

Which event(s) are you registering for?

1. [Mobile Geo-survey \(open between February 1 and February 10, 2021\)](#)
2. [Geodesign Game One \(1:30 p.m. to 4:30 p.m. on March 1\)](#)
3. [Geodesign Game Two \(1:30 p.m. to 4:30 p.m. on March 3\)](#)
4. [Geodesign Game Three \(1:30 p.m. to 4:30 p.m. on March 5\)](#)

Schedule for Geodesign Game Two (1:30 p.m. to 4:30 p.m. on March 3)

1:30 - 2:30 Briefing presentations (60 mins)

For the first 40 minutes, you will be introduced to strengths, weaknesses, opportunities, and threats of each water resource region (WRR) network’s green, blue, and human infrastructure systems. Figure one and table one show how we organize water resource regions into networks using the geographic domains of the Climate Adaptation Science Centers (CASC)

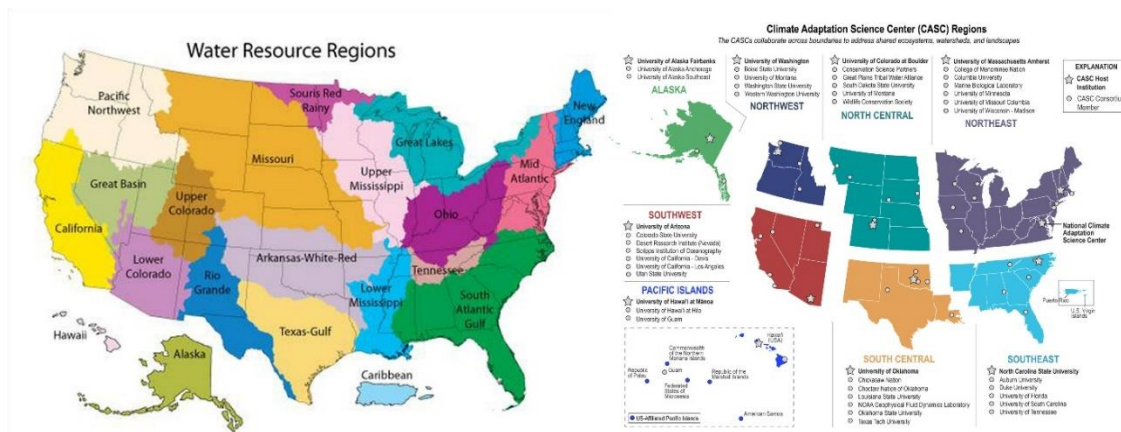


Figure 1. USGS Water Resource Regions (WRRs) (Left) and Institutions in CASC Networks (Right)

Table 1. CASC Networks of Water Resource Regions (WRRs) for Gulf of Mexico (GoM)

CASC Networks	USGS Water Resource Regions (WRRs)		
South Central (SCN)	Rio Grande	Texas-Gulf	Arkansas-White-Red
Southeast (SEN)	Lower Mississippi	South Atlantic Gulf	Tennessee
Northeast (NEN)	Ohio	Great Lakes	
North Central (NCN)	Missouri	Upper Mississippi	

We will also share prototypical climate adaptation actions generated from best practices that have been used to transform these weaknesses and threats into strengths and opportunities. Then, we will provide suitability criteria for selecting priority intervention zones and sites for implementing these best practices in a way that maximizes their collective hydrological, ecological, and socioeconomic performances. For the last 20 minutes, you will be given an overview of the network plans and the final continental climate adaptation plan generated from the first geodesign game on March 1.

2:30 - 3:30 Network team session (40 mins for team work + 20 mins for presentations)

For the first 40 minutes, you will be assigned to a network team to cocreate a consensus-based climate adaptation plan for one of the four networks of WRRs that contribute to the Gulf of Mexico (Table 1 and Figure 1). You will be asked to start with the network plan generated from the first geodesign game and to identify intervention prototypes and sites that need to be revised to make the network plan more coherent with the final continental plan and add intervention prototypes and sites that will help further strengthen the coherence between the network plan and the continental plan. For each component and site you would like to add, provide the following scores for the Integration, Change, Impact, and Decision Models (Figure 2 and 3):

- 1) SWOT analysis (3, 2, and 1 for high, medium, and low transformative potential);
- 2) Cost-benefit analysis (3, 2, and 1 for high, medium, and low economic performance);
- 3) Hydrological, ecological, or social performance (3, 2, and 1 for high, medium, and low); and
- 4) Relative importance of hydrological, ecological, social, and economic benefits (4, 3, 2, and 1 from the most important to the least important)

The scores will be used to rank the various components in the alternative continental climate adaptation plans. The rankings and comments will be used to merge alternatives into a final continental climate adaptation plan. Then, we will spend 20 minutes presenting the final network climate adaptation plans from all the teams.

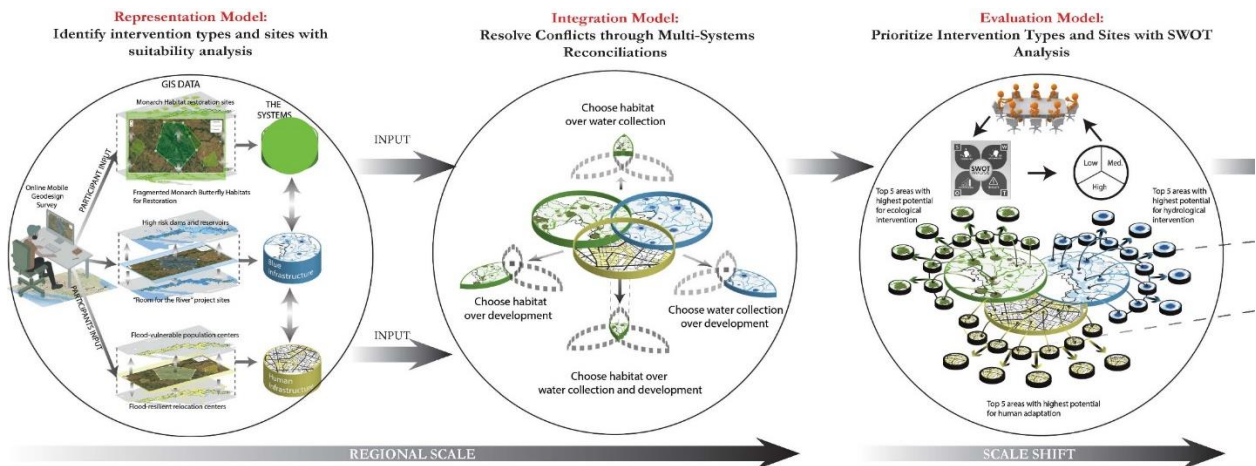


Figure 2. First Three Phases of Geodesign Games (Representation, Integration, and Evaluation Models)

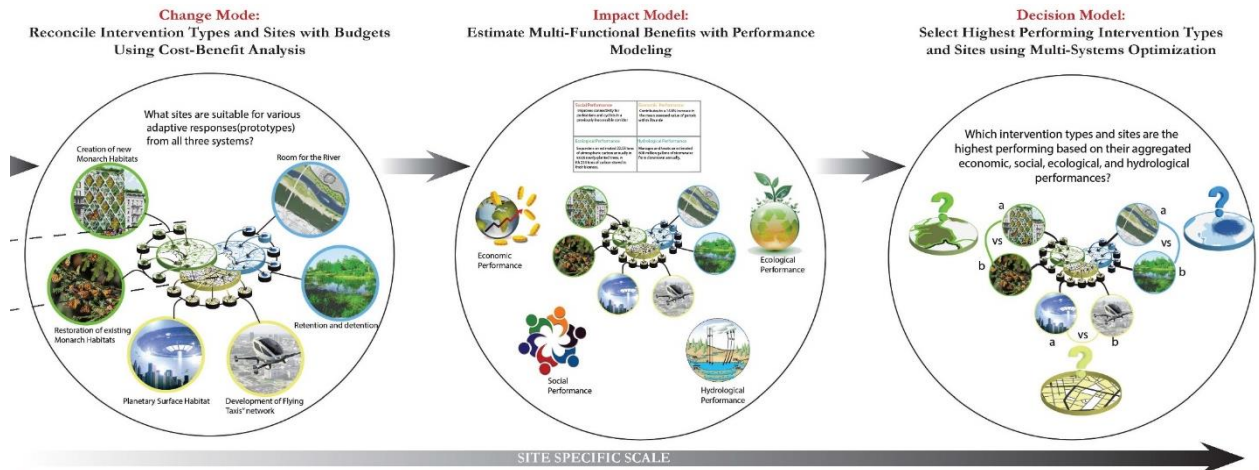


Figure 3. Last Three Phases of Geodesign Games (Change, Impact, and Decision Models)

3:30 – 4:30 Create water resource region (WRR) plans from each network plan (20 minutes)

For the first 40 minutes, use the final network climate adaptation plan to inform each water resource region plan within your network. Use the scores from the last hour to identify top two intervention prototypes and sites for each of the green, blue, and human infrastructure systems within each WRR as priority projects. Identify other intervention prototypes and sites that help integrate these priority projects into a complex adaptive system within each water resource region that will help humans and non-human species migrate to the nearest relocation destinations to circumvent the impacts of catastrophic flooding due to sea level rise with all ice melted from solar storms and tidal waves from polar reversal. We will spend 20 minutes presenting the WRR climate adaptation plans within each of the four CASC networks.

