



Application Notes

Rev 01

AN19 - How to obtain a GPS location for a block of IPCs

Introduction

Version 5 of Water-Insight's IMS system uses the concept of a FarmID to define and constrain radio communications with networks of Water-Insight Irrigation Point Controllers (IPCs). The FarmID is a unique number assigned, issued and managed by Water-Insight. It uniquely identifies sets of IPCs deployed in a specified area of land (block) and it is issued to the farmer when new IPCs are deployed to the block. When issuing a FarmID to a farm, Water-Insight requires some information to help identify the block and ensure that blocks are uniquely identified. This information includes:

1. The name of the farm (if any)
2. The farm owners name (first, last)
3. The farm managers name (or the person most likely to be contacted for day to day operational matters)
4. A contact number (preferably cell phone) for the farm manager (the person in item 3)
5. A contact email address for the farm manager.
6. The nearest road which accesses the block, preferably with a street address (if any)
7. The Fonterra number, if any. Many farms have the same point of access as the milk shed and the Fonterra number usually identifies this point so it's useful.
8. A GPS location for the block. This can be done with google maps on your phone or PC and Water-Insight can assist with this.

This will go into the Water-Insight database and the FarmID will be generated and sent to the Farm Manager contact. It will be handy to keep a record of this but if you lose it then Water-Insight can look it up against the details supplied above.

This document describes two methods of obtaining a GPS location for a block.

Method 1: Using Google Maps

Google maps is an application that runs in the internet browser of your Microsoft Windows PC or Apple Device. Typical browser applications include Google Chrome, Apple Safari, Mozilla Firefox, Microsoft Internet Explorer or Microsoft Edge. We will use google chrome in this document. Please note that there can be small variances between applications in the way that information is displayed.

Step 1 – Open browser and go to google maps

In the address bar of your browser type: www.google.com/maps google maps will start and likely take you to a location nearby. If it doesn't, type in the name of the nearest town to you in the search bar "search google maps"

Step 2 – locate your farm

Use the "zoom and pan" facility (bottom right corner or with your mouse) or type in your farm street address into 'search google maps' to locate your farm and specifically to locate the area where your block of IPCs is situated.

Once you have zoomed in tightly enough you are ready to drop a pin.

It may help to switch to a satellite view (click the small window in the browser that says satellite) to locate nearby landmarks.

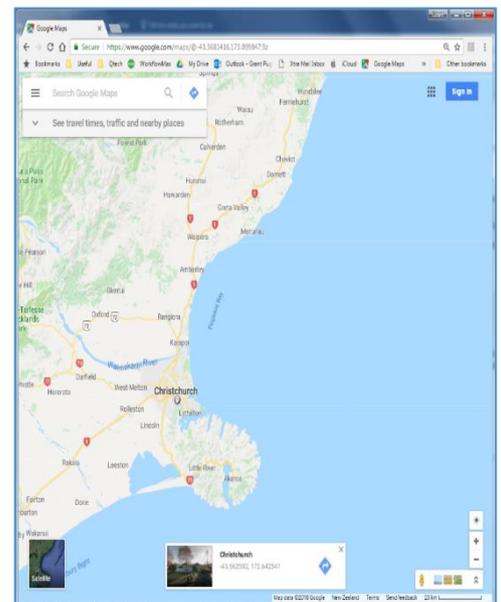


Figure 1

Step 3 – Drop a pin

Hover your mouse over an area roughly in the middle of the block of IPCs then right click the mouse and choose “what’s here?” from the pop-up menu.

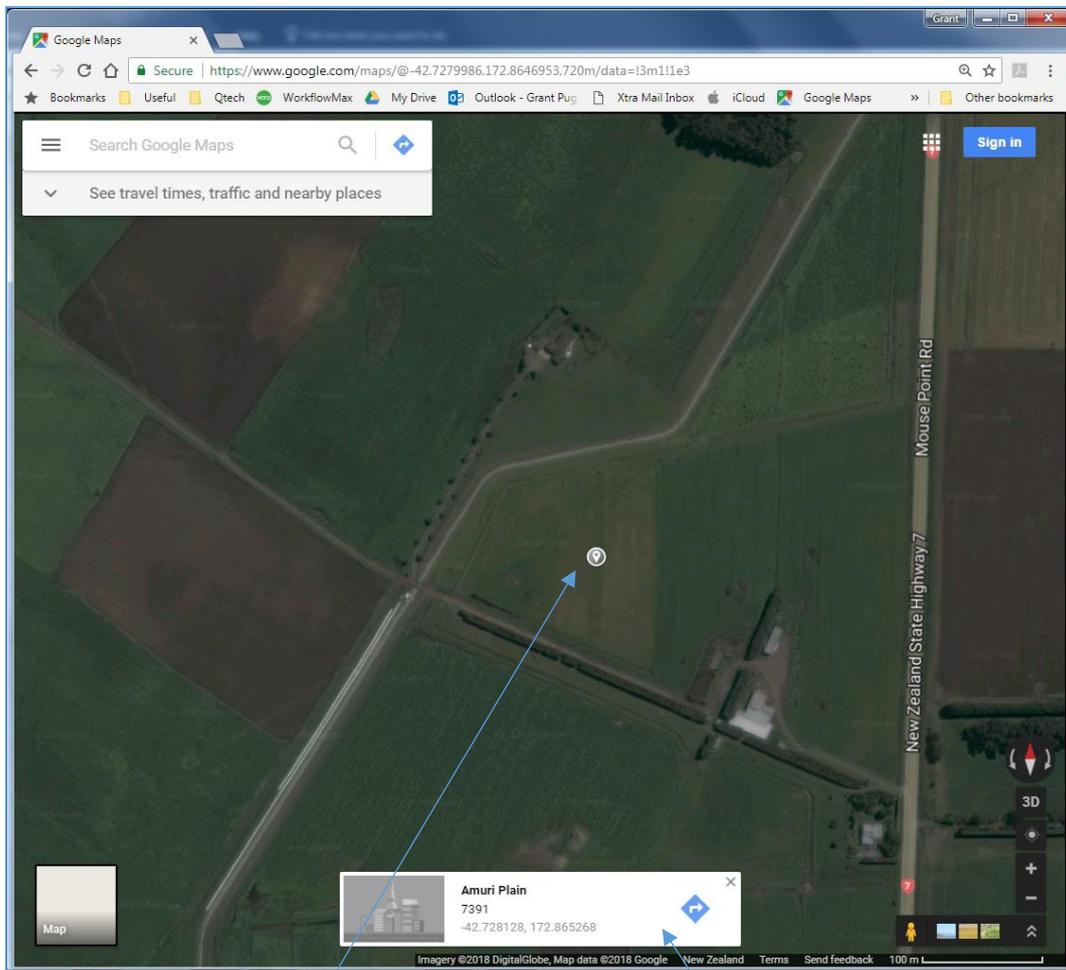


Figure 2

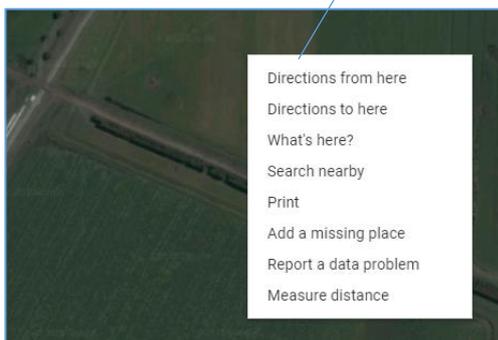


Figure 3

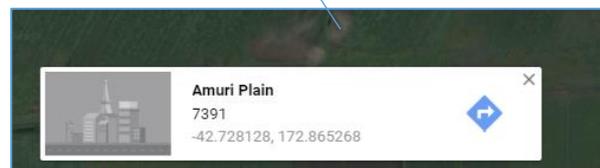


Figure 4

A small pin icon will appear on the map along with a panel that appears at the bottom of the screen. Written in the panel is the GPS location. In this example: -42.728128 (latitude), 172.865268 (longitude). **Record this information and provide it to Water-Insight when applying for a FarmID.**

Method 2: Using a Smartphone

Use this method if you are out and about on site. Make sure you have the google maps app installed on your smartphone. The example shown here is done using an iPhone.

Step 1 – Start google maps and locate the middle of the IPC block

Google maps shows your current position as a blue circle. If you happen to be in the middle of the block or very nearby then simply tap on the circle to drop a pin. Otherwise use google maps to navigate to the middle of the block using finger gestures or by typing in a starting location like the nearest town. Tap the small “layer” icon to switch between default view and satellite view if it helps to locate the area.

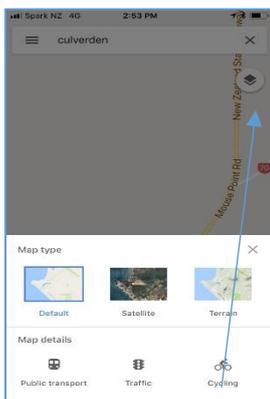


Figure 5

Tap layer icon to switch views

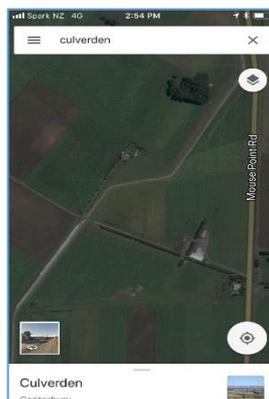


Figure 6

Pan and zoom or type to locate the IPC block

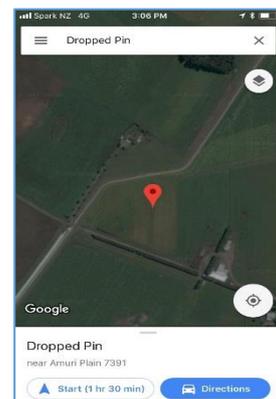


Figure 7

Tap on screen to drop pin

Step 2 – capture the GPS location

Once you have dropped a pin swipe up to reveal more details of the dropped pin. One line will show the GPS location. You can record it but if you are out and about and don't have a pen try txtng the location to yourself (to forward to Water-Insight at a later date).

Alternatively, if you have location sharing turned on then tap the “share” icon and share the GPS link via txt to yourself or Water-Insight.

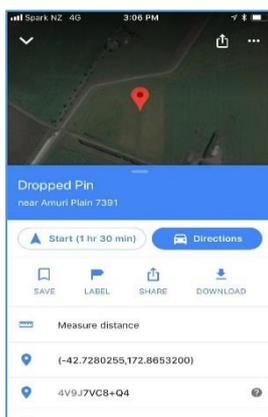


Figure 8

Swipe up or tap “more info” to show details

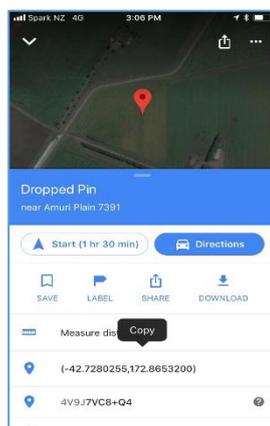


Figure 9

Tap and hold on gps location until copy option appears, tap copy

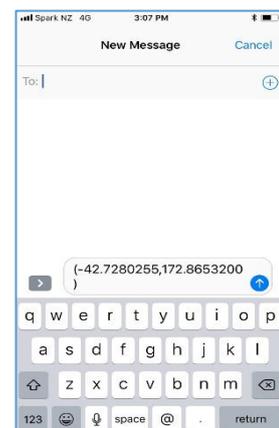


Figure 10

Switch apps to start a new txt message
Tap and hold to select paste into the message area

Fill in the to: header with your cellphone number and tap send.

Once you have the GPS location for a block. Record it and add it to the other information you need to prepare when applying for a FarmID.

For more information contact Water-Insight support@waterinsight.co.nz