



UNIVERSITY OF LEEDS



Impacts of sediment in Natural Flood Management

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What are the impacts of sediment in NFM and why are they important?

Sedimentation



Bank stabilisation



Scour

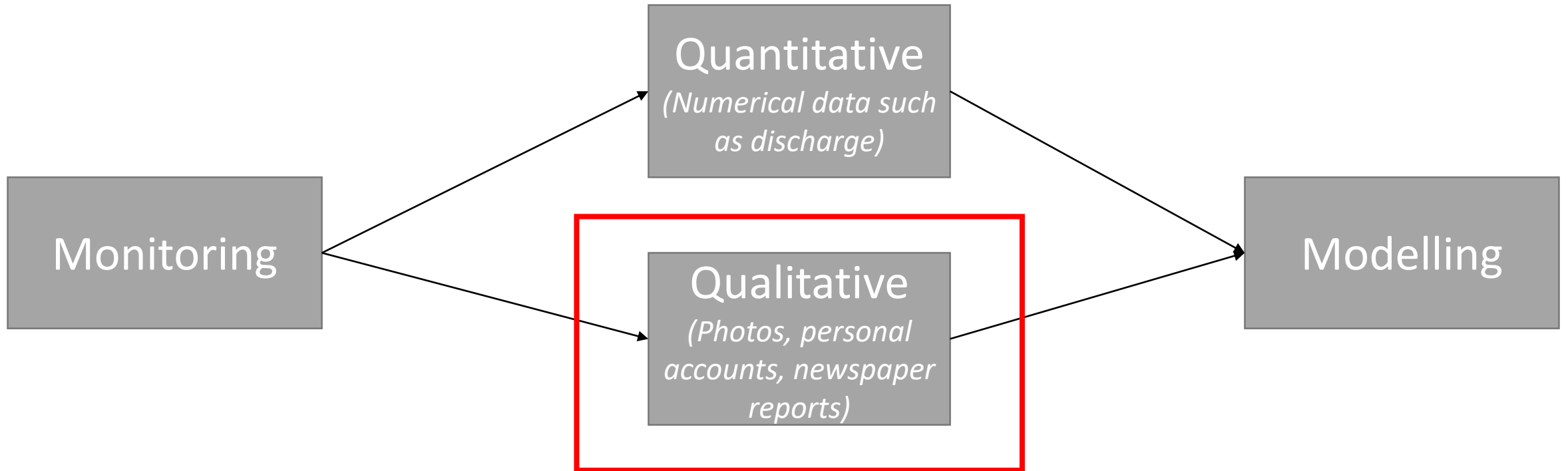


Reintroduction of natural sediment processes



(Kurth and Schirmer, 2014)

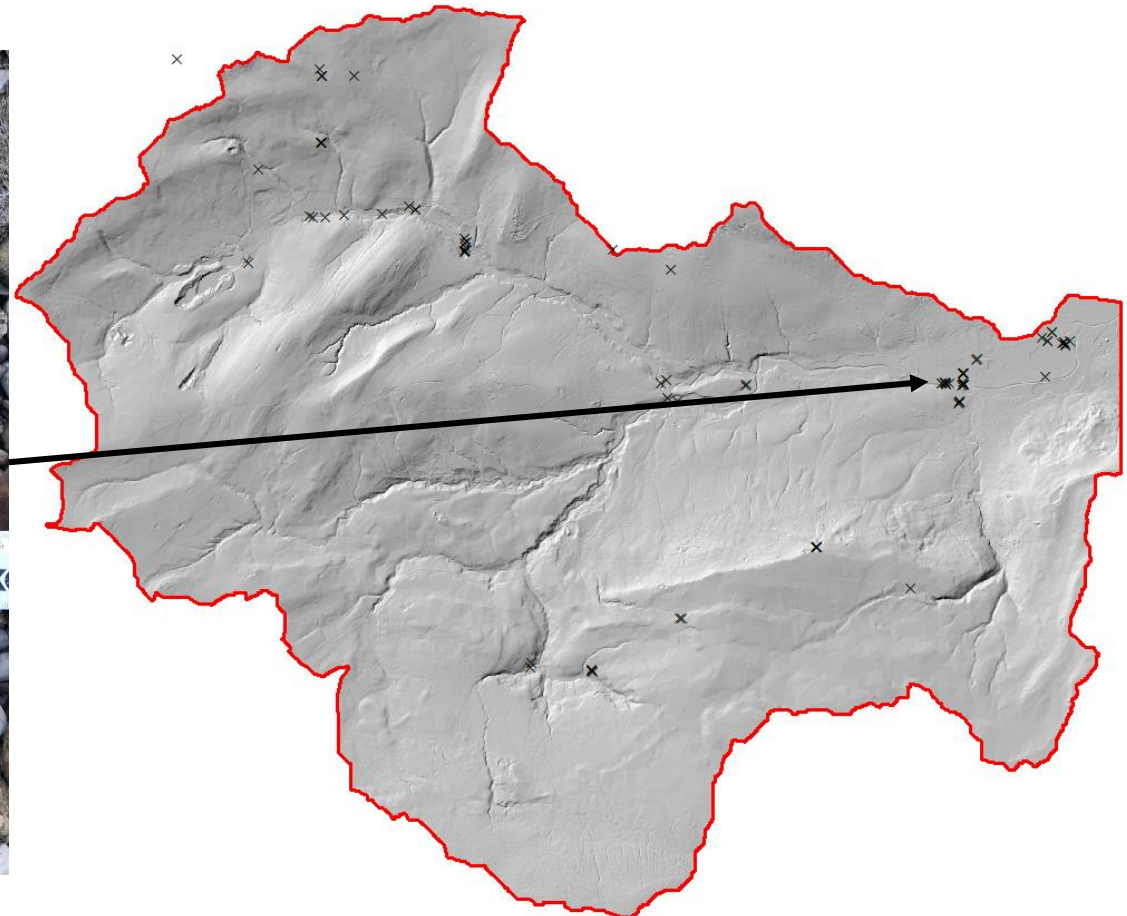
How is sediment transport accounted for?



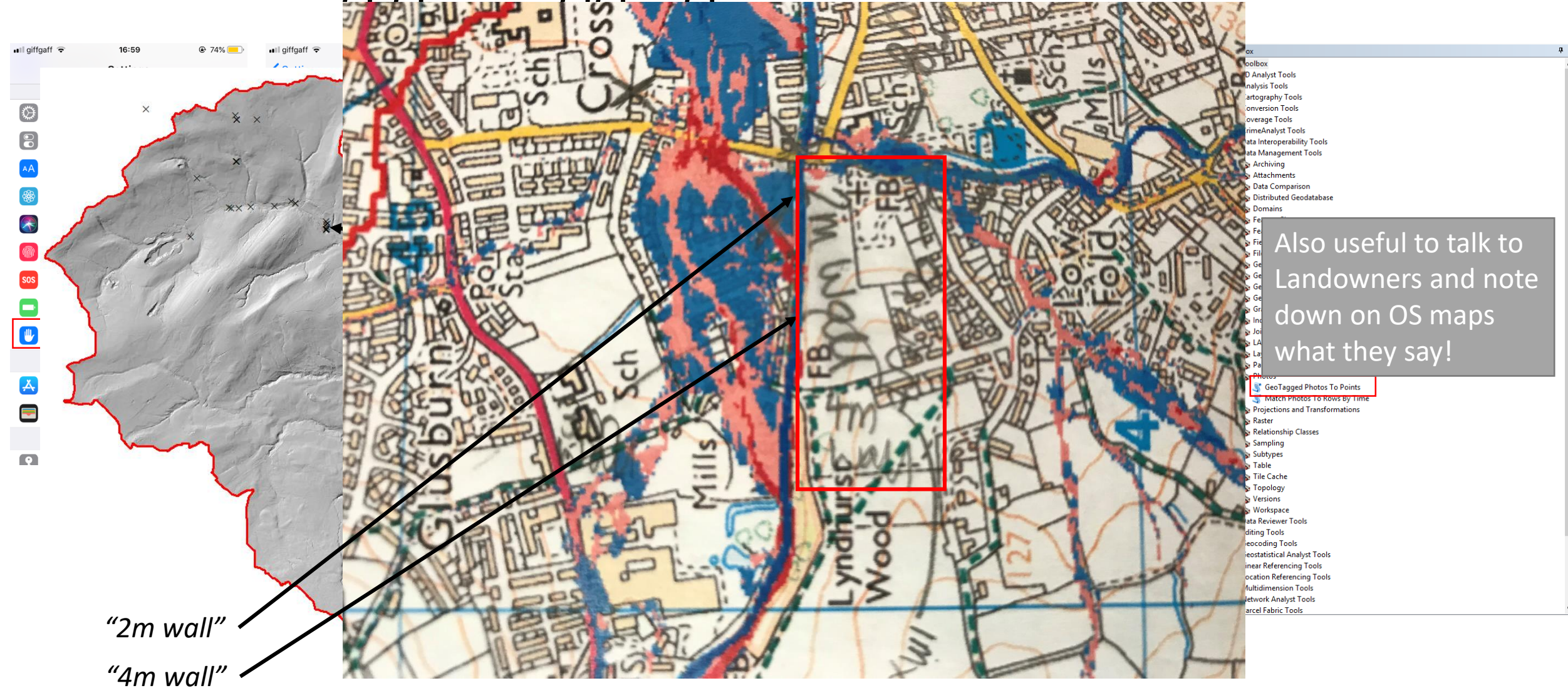
Qualitative sediment data

Scaled and geotagged photos

- Grain size
- Erosion/Deposition
 - Bank failures
 - Gully erosion
 - Wall collapses
 - Gravel bars
- Stable land
- Ponding or fast flowing water

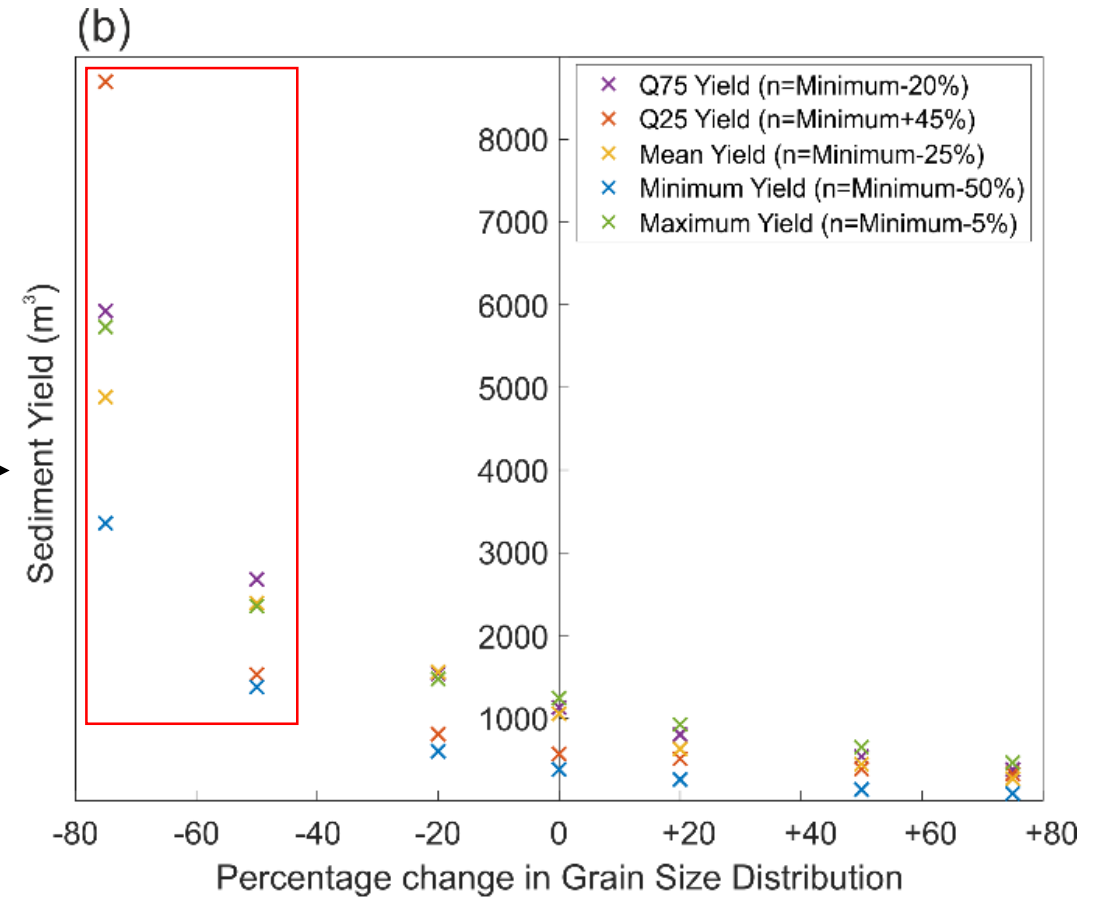


Enabling geotagging

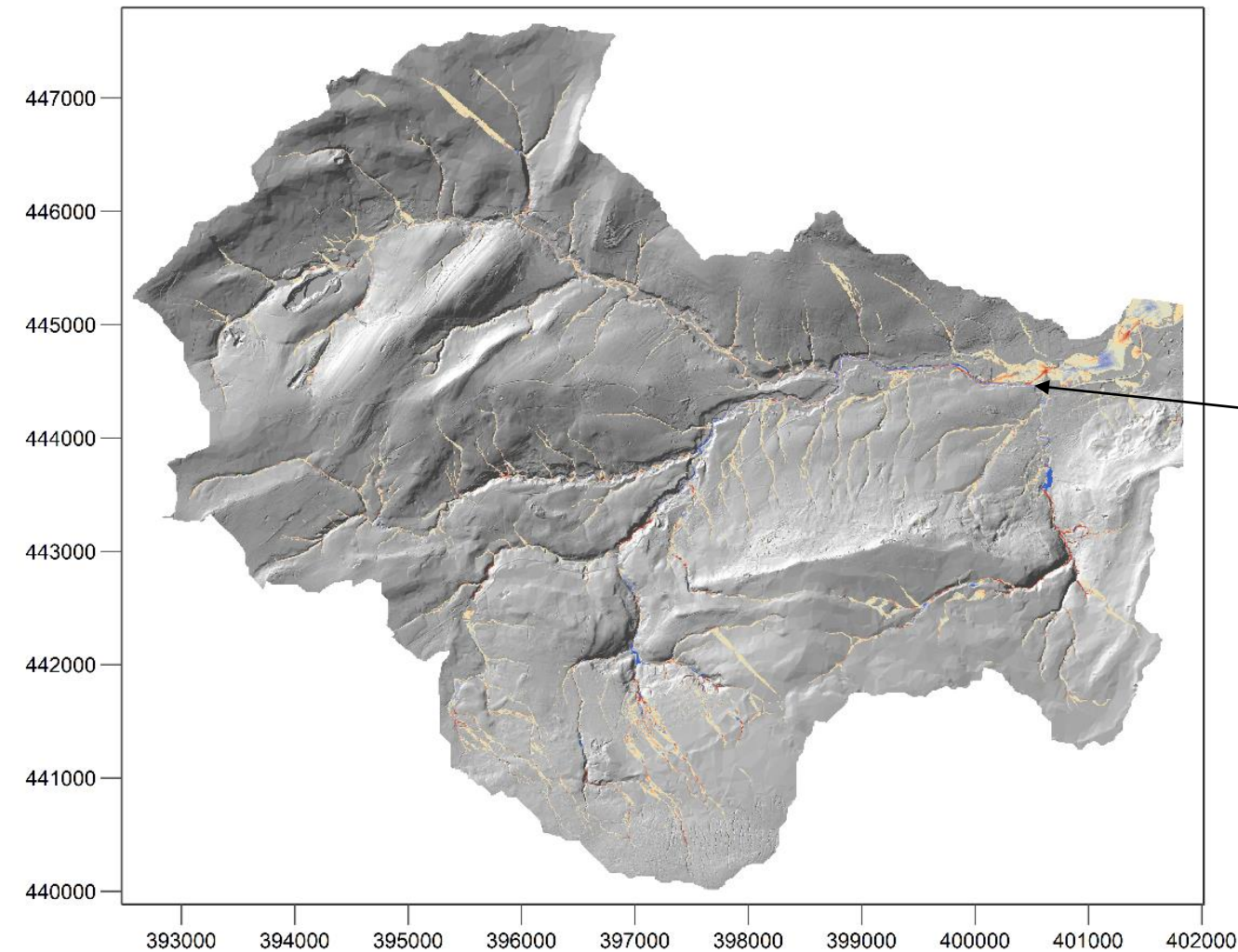


How is this data used in modelling projects?

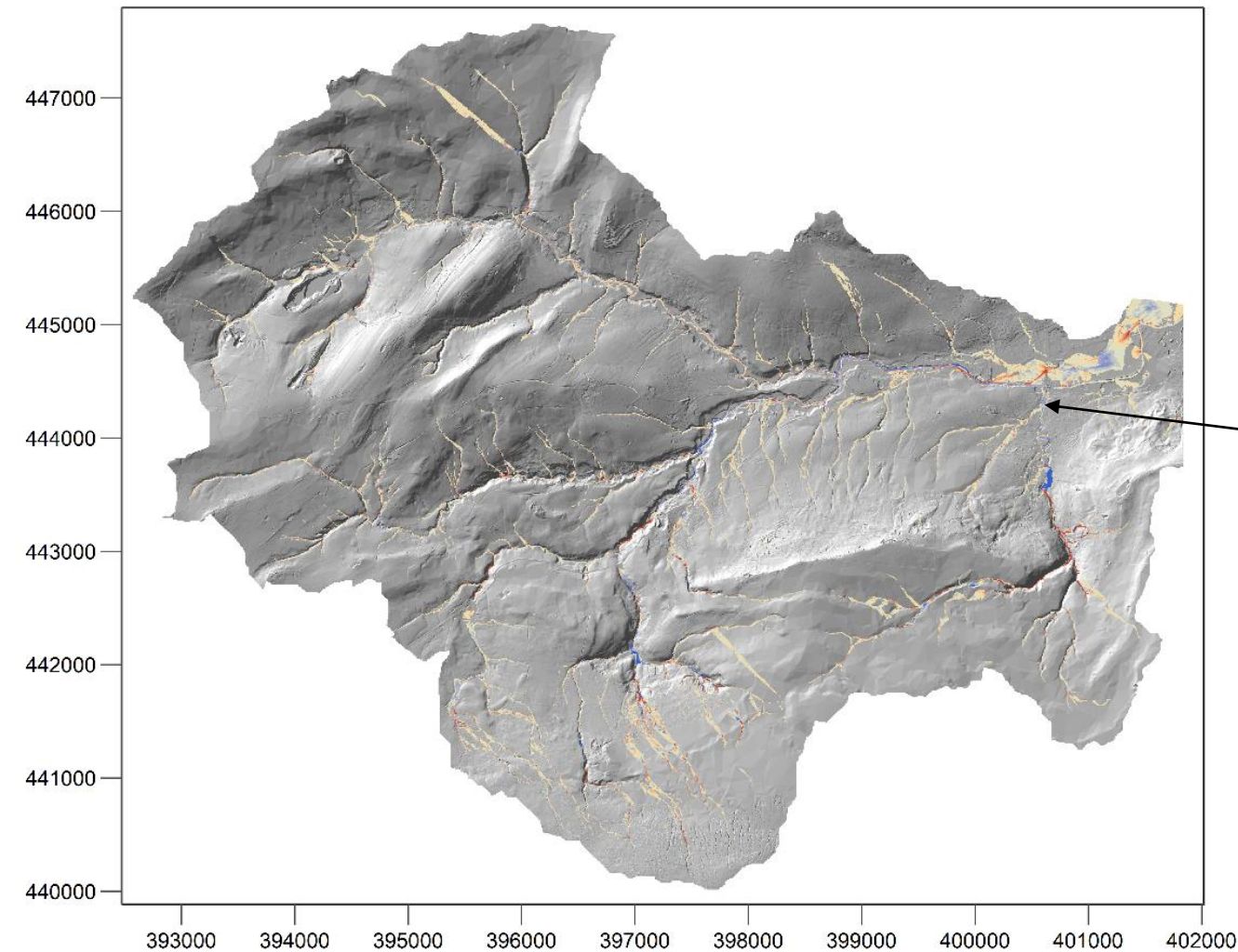
Field measurements show some grain sizes are inappropriately small – these runs are removed from the analysis



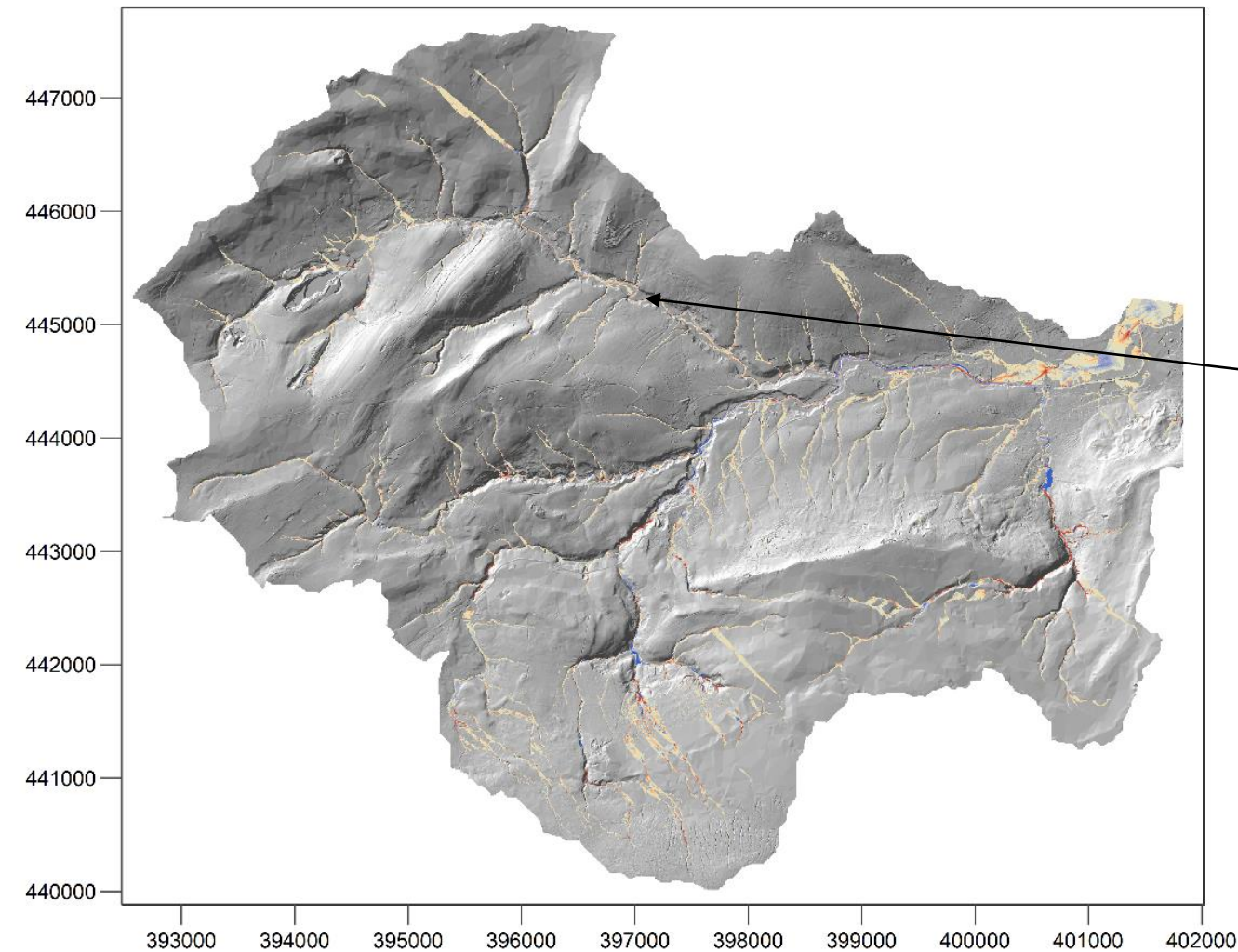
How is this data used in modelling projects?



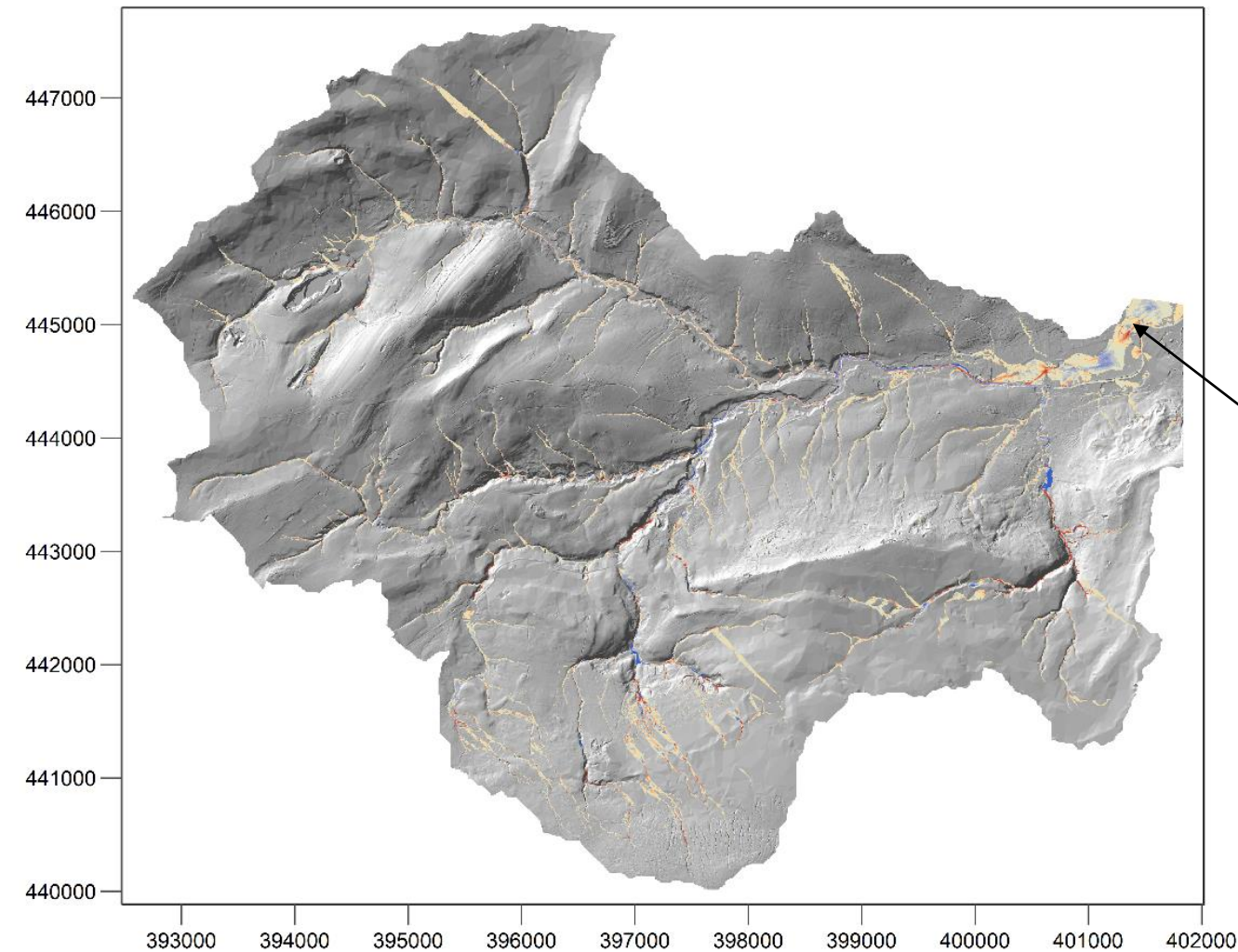
How is this data used in modelling projects?



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How is this data used in modelling projects?



But why should we be taking photos?

- Sediment is still important
- May affect NFM efficacy
- Useful to keep in mind when locating NFM measures
- Future projects
- Keep it safe, in an easy to find file

