

Participatory Modelling: Beginnings of a list

Description

[Tweet](#)

What is Participatory Modelling?

[Gray et al \(2018\)](#) – The field of PM lies at the intersection of participatory approaches to planning, computational modeling, and environmental modeling•

Wikipedia: **Participatory modeling** is a purposeful learning process for action that engages the implicit and explicit knowledge of stakeholders to create formalized and shared representation(s) of reality. In this process, the participants co-formulate the problem and use modeling practices to aid in the description, solution, and decision-making actions of the group. Participatory modeling is often used in environmental and resource management contexts. It can be described as engaging non-scientists in the scientific process. The participants structure the problem, describe the system, create a [computer model](#) of the system, use the model to test policy interventions, and propose one or more solutions. Participatory modeling is often used in natural resources management, such as forests or water.

There are numerous benefits from this type of modeling, including a high degree of ownership and motivation towards change for the people involved in the modeling process. There are two approaches which provide highly different goals for the modeling; continuous modeling and conference modeling.

Recent references

- Olazabal M, Neumann MB, Foudi S, et al. (n.d.) **Transparency and Reproducibility in Participatory Systems Modelling: the Case of Fuzzy Cognitive Mapping.** *Systems Research and Behavioral Science* 0(0). DOI: [10.1002/sres.2519](https://doi.org/10.1002/sres.2519).
- Gray S, Voinov A, Paolisso M, et al. (2018) **Purpose, processes, partnerships, and products: four Ps to advance participatory socio-environmental modeling.** *Ecological Applications* 28(1): 46–61. DOI: [10.1002/eap.1627](https://doi.org/10.1002/eap.1627).
- Hedelin B, Evers M, Alkan-Olsson J, et al. (2017) **Participatory modelling for sustainable development: Key issues derived from five cases of natural resource and disaster risk management.** *Environmental Science & Policy* 76: 185–196. DOI: [10.1016/j.envsci.2017.07.001](https://doi.org/10.1016/j.envsci.2017.07.001).
- Basco-Carrera L, Warren A, van Beek E, et al. (2017) **Collaborative modelling or participatory modeling? A framework for water resources management.** *Environmental Modelling & Software* 91: 95–110. DOI: [10.1016/j.envsoft.2017.01.014](https://doi.org/10.1016/j.envsoft.2017.01.014).
- Eker S, Zimmermann N, Carnohan S, et al. (2017) **Participatory system dynamics modelling for housing, energy and wellbeing interactions.** *Building Research & Information* 0(0): 1–17. DOI: [10.1080/09613218.2017.1362919](https://doi.org/10.1080/09613218.2017.1362919).
- Voinov A, Kolagani N, McCall MK, et al. (2016) **Modelling with stakeholders – Next generation.** *Environmental Modelling and Software* 77: 196220. DOI: [10.1016/j.envsoft.2015.11.016](https://doi.org/10.1016/j.envsoft.2015.11.016).

- Voinov AA (2010) **Participatory Modeling: What, Why, How?** University of Twente. Available at:
<http://www2.econ.iastate.edu/tesfatsi/ParticipatoryModelingWhatWhyHow.AVoinov.March2010.pdf>

See also Will Allen's [list of papers on participatory modelling](#)

Category

1. Lists of sources re ...
2. Participatory Modelling

Date

01/07/2026

Date Created

12/06/2018

Author

admin