National Trust

Clear Lakes 2020

Tackling catchment wide issues that impact on biodiversity

National Trust

Multiple objective partnership projects

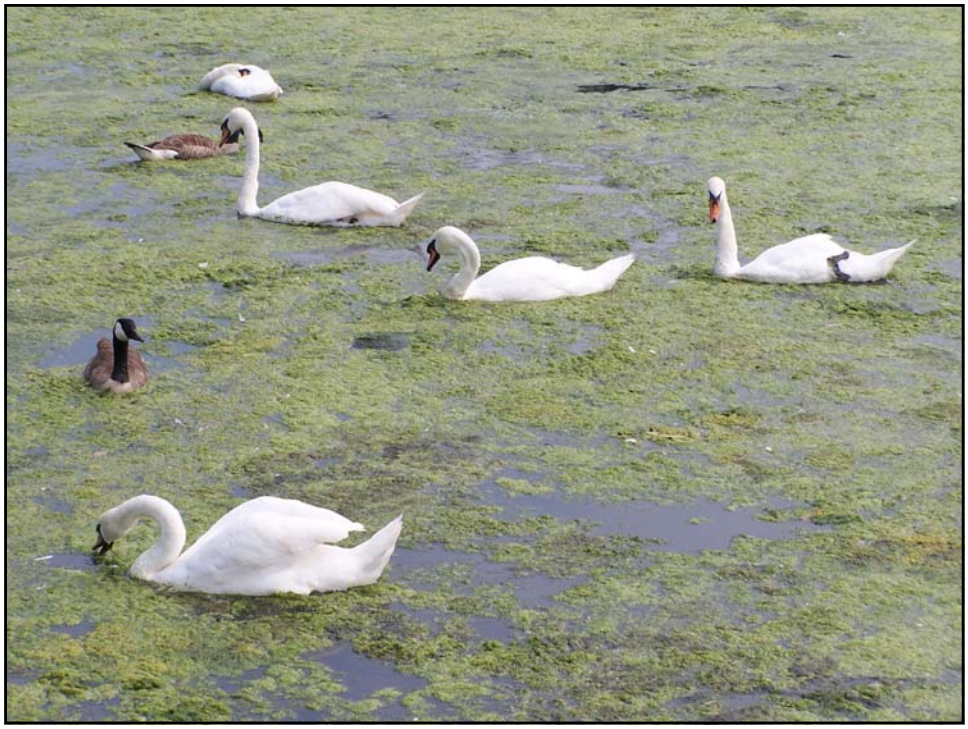
What biodiversity?

- Kedleston – Mercaston & Markeaton Brooks Project (white-clawed crayfish; 2 SSSIs; *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; buffer wetlands)
- Hardwick -Doe Lea Project (Water vole; buffer wetlands)
- Clumber – Poulter Project (Welbeck and Clumber SSSIs).

Issues

- Land Management especially the impacts of farming = diffuse water pollution from agriculture [sediments; nutrients; pesticides].
- Urban drainage = hard surface run-off.
- Industrial pollution = point source.
- Climate change
- Local flooding

= WATER QUALITY AND QUANTITY



Funding and activity to date:

- Catchment modelling
- River corridor survey
- Fish surveys
- Crayfish survey
- Bat survey
- Management planning
- Farm advice
- Soil management planning
- Environmental Stewardship
- Investigational Study
- Water quality monitoring
- Habitat management

- DCC CAMP/EA Flood defence funding.
- NT general funds.
- Natural England.
- DEFRA Associate ECSFDI grants
- EA-Yorkshire RFDC
- SITA Trust

Ca. £450k 2004-13

How has/will biodiversity benefit?

- Habitat and species survey data.
- SSSI condition.
- Increase in *Ranunculus fluitans* habitat and associated species.
- Enhanced crayfish, water vole, otter and bat populations.
- Ecological balance restored to rivers and man-made lakes.
- Creation of buffer wetlands.

Does it work?

- Monitoring?
- Baseline data.
- Understanding what's going on.
- Attributing benefits in complex, interacting systems.
- Long term.
- ELS/HLS measures –do *they* work?
- Voluntary approach vs. regulation.