

Fig 2 - City of Stoke-on-Trent Land Use Plan

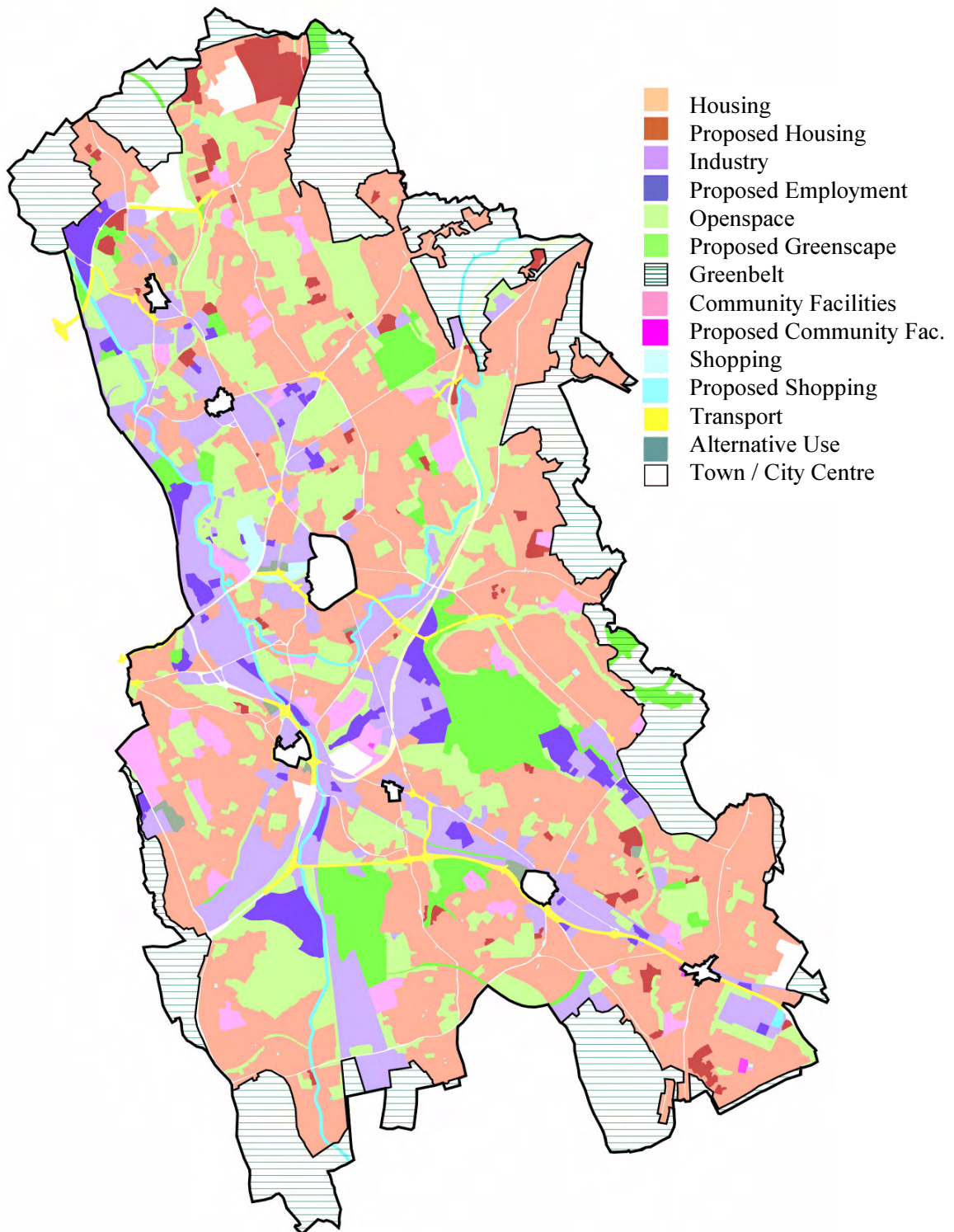


Fig 3 - Distribution of Nature Reserves and TPOs

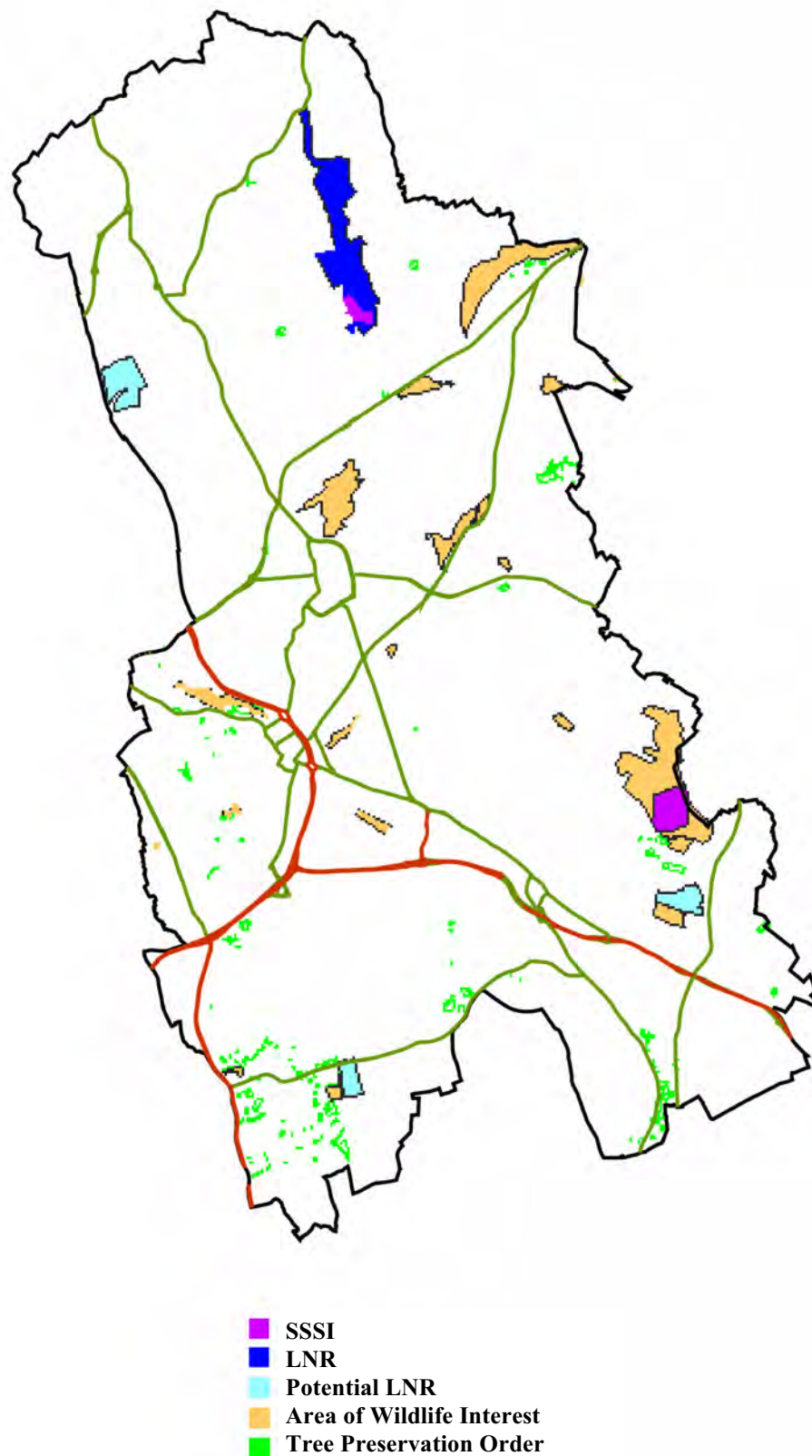


Fig 4 - Location of Listed Buildings and Ancient Monuments

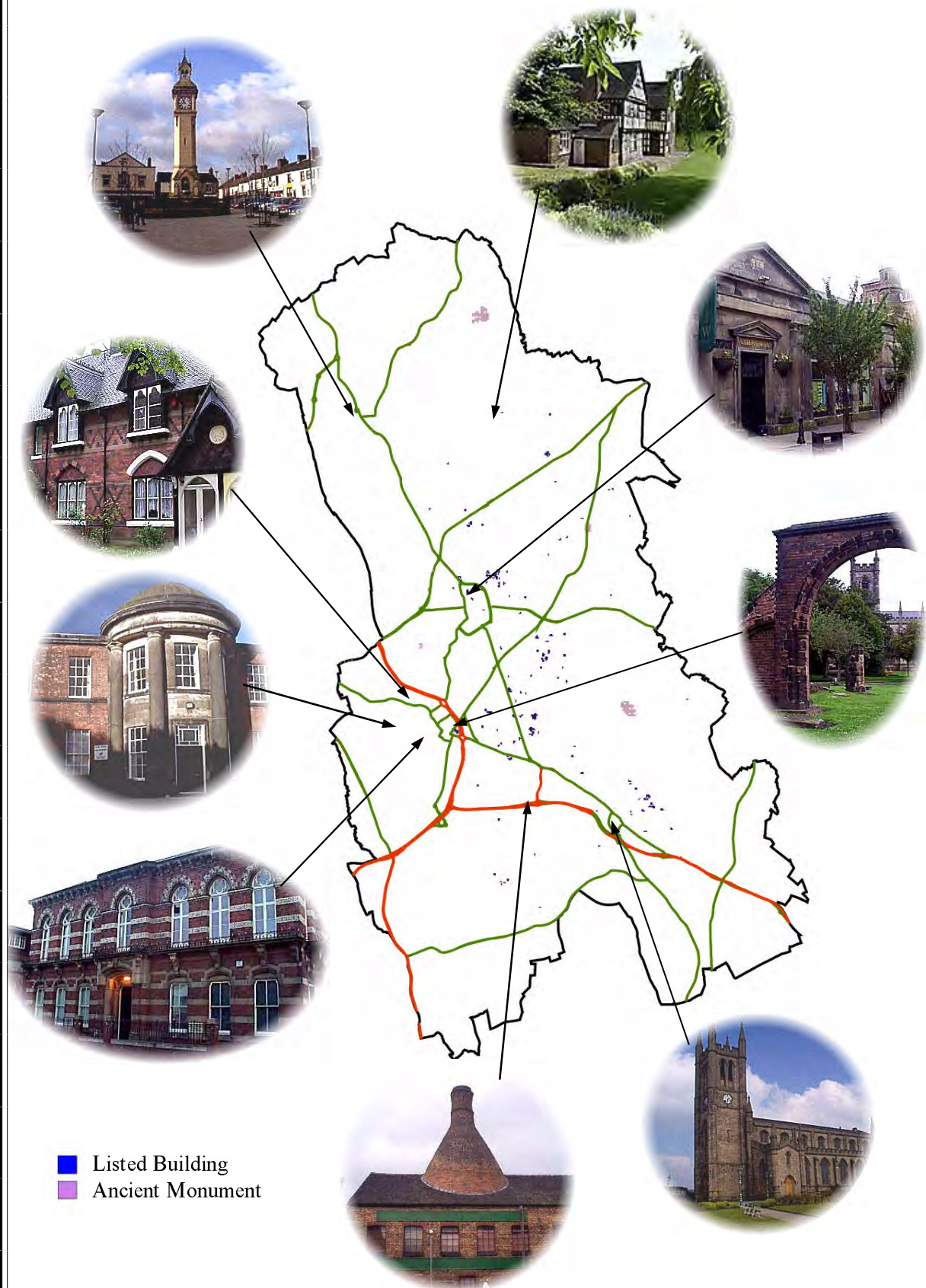


Fig 5 - Location of Source Protection Zones

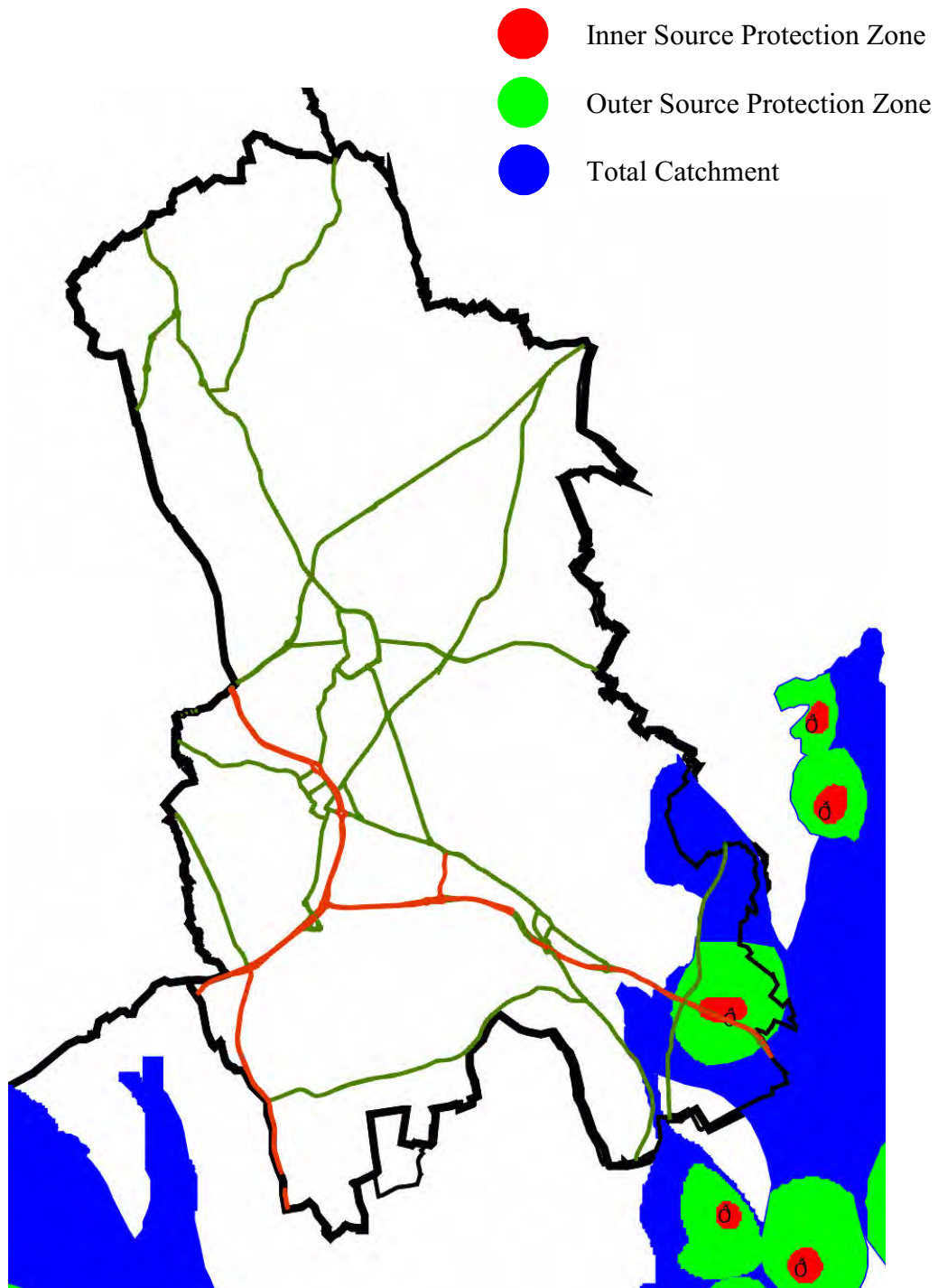


Fig 6 - RQOs 1998

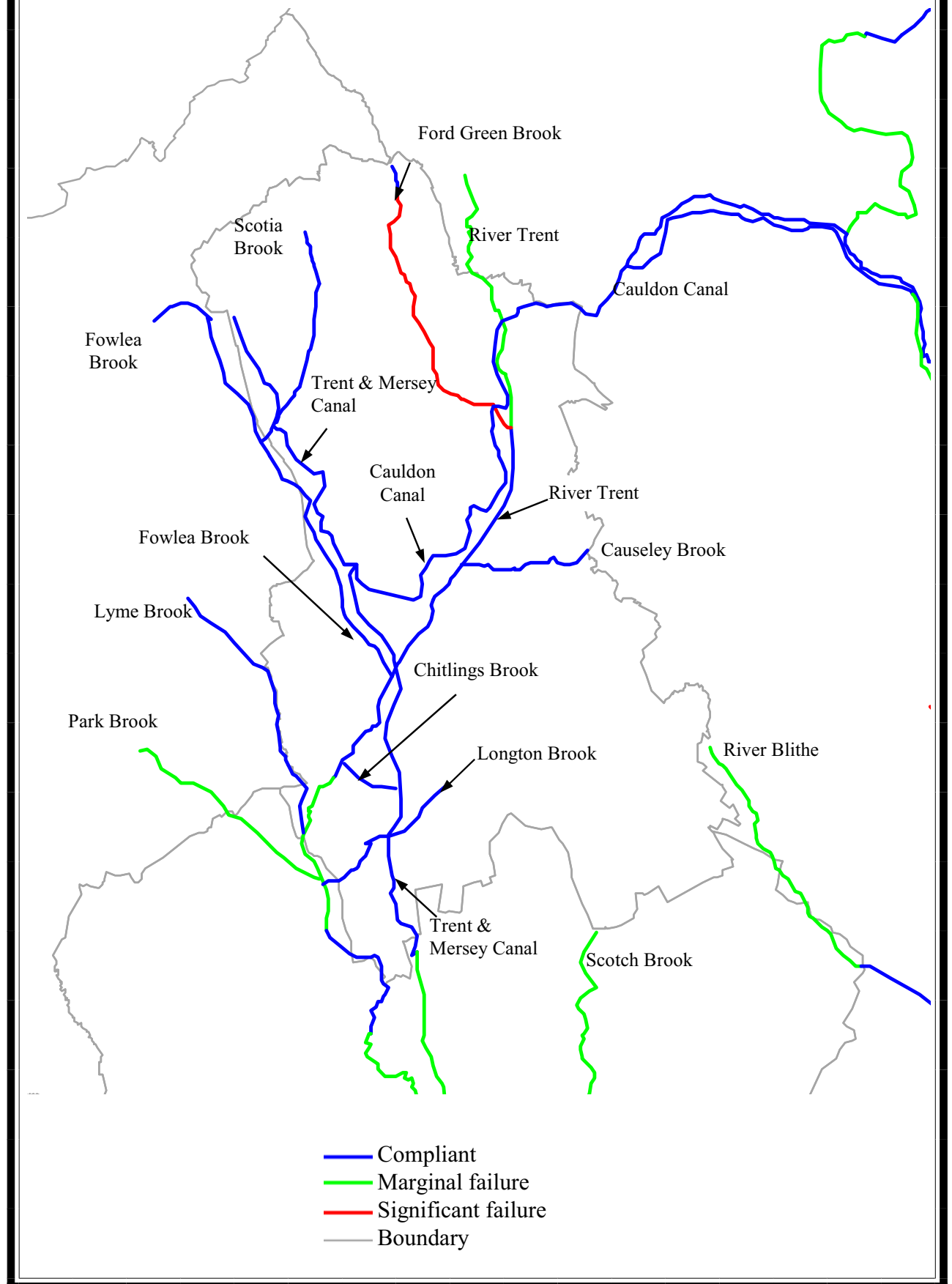


Fig 7 - GQA Chemistry

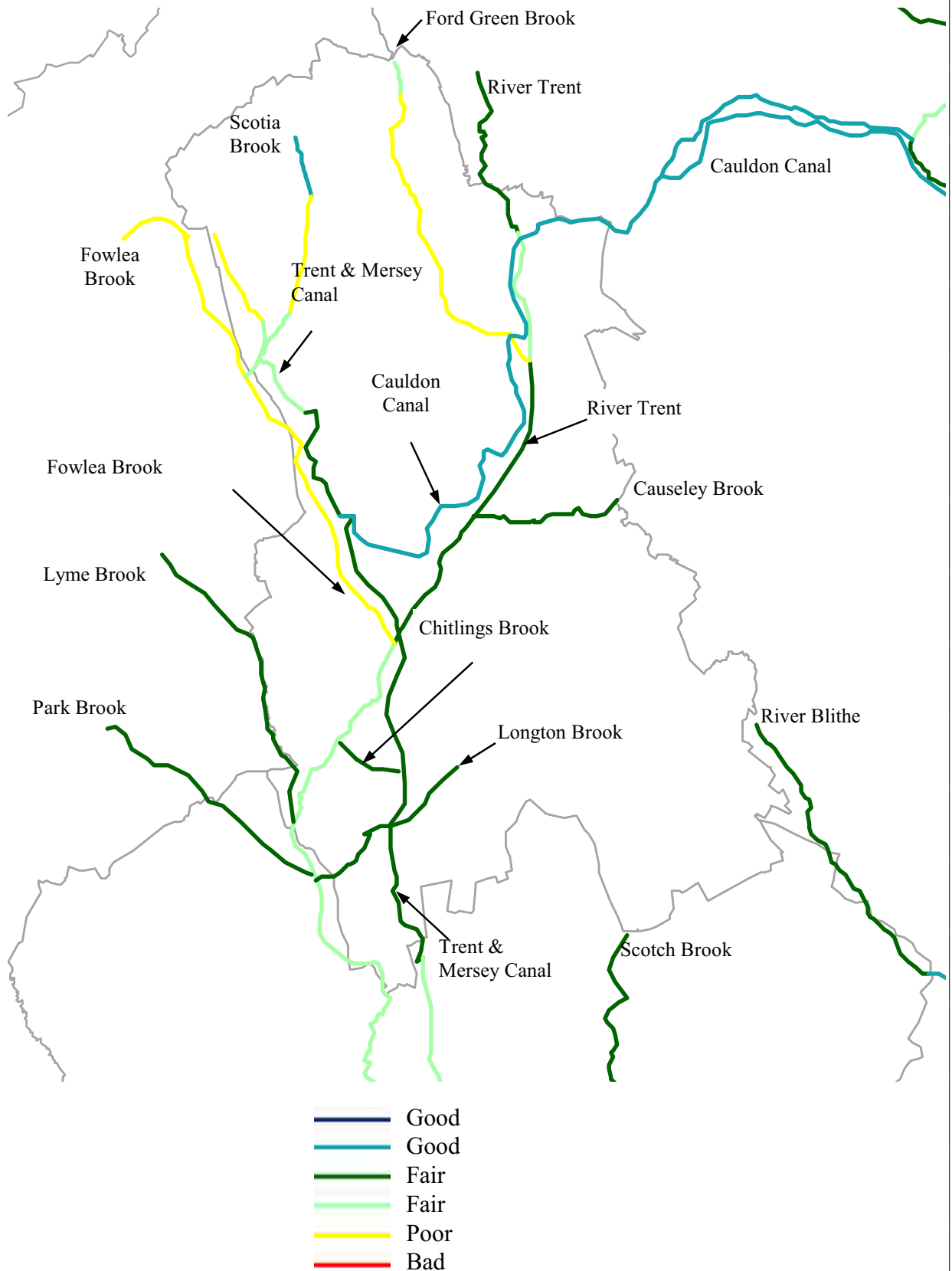


Fig 8 - GQA Biology

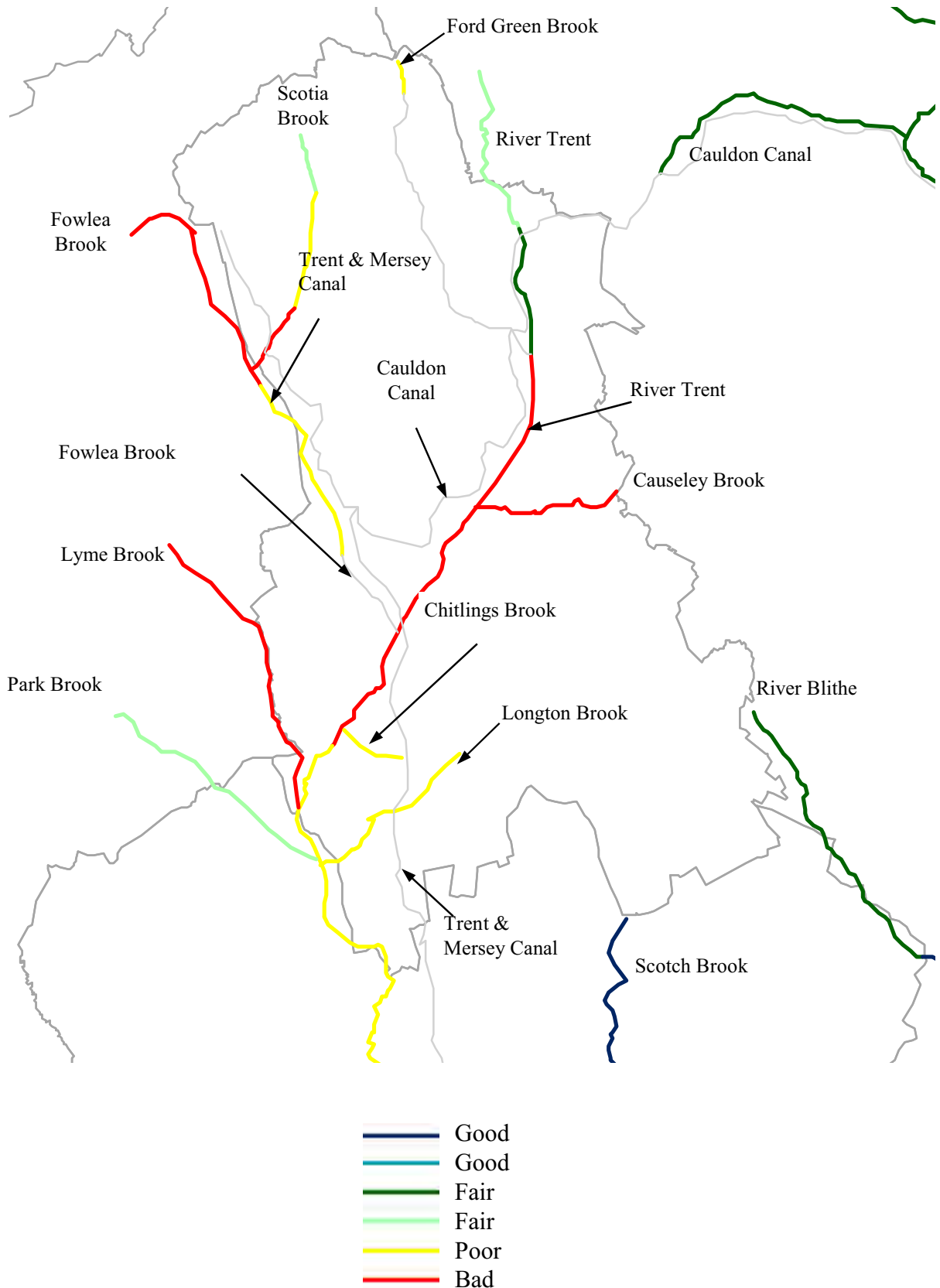


Fig 9 - Distribution of Abstraction and Discharge Points

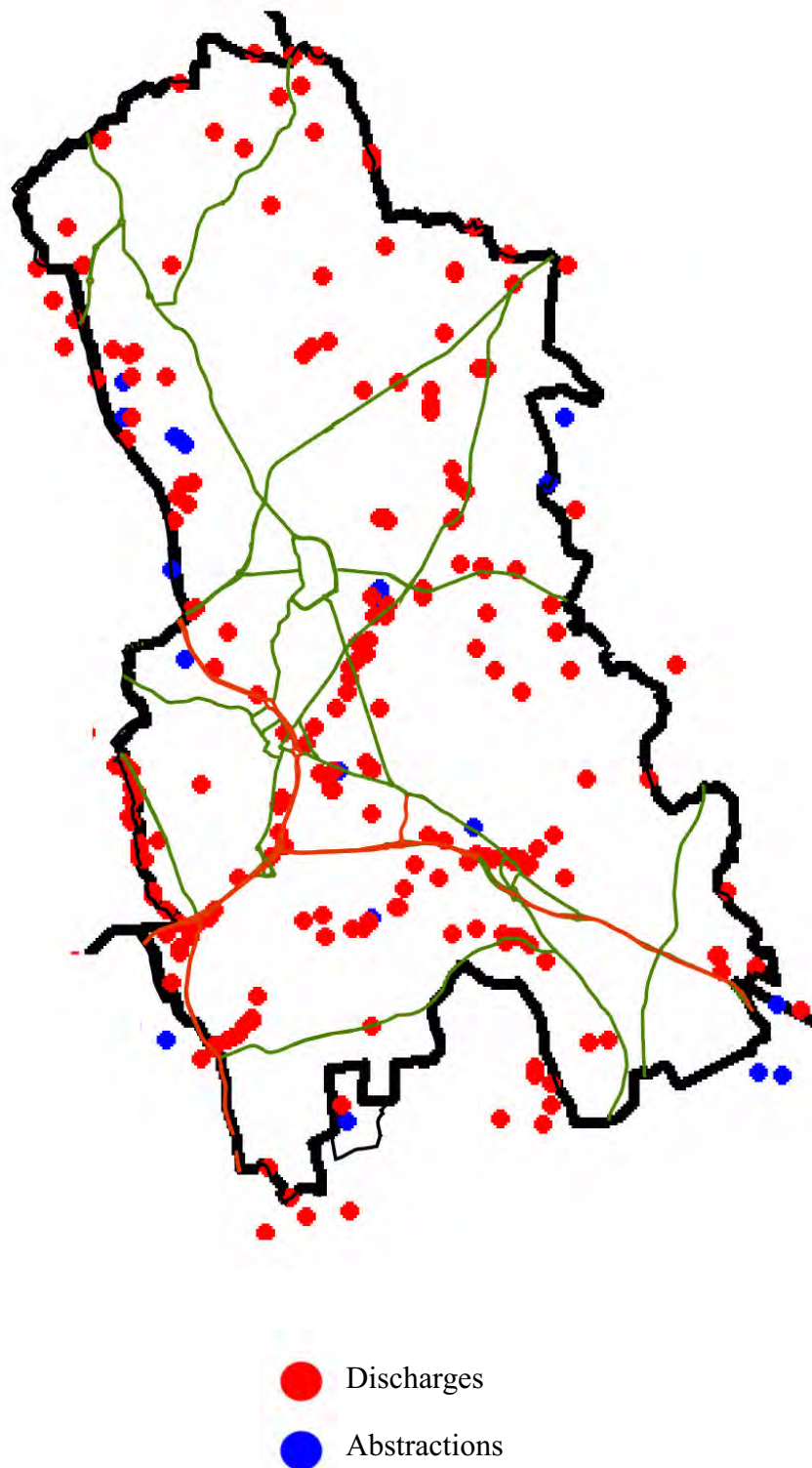


Fig 10 - Indicative Flood Plains



 Flood Plain

Fig 11 - Land Currently Owned or Leased by the City Council

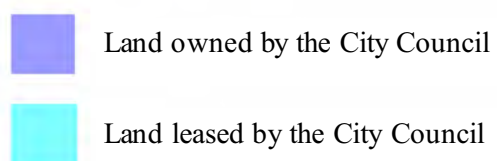
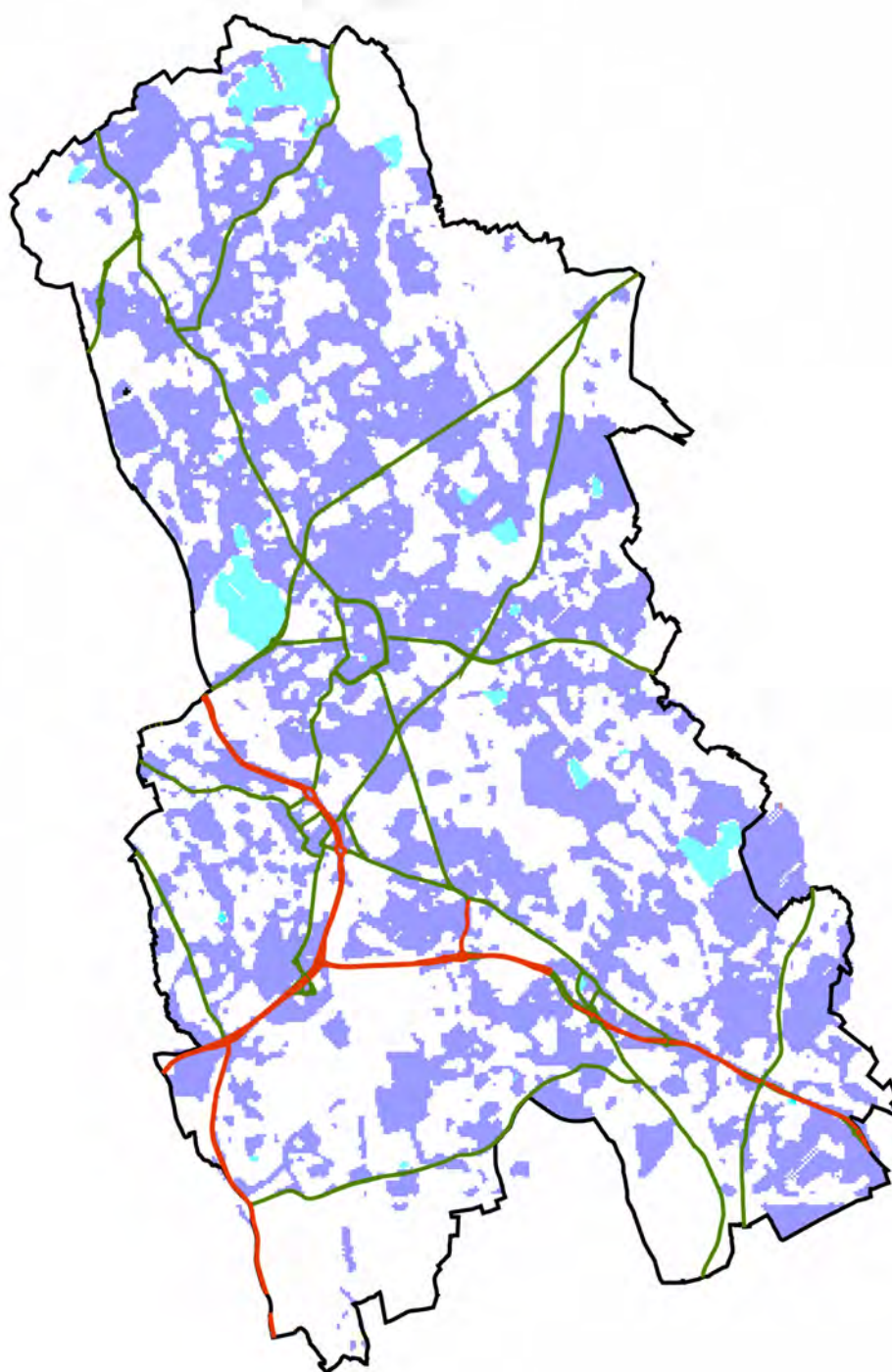
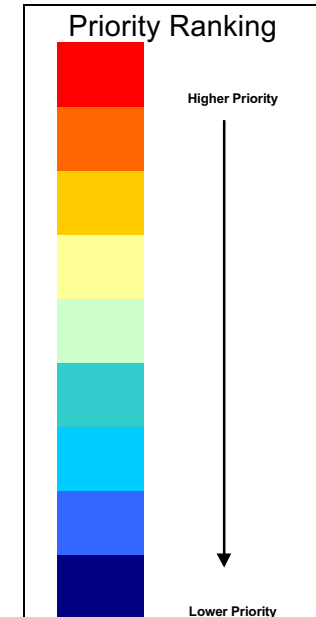


Figure 12 - Pathway Matrix

PATHWAY MATRIX v1.1			Explosion / Fire	Ingestion	Inhalation	Skin contact	Food Chain	Migration	Surface runoff / flooding	Phytotoxicity	Direct contact
Receptor Classes											
Class	Primary	Secondary									
A.1	Human	Schools / Nurseries									
A.2	Human	Residential with Gardens									
A.3	Human	Playgrounds / Parks / POS and other non food gardens									
A.4	Human	Allotments									
A.5	Human	Agricultural (including Woodland) Workplace									
A.6	Human	Residential without Gardens, Homes / hospitals									
A.7	Human	Industrial / commercial									
B.1	Controlled Waters - Protected Groundwater Zone (Permo-Triassic)	Public / Private Drinking Water Abstractions & Major Aquifers									
B.2	Controlled Surface Waters (Rivers & Streams)	Pollution Risk within Flood Plain or 100metres									
B.3	Vulnerable Groundwater	(eg. Minewaters & perched tables in fill.) Risk of Migration									
C.1	Protected Ecological Habitats	Flora									
C.2	Protected Ecological Habitats	Fauna									
D.1	Crops	Agriculture, commercial woodland, nurseries, gardens, allotments									
D.2	Livestock / animals	Cattle, fishing rights, shooting, domestic animals, kennels, stables.									
E.1	Buildings / Structures	Ancient Monuments									
E.2	Buildings / Structures	Risk of Damage rendering Unusable									



Glossary of Terms

Acute Exposure	Occurring over a short time, usually a few minutes or hours. An acute exposure can result in short term or long term health effects.
Aquifer	An underground geological formation, or group of formations, containing and transmitting water.
Adit	A horizontal or inclined tunnel for entering a mine from the surface.
AONB	Area of Outstanding Natural Beauty.
the Authority	Stoke-on-Trent City Council , “the City Council.”
Bell pit	Bell pits were one of the first methods of coal extraction. The name bell pit comes from the shape of the excavation, with a narrow vertical shaft sunk into the coal seam, which was then opened out into a small circular chamber. Little timber was used, so once the roof became unsafe, the pit was abandoned and another shaft sunk nearby. Coal was cut by using picks and shovels.
Brownfield site	A site that has previously been used and generally has been abandoned, where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the statutory definition of contaminated land in their current use.
BSI	British Standards Institution.
Carboniferous	A period in geological time, from 270 to 340 million years ago, when the rocks of this type were laid down. During the Carboniferous epoch the UK was covered by seas followed by forest and swamp, which caused the rocks deposited to have a high organic content.
Chronic Exposure	Occurring over a long period of time, several weeks, months or years.
Carcinogenic	Any substance that can cause or aggravate cancer.
Chemically Impaired Land	Land which contains pollutants but has not been determined as Contaminated Land under the statutory definition
CLEA	Contaminated Land Exposure Assessment.
Contaminated Land	Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances, in, on or under the land that: a) significant harm is being caused or there is a significant possibility of such harm being caused (as defined in the legislation); or b) pollution of controlled waters is being, or is likely to be caused.
Controlled waters	These include: a) inland waters (river, streams, underground streams, canals lakes and reservoirs), b) groundwaters, c) territorial waters, d) coastal waters.
Dermal	Referring to the skin. For example, dermal absorption means absorption through the skin.

DETR	Department of the Environment, Transport and the Regions.
Drift	An unconsolidated superficial deposit.
EA	Environment Agency.
Eco-system	An interacting biological system of the organisms of a particular habitat and the physical environment in which they live.
Endocrine Disrupting	Substance which disturbs secretions into the bloodstream.
Footrail	A horizontal or inclined tunnel for entering a mine from the surface.
FSA	Food Standards Agency.
Geomorphology	The science of surface landforms and their interpretation on the basis of geology and climate.
GIS	Geographical Information System.
GQA	General Quality Assessment
Groundwater	A body of water found beneath the Earth's surface, contained in aquifers and voids.
Heavy metals	Metallic elements with high atomic weights; (e.g., mercury, chromium, cadmium, arsenic, and lead); can damage living things at low concentrations and tend to accumulate in the food chain.
ICRCL	Interdepartmental Committee on Remediation of Contaminated Land. Consisting of representatives from the DETR and other Government Departments.
Ingestion	Swallowing (such as eating or drinking), chemicals in or on food, drink, utensils, cigarettes or hands. After ingestion, chemicals can be absorbed into the blood and distributed throughout the body or cause immediate / long term effects to tissue.
Inhalation	Breathing. Exposure may occur from inhaling contaminants because they can be deposited in the lungs, taken into the blood or both.
IPC	Integrated Pollution Control.
Leaching	As water trickles through soils or landfills, chemicals may be dissolved in it. The water can then carry these chemicals through soil to pollute nearby groundwater or surface water.
Local Agenda 21	In response to growing concern for our global environment a programme of action was agreed by governments around the world at the Earth Summit, (the United Nations Conference on Environment and Development) in Rio de Janeiro in 1992. One of the principal actions was called Local Agenda 21; its aim is to promote the concept of individuals and the local community taking some of the responsibility for the environment, rather than leaving it all to governments.

MAFF	Ministry for Agriculture, Farming and Fisheries.
Mutagenic	A substance that causes the genetic characteristics of an organism to change in such a way that future generations are permanently affected.
NNR	National Nature Reserve.
Outcrop	Rock that appears at, or near to the surface.
Oxidation	The chemical addition of oxygen to break down pollutants or organic waste; e.g., destruction of chemicals such as cyanides, phenols, and organic sulphur compounds in sewage by bacterial and chemical means.
Pathogenic	Microorganisms (.g., bacteria, viruses, or parasites) that can cause disease in humans, animals and plants.
Pathway	The physical course a chemical or pollutant takes from its source to the exposed organism.
PCU	Pollution Control Unit
Permeability	The property of permitting liquids or gases to pass through. A highly permeable soil, such as sand, allows a liquid to pass through quickly. Clay has a low
Perched water table	Zone of unpressurized water held above the natural water table by impermeable rock or sediment.
Permo-Triassic	A period in geological time, from 220 to 240 million years ago, when the rocks of this type were laid down. During the Permian and Triassic epochs the UK was a desert environment and consequently rocks of this period are commonly sandstones, mudstones and evaporates.
pH	An expression of the intensity of the basic or acid condition of a liquid; may range from 0 to 14, where 0 is the most acidic and 7 is neutral. Natural waters usually have a pH between 6.5 and 8.5.
Pollutant linkage	The relationship between a contaminant, a receptor and the pathway between them.
PPC	Pollution Prevention and Control.
Public Register	Register held by the Local Authority containing particulars relating to notices served in respect of Contaminated Land.
Putrescible waste	Organic wastes (including household refuse) which rot and produce methane gas and Carbon Dioxide.
Phytotoxic	Harmful to plants.
Ramsar site	A site protected under an international convention on protection of wetlands of international importance, especially as habitats for waterfowl.
Receptor	Person, waters, ecosystem or property type that could be affected by a contaminant. Also referred to as a "target."

Remediation	Remediation is defined, for the purpose the legislation, as being actions to determine the condition of the land in question, adjacent land or controlled waters, any cleanup works to minimise, prevent, remedy or mitigate effects of the pollution, and any monitoring works to review the site in future.
Remediation Notice	A notice specifying what the appropriate person is to do by way of remediation and the timescales within which it should be carried out.
Riparian	Pertaining to the banks of a water body.
Risk assessment	The study of a) the probability or frequency, of a hazard occurring; and b) the magnitude of the consequences
RQO	River Quality Objective
SAC	Special area of conservation
Significant Harm	Any harm which is determined to be significant in accordance with the statutory guidance.
Source	A substance in, on or under the ground with the ability to cause harm
Source protection zone	Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.
SPA	Special Protection Area for birds
Special site	Any contaminated land designated due to the presence of: waste acid tar lagoons, Oil refining, Explosives, Integrated pollution control sites or Nuclear sites. The Environment Agency is the enforcing authority for such sites.
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
Strata	Sheetlike layers of sedimentary rock.
Syncline	A fold that is convex downward, or that had such an attitude at some stage in its development.
Teratogenic	A substance capable of causing non hereditary birth defects.
TPO	Tree Preservation Order
Unconformity	A buried erosion surface separating two rock masses of different ages with younger rocks lying unconformably on older, previously eroded rocks



Acknowledgements

Many thanks to Steve Birks for the use of photographs from his website: www.thepotteries.org, and also to Alan Taylor and Sarah MacDonald at the Potteries Museum and Art Gallery for providing copies of photographs and paintings of past industrial activity in the city.

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