

On March 20, 2020, City Manager Gregory Rose declared a State of Emergency for the City of University City due to the COVID-19 Pandemic. Due to the ongoing efforts to limit the spread of the COVID-19 virus, the April 12, 2021 meeting will be conducted via videoconference.

STUDY SESSION
VIA VIDEOCONFERENCE
**Flood Warning System and
Minority Participation Policy**
April 12, 2021
5:30 p.m.

AGENDA

Requested by City Manager

1. MEETING CALLED TO ORDER

At the Study Session of the City Council of University City held via videoconference, on Monday, April 12, 2021, Mayor Terry Crow called the meeting to order at 5:31 p.m.

In addition to the Mayor, the following members of Council were present:

Councilmember Stacy Clay
Councilmember Aleta Klein
Councilmember Steven McMahon
Councilmember Jeffrey Hales
Councilmember Tim Cusick
Councilmember Bwayne Smotherson

Also in attendance were City Manager, Gregory Rose; City Attorney, John F. Mulligan, Jr.; Director of Public Works, Sinan Alpaslan; Director of Finance, Keith Cole; Commissioners Eric Stein and Todd Thompson, of the Storm Water Commission.

2. CHANGES TO REGULAR AGENDA

Mr. Rose requested that Item H-3; (Conditional Use Permit (PC-21-05), Convenience Store at 8326-8328 Olive Blvd.), be moved to the April 26th meeting.

3. EARLY WARNING SYSTEM

Mr. Alpaslan stated members of the Storm Water Commission are present to provide Council with an update on the Flood Early Warning System.

Commissioner Stein stated based on all the facts ascertained by the Task Force their written report presented to Council last year recommended that the City implement its own Flood Warning System instead of waiting for the USACE.

Background

- Both the USACE and the City's Storm Water Task Force (*now commission*) have recommended a flood warning system; (FWS).
- The Task Force found that significant resources for a system are already in place.
 - Extensive USGS stream gauge & MSD rain gauge data for our watershed exists. This is required to develop a basis for predicting floods.
 - Expertise exists on the Task Force for analyzing this data.
 - Advances in technology make the equipment required affordable.
 - These factors would allow the City to develop its own system rather than wait on the uncertainty and cost of a USACE system.

Components of a Flood Warning System

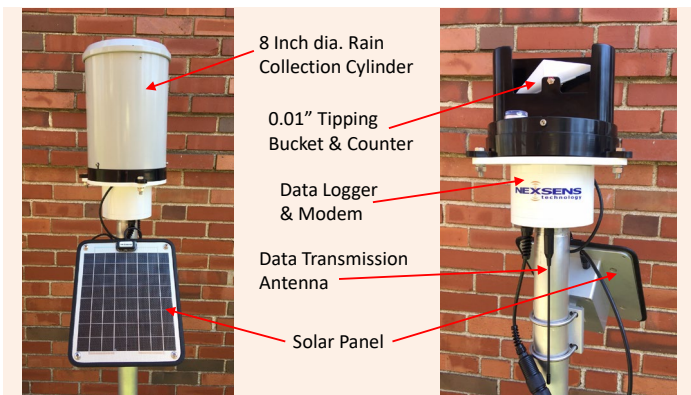
- An established protocol for the prediction of flooding based on rainfall.
- Rain gauges. Must be located in the watershed of the problem stream due to the localized nature of rainstorms.
- Stream gauges (sometimes). In our case not, because the River Des Peres (RDP) rises too quickly.
- Data logging equipment to record rain gauge readings.
- Telemetry capability for transmitting the data to a control center.
- A control center to collect, record, and analyze the data, and issue alarms when rainfall exceeds a predetermined threshold that is predictive of flooding.
- A system for disseminating warnings to the public, along with established emergency protocols.

U City's System - Prediction Protocol

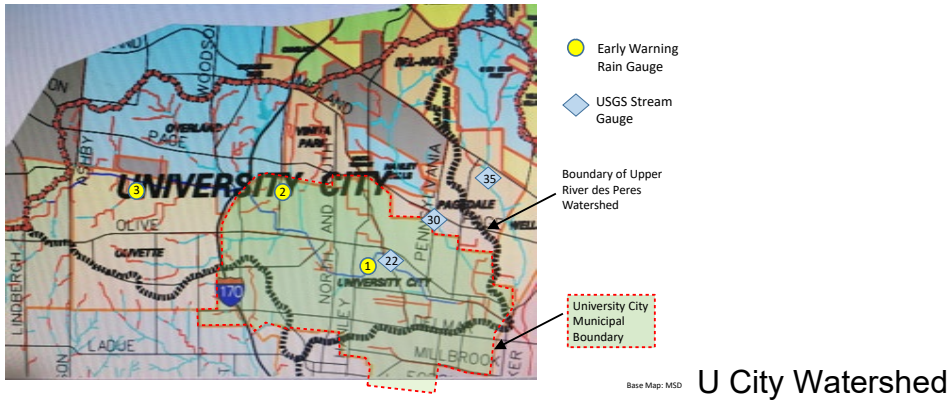
- Commission member Dr. Robert Criss; Professor of Earth & Planetary Science, built an extensive database and developed statistical protocols for flood prediction.
- Data included 10 years of 5-minute interval data from the USGS stream gauge in Heman Park and six MSD rain gauges in or near our watershed (thanks to MSD for access).....over 7 million data points.
- Experimentation showed a statistically reliable basis for flood prediction exists.

U City's System - Rain Gauges

- Three enterprise-level, automated rain gauges (NexSens G2-Rain Alert Systems), with solar power packs distributed across our 9 square mile watershed.
 - Wilson buyout tract, at Wilson & Drexel (operational).
 - Fogerty Park, near the parking lot at 82nd St (operational).
 - Indian Meadows Park in Olivette (pending).
- Gauges have integrated data logger to record rainfall at 5-minute intervals.
- Gauges have integrated cellular data modem that reports to the control center at 5-minute intervals at the onset of rainfall.



Battery Powered Automated Rain Gauge mounted on streetlights

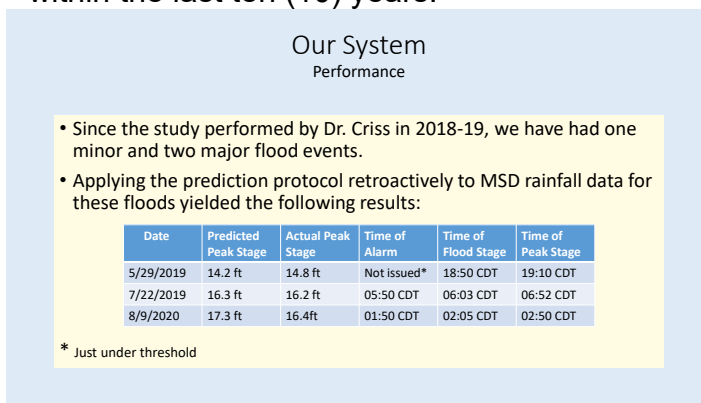


U City's System - Control Center

- Control Center is a cloud-based SaaS system (*Software as a Service*).
- Provided by the rain gauge manufacturer.
- Gauges transmit data to the City's private account at this center.
- Individuals designated by the City can log in from any computer.
- From there, we can configure the gauges, collect, record, and analyze data, and configure automated alarms to designated recipients.
- The software provides for a public portal. (*Portal to be provided to Council*)
- Emerging trends toward SaaS and cellular data transmission are what make a system like this affordable.

Performance

- Data based on MSD rainfall records.
- Flood stage equals 14 square feet; water at the top of the bank
- U City has had seven (7) 16-foot storms in twenty (20) years; six (6) have occurred within the last ten (10) years.



Current Status

- Get the Olivette gauge up and running. (*Olivette was scheduled to have a walk-through of the site on March 19th and examine possible gauge locations.*)
 - Important. This is in the RDP headwaters where much of our flood water originates.
 - The system will be ready to issue alarms within 1-2 weeks of installation.
 - Decide how to disseminate warnings to the public and define associated emergency protocols.

- The Commission envisions an FWS alarm going to the City's emergency dispatch, which then issues a public warning.
- Many vendors provide targeted emergency notification services to the public by text/email/phone.
- These are SaaS systems, with the price determined by the population served. The best known is CodeRed; used by Jefferson County. Olivette uses SirenGPS.
- City emergency managers need to be involved in the process at this point.

Future Requirements - Next Steps

- Direct the City's flood plain manager to collect data on future major floods.
 - Measure elevations of high water marks in neighborhoods; (*FEMA & USGS have training materials*).
 - Gather data on damages, including building inspection & first responder reports.
 - Procure support equipment for this; (*survey equipment, install staff gauges in flood-prone areas*).
 - Post signs showing historically high water levels to raise public awareness.
- Procure equipment to allow commission members to research stream behavior during floods.
 - Water level measuring equipment. Video cameras at Hafner Court, Groby Bridge, and Pennsylvania bridges, which may be under-sized.

Related Commission Activities

- Established a basis for measuring high-water levels of future floods.
 - The City has not collected water level data for previous floods. This is important for planning.
 - Commission members used a satellite-based surveying system to establish elevations of reference points in flood-prone areas.
 - These will serve as calibration points for measuring high water elevations for future flood events. They are accurate to within one inch.
- Developed materials for public outreach and education on stormwater and flooding issues to be published in ROARS and possible website.
- Solicited photos & information from the public on past floods to fill in gaps.
- Developing a 3-D printed model of our watershed for public display, based on satellite LIDAR data.
- Attending USACE team meetings.

Commissioner Thompson stated Mark Holly has arranged to display a prototype of the 3-D model in his garage tomorrow evening for anyone interested.

He stated he visited the Olivette site which is a much-undeveloped area. So, it may not be that Olivette is stonewalling, just that they are unsure of what they want to do with the area. However, this is not a very intrusive installation and whatever the City can do to help move this forward would be appreciated.

Mr. Thompson stated the USACE has almost concluded its review and should be making their recommendation on what their project will consist of for U City. Primarily, he believes it will entail detention basins, levees, or floodwalls in residential and commercial areas.

Councilmember Clay thanked the Commission for their work.

Mayor Crow stated he is acquainted with Olivette's Mayor and several of their Council members, so he would be happy to help if and when it is appropriate to do so.

Mr. Rose stated Mr. Alpaslan has been working with the Director of Public Works, but at some point, he may need to address this issue with their City Manager.

Councilmember Klein asked if Olivette needed to be in place before anything could be done in U City? Mr. Stein stated if the rainfall were uniform across U City's watershed all you would need is one gauge. However, the reason for three (3) gauges is to ensure that you are adequately accounting for the variations that occur. So, while the two U City gauges that are already operational are better than nothing, to cover all bets you really need that third eye in Olivette. But technically, the alarms are configured, and the City could go with what it has.

Mayor Crow stated it is a real benefit to have such talented people living within this community and he would like to thank the Commission for the incredible work they have performed.

4. MINORITY PARTICIPATION POLICY

Mr. Rose stated pursuant to Council's request regarding information on the City's existing policy, he has asked Mr. Cole to make this next presentation.

Mr. Cole highlighted the pertinent portions of each Section related to the City's requirements for minority participation.

Section 135.010 – Personnel Requirements for Contractors with City (Ordinance No. 5604, June 1, 1987)

A. Any person, firm, or corporation contracting with the City to provide services such as but not limited to, technical/professional services, street repairs, supplies, building maintenance, **at a cost to the City of fifty thousand dollars (\$50,000.00) or more and involving ten (10) or more employees in the workforce providing the contracted services, shall, as a condition precedent to the rendition of such services, certify by affidavit filed with the said City that at least twenty percent (20%) of the workforce providing the contracted services shall consist of workers generally classified as members of minorities and/or female workers. The City Council may, under special circumstances such as, for example, situations requiring technical expertise and/or specialization, waive the conditions set forth herein, provided, however, that such waiver is justified by a two-thirds (2/3) vote of the City Council.**

Section 135.010 – Personnel Requirements for Contractors with City (Ordinance No. 5604, June 1, 1987), continued.

B. Any person, firm, or corporation contracting with the City to provide **services involving payment of one hundred thousand dollars (\$100,000.00) or more in which there are two (2) or more subcontractors** shall agree with the City that at least fifteen percent (15%) of the total amount of the City's contract shall be allocated to subcontractors who employ workers generally classified as members of minorities and/or female workers.

Section 135.020 – Personnel Requirements with Respect to Employees and Owners (Ordinance No. 6818, June 21, 2010)

A. As many as possible of the City contracts over two thousand dollars (\$2,000.00) shall be entered into with the following:

- Individuals generally classified as members of minorities and/or female; and
- Firms consisting of individuals generally classified as members of minorities and/or female; and
- Corporations, the stock of which is owned by the individuals generally classified as members of minorities and/or females.

B. The City Manager shall take all reasonable steps to achieve compliance with this Section; which steps shall include, but are not limited by, the following:

- Regularly and periodically place ads in the media, which are aimed at the minorities, to solicit those minorities to bid on City contracts and to place themselves on the City's bid list;
- When publishing bid notices, the City at all times will also publish in a minority newspaper; and
- Utilize all available directories of minority and female firms.

C. The City Manager shall report quarterly to the City Council of the efforts in carrying out this Section and the results of said efforts.

D. All minority and/or female firms, corporations, or individuals shall file an affidavit with the City, prior to commencing work, that they are a minority and/or female firm, corporation, or individual.

Mr. Rose stated this is an area that was decentralized, and this year staff made the first steps towards centralizing this policy under the Finance Department. He stated based on his knowledge, Ms. Fitch was the last person to hold the position of a Purchasing Coordinator, which is something they are in the process of trying to reinstate. He stated the goal is to ensure that all departments are following these standard operating procedures and the City can do a better job with reporting its program results.

Councilmember Clay asked Mr. Rose when he believed staff would be in a position to provide these results to Council? Mr. Rose stated initially staff's priority is to put all of these procedures in place because prior to the centralization every department was doing its own thing.

Mr. Cole stated the Purchasing Specialist has revised the City's Purchasing Policy to include these Sections of the Code to make sure every department is complying. But he will need time to review the policy before it goes into affect.

Councilmember Clay asked if staff had a sense of whether departments were meeting any of these percentages? Mr. Rose stated although this does not mean departments have not been adhering to these requirements, to his knowledge, minority contract percentages have been tracked for at least ten (10) years. However, going forward, his objective is to put the appropriate resources in place to ensure these policies, as well as the State Statutes, are properly executed. The creation of a Purchasing Specialist position is the first step but if the City is to do a good job with oversight of these contracts, additional resources will be needed.

Mr. Rose stated unfortunately, staff is dealing with a lot of challenges, but he hopes to have these policies in place within the next 90 to 120 days. Once that is completed, he will have a better understanding of the type of resources needed and will advise Council of his findings.

Councilmember Smotherson stated these policies seem to indicate that when the cost of a contract increases, the amount of minority participation is decreased. For example, any contract at a cost to the City of fifty thousand dollars (\$50,000.00) requires at least twenty (20) percent, but a contract at a cost to the City of one hundred thousand dollars (\$100,000.00) only requires fifteen (15) percent. Can someone provide him with an explanation of these percentages and whether this is something that can be amended by Council? Mr. Cole stated his understanding is that the fifteen (15) percent requirement refers to subcontractors and the twenty (20) percent requirement refers to the prime contractor.

Mayor Crow stated these policies have probably been off the administration's radar for some time. However, now that the City is starting to engage in some sizeable construction projects, this might be a good opportunity to see what U City's neighboring communities are doing in this area to ensure that the City is on an equal playing field in its implementation and execution of these policies.

Mr. Rose stated staff would be happy to conduct the suggested research to identify how the City's policies compare to its surrounding neighbors.

Mayor Crow stated he appreciates the fact that this issue has been brought to Council's attention because during his tenure, he does not recall ever seeing a report on minority participation.

5. ADJOURNMENT

Mayor Crow adjourned the Study Session at 6:22 p.m.

LaRette Reese
City Clerk

