



## Colorado 2013 Floods

---

### Unmet Need Identification Project

### Local Impact and Priority Survey- City of Boulder

**Community Name: City of Boulder**

**Name of Person Completing the Form: Paul Fetherston, Deputy City Manager**

**Date Form Completed: December 11, 2013**

The purpose of this document is to assist you in communicating the overall impact that the 2013 floods had on your community. The State of Colorado is collecting this data in order to identify how to allocate available funding, as well as determining the amounts and types of additional disaster funding assistance that could be pursued. Please answer all questions as completely as possible. If you do not know the answer to a question, or if a question does not apply to your community, please leave that question blank.

For each question, please answer as completely as you are able. Statistics related to the quantity and types of damage are particularly helpful. For example, we will know more about your housing needs if you tell us that 100 modular homes were severely destroyed by the floods than if you tell us only that some families are still without housing. Similarly for infrastructure and economic development questions, please be as specific as you are able. However, do not be concerned if you are not yet in a position to estimate the cost of repair or dollar value of the impact. It is sufficient to communicate damage types and quantities.

Please feel free to use as much space as you need to communicate as much about the impact and unmet needs in your community as possible. Completing this form allows your community to supplement FEMA data with local assessments and perspective. The goal is to create the most complete picture possible. You are welcome to provide supplemental information, such as local or private studies and surveys on the flooding impact. Responses are due by December 11, 2013.

For additional assistance with completing this template, or if you have any questions about the purpose of this template, please contact your regional manager for questions related to non-housing issues. See attached map for contact information. Call Alison O'Kelly at 303.866.3409 or [alison.okelly@state.co.us](mailto:alison.okelly@state.co.us) for housing related questions.

---

**1** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. *(Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)*



## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

### Section 1: Housing Unmet Need

- 1. Are there any members of your community who were forced to relocate as a result of the floods? How many? Do you know where and/or to what types of places they relocated to?**
  - *According to November 26, 2013 FEMA Modeling Task Force (MOTF) analysis, and the DOLA Boulder County Damage Assessment spreadsheet, 8,049 individuals registered for FEMA Assistance in Boulder, totaling approximately 6,013 Households. This data may include some residents of unincorporated Boulder County adjacent to the city.*
    - City of Boulder Household Data analysis:*
      - o *Approximately 1,700 households had damage that made the housing unit uninhabitable.*
      - o *234 households had major damage as defined by FEMA, with significant repairs needed.*
      - o *No housing units were destroyed in Boulder.*
      - o *Most lived in the damaged dwelling or stayed with family/friends while repairs were made. It is unknown how many remain displaced citywide.*
  - *Many displaced residents of other communities relocated to housing in the City of Boulder temporarily and some permanently.*
- 2. How many properties in your community are vacant or abandoned as a result of the floods?**
  - *None fully vacant or abandoned that the city is currently aware of. There are properties that have not completed repairs, and their residents may still be displaced. Three city properties (Wildland Fire Cache, P&R Rental House, and the Flatirons Events Center) are uninhabitable and those residents/employees have been relocated or displaced.*
- 3. How many non-rental, single family homes in your community are still in disrepair as a result of the floods? How many of those were completely destroyed? How many were not registered for FEMA Individual Assistance?**
  - *Unknown how many are still in disrepair. No single family non-rental structures were completely destroyed. It is unknown how many did not register for FEMA Individual Assistance.*

---

**2** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

**4. How many rental single family homes in your community are still in disrepair as a result of the floods? How many of those were completely destroyed? How many of those homes are modular or manufactured homes?**

- *Unknown how many are still in disrepair. No single family rental structures were completely destroyed. It is unknown how many did not register for FEMA Individual Assistance.*
- *One 71-unit mobile home park is a county enclave inside city limits. Approximately 1/3 are rentals. Many or most of the units were damaged and are still in disrepair. They remain inhabited due to a lack of available affordable housing. In addition the flood exacerbated the preexisting water, sewer and road infrastructure problems.*

**5. Are there any multi-family housing complexes that are still in disrepair as a result of the floods? Were any of them completely destroyed? Within the multi-family housing complexes that were damaged, how many units were damaged out of the total number of units?**

- *Yes, several large multi-family apartment and condominium complexes had ground floor or garden level units with significant damage. None were completely destroyed, but most units are uninhabitable while the repairs are still underway.*
- ***Frasier Meadows**, a continuing care retirement community in Boulder, which included 205 independent living units, 34 assisted living units, and 108 skilled nursing beds experienced significant damage to two parking garages (over 100 vehicles parked in the garage were a total loss), its power distribution system, two elevators, first-floor independent living common areas, fifteen independent living units, the entire 34-unit assisted living building, and the first floor of the skilled nursing facility (54 or 108 beds) were damaged. The fifteen independent living units have been repaired and are occupied, while the 34-unit assisted living building and the 58 skilled beds (see infrastructure section) on the first floor of the healthcare center remain closed for the foreseeable future.*
- *The **University of Colorado at Boulder** reported that though there was some damage to on-campus housing after the flood, only two rooms remain vacant at this time due to mold mitigation. Far more students housed off-campus were impacted by the flood, though exact unit data weren't readily available. The University reported that four off-campus, privately-owned multi-family apartments were damaged and students were displaced. Most of the displaced students have found other housing options or have returned to rehabbed units. Some are still displaced, though building repairs are expected to be completed in January.*

---

**3** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)



## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

---

- 6. Was there a heavier impact to any traditionally underserved populations, such as non-English speaking families, minority families, or families making less than 80% of the area median income? How many of each were impacted?**
- *The 71-unit mobile home park described above has primarily very low-income residents, many of whom are undocumented and presumably non-English speaking. Between damaged homes, both owner-occupied and rental, and failing infrastructure there is a heavy impact on underserved populations.*
- 7. Have the number of building permits increased or declined in your community when compared to this time last year? What is the amount for the past six months compared to the amount from the same six months in the previous year?**
- *Yes, building permits are up from last year. To date, the city has processed over 620 permits related to flood damage.*
- 8. Has the cost of building materials in your area increased since the floods? What kinds and by how much?**
- *Boulder Housing Partners, Boulder's housing authority, did not have firm numbers to report; however they reported hearing of increases in flooring costs after the flood, but no increases to the cost of drywall.*
  - *Several members of the for-profit development community, including developers and general contractors, provided additional detail on building material costs.*
    - o *Ready-mixed concrete increased in cost by 10 percent after the flood. Flooding of area gravel pits was named as the cause of this price increase.*
    - o *Multi-family housing construction costs increased by 7 to 10 percent, depending on the style and location of the project.*
    - o *The biggest impact being reported is "significant demand on certain parts of the subcontract community" as they are called in to help with recovery projects.*
  - *Overall, the cost of building materials has been increasing since February 2013 and is expected to increase again in 2014. It is not clear what role flooding plays in prices increases in 2013 and it may be one of the factors expected to drive up material costs in 2014.*

---

**4** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

9. **What was the volunteer response in your local community related to the flooding? How many volunteers worked in your community as a result of the flood? What types of work did they do?**
- *To date, there has been a strong volunteer response in the aftermath of the flood in Boulder by local and national nonprofits, faith communities, businesses, and individuals. City staff reached out to other organizations that coordinated volunteer efforts and those contacted reported their intent to complete a separate local data survey. The data below represents flood-related volunteer activities tracked by City of Boulder.*
    - *In the early weeks after the flood, Housing and Human Services staff volunteered to staff the **Emergency Call Center** providing more than 100 hours of coverage.*
    - *City employees also contributed 218 hours of time to staffing the **Disaster Assistance Center** in Boulder.*
    - *The **Department of Open Space and Mountain Parks** reported that 861 volunteers from the community donated 4,289 hours of time as of December 10, 2013 with efforts ongoing. Project tasks generally included removing flood debris, sediment and gravel from Silver Lake Ditch, removing debris from trails and culverts, rebuilding eroded and damaged trails, clearing debris from wetland areas, removing debris from and rebuilding livestock fencing and other related activities.*
    - *The **Department of Parks and Recreation** recorded 782 volunteers contributing 2,301 volunteer hours as of October 25, 2013. Activities included: flood-related debris removal activities on improved parks and recreation areas in order to eliminate threats to public health and safety as well as restore utilization of improved properties; debris removal and clean-up on ball fields, playground areas, multi-use recreation areas and pathways; and restoring access to beaches, playgrounds, pathways, trails and improved park properties, including Eben G. Fine Park, the library grounds and Boulder Creek Path, North Boulder Park, Scott Carpenter Park, Boulder Reservoir, Columbia Cemetery, Olmstead Park and the North Boulder Recreation Center tennis courts.*

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

## Section 2: Infrastructure Unmet Need

### 1. What was the impact to your local school systems? How long were schools shut down? How many school facilities were damaged or destroyed? Are any schools still out of service?

- *Boulder Valley School District had damage to about a third of the buildings and moderate to severe damage in four buildings district wide. Playgrounds, athletic fields and landscaping throughout the school district were also damaged or contaminated with flood water. Maintenance and custodial staff were deployed to schools to clean and repair damages and all schools were closed for four days. During the event, electrical power was lost at several schools, resulting in the spoilage of food due to lack of proper refrigeration. In addition, the fiber optic network was damaged and will need to be repaired. The financial impact of the flood to the district to date is around \$5 million.*

*Specific impacts inside the City of Boulder include:*

- o *Crest View Elementary School experienced extensive flooding and was closed for 12 days to allow for clean-up and reconstruction in the building. Due to the extended closure of Crest View Elementary School, students were provided with an alternate location. BVSD provided transportation and food for this location and supplemented the cost for parents.*
- o *Crest View Elementary School, Foothill Elementary School, Boulder High School and Platt Middle School, all located in Boulder, experienced the most damage, including water and mud inside the building and damage to flooring, carpet, furniture, walls, equipment, materials and supplies. Crest View Elementary School experienced flooding in 85% of the school. Approximately 15% of Foothill Elementary School was affected. The other two buildings had flooding in several isolated areas.*
- o *BVSD Maintenance staff worked with professional contractors to conduct remediation and clean-up activities which included removal of the water, mud and damaged building materials, furniture, school supplies and learning materials. Asbestos abatement was conducted where necessary. The buildings were dried with fans and dehumidifiers and sanitized.*
- o *Where necessary, contaminated soil on school grounds and playground surface material will be removed and replaced. Athletic fields will be repaired.*
- *Impacts to private schools are not completely known, although City staff is aware of flooding that occurred at the Shining Mountain Waldorf School.*

---

**1** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

**2. What was the impact to local roads? How many miles of road were damaged or destroyed? How many miles of road are still out of service?**

*It is estimated that approximately 1 percent or three miles of the roads, within city limits, have been damaged. Approximately .25 miles of road are still closed in the City of Boulder, all of which are residential streets.*

*There are approximately 300 miles of roads that exist within the City of Boulder. It is estimated that approximately 20 percent or 60 miles of the roads were covered in debris. The city's transportation system damages occurred primarily at major drainage crossings throughout the city. A significant issue impacting transportation is sediment and debris covering the streets and the path system. A significant recovery expense was to remove the debris and sweep the fine dust which will both likely continue into next year.*

*Most of the busier streets that are collectors and arterials were not significantly damaged and were re-opened soon after the flooding subsided. There are two drainageway pipe crossings that washed out on minor residential roadways at Pennsylvania (6<sup>th</sup>-7<sup>th</sup>), and Cypress (west of 55<sup>th</sup>). These repairs are pending. The drainageway pipe crossing of 47<sup>th</sup> Street (Collector classification) at Fourmile Canyon Creek was washed out, but has since been repaired and restored to service.*

*While in stable, safe condition for winter months, there also are more permanent and final repairs that are pending for certain segments of streets and pathways that will occur in spring 2014.*

*The City of Boulder has 60 miles of multiuse path within the city limits. Approximately, nine miles (15 percent) of the path was damaged based on preliminary estimates and approximately 18 miles (30 percent) was covered with debris. There are also significant amounts of sediment and vegetation at the underpass locations. The areas that have the most damage and high water include Boulder Creek and sections of Fourmile Canyon Creek.*

*On Open Space and Mountain Parks, 0.1 mile of paved (asphalt) road was destroyed at Gregory Lane. Chapman Drive (2.62 mi), an emergency access route was severely damaged. An additional 2 miles of roads were damaged, and improved through grading.*

---

**2** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

**3. What was the impact to local bridges? How many bridges were completely destroyed? How many were damaged? How many are still out of service?**

*The following vehicular bridge locations sustained damage during the September 2013 floods:*

- *Violet Avenue at Fourmile Canyon Creek (Federal Aid Eligible Road)*
- *Upland Avenue at Fourmile Canyon Creek*
- *19<sup>th</sup> Street at Fourmile Canyon Creek (Federal Aid Eligible Road)*
- *26<sup>th</sup> Street at Fourmile Canyon Creek (Federal Aid Eligible Road)*

*No bridges were completely destroyed, and none are still out of service.*

*All of these structures are “minor structures” from a CDOT classification and rating designation, with spans of less than 20’. All of these structures are made of timber (both foundations and superstructure), and were completely overtopped during flooding for multiple days and closed for various durations of approximately 1 week each. Assessments following the flood yielded repair estimates of approximately \$25,000 each, for a total of \$100,000 to repair:*

- *Wingwall and abutment erosion, including necessary rip rap,*
- *Damage to guardrail, and*
- *Damage to timber elements, including railing supports and in the case of 26<sup>th</sup> Street, one of the upstream stringers.*

*While some pre-existing structure degradation was noted in structure inspections at these locations in 2008, it is very difficult to fully assess the possible additional degradation of various structural elements (primarily abutment/wingwall stability and resulting stringer bearing support issues) caused by the storm. If these structures were replaced by reinforced concrete box culverts, we would estimate between \$500-800K per location. The three locations of federal aid eligible facilities are included in locations under review by FHWA and CDOT.*

*On Open Space Lands, publicly maintained roadway bridges were damaged at South Boulder Creek (2) South Boulder Road/S. Mesa Trailhead), Enchanted Mesa and the Hedgecock property.*

**4. What was the impact to local utility services? How long were residents without service? Are any residents still without service?**

---

**3** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

*The city's domestic water system was significantly impacted by the flood, but remained operational throughout the event. Key impacts included loss of use of the canal from Carter Lake to Boulder Reservoir Water Treatment Plant (BRWTP), loss of ability to treat water from BRWTP due to high turbidity, loss of power to both the Betasso Water Treatment Plant and BRWTP, loss of vehicular access to Betasso Water Treatment Facility, damage to transmission facilities in Boulder Canyon, loss of access to treated water storage facilities, and other related issues.*

*A temporary water interconnect to the Spring Valley Water District was established. The only city residents without water are those that have sustained major damage and water was shut off until rebuilding is complete (at the request of their contractor).*

*The city's wastewater treatment facility and wastewater collection system experienced severe operational issues and damage during and after the flood event. The wastewater treatment facility is protected by a flood berm and remained operational throughout the event. The facility suffered damage to a number of key components including the headworks and an anaerobic digester cover. Several sections of the wastewater collection system were exposed or destroyed by floodwaters. The 17.24 inches of rain that fell in the Boulder area over an eight day period resulted in infiltration and inflow from numerous sources as well as the entry of significant sediment and debris into the collection system. Many property owners experienced sewage backups into their buildings. Currently, it is anticipated that the city will need to inspect and clean 25 percent of the approximate 400 miles of pipe in the sanitary sewer system as well as 100 percent of the approximate 160 miles of pipe in the storm sewer system.*

*Floodwater in Two-mile Canyon Creek destroyed a section of sewer serving about 50 homes along Spring Valley Road and West Linden Drive. Reconstruction of the destroyed section of line has been completed. A temporary pump system was installed to connect the damaged line with an operational line, allowing residents to return to normal flushing and water use.*

*There are numerous (currently at 40) Boulder County residents living in enclaves or adjacent to the City of Boulder limits who have sustained damage to their on-site wastewater system or well, or the well is non-potable due to contamination. These residents do not have safe drinking water at their residence. In some cases city utility infrastructure exists in front of their residence, for others infrastructure will need to be constructed. In order to connect to city water or sewer, the property must be annexed into the City of Boulder first.*

---

#### 4 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

5. **What was the impact to local natural waterways? How many are public, and how many are private? How many miles of waterways were blocked? How many miles were rerouted? Are there any public waterways that are still unusable as a result of the floods?**

*Boulder Creek and 14 tributaries, totaling approximately 53 miles in length, pass through the city of Boulder. These are considered the major drainageways and have mapped 100-year floodplains. While a portion of some of these drainageways passes through private property, the city maintains approximately 25 miles, including all of the road culverts and crossings.*

*All of these drainageways experienced erosion and sediment and debris deposition. Work to restore the drainageways to their pre-flood condition will require removal of sediment and debris to re-establish their conveyance capacity so that adjacent properties are not flooded in a future storm event. Repair to retaining walls, drop structures and stream bank stabilization is also needed. The only drainageways that got re-routed were Fourmile Canyon Creek west of the city limits and Twomile Canyon Creek at the city limits. Twomile Canyon Creek has been re-established and we are working to re-establish Fourmile Canyon Creek.*

*On Open Space and Mountain Parks, creeks were impacted through deposition of debris including mineral sediments of all sizes (silt through large boulders), erosion and channel movement. Riparian areas were eroded away, buried beneath sediment and abandoned by the creeks that had historically supported them. In stream aquatic habitat structures were damaged or destroyed. OSMP has estimated the restoration costs to address the results of flooding at between. Based upon "first look" data it appears that 90% of aquatic habitat improvements were removed or rendered non-functional by the flood. OSMP has installed improvements along approximately 15 creek miles. Habitat improvements cost \$150,000/mile (\$2.25 million). Fish passage structures are localized and expensive aquatic habitat features. Three were damaged or destroyed by the flood with an estimated total cost of replacement of \$700,000. Attempts to modify creeks to pre-flood conditions without a consideration of the ecological functions of aquatic and riparian habitats could have greater impacts on natural systems than the floods.*

6. **What was the impact to local irrigation systems? How many acres of land were without irrigation services? How many acres of land are still without irrigation services? What is grown or grazed on those acres typically?**

---

5 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

*Regionally, the September floods had a significant impact on irrigation ditches and related activities. The City of Boulder has been focused primarily on assessing damage to the 34 irrigation ditches in which it is a shareholder. Therefore, this response will be limited to impacts to ditches that run through or immediately adjacent to the City of Boulder.*

*Although the vast majority of these ditches closed their diversion headgates during the flooding, flood flows within the creek channels and overland caused damage that can be categorized as follows:*

- *ditches that were filled in with sedimentation or debris, particularly downstream of headgates or where the ditches intersected major drainage features;*
- *headgate and diversion structure damage as a result of high streamflows and/or debris flows;*
- *breached ditch banks where overtopping occurred; and*
- *stream flows changed the path of Boulder Creek and the headgate or diversion point is no longer connected to the stream.*

*These 34 ditches serve various public functions, including storm water carriage, municipal water supply, wildlife habitat, agricultural irrigation on Open Space lands, and irrigation of public parks and government facilities. For most ditches, the operational season will begin in April or May. Without major maintenance to remove sediment, repair headgates or re-route streams before that time, 11 of these ditches will be inoperable. Of the remainder, 7 ditches sustained moderate damage, and 16 of the 34 suffered only minor damage.*

*The damage to ditches that serve the City of Boulder's Open Space lands impacted an estimated 3,800 acres. Production on these lands is primarily grass hay, alfalfa-grass hay and grass dominated pastures. The bulk of production is used to support local ranchers' cow-calf operations.*

*The City of Boulder Public Works Department is the majority shareholder in two of the 11 severely damaged and one of the seven moderately damaged ditches. Two of these serve a stormwater function for the city and need to be repaired as soon as possible to minimize future flooding impacts. Additionally, one of these ditches delivers municipal water to a city drinking water reservoir and will be limited in capacity and/or delivery capability until repairs are made.*

---

## 6 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

*Initial ballpark estimates of costs to repair the most severely damaged ditches range from \$50 thousand to \$500 thousand dollars for each ditch. The one exception being Lefthand Ditch, which applied for a Colorado Water Conservation Board loan of just over \$3 million dollars to repair damages to ditches caused by the movement and/or scouring of Lefthand Creek. Although the City of Boulder has been proactive in applying for various forms of public assistance and, likewise, encouraging individual ditch companies to apply for public funds, to-date awards still leave gaps in funding total repairs. For example, FEMA assistance will cover 75% of the percentage of the public ownership in the ditch company (ex: if 60% of the ditch company shares are publicly owned, 75% of 60% of the cost of repairs would be covered by FEMA funding). Most ditch companies do not have financial reserves to address major flooding impacts. Therefore, unless other sources of funding are secured, costs will likely be passed on to shareholders in the form of special assessments. Silver Lake Ditch, for example, only has 6% public ownership but has sustained significant damage and a large gap remains between available funding and repair estimates.*

- 7. What was the impact to local mass transportation? Were buses, air service, trains, or other forms of mass transportation inoperable as a result of the floods? Are any still out of service?**

*Local transit routes were impacted during the flooding but all transit routes are currently operating on their normal schedules and routes with a few minor detours.*

*During the disaster period, the City Manager closed the Boulder Municipal Airport in order to support disaster response. More than 1,700 people were airlifted to safety at the Boulder Municipal Airport, which served as an emergency operations, equipment and supply center for the regional rescue effort. The airport has been re-opened and restored to normal operations.*

- 8. What was the impact to local hospitals and other healthcare facilities? How many were damaged or destroyed? Are any still damaged or destroyed? If so, how are local residents receiving health care?**

*There was an interruption in services at Boulder Community Hospital's Broadway campus, and during the disaster the facility was on divert for 12 hours. Staff and services were relocated. There was a loss in revenue. Most of the damage was at the Broadway Campus; approximately 1/3 of the garden level was flooded. There was minimal damage at the Mapleton Campus and*

---

**7** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

*at the Foothill campus. Repairs have been completed where required. Services are now fully operational.*

**9. What was the impact to local parks and other public recreation facilities? How long were these facilities out of service? Are any still out of service?**

*The City has identified damage at seven recreation facilities and 47 parks. The damage ranges in severity and is categorized based on a high, medium or low impact dependent upon the threat to health/safety and program viability. Most sites have debris piles and sedimentation as well as some areas of structural damage to sidewalks, park amenities and infrastructure. Notable parks and recreation facilities that are high priorities for recovery include:*

- *North Boulder Recreation Center (Gymnastics / Gymnasium)*
- *Flatirons Golf Course (Events Center and course damage)*
- *Boulder Reservoir*
- *Eben G. Fine Park*
- *North Boulder Park*
- *Elks Park*
- *Municipal Campus and Central Park*
- *Boulder Creek Corridor*
- *Bear Creek Park*

*Currently, recovery efforts are underway within several parks and recreation facilities to allow access and program delivery as soon as possible. Most notably, the North Boulder Recreation Center is reconstructing portions of the gymnastics studio and gymnasium that were damaged. Initially, staff reported 13 full park closures and 10 partial park closures, as well as full closure of the Flatirons Golf Course and Boulder Reservoir.*

*The following parks remain closed: Knollwood Tennis Court and Elks Park which had recently begun construction before the flooding. A pedestrian bridge at Bear Creek Park is also damaged and still un-usable.*

*150 miles of open space trails were closed from September 12 through September 20 when the OSMP trail system began to be gradually opened. Open space visitors were also restricted from off-trail or nighttime use during this period. Approximately one quarter of the trails were opened*

---

**8** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

*by September 26, half by October 18, three-quarters by November 6. On December 3, 92% of OSMP trails were opened. Off-trail and nighttime restrictions were lifted as trails were opened.*

**10. What was the impact to local public buildings? How many public buildings were destroyed? How many were damaged? Are any still out of service? Have any public services been halted as a result?**

*Overall, 55 city facilities were impacted by the flood and heavy rains. The most severe impacts were from floodwaters impacting five facilities – Flatirons Event Center [still closed], West Senior Center, Reynolds Library and the Wildland Fire Cache [still closed] – all of which were closed for a significant amount of time. No major public services have been halted, but the following services have been impacted or limited:*

- *Meals on Wheels – The kitchen was located in the West Senior Center, which was closed from September 11 to December 2, 2013. The services were relocated to another city facility to continue this important service.*
- *Community meetings – The Flatirons Events Center hosted numerous community and civic groups, which can no longer utilize the space as the center is closed. See the economic section for more information.*
- *Recreation classes - costly repairs are required at the South Boulder Recreation Center and the North Boulder Recreation Center due to damaged wood floors in the gymnasiums, and some classes in those facilities have been impacted.*

**11. What was the impact to local public equipment? Were fleets (for example, police vehicle fleets) damaged or destroyed? If so, how many and what kind? What other types of equipment were lost?**

*No city vehicles were destroyed. Damages did occur as a result of flood emergency responses to several police and fire vehicles. For police, 7 vehicles had some water damage and for fire, 12 fire trucks had water damage.*

**12. Were any local public infrastructure projects that were in progress damaged or delayed by the floods? Please describe those projects. What were those projects? Have they been permanently suspended?**

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey- City of Boulder

- *Open Space and Mountain Parks trail construction projects at Upper Big Bluestem Trail, on Anemone Hill and on the Wittemyer property were in process and were halted because of the flood. Habitat restoration along South Boulder Creek was also underway, and delayed by the flood. Ditch maintenance work was also interrupted and considerably set back by sediment deposition.*
- *A environmental clean-up project at Valmont Butte was in the final stages, and had some flood damages, consisting of \$22,000 of erosion, prairie dog fence repairs and silt removal. Repairs have been completed along with remaining punchlist items.*
- *Boulder Parks and Recreation had recently started the construction of a new park in Boulder, Elks Park. Construction was stopped at the time of the flood event and has been suspended since the flood due to sedimentation and debris covering the site. Additionally, the flood event damaged and destroyed many of the improvements that had already been made at the park including concrete sidewalks, earthwork/grading and some utility work. The total project cost is around \$1,500,000 and the flood impact was approximately \$300,000.*
- *Greenways/Flood project that was in progress during the flood was the Goose Creek Habitat Restoration project, which was a U.S. Army Corps Section 206 grant project. The city is funding the project at 35%. The purpose of the project is to restore the Cottonwood Pond and lower Goose Creek to how it was before it was a gravel pit. The project involved filling in Cottonwood Pond and creating a wetland and re-establishing meanders in Goose Creek. A section of multi-use path was re-routed away from Goose Creek to create more wetland area and improve site distance issues. The new section of path was completed and open for public access just before the flood, but while the project was still under construction. The path was washed out during the flood. It has recently been restored.*
- *The Violet Crossing project, which included the construction of a flood channel for Fourmile Canyon Creek and a multi-use path, was destroyed during the flood. It was recently completed and accepted by the city right before the flood.*
- *The Utilities division annual waterline replacement project was delayed, but has resumed and is almost complete.*

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

## Section 3: Economic Impact

### 1. What local businesses were damaged or destroyed by the floods? What types of services did those businesses provide? Are those services still being provided in your community?

*According to FEMA data as of November 15, **78 unique locations within commercial or industrial zoning districts have registered for FEMA assistance** (1.5% of all FEMA requests for assistance in Boulder were in non-residential areas of the city). Impacts to Boulder businesses ranged from severe to moderate damage. Many damaged businesses were repaired in a few weeks. Others had minor flooding that did not significantly impact business operations. Several examples of impacts to businesses include:*

- *In many cases, **business tenants** that did not own their buildings experienced prompt assistance with flood remediation and reconstruction by their landlords. One example was a group of retail stores in the Village Shopping Center (north of Arapahoe Avenue, between Folsom and 28<sup>th</sup> Street) that sustained damage. Sprouts, Aspen Eyewear, Mattress Firm, and Crossfit Sanitas all suffered extensive water damage and were remodeled and back in business in a few weeks. Boulder Ski Deals, in the same shopping center, suffered significant enough damage that it was able to only partially open in the months after the flood and was just fully reopened again in mid to late November.*

*Other **Boulder businesses that had significant flood damage** include Corden Pharma (a pharmaceutical manufacturer), Namaste Solar (a solar panel designer/ installer), Star Flooring (a flooring showroom/installer, a business much in demand following the flood), SecurCare (a self-storage facility that was closed due to significant damage). Numerous other businesses sustained flooding, roof leaks, odors, and property damage.*

- *A commercial building at **100 Arapahoe Avenue** was entirely demolished by flood waters. This building, owned by a local property owner, was leased to multiple small businesses, including many sole proprietors like massage therapists. These business owners lost all of their business property, including valuable records. As with other impacted businesses, these businesses scrambled to find new locations, with the help of area brokers and the Boulder Chamber. Records loss was a common business impact.*

---

**1** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

- **Fraser Meadows, a large retirement community**, experienced extensive flood damage. In addition to considerable damage to the independent living portion of the campus, half of the skilled nursing beds (54 of 108 beds) sustained extensive damage as did the entire 34-unit assisted living facility. The damaged half of the skilled nursing facility and the entire assisted living facility remain closed and will be for the foreseeable future.
- **The city-owned Flatirons Events Center** at 5706 Arapahoe Avenue sustained substantial damage; the majority of the building was closed and remains closed to date. The value of the facility is estimated at \$2.2 million, according to city facility management. An extensive building assessment is underway to determine the extent and type of damage and to determine whether the building can be remodeled and reopened. The assessment report is expected in mid-January.

**A Spice of Life**, a catering and community event company is the city's tenant at 5706 Arapahoe Avenue. This business has been significantly impacted, losing many contracts for events and catering services, as well as the loss of the Flatirons Events Center for events. A Spice of Life is evaluating possible new locations for its commercial kitchen operations.

**Many community groups held weekly or monthly meetings** at the Flatirons Events Center and have experienced challenges finding affordable and available space. City staff has worked with A Spice of Life and these groups to find and evaluate alternative Boulder event and meeting spaces.

- Boulder's business community is unique in that it has **thousands of self-employed and sole proprietor businesses**, including a much higher percentage of home-based businesses (home occupations) than most communities. While the overall flood impact has not yet been quantified, the City of Boulder is aware of numerous Boulder home occupations were displaced or disrupted (e.g. by flooded basements or lower levels). This flooding impacted not only these businesses but their clients and their ability to pay taxes.
- **The Boulder Small Business Development Center (SBDC)** has been contacted by about 60 businesses regarding flood damage, including a wide range of business types and sizes, from home-based businesses to larger companies.

## Colorado 2013 Floods

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

---

## 2. What local not-for-profit groups were impacted by the floods? What types of services did those groups provide? Are those services still being provided in your community?

The City of Boulder Division of Housing contacted our nonprofit partners and service providers in Boulder after the flood to provide information and resources for flood recovery. Thirteen nonprofit organizations reported impacts from the flood, including:

1. **Anam Chara**, a Medicaid assisted living provider, reported “some damage”.
2. **Boulder Housing Partners**, the city’s housing authority, reported that 10 residential units were damaged.
3. **Boulder Housing Coalition**, a nonprofit that provides affordable co-operative housing, reported that all three residential buildings experienced flooding, including basement and storage flooding. One residential unit was gutted and rehabilitated.
4. **Care Connect**, which provides services for seniors with disabilities, reported that its office was destroyed.
5. **Community Food Share**, provides food that is distributed to clients of six organizations and the Sunday Soup Program in Boulder. The contact reports flood impacts due to provision of food to flood-impacted individuals and operations expenses.
6. **Family Learning Center**, a provider of educational services for preschool to adults, reported extensive damage to the lower level offices, including damage to flooring, walls, and office equipment (computers).
7. **Mental Health Partners**, a provider of comprehensive psychiatric services, reported that three residential units were damaged and required gutting and rehabilitation, and one experienced a leak during the flood.
8. **Mother House**, which provides housing and an array of services for pregnant teenagers, had to replace a sump pump and water heater.
9. **Thistle Communities**, a nonprofit affordable housing provider, reported minor damage to twenty-seven units.
10. **YWCA**, a provider of human services, advocacy, education and leadership empowerment, reported that the most significant impact was cancellation of the largest fundraiser of the year. They also reported that their basement flooded, the carpet needed replacement, and there were minor roof leaks.
11. **Imagine!**, a provider of services and housing for individuals with disabilities, reported damage to four residential group homes in Boulder.

---

### 3 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

12. The office of **Meals on Wheels**, located in a City of Boulder building, was destroyed with a damage estimate of \$35,000.
13. **Homestar Child Development Center**, a nonprofit childcare facility, was destroyed.

Of the thirteen nonprofits known to have experienced damage, all but two are operational. **Anam Chara** is not operating at this time for reasons not related to the September flood. The **Homestar Child Development Center** has been displaced and is seeking a new location. Homestar is one of few organizations that provide child care for infants and there are limited options for those families to turn to in the wake of the flooding.

**Downtown Boulder Inc.**, a nonprofit organization dedicated to continued preservation and enhancement of Downtown Boulder, had no physical damage, but had to cancel Fall Fest, an important community event that brings in significant revenue for the organization.

### 3. How many people in your community are unemployed as a result of the floods? How does that compare to the number of people who were unemployed this time last year?

Initial data from WorkForce Boulder County indicates that **203 people are now unemployed as a result of the floods**. For comparison purposes, October 2012 had an unemployment rate of 5.5%, with 9,964 people unemployed and as of October 2013, Boulder had an unemployment rate of 5.6%, with 10,326 people unemployed. The long term impact on employment will not be known for some time. Early indications are that all Boulder businesses plan to stay in business. Some were closed temporarily, but not for a long time span. With regards to tax remittance, the City of Boulder received requests from a few businesses to file late due to the flood but none indicated that they were out of business.

A few examples of unemployment as a result of the floods:

- A Spice of Life laid off 16 of its 162 employees as a result of the flooding, according to an article in the Boulder County Business Report.
- Frasier Meadows Retirement Community reported that 60 of the community's employees have been either laid off or are working reduced hours as a result of the flood with additional staffing cutbacks anticipated.

### 4. Did the floods bring any new jobs or businesses to your community that did not exist previously in the area? What types of jobs, and how many?

---

4 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

As in any disaster, there have been **short term job increases in construction, remodeling, replacement and debris removal**. Long term impacts will be known as flood damage is repaired across the city. **Forty-seven contractor licenses** were applied for in the month following the flood, from Sept. 11 – Oct. 18. These licenses include electrical, general contractor, demolition and moving, mechanical, plumbing, etc. New businesses include flood remediation, building contracting, landscaping, and engineering, among others. Even contractor services that were provided by out-of-town and out-of-state companies resulted in associated business activity and tax collections, including materials and equipment purchases, license fees, food services, and hotel stays. FEMA, SBA, and other agency workers also resulted in some business activity and tax collections.

#### 5. Was there any loss of revenue to local businesses as a result of the floods? How much and what services is the loss of revenue related to?

**Open Space and Mountain Parks:** The costs associated with collecting sufficient data from commercial users would be high. Open Space and Mountain Parks is proposing waiving fees for 87 commercial permit holders for the FY 2014. This would provide benefit to businesses who pay an average \$167.24/year. Permit costs vary depending upon the type of permit (permit costs - \$50, \$150, \$300) and the number of person-visits to OSMP. The cost to the city of this mitigation would be approximately \$14,500.

**Business Impact:** The City of Boulder is aware of many specific examples of economic injury as a result of the floods – especially in terms of loss of revenue from closures, low traffic, customers that are holding back on spending, inability to produce product in order to meet sales.

- For one Boulder business, its primary customer is located in Estes Park; Estes Park was cut off from access, so most sales were cut off. In addition, home-based businesses and businesses in damaged buildings sustained revenue loss during the time of closure.
- Since the flood, A Spice of Life has suffered from numerous cancellations (of catered events in the closed events center and for off-site catering) in 2013 and 2014. The company projected about \$850,000 losses due to the flood, mostly due to sales losses, in a recent Boulder County Business Report article.

---

5 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey-City of Boulder

- *At Frasier Meadows Retirement Center, the damaged half of the skilled nursing facility and the entire assisted living facility remain closed and will be for the foreseeable future, leading to significant lost revenue.*
- *As of late November, the SBDC continued to receive regular new inquiries from Boulder businesses about financial assistance and flood relief. They have spoken with businesses that are concerned about taking out loans and going through SBA processes. Other businesses do not qualify for SBA Disaster loans.*

**Local Sales Tax Revenue:** *Varied perceptions of whether Boulder was “open for business” impacted local business. Many retail, service, and restaurant businesses experienced a reduction in foot traffic and sales which may affect city tax revenue. Downtown Boulder Inc. continues to receive calls with the question “can I get to Boulder because of the floods?” The city is partnering with Downtown Boulder Inc. and Twenty-Ninth Street to run “Buy into Boulder” ads in late November and December to remind holiday shoppers to shop in Boulder and that for every \$100 spent in Boulder, \$3.41 goes to community services and programs.*

*While September retail sales tax was down from last year by 5%, the City of Boulder has not yet received October sales tax collection numbers. There were tax increases in areas where the flood destroyed durable goods or necessitated remodeling or reconstruction. It is too early to know the long term tax revenue impact. Sales tax collected in October will be known in the middle of December. While the City of Boulder saw a short term dip in retail taxes in September (reported on in November), it is expected that this will be recovered in the coming months. On the property tax side, impacts will not be known for several months or years.*

## Colorado 2013 Floods

### Unmet Need Identification Project Local Impact and Priority Survey

---

## Section 4: Community Recovery Priorities

1. What does your community see as the top priorities for recovery from the floods? How were these priorities determined (community leadership, public meetings, and so forth)? Has the priority determination method been documented (minutes, public meeting summaries, public comment, and so forth)?

*In response to the September 2013 flood, Boulder's City Council approved key objectives for the near-term recovery and long-term resiliency on Oct. 15, 2013. The key objectives include:*

1. **Help people get assistance.** Facilitate access to individual assistance for affected homeowners, renters and businesses to support their recovery from flood impacts and strengthen long-term resilience.
2. **Restore and enhance our infrastructure.** Invest in projects to restore services and to rebuild and enhance infrastructure, as appropriate, in the interests of public health and safety, community quality of life, and long-term resilience.
3. **Assist business recovery.** Work with the Boulder business community and key partners to connect affected businesses with resources, recover quickly from flood impacts, and support long-term economic vitality.
4. **Pursue and focus resources to support recovery efforts.** Work in partnership with volunteers, governmental and other agencies to maximize financial resources and efficiencies for recovery.
5. **Learn together and plan for the future.** Engage the Boulder community in assessing neighborhood impacts, refining and rethinking community design options, prioritizing actions and opportunities that mitigate hazards before rebuilding and support long-term community resilience and sustainability. In doing so, we build a city both greater and more beautiful than we were before.

---

1 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

### Unmet Need Identification Project Local Impact and Priority Survey

---

*In support of these overarching objectives, the following priorities have been established by input from the community (via neighborhood meetings) and city department heads and staff. Please note that the items are not necessarily listed in order of priority:*

- *Develop and support city and countywide Long Term Recovery*
  - *Integrate and participate in the countywide long term flood recovery group (LTRG) to develop and implement long-term recovery structure for human service, housing and community services*
  - *Provide supplemental staffing resources which will enable city to 1) support regular operations 2) flood recovery efforts, and 3) put in place long term resources dedicated to disaster recovery, prevention and mitigation (such as permanent disaster recovery manager position)*
  - *Support low income and fixed income residents who have unmet gap needs for housing repairs what have not been completed or remain displaced*
  - *Facilitate a solution to the Ponderosa mobile home park damages, which primarily has very low-income residents, many of whom are undocumented and non-english speaking.*
  - *Continue to provide resources and assistance for mental health counseling and financial advice.*
  - *Facilitate the resolution of public health concerns due to failed on-site wastewater systems and contaminated wells, including those involving enclaves and adjacent county residents through the construction and connection to city water and sewer utility infrastructure. (including the cost associated with annexation)*
  - *Support affordable housing needs to replace units damaged, including three new affordable housing projects that could move forward quickly with funding support.*
- *Repairs to water systems and facilities and waste water/storm water collection systems, including the inspection and cleaning of more than 260 miles of the 560 miles of sanitary and storm sewer system.*
- *Complete permanent repair and debris removal for residential and lower volume streets and adjacent culverts, as well as the remaining multi-use paths, many of which provide commuting access to schools and places of employment.*
- *Complete damage repairs at city facilities and incorporate flood mitigation*
  - *Leverage flood restoration projects to enhance the resiliency of other public and private infrastructure*
  - *Repair high profile park and recreation facilities as well as restore trails, trailheads and access points*
- *Waterways*

---

## 2 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

## Colorado 2013 Floods

---

### Unmet Need Identification Project

#### Local Impact and Priority Survey

- *Removal of debris and sediment to reduce the immediate flood risk during spring run-off and higher water flows*
- *Restoration of water delivery infrastructure (irrigation ditches and headgates) prior to the growing season, to support local farmers and ranchers who provide food to local businesses and residents*
- *Restoration of natural, aquatic and riparian habitat, including areas with species listed under the endangered species act*
- *Stream/creek re-channelizing to reduce the immediate flood risk during spring run-off and higher water flows*
- *Local match for other funding*

*Following the initial flooding, the city hosted flood recovery meetings to share and collect information about flood impact assessments; neighborhood opportunities and challenges; and flood recovery information and resources offered by the city. Approximately 750 people signed in at eight flood recovery open houses. Key messages from the open houses included:*

- *Support from community members to complete flood mitigation infrastructure improvements and accelerate timing of when those improvements occur.*
- *Questions about how neighborhoods and property owners can work together (with the city in some cases) to clean up and make improvements to prevent future flooding.*
- *Questions about how to protect personal property from future flooding.*
- *Desire to see future follow-up meetings with information about proactive planning.*
- *Questions about sources for personal assistance and funding, now that FEMA and other programs have not met the full gap.*

*Priorities have been documented in City Council meeting memorandums. ([December 3 Council Meeting Memo.](#)) As the city learns more about damages, the priorities will be updated.*

#### **2. What will be the impact to your community if these priorities are not addressed?**

- *The residents, facilities and infrastructure of the City of Boulder may remain susceptible to repeated flooding and additional damage if the waterways are not repaired and flood conveyances restored to pre-flood condition. With snow melt and run-off anticipated, the timing of repairs and mitigation work prior to spring is critical.*
- *There are immediate and long-term public and environmental issues related to the individual wells and on-site waste systems if left in their current state.*

---

### **3** Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)



## Colorado 2013 Floods

---

### Unmet Need Identification Project Local Impact and Priority Survey

- *Irrigation for agricultural purposes may be limited for the next growing season if the ditches and head gates are not repaired.*
- *Very low-income and vulnerable residents may be displaced or leave the community if permanent housing options are not found.*
- *Without supplemental staffing and resources, regular operations to the public may be impacted and flood recovery, disaster prevention and mitigation may be compromised.*

### 3. What resources, public or private, is your community able to bring to bear in order to address these priorities?

*To date, the City has dipped into reserves by fronting \$6,817,818 for flood repairs. The city will actively seek assistance through all other grant opportunities available such as Natural Resources Conservation Service (NRCS), Colorado Water Conservation Board (CWCB) and others. The City is not aware of any readily available sources of private funds or resources that can be used for flood recovery.*

### 4. How long will it take your community to address your recovery priorities if you have sufficient resources to do so?

*In order to restore city infrastructure, the City anticipates that the restoration and recovery work will take a concentrated effort for at least 2-3 years, with projects stretching into 5-10 years if funding is delayed. In the event funding is made available quickly, the City would be in the position to aggressively pursue an expedited assessment and resiliency planning process.*

### 5. Is there anything else that you want to tell us about how the floods impacted your community?

*The preliminary damage assessment provided to FEMA is provided below for reference.*

---

#### 4 Colorado Department of Local Affairs

PLEASE EMAIL COMPLETED SURVEYS TO [ALISON.OKELLY@STATE.CO.US](mailto:ALISON.OKELLY@STATE.CO.US). FAXES MAY ALSO BE SENT TO 303.866.4077. (Any correspondence after December 12<sup>th</sup> can be faxed to 303.864.7856.)

**Colorado 2013 Floods**

**Unmet Need Identification Project  
Local Impact and Priority Survey**

**PRELIMINARY DAMAGE ASSESSMENT:**

<b>FEMA PUBLIC ASSISTANCE DECLARATION - CITY OF BOULDER SUMMARY*</b>	
<i>CATEGORY A - Debris Removal</i>	\$ 4,953,440
<i>CATEGORY B - Emergency Protective Measures</i>	\$ 1,296,685
<i>CATEGORY C - Road &amp; Bridge Systems</i>	\$ 2,380,000
<i>CATEGORY D - Water Control Facilities</i>	\$ 10,850,000
<i>CATEGORY E - Public Buildings &amp; Equipment</i>	\$ 4,170,000
<i>CATEGORY F - Public Utilities</i>	\$ 4,250,000
<i>CATEGORY G - "Other" (Parks and Recreation, Open Space, Multi-Use paths)</i>	\$ 15,704,220
<b>PRELIMINARY RECOVERY ESTIMATE BY CATEGORY</b>	<b>\$ 43,604,345</b>

*\* Based on revised assessments as of Oct. 8, 2013 and recognizing that some of the infrastructure is still covered by debris and water and therefore unable to be assessed at this time.*