

A GIS Tool for Flood Inundation Mapping

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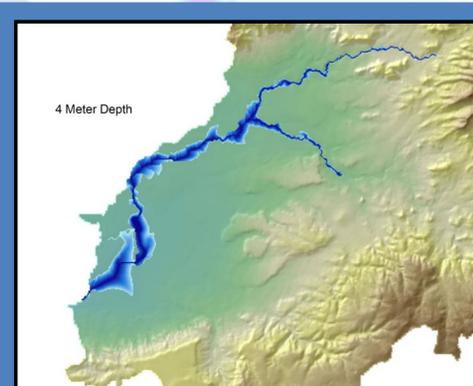
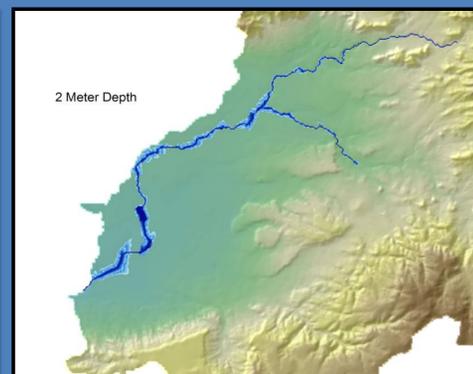
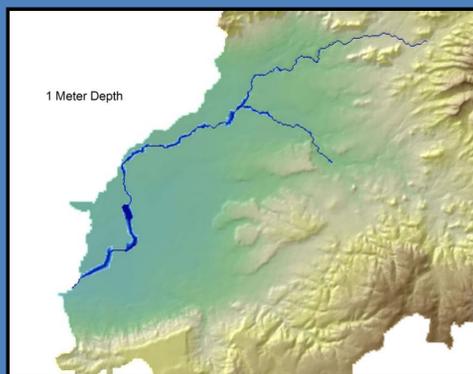
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Background

The GIS Flood Tool (GFT) is a GIS based flood inundation mapping tool developed by the United States Geological Survey (USGS). It uses existing medium scale terrain datasets to create estimates of flood inundation boundaries in an area without detailed ground survey information. The tool can also be run with high resolution terrain datasets where available. The tool provides good estimates of the flood inundation extent where flood maps do not otherwise exist. Riverside is working with the USGS to test the tool and train GIS and Hydrology professional s on its appropriate use.

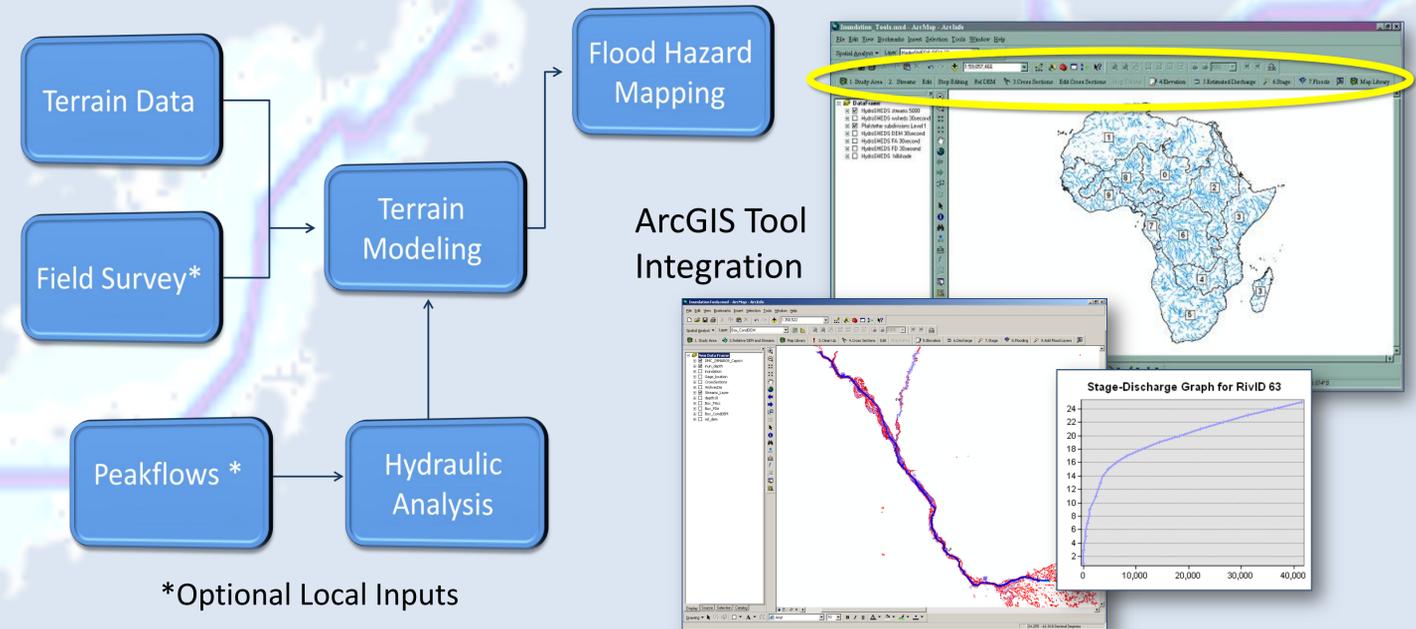
Planning Applications

- Identify areas to regulate development
- Identify areas for hazard mitigation (relocation, flood proofing)
- Identify safe havens and escape routes
- Provide education on flood risks, response
- Plan flood control measures to reduce impact



Rapid Assessment

- Many developing countries lack flood mapping to support mitigation and response planning.
- The tool can produce an initial estimate of flood inundation hazard virtually anywhere in the world, taking advantage of publically available digital elevation models. It is useful in settings that lack the field surveys and hydraulic modeling studies required for detailed flood hazard mapping.



Training Workshops

Successful training sessions have been completed for staff from Kenya, Ethiopia, Sudan and Egypt. Government and University Staff learn how to apply the tool in their respective rivers of interest.

Participants from Ethiopia, Sudan, Egypt



Participants from Kenya

