INNOVATIONS IN COLLABORATIVE MODELING 2021 Participatory Modeling Field School

Participatory Modeling Project DESIGN TEMPLATE¹

Defining Problems and Outcomes

1. What is the nature of the problem to be modeled?

2. What are the expected outputs and outcomes from this project?

3. Why is participatory modeling a useful approach for addressing this problem?

Selecting Modeling Techniques

4. Given the nature of the problem, what qualitative, semi-quantitative and quantitative methods and/or modeling techniques will be critical for gaining insight into this problem?

¹ This design template is informed by the "4 Ps" of participatory modeling specified by Steven Gray and colleagues (Gray, S., Voinov, A., Paolisso, M., Jordan, R., BenDor, T., Bommel, P., ... & Zellner, M. (2018). Purpose, processes, partnerships, and products: four Ps to advance participatory socioenvironmental modeling. *Ecological applications*, 28(1), 46-61).

Identifying and Engaging Stakeholders

- 5. Who are the major community stakeholders who have knowledge of this problem, are affected by it, or who would be affected by decisions stemming from this project?
- 6. How will you partner with these community stakeholders throughout the modeling process?
- 7. Are there additional subject matter experts you will need to seek out for this project that are not community stakeholders?
- 8. How will you partner with stakeholders throughout the modeling process? Specify what elements of the project they will be involved in, how, and when.

Using Models

- 9. How will you validate the usefulness of the model as you go along?
- 10. What strategies will you use to facilitate the use of project findings and insights for systems transformation?