Village Blue Research Project

A real-time water quality monitoring project supporting ongoing efforts to understand and improve water quality in the Baltimore Harbor

What is Village Blue?

EPA and the U.S. Geological Survey (USGS) initiated the "Village Blue" research project[1] to provide real-time water quality monitoring data to the Baltimore community, and to increase public awareness about local water quality in Baltimore Harbor and the Chesapeake Bay. It is also being done to help test, evaluate and develop water sensors that collect real-time water quality data. Village Blue complements work already being done toward the Waterfront Partnership of Baltimore's goal of making Baltimore Harbor "swimmable and fishable" [2] by 2020.

Village Blue is designed to build upon EPA's "Village Green" [3] project which provides real-time air quality information to communities in eight locations across the country.

Who are our partners?

EPA and USGS are collaborating on the project and have established partnerships with state and local organizations in Maryland.

Sensors placed near the Baltimore Inner Harbor Water Wheel on the Jones Falls River will gather real-time water quality measurements for the Village Blue research project.

Where is the project taking place?

EPA and USGS staff have installed a monitoring site in the Jones Falls River, where the river meets the Inner Baltimore Harbor in Maryland. The sensors are located near the Waterfront Partnership of Baltimore's Mr. Trash Wheel, which removes trash before it enters the harbor. The monitoring sites were established by USGS.

How does the project work?

Water sensors were installed to gather real-time water quality monitoring data that is then streamed to EPA's interactive Village Blue monitoring application[1]— which does not require a download and is compatible with all operating systems. The application displays the data in a mobile- friendly, easy-to-understand format complimentary to work that a

number of state and local organizations are already doing to make water quality data available to the public.

As part of this project, EPA scientists are developing a how-to guide so that other communities can develop their own Village Blue stations.

How does the project benefit the community?

EPA's Village Blue monitoring data provides information that allows users to develop greater understanding of water quality issues, such as the ways that heavy rainfall may contribute to changes in nitrate, turbidity, and dissolved oxygen levels in water bodies.

Will the project expand to other communities?

Adding multiple Village Blue stations across the Nation has the potential to close water quality information gaps, and would provide additional data to scientists—both citizen and professional—that could help inform communities, policies, and environmental restoration efforts.

Example of a water quality sensor being used in the Village Blue research project.

DISCLAIMER OF ENDORSEMENT:
Reference to any specific commercial products, process or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government and shall not be used for advertising or product endorsement purposes.

TECHNICAL CONTACT:

Gary Norris
National Exposure Research Laboratory
norris.gary@epa.gov

MEDIA CONTACT:

Emily Smith
National Exposure Research Laboratory
smith.emily@epa.gov

RESOURCES:

1. Village Blue Website: www.epa.gov/water-research/village-blue
2. Baltimore's Stealthy Plan to Make Its Harbor Swimmable by 2020: https://gizmodo.com/baltimores-stealthy-plan-to-make-its-harbor-swimmable-b-1741438268
3. Village Green Website: www.epa.gov/air-research/village-green-project