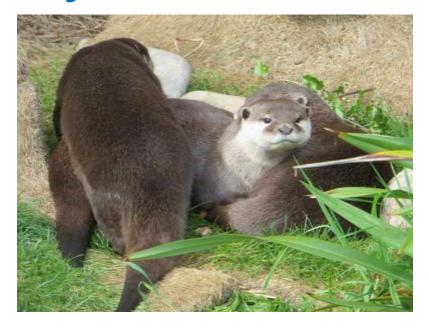
Promoting a landscape-scale approach to wetlands: the filth and the fury





Robert McInnes

DirectorRM Wetlands & Environment Ltd



The Filth

Wetland biodiversity or human dignity?

- 650 million people live without access to safe water
- Approximately 900 children die every day due to diarrhoeal diseases caused by dirty water
- 2.3 billion people don't have access to adequate sanitation



Source: WaterAid, 2015

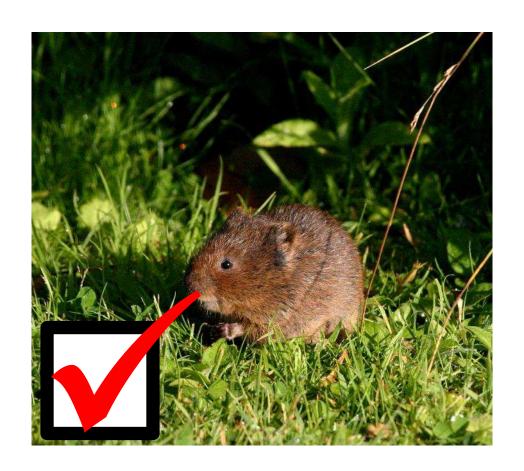
The Filth

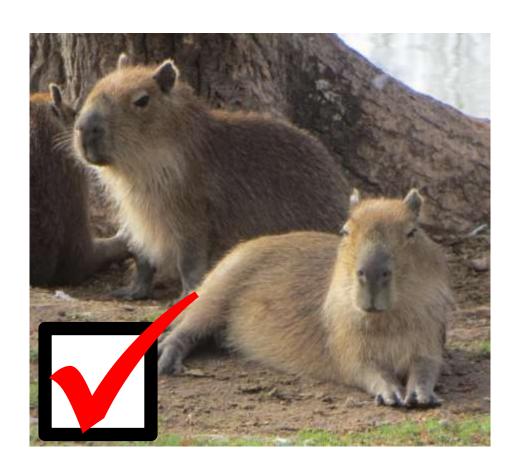
And we're worried about wetland biodiversity

- The world's poorest people do not have access to safe water, proper toilets, sanitation or hygiene
- c.33% of the world's population defecate outdoors



Source: WaterAid, 2015





















Back to the Filth . . .

Can you imagine a landscape without these bacteria?



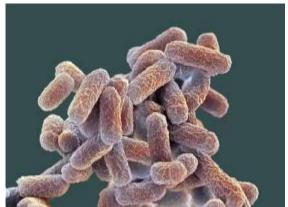
Alternative wetland biodiversity

Non-charismatic species

The stuff that does the work

- Bacteria
- Rotifers
- Nematodes
- Fungi









Our traditional approach isn't doing so well

State of Nature report published in May 2013 by 25 UK

conservation and research organisations

 Out of 848 freshwater wetland plant species, more than 10% are threatened with extinction in the UK.

- 40% of all native freshwater fish species are declining.
- Almost two-thirds of all wetland moth species have declined in the last 40 years.

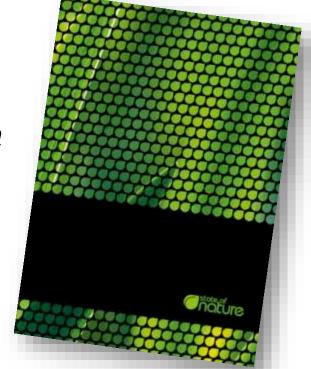


Our traditional approach isn't doing so well

State of Nature report published in May 2013 by 25 UK

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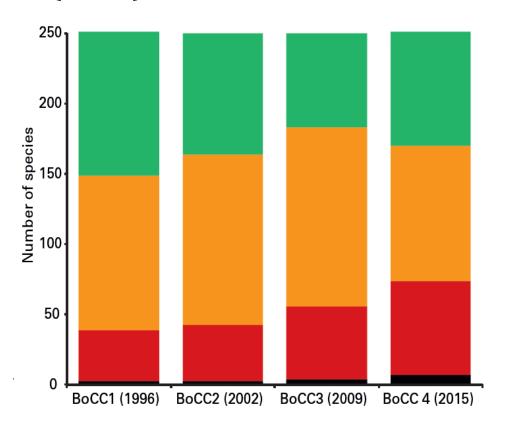
• ". . targeted conservation has produced a legacy of inspiring success stories and, with sufficient determination, resources and public support, we can, and will, turn the fortunes of our wildlife around."



Our traditional approach isn't doing so well

UK Birds of Conservation Concern (2015)

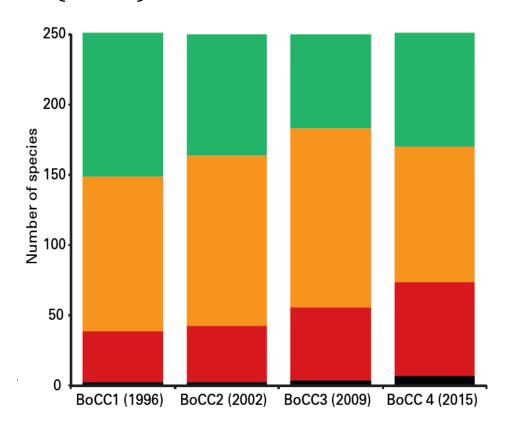
- Red list species increasing over the last 20 years
- Almost 50% of the red list species are wetland birds



Our traditional approach isn't doing so well

UK Birds of Conservation Concern (2015)

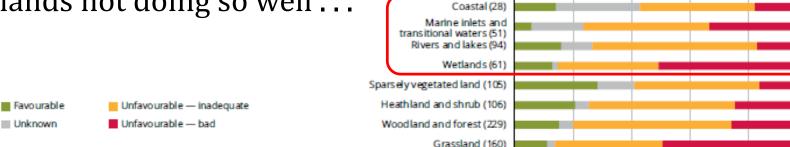
"There is some cause for hope, as the review demonstrates that conservation can work if properly targeted and funded."



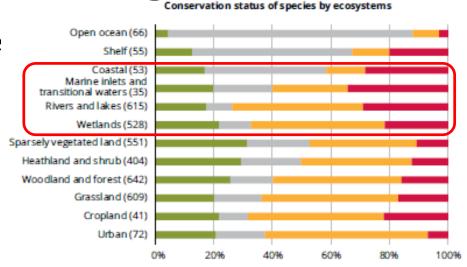
Our traditional approach isn't doing so well

The European Environment State Outlook 2015 (EEA, 2015)

- 60% of protected species assessments and 77% of habitat assessments recorded an unfavourable conservation status
- Wetlands not doing so well . . .



Open ocean (6) Shelf (14)



Conservation status of habitats by ecosystem

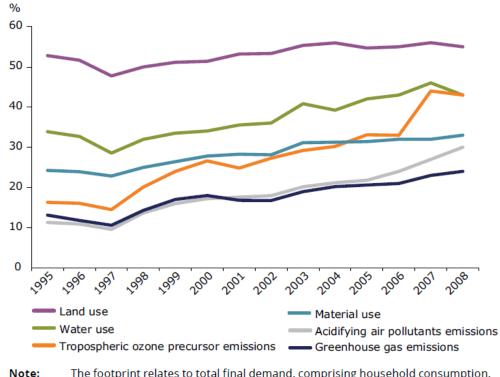
40%

Our traditional approach isn't doing so well

The European Environment State and

Outlook 2015 (EEA, 2015)

And are we now exporting the problem?



The footprint relates to total final demand, comprising household consumption,

government consumption and capital investment.

Source:

EEA, 2014f; based on JRC/IPTS analysis of World Input-Output Database (WIOD),

EC. 2012e.

Repackaging yesterday's failures?

Are landscape scale approaches another false dawn?

Do people really care about wetland biodiversity?

Report produced in 2013, reviewed the economic data of 139

environmental organisations

Income was close to £985m

Or approximately 0.06% of GDP

Does income reflect value?



Repackaging yesterday's failures?

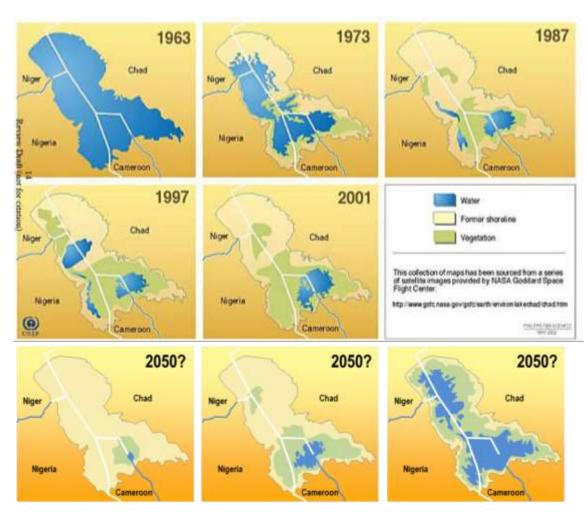
Are landscape scale approaches another false dawn?

Should we consider alternative landscapes?

- Rethinking wetland biodiversity as a utilitarian solution provider?
- Promoting 'natural capital'?
- Highlighting the multiple values of wetlands?
- Integrating across social, political and economic landscapes?



The benefits of wetland restoration





The benefits of wetland restoration

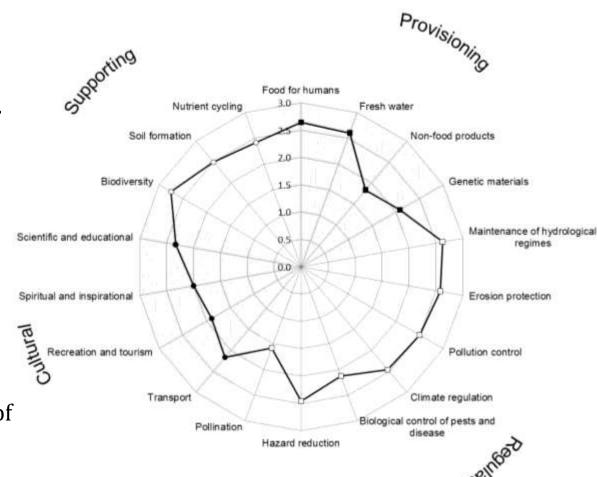
Understanding the barriers

- Institutional and sectoral constructs silo mentality
- Adoption of formulaic solutions –
 business as usual/regulatory capture
- Resource limitations both financial and expertise
- Lack of understanding of value recognising or monetising
- Conflict perceptions conservation or utilitarianism



The benefits of wetland restoration

- A scoping assessment of the ecosystem services for Lake Chad was conducted in 2013.
- Used a range of approaches including a simple scoring system to recognize benefits.
- Identified 18 different ecosystem services and 42 details of service.
- 20 of these services were considered to be of high importance (with high level of agreement).



McInnes, R.J., Noupa, P., Bunu, Z.M. & Bdliya, H.H. (in press) A scoping assessment of the ecosystem services of Lake Chad. *Wetlands*.

The benefits of wetland restoration

Understanding the different types of landscape







The benefits of wetland restoration

It <u>is</u> about biodiversity

- But more than the cute and the charismatic
- Or the rare and threatened (as noble as their cause may be)
- It is about demonstrating value across other landscapes
- ... and speaking to the right audiences



What links football, carpets, fishing nets, a zoo and wetland restoration?



The Filth and the Fury

Evolution or revolution?

- Have we all become too comfortable?
- Do we need to provoke uproar?



The Filth and the Fury

Evolution or revolution?

Two quotations

We can't solve problems by using the same kind of thinking we used when we created them.

Albert Einstein

Natural science will in time incorporate into itself the science of man, just as the science of man will incorporate into itself natural science: there will be one science.

Karl Marx

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