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### Addicks/Barker Reservoir System and its Problems.

Addicks and Barker Reservoirs- part of drainage system developed in 1940s after severe storm to prevent any future damage from floods inflicted by heavy rains of tropical storms. Since creation of reservoirs have passed about 70 years, but problems with floods is still relevant. Last year hurricane Harvey led to widespread floods, due to inability of Addicks and Barker Reservoirs system to hold rain water under control. This topic is very important because those floods inflicted by Hurricane Harvey have deep, harmful impact on many civilians in whole Houston area. Many lost their homes and had nowhere to go. As one of many residents living in this area, it in my interest to help to find some way to solve this flood problem. In this paper I will describe stories behind Addicks Reservoir and South Mayde Creek in my neighborhood; I will discuss 1981 plans for modification of Addicks and Barker Reservoirs, describe my own experience in my neighborhood during Hurricane Harvey with my recent visit to South Mayde Creek, give an example to compare from history of Ancient Rome's Tiber River floods and its impacts on ancient civilization, Finally, I will overview civilian activism to take some action regarding floods in Houston area. Based on all of this provided information I want argue for wealthy ranks of Houston, oil business men, and simple business owners to participate in development of infrastructure that will prevent damage from future floods, as Ancient Roman patricians were patrons of many major infrastructure of cities in urban areas of Mediterranean Sea, present day businessmen must to become such patrons.

## Research

My findings gave me understanding that floods are big topic discussed in Houston area. Almost all of my resources for this work was taken from paper 2, which was submitted earlier this semester. During work on paper 2 we have attended UH Special Collections Archives. There I was able to find best material I could wish for, and it was proposed plans by US military engineer's corps of modification of Addicks and Barker Reservoir dated to 1981. The Army Corps' plans provided with explicit understanding of procedure for modification of infrastructure in US and that any modifications for better flood holding infrastructure will cost a sufficient amount of money. Other materials I found regarding background Addicks Reservoir on Harris County Flood Control District website, for comparison with other time period and part of the world I found book about Tiber River floods in ancient Rome, I found news article describing meeting of Addicks Reservoir area residents held on Aug. 25 2018, and their concern for lack of activity by officials toward solving flood problem. Also, I found scholarly work conducted by group of scientists led by Ms. Goldsmith on topic of damage taken by Buffalo Bayou due to floods and how to restore it to its previous conditions.

During my Fieldnotes trip, I visited Cullen Park, through which is going South Mayde Creek, and I was able to look closer to my neighborhood watershed connected to Addicks Reservoir, and still lasting impacts of Hurricane Harvey on it. When I was conducting my research, I was looking from historical point of view. As a history major, for me general picture created by many sources is very important in understanding of human behavior and in this case human actions toward struggle with natural disasters. So, basically, I was looking for any relevant information related to history of the development of Addicks reservoir and its tributaries, development infrastructure for flood control in the area of Addicks Reservoir, I

was looking for any evidence of human activity on local level to fight flood damages to human sphere of everyday life.

Ms. Goldsmith and her team observed severe erosion inflicted by heavy rains. Scientific research was conducted by Wendi Goldsmith and her colleagues on topic of damage inflicted by seasonal heavy rains and hurricanes- "Project #23: Buffalo Bayou". The Banks of Buffalo Bayou damaged and need for recovery. River bank is "actively receding along a reach of approximately 280 ft (84 m) long and 25–35 ft (7.5–10.5 m) high on outside bend". Ms. Goldsmith and her group proposed that stream should be redirected, river banks rebuilt and drainage canals built around it to help keep health of Buffalo bayou river bank in good health. This info appeals to main topic by showing that our environment is get damaged due to natural causes, and we need to try to help it to recover and make it possible for rivers to serve its purpose during heavy rains in years to come.

In ancient Rome, in city of Rome itself floods were a big problem. Campus Martius, located in city of Rome- plain where people's assembly conducted its meeting to vote on important matters- was constantly flooded about two meters deep. In his book, Gregory S. Aldrete "*Floods of the Tiber in Ancient Rome*" shows examples from primary sources of floods and its impacts on life of romans. For example, due to the fact that most of the patricians (wealthy landowners) built their houses on Roman seven hills, specially Palatine, their residences weren't damaged most of the time, but plebeians and their houses on outskirts of the Rome were damaged severely. Another example is ancient priest post of Pontific (Pontus- bridge). This post was reserved for special priests that were required to keep intact bridge that was built across Tiber River, every time floods damaged bridge severely and bridge was required to be rebuild by Pontiffs. All these examples give us vision in the past of ancient civilization, but also provides us with understanding that two thousand years ago, people had the same problems with floods, as we do have in our time. And those

examples give us hindsight that, example of Pontiffs, well-off ranks of population, were funding recovery works after floods, and even special priests order was created to rebuilt bridge after every single flood. And as result we can ask for the same thing of business owners, to help with modification of flood infrastructure by financing these projects, to become our time pontiffs.

### First hands

During my visit to UH Special Collections Archives I was lucky to be able to find Plans proposed by US Military Engineers Corps regarding modifications of Addicks and Barker Reservoirs dams dated to 1981. Basically, all this information providing us with efforts made by officials to conduct research on matter of floods and related to it infrastructure, analyze situation and propose ways of solving the problem. The biggest problem with the plans is big costs of conducting any meaningful modifications to dams, and result is lack of any action toward actual work on problem of floods. Folder of these plans contained report with about six proposed plans of modifications of dams such as enlarging dams itself with costs of modifications, buying surrounding resident areas and enlarge reservoirs system, etc. These plans help us to understand that to fight flood damage in future we need large financial capital, which regular civilian don't have at hand. And it shows need of help from the wealthy ranks of Houstonians to fund such projects, need of support of legislation to pass any project in place.

Addicks Reservoir was built by US Engineer Corps in 1940, at the same time with Barker Reservoir. Was completed in 1948. Both reservoirs were part of plan to relieve Houston area from harmful consequences of heavy rains which resulting in floods around the area of Buffalo Bayou. Watershed is located west of Harris County, has four main streams: Bear Creek, Horsepen Creek, Langham Creek, South Mayde Creek. Drainage system

covering 138 square miles. US Engineer corps operating reservoirs and its dams. All these tells us that about long-standing efforts made to counter floods damages in Houston area. Gives us understanding that even though there was made efforts to fight flood damages, it is not enough to counter it completely with Hurricane Harvey in mind.

Many citizens were requesting third reservoir to be added to help Addicks and Barker Reservoirs. As example of regular civilians' actions regarding matter of floods there is news article by Mike Glenn of Chron which described meeting of Addicks reservoir area residents and their proposition to solve problems of floods. Some officials afraid that voters will prevent approval of any anti flood bill, if it will not implement creation of third reservoir. One of the main ideas proposed by officials was financing of cleaning of springs, rivers and canals to free way for water in severe weather situations. This news article showing actions taken by civilians, their personal efforts in diminishing impacts of heavy rains. Basically, it shows that at any level of social and political interaction, residents of Addicks Reservoir area, as in whole Houston area, attempting to solve problems with damaging heavy rains.

I have recently visited Cullen Park as part of my fieldnotes, through which is flowing South Mayde Creek. As we can clearly see on the pictures below taken by me, there is severe erosion damage on river banks inflicted by hurricane Harvey. This is a minor stream of Addicks and Barker Reservoirs system, but still its impact on life of the people is a big one. After Hurricane Harvey, all the roads of the park were covered in dirt, sign of high level of water, many trees were fallen, river banks damaged. Harris County Flood Control District proposed only extra clearing for river from natural and human waste, but no major development of the stream, any recovery of its river banks or enlarging its capacity to control water under control during heavy rains.



Photos of South Mayde Creek

### Conclusion

Based on information provided above, from Addicks and Barker Reservoirs modifications plans by US engineer corps to the example of floods of Tiber River in Ancient Rome, we can see that problem of floods have caused constant struggles between human and nature for thousands of years in all parts of the World, this problem was before and it will stay after we will leave this world, but while we are here it is in our power to do something, to modify our surroundings and create more protected living space for ourselves and in meantime for our successors. The problem with floods is not in nature, but in lack of possibilities of regular civilians, even combined, to finance the means of diminishing damages from floods, therefore I am calling for help of well-off population of Houston to help finance projects as modification of Addicks dams, to become patrons of Houston area, to contribute to wellbeing of Houston.

## Works Cited

- “Addicks Reservoir”. Harris County Flood Control District. <<https://www.hcfcd.org/projects-studies/addicks-reservoir/>>
- Aldrete, Gregory S. “Floods of the Tiber in Ancient Rome.” Johns Hopkins University Press. 2006.< <https://epdf.tips/floods-of-the-tiber-in-ancient-rome-ancient-society-and-history.html>>
- Sigler, James M. “Protection of Dams from the Spillway Design Flood.” 11/2/1981. Box 44, Folder 1. Bayou Preservation Association Records. Special Collections, University of Houston Libraries, Houston, TX.  
<[https://findingaids.lib.uh.edu/repositories/2/archival\\_objects/311565](https://findingaids.lib.uh.edu/repositories/2/archival_objects/311565)>
- Glenn, Mike. “Proposed flood control bond meeting for Addicks Reservoir residents.” 25 June 2018. Chron.<<https://www.chron.com/neighborhood/katy/news/article/Proposed-flood-control-bond-meeting-for-Addicks-13024178.php>>
- Goldsmith, Wendi, et al.” Project #23: Buffalo Bayou.” Springer, New York, NY. 19 October 2013.< [https://link-springer-com.ezproxy.lib.uh.edu/chapter/10.1007%2F978-1-4614-7996-3\\_24#citeas](https://link-springer-com.ezproxy.lib.uh.edu/chapter/10.1007%2F978-1-4614-7996-3_24#citeas)>
- “Selective Clearing at Addicks Reservoir.” 18 December 2018. Harris County Flood Control District. <<https://www.hcfcd.org/projects-studies/addicks-reservoir/selective-clearing-at-addicks-reservoir/>>