





Project Background

 Mid Calder Catchment- Historically a mill town, heavily modified rivers. Industrialised in many areas. Victorian Mill relics still present. Steep sided valleys and prone to flooding

Japanese Knotweed

- Introduced in the Victorian era as an ornamental plant. Has since become a category 9 invasive species. Found close to watercourses.

Calder Greening

- A restoration and regeneration project that began in 2019. With the aim to regenerate and reconnect the green corridor of riparian habitats





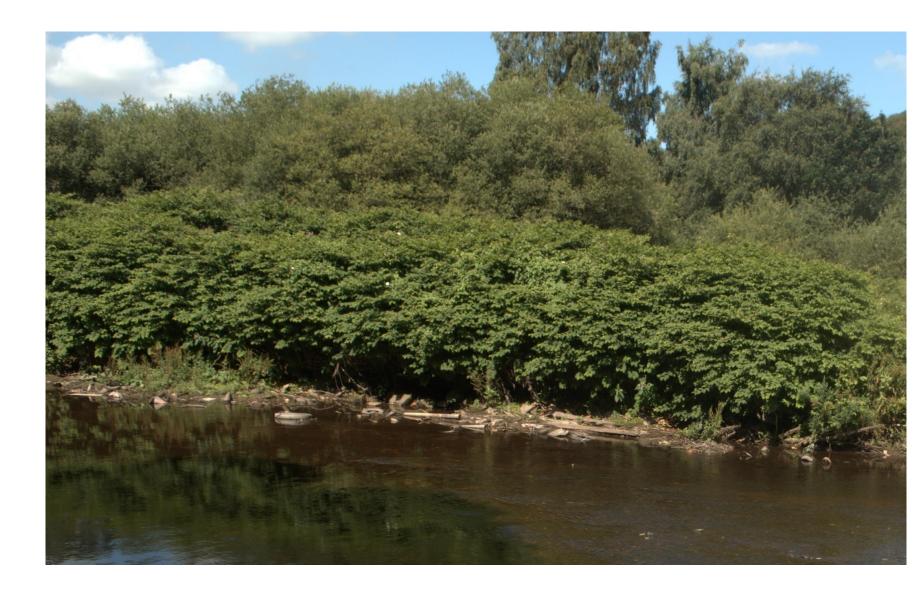
Post Japanese Knotweed Treatment

Bare ground, close to river. High erosion or secondary infestation by Himalayan Balsam

Restoration issues

We were seeing heavy erosion in post treatment areas, reduced species diversity and potentially reduced flora resilience for a possibly changing climate

Combining Forces!





High Royd Water Facility

- The 'perfect' site
 - Removed from public access.
 - Large amounts of JKW
 - Close to the river bank.
 - Continued access to assess.





What to test

- Activated Carbon (AC)
 - Activated Carbon is a refined carbon sediment. It is used industrially to remove pollutants from water bodies or in air filters.
- Grass Seed
 A bespoke seed mix for the Calder valley
- Riparian Seed Mix
 A bespoke seed mix for the Calder valley
- Plug Plants
 A bespoke species mix for the Calder valley
- Erosion Control Blanket (ECB)
 Coconut husk woven blanket to reduce erosion





The Plan

4 Sections

Section 1: No Treatment and no AC

Section 2: No Treatment and AC

Section 3: Treatment and no AC

Section 4: Treatment and AC

5 restoration methods in each section.

- 1. Control (no restoration)
- 2.ECB + Grass Seed
- 3. ECB + Riparian Seed
- 4. ECB + Plug Plants.
- 5. ECB only





Installation





The results so far









