



## INTRODUCING ESManage

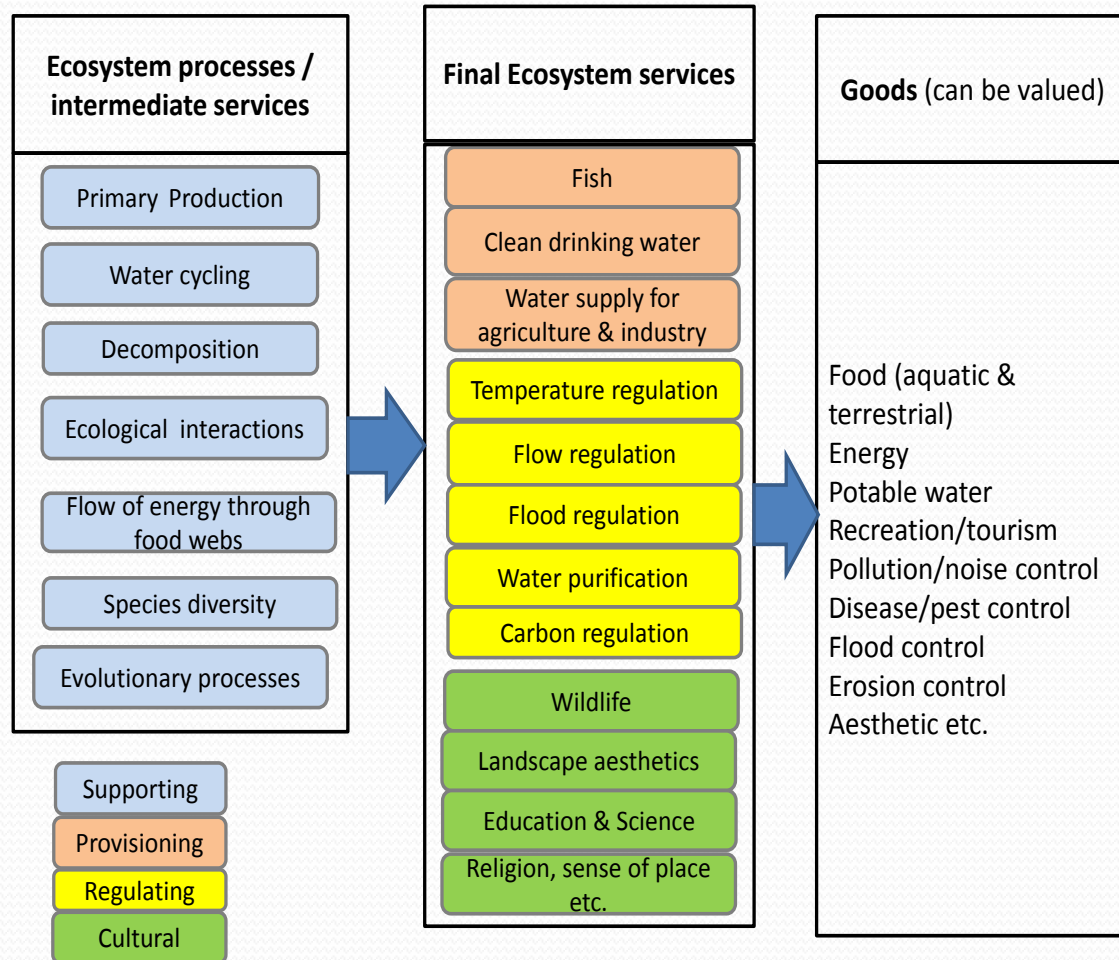
Incorporation of **Ecosystem Services Values** in the  
Integrated **Management** of Irish Freshwater Resources

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**3-year project, commenced Feb. 2015**  
**[www.ucd.ie/esmanage](http://www.ucd.ie/esmanage); [www.twitter.com](https://www.twitter.com)**

# ES Concept

ES “the functions and products of ecosystems that benefit humans, or yield welfare to society” (MA 2005)



Chain of information needs from concept to practice

# Overall Objective

- Harness the knowledge and tools required to embed the ecosystem services approach into policy and decision-making for sustainable management of water resources, as required by the Water Framework Directive.

# Specific tasks

1. Literature review
2. Provide a synthesis of current knowledge on the Irish freshwater resource in the context of ecosystem services-*select key ES for analysis*
3. Scenario analysis to show how changes in drivers (land-use) affect inputs to rivers and associated physical and chemical water quality stressors.
4. Analyse existing and new biological data to investigate biological responses to stressors/drivers and links to selected ecosystem services. Combine with Obj. 3 to illustrate change in ecological condition/ES provision
5. Estimate the economic impact of future changes to the provision of key aquatic ecosystem services in Irish rivers
6. Recommend how the ecosystem services approach can best be embedded into policy and decision-making for sustainable management of water resources