

**Administrative Control Board Meeting
Box Elder and Perry Flood Control
Special Service District
Perry City Offices 3005 South 1200 West
5:00 PM Wednesday, February 18, 2015**

Members Present: Chairman Greg Hansen, Board Member Boyd Hirschi, Board Member Bob Thurgood, Board Member Maurice Roche

Member(s) Excused: Board Member Kevin Pebley

Others Present: Susan K. Obray, Board Clerk

1. Welcome & Call to Order

Chairman Hansen welcomed and called to order the Box Elder and Perry Flood Control meeting.

2. Approve November 19, 2014 Minutes

MOTION: Board Member Thurgood moved to accept the minutes of November 19, 2014. Board Member Hirschi seconded the motion. All in favor.

3. Public Comments

There were no public comments.

4. Presentation by Brett Jones Regarding the Condition of the debris/detention basins along the east bench.

Matt Robertson with Jones & Associates did a power point presentation regarding the debris/detention basins along the east bench. Greg stated that at the last meeting Board Member Thurgood asked about what the plan was with the east bench debris/detention basins. Greg said that last month they asked Jones & Associates to look through the old reports and do an evaluation and report back to us. Matt reported that he will report on the Evans and Mathias Canyons Debris Basin and they have also been asked to do the Perry City Pipe and Basin Maintenance Plan. He stated that he has been with Jones & Associates for 2 months and was previously with another Engineering firm who did the same type of work. Matt explained that Mathias is the canyon to the north, Evans is to the south. He said they looked into the background and the history. He said they looked at potential hazards with these canyons and made some recommendations. Matt stated that RB&G did a report on the canyon back in 1986. He said what they learned from these reports is that there wasn't much development back then on the east bench, just orchards. He explained that the flow came out of the canyons and was diverted for irrigation or dissipated out into the orchards. He said in the past they did have to deal with nuisance flooding in high flows, thunderstorms& spring runoff. They would get sediment that would come down those canyons and go into the orchards. Matt said that it got to the point that Pineview canal was piped through that area because they were sick of the sediment getting down into the canal. He said the report recommended that sediment basins be built in both canyons. They also recommended that the flow from Mathias Canyon be piped over to Evans Canyon and that flow would head out to Hwy 89 all through 30" pipe. Matt reported what

they can tell is that the basins are too small for a large event and 24" pipes were installed. Board Member Thurgood asked if there was a pipe that goes from Mathias over to Evans. Matt stated that there was. He said he looked into the reports from 1997 that RB&G did and they did not say too much about the canyons other than they were still experiencing mud and debris that reaches Hwy 89. Matt explained that the current condition for Mathias Canyon is not designed for debris-flow and Evans basin needs cleaning and is undersized. He showed the board where the Mathias Canyon was. He said the Mathias Canyon acts like more of a sediment basin and somewhat more of a diversion structure. The structure can take sediments but is not very big. He said the creek flow can go down the creek down towards the Thurgood property or it can be diverted to Evans. He said there is a canal gate that controls where the flow goes if that canal gate is open then it sits lower than diversion over to Evans and the flow goes out and continues to go down. He said if the canal gate were closed it would build up a little bit and push over towards Evans. Matt commented that the structure does capture some sediment but is not designed for a debris-flow event. Matt said it is nice and clean now. Chairman Hansen stated that it was cleaned out 2 years ago. He said the drainage area is just a little over 1 square mile and the peak flow during a 100 year storm is 56 cubic feet per second.

Matt showed pictures of the Mathias Canyon diversion to the board. He said the canal gate is cracked to where the flow can get through it. Matt stated that Evans Canyon is an earthen debris basin with outlet structure. He said the creek flows through a basin to a 24" pipe. He said the basin is approximately 8,000 square feet and has a volume of 2,000-3,000 cubic yards. He said the drainage area is 0.81 square miles, and the peak flow during a 100 year storm is 49 cubic feet per second. Matt reported that Evans is effective in capturing normal amounts of sediment but not designed for a large event and could use a little bit of cleaning. He said typically only a small amount of flow comes from Mathias due to irrigation diversions, etc. Matt showed pictures of Evans Canyon to the board. Matt stated regarding potential hazards the State recommends a debris-flow study for any development near canyons with a slope greater than 30%. He said they researched studies on similar canyons. He said they recently did a study on 3 canyons for North Ogden and Centerville. He said as he looked at these reports they were pretty consistent with the estimated cubic debris flow per square mile. He said Mathias is 63,000 cubic yards and Evans is 51,000 cubic yards. Matt stated that they would recommend having a debris study done by a Geologist or a Geo-technical firm on these canyons to get a more accurate number. Chairman Hansen asked what the capacity was for Evans Canyon. Matt replied that it was 3000 cubic yards. Matt stated that this is in case of a large event. He said the Canyons without past debris flows are at higher risk because of sediment build-up.

Matt showed pictures of Facer Creek debris slide in June of 1983, Farmington Fire in April 2004, and Santaquin Fire on September 2002. He said that some of the examples of debris basins are Earthen basins with outlet structures, Perry Canyon Basin, Ben Lomond Basins and one that he was involved with at his last firm was the Centerville Canyon Basin where they used Concrete or Roller Compacted Concrete which was a pretty interesting project. He said the reason they went with the Roller Compacted Concrete, was they didn't have a big enough area to do an Earthen Basin and so they were able to go up into the canyon and build a dam. He said they let the normal flows go through it. Matt showed a picture of the Perry Canyon Basin and explained that from the reports he has read, it has been very effective. He said back in 1983-1984 they brought 1,000's of cubic yards of debris out of that basin, but it did protect the stuff downstream on

Three Mile Creek. He said it is an Earthen Debris Basin and takes up a pretty big area. He showed pictures of Ben Lomond Debris Basin and said that the basins were paid for by the developer that was doing a big development. Matt showed a picture of the Centerville Canyon Debris Basin. He said it is a much smaller area but a more expensive structure and is made with the roller compacted concrete and a very sturdy debris flow fence. Matt stated that their recommendations are: Option 1: Mathias Canyon (1) Leave diversion structure in place and construct debris basin to the east. Evans Canyon (1) Clean existing debris basin and increase the capacity; (2) Increase the outlet pipe to 36" to Hwy 89. He said that maybe could involve some participation from Perry City. Matt reported that the pipe is a little undersized already and all the developments are dumping into this pipe. Option 2: He said working with a smaller budget you can do smaller improvements to improve risk. Option 3: Don't do anything just maintain current facilities with no improvements. Matt presented pictures of Mathias & Evans Canyons and showed where they would recommend putting the basins. Matt said the estimated costs for a new debris basin would be:

- New Debris Basin
 - Earthen Basin= \$7/cubic yard (balance site)
 - Mathias =\$441,000
 - Evans=\$336,000
- RCC Structure
 - Mathias=\$819,000
 - Evans=\$624,000
- Replace existing 24" pipe with new 36" pipe
 - 3,700 lf @ \$80/lf=\$296,000
- Factors that affect cost
 - Geotechnical recommendations
 - Ability to balance cut and fill amounts
 - Land acquisition

Matt stated that this includes all the engineering and reports.

He said regarding City storm drain maintenance they recommend that the detention basins be cleaned yearly. The plan recommends March, April, May and then again in the Fall, clean higher priority basins first, split system into 5 areas for year pipe cleaning. Matt said every 5 years the system would be completely cleaned out, City to budget for yearly maintenance activities, and annual contract to clean pipes=\$20,000. He said Perry City public works will clean the detention basin themselves (attached is a copy of the Perry City detention basin and piping maintenance plan and the power point presentation).

Matt stated as part of their Storm Water Management Plan that they submitted to the State they have to have a plan in place and this will help them accomplish that. Matt said he talked to Paul and they haven't had a budget in the past and so they will need to get this in the budget every year. Matt reported that Brett Jones is going to mention to the Mayor regarding Perry City being on the State permit for the storm water regulation. He thinks it's a good idea to go to the city and say the City should have a storm water utility fee on their monthly bill to start getting a budget to keep up with the storm water facilities. Chairman Hansen stated he is on the agenda for the first meeting in April with the City Council to present the maintenance plan and he felt it was a

good idea to have Jones & Associates there also to present their idea on what we have done and what we do in the future. He said it looks like we definitely need to do something in Mathias. He said that we get looking at some kind of structure above Mathias, and clean up Evans a little bit and expand it some. Board Member Thurgood asked if it would be an advantage to consider the 36" pipe from Mathias over to Evans. He felt that would be less expensive than rebuilding or enlarging that structure. Board Member Thurgood asked if that would handle an event. Matt stated it would help with the creek flow but not the debris flow. Chairman Hansen asked Matt to look into grants or low interest loans we could get for both of those canyons and the pipe. He said we need to collect money from developments that are coming in here. Chairman Hansen stated that most of the development is on the east side of Perry. He said we will have Jones & Associates go in and do some research for us for funding and then we need to meet next month and go over those findings.

5. Motion to Recommend Jones & Associates to proceed with design and/or upgrade to the basins.

MOTION: Board Member Roche moved to recommend Jones & Associates to proceed with the design and upgrade to Evans and Mathias Basins and check and see if there is any available funding and have the information ready for the next month's meeting. Board Member Thurgood seconded the motion. All in favor.

6. Discussion/Motion for Jones & Associates to develop an "Emergency Action Plan." Chairman Hansen stated that he got a letter from the Department of Public Safety that goes right along with our basins. He said the letter says that he was listed as the primary agent of a high or moderate high hazard dam in the state of Utah. Utah Division of Emergency Management invites you to share with us the most recent copy of your Emergency Action Plan and ask that in the future you share with us any and all information as it is updated in the plan and to include personnel changes, reorganization, inundation map updates in a timely manner as required by the State of Utah. Chairman Hansen stated that the State has all these requirements that we are supposed to be following. He said we are supposed to have this plan in place, adopted and filed so that when we have an emergency it tells us exactly who, what, and where. Chairman Hansen stated we don't have one in place and so the State is telling us to get it done. He said he would imagine that any upgrade done on Evans and Mathias would be included in this. He commented that the State does regulate what size falls under the requirements under the Emergency Action Plan. He said maybe we should address all four, Evans, Mathias, Perry, and Cherry Ridge. Greg stated that he has talked with Brett Jones and they would be more than willing to develop a plan. They have already done others in the past.

MOTION: Board Member Roche moved to have Jones & Associates develop an Emergency Action Plan on the four major basins. Board Member Hirschi seconded the motion. All in favor.

Greg Hansen stated that he would like Jones & Associates to start on Perry Canyon first.

7. Discussion/Motion Regarding Increasing the Compensation for the Board Secretary.

Chairman Hansen stated that Susan is currently being paid \$20.00 an hour for the last 3 years. He asked for any suggestions on an increase if any. Board Member Roche asked if she gave any indication of what she would like to get. Greg stated that there has not been a raise in the 3 years she has been doing the work. He said 5% would be an appropriate rate. Board Member Hirschi stated that she has done a lot of work for the board. Chairman Hansen stated that she is the liaison, Mayors and Councils come and go and Susan is the one constant that we have. Board Member Roche recommended a \$5 increase. He said she does a lot of work getting everything lined up for the meetings.

MOTION: Board Member Roche moved to increase Susan’s pay rate from \$20.00 to \$25.00 an hour. Board Member Hirschi seconded the motion. All in favor.

8. Council Member Comments

Council Member Nelson was excused from the meeting.

9. Motion to Ratify Payments that were paid in December & January

Chairman Hansen stated that there were some payments that had to be pain in December. Invoice for Jones & Associates for \$99.00 paid on December 8, 2014; Invoice for Box Elder News Journal for 38.05 paid on December 31, 2014; Invoice for Utah Local Governments Trust for \$2,260.78 paid January 7, 2015; Invoice for Christensen, Crane & Ambrose for \$780.00 paid on January 7, 2015; Invoice for Box Elder News Journal for \$29.95 paid on January 7, 2015;

MOTION: Board Member Hirschi moved to ratify the payments that were paid as discussed. Board Member Roche seconded the motion. Roll call vote.

Board Member Roche yes Board Member Hirschi yes
Chairman Hansen yes

Motion Approved: 3 yes 0 no

10. Payment Approvals (if any, roll call vote)

Chairman Hansen stated that there were two invoices that need to be paid tonight. The First invoice was for Jones & Associates in the amount of \$1,687.00; and the second invoice for Susan Obray in the amount of \$80.00.

MOTION: Board Member Roche move to approve the payments of \$1,687.00 to Jones Associates and \$80.00 to Susan Obray. Board Member Hirschi seconded the motion. Roll call vote.

Board Member Roche yes Board Member Hirschi yes
Chairman Hansen yes

Motion Approved: 3 yes 0 no

11. Items for Next Agenda

(1) Report from Matt Robertson with Jones & Associates regarding Update potential funding or grants, (2) recommend what part of the projects design to proceed with, (3) and Emergency Action Plan.

12. Adjournment (Next regular meeting on March 18, 2015 at 5:00 PM)

MOTION: Board Member Roche moved to adjourn. Board Member Hirschi seconded the motion. All in favor.