Defining a new baseline and assessing the implications of change to SSSI reporting metric

December 2020

Consultation document

Contents

Summary

This consultation document looks at options for setting a new baseline for SSSI condition reporting based on feature condition that we will use during the transition from unit to feature scale reporting. We assessed four options and our analysis indicates that the best approach to use would be where the condition of each monitored feature on a SSSI is based on its least favourable condition status in any one unit in which it occurs (Least Favourable Approach). Features reported as unknown would be included in this baseline.

This has been recommended because we believe that it will most closely be aligned to the current proportion of SSSIs in Favourable condition once the number of features with unknown condition has been reduced. It is also the most precautionary approach and is similar to our current approach for assigning an overall condition to a unit.

Natural England will adopt this approach for a feature based baseline and for reporting during a transition period (to April 2022). Feature based condition reports will be produced quarterly.

1.0 Introduction

1.1 Moving to a feature based monitoring approach

1.1.1 Natural England is developing a monitoring and assessment approach which will provide evidence on how our Protected Sites function within landscapes or ecological networks. A key change is the move to whole feature assessment and reporting, rather than the current SSSI unit based approach. This will mean that we assess the condition of each feature at the scale of the feature within a SSSI and assign a condition category to the whole feature.

1.1.2 Changes to the way Natural England monitors and assesses SSSI condition will affect how we report on condition for indicators and the official statistic. The statistic would reflect the proportion) i.e. number) of features across all SSSIs in each condition category (this is already the approach taken in Scotland). For example, the proportion of all SSSI features in favourable condition is X %.

1.1.3 There will be a transition period to April 2022 to allow us to carry out external consultations and avoid an abrupt change. This will also help us manage any risks and making changes to IT systems.

1.1.4 Additional funding and priorities during the transition period will be directed to filling the gaps in SSSI condition data which will give further confidence in the data throughout the transition period.

1.1.5 This document examines the options for producing an initial baseline for feature scale reporting and an approach to reporting during the transition period.

2.0 Method

2.1 Setting a new baseline

2.1.1 Existing condition data on CMSi was analysed to aggregated data across unit to give a single condition value for a feature on a site. This was done using the four options below. Further detail can be found in Annex 1.

1. **Least Favourable** Feature Condition Status: For each SSSI feature on a site, use the least favourable condition status attributable to that feature on any unit that it occurs in.

2. Most **Frequent** Feature Condition Status: As 1, but the most frequent condition status is chosen.

3. Most Common Feature Condition **Status by Largest Area**: As 1, but the Feature status of the SSSI would be determined not by the number of Units, but by their area.

4. Areas of features at a unit scale using 90% threshold **Proportionate Area**: Attributing a condition category using the areas of features at a unit scale and a set of % rules (see Annex 1).

2.1.2 Features with condition reported as "*unknown, unknown- no site area and blank*" were amalgamated as "*unknown*" for the purposes of this exercise.

2.1.3 Data were analysed to produce the findings below. It should be noted that "blanks" "not assessed" unknown feature area" and "unknown" have again been amalgamated to read as "unknown" for the purposes of clarity.

3.0 Results

3.1 Setting a new baseline

3.1.1 The information presented in Table 1 shows the site scale features in the different condition categories with the "unknowns" included in the calculations.

Table 1. Number of site scale features in the different condition categories determined by frequency, least favourable, largest area, 90%proportionate. Including those features that were "Unknown".

Condition category	Least Favourable	%	Most Frequent	%	Largest Area	%	90% Area	%
Favourable	4375	31.6%	5347	38.6%	5730	41.4%	7509	54.2%
Unfav Recovering	3161	22.8%	3260	23.6%	3262	23.6%	2892	20.9%
Unfav No change	712	5.1%	526	3.8%	489	3.5%	431	3.1%
Unfav Declining	688	5.0%	501	3.6%	427	3.1%	353	2.5%
Partially Destroyed	25	0.2%	10	0.1%	5	0.0%	0	0.0%
Destroyed	42	0.3%	22	0.2%	19	0.1%	17	0.1%
Unknown	4835	34.9%	4172	30.1%	3906	28.2%	2664	19.2%
Total	13838	100.0%	13838	100.0%	13838	100.0%	13866	100.0%

3.1.2 The information presented in Table 2 shows the site scale features in the different condition categories. However, in this instance the number of features that are unknown have been excluded from calculations.

3.1.3

Table 2. Number of site scale features in the different condition categories determined by frequency, least favourable, largest area, 90%proportionate rule. Those features that were "unknown" were excluded from calculations of features in the different condition categories.

Condition category	Least Favourable	%	Most Frequent	%	Largest Area	%	90% Area	%
Favourable	5096	45.1%	6136	54.3%	6449	57.1%	7509	67.0%
Unfav Recovering	4151	36.7%	3926	34.7%	3786	33.5%	2892	25.8%
Unfav No change	1045	9.2%	621	5.5%	560	5.0%	431	3.8%
Unfav Declining	915	8.1%	575	5.1%	472	4.2%	353	3.2%
Partially Destroyed	36	0.3%	17	0.2%	12	0.1%	0	0.0%
Destroyed	56	0.5%	24	0.2%	20	0.2%	17	0.2%
Total[1]	11299	100.0 %	11299	100.0%	11299	100.0%	11202	100.0%

[1] The total number of features is different for the proportionate rule. This is an artefact of the analysis and has been verified.

3.1.4 Please note that in Tables 1 & 2 the percentage figures provided may not sum to 100% total due to rounding.

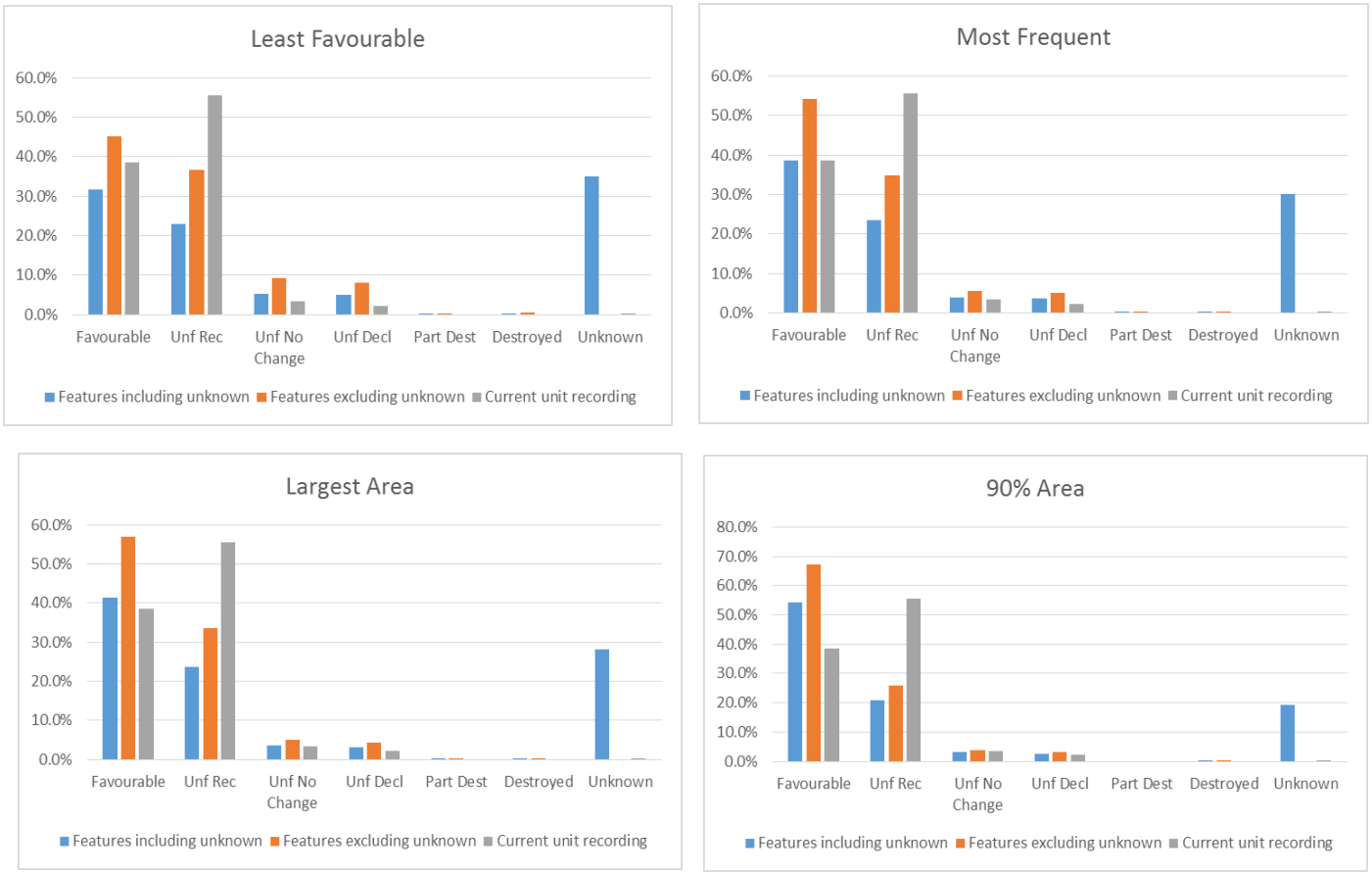
3.1.5 The information presented in Table 3 shows unit based features in different condition categories under the current way of recording and can be used to compare current unit and proposed feature recording.

Table 3. Proportion of SSSIs by unit area in the different condition.

Condition category	**Unit/Area based condition statistics (accessed 30/06/20)**
Favourable	38.6 %
Unfavourable - Recovering	53.3 %
Unfavourable - No change	4.8 %
Unfavourable - Declining	3.0 %
Partially Destroyed	0 %
Destroyed	0 %
Not Assessed/Recorded	0.3 %

3.1.6 Figure 1 provides a visual comparison of the current unit and proposed feature reporting systems for each of the five rules.

Figure 1: Proportion of site scale features in the different condition categories determined by frequency, least favourable, largest area, 90%proportionate, comparing those features recorded as 'unknown' was excluded, features where "unknown" was included and the current unit based recording system.



Unknowns included

3.1.7 The proportion of unknowns is much higher across all four options than in our current reporting. This reflects the fact that a proportion of features do not have a condition recorded even though the unit does.

3.1.8 This may be due to the fact that a condition has been attributed to a feature on a unit despite the fact that feature has not been assessed, or if assessed this information has not been recorded on the system.

3.1.9 Addressing this evidence gap is one of the priorities for the new SSSI monitoring programme (from uplift funding). We expect that the number of unknowns will be reduced substantially by the end of the transition period.

3.1.10 With the unknowns included, the proportion of features reported as favourable is broadly similar to current reporting for the first three options, but higher for the proportionate option. Unfavourable recovering is consistently higher for the current way of reporting compared to all options.

Unknowns excluded

3.1.11 The number of features in favourable condition is higher and the numbers of unfavourable recovering consistently lower across all four rules than in the current reporting system.

3.1.12 The least favourable approach gives the closest figures to the current ones and the difference is greatest for the proportionate rule approach.

4.0 Conclusions

4.1.1 The Least Favourable Approach (including the unknowns) is similar to the approach used to assign a condition to a unit based reporting. It is relatively easy to understand and familiar to our stakeholders. This approach is likely to give a Favourable % closest to the current figure once we have reduced the number of unknowns. The number of unknowns will be brought down during the transition period as this is a priority for Natural England's SSSI monitoring programme.

4.1.2 We plan to adopt the Least Favourable approach for setting a baseline for the feature based reporting and produce quarterly reports on SSSI feature condition using this approach.

Annex 1: Options for setting a feature based baseline on SSSI condition

Existing condition data on CMSi was analysed to aggregated data across unit to give a single condition value for a feature on a site. This was done using the four options below.

1) **Least Favourable** Feature Condition Status:

For each SSSI feature on a site, use the least favourable condition status attributable to that feature on any unit that it occurs in.

Example, if 'Large Blue Butterfly' was a Reportable feature on an SSSI, and on three of its Units it was 'Favourable', but on one Unit it was 'Unfavourable – Recovering', then we would record 'Unfavourable – Recovering' as being the condition of that feature on the SSSI.

If a feature was recorded as "unknown" in any unit then the whole feature would be "unknown".

2) Most **Frequent** Feature Condition Status:

As above, but the most frequent condition status is chosen.

So, in our Large Blue Butterfly example, this feature is 'Favourable' on three Units and 'Unfavourable – Recovering' on one Unit, so we would record 'Favourable' as the condition for that feature on the SSSI.

If most frequently recorded as "Unknown" then whole feature recorded as "Unknown".

3) Most Common Feature Condition **Status by Largest Area**:

As above, but the Feature status of the SSSI would be determined not by the number of Units, but by their area.

For example, if 'Large Blue Butterfly' was 'Favourable' on three Units and 'Unfavourable – Recovering' on one Unit, but the combined area of the Favourable units was 75ha (15ha + 25ha + 35ha) and the area of the 'Unfavourable – Recovering' Unit was 125ha, then 'Unfavourable – Recovering' would be the status of this feature for this SSSI.

If largest area recorded as "Unknown" then whole feature recorded as "Unknown".

4) Areas of features at a unit scale using 90% threshold **Proportionate Area**:

Attributing a condition category using the areas of features at a unit scale and the following % rules:

- If more than 90% of the aggregate unit area with the feature is Favourable then whole feature = Favourable
- If less than 90% Favourable but 90% of the aggregate unit area with the feature is Favourable (F) and Unfavourable Recovering (UR) then whole feature = Unfavourable Recovering
- If less than 90% F and UR but 90% of the aggregate unit area with the feature is F, UFR, and Unfavourable No Change (UFNC) then whole feature = Unfavourable No Change
- If less than 90% F, UR and UFNC but 90% of the aggregate unit scale feature is F, UFR, UFNC, Unfavourable Declining (UFD) then whole feature = Unfavourable Declining
- If less than 90% F, UR, UFNC and UFD but 90% of the aggregate unit area of the feature is F, UFR, UFNC, UFD, Partially Destroyed (PD) then whole feature = Partially Destroyed

- If less than 90% UFR, UFNC, UFD and PD but 90% of the aggregate unit scale feature is F, UFR, UFNC, UFD, PD, Destroyed then whole feature = Destroyed

If more than 90% was reported as Unknown, then the feature was reported as “Unknown”.

This 90% rule approach was tested as it is consistent with the Common Standards Monitoring guidance for the assessment of upland features which recommends that “when a feature is reported as favourable, it should be possible to state with a high degree of confidence that each target is met over at least 90% of the feature.

The proportionate rule was also tested at 95%, but the results were the same as the 90% rule and so are not reported below.

Features with condition reported as “*unknown, unknown- no site area and blank*” were amalgamated as “*unknown*” for the purposes of this exercise.