

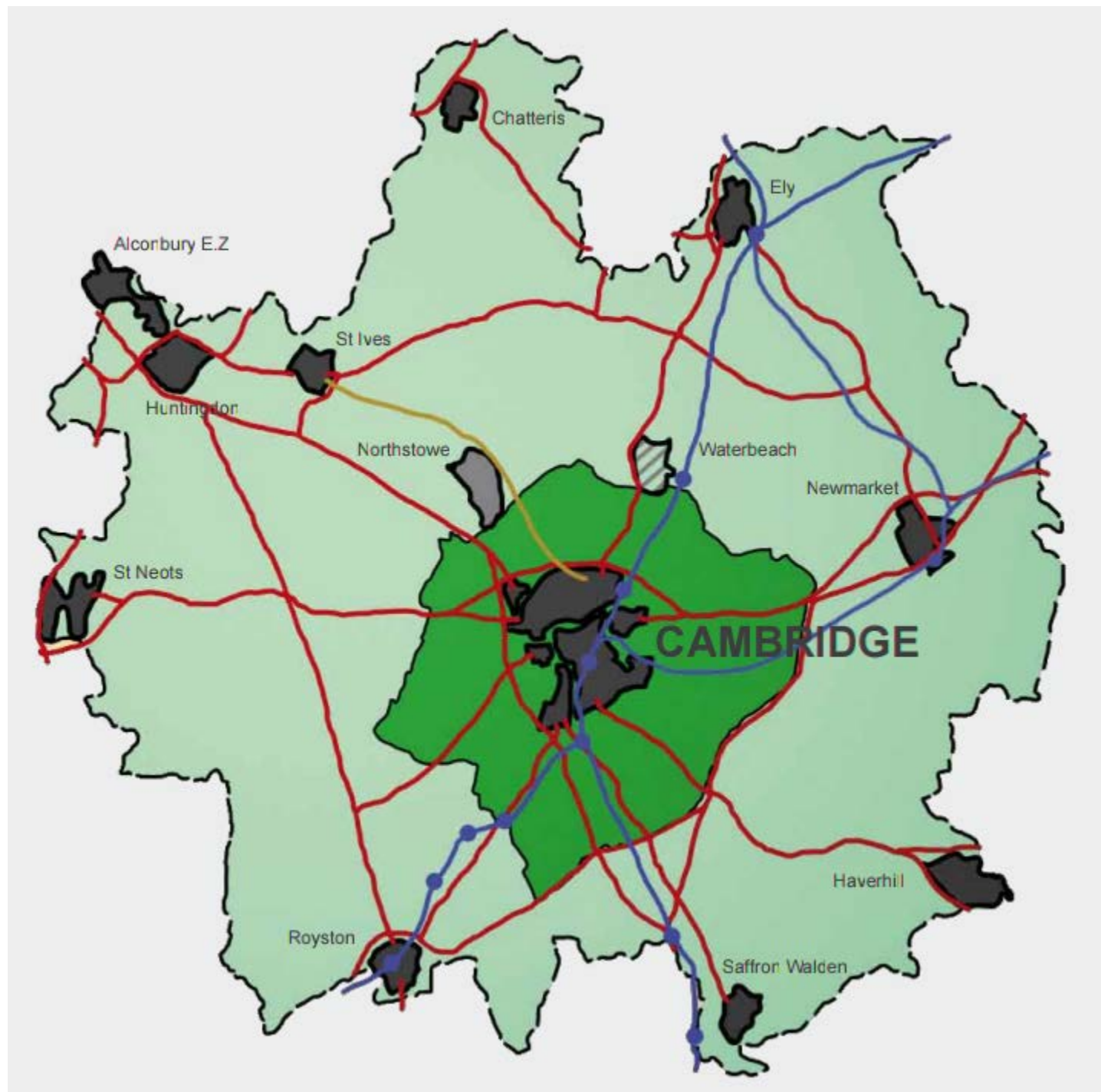
Agriculture and green spaces

Peter Landshoff

Conclusions from 2030 Vision

- The multi-functional role of the countryside needs to be recognised and low-grade land's potential for recreation and environmental enhancement exploited. This becomes increasingly important with increasing development of land for housing and business.
- Food security is a key issue. We have an increasing population yet we grow only 60% of our own food (and discard 20%)
- Agricultural production must be increased (cereal yields have not increased over the last 10 years); good agricultural land needs to be protected and the area's considerable agricultural science expertise harnessed for global benefit.
- Many urban dwellers with increasing access to the countryside do not feel 'connected' to the green environment and lack information about where they can go

Our environment contributes to our quality of life and enables business to attract highly-qualified staff against global competition.



Questions about our Green Belt

- Is it important for keeping Cambridge a compact city?
- Should we be willing to give up part of it because
 - It is of low quality
 - To allow biomedical research to expand
 - For business to expand
 - To build houses
 - To build a sports village

????



NPPF: Local planning authorities should set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure

Cambridge does well

The City's brooks and river, fens, water meadows/floodplains, pollarded willows, pocket woodlands and chalk grassland sites support a long list plants, bats, water voles, otters, fish and birds. Among the many landscape spaces within the City are

- Parker's Piece
- Christ's Pieces
- Byron's Pool LNR.
- Grantchester Meadows
- Sheep's Green and Coe Fen
- Midsummer Common
- Logan's Meadow and Stourbridge Common
- Coldham's Common

City Council proposing a supplementary planning document on spaces and movement

Saturday 13 January 2018

Centre for Mathematical Sciences, Wilberforce Road, Cambridge CB3 0WA

0900 Registration and coffee

0930 Welcome by meeting chair – Ros Aveling (Chair of Cambridge PPF)

0940 Introductory talks

Sharing spaces: Robert Myers (landscape designer)

Green spaces: Joel Carré (Cambridge City Council)

Movement: Charlene Rohr (RAND Europe)

Design: Kieran Perkins (5th Studio)

1050 Coffee

1110 Breakout groups - your views on what you have heard

1210 Report back and discussion – led by Lewis Herbert (Leader of Cambridge City Council)

Sign up on <https://www.eventbrite.co.uk/e/keeping-cambridge-special-tickets>

EU Water Framework Directive

The quality of all waterbodies (rivers, lakes and estuaries) must reach 'good ecological status' as soon as possible (with an absolute deadline of 2027).



- Water quality decreasing due to diffuse urban and agricultural pollution and ageing sewerage.
- Declining river flows and over-abstraction of aquifers exacerbated by the planned increase in development and by increasing agriculture yields.
- Fish numbers have declined, due to droughts, floods washing fish downstream, overfishing and poaching.

Invasive species – giant hogweed, Himalayan balsam, floating pennywort



Record height:
18 feet
Toxic to the skin



Huge plants
Seeds carried
downstream
Flowers edible



Depletes water
of oxygen
Grows from a
small fragment

Cam Catchment Partnership

Anglian Water
Cam Conservancy
Cam Valley Forum
Cambridge City Council
Cambridge Water

Cambridgeshire County Council
Environment Agency
Natural England
South Cambs District Council
Wildlife Trust

EXTRACT FROM 17-PAGE DOCUMENT

http://www.cambridgeppf.org/river/river_actions_2.10.14.pdf

- Re-naturalise riverbanks by the removal of metal sheet piles and the introduction of soft engineered solutions.
- Work with landowners to improve riparian habitats
- Support the survey and eradication of invasive non-native species.
- Increase fish passage around weirs.
- Support initiatives to enhance nature conservation along river corridors
- Establish better connectivity of green corridors

Agritech in Cambridge

Cambridge sits at the heart of a prime agricultural area and is home to prestigious life sciences and agritech campuses. It therefore has a unique opportunity to give world leadership to ensure food security for the ever-increasing population.

- The University has created a strategic initiative [Cambridge Global Food Security](#)
- Cambridge University is creating a [Cambridge Centre for Crop Sciences](#) in partnership with NIAB
- [Smithson Hill](#) propose to create a new park for agritech, on land adjacent to the Hinxton Genome Campus
- [Agritech East](#) drives innovation in agriculture by showcasing new research, technology and innovation
- The Greater Cambridge Greater Peterborough Local Enterprise Partnership has approved 65 SME agritech project proposals
- The aim of research at the University's [Sainsbury Laboratory](#) is to elucidate the regulatory systems underlying plant growth and development
- Together with the John Innes Centre, the University has been awarded £12m for a project [OpenPlant](#), to apply synthetic biology to plant sciences.
- The University's Bio-inspired Robotics Laboratory looking at harvesting and handling of delicate fruit and vegetables

Not just biology

Drones to examine health of crops and soil

Robots to pick strawberries, lettuce ...

Growers desert oilseed rape amid neonicotinoids ban – *Farmers Weekly, January 2017*

Glyphosates also threatened with a ban

Problems also for growing sugar beet

Discussion to be led by Bruce Knight:

- **Where do you disagree with what I have said?**
- **What have I omitted that is important?**
- **What should the local authorities and other local bodies do now to prepare for 2050?**