

RIVER CONDITION PREDICTION WITH FRIENDS OF THE RIVER KELVIN

SCAN
HERE!



From Scotland's **Most Polluted River** to a Cleaner Future.



PROBLEM STATEMENT

The River Kelvin faces **increasing environmental pressures** from urban runoff, littering, and unpredictable weather patterns, leading to **reduced water quality and a decline in biodiversity**.

Existing monitoring data is often complex and not easily understood by the public, limiting community awareness and engagement. Without accessible, predictive, and actionable information, **both public safety and the health of the surrounding ecosystem remain at risk**.

GOALS

- **Simplify** river condition data
- **Raise public awareness** on river pollution
- **Engage community** through storytelling
- Ensure **sustainability** with low-cost solutions



CONSTRAINTS

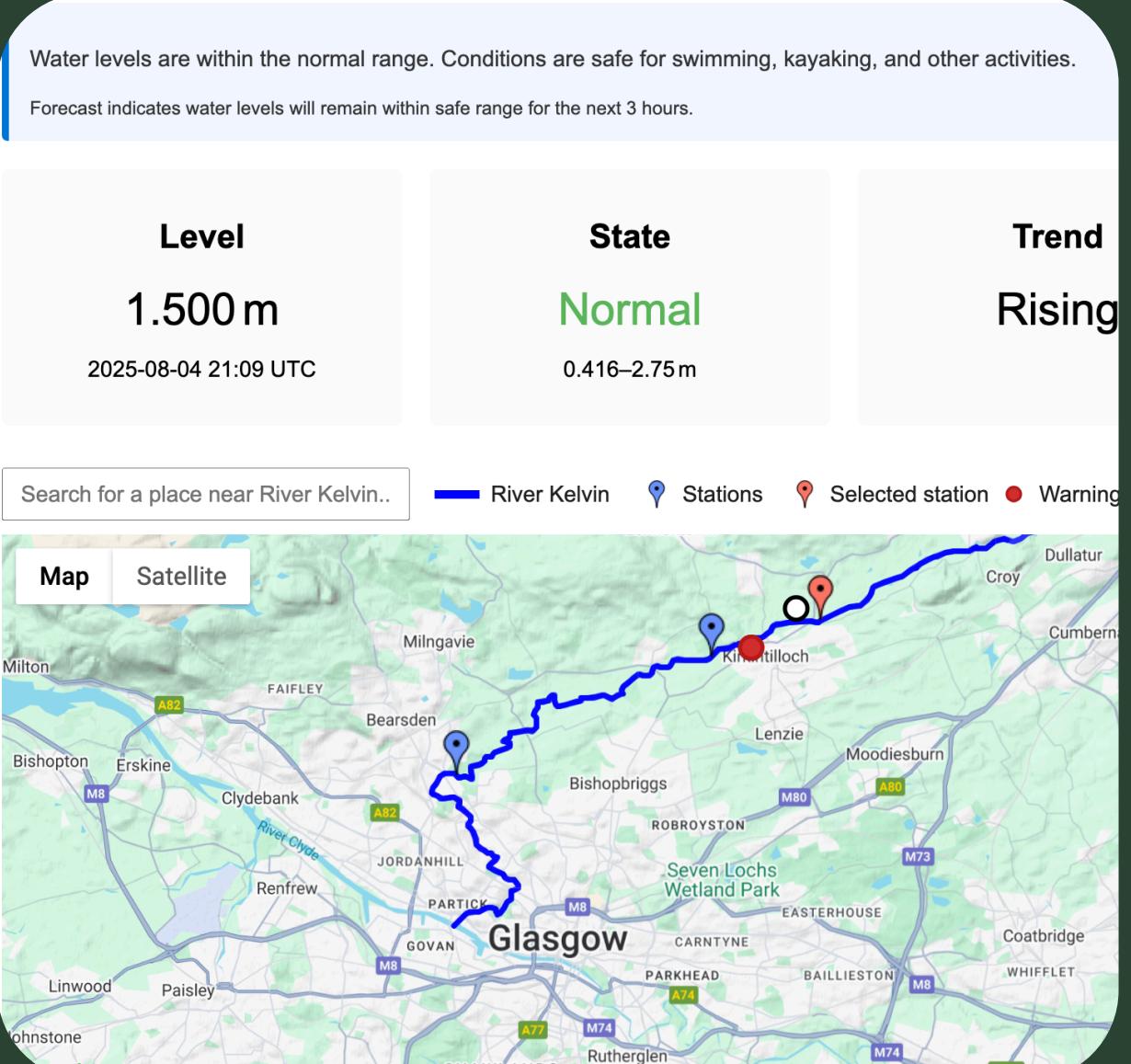
- **Budget & Sustainability** – No funding; solutions must be low-cost and easy to maintain.
- **Data Limitations** – Data is limited, technical, and not real-time.
- **Public Engagement** – Low awareness; info must be engaging and easy to understand.

CONCLUSION

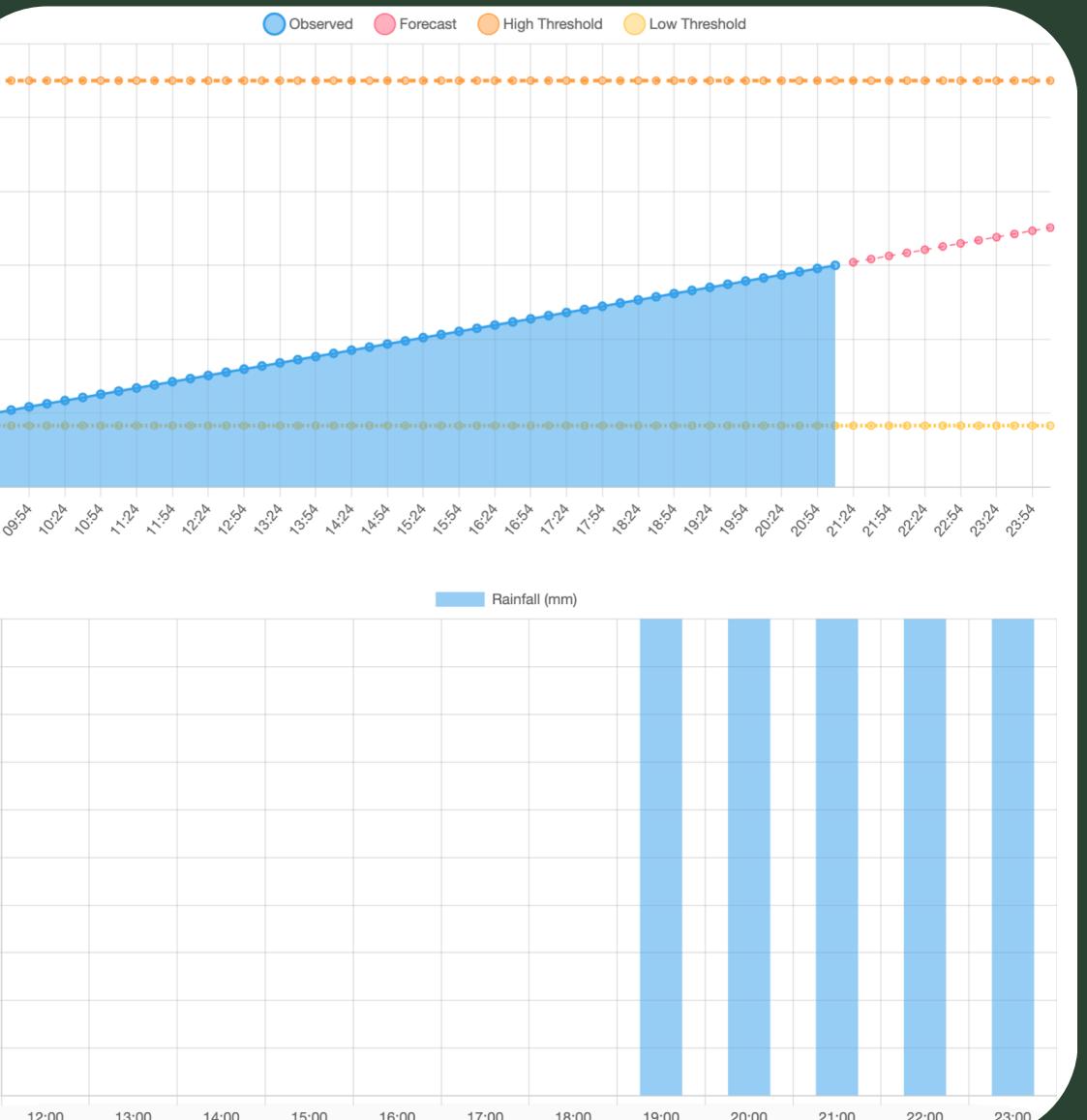
Our project bridges the gap between scientific river data and public understanding by combining storytelling, accessible visualisation, and community interaction — aiming to make the River Kelvin **safer, healthier, and more appreciated** by all.



DASHBOARD



FORECAST



OUR SOLUTION

Simplifying river condition forecasting by combining SEPA data, weather information, and user-contributed observations. Using AI models and intuitive visualisations, we deliver real-time and predictive insights on river safety and pollution trends.

1. Collect Data

- SEPA river flow & water quality data
- Live weather data (rainfall, temperature)
- Community-submitted observations (photos, reports)



2. Process & Analyse

- AI models forecast river conditions and pollution risks
- Predictions adjusted using community feedback



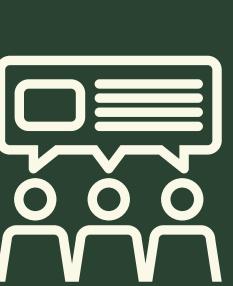
3. Visualise & Share

- Mobile-friendly dashboard with river health score, forecasts, and safety tips
- Alerts sent to subscribed users and partner organisations



4. Act & Improve

- Authorities & volunteers act on alerts
- Ongoing community feedback improves future predictions



COMMUNITY

Feed Kelvin

Feed Kelvin Your Stories & Knowledge

Activity

Insert Image

Choose file | No file chosen

Weather

Flow Rate (m³/s)

How you can help!

Chemical Data

e.g. pH, dissolved oxygen, etc.

How you can help!

Submit

Thanks!

Leaderboard

Name	No. of Submissions
Alex	12

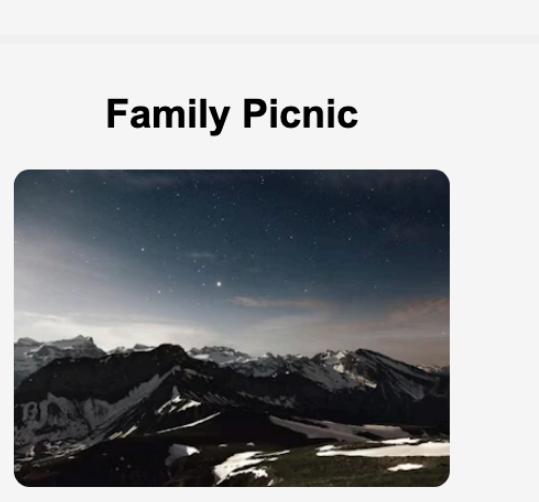
Community Stories

Discover experiences and adventures along the River Kelvin

+ Share Your Story



In the early morning, I explored the banks of the Kelvin, I found a variety of wildflowers and a peaceful escape in the heart of the city.



We spent a sunny afternoon by the river, sharing food and laughter. The kids loved watching ducks and skipping stones across the water.



Joining a local group, I helped collect samples for research. I learned so much and contribute to the health of our environment.