

## 11. CONSIDERATION OF USGS FUNDING AGREEMENT CHOWAN RIVER BASIN

As you may recall from your April 2012 meeting, the Board authorized the expenditure of slightly less than \$7,000 annually for two years in partnering with six other localities and the U.S. Geological Survey (USGS) to operate and maintain six (6) additional river gauges that were installed by the Army Corps of Engineers in the Chowan River Basin. I've attached an aerial photo illustrating the locations of the gauges – three of them are physically located in Southampton County:

1. Blackwater River at the Broadwater Bridge;
2. Nottoway River at the General Vaughan Bridge (258); and
3. Meherrin River at the Lowgrounds Road Bridge.

The other gauges are physically located in Mecklenburg County, Brunswick County and the City of Franklin.

Since the initial 2-year agreement expires this year, it is necessary for the communities to enter into a new agreement with the (USGS). Attached for your reference, please find a proposed Funding Agreement which contemplates a new 5-year agreement. The USGS is proposing to contribute \$48,600 annually and the seven (7) localities will equally share the balance of annual costs which are projected to increase to \$7,050 each in 2015 and between 1.5% and 2.5% each year thereafter.

I am scheduled to meet with the USGS this Friday (March 21) to discuss the benefits that have accrued to the participating communities over the past 2 years and will share additional information at Monday's meeting.

### **MOTION REQUIRED:**

**If the Board is so inclined, a motion is required to approve the annual funding for operation and maintenance of the six river gauges.**



## 2014-2015 Funding Agreement for Monitoring of Streamgages in the Chowan River Basin, Virginia

The U.S. Geological Survey (USGS), working with the U.S. Army Corps of Engineers and a number of State agencies and localities as part of a Technical Committee for the Section 22 Project to Identify Stream/Rainfall/Water Quality Gages for the Chowan River Basin, installed six streamflow monitoring sites in the Chowan Basin to better understand and predict flooding (table 1). Information from these sites is now being used to better understand flood prediction and impacts in the basin and is providing enhanced information related to mitigation planning, preparedness, response, and recovery.

**Table 1.** USGS streamflow monitoring sites that were added to existing Chowan River Basin, Virginia, network. [NAD83, North American Datum of 1983]

Station Number	Station Name	Latitude (NAD83)	Longitude (NAD83)	Installation Date
02045320	Nottoway River at Rt. 609 near McKenney, VA	36°54'04"	77°40'25"	01/29/2013
02047370	Nottoway River near Riverdale, VA	36°34'00"	76°56'41"	07/16/2013
02047783	Blackwater River at Rt. 620 near Zuni, VA	36°54'23"	76°49'13"	04/18/2013
02050000	Blackwater River at Hwys 58/258 at Franklin, VA	36°40'49"	76°55'07"	06/30/2010
02051190	Meherrin River at Rt. 637 near South Hill, VA	36°47'13"	78°07'03"	01/30/2013
02052090	Meherrin River near Bryants Corner, VA	36°34'12"	77°21'41"	11/26/2012

Funding for site installation was provided by the State of Virginia and matched by the USGS. It was agreed that annual operational costs will be shared by the localities in the Chowan River Basin and the USGS. The initial agreement covered a 2-year period for site installation and operation. A new agreement between the USGS and the partner localities throughout the Chowan Basin is now needed to continue site operation that will provide better understanding of flooding in the basin. **The partner localities supporting this effort are the City of Franklin, City of Emporia, Isle of Wight County, Southampton County, Greensville County, Surry County, and Sussex County.**

The USGS is requesting a 5-year funding agreement be agreed upon by the partner localities (table 2). The City of Franklin will serve as the local sponsor for the network signing a joint funding agreement with the USGS and coordinating agreements between the City and other local funding partners.

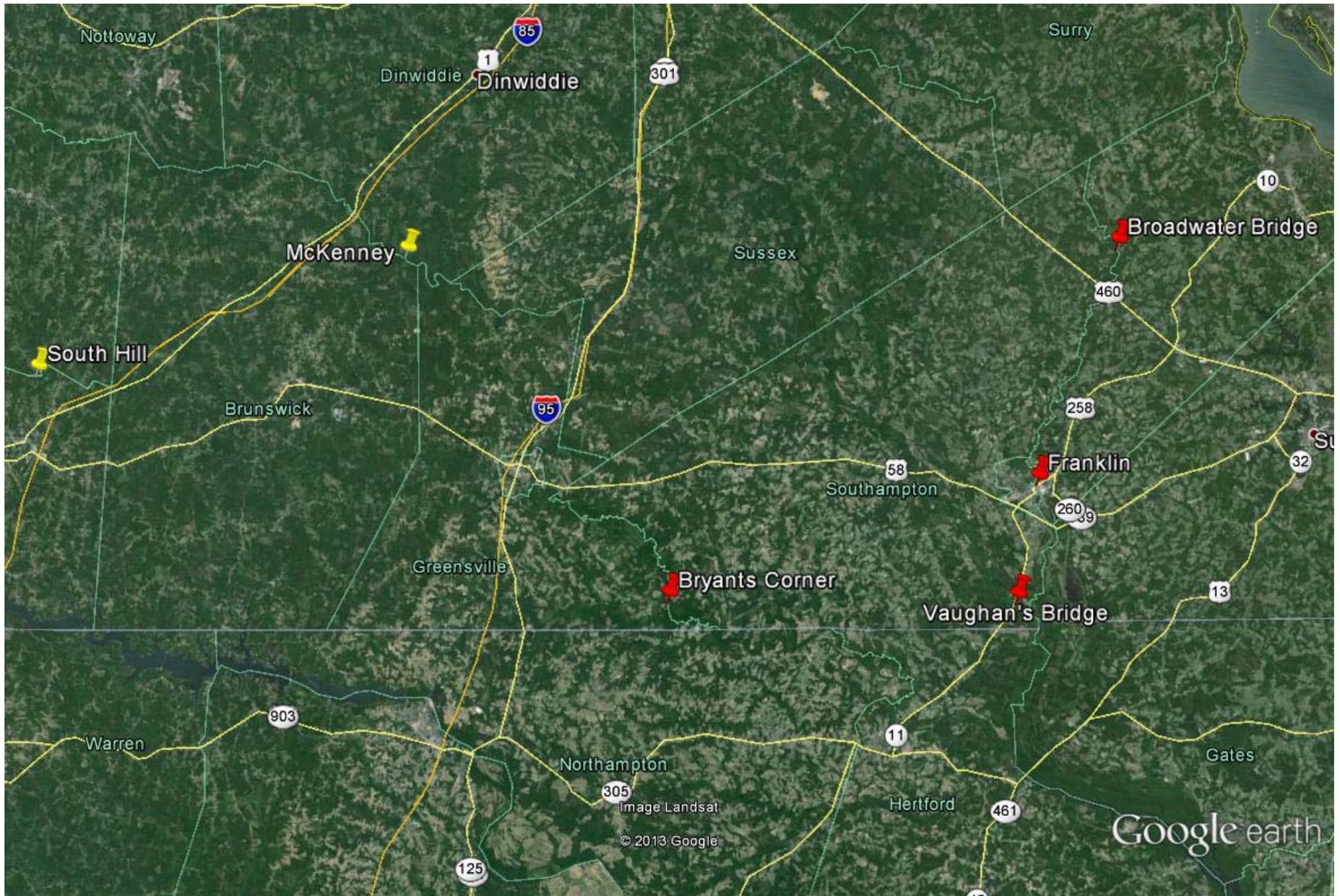
Continued – 2014-2015 Funding Agreement for Monitoring of Streamgages in the Chowan River Basin, Virginia

**Table 2.** 5-year funding summary of Chowan Basin Water Monitoring Program

Fiscal Year	Chowan Basin Localities	USGS Matching Funds	Annual Operating Cost
2015	\$49,350	\$48,600	\$97,950
2016	\$50,400	\$48,600	\$99,000
2017	\$51,600	\$48,600	\$100,200
2018	\$52,350	\$48,600	\$100,950
2019	\$53,400	\$48,600	\$102,000
Total cost	\$257,100	\$243,000	\$500,100

Funding for site operation will be used to ensure continued data collection efforts at the six monitoring sites in the Chowan River Basin. Efforts such as USGS employee salary and travel as well as equipment calibration, equipment replacement, water level and streamflow measurements, and general gage maintenance will be funded by the dollars shown in table 2.

If there are any questions, please contact Russ Lotspeich, Acting Hydrologic Network Operations Chief, at (804) 261-2637.



## **7. PROPOSAL TO INSTALL ADDITIONAL FLOW GAUGES IN THE CHOWAN RIVER BASIN**

In 2008, Southampton County contributed slightly less than \$6,500 for its pro-rata share of a \$90,000 study prepared by the U.S. Army Corps of Engineers which identified the location, number and types of river gauges that would better predict the timing and extent of flood events within the Chowan Basin (Blackwater, Nottoway and Meherrin Rivers). Other participating communities included the counties of Greenville, Sussex, Surry and Isle of Wight as well as the cities of Emporia and Franklin.

The study was completed in 2010 and recommended construction of a number of new gauges throughout the basin, locally on the Blackwater River near Zuni and the Meherrin River near Branchville. There are existing gauges on the Nottoway River near Sebrell and the Blackwater River near Burdette. The Commonwealth of Virginia and U.S. Geological Survey have agreed to split the cost of buying and installing the gauges throughout the basin, but the cost of maintenance must be shared equally by the local communities. Those costs have been estimated at approximately \$7,000 per locality for the first 2 years and will be reviewed and adjusted accordingly thereafter.

Mr. Mark Mansfield, Chief of Policy and Planning for the U.S. Army Corps of Engineers, Norfolk District, is scheduled to make a brief presentation on the project and solicit your participation in maintaining them. The proposal was approved by the Franklin City Council on April 9.

### **MOTION REQUIRED:**

**If the Board is so inclined, a motion is required to approve annual funding of \$6,915 for maintenance and operation of the gauges.**