



Feasible Options Community Meeting Q & A

Central Arlington Heights & Forest Park Berry
September 22, 2010

Frequently Asked Questions

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QUESTIONS ABOUT FLOODING

- 1. Was this a slow, growing problem or something that happened all of the sudden? Why wasn't something done many years ago?**
 - Most of the Fort Worth neighborhoods subject to severe flooding were developed in the first half of the twentieth century. The pipes were greatly undersized as compared to current standards because providing high levels of protection from low-frequency storm events was not as high of a priority in those days as it is now. By the 1950s, the commercial area along Camp Bowie was generally developed, and flooding was a common occurrence in Arlington Heights. Several studies were performed by the City over the years to address flooding but these problems, compared to other community needs, were apparently not considered to be high enough of a priority for funding to be dedicated to address them.
 - Although the amount of impervious cover has increased slowly over time due to such things as expanded parking in the Camp Bowie commercial district and the addition of patios and outbuildings to residential property, what has dramatically increased is the amount of damage

caused by flooding. Carpeting and air conditioner compressors are among items that have become common since the 1950s that are highly susceptible to damage from flooding. The amount of electronic circuitry in vehicles today makes them subject to significant damage even in smaller storms. Flooding that likely would have been considered a bad nuisance 40 years ago is devastating today.

- The situation is similar in the Forest Park-Berry watershed, except that development along Berry Street happened later than along Camp Bowie. The majority of the Forest Park-Berry watershed, is residential area where the increase in impervious surface is limited to patios, outbuildings, and other impervious surfaces added to residential lots. These types of increases in impervious surface can aggravate drainage problems on individual properties but do not significantly aggravate the overall problem.

2. What do I do and who do I call when water starts to rise?

- When water starts to rise, call 911. Police and Fire continue to be the City's emergency responders. Storm Water maintenance crews can generally only provide barricades when requested by emergency responders.
- If you are driving during storms and come to a flooded roadway, remember the saying, TURN AROUND, DON'T DROWN. Never attempt to cross a roadway if you cannot see the road surface or the curbs. Call 911 to notify police to close the roadway.

3. Why is this considered a 100 year floodplain when our property floods 4-6 times per year?

- When the [National Flood Insurance Program \(NFIP\)](#) was authorized in 1968, the 100-year storm was adopted as the standard for hazard measurement. Since there is no guarantee as to the timing of the 100-year event, hydrologists have in recent years begun to refer to it as the "one-percent storm," that is the storm which has a one percent chance to occur during any one year.
- Most studies consider other storms besides the 100-year storm. Nevertheless, the 100-year event is still considered as the ideal design storm to protect against. The "100-year" floodplain is designed to include all property subject to flooding during the one-percent event, whether it floods only in that one storm or it floods in almost every storm.
- A review of FEMA's Flood Insurance Rate Maps will indicate that most flooding neighborhoods in Fort Worth are not in a mapped floodplain, or "Special Flood Hazard Area." FEMA studies and maps are geared toward river and stream flooding, so flooding due to undersized storm drains is considered by FEMA to be a local drainage problem for mapping purposes. Nevertheless, all property owners in Fort Worth are eligible and encouraged to buy flood insurance. Damage from rising flood waters is not covered on standard property insurance policies (see #5 below).

4. Homeowners have offered to build concrete ramps or culverts on their property, but haven't had success working with the City on these solutions. Why not?

- Ramps, culverts and flood walls are measures that may provide relief for some property owners, but often they only push the water onto other properties rather than reduce the overall flooding problem. The City is looking for solutions to provide relief to all flood-prone property owners and cannot participate in on-site solutions which may have a detrimental effect on nearby or downstream properties.

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- If the Feasible Options Study concludes that such on-site treatments are part of an adopted plan, then the City will consider such treatments for all affected homes for which such treatments would be effective.

5. Why should we get flood insurance? Property owners have had trouble proving claims with recurring damage, and the insurance company saying that damage was caused by prior flooding.

- The City of Fort Worth participates in the [National Flood Insurance Program \(NFIP\)](#), and as such all property owners in Fort Worth are eligible and encouraged to buy flood insurance. Damage from rising flood waters is not covered on standard property insurance policies. Flood insurance not only will cover costs associated with flood repairs, but repeated claims can increase the amount of federal assistance and mitigation grants available for flood control projects.
- Like with all insurance claims, documenting both pre-damage and post-damage conditions through photographs is the best tool that property owners can use to substantiate their damage claims.

6. TAD keeps raising our appraisals even though our homes are flood prone and the damage diminishes the value of our home. Wouldn't it be proactive for the City to automatically send letters to affected property owners to help them get appraisals lowered?

- The City has prepared letters in the past describing flooding problems for individual owners to take to the Tarrant Appraisal District if they choose to contest their property values. These letters are most effective when they are tailored by City staff to the specific flooding problem. For this reason, the letters will continue to be provided, but only as requested by individuals.

7. Is the City's water conservation program involved with the storm water problems?

- Not directly. Fort Worth obtains its drinking water from a number of regional reservoirs. The water is pumped to treatment plants, purified, and pumped through a distribution network all across the City. Used water which goes into house drains is transported by sanitary sewers to the Village Creek treatment plant, where it is treated and released into the Trinity River. Neither of these is connected to the storm drain and creek system. The goal of the water conservation plan is to reduce costs associated with water purchases, increased pumping, plant expansions and treatment costs as Fort Worth looks to the future.
- There are a few practices which can reduce flooding and conserve water, such as rain barrels which collect storm water for later use in irrigation. Since most heavy storms happen during extended rainy periods, most rain barrels will be near full and likely to have only a minimal impact on total water runoff. The City is considering sponsoring a rain barrel program in the future.

8. Will added green space prevent future flooding?

- Green spaces always help—the less impervious cover, the less runoff and the less flooding. Unfortunately, the Central Arlington Heights and Forest Park-Berry watersheds have been fully developed for decades, and the only way to add enough green space to make a difference is to remove existing structures and paving.

QUESTIONS ABOUT THE STORM WATER UTILITY

9. What is the total revenue of the Storm Water Utility? How is it spent?

- The Storm Water Utility Fund is an Enterprise Fund with the responsibility for providing Storm Water management to approximately 200,000 residential and non-residential customers in the City of Fort Worth. The Storm Water Management Division within the Transportation and Public Works Department is responsible for managing the entire municipal storm drain system, including discharges to and from the municipal system. The division's mission is to develop and implement a cohesive, focused program *to protect people and property from harmful storm water runoff*.
- The assessment of the Storm Water infrastructure is an ongoing effort; however the current estimate for projects to address life safety issues, flooding and infrastructure protection is over \$1.0 billion. The FY11 Budget for the Utility is \$28,065,024.
- Storm Water Management is responsible for planning, constructing, operating and maintaining the city-owned storm system. Storm water utility revenues are used for the following activities:
 - Conducting watershed studies to identify needed improvements
 - Reviewing new development for compliance with storm water plans and standards
 - Cleaning open channels, catch basins, storm drains, and culverts
 - Reestablishing vegetation following construction or due to flooding or erosion
 - Performing repairs in response to structural failures such as erosion and damaged pipe
 - Responding to storms and other emergencies.

10. How do corporate abatements impact funding? Are there abatements for Storm Water Utility fees?

- The Storm Water Management program is fully funded by storm water utility fees. Corporate tax abatements have no effect on storm water utility revenue.
- There are no corporate abatements for Storm Water Utility fees. All properties in the City of Fort Worth, except those expressly exempted by law, are assessed the storm water utility fee.

11. How is flooding in other parts of Fort Worth being addressed? How are projects prioritized? What consideration is given to public safety and not just property damage?

- When the Storm Water Utility was created in 2006, capital expenditures were projected to rise from \$7 million per year in 2007 to \$30 million in 2012. Engineering design and design scoping were begun for a total of 65 project locations in 2007 with a total estimated cost of \$95 million. These projects represent much of the backlog of known drainage needs and most are under \$3 million apiece. The projects include:
 - expansion of a number of small storm drain systems and installation of new storm drains in flood-prone neighborhoods;
 - upgrade of low-water crossings and undersized culverts at hazardous roadway crossings;
 - property buyouts along floodprone streams;
 - channel erosion repair; and,
 - rehabilitation of storm drains with structural problems.
- Public safety and property damage are both considerations for initiating capital projects. The City has a Storm Water Master Plan under development to identify drainage needs in all neighborhoods across the City. The Central Arlington Heights and Forest Park-Berry studies are

early elements in the Storm Water Master Plan. One goal of the Feasible Options Study is to guide City staff in developing criteria to prioritize future projects for implementation.

12. Was a bond passed to fix Arlington Heights flooding in recent years?

- No bonds have been passed recently that were dedicated to either the Central Arlington Heights or Forest Park-Berry drainage problems. Of the \$14.8 million for drainage projects in the 2004 bond election, \$1.3 million was earmarked for studies. These studies examined almost 300 roadways subject to hazardous flooding and five of the City's storm drain watersheds. The 2007 bond election dedicated funds for the street reconstruction of Western Avenue from Bryce to El Campo. That reconstruction will be held back to coincide with future drainage improvements in this area.

13. Would the City consider selling bonds to pay for the program? Or applying for state or federal funds? Could we get the money together to move these projects forward more quickly?

- Because there are so many competing priorities, municipal bond elections can address only a limited number of City needs, predominantly residential and arterial street improvements and new fire stations, libraries and community centers. In the 2004 bond election before the Storm Water Utility was created, drainage projects received only \$14.8 million of the total \$273.5 million bond package. Due to the current financial difficulties, it is unlikely that the City will consider another bond election in the near future.
- We will look for and evaluate any grant opportunities but grants do not appear to be a long-term sustainable funding source around which to build this program. Grants can have processes and restrictions which can result in additional project delays and/or costs. Those possible downsides must be fully considered in determining if a grant opportunity will truly help a project in the overall evaluation.
- The Storm Water Utility, like other utilities, was set up to finance its own capital projects through revenue bonds, which are based on its own revenue stream. The Storm Water Utility issued \$25 million in revenue bonds in 2008-2009 and is issuing \$45 million in revenue bonds in 2010-2011. One item that the Feasible Options Study will explore is the sustainable level of revenue bonds that the Storm Water Utility can issue to address drainage needs in the future without increasing the Storm Water Utility fee to an unacceptable level.

14. Does the City have a regular schedule for storm drain maintenance?

- Under the new Storm Water Utility, maintenance is progressing from reactive to pro-active. Systematic inlet cleaning of the City's 30,000 inlets is a new program. Critical structures which have been identified are routinely inspected for blockages or other problems. As new problem areas are discovered, these are added to the critical structures list.
- If you observe blocked drains, please contact 817-392-6261.

QUESTIONS ABOUT THE FEASIBLE OPTIONS STUDY AND IMPLEMENTING IMPROVEMENTS

15. What kind of solutions are you considering? Which houses are being considered for demolition or removal? We have a concern about historic homes.

- The Feasible Options Study is a process-based planning study that will initially consider the whole universe of potential solutions. This includes traditional drainage infrastructure measures such as larger storm drains and detention basins, as well as non-traditional measures

such as floodwalls, rain barrels, and even the purchase and removal of flood-prone homes. Each measure will be evaluated with respect to its effectiveness, economic efficiency, and acceptability; and as the study progresses some measures will be eliminated from further consideration. At this time, there are no specific plans, and as such it is impossible to provide any specifics regarding demolition, relocation or removal.

- These are old and treasured neighborhoods within the City of Fort Worth. As such, it is important to maintain the integrity and fabric of the community. At the same time, there are some homes that were constructed in areas that are naturally prone to flooding, and sometimes the only way to provide meaningful reduction in flood damages to a particular structure is to remove it from the flood prone area. The Feasible Options Study will attempt to weigh the sentiment of the community and the desire to preserve the historical character against the real need to provide relief from flooding. This is one of the reasons why public engagement is so essential.

16. When will dirt turn on a solution?

- There are two factors that will determine when projects are begun: design completion and funding availability. Concerning design, once the Feasible Options Study is complete, the watershed studies will then be wrapped up to reflect the selected solutions. Engineering design consultants have already been selected and can start detailed design once the specific solutions are delineated. Based on the size and complexity of projects that will likely be needed to improve the drainage in these areas, the probable levels of utility relocation and property acquisition, and funding availability, we estimate that construction will begin in the 2015-2016 timeframe.

17. How much money is being spent on public relations? Why are we paying a consultant for that?

- There is no simple solution to the problems in these two watersheds. Meaningful flood damage reduction will involve some difficult decisions by the City of Fort Worth, and it is important to gain an accurate understanding of the desires and priorities of the community. For these reasons, a firm has been engaged to assist the team in communication both *to* and *from* the stakeholders. The City's in-house public relations and education capability is very limited and cannot provide the level of support needed for this type of initiative.
- The communications budget for the project is about \$50,000. This includes the communications professional as well as the cost of the meetings and communication materials. This is a relatively small amount to pay for ensuring that the community is actively involved in this project, particularly when considering that each project will likely cost well in excess of \$10 million.

18. Can you elaborate on which communities you're studying for comparison?

- There are a number of cities with storm water utilities and/or drainage capital improvement programs. Most, if not all, face financial challenges in meeting the needs of their communities. We are trying to identify cities that have successful programs, and preferably communities that may have challenges similar to those we face in Fort Worth.
- Some of the cities we have identified as having mature and successful storm water and drainage programs are Louisville, Charlotte, Seattle, and Tulsa. We will also look at San Antonio, Dallas, and Harris County.

QUESTIONS ABOUT DEVELOPMENT REGULATIONS

19. What kind of coordination is being done with the zoning commission and others to prevent problems from getting worse? Could zoning be used to mitigate problems when properties are being redeveloped?

- Zoning cases, proposed property divisions, and some proposed projects are sent to TPW for general review before they are acted on by the Zoning Commission, City Planning Commission, or City staff. Zoning can sometimes be an effective tool for preventing increases in the area of impervious surface in a watershed– which tends to increase runoff – as an alternative to providing on-site structural controls for achieving the same purpose. However, it may not be possible to solve flooding problems with zoning when a watershed subject to flooding is already built-out, as is the case with both the Central Arlington Heights neighborhood and the Forest Park-Berry area. As we look to the future in developing areas of the city, there is a growing trend nationwide to use on-site controls that mimic natural drainage systems. These Low-Impact Development techniques could be applied to future development in sensitive watersheds or those where flooding is a concern.

20. Why do we allow duplexes with huge parking lots rather than encouraging single family houses with more green space?

- Duplexes tend to have larger driveways than single family homes, but the overall increase in impervious area caused by duplexes is usually fairly small. The decision to grant zoning that allows duplexes is based on a broad range of community issues of which storm water impact is usually a minor consideration.

QUESTIONS ABOUT WEB INFORMATION

21. Can we get maps of problem areas? Are they online?

- Maps and meeting information will be available on the project website. (See question #22)

22. Will you have a stakeholder website?

- Yes. A project website will be developed for stakeholders to read about and retrieve information regarding the Feasibility Options Study. The site is currently under construction and will be available by early November.