02 Siting a Sculpture for COVID-19 in East Central California

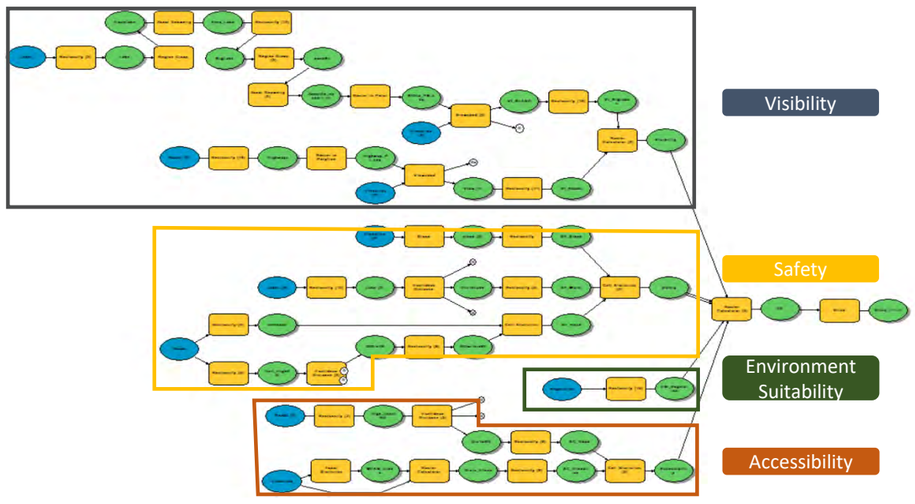
Goal

The goal is to create a site suitability map for a sculpture for the global pandemic COVID-19 in east-central California. By using Model Builder, a hierarchical assessment tree will be built and a suitability map will be developed with each pixel's value set from 1 (Best) to 10 (Worst).

Criteria Framework for assessment

The site suitability is evaluated by 1). Safety 2). Accessibility 3). Environment suitability 4). Visibility. Each criteria part will be evaluated with sub-criteria measurements which generate maps of 1 to 10 first. Then I combine sub-criteria measurement map. The final site suitability will be a map with values from 1 (Best) to 10 (Worst). The general rule is that, if the site is extremely unsafe, the score will be 10, even though the site might have accessibility/ environment/ visibility assets. Otherwise, each criterion's weights is expressed in the equation as: (5*Safety + 3*Accessibility + 5*Visibility + 2*Environment suitability) / 15.

Assessment Framework In Model



Criteria table

Criteria	Category	Layer	Weights(weight/total weights)
Safety	Slope Safety	Elevation	5 / 15
	Water Safety	Lakes	
	Road Safety	Roads	
Accessibility	Road Proximity	Roads	3 / 15
	Elevation Accessibility	Elevation	
Visibility	Road Visibility	Roads	5 / 15
	Lake Visibility	Lakes	
Environment Suitability	Land use and vegetation	Vegetation	2 / 15