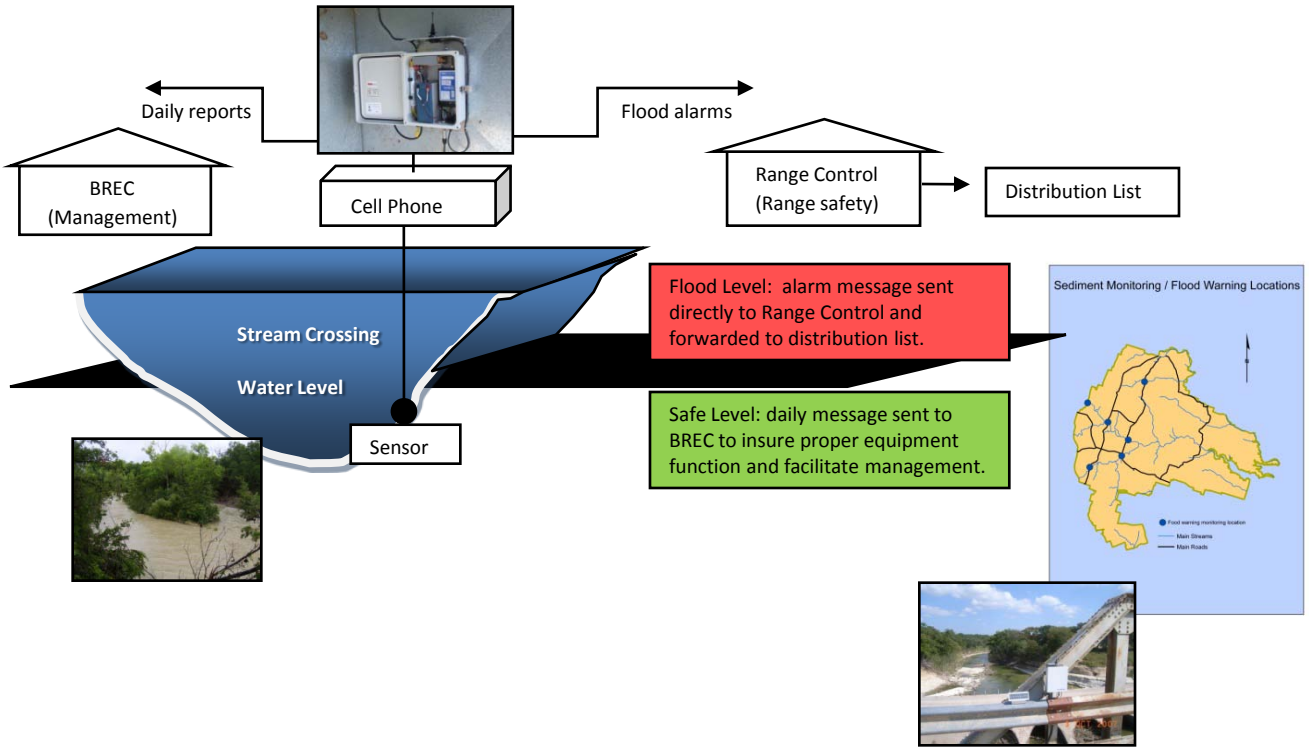
Implementation of a Cellular Phone Based Flood Warning System for Fort Hood Tactical Crossings

Fort Hood's telemetry based flood warning system for tactical crossings

Blackland Research and Extension Center (BREC) installed a cellular phone based telemetry system for flood warning in the summer and fall of 2007. Dedicated stream level sensors continuously monitor water level at six sites on three major streams. During flood conditions, the equipment notifies Range Control through an automated text message system, reporting to a dedicated receiver housed at Range Control. Alarm reports are subsequently radioed, phoned, or emailed to a distribution list of personnel that can respond appropriately. These reports allow Range Control Personnel to notify trainers in the field of rapidly approaching, dangerous stream crossing conditions. During periods of low rainfall, daily stream condition reports are emailed to BREC for management purposes and to insure proper equipment operation. BREC continues to manage and expand systems for, capability, coverage, reliability, and ease of use. Future capabilities include web-based reporting to provide real time stream conditions and additional locations with automated warning light activation.



Outcomes

- System operating at http://www.brc.tamus.edu/decision-aids/flood-alert-system.aspx
- Report daily stream level for management and reliability
- Flood alarms sent to dedicated receiver at Fort Hood Range Control
- Appropriate personnel are advised through email distribution list
- Fort Hood traffic is alerted to presence of flood conditions

Funding and Support

Department of Defense, Integrated
Training Area Management (ITAM) Program
USDA-NRCS Range Revegetation Pilot Project

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