

## Quarterly Report – Public Page

**Date of Report:** *April 23, 2019*

**Agreement No.:** *693JK31810011*

**Prepared for:** *Government Agency: DOT*

**Project Title:** *River Scour Monitoring System for Pipeline Threat Prevention*

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**For quarterly period ending:** *March 31, 2019*

### **Progress to date:**

Background studies on vortex-induced vibrations are currently being conducted. One of the project goals is to understand and determine the length of free-span that would make a given pipeline susceptible to vortex-induced vibration through finite element modeling. This task spans from Q1 to Q4.

The desktop software Version 1.0 and website were completed and submitted to the PHMSA Technical Manager for review. The software has been tested and is field ready.

Five River Scour Monitoring Systems (RSS) demonstration prototypes were manufactured and tested. These are ready for field implementation. Discussions with Enbridge have identified three of five sites for field implementation: Site #1 – Elk River (near Independence, Kansas); Site #2 – Niagara River (between Niagara Falls, Ontario and Buffalo, New York); and Site #3 – Tongue River (near Cavalier, North Dakota). We are currently waiting for final permits and should commencing installations within one month.

The project is currently on schedule with no anticipated issues to date.