

## What is SoNaRR?

The Environment Act states that NRW must prepare a report containing its assessment of the state of natural resources in relation to Wales which amongst other things must set out:

- An assessment of the extent to which the sustainable management of natural resources is being achieved
- An assessment of biodiversity
- What NRW considers to be the main trends and factors that are affecting and are likely to affect the state of natural resource; and
- Any aspects about which NRW considers it does not have sufficient information to make an assessment

The report forms an important evidence base for Welsh Ministers to consider in the preparation of the National Natural Resources Policy. It must also be taken into account in the review of National Park and AONB Management Plans by those relevant authorities.

## How do we undertake an assessment of the extent to which sustainable management of natural resources is being achieved?

SoNaRR will look at the pressures on ecosystems and natural resources and how we are managing them, assessing two things:

- Firstly, looking at environmental status, highlight the risks to the resilience of ecosystems and the impact on our wellbeing,
- Secondly, looking at human management of the environment, assess the extent to which Wales is currently achieving the sustainable management of natural resources, how we can increase benefits which enhance wellbeing and lower our impact on ecosystems.

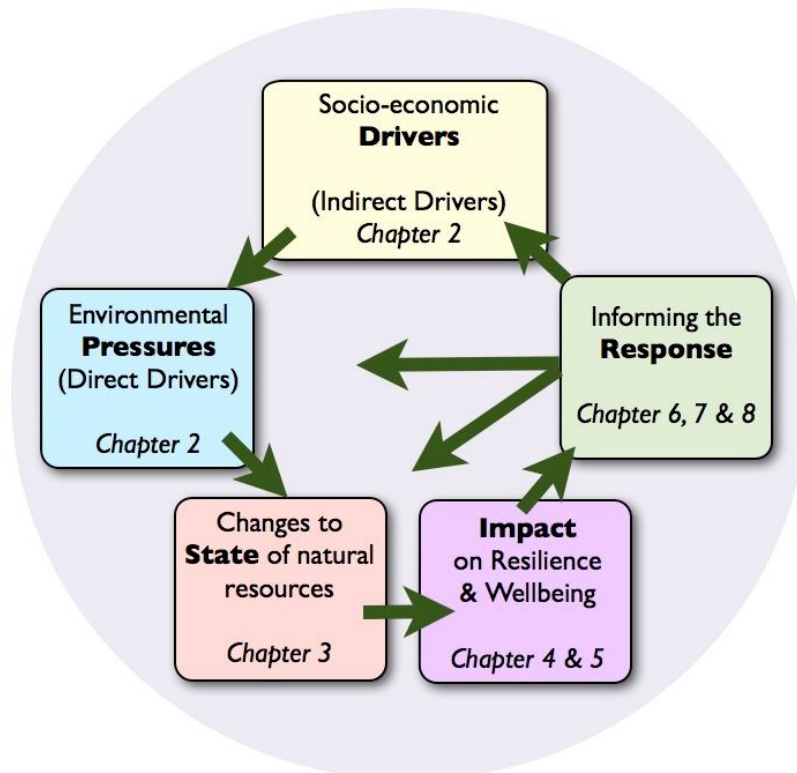
In undertaking this assessment, we need to consider four key elements:

- The use and rate of use of natural resources;
- The ongoing resilience of ecosystems;
- The needs (or well-being) of current and future generations, and in particular the well-being goals, and;
- The relationships and causal links between these things.

SoNaRR is therefore different from previous “state of” reports, as it is trying to draw conclusions on the latter point that can help us better plan for the future, by focusing on addressing the drivers of impacts, and the consequences for well-being.

## How have we approached the analysis and presentation of evidence?

The approach to the report has been framed around one used for integrated reporting by the United Nations Environment Programme, European Environmental Agency and others. This approach gives a structure within which to feedback to policy makers both on environmental status and the potential resulting impacts of the political choices to be made in the future. This has been adapted for Wales in particular to draw out information on the potential impacts on the Well-being of Wales.

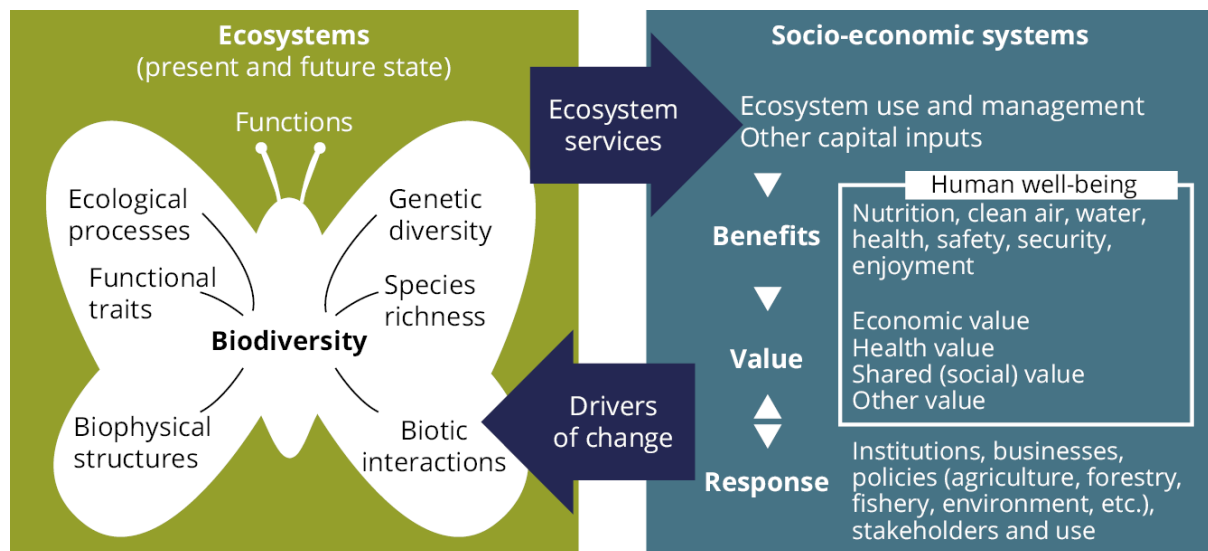


**Figure 2: Our approach to SoNaRR by chapter**

Because of historical approaches to collecting evidence and monitoring environmental change, information on natural resources other than water and air is not readily available and it is easier to study what is happening to natural resources within particular ecosystems. Following the National Ecosystem Assessment and basing our analysis around the UK ecosystem types, makes sense in terms of assessing the common pressures on natural resources in different ecosystems and the interactions between them. Since we manage natural resources within these different ecosystems, woodland, urban areas, farmland etc, an ecosystem focus also helps in identifying the potential ways in which we can move to more sustainable management of the natural resources within them. While these ecosystems are our starting point, there are obviously many links between them, for example pollutants in rivers flowing from upland mines to the sea. So we need to also pick out these connections and see Wales as a whole, land and sea.

We can use these component parts to help build up a picture of the benefits that we get from those natural systems – both on their own – through a direct service such as clean water - and through a combination of factors - like the value to health of access to local green space

By understanding a little more about the benefits derived through those systems and their contribution to well-being, we can assess the future risks to well-being - given the trends or status in those systems – by focusing in on those areas of greatest risk, and identify the priorities for sustainable management .



**Figure 3: The relationship between ecosystems and socio-economic systems as recognised in this assessment**

### What do we mean by benefits?

A benefit can be described as anything that any component or collective of natural resources does to sustain life and wellbeing on earth. It could be an environmental, cultural, social or economic benefit, and can be both measurable and non-measurable.

We typically use the term “Ecosystem Services” to categorise these benefits, although we may equally think about the many ways natural resources contribute to the well-being goals.

### What do we mean by resilience?

The benefits our natural resources provide are wholly reliant on the way that ecosystems function. Healthy, functioning ecosystems are considered to have particular elements of **resilience** in place – this is the ability of ecosystems to deal with disturbances, whilst retaining their ability to deliver benefits. The Environment Act recognises particular attributes of ecosystems that support resilience – that is their scale, connectedness, condition, diversity and ability to adapt. It emphasises these as characteristics of the environment that are likely to support resilience, and the need to focus on building and not eroding resilience wherever possible, as an insurance policy for the future.

SoNaRR therefore needs to be able to present evidence to help identify priorities to pursue sustainable management of natural resources. This will include opportunities to maintain and enhance resilience, and to use our resources more efficiently, for the benefit of both current and future generations.