



Legislation Details (With Text)

**File #:** 15-18494    **Version:** 1    **Name:**  
**Type:** Consent Item    **Status:** Approved  
**File created:** 7/29/2022    **In control:** City Council Business Meeting  
**On agenda:** 9/12/2022    **Final action:** 9/12/2022  
**Title:** Rain and Stream Gauges Maintenance Agreement

**Attachments:**

Date	Ver.	Action By	Action	Result
9/12/2022	1	City Council Business Meeting	Approve	

**Rain and Stream Gauges Maintenance Agreement**

**Action:**

- A. Approve a five-year agreement with the United State Geological Survey for an amount up to \$2,254,100 for maintenance of storm water rain and stream gauges, and**
- B. Authorize the City Manager to amend the agreement consistent with the purpose for which the agreement was approved.**

**Staff Resource(s):**

Angela Charles, Charlotte Water  
Mike Davis, Storm Water Services  
Samantha Willis, Storm Water Services

**Explanation**

- The funding from this agreement is used to maintain the rain and stream gauge system in the City of Charlotte stream network.
- Since 1961, the City of Charlotte has worked with the United State Geological Survey (USGS) to gather rainfall and stream flow information through a cost-sharing program. The previous agreement was for a five-year period and approved by City Council on November 13, 2017.
- The rain and stream gauge system for the City of Charlotte is part of a nationwide network that measures quantity and quality of surface water resources.
  - A rain gauge electronically collects and transmits the amount of rain at the location the gauge is stationed. The gauge transmits rainfall amounts to the USGS office for compilation.
  - A stream gauge electronically collects and transmits information about the water within streams and lakes. The gauge collects and transmits elevation, temperature, and flow information to the USGS office for compilation.
  - There are 29 stream gauge stations and 38 rain gauge stations in the City of Charlotte stream network.
- Data from the gauge system is used to:
  - Determine flood-prone areas,
  - Review rain event impacts,
  - Determine long-term trends,
  - Aid in surface water quality investigations,
  - Assist in drainage infrastructure design, and
  - Notify emergency personnel of potential threats to life and property.
- The agreement with USGS is for a five-year period. The total five-year cost is \$3,597,800. The city’s share payable to USGS on 29 stream gauges and 38 rain gauges is \$2,254,100, with USGS

funding the remaining \$1,343,700.

- Mecklenburg County has a separate annual agreement with USGS and shares the cost on 24 stream gauges and 36 rain gauges.

**Charlotte Business INclusion**

Contracts with other units of federal or state government are exempt (Part A: Appendix 1.27 of the Charlotte Business INclusion Policy).

**Fiscal Note**

Funding: Storm Water Operating Fund