# RELEVANT RESEARCH ARTICLES & CASE STUDIES

### Laws and Policies Shaping Citizen Science

Gellman, Robert. Crowdsourcing, Citizen Science, and the Law: Legal Issues Affecting Federal Agencies. Woodrow Wilson International Center for Scholars (2015). <a href="https://tinvurl.com/citsci-law">https://tinvurl.com/citsci-law</a>

Berti Suman A. and Pierce R. (2018) "Challenges for Citizen Science and the EU Open Science Agenda under the GDPR". European Data Protection Law Review, Volume 4, Issue 3. DOI: 10.21552/edpl/2018/3/7. https://doi.org/10.21552/edpl/2018/3/7

Anastasia Telesetsky, *Navigating the Legal Landscape for Environmental Monitoring by Unmanned Aerial Vehicles*, 7 Geo. Wash. J. Energy & Envtl. L. 140 (2016). https://tinyurl.com/citsci-UAVs

#### Case Studies

Wyeth, G., L.C. Paddock, A. Parker, R.L. Glicksman and J. Williams. 2019. "The Impact of Citizen Environmental Science in the United States". *The Environmental Law Reporter* 3, 49: 10237 – 10263. https://elr.info/news-analysis/49/10237/impact-citizen-environmental-science-united-states.

Balcom, Brittany. "Improving Crowdsourcing and Citizen Science as a Policy Mechanism for NASA." New Space 3:2 (2015): 98-116. DOI: 10.1089/space.2015.0017. https://tinyurl.com/citsci-nasapolicymaking

Berti Suman A. and M. van Geenhuizen (2019) "Not just noise monitoring: rethinking citizen sensing for risk-related problem-solving". Journal of Environmental Planning and Management. DOI: 10.1080/09640568.2019.1598852. https://doi.org/10.1080/09640568.2019.1598852

Berti Suman A. (2018) "Challenging risk governance patterns through citizen sensing: the Schiphol Airport case", International Review of Law, Computers & Technology, Volume 32, Issue 1. https://www.tandfonline.com/doi/full/10.1080/13600869.2018.1429186

Case Study: Civic resistance through citizen science. https://tinyurl.com/citsci-AnalyzeBasilicata

An Inventory of Citizen Science Activities for Environmental Policies. https://tinyurl.com/citsci-inventory

## Influencing Laws and Policies using Citizen Science

Berti, Suman A. (2019) "Between Freedom and Regulation: Investigating Community Standards for Enhancing Scientific Robustness of Citizen Science." In: Reins L. (eds) Regulating New Technologies in Uncertain Times. Information Technology and Law Series, vol 32. T.M.C. Asser Press, The Hague. <a href="https://link.springer.com/chapter/10.1007%2F978-94-6265-279-8">https://link.springer.com/chapter/10.1007%2F978-94-6265-279-8</a> 3

Dosemagen, Shannon and Alison Parker. "Citizen Science across a Spectrum: Broadening the Impact of Citizen Science and Community Service." Science and Technology Studies, (2018). <a href="https://sciencetechnologystudies.journal.fi/article/view/60419">https://sciencetechnologystudies.journal.fi/article/view/60419</a>

Citizen science for environmental policy: Development of an EU-wide inventory and analysis of selected practices (November 2018). https://tinyurl.com/citsci-envpolicyinventory

Haklay, M. 2015. Citizen Science and Policy: A European Perspective. Washington, DC: Woodrow Wilson International Center for Scholars. <a href="https://tinyurl.com/citsci-europolicy">https://tinyurl.com/citsci-europolicy</a>

Backstrand, Karin. "Civic Science for Sustainability: Reframing the Role of Experts, Policy-Makers and Citizens in Environmental Governance." *Global Environmental Politics* 3:4. (2003): 24-41. <a href="https://www.researchgate.net/publication/24089809">https://www.researchgate.net/publication/24089809</a> Civic Science for Sustainability Reframing the Role of Experts Policy-Makers and Citizens in Environmental Governance

Annie E. Brett, Putting the Public on Trial: Can Citizen Science Data be Used in Litigation and Regulation?, 28 VILL. ENVTL. L.J. 163 (2017). https://tinyurl.com/citsci-litigation-regulation

### Conservation (case studies and reviews)

Aceves-Bueno, Eréndira, Adeyemi S. Adeleye, Darcy Bradley, W. Tyler Brandt, Patrick Callery, Marina Feraud, Kendra L. Garner, et al. 2015. "Citizen Science as an Approach for Overcoming Insufficient Monitoring and Inadequate Stakeholder Buy-in in Adaptive Management: Criteria and Evidence." Ecosystems, 493–506. https://tinyurl.com/citsci-adaptivemanagement

Haywood, Benjamin K., Julia K. Parrish, and Jane Dolliver. 2016. "Place-Based and Data-Rich Citizen Science as a Precursor for Conservation Action." Conservation Biology: The Journal of the Society for Conservation Biology 30 (3): 476–86. https://tinvurl.com/citsci-conservationaction

McKinley, D. C., A. J. Miller-Rushing, H. L. Ballard, R. Bonney, H. Brown, S. C. Cook-Patton, D. M. Evans, et al. 2016. "Citizen Science Can Improve Conservation Science, Natural Resource Management, and Environmental Protection." Biological Conservation. <a href="https://tinyurl.com/citsci-conservation">https://tinyurl.com/citsci-conservation</a>

McKinley, D. C., A. J. Miller-Rushing, H. L. Ballard, R. Bonney, H. Brown, D. M. Evans, R. A. French, et al. 2015. "Investing in Citizen Science Can Improve Natural Resource Management and Environmental Protection." Issues in Ecology 2015 (19). <a href="https://www.esa.org/wp-content/uploads/2015/09/Issue19.pdf">https://www.esa.org/wp-content/uploads/2015/09/Issue19.pdf</a>

McKinley, Duncan C., Russell D. Briggs, and Ann M. Bartuska. 2012. "When Peer-Reviewed Publications Are Not Enough! Delivering Science for Natural Resource Management." Forest Policy and Economics 21 (August): 1–11. <a href="https://tinyurl.com/citsci-natresourcemanagement">https://tinyurl.com/citsci-natresourcemanagement</a>

#### Marine Conservation (case studies and reviews)

Cigliano, John A., Ryan Meyer, Heidi L. Ballard, Amy Freitag, Tina B. Phillips, and Ann Wasser. 2015. "Making Marine and Coastal Citizen Science Matter." Ocean & Coastal Management 115 (October): 77–87. https://tinyurl.com/citsci-marinecoastal

Meyer, Ryan, Erin Meyer, Leila Sievanen, and Amy Freitag. 2017. "Using Citizen Science to Inform Ocean and Coastal Resource Management." In Citizen Science for Coastal and Marine Conservation[1], 132–52. Routledge. <a href="https://tinyurl.com/citsci-meyer2017">https://tinyurl.com/citsci-meyer2017</a>

OST. 2014. "Citizen Science & Ocean Resource Management in California: Guidance for Forming Productive Partnerships." Oakland, CA: California Ocean Science Trust. <a href="https://tinyurl.com/citsci-ocean">https://tinyurl.com/citsci-ocean</a>

## **Effective Science and Community Partnerships**

Haklay, M., and Francis, L. (2018) "Participatory GIS and community-based citizen science for environmental justice action" The Routledge Handbook of Environmental Justice. Abingdon: Routledge, pp. 297-308. https://tinyurl.com/citsci-participatorygis

### **Additional Resources**

Max Liboiron. The Power Relations of Citizen Science, 2019. https://tinyurl.com/citsci-powerrelations

McNie, Elizabeth C., Adam Parris, and Daniel Sarewitz. 2017. "Improving the Public Value of Science: A Typology to Inform Discussion, Design and Implementation of Research." Research Policy 45 (4): 884–95. <a href="https://www.sciencedirect.com/science/article/abs/pii/S0048733316000056">https://www.sciencedirect.com/science/article/abs/pii/S0048733316000056</a>

McNie, E., A. Bednarek, R. Meyer, and A. Parris. 2016. "Designing Usable Environmental Research." In Science, Information, and Policy Interface for Effective Coastal and Ocean Management, edited by Bertrum H. MacDonald, Suzuette S. Soomai, Elizabeth M. De Santo, and Peter G. Wells, 203–30. CRC Press. https://www.ingentaconnect.com/content/rout/2h8avn/2016/00000001/00000001/art00010