ADVMs on the Ohio River



Dick Bartz USGS Ohio Water Science Center City of Marietta and Lower Muskingum River Flood-Inundation Warning System

Flood warning for City of Marietta and

9 Communities along the lower Muskingum River

 McConnelsville, Malta, Stockport, Beverly, Waterford, Coal Run, Lowell, Devola, Oak Grove,

New streamgage on the Ohio River at Sardis

Reinstall Muskingum River gage at Beverly



Ohio River ADVMs Corps – NWS – ORSANCO - USGS

Bottom Line

-Need more information before going forward
-Develop business case for ADVM
-Costs and benefits to Corps and others of ADVMs
-What will the Corps get extra? Accuracy? Real time?

Ohio River ADVMs

Currently have two installations Sardis Old Shawneetown

Equipment purchased for a third -Scheduled to be installed near Louisville -Some discussion about Cincinnati area installation instead, O&M issue. Detailed Bathymetric Data Collection on the Ohio River

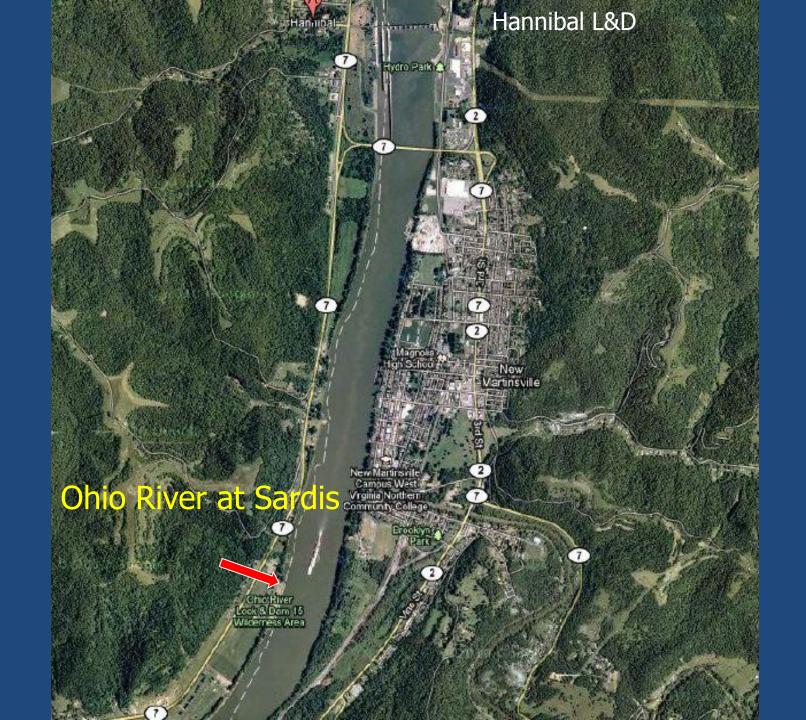
Belleville L&D upstream to Hannibal L&D (About 78 miles)

New Streamgage Ohio River at Sardis, Ohio Hannibal L&D
Ohio River at Sardis

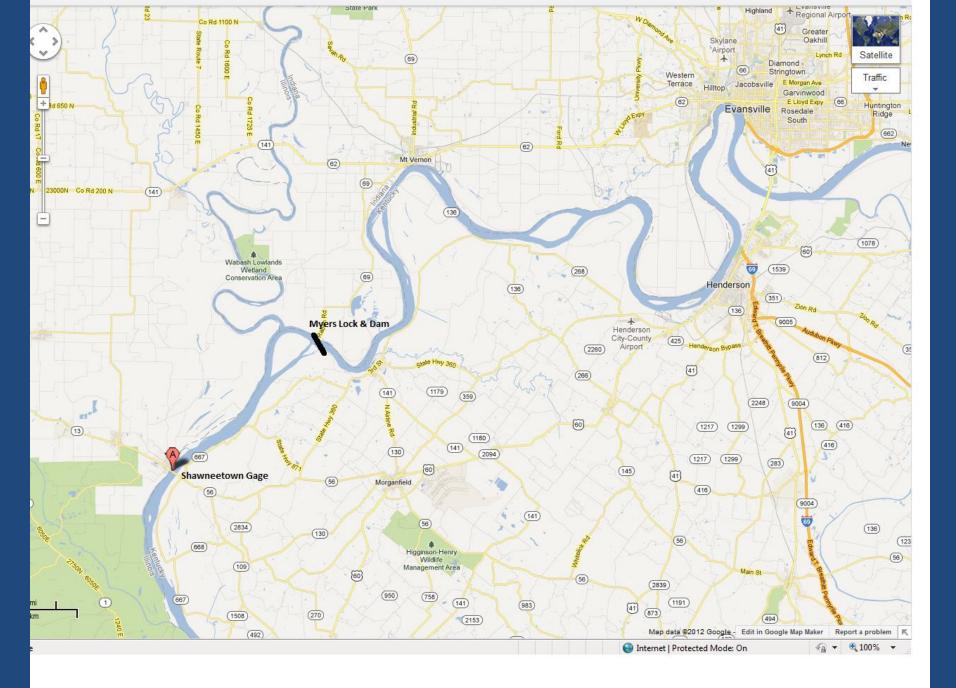
Marietta, OH

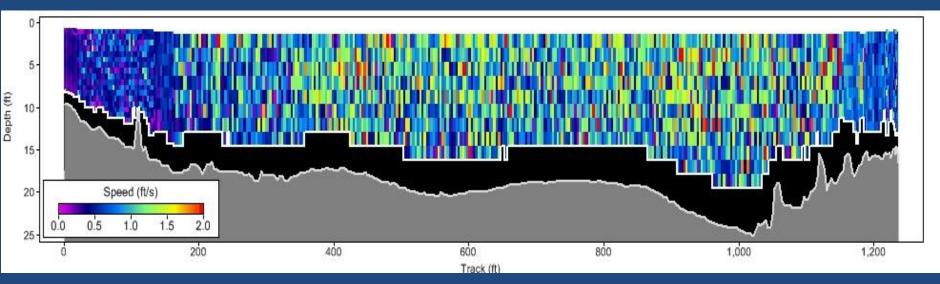
Willow Island L&D

Belleville L&D









Plot of mean velocity from an Acoustic Doppler Current Profiler measurement on the Ohio River at the Old 15 Lock & Dam site on July 20, 2011 located near Hannibal, Ohio

The total discharge measured was 16,500 ft³/second and the lock wall is located at the right side of the plot

The mean velocities indicate a general uniformity across the channel which is conducive for the installation of an Acoustic Doppler Velocity Meter (ADVM)

Acoustic Doppler Velocity Meter



Ohio River ADVMs

Meet in late January, 2013