















Reality bites in VUCA

Volatile, Uncertain, increasingly Complex, Ambiguous world

Interconnecting triple-whammy:

Biodiversity crisis.
Climate change.
Pollution and waste problem.









Some local hedgerow data	2010	2021
Length 0.9% removal per year 9% less hedgerows over 10 years	12,845km	11,689km
Hedges in unfavourable condition	73%	88%
Species richness of 4 woody species or more.	37%	23%
Semi-natural grassland adjacent	28%	14%
Adjacent land improved grassland	54%	64%

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PROVISIONING





FRESH WATER



MATERIALS

REGULATING









Why wetlands matter



CULTURAL



CULTURAL HERITAGE

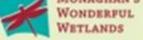




EDUCATION & RESEARCH







SUPPORTING



SOIL FORMATION



PHOTOSYNTHESI







Number of sites listed in the Monaghan Wetland Sites database (714) impacted by or threatened by various factors.

	Number of sites with impacts & activities affecting conservation value of site.
A Agriculture	51
B Forestry, Sylviculture	42
C Mining, extraction of materials & energy production	28
D Transportation & service corridors	15
E Urbanisation, residential & commercial development	24
G Human intrusions and disturbances	6
H Pollution	89
I Invasives, other problematic species & genes	25
J Natural System modifications	213
K Natural biotic & abiotic processes	7
X No threats or pressures	24
	524

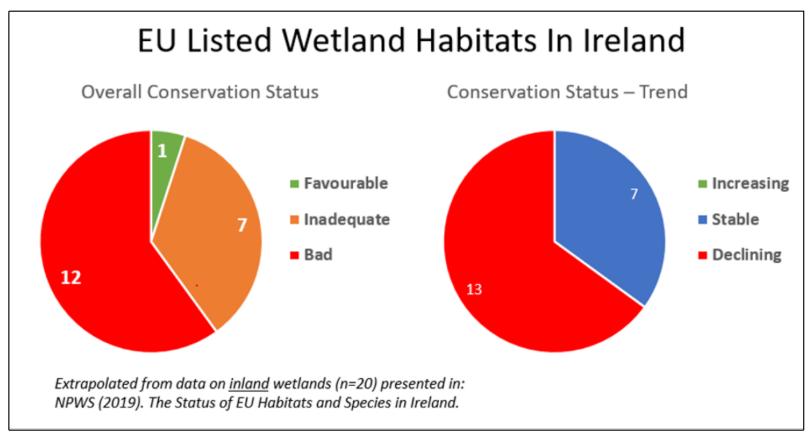
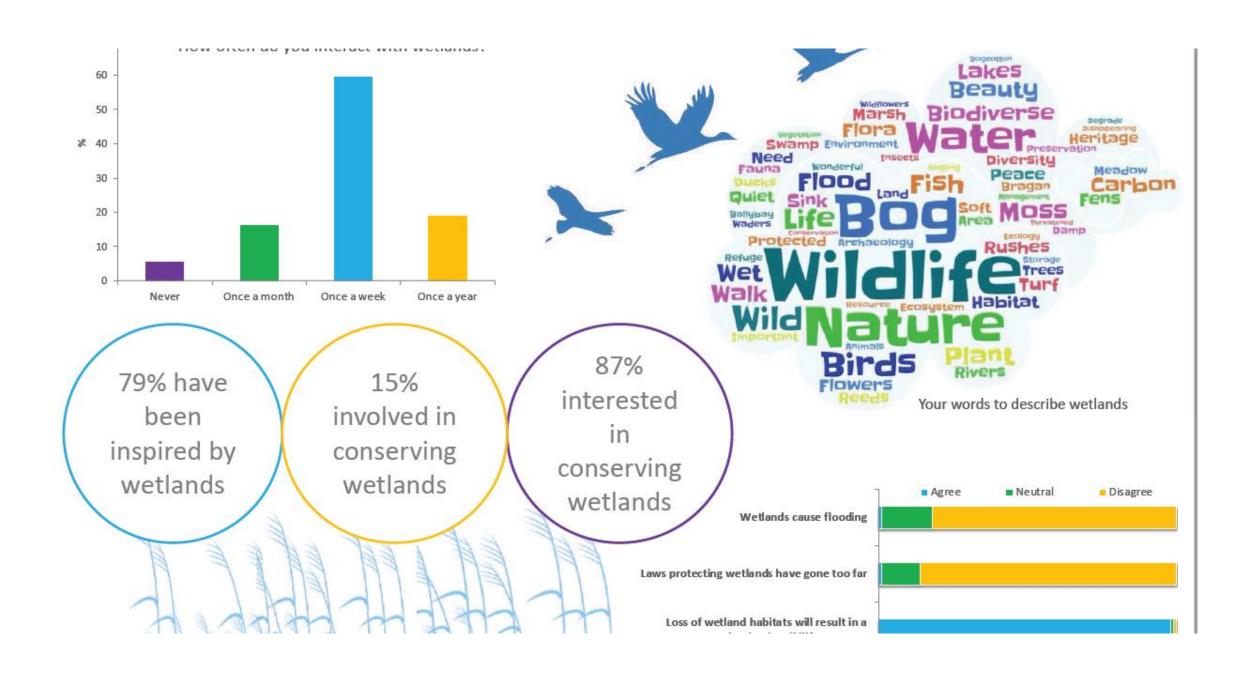


Figure 3-2: Summary of conservation status reported by NPWS (2019).





Confusion

- What and where is protected?
- Who is responsible for ensuring legislation is enforced?
- Who do you call? Have they the resources to help?
- Which legislation applies?
- Does nature have rights to survive?
- Burden of proof?
- What about nature places that are not "designated"?





Role of planning system

- Assessing planning applications for biodiversity considerations.
- What is the role of county or city development plans?
- Cumulative impacts?
- Nature-positive actions?





Shifting baselines

- The Hebrides Redacted begins with Mendelssohn's original score intact – as full and lively as the sea he travelled in 1829. But, just like nature, the score is depleted over time. The University of Cambridge's Matthew Agarwala and Ewan Campbell tie the music to the plight of the North Atlantic Humpback Whale.
- Segmenting the score into 'decades', beginning in 1830, the music is progressively redacted as the orchestra plays forward through time to 2019. The proportion of missing notes in each decade corresponds to scientific estimates of the loss of the whale population.

