

## Meeting Record

### Pre-Council on Dead Man's Run Stormwater Master Plan

Monday, February 4, 2008

Room 113, City County Building

Lincoln, Nebraska

**MEMBERS** Jon Camp, Robin Eschliman, Dan Marvin, John Spatz, Ken Svoboda  
**IN ATTENDANCE:**

**ABSENT:** Jonathan Cook, Doug Emery

**OTHERS:** Greg MacLean, Nicole Fleck-Tooze, Ben Higgins, Karen Sieckmeyer, Public Works/Utilities; Sara Hartzell, Planning; Glenn Johnson, Paul Zillig, Lower Platte South NRD; Pat O'Neill, CDM; and Coby Mach, LIBA

Dan Marvin called the meeting to order.

Devin Biesecker of Public Works/Utilities/Watershed Management introduced himself and Pat O'Neill with Camp Dresser and McGee from Kansas City, Missouri. Biesecker thanked the City Council for allowing them to present information on Deadman's Run as it is a very complex project. Biesecker explained what the City's Watershed Master Plans will do for the City and Lower Platte South NRD. There are several common items between the masters plans, 1) Watershed Management looks at floodplain management and Deadman's Run is focused on minimizing flood damage. 2) Watershed Management also looks at controlling erosion and sedimentation usually through putting together a CIP that address stream stability. 3) They also look at preservation of watershed resources in the form of water quality and stream stability and repairing habitat. In the past, the City and the NRD have completed several master plans. Beal Slough and SE Upper Salt Creek in South Lincoln. Stevens Creek on the Eastern side of Lincoln and just recently the City Council approved the Cardwell Branch Master Plan in Southwest Lincoln. Today, we would like to talk about Deadman's Run.

Biesecker then proceeded with his presentation on the Deadman's Run Master Plan highlighting the following:

- 1) Watershed Management focused on several areas in the watershed and involved the public in the Watershed Master Plan process.
- 2) Watershed Management also looked at floodplain mapping during the watershed master planning; the stability of the stream; water quality conditions of the stream; and then identified capital projects that can solve some of the problems in the watershed.
- 3) Boundaries of the Deadman's Run Watershed is basically from the lower end which dumps into

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Salt Creek near 27th and Cornhusker and then the upper end of the watershed is just south of 84th and A Street.

- 4) The public is also involved in our watershed master planning projects. In this master plan, Watershed Management had several public involvement items in our study. We had three open houses; mailed out watershed newsletter to residents in the watershed; developed a webpage and updated with the results of the study as they became available; held several stakeholder meetings with property owners in the areas where Watershed Management had proposed projects in the watershed; and organized a 20 member Citizen Advisory Committee made up of residents and business owners in the watershed.
- 5) Watershed Management is updating the floodplain mapping in Deadman's Run with this study. The last FEMA floodplain mapping update was done in 1997 and there have been many changes and topographic information in the watershed; better modeling today then back in 1997 so we felt the need to use this information to develop better floodplain mapping in the watershed and also to use the updated model to develop our capital projects.
- 6) One of the major issues in Deadman's Run is its flooding in the over banks. Biesecker pointed to a map which depicts the depth of flooding in the areas from 56th to 33rd Street along Dead Man's Run. North of Huntington is one of the worse areas of flooding that Watershed Management has found in the Watershed. Some of the streets north of Huntington, are getting 6 to 7 feet of depth of flooding during a 100 year event. We needed to focus on how to help resolve some of these flooding issues in this watershed.
- 7) Biesecker pointed out a picture taken near 37rd & Baldwin and the blue lines indicates what the 100 year service elevation would be in this area. This is a residential area and flooding with a 100 year event would be roughly 3 feet deep in the streets in this area. Another photo taken at 42nd and Baldwin have the same results with very significant flooding in the streets and to the properties in this area.
- 8) When the new floodplain mapping was developed, Watershed Management actually counted the structures in the floodplain and came up with 982 structures into the Deadman Run's floodplain.
- 9) Watershed Management worked on projects that would help minimize the affect of a 100 year storm event in Deadman's Run. The first thing they looked at was what could be done to the channel on the lower end of Deadman's Run as far as getting more stormwater flow into the channel and conveying it down stream to Salt Creek and alleviating some of the over bank flooding.
- 10) Watershed Management looked at several sights and ended up with two viable sites in the watershed. The first being an area near 56th and Holdege. This area is currently owned by Chateau Apartments which is identified by Cell A and also the Lincoln Lutheran School which is identified by Cell B. This area would be an off line detention right next to the channel where we would excavate both areas of Cell A and Cell B. The ground would have to be lowered a

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significant amount in some of these areas but this would allow the five year storm to flow into Cell A and once we get up to a 10 year storm, it would flow into cell B. This reduces the amount of flow in the Deadman's Run Channel downstream and as the peak of the storm then passes, these areas would slowly drain out and the area could be used again for recreational areas. Watershed Management does envision these areas to be multi-use facilities that can be used as recreation when they are dry and then serve as stormwater detention when we get the high stormwater runoff events. Our second detention location is Taylor Park and this one is a little different from the other two. This is a tributary to Deadman's Run. In this location, Watershed Management proposes to build an earth berm across the channel in Taylor Park; excavate some of the high ground in the park which would allow stormwater to be stored in this area; and then slowly be released down stream. We envision this area to be a multi-use facility that could be used for recreation when it is dry and serve as stormwater detention when the rain events occur.

- 11) Watershed Management has identified 982 structures in the floodplain. If the focus is on Cornhusker Highway to 56th, Watershed Management will be moving 807 of the 982 structures from the floodplain. Most of them are residential homes in these areas. If Watershed Management is not allowed to do the detention and just do the channel improvements, there won't be as good a benefit as there would be if you did both of them. If Watershed Management just completed the channel improvements, there would only be about 369 structures removed from the floodplain.
- 12) The total cost for these projects is significant. The majority of the cost being in the channel improvements themselves. The channel improvements include bridge replacements at several of the crossings over Deadman's Run. When all of the project costs are added together, it comes up to \$50 million. Project 5 and 6 are the detention projects and they are a lesser cost in most cases than the channel improvement costs.

Biesecker concluded his presentation and opened it up for questions.

Spatz asked if a cost benefit analysis was to be done, would the loss function component be included in that? Biesecker answered that the City anticipates going after Federal or State funding to aid in moving these projects forward and in order to involve Federal or State aid, you would have to do a benefit cost ratio. Nicole Fleck-Tooze added the first step for us would be the approval of the master plan and then the next step would be to obtain the lion's share of funding from State and Federal sources.

Eschliman stated that it sounds like it is essentially going to cost \$2,000 per building to remove these buildings out of the floodplain. Eschliman said that the Council has been hearing from an apartment owner and a school that they aren't really crazy about this idea because your taking private property to litigate other private property. Don't we do that all of the time - is this the first time this has ever happened? Fleck-Tooze said that for many of the public projects, we have to look at easements and right-of-way on private property. Fleck-Tooze wanted to remind the council that in terms of the basic function of government for health, safety and welfare; flood reduction is a huge part of that issue.

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Watershed Management found very limited available spaces that was open to try to find some way to mediate the flood damages. A number of different options were looked at and these were just the final ones in working with the Advisory Committee. From our point of view, this area had the least impact because they were open space uses already today and would continue to be so in the future.

Jon Camp wanted to go back to the overall cost which is roughly an estimated \$50 million. Of that, could you identify specific percentages that you would see covered by State and Federal agencies. Fleck-Tooze stated that when we are looking at Federal funding, we are looking at about 75 percent share with a 25 percent local match. It just depends on what pot of money you go after and how you package those together. One of the consideration for us in this process, is that you really need to package all of those projects together in order to have that positive benefit cost ratio so we would be looking at them comprehensively and probably look at more than one funding source to arrive there.

Dan Marvin asked how many of these strategies are we adopting as well? Fleck-Tooze stated that you will have two items before you next week. A resolution to adopt the flood prone areas with best available information consistent with how you have done with various other watersheds. You also have a resolution to adopt the Deadman's Run Watershed Master Plan just as you did the Caldwell Branch Master Plan. Marvin said, at this point, until we get Federal funding and negotiate with those private property owners, there is no way to go forward. Fleck-Tooze said the first step is always the adoption of the master plan so that we have a plan in place. It is an approved component of our comprehensive plan and then what follows is looking for funding; and doing some of those more detailed benefit cost analysis. Marvin asked if we could give him an idea as to what has changed between 2007 and 1997 as far as the map itself. Biesecker mentioned that they did do a count of structures that are shown in the new flood prone area relative to structures that were shown in the existing FEMA map floodplain. What they found was about 123 structures are shown in the new flood prone areas that were not shown in the FEMA floodplain. Watershed Management also removed about 68 structures that were shown in the FEMA floodplain. Marvin asked if that could be attributed to better technology in terms of mapping or do you attribute that to more building upstream. Biesecker said the largest area of new flood prone areas downstream and he believes this area is probably due to better typography in that location that we have today as opposed to back in 1997.

Eschliman asked for examples of some of the cell sites that were eliminated. Biesecker stated that Bethany Park was looked at and near Bethany Park on some commercial property that was open. Once we realized there were proposed buildings, it eliminated that one. Watershed Management also looked at every significant change to the Chateau site where they had proposed detention on both sides of the channel and again this would have impacted buildings. One of our goals is not to impact existing structures in the watershed so they try to look at open spaces. There is not many large open spaces like in the Deadman's Run Watershed. Eschliman asked what the challenges had been so far. Biesecker stated that due to how Bethany Park is located next to the channel of Deadman's Run, it is hard to get much flow into Bethany Park. Many of the trees in Bethany Park would have to be removed. There are some existing structures in the park and some shelters that would need to be relocated. Those were probably the biggest. Eschliman asked if that would be less difficult than trying to work with private property owners? Biesecker stated that the Chateau/Lincoln Lutheran site is our best location as far as getting benefits from a detention location. We did see some benefit at Bethany Park's but it wasn't the scale of the Chateau/Lincoln Lutheran

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site. Eschliman said that you haven't considered the loss of function on utilities, public transportation, etc. However, the building values that you have probably looked at already are comprised of rent so wouldn't you be counting that twice if you do it now and then do it later. Pat O'Neill said there were several different ways of looking at it. What we would look at is business income loss vs. the physical loss of damage to the structure. Right now we looked at strictly what would be damages to the structure as far as replacing that building. Then there is a whole other component as far as loss of business income and whether that is rental income or someone's business that it being impacted. Another component is the displacement cost where you would take people and house them for a certain amount of time so they can come back to their original residence. So there are many different components that need to be looked at in detail. Eschliman said she doesn't dispute the loss of business income, but what she is saying is if you are looking at property values, you can't count rent later also because then you are counting it twice. A property is valued as to what is it because of rental income. O'Neill thought that Eschliman had made a good point and they will be looking at that in detail to make sure that we don't double count and that we look at it as fair and honestly as we can.

Dan Marvin adjourned the meeting at 11:00.



Karen Steckmeyer  
Executive Secretary  
Public Works/Utilities