers in the view you have selected. Note that you can only select one view at a time.



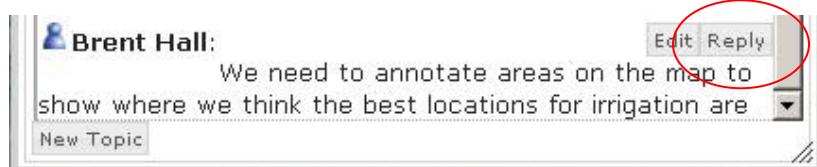
- **Threaded/Sequential:** this option determines how the chat message history is displayed on the screen. The default option is to display the messages sequentially in the order that they were sent. If you choose the threaded option, then the messages will be displayed in a nested arrangement, revealing the hierarchical order in which replies were sent. The threaded option is useful for reviewing/replying to a past discussion as all messages in that discussion are grouped together, while you may find the (default) sequential view is more useful when talking to people 'live' when you are both on line together.



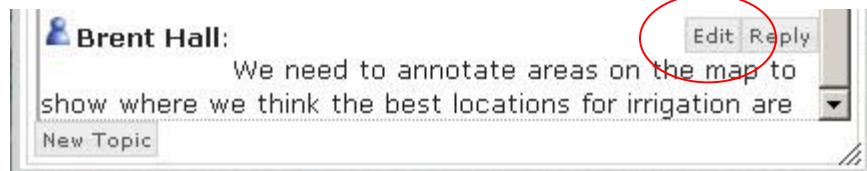
- **New Topic:** If no messages have been sent by anyone yet, or if you want to send a message that is not directly related to any previous discussion in the chat history, clicking the New Topic button will open an empty input box where you can type a message. When you are finished typing the message, press the ENTER key (if needed, you can press SHIFT+ENTER to add extra lines within a single text message).



- **Reply:** When you see messages displayed in the chat history, each message has a Reply button to the right of the user's name. When you want to respond to any past messages, click the reply button, and a text input box will appear below the message, where you can type your response then press ENTER to send it. This is similar to the New Topic button, except by using the Reply option, you will ensure that your response is linked to the previous message when reviewing the discussion in threaded mode.

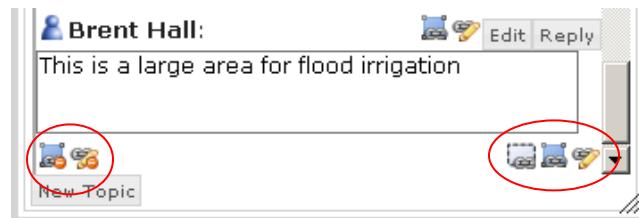


- **Edit:** When one of your own messages is displayed in the chat history, it includes an additional Edit button next to the Reply button. You can use this to edit the message you previously sent, and/or add/remove spatial links to the message (described below). It is important to note that you cannot delete your message entirely (even if left blank, it will still appear in the history). This is because other people may have already replied, or are currently typing a reply to your message. This option should be used for minor corrections only – e.g., if you need to correct spelling/grammar, or if you need to correct the spatial features linked to the message.

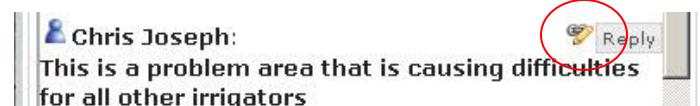


- **Spatial Linking** (sending): whenever you are typing a message, you will see three icons immediately to the bottom-right of the text input area – a dotted square, a blue shaded solid square and a pencil (see below). You can click on these to link your message respectively

to either the current **map extent** that you are viewing, a set of **selected features** that you have selected using the **Select Features** tool, or a **drawing** that you have created using the **Draw Features** (these tools are explained in the following sections of this document). If these icons are enabled (that is if you have selected something or drawn something), you can toggle each of the options by clicking on the relevant icon – if the icon has a red border around it, then that element will be linked with the message after you press ENTER. If you are editing a message that already has spatial links attached to it, you will be given additional options to the bottom-left of the input text box for removing the spatial links. Left-clicking on one of these icons will toggle the option to remove the associated spatial links when you press enter. You may also add more links to the map using the link icons to the bottom-right of the edit text box, the same way you would for a new topic or reply.



- **Spatial Linking (viewing):** when you see past messages in the chat history, any message that was linked to a spatial feature will have additional icons appear, next to the Edit/Reply buttons. You can click on these to zoom the map to the linked features. The geographic outline of the linked features will also be temporarily highlighted on the map. After the features have been displayed once, you can hold the mouse over the icon afterwards to redisplay them .



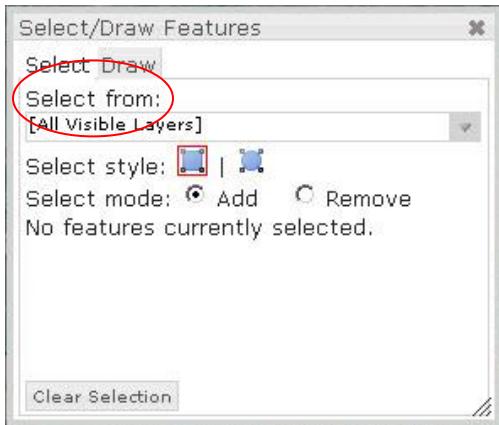
The example shown above is a small pencil icon that links the message to a shape drawn by the user to illustrate a problematic use of irrigation for other farmers in the area. The other two icons will link the message to an existing map feature that a user has selected or a message to a map extent that the user has linked to .

#### *Overview of the Select Features Dialog:*

To open the Select Features tool first open the Map Tools toolbar by right clicking anywhere on the MapChat main map window.



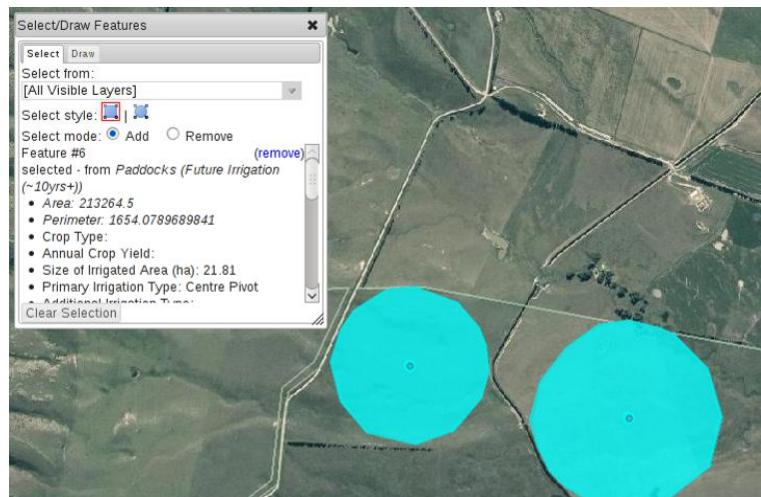
You will be presented with the set of options shown below that allow you to select shapes from different layers in the map.



From this dialog, you can select any available layer from the drop-down list under Select From: by either left-clicking the button to the right of it to display all layers, or by typing part of the name of the layer you want to select from, and selecting it from the displayed search results. Alternatively, you can select from ‘All Visible Layers’ – this is the default option, and when selected, you will be able to select any shapes that are currently visible in the map (not including shapes that are temporarily superimposed on the map to highlight locations, selections, or drawings).

You are given the option to use a point or a rectangular box or a circular shape to define the area that you want to select features from. You can switch between these options at any time by clicking on the corresponding icons . An additional option allows you to either ‘Add’ new features to your current selection, or to ‘Remove’ any currently selected features.

When you are ready, left-click and release the mouse button on a single spot in order to select (or remove) features at a specific point. Alternatively, you can left-click and hold the mouse button to begin drawing the corner of a box, or the centre of a circle – drag the mouse until the desired area is highlighted, then release the mouse button to complete the selection. Use the same process to select features with a circle.



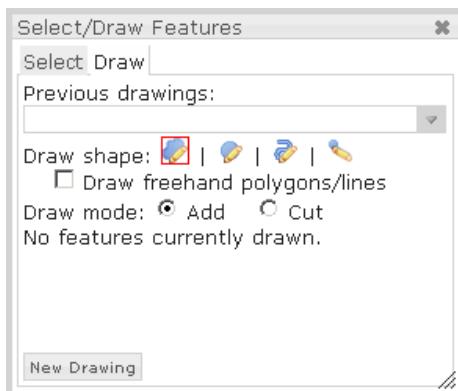
The results of the selection are displayed in the Select Features tool dialog. Each feature is also highlighted on the map. Holding the mouse over the selection or the shapes displayed on the map will highlight the corresponding shape and feature details that correspond to each other. The detailed attributes about each selected features can also be shown by left-clicking on the feature information in the select results. This will toggle the visibility of the attributes directly below the feature’s main description. Individual features may be removed from the selection by clicking the ‘remove’ link next to their description. The entire selection may be cleared by clicking the **Clear Selection** button at the bottom left of the dialog.

### *Overview of the Draw Features Dialog:*

To open the Draw Features tool  first open the Map Tools toolbar by right clicking anywhere on the MapChat main map window.



You will be presented with the set of options shown below that allow you to draw new shapes.



From this dialog you can select any previous drawings you have created from the drop-down list by either left-clicking the button to the right it to display all layers. To start a new drawing at any time, click the **New Drawing** button located in the bottom-left corner of the dialog. This will clear any current drawings from the dialog, and the next drawing will start a new shape.

You are given the option to draw irregular areas , circles , lines  or points . The currently active type of shape will be highlighted with a red border around it. You can switch between these shapes by clicking the corresponding icons. If you choose to draw areas or lines, you can begin drawing by left-clicking on the map to add points to the shape. When you are finished, either double click on the last point, or press the ENTER key.

Irregular areas and lines may be drawn ‘freehand’ by left-clicking the checkbox labeled ‘Draw freehand polygons/lines’. When using the freehand mode, left-click and hold the mouse down on the map, then drag the mouse to draw a line on the map. When you release the mouse button, the line will stop drawing. You can continue to add to the drawing in freehand mode, or by left-clicking on individual locations to add more points to the line. When you are finished, either double-click or press the ENTER key on the last point.

When drawing circles, left-click and hold the mouse button on the map where the centre of the circle should be located, then drag the mouse to increase the size of the circle. Release the mouse button to complete the circle.

When drawing points, double-click on locations in the map to add a point to the drawing.

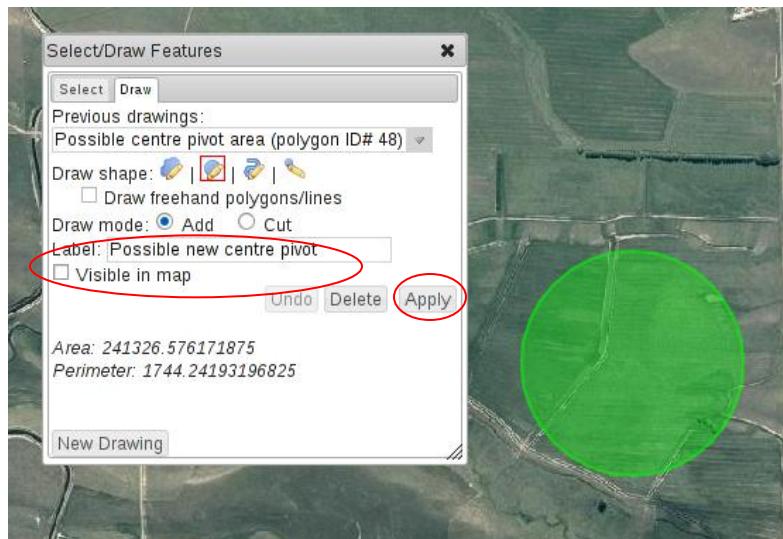
You can continue to add multiple shapes of the same class to your current drawing. You can add areas and circles to the same drawing. However, points and lines must be drawn separately. If you switch between shape types while you have a drawing currently open in the dialog, you will be asked if you want to start drawing a new shape.

Irregular areas and circles may also be used to ‘cut’ parts out of your current drawing. To do this, select the ‘cut’ option below the icons in the dialog, then draw the shape on the map where you want to remove areas from your current drawing. You can use these to cut from line and point drawings as well, and this option will be automatically selected if you switch to areas or circles when you have already

drawn points or lines.

At any time while drawing an area, circle, or line, you can press ESC to cancel the current shape. While you are adding points to regular or ‘freehand’ lines and areas, you may also undo individual points before completing the drawing by pressing the BACKSPACE key.

When you have created a new drawing, or if you open a previously saved drawing, you will be presented with options to add a label to the drawing, and/or to make it ‘visible’ in the map. You can modify either of these by typing in the **Label** text box, and/or left-clicking on the checkbox labeled **Visible in map**. After making changes to either of these, you must click the **Apply** button. When you make a shape ‘visible’, this means that other people viewing this map from another browser will have the ability to view your drawings (outlined earlier).



If you add or cut shapes multiple times in the same drawing, you will be able to use the **Undo** button to reverse the last change you made.

After you have created a new drawing or opened a saved drawing, you can delete the drawing permanently using the **Delete** button. This will remove the shape from the drop-down list of previous drawings, and it will no longer be displayed in the map. NOTE: if you or anyone else has made comments that link to this shape, the shape will still appear linked to those comments unless they are unlinked at a later time.

#### *Overview of the Show Linked Messages on Map option:*

To view spatially linked messages directly on the map (instead of the chat dialog) left-click on the button in the application toolbar labeled ‘Show Linked Messages on Map’ .



This will add small message bubble icons on the map that highlight the locations of features that have been linked to chat messages in the current discussion. The colours of these icons correspond to map extents , selected features , and drawings . You can view the discussion threads linked to these locations by left-clicking on the icon. This displays a callout bubble (shown below) with all of the discussion threads related to this location. You can continue the discussion for these threads directly within the callout bubble by clicking the reply button next to a given message.

