



**CITY OF BOULDER
CITY COUNCIL AGENDA ITEM
MEETING DATE: October 1, 2013**

To: Members of City Council

From: Jane S. Brautigam, City Manager
Paul J. Fetherston, Deputy City Manager

Date: September 27, 2013

Subject: Update on Flood Recovery and Disaster Assistance Status and Consideration of Overarching Goals Regarding Cleanup and Flood Recovery Measures

EXECUTIVE SUMMARY:

Boulder's initial response to the flood of Sept. 11 through 15, as reported to City Council on Sept. 17, focused on life-safety issues. The city has since transitioned into disaster assistance and recovery operations. While the full recovery is likely to take months, and in some cases years, city staff has provided disaster assistance to impacted residents, and has made significant progress restoring city facilities and streets, while working with disaster relief agencies to assess damages throughout the city.

On Sept. 26, the city provided the Federal Emergency Management Agency (FEMA) with a preliminary damage assessment stemming from the storms and floods. While the citywide, damage estimates totals \$48,910,000, the city has communicated with FEMA that the number is likely to change as assessments continue. On Sept. 27, four city representatives, including council member Karakehian, attended the state's Applicant Briefing. This was the preliminary meeting held before the city's kick-off meeting with FEMA occurs.

COUNCIL ACTION REQUESTED:

In order to send a strong message to our community about the city's key objectives in response to the flood, staff has prepared a draft document for council to consider. Staff requests City Council consideration of this matter and action in the form of the following motion:

Motion to approve the Key Objectives for near-term recovery and long-term resiliency relative to the 2013 Flood (stated in draft form in **ATTACHMENT A**).

BACKGROUND:

By Sept. 17, most city departments transitioned from emergency response to disaster assistance efforts and have been working cross-functionally to remove debris and restore municipal government operations, facilities and community infrastructure. A summary of the disaster

assistance and recovery status, accomplishments to date and near-term priorities are included in **ATTACHMENT B**.

In addition, in response to requests from FEMA for an initial assessment of damages caused by the flood, staff began the work of determining preliminary damage assessments. The following table explains these estimates, which are preliminary and will likely change as we are able to more fully assess the extent of infrastructure damage.

PRELIMINARY DAMAGE ASSESSMENT:

Open Space and Mountain Parks	\$17,670,000
Parks and Recreation	\$2,390,000
Utilities: Water	\$3,300,000
Utilities: Wastewater	\$2,500,000
Utilities: Stormwater/Flood	\$13,850,000
Transportation	\$6,000,000
Facilities and Asset Management	\$3,200,000
Preliminary Damage Assessment Total*	\$48,910,000

* Based on preliminary assessments as of Sept. 26, 2013 and recognizing that some of the infrastructure is still covered by debris and water and therefore unable to be assessed at this time.

OPEN SPACE AND MOUNTAIN PARKS

Approximately 64%, or 93 miles of the 145 miles of trails within the OSMP system have significant to severe damage. Estimates include repair, restoration and/or replacement of trails, ecology, water delivery infrastructure and fencing.

PARKS AND RECREATION

Approximately 34%, or 35 of the 98 parks and recreation facilities have significant damage. Estimates include repair, restoration and/or replacement of facilities, structures, playgrounds, multi-use fields and courts, and paths.

UTILITIES

Water

Damage estimates include the restoration of erosion that is jeopardizing water delivery pipelines and access roads to critical water infrastructure.

Wastewater

Damage estimates include inspecting and cleaning 25% of the approximate 400 miles of pipe in the sanitary sewer system.

Stormwater/ Flood

Damage estimates include inspecting and cleaning 100% of the approximate 160 miles of pipe in the storm sewer system. Damage estimates include the reconstruction of improved drainageway features which will require the removal of vast amounts of sediment and debris.

TRANSPORTATION

Approximately 1% or 3 miles of the roads, city wide, have been damaged. There are approximately 300 miles of roads that exist within the City of Boulder. It is estimated that approximately 20% or 60 miles of the roads were covered in debris.

The City of Boulder has 60 miles of bike path within the city limits. Approximately, 15%, or 9 miles, of the path was damaged based on preliminary estimates.

FACILITIES AND ASSESSMENT MANAGEMENT (FAM): BUILDINGS AND STRUCTURES

84% or 306 of the 365 buildings and structures have been assessed. Utility and parking structures still require assessment. Of those 306 assets, approximately 35, or 9% are estimated to have damage.

NEXT STEPS:

Adopt a motion to approve Key Objectives for the near-term recovery and long-term resiliency.

ATTACHMENTS:

Attachment A – Responding to the 2013 Flood: Key Objectives for Near-term Recovery and Long-term Resiliency

Attachment B – Department Status Updates and Priorities/Goals Going Forward

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**Responding to the 2013 Flood:
Key Objectives for Near-term Recovery and Long-term Resiliency**

September 2013 brought unprecedented rainfall to our region, causing significant flooding, loss of life, and widespread damage. The Boulder community is quickly getting back on its feet. But while many are back to normal routines, others will be dealing with the floods' impacts for months and years to come. As a community, adequate care and support should be ensured for those most affected, in Boulder and surrounding areas, while focusing on the important work of reconstruction and other priorities. The flood has caused harm, but has also created an opportunity: to think critically about our future, and to work together like never before in support of long-term community sustainability and resiliency.

Our key objectives for the near-term recovery and long-term resiliency are:

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 with governmental and other agencies to maximize partnerships, financial resources and efficiencies for recovery.
5. **Learn together and plan for the future.** Engage the Boulder community in assessing neighborhood impacts, evaluating options, and prioritizing actions and opportunities that mitigate hazards and support long-term community resilience and sustainability - building a city both greater and more beautiful than we were before.

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DEPARTMENT STATUS UPDATES AND PRIORITIES/GOALS GOING FORWARD

Since the initial response to flooding on September 11, 2013, the city has been supported by the community through their patience during interruptions in services and individual impacts to persons and property. In addition, the community has expressed to the many departments who offer programs and services their overwhelming support. The great community in and around Boulder have stepped forward to help the community, affected neighbors and the many great attributes that make Boulder the special place it is. The city is most grateful to the community for its patience, assistance and support.

PUBLIC WORKS DEPARTMENT:

Overall, the priority for Public Works is to respond to immediate threats to public health and safety.

UTILITIES

For Utilities, the priority is to ensure safe drinking water and water for fire protection, conveyance and treatment of wastewater, and restoration of stormwater facilities required to convey minor storm events. Recovery efforts will commence as soon as response to immediate public health and safety are completed.

Initial recovery work that is occurring includes the restoration of erosion that is jeopardizing water delivery pipelines and access roads to critical water infrastructure. 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. Initial assessments indicate that the city will need to reconstruct improved drainageway features which will require the removal of vast amounts of sediment and debris.

Source Water System

Recovery Goal:

Restore and stabilize all critical elements of the water system before the onset of winter or approximately Nov. 1, 2013 in mountainous areas.

Status:

Dams, diversion and source water pipelines were inspected for damage and confirmed safe and operable. Hydroelectric facilities were inspected for damage and are online with the exception of the Orodell facility which is offline due to non flood related issues.

Accomplishments:

- Boulder Canyon Hydro had minor flood damage and was brought back online on Sept. 19.

Water Treatment and Distribution

Recovery Goal:

Restore and stabilize all critical elements of the water system by Nov. 1, 2013.

Status:

All water to the city is currently being supplied by the Betasso Water Treatment Facility via the Sunshine Pipeline. The city's two treated water pipelines in Boulder Canyon were impacted by flood erosion and unstable slopes and are currently offline pending the completion of stabilization work.

The Betasso Water Treatment Facility suffered minimal damage but had to operate on emergency generator until power was restored by Xcel Energy. Fuel and chemical deliveries have been and will continue to be coordinated with CDOT during reconstruction of the CO Highway 119.

The Boulder Reservoir Water Treatment Facility was shut down during the flood event due to high turbidities in Boulder Reservoir and damage to the Boulder Feeder Canal that delivers water from Carter Lake. It is anticipated that the treatment facility will be ready to come online if needed the week of Sept. 30 using water from the Boulder Reservoir source. The Boulder Feeder Canal, which is maintained by the Northern Colorado Water Conservancy District, is expected to be out of service through approximately April 2014.

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). Fire hydrants are all in operation.

Several access roads suffered damage from erosion, the most serious being the road leading up to the Booten (Fourmile Canyon Creek crossing) water storage tank. Boulder County is currently working on restoring Wagon Wheel Gap Road (access to Booten). Once this roadway is restored, work will be initiated to restore the access road to the Booten water storage tank.

Accomplishments:

- Damage inspections have occurred for remote facilities including pipelines, tanks, pump stations and pressure reducing valves and access roads;
- Completed restoration work on the Chautauqua water storage tank access road; and
- Completed restoration of erosion damage threatening the treated water transmission line near Table Mesa Drive and Vassar Avenue.

Wastewater Collection System

Recovery Goal:

Restore and stabilize all critical elements of the wastewater collection system by Oct. 1, 2013.

Status:

Staff will continue to respond to reported issues in the collection system on a daily basis.

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 begun. 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. It is anticipated that the reconstruction will be complete in about a week.

Accomplishments:

- Investigated and resolved all reported issues in the collection system as of Sept. 23, 2013;
- Inspected all remote facilities including IBM pump station and pipelines for damage;
- Reconstruction of a severely damaged berm that contains an interceptor sewer to the Wastewater Treatment Facility.
- City and contracted crews worked 24/7 to mitigate overflows and backups in the sanitary sewer system; all reported issues in the collection system were resolved as of Sept. 23, 2013;

Wastewater Treatment Facility (WWTF)

Recovery Goal:

Restore all critical elements of the wastewater treatment facility by Nov. 1, 2013, including the influent bar screens in the “headworks” portion of the facility.

Status:

As of Wednesday, Sept. 25, 2013, the influent flows to the WWTF were 27 million gallons per day (Mg/D). While this is an improvement, it is still twice the pre-flood total (normal, pre-flood was 13 Mg/D on average). Once flows are below 25 Mg/D, staff will begin to clean facility tanks and channels. This is estimated to begin on Monday, Sept. 30. More damage may be discovered once a thorough facility assessment has occurred. Damaged headworks screens were shipped for repairs at the manufacturer’s facility. One screen has been repaired and arrived on Thursday Sept. 26. Staff is working to get the screen installed and online as soon as possible. It is unknown how long the manufacturer will need to repair the second screen, or if a new screen will be required.

Accomplishments:

- Successfully treated wastewater influent during and after the flood event (with six consecutive days treating 50 Mg/D; normal is 13 Mg/D); and
- Based on performance this month, the WWTF is meeting the normal monthly discharge permit effluent limitations for September, which is a significant positive result.

Storm water collection system

Recovery Goal:

By April 1, 2014, restore the capacity of the storm sewer and local drainage systems. This will require removal of significant debris and sediment lodged in pipes, catch basins and inlets.

Status:

Work to remove debris and sediment lodged in pipes, catch basins and inlets continues.

There are likely other areas that have been impacted by the flood event and these areas will be inspected for debris and sediment. It is anticipated this work will continue through the winter and be completed by April 1, 2014.

Accomplishments:

- Using city staff, contractors, and assistance from the City of Broomfield, approximately 35-40 percent of the known impacted areas have been cleaned of debris and sediment.

Major Drainageway System

Recovery Goal:

By April 1, 2014, restore the capacity of the major drainageway system, with the exception of Fourmile Canyon Creek. Restore the capacity of the Fourmile Canyon Creek drainageway by Oct. 1, 2014. This will require removal of significant debris and sediment as well as the restoration or reconstruction of improved drainageway features such as drop structures, retaining walls and eroded channel bottoms.

Status:

A plan is being developed for long-term reconstruction, sediment and debris removal for heavily impacted drainageways including Bluebell Creek, Gregory Canyon Creek, Two-mile Canyon Creek and Fourmile Canyon Creek

Work to clear sediment and debris and restore drainageway features along Two-mile Canyon and Fourmile Canyon creeks will continue in cooperation with the Urban Drainage and Flood Control District. Work to clear sediment and debris and restore drainageway features along Gregory Canyon and Bluebell Creeks has been initiated.

Accomplishments:

- Field work completed required to document the extent of flooding, flow paths and damage along all major drainageways. This information will be documented in Geographical Information System (GIS) format for analysis and record keeping; and
- Significant restoration progress has been accomplished of drainageway features along Two-mile Canyon Creek upstream of Linden Avenue.

TRANSPORTATION

Based on preliminary assessments and recognizing that some of the infrastructure is still covered by debris and water, it is estimated that approximately 1 percent or three miles of the 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. While local transit routes were impacted during the flooding, all transit routes are currently operating on their normal schedules and routes with a few minor detours.

The City of Boulder has 60 miles of bike 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 is also a significant amount of sediment and vegetation at the underpass locations.

Overall, the priority is to get the transportation system (streets and paths) cleared of sediment and debris, assess the damage for the remaining sections that have yet to be evaluated and repair the damaged portions of streets and paths.

Street Damage

Recovery Goal:

Reconstruct and open residential streets (i.e., Willow Brook) impacted by flooding by December 2013. Clear and/or reconstruct culverts and adjacent impacted roadways (i.e. 47th north of Independence, Pennsylvania west of 7th, and 55th and Cypress) by the end of October 2013.

Status:

A few residential roadways remain closed and/or will need to be reconstructed because of flood damage. A list of current closures can be found at www.BoulderFloodinfo.net. Numerous storm water channels through bridges and culverts will need to be cleared of sediment and debris. The bridges and culvert will be cleaned out as the channels are cleared of debris and sediment. Bridge structures shorter than 20 feet are being evaluated for impacts. Inspections will continue as water recedes to determine if there is damage to the structures below the water surface.

Accomplishments:

- Reopened Table Mesa Drive (Gillespie to Lehigh) to traffic – an exposed gas and communication line were supported and undermining on this major arterial was repaired to open all lanes to traffic including the Skip transit route;
- Opened access to high priority residential streets - Asphalt has been removed and a temporary gravel surface has been placed on streets that had significant damage and homes could not be accessed. The streets will be paved after underground utilities are evaluated. Example Streets include King Avenue from 17th to 18th Street; Willowbrook Drive north of Cascade and 7th Street from Pennsylvania to University; and
- Inspected vehicular bridges - To date, all major structures (more than 20 feet in length) have been evaluated and confirmed to be safe and operable.

Debris on streets

Recovery Goal:

Clear majority of the debris from streets and sidewalks deposited by the flooding by Nov. 1, 2013. Debris removal is expected to continue throughout the end of the year.

Status:

Work to clear sediment and debris on roadways and street sweeping was initiated to follow up debris removal. Much of the debris on the streets has been picked up and hauled away. City crews will continue to remove debris throughout the city.

Accomplishments:

- Removed significant amounts debris in the most impacted areas of town including Gregory Canyon Creek, Four Mile Canyon Creek and Two-mile Canyon Creek; and
- Street maintenance crews have been working on debris removal and two private crews have been hired to supplement the city's crews.

Street Sweeping

Recovery Goal:

Continue to sweep the street system concentrating on hardest hit areas first. Sweep and clear debris from all roadways with bike lanes, making them useable by the middle of October 2013. Sweeping will be on-going with a big focus on this effort the next two weeks and continuing with fewer sweepers into November and later, as needed.

Status:

Currently using the two city sweepers, one contracted sweeper, two sweepers on loan from Denver International Airport (DIA) and a contractor with power brooms. Crews have concentrated on the hardest hit areas first. This initial work, which is weather dependent, is expected to be complete in approximately two weeks. Sweeping and debris removal in certain areas need to be coordinated and posted for "No Parking" in order to access the parking areas.

Accomplishments:

- The sweepers have initially swept all impacted areas and continue to revisit and sweep as fine dust continues to be deposited on the streets.

Bike/Multi-Use path system and Underpasses

Recovery Goal:

Clear debris from paths and underpasses; remove trees that were undermined; reconstruct damaged path sections and open all of the greenways system to public use by the end of the year. Some of the system is still underwater, mostly at underpasses, and if significant damage is uncovered repairs could extend into spring 2014. Coordination will be required for most damaged sections with channel debris removal and reconstruction.

Status:

Much of the flood impacted path system is open, crews continue to pick up debris and sweep sand from paths. Several underpasses are still flooded. By the end of the week of Sept. 30, the Transportation Division hopes to have identified segments that have major damage and require capital reconstruction (unless they are still flooded). Up-to-date path and underpass closure can be found at www.BoulderFloodinfo.net. The areas that have the most damage and high water include Boulder Creek and sections of Four Mile Canyon Creek.

Accomplishments:

- Inspected all sections of path that are not under water and continue to evaluate the system daily;
- Removed significant amounts of debris and sediment and opened many underpasses and buried segments of path;
- Started capital maintenance and repair by filling some undermined paths;

- Concrete path was removed and replaced at Bear Creek and Moorhead Avenue where the path was significantly damaged;
- Forestry has inspected and removed many damaged and threatening trees in the channels; and
- Created a map for public information of closed segments that is updated daily on new openings.

FACILITIES AND ASSESSMENT MANAGEMENT (FAM)

Of the 365 city buildings and structures, 306 (84 percent) have been assessed. Utility and parking structures still require assessment. Of the 306 that have been assessed, approximately 35, or 9.6 percent, are estimated to have damage.

Recovery Goals:

- Complete all facility assessments and damage costs estimates by mid-October;
- Open all community use facilities for full use by the end of October (Reynolds Library, West Senior Center, parts of North Boulder Recreation Center); and
- Identify all latent flood damages to electrical, lighting and HVAC systems by the end of October.

Status:

Four facilities remain closed (West Senior Center, Reynolds Library, Fire Station #4 and the FlatIrons Event Center) with immediate restoration actions completed:

- Fire Station #4 is anticipated to re-open on Monday, Sept. 30, 2013;
- West Senior Center and Reynolds Library will be re-opened by the end of October 2013; and
- Assessments continue for the FlatIrons Event Center with the Spice of Life kitchen continuing to operate in safe areas of the facility.

Accomplishments:

- 306 of the city's 365 buildings and structures have been assessed for flood damage;
- Flood damage to the 35 facilities had air, water and materials tested to varying degrees;
- Flood damaged materials have been removed and impacted areas are being air dried; and
- Roof evaluations have been completed.

PARKS AND RECREATION DEPARTMENT:

Emergency Response

Parks and forestry staff responded to assist during the emergency work to assist the Public Works Department in the city emergency response operational structure to assist with city-wide flood response efforts. Parks staff performed road assessments for emergency service needs, road closures, sand bagging the two hospitals, and other assignments. Parks staff also initially assessed each park systematically to ensure a safe environment and where possible were able to mitigate issues to open some areas of parks or entire parks.

Tasks that parks staff were involved in were:

- De-watering flooded areas and Maxwell Lake
- Cleaning out clogged drains and ensuring flow of water away from buildings and neighborhoods
- Closing parks and park areas heavily impacted by the flood and creating unsafe conditions
- Clearing Boulder Creek Bike Path of debris
- Assessing tree stability along right of ways and along greenways and contracting out tree removals where deemed necessary

Initially, staff reported 13 full park closures and 10 partial park closures, full closure of the Flatirons Golf Course and Boulder Reservoir. By Sept. 25, 2013, staff reported five full park closures and only a handful of partial closures. Park closures currently include: Eben G Fine Park, Boulder Reservoir, most of Boulder Creek Bike Path, Elmer's Two Mile Park, Knollwood Tennis Court, and Elks Park which had recently begun construction before the flooding. The pedestrian bridge at Bear Creek Park is also damaged and un-usable.

Damage Assessment and Recovery

To date, all parks and park facilities within the City have been assessed with damage identified 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

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.

The initial recovery process for Parks and Recreation will have five phases:

1. **Assessment** – assess and prioritize impacts to all parks, facilities and equipment (*Current Phase*)
2. **Coordination / Prioritization** – review comprehensive list of impacts and prioritize work/projects from city-wide perspective
3. **Design/Permitting/Purchasing** – develop plans, solicit vendors, permitting and engage contractors/suppliers
4. **Construction / Implementation** – implement improvements or install equipment that was damaged.

5. **Operation / Reporting** – ongoing operation and management with reporting functions for FEMA.

The goals for Parks and Recreation:

1. Open all parks by the end of October with the exception of the Everett Pierce Kids Fishing Ponds and Knollwood Tennis Courts.
2. Coordinate Evert Pierson Kids Fishing Pond repairs with Public Works, Urban Drainage and others to identify necessary repair work, costs, funding and timeline.
3. Assess damage to Knollwood Tennis Court and determine appropriate next steps by the end of October.
4. Clear all of Boulder Creek Bike Path after flood waters have receded and assess all damage and repair needs and costs (with Public Works)
5. Complete assessment of irrigation systems by mid October
6. Complete second full assessment of trees after water in the greenway corridors has receded and remove all hazard trees.
7. Complete right-of-way tree assessments by Oct. 15.
8. Develop and complete community-building volunteer events in the parks, facilities and Boulder Reservoir for the fall of 2013. Coordinate volunteer and other events across the city.
9. Coordinate with FAM to assess the opening all of the North Boulder Recreation Center by Jan. 1, 2014.
10. Coordinate with FAM to Investigate and evaluate engineering options for reducing flood risk to recreation centers by second quarter of 2014.

OPEN SPACE AND MOUNTAIN PARKS DEPARTMENT

Accomplishments

Open Space and Mountain Parks (OSMP) is in the process of simultaneously assessing conditions, setting priorities, developing strategies taking action, while communicating what is going on. Much of the priority setting and strategy development is being “field engineered” and is embedded into the items listed below. The community has seen and appreciated the rapid follow up to the flood, considerable progress on providing community access to open space lands, steps to ensure public safety, and a focus on protecting resources at this vulnerable time while developing opportunities for meaningful community involvement.

Assessment and Information Gathering

- Trail and Trailhead Assessment Completed
- Ditch & Reservoir Assessment, Bridge, and Fence Assessment completed for areas most affected by flooding and to address known potential hazards.
- High level Plant and Wildlife Habitat Assessment completed for areas most affected by flooding and erosion.

- More in depth and widespread flood impact assessments to infrastructure habitat are underway and in early stages.
- Coordination with Colorado Dam Safety Inspectors on mitigation at the Flatirons Vista dam dams at Mesa Teller #3, Teller #5 reservoirs, Wonderland Lake. The smaller Eggleston #3 and Eggleston #4 reservoirs have been visually inspected by staff.
- Working with city and county transportation and utilities departments to identify and assess flood impacts to OSMP land that have affected roads and utilities.
- Working with other utility and ditch companies to address the impacts of the flood on their infrastructure that lies on OSMP.
- Condition Assessment and Rough Preliminary Cost Estimate prepared for FEMA.

Taking Action

- Fifty (50) miles, or one third of OSMP trails opened to public access (as of Sept. 26). Trails selected on the basis of safety, resource protection and to provide access by a variety of city neighborhoods, and activity types. Although many trails are not in pre-flood condition; these trail openings required many repairs, some minor and some major.
- Over 90 percent (32 of 35) trailheads cleared of debris and readied for stockpiling of materials and access by equipment necessary for trail restoration.
- Completed the mitigation required by Colorado Dam Safety Inspectors for the Flatirons Vista dam.
- Graded several dirt roads (ca. 3 mi) that provide access to OSMP so they can be used by staff/contractors for recovery efforts and visitors (where the roads serve areas that have been opened).
- Completed a variety of volunteer projects to restore trails and ecological resources, guide visitors, and remove rocky debris. OSMP staff is coordinating and assisting Parks and Recreation staff on volunteer projects.
- Began mitigation of water damage at OSMP facilities (roof leaks and mold in storage facility, minor flooding of crawlspaces, lower levels of two offices).
- Produced over 100 different maps to inform visitors about access opportunities on the city website, at OSMP trails, trailheads and access points, and guide decision making.
- Drafted and issued daily media releases and social media updates to inform the community about the increasing availability of OSMP access. The media involvement has resulted in several articles in the Daily Camera and interviews with television and radio.
- Recorded a 15 percent increase in Twitter followers; many of whom are showing a high level of engagement (re--tweeting), and positive reactions to news of openings of trails and availability of information.
- Coordinated with the city of Lafayette to divert flood water from South Boulder Creek at South Boulder Road to prevent water from entering Baseline Reservoir and threatening the dam.

- Coordinated with the Urban Drainage and Flood Control District and Boulder County Transportation to divert Boulder Creek floodwater through OSMP so that flows overtopping 95th Street would cease and the road could be re-opened.

COMMUNITY PLANNING & SUSTAINABILITY / PLANNING & DEVELOPMENT SERVICES:

Planning & Development Services (P&DS)

- Developed a streamlined building permit specific to flood recovery and repair that waives all fees, only charging tax.
- Opened a second Planning & Development Services permitting and customer service office at the Disaster Assistance Center. Assisted 72 customers at the Disaster Assistance Center and issued 23 building permits “over the counter” through Wednesday Sept. 25.
- The rapid evaluation safety assessment of buildings within the affected areas was completed on September 23 and 24. Approximately 20 disaster certified volunteers from the International Code Council Colorado Chapter and nine City of Boulder inspectors participated.
- Historic Preservation staff visited all 165 individual landmarked properties in the city, six were found to have substantial damage. A streamlined landmark alteration process and application was developed.
- Waived permitting requirements for roll-off trash receptacles in the right-of-way.
- Worked with the City Attorney’s Office to develop a list of zoning regulations to vary due to the floods on a temporary basis.

Neighborhood Outreach

- Worked with the communications division to provide content for the boulderfloodinfo.net website
- Developed and continuously update frequently asked questions on the flood website
- Developed informational handouts for public meetings and the Disaster Assistance Center.
- Attended the previously scheduled Fourmile Canyon Creek Greenways open house on Sept. 26 to provide flood recovery information.
- Developed a neighborhood outreach strategy to learn from residents and assist in providing information.
- Investigating crowdsource tools to use for capturing flood assessment information.

Business

- Secured a lease at 5495 Arapahoe for the Disaster Assistance Center (coordinated with partner agencies, toured vacant buildings, negotiated a Letter of Intent for 2 buildings, and coordinated signing of a lease with Premier Credit Union).
- Contacted Google and local tech community contacts to request help with city tech needs as part of flood recovery efforts; coordinated tech offers with CP&S staff working on neighborhood outreach.

- Worked with city Parks and Recreation staff and Spice of Life owners (tenants and potential business retention clients) to discuss next steps after flood damage to the city-owned Flatirons Events Center building, including evaluating site options for community events and meetings, and Spice of Life events and catering.
- Prepared presentation and resources and participated (with City Manager Jane Brautigam and Chief Building Official Dave Thacker) at the Sept. 24 business flood information workshops at the Chamber, attended by over 50 people.
- Conducted outreach and assistance to Boulder businesses (primary employers and retail businesses in affected areas), coordinated with the Boulder Economic Council. The city and BEC have contacted 101 businesses as of Sept. 24 and created a list of those significantly impacted. Many businesses expressed appreciation for this proactive outreach. These calls addressed:
 - Did your business sustain any damage?
 - Do your employees need assistance or support? (staff provided resources/answered)
 - Are there any services or assistance your business needs moving forward?
- For the city web site, developing flood FAQs and a Resource Guide specifically for businesses, which includes:
 - Boulder Disaster Assistance Center and Boulder County Business Recovery Center information
 - Building repair and permitting information
 - Disaster assistance available from the Small Business Administration (SBA), including low interest loans for physical damage and economic injury
 - Free consulting from the Small Business Development Center (SBDC)
 - Tax relief and employment assistance
 - Volunteer opportunities for employees
- Began coordination with the Boulder SBDC to coordinate outreach to hardest hit businesses and assist them with accessing SBA disaster assistance.
- Began coordination with city building inspectors to share information on damaged commercial buildings and businesses.

Debris & Pest Management:

- Coordinated with county partners to set up 10 community collection sites for debris for initial disaster response.
- Managed and operated debris collection sites Sept. 16 - 22.
- Successfully cleaned up and closed collection sites by Sunday Sept. 22.
- Conducted a bid process that resulted in the selection of Swingle, Inc. to conduct curbside cleanup for residential flood debris from Sept. 26 through Oct. 18.
- Provided information on the website regarding pest management following floods
- Coordinated with Eco-Cycle's Center for Hard to Recycle Materials (CHaRM) to waive fees for electronics disposal
- Coordinated with debris monitoring contractor, True North, to monitor the debris collection for FEMA compliance on the city's behalf
- Coordinated with Western Disposal to waive fees for flood debris drop-off
- Coordinated street sweeping to follow debris collection crews

- Coordinated “no parking” zones in the most heavily damaged areas with a high density of on-street parking to facilitate safe debris collection
- Coordinated outreach to bicycle websites and listservs through email blasts and social media to minimize conflict and maintain safety around debris collection activities
- Coordinated with BVSD to avoid debris collection in school zones during drop-off and pick-up times
- Beginning on Sept. 27 will receive updated maps of completed debris collection areas; will post to www.boulderfloodinfo.net

BOULDER DISASTER ASSISTANCE CENTER

- Opened the Boulder Disaster Assistance Center on Sept. 19 in partnership with Boulder County disaster recovery team.
- Have served 2,773 Individuals and 1,194 households through Sept. 25; total Boulder residents served: 882 individuals and 435 households.
- Highest demand needs include FEMA individual assistance; basic needs assistance from Red Cross, BCDHHS and local nonprofits and short- and long-term housing.
- As the numbers of residents seeking services declines at the Boulder Disaster Assistance Center, triage services will cease and clients will access ongoing services at local organization sites. The Boulder DAC anticipates closing for triage services early the week of Sept. 30. FEMA will continue on site providing Disaster Recovery Operations open to the public. Results of FEMA Disaster Survivor Feedback Survey completed on Sept. 24:
 - 96 percent rated DRC experience as Satisfactory or better
 - 97 percent rated convenience of location as satisfactory or better
 - 98 percent rated hours of operation as satisfactory or better
- The organizations and services provided through the DAC include:
 - A Precious Child: Clothing, toiletries, diapers, shoes, food, pillows, blankets.
 - Boulder County Debris Management: Waste removal, dumping sites.
 - Boulder County Housing and Human Services: Cash assistance for food and transportation, referrals for housing assistance, and information on short and long-term housing needs, food vouchers.
 - Boulder County Land Use: (Unincorporated county) Building permits; code, planning and zoning questions.
 - Boulder County Mental Health: Mental health counseling/support
 - Boulder County Public Health: Environmental health (flooding issues with water, sewage, mold; food safety; info on debris collection)
 - Bridge House: Information and assistance for homeless residents.
 - City of Boulder Planning & Development: Building permits; code planning and zoning questions for city residents.
 - Colorado/Southern Baptists: Volunteers for on site debris and med removal; removal of household items, power wash, disinfect for mold.
 - Colorado Department of Labor: Help to people who lost their job due to flood.
 - Colorado Division of Housing: Assistance with locating housing.
 - Colorado Division of Insurance: Assistance with insurance policy questions

- Community Food Share: Food boxes (dry goods) Emergency Family Assistance Association (EFAA): Rental assistance, food, emergency hotel vouchers, eyeglasses, minor medical and prescription costs, ID and birth certificate fee assistance.
- EnergySmart in Boulder County: Interior building repairs, insulation, furnace, etc. Help finding contractors and low-interest loans.
- FEMA: Intake and registration for individual and small business disaster assistance; referral to other government agencies.
- Red Cross: Replacement of medication; onsite mental health services; clean up kits, eyeglasses, durable medical equipment.
- Salvation Army: Gift cards for replacement of personal items; clothing vouchers; taxi vouchers.
- Small Business Administration: (Register at FEMA) Low-interest Federal Disaster Loans for businesses & homeowners.
- Workforce Boulder County: Help in locating employment.
- Significant number of businesses supporting the operations of the DAC through volunteers, food and supplies for DAC volunteers and staff.
- Foothills United Way has funded the City of Boulder through the Disaster Relief Fund for the following: \$40,000 for immediate housing subsidies for city residents and \$4,400 for Bridge House to assist homeless clients not eligible for services at the DAC.

HOUSING:

- Participating in State-led Disaster Housing Task Force.
- Supporting County-led efforts to facilitate rehousing displaced residents.
- Developing a county-wide housing recovery plan.
- Assembling data on City of Boulder residents with short- and long-term housing needs.
- Finance and Housing staff met with CDBG disaster funding consultant.