Potentially Affected Streams

- Overland flow non point source pollution is the number one water quality problem in the majority of US waters (EPA, 2010)
- Almost 20% of the streams are impaired and not meeting designated uses
- Sources include mine drainage, leaking or overflowing sewage systems, illegal homeowner discharges, runoff from agriculture and urban areas
- Basic ArcGIS steps include acquire sources of pollution, convert to raster, use the weighted flow accumulation command with the sources as a weight, raster output, provide flow path analysis .
- Can use land cover from NLCD or digitized features from imagery, or point features loaded into ArcMap.
- The result gives us the flow paths across the landscape. This can be altered to just show or calculate the instream paths to give an overall watershed stream % of impact.
- We can plan for runoff by examining overland flow paths.
- Some of the hydrological limitations are that the method does not consider any overland flow buffers, assumes all runoff from site finds its way to stream.

Student Notes:

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