



STONE CREEK FLOODPLAIN MAPPING PROJECT

Meeting Minutes – DRAFT Revised 05/12/2009
Steering Committee Meeting #1
Eagle-Vail Pavilion, 538 Eagle Drive
Conference Call-in 866.539.1119, code *6715129*
May 4, 2009 – 3:00pm-6:00pm

AGENDA

1. Introduction
 - a. Introductions – Around the room
Sign in sheets were passed around (copies enclosed). Everyone identified themselves that were in attendance. Members on the phone identified themselves.
 - b. Role of the Steering Committee
Greg Schroeder thanked the Steering Committee (SC) for their participation and input on moving this project forward. The intent of the SC is to assist the County in the overall project by providing feedback and guidance of the project. Greg reminded the group by showing the “Impact of Existing and Proposed floodplains” document that depicted a total of 48 structures that are currently affected, and the proposed floodplain showing 23 structures that would be affected. He indicated that many of these structures may actually consist of duplexes, tri-plexes, or larger multifamily structures, especially along the existing floodplain, so that the number of affected owners is likely higher than 48. He indicated that the reduction down to 23 was good, but if there were better ways to further reduce that number, especially in terms of potential capital costs, those costs and benefits would need to be weighed and considered to determine the best option for the community, keeping in mind that it is important for the project to move along and stay on schedule and not be delayed unnecessarily.
2. Schedule
 - a. Future Steering Committee Meeting(s)
Greg commented that future SC meetings would be held based upon the outcome of this meeting, the outcome of the future Stakeholder Meeting(s), and other pertinent items.
 - b. Stakeholder Meeting(s)
Greg explained the purpose for the Stakeholder Meeting would be to educate all members from the public and all members that are within

the existing floodplain, proposed floodplain, or along any of the stream corridors. The total number on the stakeholder list is about 270.

c. **FEMA LOMR Submission**

Greg explained that the mission of this project is to submit a LOMR to FEMA and have it adopted. Robert Krehbiel indicated that the timing on the LOMR is a 90 day process with FEMA, but that it typically takes 6-9 months due to additional information requests, public comment response, and other related issues.

d. **LOMR Adoption**

3. **Consultant Presentation**

a. **Hydrology Methodology**

Robert Krehbiel of Matrix Design Group presented the hydrology that was implemented for the study. He explained that the value of 250 cubic feet per second (cfs) was derived using a statistical analysis of similar basins located within the mountainous region of Colorado. He noted that Stone Creek did not have a gauging station, and therefore had to use the statistical method. Robert pointed out that in the 1986 CWCB flood study, they had determined that 250cfs was the 100 year (1% annual chance) flow and that his results were very similar. He further mentioned that in addition to the 1986 study, we have over 20 additional years of other gauge data to be used, and this further substantiates this flow range. The characteristics of the north facing drainage actually help keep the flow lower, as there is not as much rapid melting from the northern exposure.

b. **Hydraulics Methodology**

Robert explained that the software used to run the hydraulics is called HEC-RAS, and that it is a one-dimensional model. The program runs by taking cross sections, and Robert explained that the elevations on these cross sections represent the elevation of the flood.

c. **Floodplain Delineation**

Robert explained that the floodplain delineation as shown on the maps have not been field verified. He mentioned that the elevations ultimately determine what structures are in the floodplain, as the owner can obtain an elevation certificate to verify if their property is within the mapped area.

d. **Current Progress**

Robert mentioned that he would like to field verify some of the mapping to make sure that it is accurate.

e. **FEMA LOMR Submission Process & Schedule**

4. Feedback Received

a. Public Comments received

This topic was not discussed, and will be identified in the next SC meeting.

5. Technical Discussion

a. Accuracy of mapping

b. Alternatives

The discussion regarding the possible alternatives developed as Robert explained that the culverts located on Golf Club Creek were only able to safely pass approximately 100cfs of flow. The flow split diagram indicated that during a 1% annual chance flood event, approximately 182cfs would flow into Golf Club Creek, and the remaining would enter the Stone Creek Bypass and possible other routes. For the sake of the discussion, the approximate 100cfs of flow was an estimate that represented the “maximum capacity” of Golf Club Creek where the flow could safely be passed through the culverts without overtopping them. Robert explained that the first culvert crossing downstream of the Main Stone Creek / Stone Creek Bypass junction would overtop, and flow would dam up behind the road before passing over the road. The second culvert crossing did not have much upstream head that could develop, thus pushing through the culvert, and it would represent a minimal amount of flow at this crossing.

Mel Holzman mentioned that the county should consider fixing the culverts given that they would not pass a 1% annual chance flood event.

Art Abplanalp suggested that the possibility of constructing the diversion channel to direct flow into the Stone Creek Bypass. Karl Krueger mentioned that he preferred the existing conditions option, as directing more flow may have adverse effects on properties adjacent to the bypass.

Tom Allender suggested that an option be pursued based upon the theoretical “100cfs carrying capacity” to flow within Golf Club Creek, and the remaining 150cfs to flow into the Stone Creek Bypass. This option could have the most potential for minimizing the number of affected structures. Greg added that we would need to gather the costs for this option to evaluate it. This option was referred to as Option “A”, Bypass. An Option “B” was also developed, which would consist of upgrading the three culvert crossings so that the 182cfs would pass

through without modification of the bypass control structure near Holland Pond.

Karl Krueger requested that for the (3) Golf Course Creek crossings under Stone Creek Road the following should be memorialized so as to show the reason for the Steering Committee's request to study increasing the flow of water to the diversion channel over and above the current existing rate as calculated on the most recent (April 09) preliminary flood plain map:

- *the sizes and assumed specifications of existing culverts*
- *the existing carrying capacity of each set of culverts as if the culverts and surrounding inlet area were made to be the way they were installed-cleaned out of sediment, inlet/outlets repaired, nearby tree root-balls be removed and immediate upstream condition be dredged if required (Golf Course Creek may never have been dredged since construction).*

6. Stakeholder Meeting

a. Public Notification

- i. Websites
- ii. Newspaper
- iii. Property Owner Letter

Greg passed out a draft copy of the property owner letter for the SC to review. Tom Allender suggested that one of the 8 ½"x 11" maps be enclosed with the letter for further explanation, as not everyone has access to the internet to view the information.

b. Meeting Agenda

No stakeholder meeting agenda was set at this time due to a following SC meeting.

c. Deliverables

- i. Maps
- ii. Schedule
- iii. Resources

7. Closing

A second SC meeting was scheduled for Monday, May 18th at 9:00am-12:00pm. The meeting will be held at the Slifer Smith & Frampton office in Avon. The address is 90 Benchmark Road, Suite 90. A conference call-in number will be available.

An agenda will follow containing the following items:

- *Discussion/pricing for Option A – bypass channel usage with 100cfs (or “carrying capacity”) flowing in the Golf Club Creek channel where it is not overtopping culverts, and the remaining 150cfs flow entering the bypass channel.*
- *Discussion/pricing for Option B – Culvert Replacement, consisting of replacement costs of culverts adequately sized to safely pass the 182cfs of flow for Golf Club Creek.*
- *Discussion of FEMA insurance “Grandfathering” rules allowing lower insurance premiums for those whose flood zone may be changing.*
- *Costs for individual properties by performing a topographic survey by a licensed surveyor, and the inclusion of that data within the flood study.*

The meeting ended at 6:00pm.

8. **Site Visit (Optional)**

No site visit was conducted.

Stone Creek Floodplain Mapping Project

Attendance Sheet

Steering Committee Meeting #1

May 4, 2009 - 3:00pm

Initial	Name	Group	Street Address	Phone	Email
RL	Robert Krehbiel	Matrix Design Group, Inc.	NA	303.572.0200	robertk@matrixdesigngroup.com
AK	Greg Schroeder	Eagle County	NA	970.328.3567	greg.schroeder@eaglecounty.us
	Neil Mulholland	Development Advisory Committee	NA	720.570.1220	neil@mulhollandco.com
	Tom Allender	EVMD Board Member	NA	970.479.3139	tallender@vailresorts.com
	Tracy Walters	EVPOA Board Member(s)	NA	970.845.8800	twalters@mcmahancpa.com
	Valerie Wilkinson	Homeowner, Eagle-Vail	117 Elk Lane	303.829.0738	valeriewilkinson@aol.com
	Mike Stein	Homeowner, Eagle-Vail	482B Deer Blvd.	303.859.7750	mpstein@sbcglobal.net
	Cory Glackin	Homeowner, Eagle-Vail	342A Stone Creek Dr.	970.390.7773	kayakalpine@hotmail.com
	Arthur Abplanalp	Homeowner, Eagle-Vail	499 Stone Creek Dr.	970.476.6500	Art.Abplanalp@earthlink.net
	Karl Krueger	Homeowner, Eagle-Vail	285 Stone Creek Dr.	970.748.1504	Kruegerarchitect@comcast.net
JP	Jim Potter	Homeowner, Eagle-Vail	601 Deer Blvd.	970.845.2021	jpotter@slifer.net
	Debbie Lathram	Homeowner, Eagle-Vail	282 Elk Lane	303.810.9882	deb@lathram.com
	REX SCHURENSTADT	HOMEOWNER, EAGLE VAIL	680 STONE CREEK	970 390 3419	REXLES@MSN.COM
MH	MEL HOLZMAN	HOMEOWNER, Eagle Vail	14 ELK LN	970-949-4506 303-588-3675	melholzman@earthlink.net

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	Greg Schroeder ✓	Eagle County	NA	970.328.3567	greg.schroeder@eaglecounty.us
	Neil Mulholland	Development Advisory Committee	NA	720.570.1220	neil@mulhollandco.com
	Tom Allender ✓	EVMD Board Member	NA	970.479.3139	tallender@vailresorts.com
	Tracy Walters	EVPOA Board Member(s)	NA	970.845.8800	twalters@mcmahancpa.com
	Valerie Wilkinson ✓	Homeowner, Eagle-Vail	117 Elk Lane	303.829.0738	valeriewilkinson@aol.com
	Mike Stein	Homeowner, Eagle-Vail	482B Deer Blvd.	303.859.7750	mpstein@sbcglobal.net
	Cory Glackin	Homeowner, Eagle-Vail	342A Stone Creek Dr.	970.390.7773	kayakalpine@hotmail.com
	Arthur Abplanalp ✓	Homeowner, Eagle-Vail	499 Stone Creek Dr.	970.476.6500	Art.Abplanalp@earthlink.net
	Karl Krueger ✓	Homeowner, Eagle-Vail	285 Stone Creek Dr.	970.748.1504	Kruegerarchitect@comcast.net
	Jim Potter ✓	Homeowner, Eagle-Vail	601 Deer Blvd.	970.845.2021	jpotter@slifer.net
	Debbie Lathram ✓	Homeowner, Eagle-Vail	282 Elk Lane	303.810.9882	deb@lathram.com
	Rex Schumstad ✓				
	Mel Hazen ✓				
	Nick Stein				