



Gregory Canyon Creek Flood Recovery Open House Summary Form

Date: 10.23.13

Meeting Location & Neighborhood:

Flatirons Elementary library – Gregory Canyon Creek

Number of Attendees: 67

Staff in Attendance:

Susan Richstone	Dave Thacker	Chris Trice	Dean Paschall
James Hewat	LaDonna Eubanks	Annie Noble	Melinda Melton
Jeff Hirt	Kurt Bauer	Russ Sands	Allison James
Marie Zuzack	Katie Knapp	Rod Rindal	Pieter Beyer
Margaret Rogers (Populus)			

Summary of community comments:

Many attendees would like another meeting with the city presenting a plan for clean-up and flood recovery efforts in the neighborhood. Members of the community would like the planners and engineers who will be working on the area to be there as well to answer any questions. It was also mentioned that the older homes were built much higher than the newer built homes, that the 810 Marine Street drainage ditch needs clearing and for the city to be careful with culvert improvements so that they don't cause more damage downstream and don't conflict with the wetlands regulations.



Pennsylvania Avenue Flood Repair February 6, 2014 Open House and On-Line Public Comments

Purpose of Meeting

Pennsylvania Avenue was damaged during the September 2013 flood and the City of Boulder is evaluating different options for repairs of the section of road between 6th and 7th streets, where Gregory Canyon Creek crosses the roadway. We asked members of the community to choose one of two alternatives or share another alternative with us.

Alternative 1: Replace the existing culvert (drainage pipe) and rebuild the roadway to pre-flood conditions.

Alternative 2: Remove the culvert and roadway above the creek, close the road to through traffic and build a pedestrian bridge over the creek.

Summary of Public Comments (Received through 2/14/14)

General Comments

Alternative 1: 3 in favor

- Traffic on the road and school access is better mitigated on option 1. Option 2 looks like it would cause more blockage.
- There would be through traffic, less congestion, a paved road, and less mud. School parking traffic will be decreased if back to pre-flood conditions. There would be less speeding traffic to suddenly stop at the closed road and dead end to turn around.

Alternative 2: 56 in favor

- Alternative two is much better for our neighborhood.
- The culvert will continue to get clogged and spill over.
- This has the greatest opportunity to mitigate future property damage from structure blockage and volume.
- The culvert narrowing the creek bed at Pennsylvania caused the flooding west of the creek; Therefore if it is restored as it was there will be a problem of liability. It also seems that option two is less expensive.
- Regardless of the alternative, the type of maintenance upstream to the head waters is critical for safety. The flood in September 2013 highlighted the limitations of culverts. Alternative two is consistent with City Council's goals of encouraging pedestrian traffic as opposed to vehicular traffic.

- I would like the peaceful space and green belt. There would be calmer traffic during school when kids are walking and a significant water flow improvement during flood episodes.
- It's very nice to see the creek again from the bridge. We can manage very well without this street and have been doing so since mid-September. Thank you for finding some funding to get started on the Gregory Creek flood plain mitigation. We know there are lots of mitigation needs elsewhere, but please don't forget that Gregory Creek needs more attention sometime in the future.
- Adequate access exists without Pennsylvania. Why rebuild it?
- The chance of the road washing out again will be lessened. A pedestrian bridge would be nice for the neighborhood. We walk our dog in the neighborhood a lot. Option two is a safer alternative. The children at Flatiron Elementary will have to contend with less traffic on Pennsylvania. Option one would risk rocks getting caught in the culvert again.
- If option two is selected, please move the west-side cul-de-sac further west.
- Great for habitat/wildlife restoration and a safe route for bikes, pedestrians and flood mitigation.
- Use the east side of the bridge area as a family meeting area for walking and cycling families. Pennsylvania can be a riding route to 6th. 6th should be a marked bike route to University and down to the Boulder Creek Path. Benches and bike racks should be provided. Thanks!
- This will not eliminate future flooding. The culvert under 7th gets blocked every time we have a severe thunderstorm. The grate catches debris and blocks very quickly.
- Pedestrian friendly.
- Better neighborhoods.
- This street hardly has any traffic to begin with. The pedestrian bridge close to the school would be a great addition!
- Option #2 sounds like a much better fit for the neighborhood!
- This would be so nice for walking my kids to school!
- This culvert caused my house to flood! Rebuilding it the same way is just plain stupid! Having a pedestrian bridge and cul-de-sac is the best idea I have heard from the city in years!
- I think a pedestrian bridge here would be a great addition for no extra cost! These kinds of options continue to make Boulder the special place it is.
- It seems like option 2 is clearly the right solution. Why rebuild something that will be blown out again? Let the stream run naturally as it was intended. Thanks for the opportunity to provide this input.
- I visit the neighborhood often and would enjoy walking over the foot bridge and seeing the stream below. There doesn't seem to be enough traffic to warrant rebuilding the road/culvert.
- Having seen firsthand the devastation that the clogged culverts caused throughout Boulder with the floods in September, I'm inclined to say where there is an opportunity to allow water to flow in a more natural manner and still allow access to communities, this is the appropriate way to proceed.
- I am a fan of anything to improve pedestrian access to our beautiful creek.
- As someone who grew up in the neighborhood and still lives in town I like the second idea. Seems to be a much better idea for flood control and the idea of an open creek bed through there seems kind of nice. If it floods again you're going to have the exact same problem if you build it back.
- Let the stream flow!

- The pedestrian bridge option is a great one for this neighborhood!
- Pennsylvania Ave has a number of issues that make for an accident waiting to happen. These issues include: Icy conditions - due to lack of snow removal and direct sunlight, steep grades - west side, blind corners - Dean Pl. Reducing the amount of traffic by replacing the culvert with a foot bridge would lessen the risk of an accident on this street.
- I live on Pennsylvania and Gregory Creek goes under my deck. I would LOVE Option 2 with a pedestrian bridge. I think it offers a safe route to school for students walking or biking as well as slows down and/or lessens the traffic impact before and after school. In terms of emergency vehicles, since Pennsylvania only runs between 6th and 7th, it is already confusing and difficult to find so improved mapping and signage could effectively bring attention as to how to reach us on the West side via 6th or Dean Place. I also really like that this option allows for better wildlife and habitat restoration along with flood mitigation, in particular for the folks downstream.
- I am a big proponent of Alternative Two. I think any chance to restore a stream corridor should be capitalized on. There are ecological/habitat benefits, safety benefits regarding flood control and aesthetic benefits for those living there. I'm all for number 2!
- Very hopeful that we can begin a small step of prioritizing people traffic over car traffic.

Other options: 5 in favor

- Reduce parking on east side of stream. Turn that area into a gathering place for kids and parents. Allow residents to access their drives, but reduce traffic and parking.
- Car bridge or better yet, a draw bridge.
- Square opening (rock wall exposed in flood) with roadway over (open to cars).
- Build a vehicular/pedestrian bridge or street and keep flow way open.
- Car bridge.
- Re-engineer the culvert to convey flow consistent with expected flow from culverts above and open street to vehicle traffic as well as pedestrian traffic. Flatirons Elementary School has been open well over 50 years and will be most affected by the decision. It is considered by Flatirons staff that closing the street would have a negative effect on the traffic flow relative to school operations.
- The biggest push to close the street thus far has come from a resident who moved in to the neighborhood 8 months ago and has stated he was "tired of having cars from the school park on Pennsylvania" and was going to try to get the street shut down.



Pennsylvania Avenue Flood Repair May 22, 2014 Greenways Advisory Committee and On-Line Public Comments

Purpose of Meeting

During the flood events of September 2013, Gregory Canyon Creek overtopped and severely damaged the Pennsylvania Avenue roadway. The roadway was not immediately repaired because it looked like there was an opportunity to increase the flood conveyance capacity and improve the riparian habitat for what was initially considered to be a similar cost to replace the culvert pipe and repair the roadway. Three different alternatives were assessed:

Alternative 1: Replace the existing culvert and rebuild the roadway.

Alternative 2: Remove the culvert and damaged roadway above the creek, close the road to through traffic, and build a pedestrian bridge over the creek.

Alternative 3: Remove the culvert and construct a new roadway with a significantly larger culvert or a vehicular bridge over the creek.

The GAC recommended 4:1, the implementation of Alternative 1 and further evaluation of alternatives as part of the Gregory Canyon Creek Mitigation project.

Summary of Public Meeting Comments

- Why just this stretch? Within 100 yards of this area are the 7th St. culvert, the intersection of the Anderson Ditch and the school. A professional engineering firm needs to assist with evaluating the best solution for this area. What is presented seems like a piece meal approach. The entire section needs to be looked at. Water flow and flood safety for the students cannot be ignored.
- The downstream culvert must be addressed. A temporary repair is better than what is currently set up, but the pursuit of the pedestrian bridge would be the best option especially for the students accessing the elementary school.
- If you go uphill to 6th and Aurora there are two 5 x 10 culverts. These are old engineering. Alt. 3 has two options. Option one – a traffic bridge to span the creek with work done below. Option two – box culvert to go there. What is the real cost of Alternative three? Option three allows for all alternative modes to share the road. Keeping the road open in option one and three would be better for emergency personnel. The presentation and memo seem to be skewed toward option two. Only a few property owners would be benefitted by option two. Neighbors who live in the area should expect higher traffic densities due to the school. Option two was originally one of two

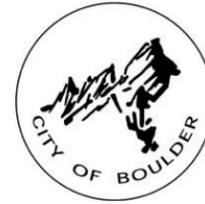
proposed options. Option three was added later. The school district feels like they have been excluded from public process.

- Why are the repairs taking so long? Each day the area gets worse. The neighbors would like to see a cul-de-sac situation. This needs to get fixed now. There is a big problem with the 7th St. culvert. The trash rack was replaced and the culvert is not large enough to convey the capacity needed for another event.
- We were heavily affected by the September 2013 flood. We strongly encourage the board not to consider Option 1, and prefer Option 2, the pedestrian bridge over a full vehicle bridge. Option 2 provides increased flood capacity, restores wetlands, increases pedestrian and bike access, increases safety for the school and results in minimal additional traffic on adjacent streets.

Summary of Online Comments

Online comments received prior to February 14, 2014 are included in the February 6, 2014 Open House and on-line public comment summary. The following comments were received between April 17, 2014 and April 23, 2014:

- This is a really great opportunity to decrease flood risk while re-building! The extra cost of a pedestrian bridge is absolutely worth it for the downstream flood reduction.
- This seems like a great opportunity to increase multi-use pathways in Boulder. I have been in this area often and agree that drivers often speed through, even though there is a school nearby. It is such a beautiful area, would love to see it become more pedestrian friendly.
- I live at 637 Pennsylvania Ave and would like the pedestrian bridge please
- Given the proximity to the school building I think it makes sense to reduce some traffic in this area.
- Option #2 would improve the pedestrian character of the neighborhood and provide important flood relief that could not easily be obtained by a culvert.
- It seems like an option to take into account future flooding would be a good idea. Does local traffic require a bridge?
- Option 2 is a nice compromise. Flood improvements for future storms but at more than half the cost of a vehicular bridge.
- #2 has the most positive attributes.
- great job with some good alternatives --thanks staff
- Versus option 1, Option 2 seems like the better long-term compromise that's potentially a good investment capable of preventing damage otherwise in the future. With flooding though, it's a zero-sum game---every link of the chain would need to be more robust in order to prevent problems. Making one link stronger may have little net positive effect to the city. If this is one of the weakest links, then by all means, please treat as such.
- As a parent of students at Flatirons Elementary, I love the idea of closing this dangerous street to vehicles and walking my kids to school over a pedestrian bridge.
- It is imperative to our neighborhood that Alternative TWO is implemented, since the pre-flood condition is the one which enabled the flooding in the first place. The cost to restore our home is now close to \$50,000, and we know that others in our area have spent as much



Gregory Canyon Creek Mitigation Study June 12, 2014 Open House and Online Questionnaire Results June - October 2014

or more. We are asking the city in good conscience and good faith to help us to keep this from happening again.

- It is option number two which is most beneficial to our neighborhood, as it would allow more flood conveyance AND, very importantly, would interrupt the speeding and dangerous driving on Pennsylvania. The school already has good access on nearby streets, and the pedestrian bridge would be available for everyone. Thanks for your work on this.
- I live adjacent to the existing culvert and am in strong support of increasing the flood conveyance capacity. Option 2 is the most reasonable cost option that accomplishes this.
- Alt. 2 has, by far, the strongest support from those effected by this problem - those who were directly flooded by the breach of Penn. Ave. It does feel like the estimate for this repair could be greatly reduced by looking at simpler options for the bridge. Perhaps a use of pressure treated lumber beams instead of metal.

The city cannot really choose Alt. 1 since that would put it in the position of intentionally creating a greater risk of flood and the possible liability. And since it is 7 months since the flood and nothing has been done, I see no value at this point of its being the fastest fix. That time is long past. It also seems the estimate for this job is way too low. Alt. 3 is too expensive and there is no good reason to do it. A final cheapest alternative would be to simply remove the ton of gravel that the city dumped in the hole, which raised the likelihood of further flooding, and fence the whole creek gap off on both sides at Penn. Ave. and have no access.

- Yes to a pedestrian bridge!
- Pedestrian Bridge seems wonderful!
- I hope this can still be received. I live on Pennsylvania and think this option is the best solution; for pedestrian/bike safety and access, wildlife habitat and flood mitigation.
- I actually prefer alternative 2 EXCEPT the fact that Flatirons Elementary School is located in the area. Students with special needs, combined with the occasional presence of bears and mountain lions, makes it critical for fast emergency response times.
- I support alternative 3 because it is the most comprehensive and it is the best for the nearby elementary school due to the access for emergency vehicles (which is negatively impacted by alter #2). This culvert was supposed to be replaced in 1996, but the project ran out of money. It is long overdue. Also, given that mountain lions have begun to hunt around gregory creek in town, it is a bad idea to create an ""attractive"" environment for wildlife as suggested by alter. 2. Due to the school and the number of small children, we must put public safety first and select option 3. The price is commensurate with the benefits.
- I'm not advocating for any particular solution, but do have the following concern: if the capacity at Pennsylvania is increased, does that just mean that the flooding as the Creek goes under 7th will be that much worse? Or further down, as it goes under Pleasant? Or University? Or Eighth? It seems to me that having the creek top over and go sluicing down broad streets during a flood is not the worst solution -- it keeps the flood shallow enough not to drown anyone, or to cause major structural damage (just wet basements, which one can recover from.)
- alternative 2 is probably best, but i would like a draw bridge.
alternative two or alternative 3 with a drawbridge.

Purpose of Meeting

The purpose of the June 12, 2014 Open House was to inform the public about the Gregory Canyon Creek Mitigation Study, gather information about on problem areas, and hear suggestions on flood improvements.

Summary of Open House Comments

- My entire lawn, front and back, was flooded.
- I need more details what an easement would involve before I would be willing to dedicate an easement. My back yard has beautiful trees. I would hate to see them uprooted.

Purpose of Questionnaire

The purpose of the online questionnaire was to gather information on flooding problem areas and receive suggestions on mitigation alternatives to be considered for the Gregory Canyon Creek Mitigation Plan.

Questionnaire Results

1. Please describe any areas where you have witnessed flooding problems along Gregory Canyon Creek.
 - My entire lawn, front and back, was flooded.
 - 1. There was extensive flooding at the entrance to the culvert at the northeast corner of our property (745 University Ave.) The water overtopped the culvert opening and flowed, swift and deep, over the surface, off in the direction of 8th and Marine.
 - 2. There was water streaming over the surface along the property line that runs along the west side of our property, between our house and our neighbors to the west.
 - 3. There was a lot of water running along University Ave and the adjacent sidewalk in front (south) of our house, flowing east. As it passed our house it turned left (north) and flowed over the property of our neighbor to the east, Stewart Machle, and then along his foundation, damaging his yard and his house.
- I witnessed Gregory Creek at both Pennsylvania and College Ave... What a world of difference between the design of the two waterways... The people who built the College Bridge in the 40's had it ""right""... wide enough to not accumulate debris (would snap almost anything spanning the opening). High enough to handle all that came at it with room to spare (almost bank to bank in the channel)... At Pennsylvania, the two culverts simply collected debris and ""self destructed"". (Kudos to the engineers of days past for the College Ave bridge. Too bad someone paved over the original

storm drain within in the structure though)... Just an observation which you may wish to ponder... Thanks for all you do and for all the hard work! Hal

- Pennsylvania Avenue and 7th street culverts were problem areas during past flood events.
- The Sept. flood and all of your maps come along the bottom of our driveway. During the flood, the city diverted water down 6th St. and onto Rosehill Dr. This flooded some of the houses below us on Rosehill. I walked to 6th and Euclid and told the bulldozer driver that his efforts to prevent so much water going along Gregory Creek were creating additional problems along Rosehill. He didn't know what to do other than what he'd been told to do.
- Shallow flooding < 12" during event.
- 7th near pleasant

Do you have any suggestions for future flood mitigation projects?

- My main concern is that mitigation should proceed from Boulder Creek up, and not from Chautauqua Meadows down. If you enlarge a bunch of culverts and broaden a bunch of channels upstream from University Ave before you do that for University Ave and downstream, the flood will hit the culvert under University Ave with explosive force and could cause major structural damage or loss of life in the houses nearby.
- I think you have plenty to do without additions...
- Pennsylvania Ave pedestrian bridge.
- "YES!!!
- Nowhere in this study does it indicate an analysis of the predictive nature of the model and the REALITY of what happened during the flood event. Most residents could indicate depths of water during the flood at maximum height and approximate times. Didn't you ask to SEE IF THE MODEL WAS CORRECT??? This is a waste of money unless correlated with reality. I cannot believe the statement on pg.4: "No other changes were made to the baseline model to create the existing conditions HEC-RAS model for the purpose of this analysis."
- Enlarge the culvert, and reshape 7th so water flows down the middle of the road, not just to the east side.

2. Would you be willing to dedicate an easement to the city for flood control purposes?

- I would need more details. My back yard has beautiful trees. I would hate to see them uprooted. But I need more details what an easement would involve.
- Yes. I would want to see the plan before dedicating the easement, but I am very open to the idea.
- No
- Yes. If flood improvements bring my house out of FEMA 100yr floodplain.
- No
- maybe depending on easement plans
- Yes

3. Other comments

- Please pass on my thanks (to Jerry Weitzel amongst others) for the recent repairs to the alley on the south side of my house. The new entry across the sidewalk and the layer of blacktop look great.

- You should check to see if neighbors have increased the elevation of their property since the 1987 mapping to see if they increase or decrease risk of property damage to neighbors. Since the flood I notice flood walls being erected. What is that going to do to the model?
- I missed the open house but would request consideration of Gregory creek flowing out of its banks, running down 9th street, flowing into the historic church property (law office at 9th / Arapahoe) collections in the NE corner of the parking lot and then flooding 932 Arapahoe
- It would be nice if the city encouraged neighbors to work together on mitigation issues. My neighbors who are attorneys at 9th and Arapahoe will not even speak to me concerning this ongoing flood problem generated from drainage issues in their parking lot.



Gregory Canyon Creek Mitigation Study Open House and WRAB Meeting October 20, 2014 Summary of Public Comments Received

Purpose of Meeting

The purpose of the October 20, 2014 Open House and Water Resources Advisory Board (WRAB) public hearing was to present the preliminary alternatives for the Gregory Canyon Creek Flood Mitigation Study and to receive feedback from the public and board members. City staff and the project consultants are assimilating the comments and suggestions received at these meetings, as well as additional comments received by the public, in order to continue to refine and identify the best alternatives.

Summary of Open House Comments

- We live in a beautiful city. We are fortunate to live near running water, but everything has a price! I think we should start whatever we end by deciding to do from Boulder creek going south. The culvert on highland school land is 36"! Since Canyon Blvd. is going to be impassable during a Boulder Creek 100 year flood, we need to ensure that Arapahoe is passable. Hence we need to expand the Arapahoe culvert first, and hopefully when we do others. As a stakeholder, I am willing to walk with City staff, grant an easement, be taxed or whatever it takes to finish the project & help the Civic Area designers glam our Gregory Creek is not going to be forgotten.
- I am current doctoral student at the University of Colorado at Boulder. My investigations lie in the nexus of construction materials, urban water management, and sustainability. I would like to contribute to reducing flooding risks by helping the city instal durable, sustainable, and novel pervious concrete materials. These materials have the ability to reduce flooding hazards in the local watershed if designed correctly.
- How are the alternatives going to be chosen? How will city decide when or how to purchase identified properties in hazard area? How does the city decide how big to make the different box culverts?
- The 31'x6' culvert at Euclid is a major concern to us. This is a major physical intervention that would impact us visually, aesthetically, and in the way we use our property in a significant way.
- I am concerned with the accuracy of the modeling. At no time was the culvert at 6th and Euclid, which is presently ~ 4ft diameter, at capacity in the 50-75 year event of 2013. Water flowed primarily down 6th and Euclid and down from Edward Smith Park. I don't see any attempt at mitigation of the Smith Park overflow.

- To truly utilize a 31' wide culvert at 6th and Euclid one would need to deepen the creek. That would destroy the deer/fox habitat along with removal of significant trees and vegetation. Occasional flooding would be preferred to this kind of destruction.
- BOTTOM LINE: the engineers have addressed lots of issues that I and neighbors have been thinking. Putting in large box culverts will be a big improvement and "buy insurance" against rock/vegetation clogs. Modifying road grades/crowns (eg directing flow down 7th street) is exactly right.
- Good job at making the effort to reach out and educate the neighborhoods. Consider the following financing proposal: There may be home owners who are retired and thus "asset rich" and "income poor". They may be willing to make improvements to their properties, but not be able to afford them from current income. This could be accommodated by a grant to the owner for the improvements and a lien on the property to be paid off when the owner moves or by their estate. This would fit in the philosophy of "public-private partnership".
- All three alternatives seem viable and reasonable. However no particular improvement has increased priority, nor do the recommendations align with the 2001 Belt Collins problem areas. The 2012 mitigation suggestions or the actual observations from Sept. 2013.
- I missed the open house but would request consideration of Gregory creek flowing out of its banks, running down 9th street, flowing into the historic church property (law office at 9th / Arapahoe) collections in the NE corner of the parking lot and then flooding 932 arapahoe
- It would be nice if the city encouraged neighbors to work together on mitigation issues. My neighbors will not even speak to me concerning this ongoing flood problem generated from drainage issues in their parking lot.

Summary of Open House Suggestions:

- The storm drains in front of 833 Marine are old, and are inadequate for the kind of debris that cover them up. We've been cleaning up the drains for 60 years because they are too small.
- It appears that the SECOND culvert under Euclid Ave, about 30'-40' to the west of the proposed 31'x6' culvert has been overlooked in the study. It likely should be considered as part of any flood mitigation- maybe two smaller culverts?
- What about the 100 year trees that border the creek? What care would the city take to maintain their health?
- A) The city should be aware that a high flow event down 7th street (Univ. - Arapahoe) will destroy the paving and curbs. This is not against doing the redirection, just a heads up on future repairs.
B) As a property owner, I have invested in flood mitigation measures. The ones I did prior to 2013 worked well. I believe that this is a "private" or "public project" not just a city project.

- 1.) Strongly suggest purchasing the property in the high hazard at 1655 9th street. There are 2 houses, one of which is 2ft from the creek channel and should be the highest priority.
- 2.) The culvert enlargements should be considered at the same time as the up-and downstream channel enlargement.
- I liked the Pennsylvania roadway removal plan that was considered.

past Flatiron Elementary School. According to charts – what happened on College is being compared to what happened on Pennsylvania, which are not comparable. Stone bridge on his property has weathered 3 major storm events in his lifetime, which is a good model.

- Lives below Anderson Ditch. Asks what kind of incentive programs are being considered for property owners to keep stream beds clean?
- Lives at 7th and Pleasant and thinks that street conveyance is a good idea. With some work on 7th, a lot of the damage could have been avoided. East side was severely damaged. Could make a difference in the future with better street conveyance.

Summary of WRAB Meeting Comments:

- Lives near Flatirons Elementary School, really appreciates where city is going with their plan and agrees that conveying a 100 year flood out of the question. Read study in its entirety. Alternatives proposed do not necessarily match what actually happened on the ground during the flood. Problematic area during this event that may not adequately be addressed at 7th. Does not have a strong feeling on option three in the roadway. Feels that spending money to make the roads convey without hurting property is money well spent. People are open to having flood mitigation done on their properties, but there are possible challenges there. Impressed with how accurately earlier studies match up with what was seen during the flood event. May be able to leverage earlier studies going forward.
- Lives midway on creek and has specific question regarding two maps and noticed there is a chart in attachment A that shows different culverts and what improvements would look like in a 10-year plan or maximum culvert (35x6). The 10 and 50 year maps only show maximum 50-year extent. Comments were heard during open house questioning this finding showing 35 foot culverts on the 10-year map, which isn't actual benchmark for 10-year event. Requests clarification whether the maps reflect 10-year or maximum numbers and asks if maps need updating.
- Wants to thank the board for hearing the neighborhood last year and putting neighborhood's name out there for potential for growth, which shows a lot of thought. Concerns about map showing 35-foot culvert and hopes that Board will take closer look at document from CH2M Hill to address and consider street conveyance. Appreciates Board taking a closer look at this creek and looks forward to the future.
- Didn't have problems like University and 7th. Suggests putting energy into conveyance because Mother Nature is going to decide, not what planners decide. Water went back into Gregory Creek because a car diverted it. This area is packed with cars and not enough parking.
- Lives on College and appreciates looking into this issue. Mentioned culvert at College Avenue, which was filled with fences and BBQ grills that were piled into culvert, forcing water to run over the creek onto other properties. Suggests looking at this issue and better advising people not to put objects in the creek bed. Mentioned 22-foot wide culvert at Aurora and feels that a 35-foot culvert is too excessive.
- Lives on College, family built house in 1950. At height of flood, banks took all the flood waters, bank to bank and held a 1.5 – 2 feet of water before touching his foundation. Some of the street did have water conveying and he built diversion with 2x4's which diverted water down College,



Gregory Canyon Creek Mitigation Study Open House March 30, 2015 Summary of Public Comments Received

Purpose of Meeting

The purpose of the March 30, 2015 Open House was to present the Engineer's Recommended Plan and Staff's Recommended Plan for the Gregory Canyon Creek Flood Mitigation Study and to receive feedback from the public. City staff and the project consultants are assimilating the comments and suggestions received at the open house, as well as additional comments received by the public, in order to continue to refine and identify the recommended alternative.

Summary of Open House Comments:

Approximately 15 people attended the open house. The majority of the residents were in support of Staff's recommended plan. Additional comments received are as follows:

- It was suggested that the storm inlets on Willowbrook cover the same area north of the culvert as well as above the culvert.
- Appreciation was expressed in regards to the channel improvements proposed in the lower creek.
- There was support for acquisition of the properties within the High Hazard Zone Priority Area. The city should contact those property owners to see if they are willing to sell.
- It is a well researched, well intentioned plan.
- The efforts are supported, but it is understood that individual property owners will draw conclusions based on impacts to their own properties.
- The streets should include signs which convey the high risk of flooding during a 10 to 100-year storm.
- A fence has been constructed on private property across the creek channel. Was this permitted by the city? If not, please have the city investigate.
- Thank you for the hard work.
- Impressed with the professionalism and creativity by staff.



Gregory Canyon Creek Mitigation Study Online Questionnaire Results March - April 2015

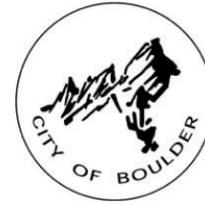
Purpose of Questionnaire

The purpose of the online questionnaire was to receive feedback on the recommendations under consideration for the Gregory Canyon Creek Mitigation Plan in order to make refinements prior to the April 28, 2015 Water Resources Advisory Board (WRAB) public hearing.

Questionnaire Results

4. Are you supportive of the City of Boulder Staff Recommended Plan?
 - Yes, overall. I am relieved to see channel improvements proposed in the lower creek, as well as prioritized HHZ properties to acquire. I have lots of questions about the details, but I understand those are not well-defined yet.
 - I think it is a well researched, well intentioned plan. I support the efforts but understand that individual property owners (myself included) will draw conclusions based on impact to their own properties.
 - The comments I made to the 15 people doing the walk were lost. My idea is to make the storm intake across Willowbrook cover the same area north of the culvert as well as above the culvert.
 - Yes.
 - Yes.
 - Yes.
 - Yes.
 - Yes. We attended the open house on March 30, and appreciated the opportunity to talk with staff about the draft proposal. Since my home is next to the Anderson Ditch, I support making that a pipeline, running below ground. During the flood, it filled to the top with silt next to my home.
5. What other improvements do you suggest?
 - Spoke to Christen Shepard and Franz to explain the idea (also on a blue sticky note).
 - Signs on potential risk on streets where flow is likely to be high in 10 year or 100 year events.
 - Continued vigilance of Willowbrook culvert.
 - 1. Bury overhead lines along 7th St. which would also prevent downed lines in big snow storms.
 - 2. Raise the retaining wall in the Flatirons School parking lot, north side next to my property.
6. Do you have comments about specific improvements proposed?
 - I would like personal feedback as to whether this idea will be considered and a detailed explanation of why or why not.
 - I suggest contacting the owners of HHZ properties that the city desires to acquire, as they may not be aware of this. Chances are a couple of them might be interested in selling to the city in the next couple of years, and that may open up more options in specific areas.

- I would like to point out that the property owner at the NW corner of 6th and Aurora has constructed a fence across the creek channel. If this was permitted by the city, I would like to ask, why? If it was not permitted, I would ask the city to investigate.
- Thank you for all your hard work. Looks great.
- All makes sense.
- I continue to be impressed with the professionalism & creativity of the staff.
- I would be pleased to discuss sharing costs of retaining wall (or solid fencing) of the school parking lot on the property line.



Gregory Canyon Creek Mitigation Study WRAB Meeting Summary April 28, 2015

Purpose of Meeting

The purpose of the April 28, 2015 Water Resources Advisory Board (WRAB) public hearing was to present the Gregory Canyon Creek Draft Flood Mitigation Plan for the WRAB's consideration, input and recommendation to Council on acceptance.

The WRAB unanimously recommended the Gregory Canyon Creek Flood Mitigation Plan be finalized based on the Staff Recommended Plan and presented to City Council for acceptance.

Summary of Public Meeting Comments

- Staff and Board have been very open and solicitous to the neighborhood concerns. As the plan has developed, the landowners have some concerns, both on macro and micro scales. Inconsistencies lead to deep concern. Glad that benefit-cost analysis has been addressed. The value of the damages presented in the documents are inconsistent. Has to be some sort of calibration to what actually happened. Understands that the damages are estimated, but this cannot be accurate. No realistic assumptions about the value can be made based on these numbers. Open to hearing explanation as to how these numbers were arrived at from CH2M Hill. Landowners would appreciate if city and CH2M Hill could be more transparent about the cost to landowners. If in fact properties gain or lose value, tell them how much and reflect this in the budget. If easements will be given to the city for free, this may not be realistic, especially based on her experience throughout this process.
- Would like to thank city for all the help given to him since the flood. Rock walls have been rebuilt. Question about intersection of Anderson Ditch and Gregory Creek. Heard comment about an overhead culvert or culvert separate from Gregory Creek and agrees they should be separated. Asks if a decision has been made about what is going to be done with this location, as this is a critical area.
- Asked why everyone is in favor with box culverts. They are ugly. Preference is for keeping Anderson Ditch open so children can play there. Running water is aesthetically pleasing. Based on personal experience, Anderson Ditch was actually shut off during the flood. There was no more flow in Gregory Creek afterwards. Something needs to be done. Asks if there is a reason for always having two box culverts and if it is more cost-effective.
- Part of property is Anderson Ditch, which goes to the edge of property. Flows stopped in Anderson Ditch, because it was filled to the top with silt during the flood. Agrees that the area where Gregory Creek and Anderson Ditch come together is an issue because it's at the edge of her property. Appreciates that neighbors have been solicited and looking forward to working with city with regard to easements.



Gregory Canyon Creek Mitigation Study City Council Meeting Summary December 1, 2015

Purpose of Meeting

The purpose of the December 1, 2015 City Council public hearing was to present the Gregory Canyon Creek Draft Flood Mitigation Plan to the council for their acceptance.

Summary of Public Meeting Comments

- Amend the plan to remove the sediment trap at 637 Pennsylvania. The city does not have the legal right to build the sediment trap. The property owners have already dedicated a flood control easement and are not willing to negotiate with the city on the inclusion of the sediment trap on their private property. Request Council to remove the possibility of the sediment trap at this location to remove any future uncertainty for the purpose this parcel.
- Support the flood mitigation plan with the removal of the proposed sediment trap, because the sediment trap would render a portion of the property unusable.
- Implementation of the plan will be an issue, but that is neither here nor there.
- 765 University – appreciate the efforts the city has made for flood mitigation. Would like a better explanation of the Gregory Creek and Anderson Ditch intersection. The Master Plan includes removal of very large trees. Flatirons Elementary School will be gravely impacted. Over the years, the school has added more students and more specifically, students with special needs and therefore the sediment traps need to be taken into consideration for public safety.

Council Motion

Motion to accept the Gregory Canyon Creek Flood Mitigation Plan. The motion was amended to remove the sediment trap from 7th Street, direct staff to look for opportunities for future sediment traps on properties as they are acquired, and condition future private-property sediment traps on obtaining property owner approval. Motion passed 8:0 with Council Member Appelbaum absent.