



COLORADO
Colorado Water
Conservation Board
Department of Natural Resources

AECOM



CHAMP News!

The Colorado Hazard Mapping Program (CHAMP) Phase I is underway! The Colorado Water Conservation Board (CWCB) is the lead agency coordinating CHAMP. CWCB is working with AECOM, a nationally-recognized engineering firm, to conduct the technical work.

The CHAMP team has made great progress in the last several months. Field Survey, Hydrology, and Topographic data development are nearly complete.

Look for periodic program updates via this quarterly newsletter, the project website, and through in-person meetings, such as the quarterly meeting that took place on November 6, 2015, and the next one planned for February 2016.

History of CHAMP

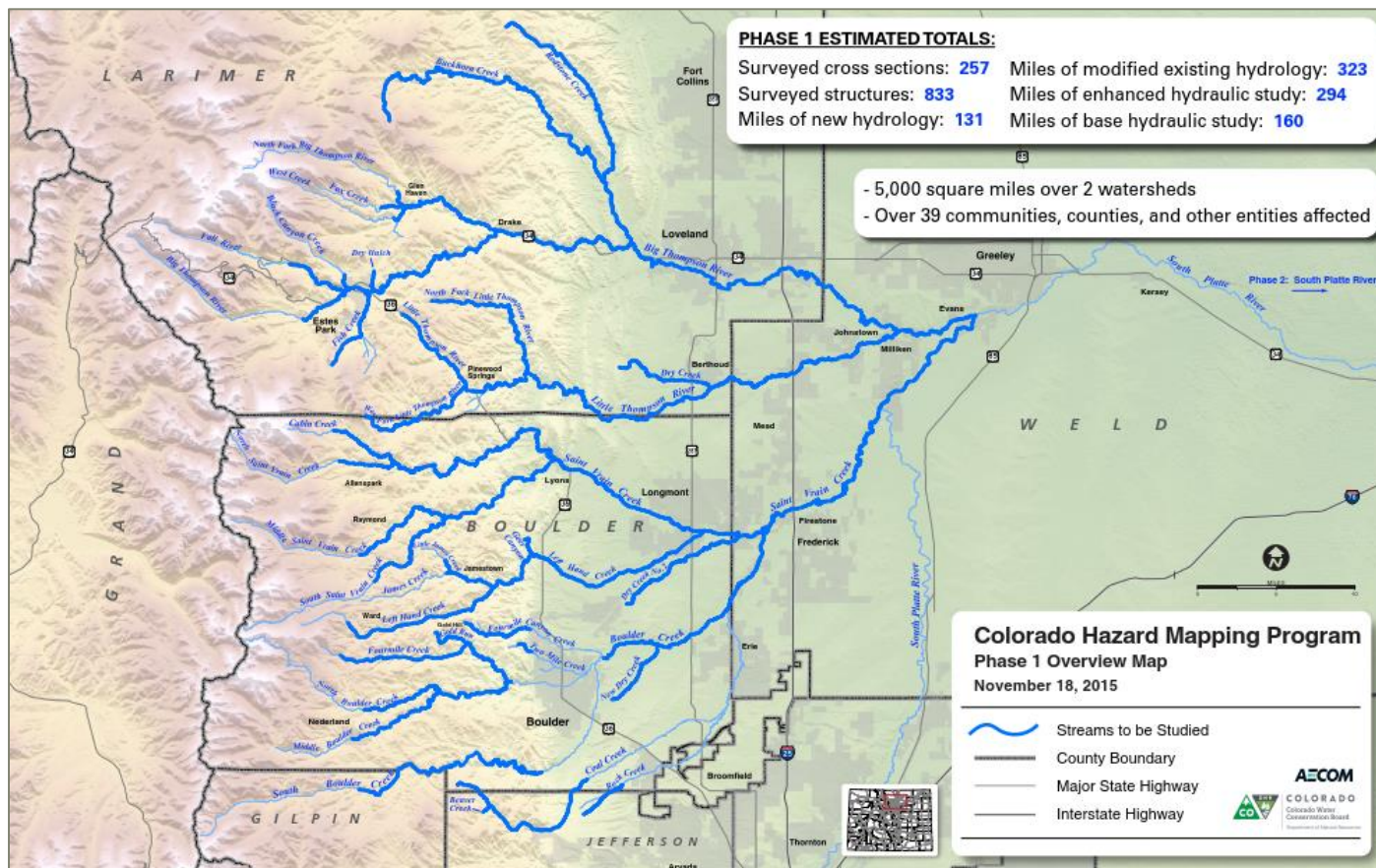
To continue the long-term resiliency efforts for flooding and natural hazards initiated after the 2013 flood disaster, Colorado's Legislature passed a funding bill for CHAMP in early 2015. CHAMP aims to provide a mitigation and land use framework in areas likely to be affected by future flooding, erosion, and debris flow events.

Phase I of CHAMP includes preparing updated hazard information for the streams most affected by the September 2013 flooding, beginning in the greater Big Thompson and St. Vrain watersheds.

**For more information on CHAMP,
please visit**

www.coloradohazardmapping.com!

Project Location





Field Survey and Reconnaissance

Field Survey and Reconnaissance involves surveyors and engineers going to the field and taking actual measurements, photographs, and observations of crossing structures and stream channels. This task helps determine conditions along the floodplains, types and numbers of hydraulic and/or flood-control structures, apparent maintenance of existing hydraulic structures, locations of cross sections to be surveyed, and other parameters needed for the hydrologic and hydraulic analyses. Field reconnaissance teams

identified over 1,000 locations recommended for survey.

Certain streams were surveyed in 2015, while others are held for survey in 2016 to allow local construction and recovery projects to be completed. Over 400 structures and 200 cross section locations were surveyed in 2015. Survey data have been compiled and are undergoing quality control checks. Field reconnaissance data is available on request, and field survey data will be available early 2016. See the project website www.coloradohazardmapping.com/hazardMapping/phaseOne/Map for the current survey status and schedule.

Enhanced Study – Study conducted using field survey and topographic data.

Base Study – Study conducted using topographic data only.



Field Reconnaissance complete!

Topographic Data Collection

Topographic data is used to identify channel and overbank geometries for the study streams. The study team is leveraging existing topography (information on topography data extent can be found on the [project website](#)).

Data utilized for this portion of the study includes:

- 2014 USACE LiDAR
- 2013 USGS LiDAR
- Future LiDAR Collection of approximately 7 square miles in Loveland, CO
- LiDAR provided by Larimer County for Glen Haven Area,
- 2014 LiDAR for Longmont, CO

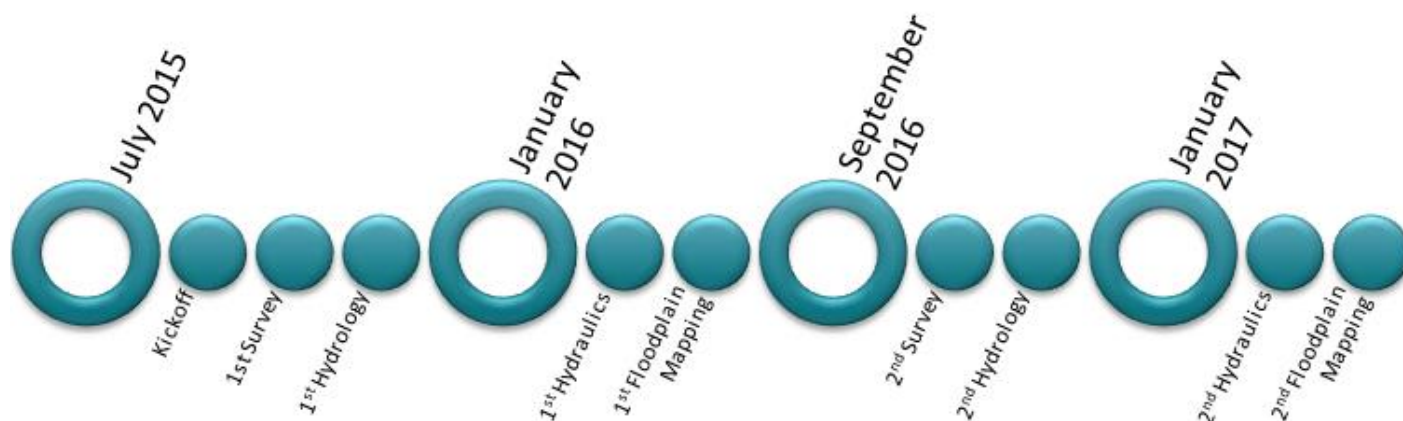


Hydrology

Hydrologic analysis is used to determine the amount of water flow anticipated in each stream for a given recurrence interval. CWCB and the Colorado Department of Transportation (CDOT) completed post-flood hydrologic studies for the majority of the streams in the in the project area. The study team has been evaluating these studies as well as additional hydrologic studies that have been completed. The results were evaluated and compiled into a database, and are being used to determine where additional peak flood discharge calculations for the 10%, 4%, 2%, 1%, 1% plus, and 0.2% annual chance events are required. Results will be available upon request in the spring of 2016.



Estimated Project Timeline



Next Steps	Upcoming Meetings	Project Contacts
The project team is currently in the process of creating hydraulic models, which calculate the depth of water anticipated during flood events. Hydrologic analysis results are used along with survey and topographic data to model stream behavior. Refer to the project schedule above for anticipated completion dates and other next steps.	The following meetings are planned or have occurred recently for the project: ▪ Quarterly Project Status Meeting: Date: 11/6/15 Meeting minutes on website ▪ Quarterly Project Status Meeting: Date: TBD February 2016 Time & Location: TBD	▪ CWCB: Thuy Patton thuy.patton@state.co.us ▪ CWCB: Stephanie DiBetitto Stephanie.dibetitto@state.co.us ▪ AECOM: Remmet deGroot remmet.degroot@aecom.com ▪ AECOM: Rigel Rucker rigel.rucker@aecom.com

More Information

For more information, please visit these websites:

- Learn more about CHAMP: www.coloradohazardmapping.com
- For more information regarding CWCB: <http://cwcb.state.co.us/Pages/CWCBHome.aspx>
- For more information on FEMA's NFIP, please visit: www.fema.gov/floodplain-management
- To find out more about FEMA Flood Insurance, please visit: www.floodsmart.gov