BROWNWOOD CITY COUNCIL
Willis Creek Channelization Study Presentation
by the Corp of Engineers and Speak for the Creek
6:00 p.m. Tuesday, May 24, 2016
The Depot Civic and Cultural Center
600 E. Adams Street, Brownwood, Texas

The public was invited to attend the Willis Creek Channelization Study Presentation by the Corp of Engineers and Speak for the Creek at the Depot Civic and Cultural Center, 600 E. Adams Street, Brownwood, Texas, where a quorum of the City Council was present. The Council did not deliberate or take any action. Those in attendance were: Councilman Ward 1, H.D. Jones; Councilman Ward 2, Ed McMillian; Councilman Ward 3, Larry Mathis; Councilman Ward 4, Draco Miller; Councilman Ward 5, Jerry DeHay; City Manager, Emily Crawford; City Secretary, Christi Wynn; and various City Staff.

City Manager Crawford introduced Daniel Graham with Speak for the Creek (and property owner within Willis Creek). Mr. Graham spoke about ecology and the flow of the creek and how human activity is the reason for flooding. Mr. Graham stated that the FEMA maps are driving the new study. The first study produced in 1997 – 2002 cost $337,500 and now we are conducting another $400,000 study. If a channelization of Willis Creek is done, FEMA will be required to re-evaluate the area and there is no guarantee it will change the current flood map. Mr. Graham showed a picture of Adams Branch and what a channelization project looks like. He stated the trees and shrubs were supposed to be planted along the tops of Adams Branch, or in nearby parks, but have not been planted as of yet. Channelization of Willis Creek does not automatically change the flood plain map. Mr. Graham spoke about the City of Brownwood Flood Plain Ordinance and how it allows development rather than preventing development. He spoke about various dams and the detention pond on Austin Avenue. Mr. Graham showed pictures of the Austin Avenue street widening project and where erosion has occurred. There are two approaches that can be taken to control flooding: 1) pipe water out so that it alleviates some of the water flowing into Willis Creek; or 2) the catchment approach – keeps the water on the land and allows water to soak in and prevents erosion. This can be done by adding permeable pavement in driveways, adding rock and vegetation on the roadsides, and planting trees, shrubs, and grass. Mr. Graham showed pictures of City property and projects where gully erosion has not been taken care of – to include: Gordon Wood Stadium, the Service Center parking lot, and the new ball park on Calvert Drive. These all run into South Willis Creek. Mr. Graham stated that the City maintains the landfill with mulch which is very good. He suggested researching a USDA cost sharing grant.

City Manager Crawford introduced Program Manager, Jon Loxley and Chief Civil Project Manager, Elston Eckhardt. Mr. Loxley stated that the City of Brownwood has experienced damages and loss of life from Willis Creek flooding. Floods have occurred in 1990, 1991, 2000, and 2015 and have had economic damages exceeding $10 million dollars. There have been portions of the City that have flooded over seven feet of water. There are 164 structures that could receive damage with a 100 year flooding event. Mr.

Loxley stated that the US Army Corp of Engineers (USACE) conducted a study of Willis Creek in 2003. The City of Brownwood chose not to move forward with the project at that time. In late 2014, the City of Brownwood entered into an agreement with USACE to re-examine feasibility of the 2003 recommended alternatives. Some of the things the USACE were asked to do was to ensure the cost-to-benefit ratio was justifiable, update flood plain to current conditions, design channel to carry 1% chance flood event (100 yr.), and to incorporate environmental mitigation features. In 2003, the recommended plan involved approximately 3 miles of Willis Creek, contained 100 year flows, included a one-side constructed channel, and had a central reach bypass channel. The bypass channel was to avoid disturbing Willis Creek. Some other possibilities were the possibility of upstream retention, the enlarging of some of the existing flood control structures, and buying out properties from the flood plain. For economic reasons, the project settled on one-sided construction. The bypass channel is a possibility and will look similar to Adams Branch. Mr. Loxley explained that the USACE sent a letter to affected property owners asking for input. Some of the concerns received back from the property owners included loss of residential property, the impact to natural Willis Creek, and the loss of screening from adjacent land uses. The City of Brownwood and the USACE looked through the comments and recognized that these were significant issues and that there may be some public opposition to the project. The City of Brownwood asked the USACE to look at a bypass channel. The channel would be along the southern portion of Willis Creek, would allow for maintaining natural Willis Creek, has less disruption to residential properties, and has the same level of flood protection with less environmental impacts. Mr. Loxley went over a Combo Plan Analysis designed to accommodate 100 year floods to incorporate a bypass channel. He stated that the channel design will need refinement to property balance conveyance. As the plan is implemented there may be some real-estate acquisitions in both residential and commercial areas. He stated that they would work with the City to identify additional mitigation and screening plantings. Mr. Loxley identified that the combination project is projected to go beyond federal program spending limits. He went over the projected approach and stated that their focus will be on the upper region of Willis Creek from US Highway 377 to Fourteenth Street Bridge. They plan to develop a companion channel, accommodate on-site environmental mitigation, incorporate screening plantings along the southern edge, and convey 100-year flows. Mr. Loxley stated that the timeline has been delayed due to the addition of the bypass channel to the project.

City Manager Crawford took questions from the audience:
Terry Blevins – Did the Adams Branch project reduce the flood plain? City Engineer, Donald Hatcher stated yes.

Citizen – How does best management practices impact water quality? Daniel Graham stated that it is based on nature and how nature cleans water by filtering it through soil. The best management practices are to help keep the water on-site.

Carey Parin – What is meant by natural character? Mr. Loxley stated that it is the current character of Willis Creek. Ms. Parin asked if they would imitate that in the bypass

channel. Mr. Loxley stated that no, the companion channel is very similar to the Adams Branch design.

Citizen – Stated that as we are envisioning the bypass channel he wants to make sure that the normal low flows stay a part of the Willis Creek. It is the flood flow that the citizens are more concerned about and when the area is in danger of flooding that the bypass channel will then be utilized.

Citizen – Concerned about the removal of trees along the banks of Willis Creek where the one-sided channelization project is being considered. He expressed concern about devalued property values along the creek. What assurances do the property owners have that if trees are removed to create the southernmost companion channel that they will be planted or left as is? Mr. Loxley stated that there will be efforts in place as they look towards the development of the project to minimize those impacts along the southern side of Willis Creek.

Citizen – Stated that there are 150 to 200 year old pecan trees and live oak trees along the water and to lose those trees would be outrageous. Mr. Loxley stated that not all of the trees along the southern edge will stay, but they will do their best to avoid, minimize, and mitigate.

Becky Jones – Stated that the Adams Branch channelization project is a big eye-sore. There are very nice homes along Willis Creek. What will happen to property values when this eye-sore is behind their homes and what do you propose to do about that? Are you going to compensate the property owners? How will the impact of a new companion channel impact property values? Mr. Loxley stated that there are residential properties that will be impacted by the project. Once the general foot-print of the project is recognized, there will be real-estate transactions associated with the project. With respect to the companion channel, the City is responsible for maintaining those areas. A walking path could be added and the planting of trees.

Citizen, Brice Harris – Stated that he is a business owner on the south side of Willis Creek. Who will maintain the areas outside the city limits? How wide will the channel be? Has dredging the creek been considered? Mr. Loxley stated that the City would be responsible for maintenance, even outside the city limits. The proposed channel is 40’ bottom width, with 3 1/2 to 1 side slopes. Dredging has not been considered as a part of the current plan.

Becky Jones - Stated that there could be a lot of improvements made to the current creek by straightening out some of the curves and cleaning. Mr. Loxley stated that in the 2003 plan some of the bends were proposed to be removed, but went against feedback received from property owners. Mrs. Jones stated that as a property owner, she would rather have a nook taken out than a 40’ channel running through her back yard.

Citizen, Scott Peters – Owns five acres on Asbury and stated that he does not want a 40’ channel in the middle of his property and does not want a walking / jogging trail where

people come on to his property. Mr. Peters suggested going out further and making a bigger drain and clean out more downstream areas. Mr. Loxley stated that cleaning could help with drainage issues, and that a 404 permit is required.

Citizen, Lemke – The 400 residents not currently in the flood plain that could be added if this project isn't done would have the same effect on their property values as well.

Citizen - If you increase the flow what kind of problems are you going to create downstream? Mr. Loxley stated that the volume of water would remain the same and beyond that project area they could experience continued flooding. This project should delay the flow and it is their intent to not have any negative impact downstream.

Citizen - Stated that the upper regions of Willis Creek does not flood and the project will stop at Fourteenth Street. This plan will not fix the lower areas of Willis Creek that experience flooding. Mr. Loxley stated that there are many more homes threatened by flooding in the upper region. Citizen stated that she has lived in the upper region for thirty years and has never experienced flooding.

Dr. Fred Kelly stated that he lives in the upper region. There was seventeen inches of rain and they did not flood. When water reaches the Fourteenth Street Bridge, logs block it up and needs to have a much larger opening, as well as the Fourth Street Bridge and the opening down the bayou. What has been done with the outflow when it hits the Fourteenth Street Bridge and will eminent domain be used to obtain this property? Mr. Loxley stated that there may be a suggestion to modify the bridge openings. With the respect to property acquisition that is a process that the City will need to work through with its residents. City Manager Crawford stated that we have not gotten that far on the project. This is a project that has to be approved by the City Council and is the reason for their attendance today. She stated that she hopes that eminent domain will not be used.

Citizen - How did the Corp of Engineers get involved in the process? He stated that he thinks the project is being driven by tax revenue. City Manager Crawford stated that the City received concern from the residents when FEMA changed their flood plain maps regarding residences that were not in the flood plain and would now be included in the flood plain. They asked for any kind of relief that the City could provide them so that their residences would not be included in the flood plain.

Citizen - If the channel is 40' at the bottom, how wide is it at the top? Mr. Loxley stated that some of it will be determined from the different topography and will be a trapezoidal shape.

Citizen - Stated that it does not make sense to have a 40' wide ditch through his back yard and then to stop at Fourteenth Street.

City Manager Crawford thanked everyone for attending and encouraged all to sign in for future forums and information.

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STEPHEN E. HAYNES, Mayor

ATTEST:

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CHRISTI WYNN, City Secretary