

Appendix for “The Ecosystem Service Valuation and Federal Conservation Special Issue of ARER”

Ecosystem service valuation resources

The following lists several recent USDA sponsored reports on using Ecosystem Services in federal programs.

- 2016: EPA sponsored workshop on Benefits Transfer (Environmental & Resource Economics special issue.
https://ideas.repec.org/a/kap/enreec/v69y2018i3d10.1007_s10640-017-0206-8.html
- 2017: “The Valuation of Ecosystem Services from Farms and Forests”. A report from several case studies; funded and coordinated by the USDA Office of the Chief Economist Office of Environmental Markets USDA Office of Environmental Markets, and the Council on Food, Agricultural & Resources. <https://www.cfare.org/youtube-videos/2017/8/30/ysgngrouizyu4mie6647rcblm6jnj6>
- 2017: “Assessment and Valuation of Forest Ecosystem Services: State of the Science Review”; USFS General Technical Report NRS-170
<https://www.fs.usda.gov/treesearch/pubs/54252>
- 2018: “Ecosystem services find their federal footing: A history of the 2008 Farm Bill and 2012 Forest Planning Rule” <http://www.jswnonline.org/content/72/6/650.short>
- 2019: “Applications and Potential of Ecosystem Services Valuation within USDA – Advancing the Science”. Proceedings from a USDA sponsored workshop.
<http://www.narea.org/esvworkshop>

Data on the design, and impacts, of USDA farmland conservation programs can be found at:

- NRCS Conservation Practice Standards can be found at
https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849
- A summary of NRCS practices implemented by state / county / HUC-12, etc. can be obtained by submitting a request to: REAPDataTeam@wdc.usda.gov.

- The CEAP reports are a good source of information on environmental impacts, <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap> .
- A description of Conservation Reserve Program practices, and the Environmental Benefits Index used to rank and select offers, can be found at https://www.fsa.usda.gov/Internet/FSA_File/2-crp_r05_a35.pdf
- Information on the benefits/impacts of CRP is compiled at <https://www.fsa.usda.gov/programs-and-services/economic-and-policy-analysis/natural-resources-analysis/index>

Data on the design, and impacts, of USFS conservation programs can be found at:

- US Forest Service National Visitor Use Monitoring Program (NVUM) is a rotating series of visitor surveys across National Forests reporting on visitation activity participation, demographics, visit duration, measures of satisfaction and trip spending <https://www.fs.fed.us/recreation/programs/nvum/>
- Publications for calculation the value of recreation on national forests include: “Recreation economic values for estimating outdoor recreation economic benefits from the National Forest System” <https://www.fs.usda.gov/treesearch/pubs/54602> , and “Spending patterns of outdoor recreation visitors to national forests” <https://www.fs.usda.gov/treesearch/pubs/55244>
- Estimates of economic impacts of recreation on national forests may be found at <https://www.fs.fed.us/emc/economics/at-a-glance/index.shtml>
- Forest Service implementation of ecosystem services valuation for the 2012 Planning Rule and mitigation policies may be found at <https://www.fs.fed.us/emc/economics/applications.shtml>

Spatially detailed data on the environment and ecosystems services can be found at:

- You can find a wealth of data related to ecosystem services at the EPA EnviroAtlas <https://www.epa.gov/enviroatlas>
- National geodata sets managed by the Forest Service and available in downloadable formats including Enterprise data, Maps, Raster data, and Special purpose data are available at <https://data.fs.usda.gov/geodata/>
- You might use some of the ~300,000 data sets on the US Government's open data web site:-- <https://www.data.gov/>
- You may also wish to collaborate with a government economist who can direct you to databases and models in use on public and private lands

Guidelines, literature reviews, and compendiums of Ecosystem Service values can be found at:

- NRCS has posted bibliographies and literature reviews related to effects and benefits of conservation practices at:
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/ceap/blr/>
- Environmental Valuation Reference Inventory (EVRI) resources provides a searchable storehouse of empirical studies on the economic value of environmental assets and human health. The EVRI home page is at <http://www.evri.ca/en>.
- Federal Resource Management and Ecosystem Service Guidebook at <https://nespguidebook.com> is a collaborative work to guide resource managers in federal agencies in ES assessments and includes numerous examples
- Ecosystem Services Assessment Portal at <https://www.oem.usda.gov/content/es-portal> is a searchable collection of links to guides, databases, online tools, and downloadable software vetted by the USDA Forest Service to help users identify, quantify, and value ecosystem services.