

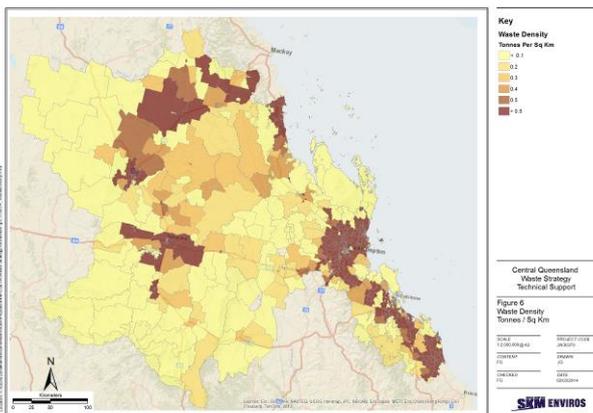
GIS Musings – Newsletter February 2015

InTouch GIS Service Ltd – providing Geographical Information Systems, Spatial Analysis and Mapping expertise
Issue 3



Welcome to the February 2015 edition of GIS Musings, the latest newsletter from InTouch GIS Services Ltd. The previous year has been a busy and exciting time for InTouch, not least the fact that InTouch GIS Services became a limited company, a decision made in light of continuing growth in the business and recognition that InTouch GIS Services is here to stay. There has been an interesting mix of large and small projects covering everything from mapping peat bogs in the Derbyshire Peak District to strategic waste management plans in Queensland Australia. I hope the following information is of interest to you and gives a few ideas of how geographic information can be used within your own business.

Strategic Waste Management Plan – Queensland Australia



As part of developing a waste management strategy for Queensland, Australia, InTouch GIS Services was commissioned by SKM Enviros (now Jacobs) to undertake a waste distribution and travel time analysis.

The first stage of this work identified locations of all waste and recycling points in the dispersed settlements in this part of Australia. An initial set of locations provided by the local municipalities gave a rough indication of locations but was not accurate enough for the intended use in travel time analysis. Surprisingly, Google Maps and Google Streetview provided enough detail in their imagery and coverage to identify the exact locations of community waste sites even in these remote areas of Australia.

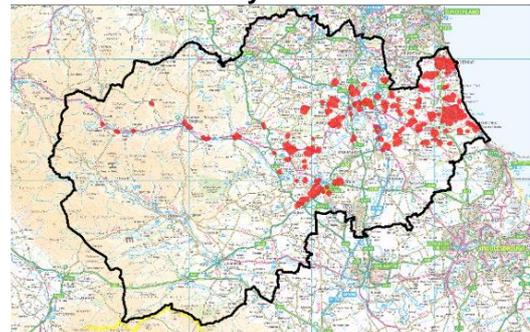
Once all waste sites had been identified and classified by waste type, travel time analysis was undertaken to identify 'catchment areas' and 'distance travelled' from proposed centralised processing facilities and localised 'bulking sites'. This enabled the feasibility of different waste management processing options to be calculated based on haulage costs and enabled a number of depot location scenarios to be modelled for optimum cost effective waste collection and processing.

Peat Erosion Assessments – Derbyshire Moors



To help inform '[Moors for the Future](#)' ongoing work in reducing and regenerating peat erosion in the Peak District national park, InTouch GIS Services was asked to map the distribution and extent of bare peat areas. Use was made of 8cm resolution aerial imagery taken in 2014 to undertake a multi-spectral analysis, automatically identifying all areas of bare peat. Identifying 'Target' areas where the ground cover type was known, the corresponding spectral signatures from the 'Red', 'Green' and 'Blue' channels of the aerial RGB imagery were identified. The 'spectral signatures' were used to identify corresponding areas across the whole of the imagery coverage, allowing bare peat and other ground cover classes to be identified over a large area and considerable detail.

Environmental Risk Assessment of Housing Assets – Durham County Council



Another in a series of environmental risk assessments undertaken in conjunction with Eden NE. This assessment was part of a large scale housing stock transfer involving over 19,500 properties spread across County Durham. The assessment identified environmental risks associated with previous industrial land, floods, subsidence and radon gas. Ninety areas were identified where housing and other land assessments may be potentially at risk and the costs calculated for any remediation work as part of a due diligence process to identify financial risk on behalf of the Council.



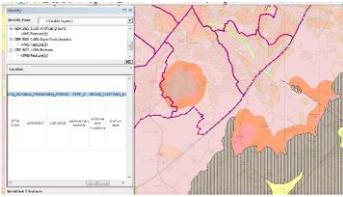
In addition, site assessments were made on 33 locations with development potential. Summary sheets were produced showing the environmental risk within 5 different categories and summarising the overall risk for site development.

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GIS Tips

WMS (Web Mapping Service) Feeds



Over the last few years, many organisations, particularly government agencies such as the Environment Agency and British Geological Survey, have provided access to their geographical data through the use of WMS feeds. These are basically links to the organisations own GIS datasets that are supplied 'on demand' at the point of use. It provides convenient access to large national datasets without having to download large volumes of data. Your own GIS software downloads the required data from the organisations own file servers, as and when it is needed ensuring you have access to the most up to date data.

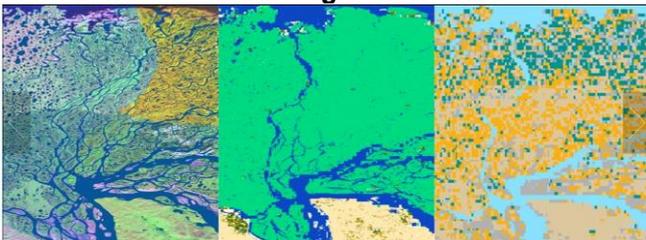
Public sector organisations are increasingly making their geographic information available free of charge for 'non-commercial use' through WMS feeds as part of the European [INSPIRE](#) initiative. This came into force in 2007 but it is only in the last couple of years that viable WMS data feeds have become available for practical use. A number of commercial organisations are also using WMS to provide data on a subscription basis such as those provided by [Getmapping](#).

Take a look at these links and have a go at integrating WMS into your GIS;

- [British Geological Survey](#) - Geology, Stability, Soils
- [Environment Agency](#) – Canals, Rivers, Coastal data and designated sites for England.
- [Scottish National Marine Plan](#) – information on coasts, seas and their management.

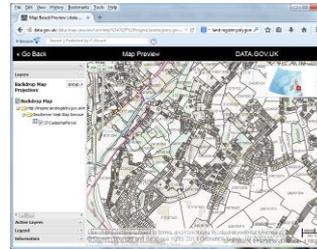
Some Interesting GIS datasets

GlobeLand30 – Global Vegetation Cover



2014 saw the release of [GlobeLand30](#), a global 30m resolution data set of vegetation cover for both 2000 and 2010. This has been created by the National Geomatics Center of China (NGCC) and is designed as a tool to look at national and regional vegetation change. It includes 10 different broad categories of land cover including cultivated land, grasslands and forests. The raster dataset is available for download as a series of raster tiles for the area you interested in.

Land Registry Polygons



The [Land Registry](#) now allows access to registry polygons index information either online through a web viewer, downloading of the GIS index polygons layer, or via a [WMS service](#). While this doesn't directly provide information on land ownership, it can help in identifying the land parcel identification numbers you need when requesting land ownership information from the Land Registry.

UK Government Datasets

[Data.gov.uk](#) lists over 23,000 different datasets that are available to the public, many relating to mapping and location. Many of these are also available under the open government license for free use. Here you will find links to the OS mapping data, environmental datasets, census data and many more.

Photography by InTouch



InTouch Photography has also been busy during 2014, providing photos for the [Chicago Blues Brothers](#) band, [Woodfest](#) in Hatfield Forest and product photography for [Re-considered](#) who are launching a range of bags made from recycled bicycle inner tubes. If you have an event you need photographing, do get in touch.

Getting in touch with InTouch GIS Services Ltd.

InTouch GIS provides a range of services to help you use your spatial data more effectively. Whether you are a consultancy offering GIS and mapping to your clients, or a user of spatial data in your own right, InTouch can help you make the most of your spatial data and GIS software. So for help and advice on all things spatial, get in touch with InTouch.

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