Job Description

GIS Analyst

Reports to	Head of Science & Partnerships
Responsible for	No direct reports (but potential to grow a team). Volunteers and contractors as required.
Location	Hybrid work at home and in the office based in Leatherhead with travel across the South East, particularly South London, Surrey and Kent.

The role

Healthy rivers are essential for people and nature but they are on the brink of collapse, under threat from pollution, climate change, habitat loss and water scarcity. Tackling these issues requires holistic understanding and effective partnership working.

SERT is seeking a highly competent Geographical Information Systems (GIS) professional with a passion for the natural environment to join our growing team. This is a role dedicated to data, evidence and GIS. The primary purpose of the position is to underpin the evidence-based approach taken by the Trust by managing, analysing and communicating spatial data to inform effective river catchment management. You will lead on developing opportunities for the Trust to work with others and develop partnership projects, by building relationships with others whose objectives align with our own, such as Local Authorities, Environmental NGOs, water companies etc.

You will have a good understanding of environmental data and how it can be used, experience with field data collection, tools for spatial analysis and will be able to incorporate and use remotely sensed data, e.g. drone footage and satellite data, to inform decisions relating to water and land management. You will be involved in a variety of projects, ranging from multi-year landscape scale research programmes to short-term local restoration projects. This will require you to work on defined tasks as well as taking the initiative to identify further opportunities in which GIS-based analysis, data collation and data visualisation could be used to enhance and support projects and funding applications.

About the team

The Science and Partnerships Team is at the heart of being able to achieve our vision of 'Healthy, thriving rivers for people & wildlife in the south east of England'. We bring together groups of stakeholders and members of the community to take a catchment based approach (CaBA) in understanding their local river, identifying issues by spatial data analysis, that are impacting rivers and catchments, and working together to find and implement solutions that will improve the health of the water environment.

Key duties & responsibilities (and approximate proportion of time)

1. Data Coordination and Management (20%)

1.1. Develop and coordinate spatial databases for the Trust and its trading subsidiary;

1.2. Be responsible for holding and maintaining datasets for the Trust, its partnerships and trading arm, including data assurance and quality control;

1.3. Be responsible for the management of all data and software licences.

2. Spatial Analysis and Data Presentation to Support Environmental Decisions (50%)

2.1. Work closely with colleagues to identify opportunities for spatial data analyses bringing innovative approaches which will enhance the understanding of environmental issues and their solutions;

2.2. Collect, source, process and analyse data from a variety of sources (e.g. topographic, Lidar, open source, government, citizen science) to support evidence-based decision making and inform catchment management priorities, e.g. targeting measures to improve water quality, water resources, habitat restoration and natural flood management;

2.3. Support staff and the Trust's Catchment Partnerships in spatial data analysis and presentation;

2.4. Support staff in stakeholder and partner workshops to collect, collate, present, analyse and refine environmental information to facilitate decision making;

2.5. Support the Trust to take a Natural Capital approach, supporting the creation of decision-making tools and evidence, such as risk and opportunity maps for water resources, biodiversity and other ecosystem functions;

2.6. Be responsible for effective presentation and communication of spatial data and facilitate its interpretation, including high quality visual outputs to support stakeholder engagement and decision making.

3. Project and GIS Function Development (30%)

3.1. Lead on the development of GIS and data led opportunities for the Trust, and its trading arm, to work with others and develop project opportunities that deliver benefits to the environment;

3.2. Contribute to the development of projects and funding applications;

3.3. Support colleagues in the development of their own GIS and data management capabilities;

3.4. Attend relevant training, workshops, meetings and conferences on behalf of the Trust to share knowledge and best practice in GIS and data management.

Person specification

Please keep this list of competencies in mind, together with the Trust's core values when completing your application. Knowledge, experience, skills and aptitudes will be assessed through the application process and at interview.

Requirements	Essential	Desirable
Training & Experience		
At least degree level qualification in a relevant field, e.g. GIS, Geography, Environmental Science or equivalent professional work experience	X	
Higher degree involving GIS or at least two year's work experience in GIS	X	
A good level of knowledge and understanding of environmental, ecological and topographic datasets relevant to catchment management and/or hydrology	X	
A good understanding of natural capital, ecosystem services and nature based solutions, including multiple benefits, value, risk and uncertainties		X
Knowledge of topographic surveying or willingness to learn		X
Competent in processing remotely sensed datasets for GIS analysis		X
A good understanding of statistical analysis and/or software e.g. R, Minitab		X

Experience with spatial modelling tools including for example hydrology, habitat connectivity, ecosystem services assessments e.g. SCIMAP, FME, Arc ModelBuilder		X
Experience of citizen science monitoring, including design and use of data		X
Experience of using programming languages, e.g. Python, R, including for data processing or visualisation.		X
Experience of working in partnership with a range of organisations and sectors		X
Experience in field data collection and survey design, e.g. Survey123		X
Track record of successful project delivery and meeting funders' requirements	X	
Track record of successful funding applications		X
Knowledge & Understanding		
Knowledge of the objectives, drivers and funding mechanisms of external stakeholders: water companies, local authorities, environmental NGOs		X
A good level of knowledge and understanding of river ecosystem function		X
Knowledge of the issues faced by rivers and the water environment		X
Skills & Personal Attributes		
Advanced desktop and online GIS skills (predominantly ESRI ArcPro/Desktop, ArcOnline)	X	
Ability to overcome technical GIS problems using own initiative	X	
A keen interest in the environment	X	
Excellent IT skills, including MS Office	X	
Strong analytic skills in reviewing and synthesising data and evidence	X	
Skilled in clearly presenting spatial data and analysis in an engaging way to a range of audiences, e.g. Arc StoryMaps	X	
Excellent data management skills including relational databases	X	
Excellent organisational skills and able to work to tight deadlines	X	
Proven ability to work in a team with a range of partners	X	
Excellent communication skills for both internal and external audiences	X	
Genuine enthusiasm, upbeat and passionate	X	
Ability to use your initiative and collaborate with others	X	
Personable with networking skills	X	
Willingness to learn and turn hand to whatever is required	X	
Miscellaneous		
Full driving licence and access to private (or hire) vehicle for work purposes		X
Ability to work occasional evenings and weekends		X
Suitable, safe home working environment	X	
Willingness to travel within the UK	X	