

Risk Map FAQ's

1. What is the RiskMap Project?

The RiskMap project in the context of the City of Greeley refers to the efforts to revise the Cache la Poudre regulatory floodplain and floodway with more up-to-date hydraulic modeling practices, topography, and hydrologic data.

2. What is the CHAMP Project?

The CHAMP Project is the Colorado Hazard Mapping Project. See <http://www.coloradohazardmapping.com/> for more information

3. What is the difference between RiskMap and CHAMP?

CHAMP was initiated in response to regional flooding in 2013 and 2014 and targets the remapping of affected floodplains, including the South Platte, St. Vrain, and Big Thompson Rivers. The RiskMap of the Cache la Poudre River was initiated in 2010 before CHAMP was initiated. However, both projects follow the same methodologies and are currently on the same timeline for adoption.

4. Who Initiated CHAMP and the RiskMAP?

The Colorado Water Conservation Board (CWCB), a state agency within the Colorado Department of Natural Resources, initiated both programs. The CWCB is the state agency overseeing the Federal Emergency Management Agency's National Flood Insurance Program, and by extension, facilitates updates and compliance with Flood Insurance Rate Maps.

5. What is the timeline of the CHAMP and RiskMap process?

The timelines to these studies are variable, dependent on the level of community comment and appeals. Preliminary Flood Insurance Rate Maps were released in September 2020. The current timeline projects for a 90-day appeal period to begin as early as November 2020, with required adoption by communities in by early 2022. This timeline will be adjusted as further information is known.

6. How are the maps produced?

Maps are generated by combining ground survey with topographical data extracted from aerial LiDAR data. Industry best practices are followed to calculate anticipated rainfall and runoff in the 1% annual exceedance event to produce the 1% annual exceedance flows in rivers. The 1% annual exceedance event corresponds to what was formerly referred to as the "100-year storm."

Well-qualified technical professionals then utilize technical modelling software to model flows through cross-sections of the river, which produces elevations and top widths which can be used to overlay on maps.

The Cache La Poudre River, in Greeley especially, exhibits several “split flows,” where a large portion of the river splits from the main stem of the river and runs in a separate alignment. For the RiskMap project, two-dimensional modelling was utilized to identify locations of these splits. This was then utilized to adjust the one-dimensional hydraulic model.

7. Why is a two-dimensional model not used for the RiskMap update?

Two-dimensional models are much more complex than one-dimensional models. A two-dimensional regulatory model forces more requirements on property owners’ and developers’ engineers and is more difficult for communities to regulate. The City of Greeley and other communities on the Cache la Poudre River requested the regulatory model be a one-dimensional model.

8. What is expected to change from the current effective floodplains to the CHAMP and RiskMap floodplains?

One significant update is that the resultant floodmaps will follow the CWCB’s 0.5-ft floodway rule established in 2010, in which a floodway is defined by the remaining area of the floodplain when development and fill from both sides raises the water surface elevation in the floodplain by 0.5 feet. Effective floodplain maps utilize FEMA’s 1.0-ft floodway rule. As there is less fill required in the floodplain to increase the water surface elevation by 0.5 feet as opposed to 1.0 feet, the floodway boundaries will expand for the new floodplain mapping. As a result, some properties are projected to be mapped into the floodway that previously were not in the floodway. For more information on restrictions on properties in the floodway, see Floodplain FAQs.

Improved modelling techniques and updated topography are likely to change floodplain boundaries as well.

9. Are there any new regulations as a result of the RiskMap?

No. All floodplain regulations remain the same. RiskMap changes the mapping, so some parcels will be mapped into different Special Flood Hazard Area. Parcels being moved into a more restrictive SFHA will experience increased regulations on their property.

10. What happens if my property is mapped into a higher risk SFHA?

You may be required to purchase flood insurance through your lender or experience increased flood insurance premiums. It may be beneficial to purchase flood insurance voluntarily prior to adoption of the new maps to lower your insurance premiums.

11. How can I view and the draft maps and determine if my property is changing Special Flood Hazard Areas?

There are several resources to view Preliminary maps:

- [FEMA Map Service Center](#): Search for Colorado -> Weld County -> Greeley and click search. Preliminary RiskMap maps are located under "Preliminary Products"
- [FEMA Flood Map Changes Viewer](#): Users can enter their address to zoom to their location, activate the red pin in a location, and generate a side-by-side map and report on their property.
- [Colorado Hazard Mapping and RiskMap Address Lookup](#): Enter an address in the Homeowner field and generate a side-by-side map and report on the property.
- [Weld County Map](#): Weld County hosts an overlay map that allows users to swipe layers off and on to evaluate changes between Effective and Preliminary RiskMap.
- [Contact the City Floodplain Administrator](#). The City possesses a database of changes to parcels by owner and address. Paper copies of Preliminary FIRMs are also being held at 1001 9th Avenue and can be viewed with an appointment. The City also possesses a database identifying changes by parcel number.

12. When do the draft maps become effective?

Currently, the schedule for CHAMP and the Poudre RiskMap is scheduled for required adoption by early Spring 2021, with appeals being heard from late 2020 to early 2021. This is subject to change and delay based upon the level of community comments and appeals.

13. Can I appeal the maps if I believe them to be incorrect?

Yes. Technical appeals will be heard during a 90-day period between November 2020 and April 2022. Contact the City Floodplain Administrator if you have are interested in filing an appeal.

14. What types of information constitutes a valid appeal?

Technical appeals must demonstrate an indisputable error in technical floodplain models, mapping or topography. As topography utilized in the mapping was taken in 2013, major topographical changes since 2013 may not be captured in the maps. The City has conducted thorough technical review throughout development of RiskMap to minimize or eliminate these issues, but some may exist.

- Certified survey of the subject property showing the property and/or structure above the base flood elevation.
- Survey of multiple cross-sections of the river showing significant changes from the published model.
- Hydraulic modeling by a certified water resources engineer

15. What types of information do NOT constitute a valid appeal?

The Cache la Poudre has not experienced a flood matching the 100-year (1% annual exceedance flood) since 1904. Examples of information that will not result in a successful appeal:

- Anecdotal narrative of past floods experienced on the subject property
- Photos of past floods experienced on the subject property
- Past discussions with FEMA, State or City personnel regarding floodplains

16. How can I appeal a floodplain map if I believe it is wrong?

If you intend to file a technical appeal, please [contact the City Floodplain Administrator](#). The City Floodplain Administrator must file one appeal package on behalf of the City, including all appeals within the City, within the 90-day appeal period. Visit [this link](#) for more information on Technical Appeal procedures.

17. Who is responsible for funding the additional data collection, survey, and engineering to prepare a technical appeal?

Any appeals on one subject property must be funded by the property owner. The City has funded detailed technical review and is pursuing multiple regional map updates.

18. Why is Greeley involved?

Greeley is a member of the National Flood Insurance Program (NFIP), in which property owners within the City receive flood insurance, support in the event of flooding, and national disaster support from FEMA in exchange for the City regulating all effective floodplain regulations and mapping within the community. Failure to administer these regulations and regulate to the effective FIRMs would result in the City losing NFIP status. Being removed from the NFIP would increase flood insurance premiums on property owners and exempt the City from federal disaster relief grants and assistance.

19. When does FEMA get involved?

FEMA is involved throughout the project, as FEMA must approve of the hydrologic report, hydraulic report, topography and maps at each stage of the project.