



The Calapooia River Erosion Concern

Summary: Brownsville experienced heavy flooding that cause large pieces of land to be lost to the Calapooia River in 2011. The City lost a restroom and a major waterline failed due to the erosion. Council went on a major search for funding, worked with the Governor's Office, hired experts all in an attempt to reach a solution. Council decided to retreat from the Calapooia River. Below are excerpts from Council Minutes and reports.

Council decided that the financial costs associated with such an endeavor would be too great with not enough surety that the Calapooia would not continue to erode.

2017



Council Minutes

March 28th, 2017

McDowell was recently contacted by Linn County indicating that there has been some discussion at the County level surrounding the Calapooia river erosion issue we are facing. He was told that grant funding is available to address the issue. To recap history, McDowell reminded Council that on January 19th, 2011 the park restroom was lost to the river. After that flood event, the City reached out to the Governor's Regional Solutions Team, Linn County and Federal representatives to review the situation. The options that were offered included a 'new techniques' approach at the cost of \$575,000, which included a 50% chance of failing in any given flood event. The Army Corp of Engineers indicated their project would cost approximately \$1.4 million, but would be a better long term solution. McDowell wonders how just land will qualify for a grant, when our restroom building did not qualify? Even if the City does qualify, there are matching funds required, and frankly, the City does not have the money at this time. McDowell would like direction from Council on the matter. Mayor Ware commented that the City should stay the course which is to retreat if need be. Council consensus was to stay the current course. Ware continued. "The river's gonna do what the river's gonna do, and we will need to adjust accordingly." At this point the City cannot really afford to do anything else without going for a bond.

2012



COUNCIL MINUTES

July 24th, 2012

ACTION ITEMS:

1. Pioneer Park River Bank Stabilization Effort. Mr. McDowell said that if Council chooses to move forward with a stabilization effort it was necessary to start the process moving forward due to the long time frame needed for engineering and permitting. McDowell gave a brief recommendation based on his Administrator's Report. Basically, there is no funding available for this kind of project. The City has exhausted every possible angle. Spending City funds is risky because there is no guarantee that the improvement will last. Two failures have happened this year just downstream. The City does not have any assets to protect by doing a stabilization project. Councilor Shepherd said that the Council should accept that it would not be possible to do anything as the water line repair project would consume all the City's available funds for the near future. Councilor Shepherd moved to adopt the option of taking no action and to move the playground should it prove necessary. Mr. McDowell said that the playground is east of the historic erosion line of the Calapooia River but that the City should put aside around \$10,000 per year for two or three years in case it proves necessary to relocate it. Councilor Chambers asked if the native plants would still be planted along the river bank. Mr. McDowell said that he would check with the Watershed Council but given the topography of the bank it may not be very successful. Public Works plans on removing a few trees and debris from the river along with the picnic table in the near future. The motion was seconded by Councilor Boyanovsky and was approved unanimously.



Excerpt from City Administrator Report

07.24.2012

Calapooia Stabilization – Council needs to make a decision regarding the future outcome of this potential project.

What We Have Learned

1. **Grant Funding Sources Are Not Available.** The City has exhausted every possible opportunity for State and Federal funding. The Governor's Office Regional Solutions Team, the Calapooia Watershed Council, the Army Corps of Engineers, the Linn County Engineer's Office and the Federal Emergency Management Agency have all thoroughly reviewed the stabilization effort.
2. **Construction Techniques.** The State & Federal rules and requirements do not allow the City to place rip rap along the bank for stabilization purposes. River Design Group Incorporated, Cascade Earth Sciences and the Calapooia Watershed Council have done extensive engineering designs around the construction principles allowed in the 21st century. Scott Wright of River Design Group shared with Council at the public hearing in January 2012 approved construction techniques for this type of stabilization effort.
3. **Costs.** Engineering solutions built to the 50 year flood standard would cost the City approximately \$275,000. Engineering solutions built to the 100 year flood standard would be in excess of \$1,000,000.
4. **Risk.** The Calapooia Watershed Council suffered damage to two stabilization efforts just downstream of the City's problem area. A project of this nature does not have a projectable useful life. A flood event like the one in January 2012 could completely destroy any improvement made by the City.
5. **Improvements.** The City has many other capital improvement projects that have high costs associated with their eventual construction.
6. **Budgetary Constraints.** Allocating financial resources for such a project could cause an undue strain on the municipal treasury.

Thoughts

1. **Retreatment Strategy.** Park Board was generally in favor of retreating. The plan presented and reviewed by the Board and Council in November 2011 included removing the gravel road west of the playground, creating a new cul-de-sac turnaround area north of the playground, planting native species along the top of the bank from Gerber's property line to just north of the logging show area. The City would budget to eventually move the playground across from the Community Arts building at some point in the future.
2. **Asset Protection.** What is the City trying to protect? So far the City has retreated out of necessity. The only asset that we had in the area was the restroom that had to be removed.
3. **Historic Channel.** While we do not know the complete history of the Calapooia River channel, we do know that according to the research on record the channel has never been beyond the west road at the edge of the playground.
4. **Wild River.** All of the presentations have demonstrated one thing – the Calapooia is restless and is continually moving regardless of what manmade structures are created to contain the river's banks and path.
5. **Hard Structures.** There has been a lot of discussion about the hydrology of the river and consternation over the rip-rap corner bend. I would submit for your consideration that the rip-rap was installed around 1964 and the City did not experience the bank destabilization until around 2004. It is hard to extrapolate a direct correlation forty years later.

Decision

Staff needs to know Council's wishes for this project. If the City chooses to move forward with an engineering design, Staff will need to start executing contracts in order to get a substantial design completed by October 2012, otherwise we will miss the opportunity to work in the river in 2013.

Recommendation

The stabilization of the river has been a very emotional issue. Pioneer Park is the crown jewel of Brownsville. Everyone loves the Park. There has been a lot of frustration over the rules and regulations that are in place to protect the environment. Many have offered solutions to the problem, but no one has a viable solution that meets the current regulatory requirements and that will offer long term stability for the bank. The City has worked with every political figure in the State to determine a way to fund and construct this project.

Every Councilor is going to have their own perspective and understanding of what this issue means to both them individually and to the City collectively. My recommendation is to consider a retreatment strategy. I base that recommendation on the fact that the project is a very risky undertaking on three fronts, 1) Politically – people who are wanting something done will be the first to condemn if the project should fail, 2) Financially – spending the taxpayers money to protect no known assets does not make sense to me, and 3) Construction – there is no guarantee that any method used will be effective in the long-term future.

BROWNSVILLE CITY COUNCIL MEETING MINUTES

February 28th, 2012

DISCUSSION ITEM – PIONEER PARK EROSION:

Mr. McDowell asked that this item be moved up in the agenda as Mr. Quigley was present. Mr. McDowell said that at the moment there are more questions than answers. He said that he has had multiple meetings with state and federal agencies and officials. Mr. McDowell said that he is still waiting to see if there is a Federal disaster declaration. He said that the estimate for the water line repair is \$496,000, but the river water level needs to drop this summer before the exact nature of the damage can be determined. Councilor Cole asked about permitting for the water line work. Mr. Quigley said that the City may be able to get permits for work late in the summer under a conditional permitting process. He said that any work on the stream bank stabilization will not be possible this summer. Mr. McDowell said that he is budgeting \$100,000 in the next budget for stabilization work with the plan to put another \$125,000 in the following year's budget for work to be done in late summer 2013. He said that it is difficult as the stabilization work will need to be funded out of the General Fund, which is financially tight. Mr. McDowell said that the State has loan money for the waterline work and the cost of repaying the loan would add about \$5 per month to each water bill. However, it would have to be funded through a bond measure and the measure would need to be on the ballot by March 15. Mr. McDowell said that he can budget \$450, 000 in the next budget for the water line work if needed but it would result in three years of very tight budgets. Mr. McDowell said that all of this is contingent on the outcome of the federal disaster declaration and what the various State and Federal agencies do. Mr. McDowell asked if Council approved of his decision to postpone design services through River Design Group, Inc. until October or November of 2012 since there is no grant money available and due to the necessary permitting process. Council was in agreement by consensus.