

Campagne, Roche, Muller and Burkhard
 - 10 years of ecosystem services matrix: Review of a (r)evolution -
 Supplementary files:

Process to select articles

1. WOS and Scopus papers research

# of results	Search terms	Database	Timespan
714	TI=(matrice* OR "matrix" OR "look-up table") AND (landscape* OR ecosystem*) AND (service*)	WoS	1945-2019
624	Environmental Science(449) Agricultural and Biological Sciences (330) Social Sciences Decision Sciences Economics, Econometrics and Finance Multidisciplinary (TITLE-ABS-KEY (matrice* OR "matrix" OR "look-up table") AND TITLE-ABS-KEY (ecosystem* OR landscape*) AND TITLE-ABS-KEY (service*)) AND (LIMIT-TO (SUBJAREA , "ENVI") OR LIMIT-TO (SUBJAREA , "AGRI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "MULT"))	Scopus	1990-2019

2. Delete duplicates

Number of papers in the 1st review: 880 papers

3. Papers selection

Papers that do not use the “matrix approach” and are not English papers are removed.

3.1 Sort papers based on the titles and abstracts:

Number of papers in the 2nd review: 158 papers

3.2 Individual papers checking and creation of the database

Number of papers in the 3rd and final review: 110 papers

List of the 110 selected articles

- Augstburger, H., Jacobi, J., Schwilch, G., & Rist, S. (2019). Agroecosystem Service Capacity Index – A methodological approach. *Landscape Online*, 64(March), 1–48. <https://doi.org/10.3097/lo.201864>
- Balthazar V., Vanacker V., Molina A., Lambin E. F., (2015) Impacts of forest cover change on ecosystem services in high Andean mountains, *Ecological Indicators*, 48, 63-75, , <https://doi.org/10.1016/j.ecolind.2014.07.043>.
- Baral, H., Keenan, R. J., Fox, J. C., Stork, N. E., & Kasel, S. (2013). Spatial assessment of ecosystem goods and services in complex production landscapes: A case study from south-eastern Australia. *Ecological Complexity*, 13, 35–45. <https://doi.org/10.1016/j.ecocom.2012.11.001>
- Baró, F., Gómez-Baggethun, E., & Haase, D. (2017). Ecosystem service bundles along the urban-rural gradient: Insights for landscape planning and management. *Ecosystem Services*, 24, 147–159. <https://doi.org/10.1016/j.ecoser.2017.02.021>
- Bhandari, P., KC, M., Shrestha, S., Aryal, A., & Shrestha, U. B. (2016). Assessments of ecosystem service indicators and stakeholder’s willingness to pay for selected ecosystem services in the Chure region of Nepal. *Applied Geography*, 69, 25–34. <https://doi.org/10.1016/j.apgeog.2016.02.003>
- Bicking S, Burkhard B, Kruse M, Müller F (2019) Bayesian Belief Network-based assessment of nutrient regulating ecosystem services in Northern Germany. *PLoS ONE* 14(4): e0216053. <https://doi.org/10.1371/journal.pone.0216053>
- Burdon, D., Potts, T., Barbone, C., & Mander, L. (2017). The matrix revisited: A bird’s-eye view of marine ecosystem service provision. *Marine Policy*, 77(October 2016), 78–89. <https://doi.org/10.1016/j.marpol.2016.12.015>
- Burkhard, B., Kandziora, M., Hou, Y., & Müller, F. (2014). Ecosystem service potentials, flows and demands-concepts for spatial localisation, indication and quantification. *Landscape Online*, 34(1), 1–32. <https://doi.org/10.3097/LO.201434>
- Burkhard, B., Kroll, F., Müller, F., & Windhorst, W. (2009). Landscapes’ capacities to provide ecosystem services - A concept for land-cover based assessments. *Landscape Online*, 15(1), 1–22. <https://doi.org/10.3097/LO.200915>
- Burkhard, B., Kroll, F., Nedkov, S., & Müller, F. (2012). Mapping ecosystem service supply, demand and budgets. *Ecological Indicators*, 21, 17–29. <https://doi.org/10.1016/j.ecolind.2011.06.019>
- Burkhard, B., Müller, A., Müller, F., Grescho, V., Anh, Q., Arida, G., ... Settele, J. (2015). Land cover-based ecosystem service assessment of irrigated rice cropping systems in southeast Asia-An explorative study. *Ecosystem Services*, 14, 76–87. <https://doi.org/10.1016/j.ecoser.2015.05.005>
- Cai, W., Gibbs, D., Zhang, L., Ferrier, G., & Cai, Y. (2017). Identifying hotspots and management of critical ecosystem services in rapidly urbanizing Yangtze River Delta Region, China. *Journal of Environmental Management*, 191, 258–267. <https://doi.org/10.1016/j.jenvman.2017.01.003>
- Campagne, C. S., & Roche, P. (2018). May the matrix be with you! Guidelines for the application of expert-based matrix approach for ecosystem services assessment and mapping. *One Ecosystem*, 3, e24134. <https://doi.org/10.3897/oneeco.3.e24134>
- Campagne, C. S., Roche, P. K., & Salles, J.-M. (2018). Looking into Pandora’s Box: Ecosystem disservices assessment and correlations with ecosystem services. *Ecosystem Services*, 30, 126–136. <https://doi.org/10.1016/j.ecoser.2018.02.005>
- Campagne, C. S., Roche, P., Gosselin, F., Tschanz, L., & Tatoni, T. (2017). Expert-based ecosystem services capacity matrices: Dealing with scoring variability. *Ecological Indicators*, 79, 63–72. <https://doi.org/10.1016/j.ecolind.2017.03.043>
- Chaudhary, S., Chettri, N., Uddin, K., Khatri, T. B., Dhakal, M., Bajracharya, B., & Ning, W. (2016). Implications of land cover change on ecosystems services and people’s dependency: A case study from the Koshi Tappu Wildlife Reserve, Nepal. *Ecological Complexity*, 28(May), 200–211. <https://doi.org/10.1016/j.ecocom.2016.04.002>
- Clius, M., & Pătroescu, M. (2014). An evaluation matrix for ecotourism potential in certain categories of protected areas in romania. Case studies: national parc, nature parc, Geopark. 14th International Multidisciplinary Scientific GeoConference SGEM 2014 Through.
- Cotillon, S. (2013). Impacts of Land Cover Changes on Ecosystem Services Delivery in the Black Hills Ecoregion from 1950 to 2010. South Dakota State University.
- de Chazal, J., Quétier, F., Lavorel, S., & Van Doorn, A. (2008). Including multiple differing stakeholder values into vulnerability assessments of socio-ecological systems. *Global Environmental Change*, 18(3), 508–520. <https://doi.org/10.1016/j.gloenvcha.2008.04.005>
- Depellegrin, D., Menegon, S., Ghezzi, M., Gissi, E., Sarretta, A., Farella, G., ... Barbanti, A. (2017). Multi-objective spatial tools to inform Maritime Spatial Planning in the Adriatic Sea. *Science of the Total Environment*, 609, 1627–1639.
- Depellegrin, D., Pereira, P., Misiunė, I., & Egarter-Vigl, L. (2016). Mapping ecosystem services potential in Lithuania. *International Journal of Sustainable Development & World Ecology*, 4509(February), 1–15. <https://doi.org/10.1080/13504509.2016.1146176>
- Egarter Vigl, L., Depellegrin, D., Pereira, P., de Groot, R., & Tappeiner, U. (2017). Mapping the ecosystem service delivery chain: Capacity, flow, and demand pertaining to aesthetic experiences in mountain landscapes. *Science of the Total Environment*, 574, 422–436. <https://doi.org/10.1016/j.scitotenv.2016.08.209>
- Elliott, R. M., Motzny, A. E., Majd, S., Chavez, F. J. V., Laimer, D., Orlove, B. S., & Culligan, P. J. (2019). Identifying linkages between urban green infrastructure and ecosystem services using an expert opinion methodology. *Ambio*. <https://doi.org/10.1007/s13280-019-01223-9>

- Galparsoro I., Borja A., Uyarra M.C., 2014. Mapping ecosystem services provided by benthic habitats in the European North Atlantic Ocean. *Frontiers in Marine Science*, Volume 1, Article 25, Pages 1-14.
- García-Illamas, P., Cramer, W. (2018). Impact of land cover change on ecosystem service supply in mountain systems : a case study in the Cantabrian Mountains (NW of Spain). *Regional Environmental Change*.
- García-nieto, A. P., Geizendorffer, I. R., Baró, F., Roche, P. K., Bondeau, A., Cramer, W., ... Bondeau, A. (2018). Impacts of urbanization around Mediterranean cities : changes in ecosystem service supply. *Ecological Indicator*, 91(May 2017), 589–606. <https://doi.org/10.1016/j.ecolind.2018.03.082>
- Geange, S., Townsend, M., Clark, D., Ellis, J. I., & Lohrer, D. (2019). Communicating the value of marine conservation using an ecosystem service matrix approach. *Ecosystem Services*, 35(December), 150–163. <https://doi.org/10.1016/j.ecoser.2018.12.004>
- Goldenberg, R., Kalantari, Z., Cvetkovic, V., Mörtberg, U., Deal, B., & Destouni, G. (2017). Distinction, quantification and mapping of potential and realized supply-demand of flow-dependent ecosystem services. *Science of The Total Environment*, 593, 599–609. <https://doi.org/10.1016/j.scitotenv.2017.03.130>
- Gorn, L., Kleemann, J., & Fürst, C. (2018). Improving the Matrix-Assessment of Ecosystem Services Provision—The Case of Regional Land Use Planning under Climate Change in the Region of Halle, Germany. *Land*, 7(2), 76. <https://doi.org/10.3390/land7020076>
- Haines-Young, R., Potschin, M., & Kienast, F. (2012). Indicators of ecosystem service potential at European scales: Mapping marginal changes and trade-offs. *Ecological Indicators*, 21, 39–53. <https://doi.org/10.1016/j.ecolind.2011.09.004>
- Haines-Young, R., Potschin, M., CEM, S. of G., & University of Nottingham. (2008). *England's Terrestrial ecosystem services and the rationale for an ecosystem approach*. Full technical report.
- Hainz-Renetzeder, C., Schneidergruber, A., Kuttner, M., & Wrška, T. (2015). Assessing the potential supply of landscape services to support ecological restoration of degraded landscapes: A case study in the Austrian-Hungarian trans-boundary region of Lake Neusiedl. *Ecological Modelling*, 295, 196–206. <https://doi.org/10.1016/j.ecolmodel.2014.07.001>
- Hermann, A., Kuttner, M., Hainz-Renetzeder, C., Konkoly-Gyuró, É., Tirászi, Á., Brandenburg, C., ... Wrška, T. (2013). Assessment framework for landscape services in European cultural landscapes: An Austrian Hungarian case study. *Ecological Indicators*, 37(PART A), 229–240. <https://doi.org/10.1016/j.ecolind.2013.01.019>
- Hornung, Lena & Podschun, Simone & Pusch, Martin. (2019). Linking ecosystem services and measures in river and floodplain management. 15. 214-231. 10.1080/26395916.2019.1656287.
- Huq, Nazmul & Bruns, Antje & Ribbe, Lars. (2018). Interactions between freshwater ecosystem services and land cover changes in southern Bangladesh: A perspective from short term (seasonal) and long-term (1973–2014) scale. *Science of The Total Environment*. 650. 10.1016/j.scitotenv.2018.08.430.
- J. Saunders, T. Potts, E. Jackson, D. Burdon, J.P. Atkins, E. Hastings, O. Langmead, Chapter 9. Linking ecosystem services of marine protected areas to benefits in human wellbeing?, in: R.K. Turner, M. Schaafsma (Eds.), , *Coastal zones ecosystem services: from science to values and decision making*. Studies in Ecological Economics 9, Springer, Switzerland, 2015.
- Jacobs, S., Burkhard, B., Van Daele, T., Staes, J., & Schneiders, A. (2014). 'The Matrix Reloaded': A review of expert knowledge use for mapping ecosystem services. *Ecological Modelling*, 295, 21–30. <https://doi.org/10.1016/j.ecolmodel.2014.08.024>
- Kaiser, G., Burkhard, B., Römer, H., Sangkaew, S., Graterol, R., Haitook, T., ... Sakuna-Schwartz, D. (2013). Mapping tsunami impacts on land cover and related ecosystem service supply in Phang Nga, Thailand. *Natural Hazards and Earth System Sciences*, 13(12), 3095–3111. <https://doi.org/10.5194/nhess-13-3095-2013>
- Kamlun, K. U., & Arndt, R. B. (2019). Expert-Based Approach on Mapping Ecosystem Services Potential Supply Incircling a Protected Areas by Integrating Matrix Model. *Journal of Physics: Conference Series*, 1358 (2019(012032 IOP). <https://doi.org/10.1088/1742-6596/1358/1/012032>
- Kandziora, M., Burkhard, B., & Müller, F. (2013). Mapping provisioning ecosystem services at the local scale using data of varying spatial and temporal resolution. *Ecosystem Services*, 4, 47–59. <https://doi.org/10.1016/j.ecoser.2013.04.001>
- Karrasch, L., Klenke, T., & Kleyer, M. (2019). Land-use elements and attributed ecosystem services: an archetype approach to land-use evaluation at the German North Sea coast. *Ecology and Society*, 24(2). <https://doi.org/10.5751/es-10744-240213>
- Karsten S, Inácio M and Schernewski G (2019) Expert-Based Evaluation of Ecosystem Service Provision in Coastal Reed Wetlands Under Different Management Regimes, *Front. Environ. Sci.* 7:63 DOI: 10.3389/fenvs.2019.00063
- Kienast, F., Bolliger, J., Potschin, M., De Groot, R. S., Verburg, P. H., Heller, I., ... Haines-Young, R. (2009). Assessing landscape functions with broad-scale environmental data: Insights gained from a prototype development for Europe. *Environmental Management*, 44(6), 1099–1120. <https://doi.org/10.1007/s00267-009-9384-7>
- Kilonzi FM, Ota T (2019) Ecosystem service preferences across multilevel stakeholders in co-managed forests: Case of Aberdare protected forest ecosystem in Kenya. *One Ecosystem* 4: e36768. 10.3897/oneeco.4.e36768
- Kokkoris, I. P., Bekri, E. S., Skuras, D., Vlami, V., Zogaris, S., Maroulis, G., ... Dimopoulos, P. (2019). Integrating MAES implementation into protected area management under climate change: A fine-scale application in Greece. *Science of the Total Environment*, 695(August), 133530. <https://doi.org/10.1016/j.scitotenv.2019.07.336>

- Kokkoris, I. P., Drakou, E. G., Maes, J., & Dimopoulos, P. (2018). Ecosystem services supply in protected mountains of Greece: setting the baseline for conservation management. *International Journal of Biodiversity Science, Ecosystem Services and Management*, 14(1), 45–59. <https://doi.org/10.1080/21513732.2017.1415974>
- Kopperoinen, L., Itkonen, P., & Niemelä, J. (2014). Using expert knowledge in combining green infrastructure and ecosystem services in land use planning: An insight into a new place-based methodology. *Landscape Ecology*, 29(8), 1361–1375. <https://doi.org/10.1007/s10980-014-0014-2>
- Koschke, L., Fürst, C., Frank, S., & Makeschin, F. (2012). A multi-criteria approach for an integrated land-cover-based assessment of ecosystem services provision to support landscape planning. *Ecological Indicators*, 21, 54–66. <https://doi.org/10.1016/j.ecolind.2011.12.010>
- Kris Van Looy, Thierry Tormos, Yves Souchon & David Gilvear (2017) Analyzing riparian zone ecosystem services bundles to instruct river management, *International Journal of Biodiversity Science, Ecosystem Services & Management*, 13:1,330-341, DOI: 10.1080/21513732.2017.1365773
- La Bianca, G., Tillin, H., Hodgson, B., Erni-Cassola, G., Howell, K., & Rees, S. (2018). Ascension Island- Natural Capital Assessment: Marine ecosystem services report. JNCC; Funded by UK Government, 83p.
- Lauf, S., Haase, D., & Kleinschmit, B. (2014). Linkages between ecosystem services provisioning, urban growth and shrinkage - A modeling approach assessing ecosystem service trade-offs. *Ecological Indicators*, 42, 73–94. <https://doi.org/10.1016/j.ecolind.2014.01.028>
- Leitão, I. A., Ferreira, C. S. S., & Ferreira, A. J. D. (2019). Assessing long-term changes in potential ecosystem services of a peri-urbanizing Mediterranean catchment. *Science of the Total Environment*, 660, 993–1003. <https://doi.org/10.1016/j.scitotenv.2019.01.088>
- Li, J., Jiang, H.H., Bai, Y., Alatalo, J.M., Li, X., Jiang, H.H., Liu, G., Xu, J., 2016. Indicators for spatial-temporal comparisons of ecosystem service status between regions: A case study of the Taihu River Basin, China. *Ecol. Indic.* 60, 1008–1016. doi:10.1016/j.ecolind.2015.09.002
- Liu, W., Zhan, J., Zhao, F., Yan, H., Zhang, F., & Wei, X. (2019). Impacts of urbanization-induced land-use changes on ecosystem services: A case study of the Pearl River Delta Metropolitan Region, China. *Ecological Indicators*, 98(August 2018), 228–238. <https://doi.org/10.1016/j.ecolind.2018.10.054>
- Lovett, Andrew & Dockerty, Trudie & Papathanasopoulou, Eleni & Beaumont, Nicola & Smith, P.. (2015). A framework for assessing the impacts on ecosystem services of energy provision in the UK: An example relating to the production and combustion life cycle of UK produced biomass crops (short rotation coppice and Miscanthus). *Biomass and Bioenergy*. 83. 311-321. 10.1016/j.biombioe.2015.10.001.
- Lundy, L., & Wade, R. (2011). Integrating sciences to sustain urban ecosystem services. *Progress in Physical Geography*, 35(5), 653–669. <https://doi.org/10.1177/0309133311422464>
- Ma, L., Bicking, S., & Müller, F. (2019). Mapping and comparing ecosystem service indicators of global climate regulation in Schleswig-Holstein, Northern Germany. *Science of the Total Environment*, 648, 1582–1597. <https://doi.org/10.1016/j.scitotenv.2018.08.274>
- Maebe, L., Claessens, H., & Dufrêne, M. (2019). The critical role of abiotic factors and human activities in the supply of ecosystem services in the ES matrix. <https://doi.org/10.3897/oneco.4.e34769>
- Maes, J., Paracchini, M.-L., & Zulian, G. (2011). A European assessment of the provision of ecosystem services - Towards an atlas of ecosystem services. Joint Research Centre, Publications Office of the European Union (Vol. JRC63505). <https://doi.org/10.2788/63557>
- Malherbe, H., Pauleit, S., & Lorz, C. (2019). Mapping the Loss of Ecosystem Services in a Region Under Intensive Land Use Along the Southern Coast of South Africa. *Land*, 8, . doi: 10.3390/land8030051
- Maltby, L., Jackson, M., Whale, G., Brown, A. R., Hamer, M., Solga, A., ... Marshall, S. (2016). Science of the Total Environment Is an ecosystem services-based approach developed for setting specific protection goals for plant protection products applicable to other chemicals? *Science of the Total Environment*, 580(December 2016), 1222–1236. <https://doi.org/10.1016/j.scitotenv.2016.12.083>
- Mangi, H. O. (2016). Tide Management in the Elbe River and Changes in Ecosystem Services. *Advances in Ecology*, 2016, 13. Retrieved from <http://dx.doi.org/10.1155/2016/9519637>
- Manolaki, P., & Vogiatzakis, I. N. (2017). Ecosystem services in a peri-urban protected area in Cyprus: a rapid appraisal. *Nature Conservation*, 22, 129–146. <https://doi.org/10.3897/natureconservation.22.13840>
- Martínez-Harms, M. J., Quijas, S., Merenlender, A. M., & Balvanera, P. (2016). Enhancing ecosystem services maps combining field and environmental data. *Ecosystem Services*, 22(December), 32–40. <https://doi.org/10.1016/j.ecoser.2016.09.007>
- Mukul, S. A., Sohel, M. S. I., Herbohn, J., Inostroza, L., & König, H. (2017a). Integrating ecosystem services supply potential from future land-use scenarios in protected area management: A Bangladesh case study. *Ecosystem Services*. <https://doi.org/10.1016/j.ecoser.2017.04.001>
- Nahuelhual, L., Carmona, A., Lozada, P., Jaramillo, A., & Aguayo, M. (2013). Mapping recreation and ecotourism as a cultural ecosystem service: An application at the local level in Southern Chile. *Applied Geography*, 40, 71–82. <https://doi.org/10.1016/j.apgeog.2012.12.004>
- Nedkov S., Boyanova K., Burkhard B. (2015) Quantifying, Modelling and Mapping Ecosystem Services in Watersheds. In: Chicharo L., Müller F., Fohrer N. (eds) *Ecosystem Services and River Basin Ecohydrology*. Springer, Dordrecht

- Nedkov, S., & Burkhard, B. (2012). Flood regulating ecosystem services - Mapping supply and demand, in the Etropole municipality, Bulgaria. *Ecological Indicators*, 21, 67–79. <https://doi.org/10.1016/j.ecolind.2011.06.022>
- Nedkov, S., Gikov, A., Nikolova, M., & Dimitrov, P. (2014). MAPPING OF ECOSYSTEM SERVICES SUPPLY IN MOUNTAIN AREAS : A CASE STUDY OF SEVEN RILA LAKES , BULGARIA, 5th International Conference on Cartography and GIS, June 15–21, 2014 Riviera, Bulgaria
- Neumann, B., Mikoleit, A., Bowman, J. S., Ducklow, H. W., & Müller, F. (2019). Ecosystem Service Supply in the Antarctic Peninsula Region : Evaluating an Expert-Based Assessment Approach and a Novel Seascape Data Model. *7*(October), 1–17. <https://doi.org/10.3389/fenvs.2019.00157>
- Nowak, A., & Grunewald, K. (2018). Landscape sustainability in terms of landscape services in rural areas: Exemplified with a case study area in Poland. *Ecological Indicators*, 94(February), 12–22. <https://doi.org/10.1016/j.ecolind.2018.01.059>
- Nurokhmah, I., Adrianto, L., & Sjafrin, N. D. M. (2019). The linkage of social-ecological system of Mangrove in Jor Bay, East Lombok Regency, West Nusa Tenggara. *IOP Conference Series: Earth and Environmental Science*, 241(1), 0–10. <https://doi.org/10.1088/1755-1315/241/1/012001>
- Owuor, M. A., Icelly, J., Newton, A., Nyunja, J., Otieno, P., Tuda, A. O., & Oduor, N. (2017). Mapping of ecosystem services flow in Mida Creek, Kenya. *Ocean & Coastal Management*, 140, 11–21. <https://doi.org/10.1016/j.ocecoaman.2017.02.013>
- Peter Waweru Wangai, Benjamin Burkhard & Felix Müller (2019) Quantifying and mapping land use changes and regulating ecosystem service potentials in a data-scarce peri-urban region in Kenya, *Ecosystems and People*, 15:1, 11-32, DOI: 10.1080/21513732.2018.1529708
- Poikolainen, L., Pinto, G., Vihervaara, P., Burkhard, B., Wolff, F., Hyytiäinen, R. & Kumpula, T. (2019) GIS and land cover-based assessment of ecosystem services in the North Karelia Biosphere Reserve, Finland. *Fennia* 197(2) 1–19. <https://dx.doi.org/10.11143/fennia.80331>
- Polce, C., Maes, J., Brander, L., Cescatti, A., Baranzelli, C., Lavallo, C., & Zulian, G. (2016). Global change impacts on ecosystem services: a spatially explicit assessment for Europe. *One Ecosystem*, 1, e9990. <https://doi.org/10.3897/oneeco.1.e9990>
- Potschin, M., & Haines-Young, R. (2013). Landscapes, sustainability and the place-based analysis of ecosystem services. *Landscape Ecology*, 28(6), 1053–1065. <https://doi.org/10.1007/s10980-012-9756-x>
- Ricaurte, L. F., Olaya-rodríguez, M. H., Cepeda-valencia, J., Lara, D., Arroyave-Suárez, J., Finlayson, C. M., & Palomo, I. (2017). Future impacts of drivers of change on wetland ecosystem services in Colombia. *Global Environmental Change*, 44(April), 158–169. <https://doi.org/10.1016/j.gloenvcha.2017.04.001>
- Roche, P. K., & Campagne, C. S. (2019). Are expert-based ecosystem services scores related to biophysical quantitative estimates ? *Ecological Indicators*, 106(May), 105421. <https://doi.org/10.1016/j.ecolind.2019.05.052>
- Roussel, F., Schulp, C. J. E., Verburg, P. J., & van Teeffelen, A. J. A. (2017). Testing the applicability of ecosystem services mapping methods for peri-urban contexts: A case study for Paris. *Ecological Indicators*, 83 , 504-514.
- Salomidi, M., Katsanevakis, S., Borja, A., Braeckman, U., Damalas, D., Galparsoro, I., et al. (2012). Assessment of goods and services, vulnerability, and conservation status of European seabed biotopes: a stepping stone towards ecosystem-based marine spatial management. *Mediterr. Mar. Sci.* 13, 49–88. doi: 10.12681/mms.23
- Sanchez-Porras, A., Tenorio-Arvide, M., Peña-Moreno, R., Sampedro-Rosas, M., & Silva-Gómez, S. (2018). Evaluation of the Potential Change to the Ecosystem Service Provision Due to Industrialization. *Sustainability*, 10(9), 3355. <https://doi.org/10.3390/su10093355>
- Santolini, R., Morri, E., Pasini, G., Giovagnoli, G., Morolli, C., & Salmoiraghi, G. (2014). Assessing the quality of riparian areas: the case of River Ecosystem Quality Index applied to the Marecchia river (Italy). *International Journal of River Basin Management*, 13(1), 1–16. <https://doi.org/10.1080/15715124.2014.945091>
- Schernewski, G., Inácio, M., & Nazemtseva, Y. (2018). Expert Based Ecosystem Service Assessment in Coastal and Marine Planning and Management : A Baltic Lagoon Case Study. *Frontiers in Environmental Science*, 6(April), 1–14. <https://doi.org/10.3389/fenvs.2018.00019>
- Scolozzi R, Morri E, Santolini R (2012) Delphi-based change assessment in ecosystem service values to support strategic spatial planning in Italian landscapes *Ecological Indicators* 21:134–144
- Sinare, H., Gordon, L. J., & Enfors Kautsky, E. (2016). Assessment of ecosystem services and benefits in village landscapes - A case study from Burkina Faso. *Ecosystem Services*, 21, 141–152. <https://doi.org/10.1016/j.ecoser.2016.08.004>
- Skokanová, H. (2013). Can we combine structural functionality and landscape services assessments in order to estimate the impact of landscape structure on landscape services ? *Moravian Geographical Reports*, 21(4), 2–14. <https://doi.org/10.2478/mgr-2013-0016>
- Sohel, M. S. I., Ahmed Mukul, S., & Burkhard, B. (2015). Landscape's capacities to supply ecosystem services in Bangladesh: A mapping assessment for Lawachara National Park. *Ecosystem Services*, 12, 128–135. <https://doi.org/10.1016/j.ecoser.2014.11.015>
- Stoll, S., Frenzel, M., Burkhard, B., Adamescu, M., Augustaitis, A., Baeßler, C., ... Müller, F. (2015). Assessment of ecosystem integrity and service gradients across Europe using the LTER Europe network. *Ecological Modelling*, 295, 75–87. <https://doi.org/10.1016/j.ecolmodel.2014.06.019>

- Sun, J., Liu, L., Müller, K., Zander, P., Ren, G., Yin, G., & Hu, Y. (2018). Surplus or deficit? Spatiotemporal variations of the supply, demand, and budget of landscape services and landscape multifunctionality in suburban Shanghai, China. *Sustainability (Switzerland)*, 10(10), 1–21. <https://doi.org/10.3390/su10103752>
- Sun, X., Tang, H., Yang, P., Hu, G., Liu, Z., & Wu, J. (2020). Spatiotemporal patterns and drivers of ecosystem service supply and demand across the conterminous United States: A multiscale analysis. *Science of the Total Environment*, 703, 135005. <https://doi.org/10.1016/j.scitotenv.2019.135005>
- T. Potts, D. Burdon, E. Jackson, J.P. Atkins, J. Saunders, E. Hastings, O. Langmead, Do marine protected areas deliver flows of ecosystem services to support human welfare?, *Mar. Policy* 44 (2014) 139–148.
- Tamang, B. (2011). An Assessment of Ecosystem Services of the Everest Region, Nepal. Universität zu Kiel. <https://doi.org/10.1002/ejoc.201200111>
- Tao, Y., Wang, H., Ou, W., Guo, J., 2018. Land Use Policy A land-cover-based approach to assessing ecosystem services supply and demand dynamics in the rapidly urbanizing Yangtze River Delta region. *Land use policy* 72, 250–258. doi:10.1016/j.landusepol.2017.12.051
- Tavora, G. S. G., & Turetta, A. P. D. (2016). An approach to map landscape functions in Atlantic Forest - Brazil. *Ecological Indicators*, 71, 557–566. <https://doi.org/10.1016/j.ecolind.2016.07.005>
- Tempera F., Liqueste C., Cardoso A.C., 2016. Spatial distribution of marine ecosystem service capacity in the European seas. EUR 27843. Luxembourg (Luxembourg): Publications Office of the European Union. doi:10.2788/753996.
- Ušča, M., Vinogradovs, I., Reke, A., Immurs, D. V., & Zariņa, A. (2019). Assessment of ecosystem services for planning of green infrastructure at the regional level. *Proceedings of the 12th International Scientific and Practical Conference.*, 1, 315–319. <https://doi.org/10.17770/etr2019vol1.4085>
- Van der Biest et al. (2015). Evaluation of the accuracy of land-use based ecosystem service assessments for different thematic resolutions. *Journal of Environmental Management*, 156(June), 41–51. <https://doi.org/10.1016/j.jenvman.2015.03.018>
- Vanteeva, J. V., & Solodyankina, S. V. (2015). Ecosystem Functions of Steppe Lands Capes Near Lake Baikal. *Ecological Indicators*, 14(1), 65–78. <https://doi.org/10.1515/hacq-2015-0016>
- Vihervaara, P., Kumpula, T., Ruokolainen, A., Tanskanen, A., & Burkhard, B. (2012). The use of detailed biotope data for linking biodiversity with ecosystem services in Finland. *International Journal of Biodiversity Science, Ecosystem Services & Management*, 8(1-2), 169–185. <https://doi.org/10.1080/21513732.2012.686120>
- Vihervaara, P., Kumpula, T., Tanskanen, A., & Burkhard, B. (2010). Ecosystem services-A tool for sustainable management of human-environment systems. Case study Finnish Forest Lapland. *Ecological Complexity*, 7(3), 410–420. <https://doi.org/10.1016/j.ecocom.2009.12.002>
- Villoslada, M., Vinogradovs, I., Ruskule, A., Veidemane, K., Nikodemus, O., Kasparinskis, R., ... Gulbinas, J. (2018). A multitiered approach for grassland ecosystem services mapping and assessment: The viva grass tool. *One Ecosystem*, 3(514). <https://doi.org/10.3897/oneeco.3.e25380>
- Vrebos, D., Staes, J., Vandenbroucke, T., D’Haeyer, T., Johnston, R., Muhumuza, M., ... Meire, P. (2015). Mapping ecosystem service flows with land cover scoring maps for data-scarce regions. *Ecosystem Services*, pp. 28–40. Elsevier. <https://doi.org/10.1016/j.ecoser.2014.11.005>
- Wangai, P. W., Burkhard, B., & Kruse, M. (2017). Contributing to the cultural ecosystem services and human wellbeing debate : a case study application on indicators and linkages. *LANDSCAPE ONLINE*, 50(March), 1–27. <https://doi.org/10.3097/LO.201750>
- Weyland, F., Barral, M. P., Lateralra, P., Nacional, U., Mar, D., Weyland, F., ... Lateralra, P. (2017). Assessing the relationship between ecosystem functions and services: Importance of local ecological conditions. *Ecological Indicators*, 81(June), 201–213. <https://doi.org/10.1016/j.ecolind.2017.05.062>
- Wu, X., Liu, S., Zhao, S., Hou, X., Xu, J., Dong, S., & Liu, G. (2018). Quantification and driving force analysis of ecosystem services supply, demand and balance in China. *Science of the Total Environment*, 652, 1375–1386. <https://doi.org/10.1016/j.scitotenv.2018.10.329>
- Yaneva R. 2016 Qualitative assessment of the supply and demand of ecosystem services in the Pantano Wash watershed- Chapitre 13 in Poupeau et al. 2016 Steps towards a transatlantic and transdisciplinary assessment of water scarcity in Southern Arizona Book UNESCO-IHE institute for Water Educationm Delft The Netherlands
- Zarandian, A., Baral, H., Yavari, A. R., Jafari, H. R., Stork, N. E., Ling, M. A., & Amirnejad, H. (2016). Anthropogenic decline of ecosystem services threatens the integrity of the unique Hyrcanian (Caspian) forests in Northern Iran. *Forests*, 7(3). <https://doi.org/10.3390/f7030051>
- Zhang, S., & Ramírez, F. M. (2019). Assessing and mapping ecosystem services to support urban green infrastructure : The case of Barcelona , Spain. *Cities*, 92(May 2018), 59–70. <https://doi.org/10.1016/j.cities.2019.03.016>
- Zhang, Z., Gao, J., Fan, X., Lan, Y., Zhao, M., 2017. Response of ecosystem services to socioeconomic development in the Yangtze River Basin, China. *Ecol. Indic.* 72, 481–493. doi:10.1016/j.ecolind.2016.08.035