

For this tutorial we are going to show you how to set up a time-series scenario in the USGS Shoreline Management Tool. First, start up ArcMap. Once in ArcMap, select the shoreline management tool icon from your toolbar. If you haven't yet installed the tool, please refer to the Installation tutorial video.

Now, depending on whether this is your first time running the application, you may or may not need to connect to the shoreline tool directory. Let's do it here, just in case. Click [here](#) to change the Shoreline Directory. Then you just need to navigate to wherever you downloaded and are storing your ShorelineDirectory. Single click there. Choose Select.

Now let's run this scenario. Operating the shoreline management tool is easy. Each step has been color coded for your convenience. All you need to do is follow the yellow box.

Click on define the "Input GIS layers." A new popup window will appear. This is where you choose your resolution for your digital elevation model, or DEM, as well as your parcel or study area data sets. For this exercise, let's go with a 5-meter resolution for our DEM. Do dropdown, click 5 meters. And then we are going to choose our parcel layer from ArcCatalog. You'll see a geodatabase populate the window and you're going to scroll over and select "Parcels." It will take a few seconds to populate. Then click "Done." And next, we are going to select the "Stage, Parcels, and Habitats for this Scenario" by clicking [here](#). A new popup window will appear and this will give you the option of doing a "Single-Time Scenario" or a "Time-Series Scenario."

In this situation we want to do a time-series scenario. A time-series scenario utilizes a text file that has the dates and elevations of interest that you want to run. We have an example here for the Wood River Wetland that is entitled, "ts_example." We'll select that. We're going to set the vertical datum for our scenario. And let's choose the NAVD88. We're done with stage.

Next we'll select parcels for the current parcel group. We're going to choose parcel 9. Then reopen the shoreline management tool. We're done with the parcels.

Okay. Let's explore a particular habitat. Say you are looking for the best environment for an aquatic plant that flourishes in shallow water. So we'll name this "shallow_water." And say we need a minimum depth of 1 foot, maximum depth of 3 feet. And we're looking for slopes between 0 and 25 percent. With an aspect between 10 and 350 degrees. We are also interested in including flat areas, since this is a wetland. We're going to save this defined habitat and add it to our current parcel group. And then we are done with our habitats. We're going to finalize current group parcel settings. And then we're going to exit this stage, parcels, and habitat selection pop-up menu.

Now we are almost done. After putting all the work into creating this scenario, let's make sure to save it. We'll name it "timeScenario1." And we'll save current scenario. Let's add it to "TimeSeries" folder. And we'll create the output folder. Next we'll run the scenario.

This may take some time depending on what you defined and how much data needs to be processed. And there you have it, there is your parcel group for inundation and habitat for shallow water plants.

Click okay. And if you look at your layers file you'll see the different dates and times and the different inundations you can then turn on and off, depending on what you want to explore.

Well, thank you for using the shoreline management tool. If you have any questions please refer to the user manual or check out more information on the shoreline management tool website.