

## **AGENDA NOTE – HRPDC QUARTERLY COMMISSION MEETING**

### **ITEM #10-G: LAND SUBSIDENCE**

#### **SUBJECT:**

The HRPDC staff will recommend an approach to obtain better data to predict future rates of land subsidence.

#### **BACKGROUND:**

The HRPDC partnered with U.S. Geological Survey (USGS) in 2012-13 to evaluate the existing measurements of land subsidence in the region. The USGS report, *Land Subsidence and Relative Se Level Rise in the Southern Chesapeake Bay Region* notes that land subsidence has been observed since the 1940s in the southern Chesapeake Bay region at rates of 1.1 to 4.8 millimeters per year, and subsidence continues today. Data indicates that land subsidence has been responsible for more than half the relative sea-level rise measured in the region. The existing data is not adequate to predict future rates of land subsidence.

HRPDC staff presented the following options at the November 20, 2014 meeting:

1. The HRPDC could fund USGS to assess the methods of monitoring land subsidence and develop cost estimates. The resulting report could be used to support a state budget request or future grant opportunities. Estimated costs = \$50,000.
2. The HRPDC could issue a request for proposals for InSar analysis. The analysis would compare land elevations from the 1990s to 2000s to create a map of historic land subsidence across the region. Estimated costs = \$250,000.

The Commission requested the HRPDC staff ask the advisory committees to make a specific recommendation on the two options. The HRPDC Special Committee on Recurrent Flooding and Sea Level Rise and the Directors of Utilities Committee recommended Option 1.

This item was presented under Workshop Agenda Item #5.

#### **RECOMMENDED ACTION:**

Approve Option 1 and use existing HRPDC funding to support the USGS project.