

Knowledge Synthesis Methods

2. Solution scanning¹

Summary of method

A structured, step-wise methodology to identify a long list of available actions, interventions or approaches, in response to a broad challenge. A list is gathered through consultation with a wide range of stakeholders, and continues to be circulated through networks until five new people have seen it and add nothing.

Solution scanning forms the first step in Summaries of evidence.

Key references

Sutherland WJ, Gardner T, Bogich TL et al (2014). *Solution scanning as a key policy tool: identifying management interventions to help maintain and enhance regulating ecosystem services*. *Ecol Soc* 19:3. doi:10.5751/ES-06082-190203.

Examples of application in policy

This method was used to identify a long list of possible actions that constitute ‘sustainable intensification’ of agriculture, during the Sustainable Intensification Platform (<http://www.siplatform.org.uk/>) funded by the UK Department for Environment Food and Rural Affairs (Defra; Dicks *et al.* in prep). The most promising actions from among the list were prioritised by a group of stakeholders to inform subsequent research activity.

Solution scanning

Cost	1 month (FTE)
Time required	Can be completed within 1 month, if needed. Maximum 3 months
Repeatability	Low to Moderate. There is no definitive list New possibilities occur over time
Transparency	High (if conducted well)

¹ A guidance note from Dicks LV, Haddaway N, Hernández-Morcillo M, Mattsson B, Randall N, Failler P, Ferretti J, Livoreil B, Saarikoski H, Santamaria L, Rodela R, Velizarova E, and Wittmer H. (2017). *Knowledge synthesis for environmental decisions: an evaluation of existing methods, and guidance for their selection, use and development – a report from the EKLIPSE project*.

Risk of bias	Moderate. Contents of the list depend on who is asked to contribute. Conducted properly, a very wide range of stakeholders should be included and the risk of bias reduced
Scale (or level of detail)	Independent of scale (any)
Capacity for participation	High
Data demand	No data required
Types of knowledge	Science/technical/opinion; Tacit
Types of output	Written list of options
Specific expertise required	None. The consultees who build the list should have practical experience in the policy area

Strengths	Weaknesses
Powerful tool at an early stage in the policy cycle Suitable for very broad topic areas	Does not provide any evidence for the effects/impacts of the different solutions