

Environmental Consultancy 2015 Ltd “Water Use” web site

Our “water use” web page is accessed from our web site address: www.ecs-limited.co.nz

The screenshot shows the website's navigation menu on the left with buttons for Home, Water Use, Client Instructions, News, Photographs, and Services. The 'Water Use' and 'Client Instructions' buttons are circled in red. Two red boxes with arrows pointing to these buttons contain the following text:

- Select “Water use” to log into our web page.
- Select here to read these instructions on-line


The main content area includes the company logo, a navigation menu, and a list of services such as preparation of water resource consent applications, flow monitoring equipment installation, and meteorological instrumentation. At the bottom, it states they are an authorized provider for Surface Water Flow and Water Metering Verification, and Data Hosting & Compliance Reporting, with the Irrigation New Zealand logo.

After logging in to our water use web site, you will be able to review any data you are authorised to access. Username and Password are case sensitive.

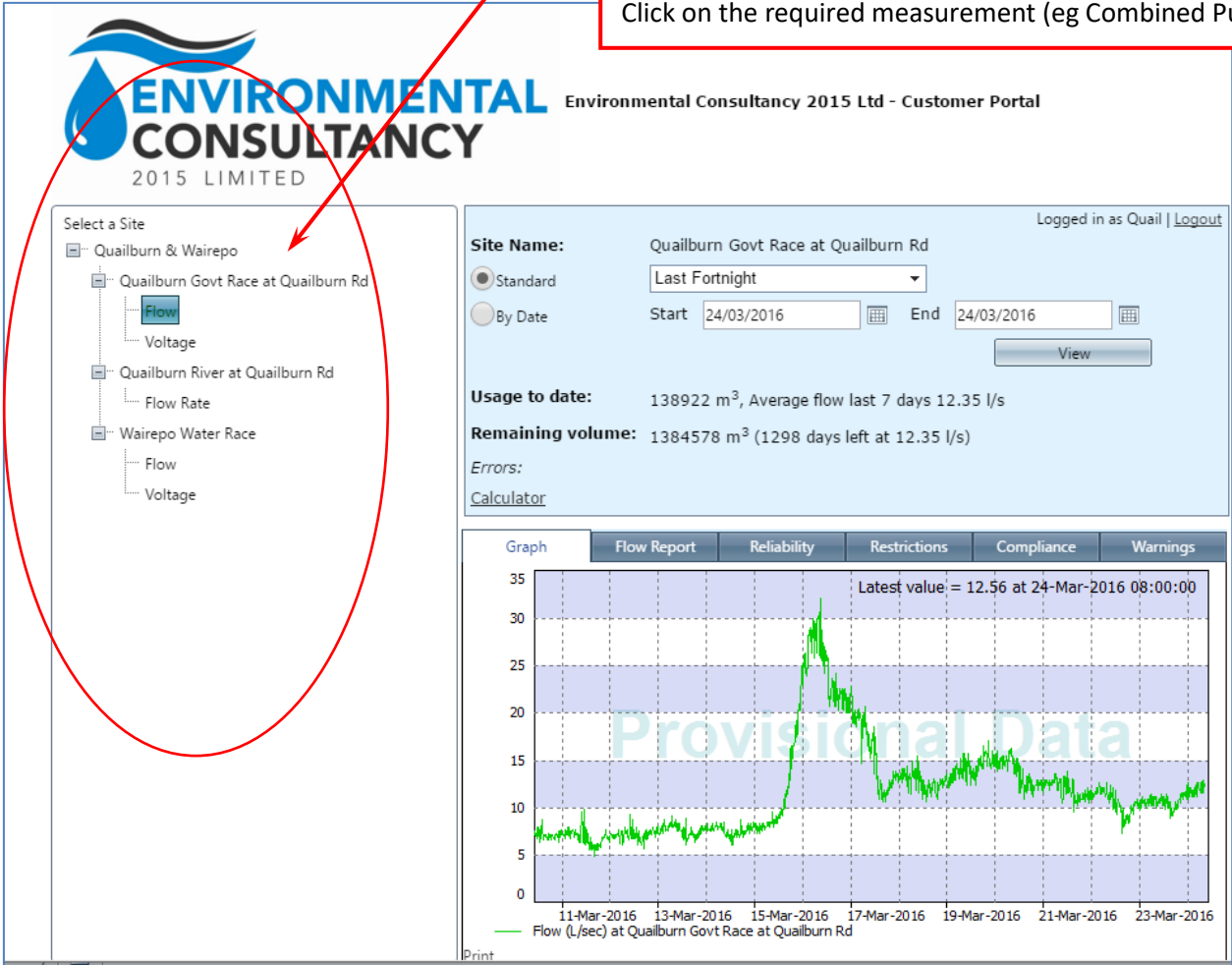
Your details are:

Client:	
Username:	
Password:	
Email address:	

1 SELECT THE REQUIRED INFORMATION

The data in the left panel of the web page is grouped by Site Owner, then by sites, then by any measurements relating to that site. The example shows the sites authorised under the “Quailburn & Wairepo Races”. Clicking the mouse on the  symbol expands the list.

Select the required data from here.
Click on the required measurement (eg Combined Pumps)



The screenshot displays the Environmental Consultancy 2015 Limited Customer Portal. On the left, a tree view under "Select a Site" shows a hierarchy: Quailburn & Wairepo (expanded), Quailburn Govt Race at Quailburn Rd (expanded), Flow (selected), Voltage, Quailburn River at Quailburn Rd (expanded), Flow Rate, Wairepo Water Race (expanded), Flow, and Voltage. A red circle highlights this tree view, and a red arrow points from the text box above to the "Flow" item. The main content area shows the site name "Quailburn Govt Race at Quailburn Rd", a "Standard" radio button selected, a "Last Fortnight" dropdown, and date pickers for "Start" (24/03/2016) and "End" (24/03/2016). A "View" button is present. Below this, usage statistics are shown: "Usage to date: 138922 m³, Average flow last 7 days 12.35 l/s" and "Remaining volume: 1384578 m³ (1298 days left at 12.35 l/s)". There are links for "Errors" and "Calculator". At the bottom, a "Graph" tab is active, showing a line graph of "Flow (L/sec) at Quailburn Govt Race at Quailburn Rd" from 11-Mar-2016 to 23-Mar-2016. The graph shows a peak of 12.56 L/sec on 24-Mar-2016 at 08:00:00. A "Provisional Data" watermark is overlaid on the graph. A "Print" button is at the bottom left of the graph area.

2 SELECT GRAPH TYPE AND DATE RANGE

Once you have selected the required site and measurement, the relevant information is shown in the right panel of the page.

The default graph is always the last 14 days of data. The type of graph can be changed by selecting the down arrow on the right side of the "Standard" graph. After selecting the type of graph you must press the "View" button to refresh the graph.

1 Press the down arrow and select the required graph type

2 Press "View" to see the requested graph.

Site Name: Quailburn Govt Race at Quailburn Rd

Standard (selected) | By Date

Graph Type Dropdown: Last Fortnight, Last Fortnight, Last 30 days, Last 24 hours, Consecutive day moving volume, Remaining volume

Consent [CRC164043](#)

Max rate = 170 l/s, Max volume = 14688 m³/1 day(s), Annual volume = 1523500 m³

Usage to date: 138943 m³, Average flow last 7 days 12.33 l/s

Remaining volume: 1384557 m³ (1300 days left at 12.33 l/s)

Errors:

[Calculator](#)

Logged in as Quail | [Logout](#)

You can select a specified time scale by selecting the "By Date" radios button, then entering a start and end date. Dates can be entered manually or use the calendar date picker as shown.

1 Select "By Date" button

2 Press the Calendar Icon and select the required start and end dates.

Site Name: Quailburn Govt Race at Quailburn Rd

Standard | **By Date** (selected)

Graph Type: Last Fortnight

Start: 24/03/2016 | End: 24/03/2016

Consent [CRC164043](#)

Max rate = 170 l/s, Max volume = 1523500 m³

Usage to date: 138943 m³

Remaining volume: 1384557 m³

Errors:

[Calculator](#)

Logged in as Quail | [Logout](#)

	M	T	W	T	F	S	S
10	29	1	2	3	4	5	6
11	7	8	9	10	11	12	13
12	14	15	16	17	18	19	20
13	21	22	23	24	25	26	27
14	28	29	30	31	1	2	3
15	4	5	6	7	8	9	10

3 Press "View" to see the requested graph.

3 WATER USE INFORMATION

After the required site and date range is selected, information relating to the site is displayed.

Consent:

If the data is associated with a resource consent, the relevant flow rate and volumes are shown. Clicking on the consent number provides a direct link to ECan. Relevant consent details can then be seen.

Usage to Date:

If "usage" data is available, the volume of water taken for the specified pump or flow site for the current irrigation season, and the average rate over the last 7 days is shown.

Amount Left:

If an annual volume of water is specified, the amount of water left for the season, and the number of days remaining at the average pump rate is shown. If there are **multiple pumps** for a resource consent, the remaining **volume is only shown when the "Combined" or "Total" flow option is selected.**

Calculator:

Clicking on the "Calculator" activates a pop up screen where you can enter any 2 of the 3 Values (flow rate (l/s), volume (m³), time (hours)). This is useful to find out, for example, the number of hours remaining to pump the available volume at a specified flow rate.

Site Name: Quailburn Govt Race at

Standard Last Fortnight

By Date Start 24/03/2016 End 24/03/2016

View

Consent CRC164043

Max rate = 170 l/s, Max volume = 14688 m³/1 day(s), Annual volume = 1523500 m³

Usage to date: 138943 m³, Average flow last 7 days 12.33 l/s

Remaining volume: 1384557 m³ (1300 days left at 12.33 l/s)

Errors:

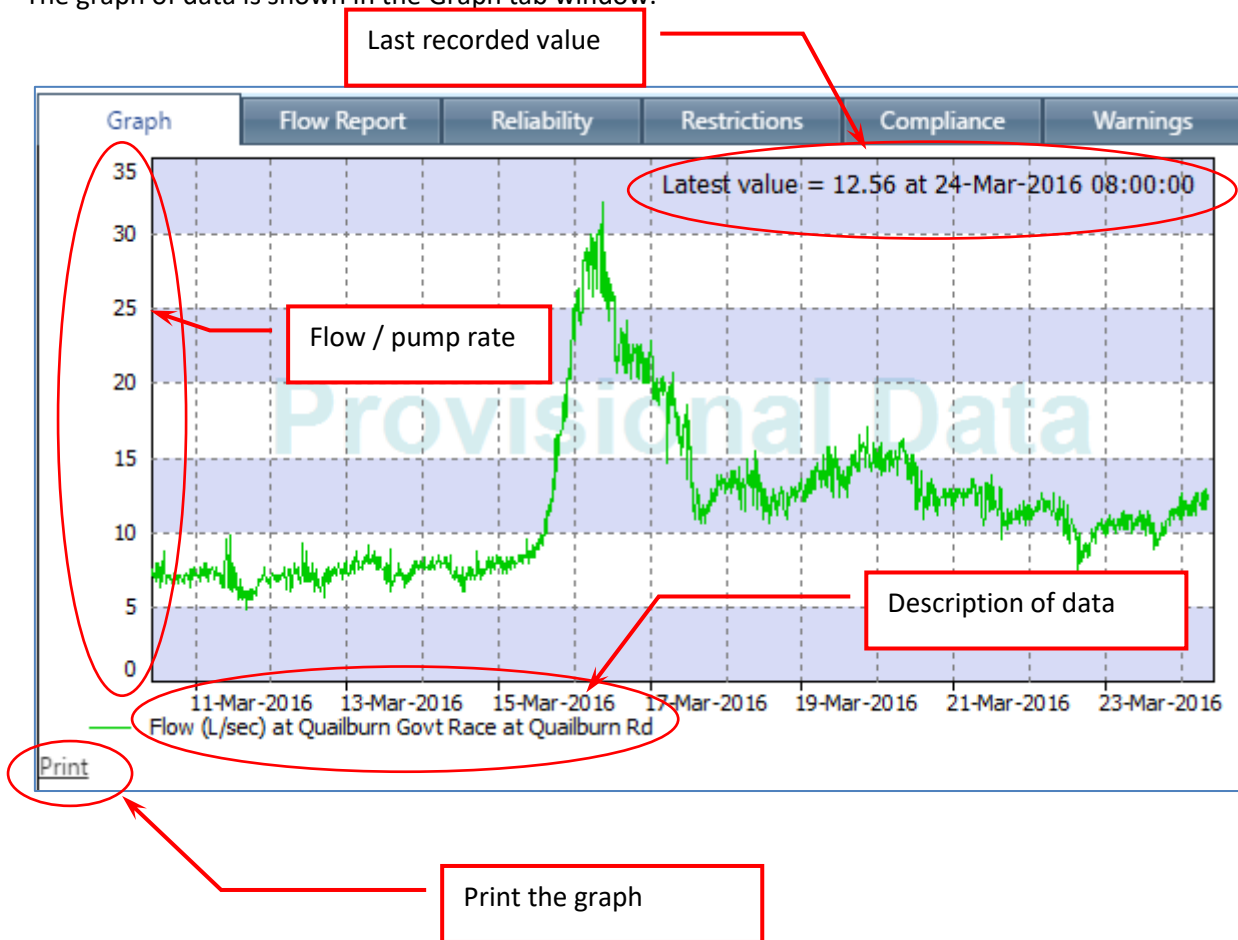
Calculator

Press the Consent number to view the ECan consent details

Press this link to calculate remaining pump hours, volumes and flow rates.

4 GRAPH INFORMATION

The graph of data is shown in the Graph tab window.



5 FLOW REPORT

The Flow Report tab provides a table of daily mean flow rates for the selected site for the entire period of data record held in our Telemetry file.

This information can be selected using Windows controls:

- Place the mouse in the Tab to the left side of the title, hold down the right mouse click and drag the selection to the bottom of the page ;
- Press Ctrl+C to copy the data to the clipboard.
- Open WORD or EXCEL and press CTRL+V to paste the information.

Alternatively, select the Print icon at the bottom of the report to print the report.

Graph	Flow Report	Reliability	Restrictions	Compliance	Warnings								
Year = 2016													
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	8.00	13.19	7.21										
2	7.83	11.90	7.33										
3	10.49	10.95	7.49										
4	12.36	10.03	7.57										
5	9.04	9.70	7.82										
6	8.39	8.97	7.67										
7	8.58	8.58	7.45										
8	8.44	8.29	7.03										
9	7.10	8.37	6.94										
10	6.31	8.11	7.23										
11	6.19	7.54	6.82										
12	6.34	7.47	7.14										
13	7.42	7.47	7.57										

6 RELIABILITY OF THE INFORMATION FOR PUMP SITES & OPEN CHANNEL FLOW SITES

The reliability tab provides basic information relating to the accuracy of the data. If the data is from a pump, the type of water meter, datalogger and check compliance is shown.

Graph	Flow Report	Reliability	Restrictions	Compliance	Warnings
COMMENTS ON THE RELIABILITY OF DATA FROM THIS SITE					

Under development

7 RESTRICTIONS

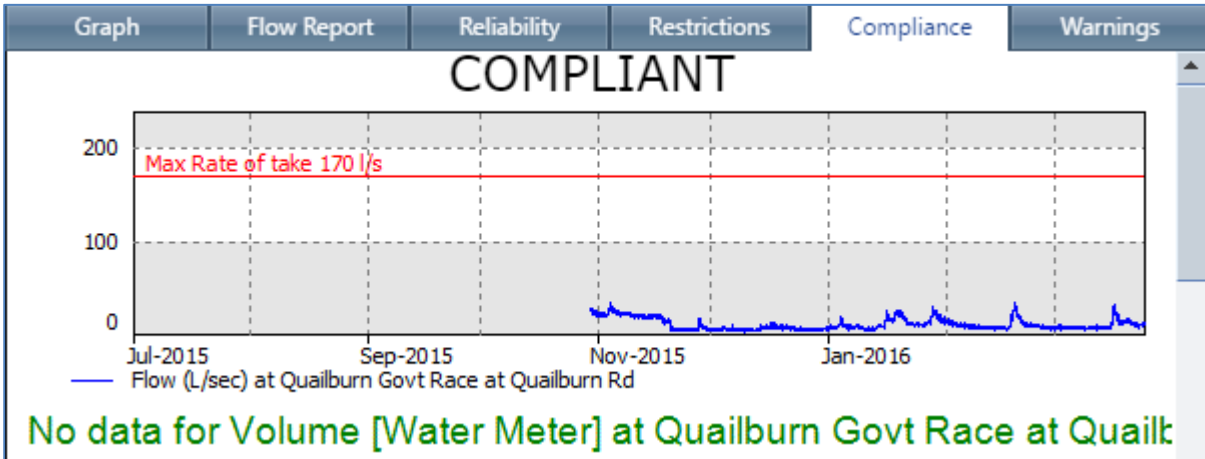
If the flow rate is restricted by river flow trigger levels, this tab provides a direct link to the ECan site to show if there is any restriction for the current day. Flow restrictions are stored in our database and used to check compliance with consent conditions.

Graph	Flow Report	Reliability	Restrictions	Compliance	Warnings
Low Flow Site		Flow (m3/s)		Date	
Restriction Band		Restrictions			
Quail Burn @ Hen Burn Road		0.008		24 March 2016	
Band 1		Restricted			
Print					

8 COMPLIANCE

This tab provides a quick summary of compliance with any resource consent requirements (flow rate, volumes, annual volumes, flow restrictions etc). Any non-compliant days are shown in a table beneath the graphs. The compliance graphs and tables can be printed using the [Print](#) link at the bottom of the report.

The graphs and table do not constitute a formal compliance report required by ECan. Those are produced at the end of each season, or upon request to us (Lindsay@ecs-limited.co.nz).



9 WARNINGS

The Warning tab can be used by the Client to send email warnings whenever specified events occur.

The warnings can be created, edited, or deleted by the Client.

The figure is a screenshot of a web application's 'Warnings' tab. At the top, there are navigation tabs: Graph, Flow Report, Reliability, Restrictions, Compliance, and Warnings (selected). Below the tabs is a dark blue bar with a '+ Add New Warning' button. Below this is a table with the following columns: Site, Measurement, Type, Active, and Delete. The table contains one row with the following data: Site: Quailburn Govt Race at Quailburn Rd, Measurement: Flow, Type: Flow Rate, Active: , Delete: Delete. Red circles highlight the '+ Add New Warning' button and the 'Delete' button in the table row. Red arrows point from the text above to these elements.

Site	Measurement	Type	Active	Delete
Quailburn Govt Race at Quailburn Rd	Flow	Flow Rate	<input checked="" type="checkbox"/>	Delete

This example shows an active warning to send a message if the flow rate for Quailburn Govt Race exceeds 75% of the consented flow rate.

Graph	Flow Report	Reliability	Restrictions	Compliance	Warnings
Edit	Quailburn Govt Race at Quailburn Rd	Flow	Flow Rate	<input checked="" type="checkbox"/>	Delete
Site	Quailburn Govt Race at Quailburn Rd				
Measurement	Flow				
Warning Type	Flow Rate				
Recipients	<input type="text" value="[your email address]"/>				
	<i>Separate emails with ; e.g. name@domain.com;name2@domain.com</i>				
Percentage	<input type="text" value="75"/>				
	<i>e.g. 75 Send an email when the Flow Rate or Volume has reached 75% of its maximum.</i>				
Active	<input checked="" type="checkbox"/>				
	<input type="button" value="Update"/> <input type="button" value="Cancel"/>				

Remember to check this box to make the warning active