The Answer is in the Soil: S-Map 101

The following questions were asked during our live webinar with Sam Carrick and Linda Lilburne but due to time restrictions, we were unable to answer these in the session.

How complete is digital capture of heritage data, expert knowledge etc. especially in areas where S-map mapping is not yet complete?

Most of the useful heritage data either has been or is in the process of being included in S-map. Unfortunately, many areas of NZ that have not yet been S-mapped have little useful heritage information.

Given the big discrepancies between S-map and LUC can the LUC classes be automatically updated/improved, or is there some question about the accuracy of S-map too?

S-map is of course limited by scale. The current national map of LUC is at a coarser-scale than S-map. Soil is an important factor in LUC. So yes, the LUC mapping can be improved by using S-map as well as finer scale DEM information (e.g. LIDAR)

Can I screen to show locations with specific soil properties, e.g. where are soils with a carbon concentration greater than 3%?

A GIS can be used to filter soil information according to a criteria of interest. This functionality is not currently available on S-map Online. Note that Carbon is strongly influenced by land use so is not available in S-map which focuses on the more static soil properties.

If you include class 3 in the LRI / S-map comparison do you still see the same level of disparity between the two datasets?

Yes, the boundary between classes 3 and 4 is as susceptible to error as the boundary between classes 2 and 3.

What does it take to get baseline information on some of the areas that don't currently have data on, how can this be added into this program? I notice that Northland has very little info, how can we populate that data?

The main requirement is funding! Most funding has come from regional councils, MPI and Envirolink grants. It is likely a small area near Kaipara will be done soon.

Is there a map in S-map Online with alternative LUCs to the NZLRI available?

So far, the Canterbury plains have been translated into an updated LUC. This has been provided to Environment Canterbury but is not available on S-map Online.

For Councils now making decisions following NPS-FM and regional plan changes, how important is getting regions s-mapped to provide accurate data for soil nutrient leaching capability and the influence on groundwater/surface water?

Very important.

So, should people rely more on S-map than LRI?

Yes - if they are wanting soil information. The fundamental soil layers which are derived from the LRI layer are considerably less accurate or useful.