

## **FACTSHEET**

**TITLE: COMPREHENSIVE PLAN AMENDMENT NO. 07002**, by the Director of Planning, at the request of the Director of the Public Works & Utilities Department and the General Manager of the Lower Platte South Natural Resources District, to amend the 2030 Lincoln-Lancaster County Comprehensive Plan by adopting the **Deadmans Run Watershed Master Plan**,

**STAFF RECOMMENDATION:** Approval.

**SPONSOR:** Planning Department

**BOARD/COMMITTEE:** Planning Commission  
Public Hearing: 01/16/08  
Administrative Action: 01/16/08

**RECOMMENDATION:** Approval (8-0: Esseks, Sunderman, Taylor, Larson, Gaylor-Baird, Francis Moline and Carroll voting 'yes'; Cornelius absent).

### **FINDINGS:**

1. This is a request by the Public Works & Utilities Department and the Lower Platte South NRD to amend the 2030 Lincoln-Lancaster County Comprehensive Plan to adopt the proposed ***Deadmans Run Watershed Master Plan***. The watershed master plan includes approximately 9 square miles of stream drainage basin located generally between North 27<sup>th</sup> Street and South 84<sup>th</sup> Street, from South Street on the southeast to the confluence with Salt Creek on the northwest.
2. The "Executive Summary" of the Master Plan is being provided under separate cover. The entire Master Plan document is being provided to the Council members on CD and is available on the internet at [www.lincoln.ne.gov/city/pworks/watrshed/mplan/dmr/index.htm](http://www.lincoln.ne.gov/city/pworks/watrshed/mplan/dmr/index.htm).
3. The staff recommendation of approval is based upon the "Analysis" as set forth on p.5-6, concluding that the proposed Deadmans Run Watershed Master Plan is in conformance with the Comprehensive Plan. This Master Plan will provide long term planning tools and improvement projects to address water quality, flood management and stream stability to provide guidance for sustainable urban growth in the watershed. The staff presentation and discussion with the Commission is found on p.8-11.
4. Testimony in support is found on p.11, and the record consists of two letters in support (p.17-18).
5. Testimony in opposition by Chateau Development to the proposed flood retention site (Cell A: Project #5) is found on p.11-13. The two speakers suggested that the private owners benefitted by the flood reduction should help pay the cost of the projects.
6. Testimony on behalf of Lincoln Lutheran School Association in a neutral capacity, also with concerns about the proposed flood retention site (Cell B: Project #5), is found on p.13.
7. The record also consists of a letter from Dr. Darryll Pederson (p.19-21) in opposition to the proposed flood retention site in Taylor Park (Project #6).
8. The discussion about the need for the detention areas is found on p.10-11.
9. On January 16, 2008, the Planning Commission agreed with the staff recommendation and voted 8-0 to recommend approval (Cornelius absent). See Minutes, p.15.

**FACTSHEET PREPARED BY:** Jean L. Walker

**DATE:** January 28, 2008

**REVIEWED BY:** \_\_\_\_\_

**DATE:** January 28, 2008

**REFERENCE NUMBER:** FS\CC\2008\CPA.07002

**LINCOLN /LANCASTER COUNTY PLANNING STAFF REPORT**  
**for January 16, 2008 Planning Commission Meeting**

**P.A.S.:** Comprehensive Plan Amendment #07002  
Deadmans Run Watershed Master Plan

**PROPOSAL:** To amend the 2030 Lincoln-Lancaster County Comprehensive Plan to adopt the proposed “Deadmans Run Watershed Master Plan” as a subarea plan and add it to the list of approved watershed master plans.

**CONCLUSION:** The proposed Deadmans Run Watershed Master Plan is in conformance with the 2030 Lincoln-Lancaster County Comprehensive Plan. The Deadmans Run Watershed Master Plan will provide long term planning tools and improvement projects to address water quality, flood management, and stream stability to provide guidance for sustainable urban growth in the watershed.

<b><u>RECOMMENDATION:</u></b>	Approval of the proposed amendment
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**GENERAL INFORMATION:**

**LOCATION:** Includes approximately 9 square miles of stream drainage basin located generally between N 27<sup>th</sup> & S 84<sup>th</sup> Streets, from South Street on the southeast to the confluence with Salt Creek on the northwest.

**EXISTING LAND USE:** The watershed is fully urbanized with areas of commercial including Westfield mall, north 48<sup>th</sup> Street business district and University Place business district; industrial uses near Cornhusker Highway; public uses such as UNL’s East Campus, Bethany and University Place parks, Seacrest Field, and Wyuka Cemetery; trails, open space, major arterials and many residential neighborhoods.

**ASSOCIATED APPLICATIONS:** None

**HISTORY:** The City and the Lower Platte South NRD are in the process of developing a *Comprehensive Watershed Management Plan for the City of Lincoln* and its future growth areas. This comprehensive watershed master plan is being developed basin by basin, through the completion of watershed master plans for individual basins. To date, four of these watershed master plans have been completed and are adopted as subarea plans and amendments to the 2030 Comprehensive Plan; the Beal Slough, Southeast Upper Salt Creek, Stevens Creek and Cardwell Branch Master Plans..

A major part of the Master Plan is an update of the 100-year floodplain and floodway boundary maps. These maps have been presented to the Federal Emergency Management Agency for review and will be presented to the City Council, along with this master plan, for adoption as “best available information”.

**COMPREHENSIVE PLAN SPECIFICATIONS:** The 2030 Comprehensive Plan for this area includes industrial, commercial, residential and other uses that reflect the uses currently existing in this watershed. Some of the relevant language of the Plan is:

From Comprehensive Plan Vision: Environmental Stewardship - *“Natural and environmentally sensitive areas are preserved and thrive. Wetlands, native prairies and streams (riparian) corridors are preserved to ensure the ecological health of the community. Other natural features, such as tree masses, in areas for future development, are integrated into new development to provide for green spaces within the built environment.”* (P. 7)

From The Urban Environment: Overall Form - *Streams, trees, open space, and other environmentally sensitive features should be preserved within new developments as design standards allow. The natural topography and features of the land should be preserved by new development to maintain the natural drainageways and minimize land disturbance.* (P. 10)

From Implementation -

*Green Space: Areas predominantly used for active recreational uses, such as parks, golf courses, soccer or ball fields, and trails. Green space areas may be either public or privately owned. While some isolated environmentally sensitive features may be within these areas, they are predominantly for active recreation, with some passive recreation uses also possible.*

*Environmental Resources: Land and water masses which are of particular importance for maintenance and preservation, such as saline wetlands, native prairie, and some floodway and riparian corridors. Such areas may be either publicly or privately owned.* (P. 16)

From Environmental Resources -

*Floodplains provide multiple benefits to both the natural (flood storage, habitat, water quality) and built (recreation, public health and safety, economic) environments.* (P. 52)

*Throughout the region, surface water runoff flows into these stream corridors that typically consist of floodplains and riparian areas. These are instrumental in providing habitat and water infiltration benefits, along with serving as connectors to natural areas.* (P. 54)

*Pursue Greenways connecting urban and rural areas. Such corridors should follow stream courses (particularly along floodplains) and connect valuable resource areas (such as the Salt Valley Lakes, points with special vistas or views, prairie grasslands, cultural and historic sites, and the county’s towns and villages).* (P. 58)

*Implement a “Rain to Recreation” watershed approach to reduce flood damages, protect water quality and natural areas, while providing for recreational and educational opportunities so as to realize multiple benefits.* (P. 59)

*Integrate the “Core Resource Imperatives” and natural resources feature concepts into future city and county studies that implement the Comprehensive Plan.* (P. 62)

From Utilities Watershed Management

*A comprehensive watershed management program will need to incorporate a range of strategies including land use planning, conservation efforts, appropriate standards for floodplains and stormwater, flood warning system development/expansion, stream stabilization, stormwater storage basins, and other structural flood control efforts.* (P. 78)

*Watershed planning will continue in order to be proactive and integrate stewardship principles for land conservation, stream and wetland buffers, better site design, Best Management Practices*

*(BMP), and erosion and sediment control. The natural drainage system can serve multiple benefits, including wildlife habitat and recreation. (P. 79)*

*Use public projects as an opportunity to set positive examples for the community relative to stormwater and floodplain management. Seek opportunities for “Rain to Recreation” project approaches that reduce flood damages, protect water quality and natural areas, while providing for recreational and educational opportunities so as to realize multiple benefits.*

*Develop a Watershed Management Master Plan for Lincoln and its future growth areas. Integrate existing neighborhoods and growth areas into watershed planning.*

*Utilize basin master plan recommendations and components as analysis tools to be referenced and compared with proposed development within the basin, and as a guide in the preparation of future capital improvement projects.*

*Seek broad public participation in the location and design of specific watershed management projects. The relative benefits of the projects to be evaluated should include impacts on the flood hazards, water quality, channel integrity, natural character, bridges, culverts, and existing public and private structures.*

*Improve the accuracy of floodplain mapping and make it a priority to which specific resources are dedicated. Continue to develop a comprehensive, watershed approach to floodplain mapping. (P. 80)*

*The following watershed studies are adopted in order to provide guidance to watershed management activities within the basin.*

- ◆ *Stevens Creek Watershed Study and Flood Management Plan, 1998 (for rural watershed).*
- ◆ *Beal Slough Stormwater Master Plan, May 2000.*
- ◆ *Southeast Upper Salt Creek Watershed Master Plan, 2003.*
- ◆ *Stevens Creek Watershed Master Plan, 2005.*
- ◆ *Cardwell Branch Watershed Master Plan, 2007.*

#### From Parks, Recreation & Open Space:

*Public and private partnerships are important in the development of recreational opportunities and the preservation of environmental resources that bring a high quality of life to the City and County. (P. 133)*

*Utilize a “Rain to Recreation” approach to open space and greenway linkages that is coordinated with the City’s watershed management program and the Lower Platte South Natural Resources District to reduce flood damages, protect water quality and natural areas, while providing for recreational and educational opportunities so as to realize multiple benefits. (P. 139)*

## **ANALYSIS:**

The full text of this report, and materials from public meetings, can be found at [www.lincoln.ne.gov](http://www.lincoln.ne.gov) (Key word: watershed) under “Master Plans”.

1. The amendment proposed by the Public Works and Utilities Department (PW&U) and the Lower Platte South Natural Resources District (NRD): Adoption of the Deadmans Run Watershed Master Plan as a subarea plan of the 2030 Lincoln/Lancaster County Comprehensive Plan.
2. The Deadmans Run Watershed Master Plan is the fifth watershed master plan to come forward for adoption. Previously adopted plans include the Beal Slough, Southeast Upper Salt Creek, Stevens Creek and Cardwell Branch Master Plans. The Deadmans Run Master Plan involved a nearly two year process, including a public outreach program that included
  - The involvement and input of an 18-member Citizen Advisory Committee representing a broad cross section of interests in the watershed, who met with the project team during a series of four meetings beginning in November 2006 and ending in September 2007.
  - A series of three open houses in June 2006, November 2006, and October 2007, that attracted over 200 people.
  - A series of ten information sessions with property owners and interested citizens regarding potential Capital Improvement Projects (CIPs).
  - A project web site used to post alternatives under consideration, upcoming events, and material distributed to the advisory committee. Additionally, three newsletters were mailed to over 4,200 individual residents and organizations.
3. The Deadmans Run watershed is the first fully urbanized watershed for which a plan has been developed. Urbanization of the watershed provides particular challenges to the identification of projects which met the goals of the Master Plan. The goals were to identify improvement projects to address future flooding, water quality and stream stability and to keep the proposed projects on existing park land or other publicly owned land as much as possible.
4. There are three major elements of the Deadmans Run Watershed Master Plan;
  - 1) Floodplain Management Tools. Update of 100-year floodplain and floodway boundary maps recommended for adoption for local regulatory purposes and will be reflected on Federal Emergency Management Agency (FEMA) floodplain maps when FEMA finalizes the Flood Insurance Rate Map Physical Map Revision.
  - 2) Capital Improvement Projects (CIPs). Development of 13 CIPs in the watershed to address potential building flooding, street flooding, stream instability, improve stormwater quality, with a goal of utilizing existing open space to minimize stakeholder disruption.

3) Benefit-Cost Analysis. The economic feasibility of the recommended CIPs was analyzed by using the Benefit-Cost Ratio (BCR) approach based on FEMA procedures.

5. The Deadmans Run study floodplain map encompasses approximately 982 buildings within its limits. In the lower reach of the watershed, along Huntington Avenue, the depth of potential flooding is 5 to 7 feet which could result in significant property damage and potential loss of life if the 100-year flood occurred.
6. Capital Improvement Projects developed in the master planning project include 4 projects to improve stormwater conveyance in the channel, 2 projects for detention of stormwater, 1 project for local flood control, and 6 projects that would improve water quality in the watershed. Implementation of the first 6 CIPs, stormwater conveyance and detention projects, would remove 807 buildings from the floodplain and provide flood protection benefits to 175 others.
7. The preliminary Benefit Cost Ratio (BCR) was calculated by comparing the benefits associated with reduction of the 100-year floodplain to the costs of the first 6 CIPs that are associated with storm water conveyance and storage. Benefits were calculated according to the reduction of physical damage to structures using figures from the County Assessor's office. Additional benefits would be realized from reduction of economic and casualty losses and emergency management costs, associated with a 100-year storm in the watershed. Costs are significant because of the nature of projects built within an urbanized watershed. However, the study team is confident that a full BCR analysis will produce a value of greater than one, meaning the benefits of the CIPs outweigh the costs. Because of the scale of the CIPs, a combination of federal, state, and local funds would likely be needed to cover the costs.

#### **PROPOSED AMENDMENT:**

Amend the 2030 Lincoln-Lancaster County Comprehensive Plan as follows:

1. Add the "Deadmans Run Watershed Master Plan, 2007" to the list of approved subarea plans on Page 155.
2. Add to the end of the Watershed Management section on Page 81 as follows:

The following watershed studies are adopted in order to provide guidance to watershed management activities within the basin:

- Stevens Creek Watershed Study and Flood Management Plan, 1998 (for rural watershed)
- Beal Slough Stormwater Master Plan, May 2000
- Southeast Upper Salt Creek Watershed Master Plan, 2003
- Stevens Creek Watershed Master Plan, 2005
- Cardwell Branch Watershed Master Plan, 2007
- Deadmans Run Watershed Master Plan, 2007

Prepared by:

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**DATE:** December 28, 2007

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# COMPREHENSIVE PLAN AMENDMENT NO. 07002

## PUBLIC HEARING BEFORE PLANNING COMMISSION:

January 16, 2008

Members present: Esseks, Sunderman, Taylor, Gaylor-Baird, Larson, Moline, Francis and Carroll; Cornelius absent.

Ex Parte Communications: None

Staff recommendation: Approval.

Staff presentation: **Sara Hartzell of Planning staff** submitted a letter from Dr. Darryll Pederson in opposition to the proposed flood retention in Taylor Park as part of the Deadmans Run Watershed Master Plan.

Hartzell explained that this is an application for a Comprehensive Plan amendment for the Deadmans Run area. This is unique because it is the first fully urbanized drainage basin for which we have a plan. There are thirteen projects, the first six of which are directly for reduction of floodplain. A preliminary benefit and cost analysis was done. This master plan removes about 807 structures from the floodplain and significantly reduces the flood heights on the remaining flood zone areas. This master plan does not include any land use changes. This is a request to add the Deadmans Run Watershed Master Plan to the list of subarea plans and to the list of watershed master plans in the Comprehensive Plan.

Esseks observed that it is an amazing reduction in the extent of the floodplain.

## Proponents

**1. Devin Biesecker of Public Works & Utilities**, gave a power point presentation. The purpose of this master plan is to minimize the flood damage, control erosion and sedimentation in the channel, and to preserve watershed resources such as water quality, stream stability and riparian habitat. The overall goal is to develop a unified master plan for the entire City of Lincoln that identifies projects to get out in front of development in the newer areas and to address existing problems in the existing urban areas.

Public involvement was fairly comprehensive including three open houses; newsletter; Web site; stakeholder meetings with landowners that would be affected by the capital projects proposed; and a 20-member citizens advisory committee met three times during the study. The floodplain mapping is being updated with this study. New floodplain mapping will be brought forward to the City Council to adopt the floodplain mapping as "best available information".

This is also going through the FEMA process. Once FEMA adopts the floodplain, it will become the FEMA regulatory floodplain in Lincoln.

Biesecker pointed out that they started with 982 structures in the existing floodplain in Deadmans Run, most being residential. The main focus was to identify projects that would reduce this number. They considered channel improvements (Projects 1-4 identify channel projects that help channel more of the water downstream to reduce some of the overbank flooding). Since Deadmans Run

is built out, there are several areas where it would be difficult to widen the channel without impacting structures or adjacent property. In these areas, a more engineered channel is proposed with vertical stone walls. Where there is more room to work, they are proposing to lay the banks of the channel back to increase the capacity of the channel and allow more water to flow into the channel.

The further upstream they went with the improvements, they began to negate the benefits downstream so they had to look at other ways to control the water flowing into Deadmans Runs. Thus, the decision to look at detention in the watershed, where the study ends up showing two viable sites for stormwater detention that would help reduce the flooding, the first being on private property located near 56<sup>th</sup> & Holdrege (Chateau) and Lincoln Lutheran School. The proposal is to lower the ground in those two areas, which would allow the stormwater to flow into those detention areas and then slowly be released out as the flood waters recede. These areas are intended to be multi-use so that they could be used for recreation. The Lincoln Lutheran site currently serves as practice fields and that use could remain.

The second detention site is actually a city park site, Taylor Park, located south of O Street near 66<sup>th</sup> Street. This is proposed to be a multi-use facility, involving an earthen berm to hold back stormwater. They would need to excavate some high ground.

Biesecker explained that Project 7 is a local flood control project and has nothing to do with reducing floodplain. It is a local stormwater problem near Seacrest Park. Projects 8-13 are all water quality projects. These projects would take existing detention sites and modify them using either extended wet detention or extended dry detention to help filter out the pollutants in the stormwater.

Biesecker acknowledged that the cost of this master plan is fairly high (\$50,000,000), with the majority of the cost being in the flood control projects, and the majority of that cost is the downstream projects. Almost all of the channel projects have bridge replacement involved.

The benefit of this watershed master plan is a reduction of the floodplain and removing a little over 800 structures from the floodplain.

Biesecker stated that a simplified benefit cost analysis was done on these projects, considering the physical damages that would result from a 100-year storm event. They did not consider loss of function, business or transportation. They came up with a benefit cost ratio of about .8. Adding in the loss of function would result in a benefit cost ratio above 1.0.

It is anticipated that funding would be sought from the federal and state government to help with these projects.

Biesecker advised that the Lower Platte South NRD Board approved this master plan in December, 2007.

Larson inquired as to the reliability of these floodplain. Is it based on real scientific evidence? Biesecker stated that they used the same technology that was used to develop the floodplain mapping. He is very comfortable about getting that much reduction in the floodplain.

Larson inquired as to how much insurance savings there would be by taking these 800 structures out the floodplain. Biesecker believes that the flood insurance on a moderately priced home would be about \$1,000 per year. They would not have to pay flood insurance if they are not in the

floodplain.

Larson confirmed that there would be no local funding and no property tax impact. Biesecker believes there would have to be some local funding because most federal money is based on a cost-share.

Esseks inquired whether there are examples of the technology being proposed actually working, such as adding cement or other type of solid barriers. **Pat O'Neill of CDM**, the lead consultant for the study, stated that CDM has some real recent experience with these kinds of channel improvements. For example, Lenexa, Kansas, just restored a channel of two miles in a residential neighborhood with back yards abutting the channel with severe erosion and flooding. They used the vertical walls, coupled with natural vegetation. The construction has gone well and they plan to finish this spring. There are other multiple examples where they have had similar success.

Esseks confirmed that there is evidence that the houses are no longer in the floodplain because of these engineering changes. O'Neill concurred.

Gaylor-Baird asked Mr. O'Neill to address the concerns raised by Dr. Pederson. O'Neill believes that Dr. Pederson is concerned that excavating some of the higher ground could impact the cost of excavation and impact the ability to put natural vegetation back in the area. In the master plan, it is recommended that the first step is to do exploration of the subsurface condition, which will require some boring of the soil. If it is determined that the groundwater could have a substantial impact, the project would not proceed. The goal would be to excavate and keep the bottom of the detention basin above the groundwater table so that there is not flowing water. They will not be able to fine-tune this until they get additional soil borings, which is the next step.

Esseks wondered what kind of impact there would be on the ultimate goal of the master plan if Project No. 6 (Taylor Park) were removed or put on hold. O'Neill noted that there are two sites for detention. If Project 6 is removed, it would make the ability to get all the detention at that one site even more difficult. While it may be possible to get it all at one site, our study is not far enough along to conclude that. At this point it is better to have two sites in the master plan. Esseks and O'Neill agreed that there is a potential option to delete Project 6. O'Neill reminded the Commission that this is all at a conceptual level at this time.

**Nicole Fleck-Tooze of Public Works and Utilities** offered that one of the reasons you see the two detention sites included is to insure that we have adequate areas to provide the detention. If we do the channel improvements without the detention, we risk an adverse impact on the downstream properties. The detention is to make sure we have only a positive benefit and no adverse impact. We need to provide adequate storage area for that detention. We could not continue all the way up to Project 4 without all of the detention.

Moline suggested that if this detention area is taken out, it could harm the people downstream greater than they are today. Fleck-Tooze responded that if we are going to have the benefits we want, we must couple that with detention or we risk some adverse impact on some properties. You can't have one without the other. In order to seek federal funding from the Corps and FEMA, it is important to have a project composed in a way that is comprehensive to have that benefit cost greater than 1.0, which is the key to getting federal funds.

Moline wants specific answers about Dr. Pederson's concerns. Dr. Pederson is very qualified and Moline is not comfortable that Dr. Pederson's concerns have been mitigated. Fleck-Tooze referred

to the big picture – we are saying that the detention in general is absolutely essential to make the flood reduction projects workable. Part of the challenge is that we are now only at the level of a “conceptual” master plan and we have the obligation to examine all of the details when we go forward with a design. We do know today that we cannot proceed with many of the improvements or reduce the floodplain without also having that detention.

O’Neill stated that he does not dispute Dr. Pederson’s concerns about groundwater becoming an issue. But, since we are at a conceptual level, there is no money to go out and do subsurface borings. That would definitely be the first step as far as moving forward with design. If his concerns are then validated, we would not be able to proceed with the project.

Moline wondered what happens if the borings are done and Dr. Pederson is correct. O’Neill suggested that then Project 5 (Chateau and Lincoln Lutheran) becomes even that more important. Fleck-Tooze added that it may just be that the design for Taylor Park needs to be modified to take those issues into consideration.

Esseks does not believe that Dr. Pederson is challenging the position that detention is needed. He is suggesting that it may not be cost-effective. If the cost estimates are valid, let’s spend it to get those homes out of the floodplain. The on-site costs are significant, but the overall goal is so important.

Gaylor-Baird wondered whether Project 5 will be able to go forward. O’Neill reiterated that the master plan is still at the conceptual level. We are going to get much more detailed data as we move forward. All of the projects are going to be fine-tuned as they are taken through to design. There is potential that they could get modified, but at this point we feel they are viable.

Gaylor-Baird observed that we don’t have as much to work with as we do in less urban areas. Fleck-Tooze agreed. We don’t have the flexibility here with the constraints of the urban environment. Biesecker also noted that they did look at several sites for detention, with these two ending up being the ones that might be feasible.

Carroll noted that the Planning Commission did receive a briefing on this master plan about a month ago.

### Support

**1. Russell Miller** testified in support and submitted his testimony in writing. He also showed some photographs depicting how high the water will be under current conditions and showing examples of floodplain creep. Variances to the floodplain regulations should not be granted. Mr. Miller served on the Mayor’s Floodplain Task Force and the Deadmans Run Task Force.

### Opposition

**1. Stefan Gaspar**, managing partner for **Chateau Development**, 3100 S. 72<sup>nd</sup> Street, testified in opposition. He has been in charge of Chateau Meadows for 16 years. In those 16 years, the FEMA floodplain has changed three times. There were seven buildings which border Deadmans Run and they were all in the floodplain. After that, the floodplain was changed with only three buildings remaining in the floodplain. And in the last 5-7 years, there have been no buildings in the floodplain.

In other words, Deadmans Run has changed at least three times. They have put in rock and wire cages to slow down the flow of the water. They have also made concrete liners around Cotner Boulevard. Things change over the years.

Gaspar is concerned about detention Cell A because it is very close to the apartments. The slope is 33%. His sidewalks can have a maximum of 2% slope. He is concerned that the grade drop is quite significant and very close to an existing building.

He has looked at the cost of flood insurance. He owns a property in York, Nebraska, where the premium for flood insurance is \$300 on a building value of \$159,000. Thus the average cost to insure these structures in the floodplain is \$294,600. The cost of this project is \$49,846,000, so that means he can pay 169 years of flood insurance for those houses and break even. As a taxpayer, Gaspar questions the financial validity of this project.

Gaspar acknowledged that Cell A is vacant land at the present time and that he has no plans for that area. There is a sidewalk that was a contingency to get Adriana Apartments approved in 1986. It was a big deal to have that sidewalk constructed and this would require that it be rerouted.

Gaylor-Baird suggested that another issue the Commission may have to consider is that some of these buildings are businesses which have an impact on the community's well-being, thus she thinks this is really a greater economic development picture.

Larson inquired as to the financial impact on Chateau Development if this is approved and goes through. Gaspar wants his tax money to go to a project that is going to have a positive financial benefit. He would rather pay flood insurance for everyone.

Francis believes that the flood insurance rates in York are different than in Lincoln. From her experience, a \$58,000 house in Lincoln equates to \$475/year for flood insurance. Gaspar believes the question would be whether they are also insuring the contents of the house in addition to the building value.

**2. Fred Hoppe** also appeared on behalf of **Chateau Development**. Chateau does not want Project 5 in conjunction with this amendment. Chateau is not opposed to the FEMA mapping change, but the Planning Commission's approval of the other two parts is an implicit agreement with both the cost/benefit analysis and each and every one of the projects set forth. He believes that the Planning Commission approval is an implicit approval of each one of the projects. That is why Chateau objects to Project 5. It is his understanding that Project 5 is pivotal to the entire set of projects because that detention is the critical detention in the batch of projects. Chateau has consistently come forward against using their property for the detention cell. For a project that protects 800+ private properties, you are wanting to condemn another private property. If Chateau does not go along with the use of that property, it will have to be condemned. Are we going to condemn private property for a non-public use? You're looking at taking some private property for the benefit of other private property. You're not allocating the cost, which is directly allocable to moving private property out of the floodplain. We know that those property owners in the floodplain have a direct stream of payments that they are relieved of if they are out of the floodplain. That money could be used toward the project. There is a measurable benefit that can be assessed against those properties that are benefitted. Antelope Valley was sold on the fact that it would be federally funded, and that federal funding has not come through. How much of that do we have in this project? Should some of those properties be replaced rather than protected? Some of those structures in those neighborhoods probably should be replaced and not protected because most

of those properties were built in the 1930's. The Planning Commission needs to recognize the full extent of what this does.

### Neutral

**1. Mark Fahleson** appeared on behalf of **Lincoln Lutheran School Association** in a neutral capacity. Lincoln Lutheran wants to be a good citizen, but at the same time they are very concerned about their property located at 1100 N. 56<sup>th</sup>, which is landlocked, and the school is at capacity and enrollment is thriving. The area of Project 5 has been used for training fields by Lincoln Lutheran. This property has been improved in excess of \$50,000. If Project 5 goes forward, Lincoln Lutheran's interest needs to be considered as the property is developed.

**2. Scott Ernstmeyer, Executive Director of Lincoln Lutheran School Association**, stated that Lincoln Lutheran serves nearly 400 families on 18 acres. Their biggest concern is the ability to continue to use the facility for the sake of the families and students. Lincoln Lutheran has spent time and money in the last 2.5 years modifying and creating a game field, whereas before it was a much less investment on the far east end of the property. Their biggest concern is that throughout the course of project, the activities of Lincoln Lutheran need to be taken into consideration and the ability to continue to use as much of the space as possible before, during and after the project.

Since the land is in the floodplain, Esseks assumes there are no plans to put a building there. The issue is whether the city can design whatever modifications are required for flood storage in such a way that Lincoln Lutheran's rightful uses of the property will not be damaged. Ernstmeyer concurred.

Hartzell clarified that the Chateau outlot is a required open space for the community unit plan/apartment houses and is not slated for future development. The sidewalk would have to be rerouted in some way but she assumes they would have to deal with the grade. Biesecker confirmed that any sidewalk would have to meet ADA standards when replaced after this project. It would have to be meandered and meet the required slope, at the city's cost. The property would be put back in a way that is consistent with its designation as green space.

Gaylor-Baird inquired as to what staff sees as the biggest risk if we let all of the property owners continue to pay flood insurance and do not proceed with this project. Biesecker stated that the biggest risk is if the 100-year event were to occur – there would be several houses damaged by flood waters. There would be a question as to whether those houses would be allowed to be rebuilt. If they were in the floodway, they would not be able to be rebuilt. Hartzell offered that one of our primary concerns as public volunteers and employees is health, safety and welfare, and flooding is definitely a risk to all three.

Esseks inquired whether some of the 807 homes would be in jeopardy if there were a 50-year flood. O'Neill stated that when the flood damage assessment was done, they looked at how many homes would be impacted by the 10, 50 and 100 year events, and there were definitely impacts for all three storms.

Esseks observed that a very conservative benefit cost analysis approach is being used. It does not discount present values – it only looks at damage to the physical properties. O'Neill stated that the benefit cost analysis is based on a lengthy and stringent procedure that FEMA has published. They do estimate physical damage to the properties; however, there are a lot of economic damages also associated with flood, such as emergency management, displacement, temporary housing, loss of

business income, etc. These will be taken into account when the benefit cost analysis is finalized. We have not even gone to estimating all the costs that could be saved if these projects were in place. FEMA insurance is directly related to how much of a flood risk you have. We have seen insurance premiums go as high as \$2,000. In Deadmans Run we have depths of 7-8 feet, which is very significant, resulting in a much higher flood insurance premium.

Esseks wondered whether it is possible that some of these homes in the 1930's may not have that much disposable income and maybe cannot afford the insurance. O'Neill did not know how many people in the area have insurance, but depending on the premium and what it is meant to replace, it does not guarantee that they will get their home put back in the condition that it is today. This master plan attempts to protect all of the homes that are in the floodplain. All of the structures were treated equally.

Carroll pointed out that the Planning Commission is voting whether or not to add this master plan to the Comprehensive Plan. The Planning Commission is not being asked to approve each project or the expense of each project.

Gaylor-Baird asked whether there are communication mechanisms that would be in place that will allow conversation to occur to address the concerns. Biesecker explained that if this project were to move forward to design, such as through an easement agreement where the property owners would be paid for the use of their property, their concerns could be addressed and the property owners would be involved in the design of the improvements.

O'Neill believes that Lincoln Lutheran has a good point about having usability of their site during construction. Playing fields would be located to the right of Cell B on undisturbed ground before they even started construction. After lowering the ground for Cell B, the playing fields would be put back in the condition that they exist today. That area would only be flooded on a very infrequent basis. With regard to Cell A, the trail would be put back right along the alignment where it is today with the proper slope requirements.

Sunderman inquired as to the sort of event for which the cells would be used. Biesecker advised that Cell A (Chateau) would fill up during a 5-year or greater event. Cell B (Lincoln Lutheran) would have stormwater flow at a 10-year event or greater. The water would run out fairly quickly within 24 hours. It would take a little longer for the ground to dry out, maybe three or four days.

Moline inquired whether the city is responsible if there is any damage to the property. Biesecker acknowledged that Lincoln Lutheran did raise some maintenance concerns during discussions. If this project were to move forward, there would have to be some discussion in the easement agreement about the maintenance after a flood event.

If nothing were done, Esseks inquired whether any of these properties would be susceptible to flood. Biesecker stated that Cell A and Cell B are currently out of the FEMA mapped floodplain. There is property immediately downstream that would benefit from just the implementation of this project.

**ACTION BY PLANNING COMMISSION:**

January 16, 2008

Taylor moved approval, seconded by Esseks.

Larson observed that Chateau is objecting on a matter of principle as to whether or not public money should be used to relieve private expenses, and he is not sure about that. Although, it appears that the immediate impact for Chateau is fairly neutral.

Moline asked for clarification on the Planning Commission action.

Esseks believes that the Commission is giving a signal to the people in this area whose homes are now vulnerable. Through this plan, they are likely to be protected from a flood. They can make plans for the future. This is a very serious problem. Too many properties in this community are vulnerable to flooding and flooding is a terrible experience. He thinks this is a marvelous effort to deal with a really horrendous potential flood.

Gaylor-Baird believes that there is also an economic development aspect. This is an area that also includes a mall, several business districts, and numerous parks. If we have this land at risk and there is a flood, we may not see these businesses remain in this area and we could have a dead zone in the community. She believes that there would be a lot to lose from an economic development standpoint as well.

Taylor admires what has been done so far with removing that many structures from the floodplain.

Marvin Krout, Director of Planning, explained that the Planning Commission will have another opportunity to review any or all of the 13 projects in this master plan, but it will be as part of the Capital Improvements Program (CIP), at which time the Commission's official statutory role is to determine whether or not the project in the CIP is in conformance with the Comprehensive Plan. The Commission can have comments at the time, but you won't necessarily have a lot of details. Approving this plan is a direction to the staff and administration to seek federal funding for these projects, through bonds or whatever, and to place them in the CIP, and then bring those projects through the budget to the Planning Commission. The Planning Commission's role in the CIP process is fairly limited. The Planning Commission action on this proposal creates a presumption that this plan and the projects in it are a good strategy, and you are giving direction to pursue the elements of that plan.

Carroll believes people will have opportunity to speak when the project appears in the CIP. People living in the city and coming to the city would like to see what the city intends to do with floodplain areas, and it is up to us to give them a guide. This shows that the city intends to improve the floodplains in certain areas. This area does need to be improved. It brings over 800 structures out the floodplain. It improves the area economically.

Motion to approve carried 8-0: Sunderman, Esseks, Taylor, Gaylor-Baird, Larson, Moline, Francis and Carroll voting 'yes'; Cornelius absent. This is a recommendation to the City Council.



**CITY OF LINCOLN  
NEBRASKA**

**MAYOR CHRIS BEUTLER**

lincoln.ne.gov

Public Works and Utilities Department

555 South 10th Street  
Suite 203  
Lincoln, Nebraska 68508  
402-441-7548  
fax: 402-441-8609

December 18, 2007

Marvin Krout, Planning Director  
Lincoln-Lancaster Co. Planning Dept.  
555 S. 10th Street, Ste 213  
Lincoln, NE 68508

Dear Marvin:

This is a request by the Public Works and Utilities Department and the Lower Platte South Natural Resources District (NRD) to schedule a Comprehensive Plan Amendment for the Deadmans Run Watershed Master Plan on the January 16, 2008 Planning Commission agenda.

The Deadmans Run Watershed Master Plan is a joint project between the City of Lincoln and the Lower Platte South NRD and it represents the fifth master planning effort to date. Master Plans for Beal Slough, Southeast Upper Salt Creek, Stevens Creek, and Cardwell Branch have previously been adopted as subarea plans. The Deadmans Run Watershed Master Plan is the first master plan completed in a 100% urbanized watershed. Because the watershed is completely built out it was a challenge to identify solutions that met the goals of the Master Plan. The goals were to identify improvement projects to address future flooding, water quality and stream stability and to keep the proposed projects on existing park land or other publicly owned land as much as possible. The projects identified in the Master Plan would provide significant benefit to the City of Lincoln in addressing the potential for future flooding and water quality conditions in Deadmans Run.

Throughout the Master Plan, study information was made available to the public and meetings were held to give the public opportunities to provide input. This public process included open houses, meetings with stakeholders, a project website and project newsletters all of which are detailed in the report and executive summary. Information presented at the open houses and stakeholder meetings can be found online on the project website at lincoln.ne.gov, keyword: "watershed".

Should you have any questions or need further information, please contact Devin Biesecker in the Public Works and Utilities Department, [dbiesecker@lincoln.ne.gov](mailto:dbiesecker@lincoln.ne.gov) or at 441-4955

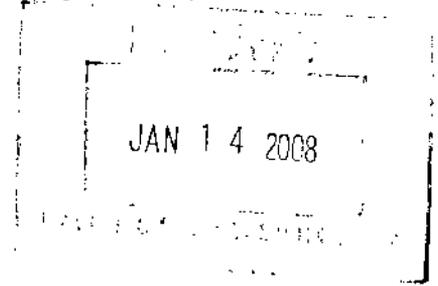
Sincerely,

  
Greg MacLean, Director  
Public Works & Utilities Dept.

  
Glenn Johnson, General Manager  
Lower Platte South NRD

- cc: Terry Genrich - Parks Dept.
- Nicole Fleck-Tooze, Ben, Higgins, Devin Biesecker - PW/U Dept.
- Sara Hartzell - Planning Dept.
- Pat O'Neill - CDM, Paul Zillig - Lower Platte South NRD
- Milan Wall - Heartland Center for Leadership Development





January 11, 2008

Lincoln-Lancaster County Planning Commission

Dear Commission Members:

The University Place Community Organization (UPCO) appreciated the opportunity to serve on the Citizen Advisory Committee that assisted with the development of the Deadmans Run Watershed Master Plan. We are concerned about the threat of flooding and the impact of having homes or businesses located in a designated floodplain as some areas are projected to be flooded with up to 7 feet of water. Implementing the plan would remove the flood threat to over 800 existing homes and businesses, reduce flooding of streets, the University of Nebraska's East Campus and other public property. We feel this will be a much needed improvement to our neighborhood and to Lincoln.

The University Place Community Organization is in support of this plan and we encourage the Planning Commission to approve the Deadmans Run Watershed Master Plan.

Sincerely,

Gail Anderson, President  
University Place Community Organization

Hello,

I am in favor of you approving and accepting Deadmans Run Watershed Master Plan.

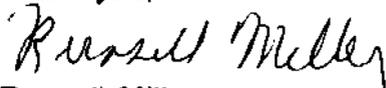
This Plan illustrates the importance of treating stormwater run-off with respect that it demands and will always get at some date in time. Hind sight is always perfect but this report shows the inefficiencies of not dealing with stormwater at the beginning of a building project.

It is projecting a cost of 50 million dollars to make life and property in its drainage area reasonably safe. If 1970's and 1980's government officials knew then what we know now, this expense would not exist. But the concepts of zero net rise(or no loss of storage) and no adverse impact did not exist. The plan of that day was to remove the water from their area as fast as possible. Our society now knows that that plan and attitude just pushes extra stormwater onto their downstream neighbors. Those neighbors then have the extra and unwanted cost of flood insurance.

Stormwater ordinances were not enacted to harass or prevent new businesses or development. They protect the many, many current property investments from further floodplain creep as it has happened in the Deadmans Run's watershed.

This Commission has and will continue to receive tremendous pressure to grant variances to developers from the stormwater regulations that are in place today. Please remember that the consequence of granting these waivers is another watershed that will look like Deadmans Run. The short term gain of one person is not worth the long term cost to the many persons downstream.

Thank you,



Russell Miller

341 S. 52

Lincoln, Nebraska 68510



Darryl Pederson  
<dpederson2@unl.edu>  
01/14/2008 03:46 PM

To plan@lincoln.ne.gov  
cc  
bcc

Subject Deadman's Run-Taylor Park retention basin

Lincoln/Lancaster County Planning Commission:

I urge you strongly not to approve the flood retention basin in Taylor Park as part of the Deadman's Run project. This project has the potential to create a local health hazard, disrupt access by children to Eastridge School, destroy the potential for use of this part of the park, severely stress or kill trees on private property bordering the park, does not meet cost/benefit standards, and will reduce property values in the area.

I am a member of the Deadman's Run Citizen Advisory Committee, a professional geologist and hydrogeologist, and have lived in the general park area for over 32 years. I feel well qualified to support the above statements.

The park is a general area of groundwater discharge. Before Taylor Creek started downcutting, there were a number of active springs at the park level along the creek. These springs dried up with incision of the channel but the groundwater discharge did not stop. Taylor Creek is a constant flowing groundwater fed stream as this area represents a general area of groundwater discharge for the water recharged in the Taylor Creek watershed. The Dakota formation also underlies the park and there is likely groundwater discharge from this geologic unit.

Why is it important to consider groundwater discharge? Groundwater discharge represents an intersection of the groundwater table with the surface. Groundwater levels are high underneath the park. It is likely that development of a retention basin will cut into the groundwater table. There will be difficulties in excavation of the retention basin as have been experienced other places. Cost overruns should be expected. The bottom of the basin will represent the top of the watertable with all the attended problems. Trees will not be able to grow because their roots would drown. There will likely be new springs developed in the basin bottom. There will be ample possibilities for mosquito breeding.

Filling of the retention basin during storm runoff would lead to recharge of the groundwater. Draining the basin afterwards will require considerable time. Placing drain tile for drainage will add to the cost of development and is not a panacea because there will still be problem areas within the basin.

As the basin will directly cut across the route that children take in going to Eastridge School this mean multiple days when they will have to take much longer alternate routes. Don't lose sight of the fact that the basin will directly border school grounds. The basin represents an attractive nuisance when filled especially because of its location by the school.

Because the basin will be developed on a short time scale (compared to tree root growth) there is a serious potential for severely

stressing trees on private property along the park boundaries. Currently the roots for these trees go down to the water table. Extensive root development is not required because of the abundant availability of groundwater. Dropping of the watertable with development of the basin will be on a much shorter time scale than roots can grow. Area trees will be severely stressed and may die.

The Nebraska Department of Highways paid dearly for doing just this along the section of the Platte River by the Brady Island rest stop on I-80. During the construction of I-80, the Platte River channel was dewatered so gravel could be mined. The rapid drop of the watertable resulted in extensive deaths of trees on the north side of the channel. One can still see the dead trees decades later. The owner of the land requested compensation for the loss of trees. The highway department denied any role. The landowner sued, the case went up through the courts and the Nebraska Supreme Court sided with the landowner. The owner collected orders of magnitude of compensation compared to what he first requested. The courts have established the precedent of he who drops the watertable pays for trees that die. The present of the underlying Dakota Formation increases the possibility that the hydrologic effects will be the same.

Trees are a critical component in determining property values. As a taxpayer I and many other citizens of Lincoln will be extremely upset if at some point Lincoln ends up having to pay for another dumb decision because the science was ignored. The flood plain map fiasco comes to mind.

The retention basin cannot under any conditions be considered aesthetically comparable to park land. Part of the value of homes in the area is based on bordering park land. This has not been considered in cost/benefit studies.

There is only one home along the park that might benefit from the retention pond. The home will still be flooded during very high runoff conditions as the height of the road over the culvert will back up water. This homeowner has a daylight basement window that caused the basement to flood in 2002. The road height has not changed since the house was purchased so the potential was not unknown. The house can be flood proofed by removing the window and filling in earth. The cost for this is far less than the millions for the retention pond.

Downstream in the Shopko and East Park Plaza area their design has considered the conveyance of flood water exceeding the capacity of the culvert at the north end of the park. This served well during the 2002 runoff event. Cars were washed off O street into the East Park Plaza area, but that was their choice to try to drive through high water. No buildings were flooded. My question, never answered during the meetings of the Deadman's Run Advisory Committee meetings, was if the retention pond would allow much greater development of the Shopko and East Park area. The answer was always that Taylor Creek is not a big enough watershed to be included in the Deadman's Run studies. I suspect that somewhere there is an analysis that has been done that will show that much more development can occur in the Shopko and East Park Plaza area with the retention basin.

I will bring this to a close by asking why Taylor Park residents have to pay the price for people downstream who developed in the floodplain? Certainly Shopko and East Park Plaza recognized they were building in a floodplain as demonstrated by their layout

design. In essence, property in flood plain of less value is enhanced by building structures that decrease values of land that is not in a floodplain.

Don't build the retention pond. The funds required for building the retention pond should be used to buy out the 80 some structures that would be removed from the floodplain, or at least pay their flood insurance. Most cities have addressed floodplain problems by clearing the land. It appears only in Lincoln that new development is allowed in floodplains

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