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## Special challenges in assessing and mapping flood risk following a flood-debris flow event

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Severe rainfall along the Colorado front range in 2013 delivered flood and debris flows to many mountain communities, causing millions of dollars of damage as well as taking several lives. Phase changes in clear-hyperconcentrated-debris flows during the event created challenges in recreating the hydrology post-flood and in estimating and mapping new regulatory floodplains to support ongoing flood recovery efforts. This presentation highlights approaches used to overcome these challenges and to adequately represent the different processes and their uncertainties in updated flood hazard and risk assessments. It also considers the need to educate and involve the community in this process.