**Datasets used in the Ouseburn Evidence & Measures project**

|  |  |
| --- | --- |
| **Dataset name / description** | **Source** |
| Water Framework Directive (WFD) classifications for the waterbody between 2009 and 2013 | Environment Agency |
| NIRS (Incidence Reporting System)* level 1 & 2 included dates,
* level 3 & 4 also had grid refs and pollutant details.
 | Environment Agency / Some of these datasets are in the CaBA datasets |
| The Sewer network *Tip : ask for an area reasonably bigger than the waterbody you are interested in - this is because pumping stations mean that the sewer catchments are radically different to the surface waterbodies.  Try asking for the sewer catchment boundaries first?* | Northumbrian Water Group |
| Combined Sewage Overflows (CSOs) and Pumping Station Overflows (PSOs), including spill volumes, frequency, typical durations.  This is and excel pivot table.  *Tip: if you haven't worked with pivot tables before it might be worth arranging some advanced excel training.  Some consented discharge information is also in the CaBA datasets.  Because the typical ammonia and phosphate concentrations in household sewage is known, this information allows an estimate of the typical load of these chemicals from a particular CSO or PSO, and can be compared with agricultural runoff, landfill effluent, road runoff etc.* | Northumbrian Water Group |
| Properties more than 100m from a sewer | In the end we made this dataset ourselves running GIS queries on gazetteer data / urban areas.  In other areas, the water company may have this dataset to share. The Gazetteer came from Newcastle City Council (but the equivalent didn't exist at North Tyneside Council) |
| A programme of work (with locations and estimated dates) over the previous 5 years and the next 5 years.  For example, sewage treatment work upgrades, or work on problem CSOs or PSOs. | Northumbrian Water Group |
| A current list of surface water outfalls which have wrong connections - this list is the focus of regular meetings between Northumbrian Water and the Environment Agency | Northumbrian Water Group |
| Water Quality Monitoring data.  The Environment Agency sent a spreadsheet of over 54,000 data points (60 locations) relating to all the historical data for the monitoring - a raft of 10 measures being monitored, going back to 1973. | Environment Agency |
| Reasons for Failure data - in the Ouseburn there were nearly 500 data rows relating to 6 sampling points.  We used this at a summary level. | Environment Agency |
| Continuous Monitoring (Sondes) data - from the WISKI database.  You will also need the locations (grid refs) and the dates for which the loggers logged! | Environment Agency |
| Further water quality monitoring data at a site scale - these sites were operational during the winter and so showed spikes in ammonia owing to salt run-off.  Other sites, where spikes occur during a high rainfall event, may be linked to CSOs discharging at the time. | Environment Agency |
| Data relating to biology (diatoms, invertebrates and macrophytes) - this is associated with routine monitoring | Environment Agency |
| In the Ouseburn some bespoke phosphate monitoring had been done | Environment Agency |
| Landfill Sites.  These can be downloaded from Geostore.  This gives the map data, but not the waste type.  As there were only a few sites and our project turned out not to focus on landfill sites, we didn't need the waste type.  However, the "What's in My Backyard" website probably gives this level of detail | Geostore  |
| Fish data - on the Ouseburn only 4 species are monitored, at 1 location | Environment Agency |
| Obstruction location (waterfalls and weirs) | Environment Agency |
| Discharge consents - this needs to include dry weather flows.   | Environment Agency |
| Flow data - you may also need tipping bucket data, but we decided we didn't | Environment Agency |
| In the Ouseburn some special N:P ratio analysis was done, that would supersede the Aadvark Model | Environment Agency |
| Abstractions and Discharges - spreadsheets  | Northumbrian Water Group |
| A walk-over study that the Northumbrian Wildlife Trust had worked on, in partnership with the Environment Agency.  It was a way of recording issues and possible projects. | Environment Agency |
| Locations of closed mining sites / locations / discharges - previous mining sites are a big issue in the Tyne | Geostore / CaBA |
| There have been a number of academic studies on the Ouseburn over the years.  Particularly useful was a 2012 MSc by Matthew Rennie - we used the raw data (monitoring points and data).  Another paper was by A Baker in 2003 - here the data was not available electronically, so it was approximately digitised for this project | MSc papers / self digitised |
| SAGIS - this is an Environment Agency model.  We were supplied with 1km grids of the SAGIS P export co-efficient loads for a variety of sources (livestock, arable, septic tanks, urban runoff) | Environment Agency |
| Catchment Sensitive Farming - this dataset is in the CaBA package.  It shows places that have had a CSF type visit (but not a record of grant given).  The data source is Natural England. | CaBA / Natural England |
| SCIMAP. Standard deviation from the mean relative to the Tyne catchment but here scaled so thematic mapping is relative to the area within the plot.  The risk was calculated using weightings agreed with Durham Uni. | Northumbrian Water Group |
| Lower Level Super Ouput Areas - these were used for estimating population. They need to be matched up with census data, again from the Office for National Statistics - we used table PHP01 for the North East | Office for National Statistics |
| Planning & Development : areas allocated for Housing etc - Newcastle City Council were able to supply us with this electronically, data for North Tyneside was approximately digitised by hand | Newcastle City Council |