

Flood Smart Communities

Summary of Project Method

Our goal is to work with communities to reduce their flooding vulnerability to benefit human and ecological communities. To accomplish this goal we will complete five project objectives:

- Work with communities in a way that will improve their participation in and support of flood risk reduction and coastal resiliency planning efforts.
- Examine the relationship between communities and their natural resources to better understand ecosystem services and community values.
- Conduct an intensive vulnerability assessment of flooding that will identify not only physical infrastructure at risk but also the associated social and economic impacts.
- Through a collaborative process, provide communities with the information they need to make informed decisions about land use planning and develop recommendations that they will adopt, implement, and support into the future.
- Complete a Floodplain Action Plan that will document the engagement process, community information, land use planning recommendations, and a prioritized project list.

A Structured Decision Making (SDM) approach has been modified for application to this project. SDM is a transparent method for breaking a complex decision making process into manageable pieces. Thus far, we have completed the first four steps of this process and are currently working on step 5, the vulnerability assessment (Fig. 1). We have identified two main groups of decision makers that are impacted by flooding; local government and property owners. For each group the processes of engagement to work through the SDM steps will be different. We will work with local government decision makers through formal meetings and with property owners through surveys, interviews and focus groups. Each step is summarized below.

1. Identify the problem – characterize the kind of flooding the communities experience, and the causes and impacts.
2. Define the decision – determine what is driving the need to make the decision, what the constraining factors are, what actions are within the decision makers’ power to implement, and what the Flood Smart Communities project will result in.
3. Develop objectives – these are decision criteria and are intentionally stated simply and with a desired direction of movement so solutions/recommendations aren’t limited at the start, there is a transparent trail for how recommendations were arrived at, and so decision makers can see how each recommendation meets one or more objectives, or may be the only or the most efficient way to meet that objective.
4. Select evaluation criteria – provide a measure of performance, and for the purposes of Flood Smart communities, serve as a baseline for objective-related conditions that can be measured again in the future to determine if progress has been made towards an objective.

5. Conduct vulnerability assessment –a comprehensive study of flooding vulnerability unique to the focus communities and includes data or information that have been identified in steps 1 through 4 as being important to decision makers. Vulnerability consists of three components;
 - Exposure – what is inundated or impacted by flooding,
 - Sensitivity – how important are those things to the community,
 - Adaptive capacity – what does the community have in place to respond to and recover from flooding.

Over 100 metrics will be used to paint this picture.

6. Develop recommendations – these are actions the communities can take to reduce their vulnerability to flooding that meet the decision makers’ objectives. They will be prioritized and included as action steps in the Floodplain Action Plan.
7. Assess effectiveness – this is not part of the funded project but is important to TNC. We will track implementation of action steps and evaluate how the process could be modified for future implementation to improve success.

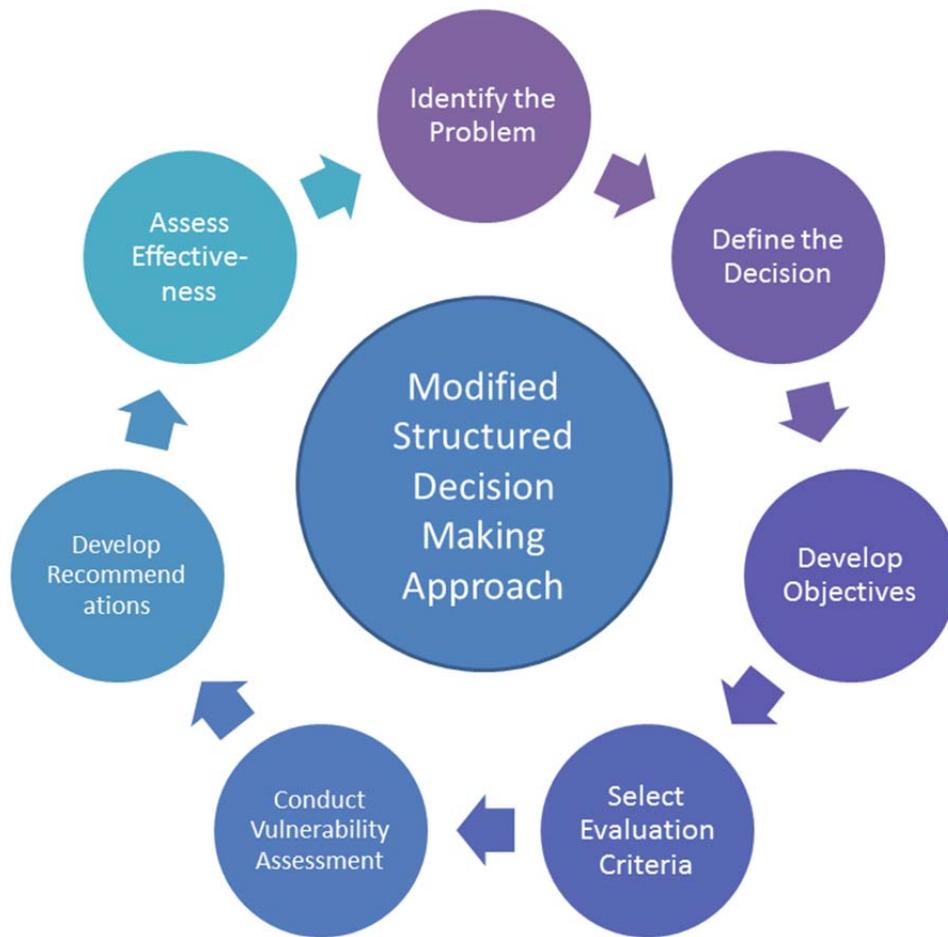


Figure 1. Steps of the modified Structure Decision Making process.