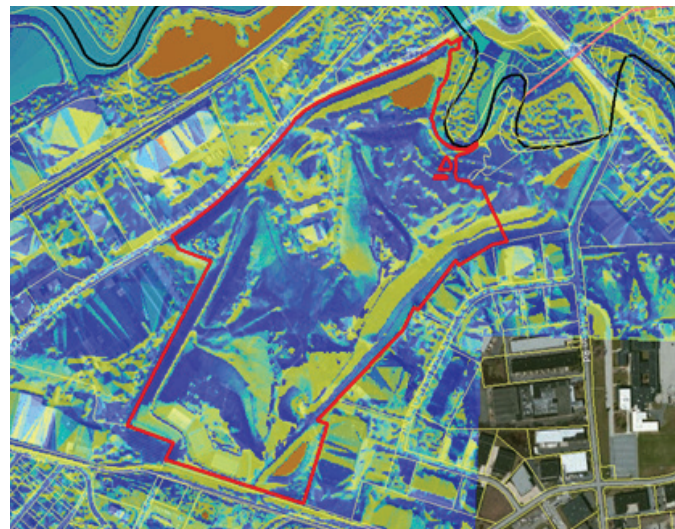
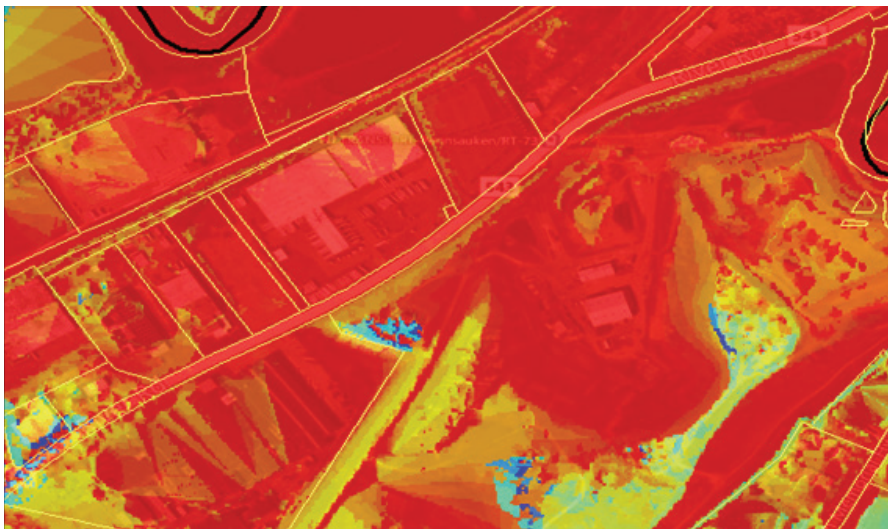


Langan uses Geographic Information Systems (GIS) software to help determine potential locations for solar arrays based on a number of criteria provided by our partners and clients. These criteria can include:

- Property size
- Natural features on-site
- Slope analysis
- Proximity to major utility transmission lines
- Demographic information
- Drive-time analysis

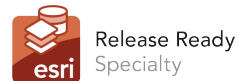
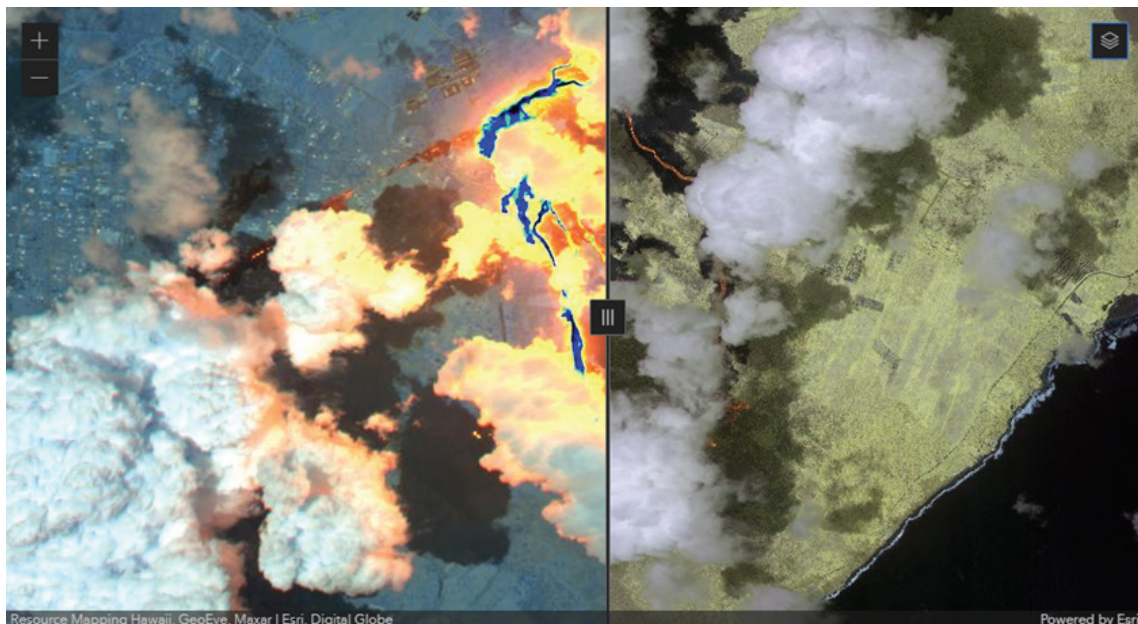
Langan also utilizes GIS to help clients create viewsheds of projects to show potential areas that may be visually impacted by a project. This type of analysis can take into account the potential solar array structure, the surrounding area topographic, and any potential sensitive receptors. These viewshed



analysis can also incorporate 3D features to help identify real-world conditions such as buildings and existing structures that will impact the visibility of a project.

This type of analysis can be presented in the traditional printed map format, and also through the use of interactive 3D webviewers which allow individuals to pan and zoom around the entire project area.

In addition to line of sight analysis, Langan can also model the solar potential for direct radiation, diffuse radiation, and duration of sunlight across land surface.



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