

Marin County Game of Floods Improvements Scope of Work

Term of project: January 1, 2017 – September 30, 2017

Alfred Twu, consultant for Tasks 1-3

County staff, Task 4

Amount: \$7,200

The Game of Floods is a public outreach tool developed by the County of Marin as a way to educate and engage residents in planning for sea level rise adaptation. After playing the game with a variety of audiences, including high school students, environmental and water resource managers, historic preservationists and Marin residents, the County would like to update the game so that it can be played independently without support from County staff. Groups from around the state and country have expressed interest in playing the Game of Floods, and widespread use will promote open dialogue around adaptation strategies that balance economic, environmental and social goals.

Game Parameters

- 1.1 Number of players (4 minimum, 8 maximum, 6 ideal)
- 1.2 Game length (Minimum 50 minute classroom sessions, with optional bonus rounds for extended play of up to 90 minutes)
- 1.3 Level of English proficiency required to play (Proficient)
- 1.4 Recommended minimum age (12 years)
- 1.5 Production cost (\$30), plus shipping (\$6-\$10)

Tasks

1. Prepare 3 conceptual ideas for refining the structure of how the game is played.

- 1.1 Articulate the central challenge/question presented by the game. For example: “Sea level rise and storms are threatening to flood our communities. With a limited budget and competing interests, how can we work together to prepare and survive?”
- 1.2 Set a budget or otherwise include the idea of fiscal constraints.
- 1.3 Include the element of chance. (more on this in 2.4)
- 1.4 Does group place a set number of strategies per round, with simultaneous play and consensus-building? Does group play for the whole island or start with one community and work their way around?
- 1.5 Could the consequences of rising waters progress with each turn? Ex: After first round, red area floods and unprotected assets like road access are lost. Impacts could be based on what adaptation strategies are already in place. Encourage spending on long-term protection up front.

Task 1 Deliverable: Present conceptual ideas to County staff in March 2017. Each idea will be documented as a one page description of how the game works, plus a general summary consisting of a paragraph of text with a couple of sketches, similar to a description found on the back of a typical board game box.

Task 1 Budget: \$1,000

2. Revise instructions, game board and pieces to support modified rules of play.

2.1 Develop 1-2 page instructions with visuals, similar to “Bay Area Regional Planner”.

2.2 Develop 2 alternative draft design game boards and pieces (County to provide Illustrator file)

- Peninsula like landform with both sheltered bay and open coast.
- Make communities more different from one another, including some more urban areas, historic neighborhoods, landfill, wastewater treatment plant, transit center, airport, etc.
- Could there be a geometric pattern or distinct boundaries between assets or communities to improve clarity?
- Possibly simplify strategies and assets
- Could the game board be developed as a puzzle with interchangeable pieces that allow for more complex geography or could the board be double-sided to allow for a variety of landscapes?

2.3 Develop role cards with asset-based goals for each player (some ideas below):

- Ecologist: preserve beaches and wetlands (lose no more than one of each). Consider including fisheries issues as that is a big local issue.
- Resident: buildings, recreation, scenic views, and low-income, affluent communities
- Rancher: agriculture, roads
- Utility Manager: protect wastewater and potable water systems, electricity, etc.
- Fire chief: Emergency access and facilities

2.4 Develop chance cards (some ideas below):

- State grants \$200,000 for managed retreat of public facilities at beach parks.
- Regional tax measure generates \$1,000,000 for wetland restoration.
- Mudflat Manor residents approve local tax measure that generates \$500,000.
- King Tide: Temporary flooding, can't access certain communities.
- Annual storm: Unprotected assets in orange zone are damaged, assets in red zone destroyed.
- 100-year storm: Unprotected assets in yellow zone are damaged, assets in orange and red zones are destroyed.

2.5 Place wooden houses and/or people in each community? One goal to keep a certain number of them on the board?

Task 2 Deliverables: Game will be tested and revised, with 3 rounds of draft rules/boards/etc send to County staff for review, in March, April, and May, plus final version in September 2017. Present rough draft of game components and box art in June 2017.

Task 2 Budget: \$4,000

3. Finalize Game of Floods for professional printing

- 3.1 Incorporate feedback from County staff to finalize game
- 3.2 Produce final art for game components box, and promotional materials.
- 3.3 Obtain cost estimate for producing 10 copies or more.
- 3.4 Provide County with instructions to have the game printed.
- 3.5 Advise on offering game to a wider market (e.g., using kickstarter or other means for interested buyers to purchase game boards all ensure County can recover costs). Prepare one page marketing plan.
- 3.6 Advise on copyrighting process.

Task 3 Deliverables: Provide digital PDF version of game instructions, board and cards. Provide memo with professional printing costs and instructions by July 2017.

Task 3 Budget: \$2,000

4. Facilitate “train the trainers” workshops in the North Bay

- 4.1 Print six copies of the game for Napa and Sonoma Counties
- 4.2 Marin County staff will lead the game with a focus on training local county leads for Napa and Sonoma. Possible leads could include educator networks, environmental groups, or local organizations like the Resource Conservation Districts or Point Blue to expand the reach of the game in the North Bay.

Task 4 Deliverables: Provide six copies (three each) of the game to Napa and Sonoma County. Marin County staff to lead up to three trainings at NBWA meetings like the Watershed Council or another NBWA-organized meeting with the purpose of training and identifying a local county lead at each of the three North Bay Counties.

Task 4 Budget: \$200