

ICWA in Action 2018

*Our mission is to preserve and protect
Monroe County's abundant, pure water.*

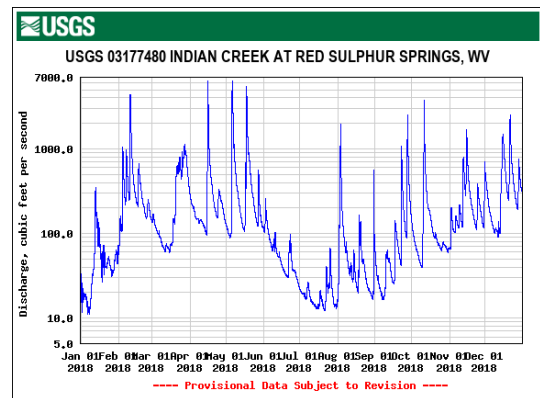
Here's how you are making an impact!

In 2018 (and beyond) ...

With your support, ICWA continues to encourage and assist field-based studies that are building a better understanding of Monroe County's water resources and vulnerabilities.

We believe that engaging and sharing this new knowledge with residents, local officials, and state and federal agencies will lead to greater awareness, better planning, and more effective protection.

- **County-wide water study:** ICWA continued to work with the USGS and Monroe County Commission to support the first comprehensive hydrogeologic mapping of the county and the first USGS mapping update since 1926. Members and friends contributed \$5,000 to upgrade the USGS stream gauge on Indian Creek at Red Sulphur Springs to add discharge measurements that improve data collection and interpretation during the study.
- **Research on Peters Mountain springs:** The multi-year WVU study of interconnectivity of springs and water on Peters Mountain by professor of geology Dr. Dorothy Vesper and graduate student Emily Bausher concluded in 2018. ICWA volunteers helped WVU researchers check data and measure water flow. Results were shared at national and international workshops and published in Emily's master's thesis. WVU's report to the WVDHHR about our springs' source water vulnerability is on ICWA's website.
- **Peters Mountain cave mapping, dye-tracing, and new cave in-the-making:** Since 2014, ICWA has raised concerns about MVP's route over Peters Mountain through karst and close to the Rich Creek Spring and Cave. We have worked with DEP karst specialist Nick Schaer, local landowners, and caving experts to help expedite mapping of the previously unexplored Rich Creek Cave. Dye-tracing has revealed a groundwater connection between a cave northeast of the MVP corridor to the Rich Creek Cave and Spring on the opposite side. A new sinkhole/cave forming on farmland close to the route also shows a dye-traced connection across the corridor to the Rich Creek Cave and Spring.
- **Springs Ecosystem workshop:** ICWA provided local support and coordination for an interdisciplinary Springs Ecosystem Assessment in Monroe County in June 2018. Organized by Dr. Vesper, the workshop brought experts from around the country in fields such as geology, hydrogeology, geochemistry, botany, and biology to visit and assess the ecosystems at Peters Mountain springs.
- **LIDAR mapping technology:** At ICWA's 2018 annual meeting in October, Dan Doctor, PhD, of the USGS Bascom Geoscience Center in Reston, Va., described his work using LIDAR mapping of the Gap Mills area for verification and updates to the 1926 USGS topographical map.



2018 was a banner year for major water events! View live data at:
https://waterdata.usgs.gov/wv/nwis/uv?site_no=03177480

With your support, ICWA helped bring attention to two water pollution permits that could affect Indian Creek and helped establish a weather station at James Monroe High School.

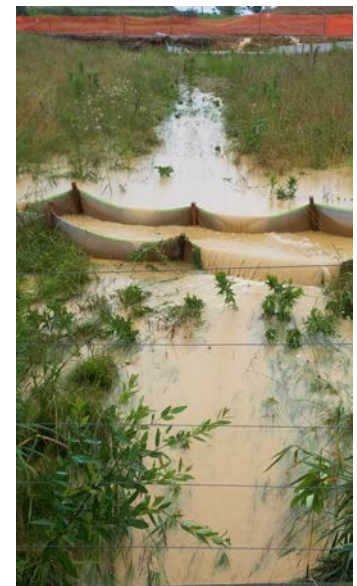
ICWA promotes responsible economic developments and infrastructure improvements in Monroe County with assured protections for the water we rely on for drinking, agriculture, recreation, and the continuing preservation of healthy streams and wildlife habitat.

- **UTC/Goodrich and Town of Union wastewater treatment plant water pollution permits:** With other groups and local residents, ICWA submitted comments regarding water pollution permit applications for UTC/Goodrich and the Town of Union's wastewater treatment plant. Both permits allow for discharge of industrial wastewater into Indian Creek.
- **New weather station:** ICWA helped secure approval of the Monroe Co. Board of Education to install a weather station at JMHS and involve JROTC and other students in the statewide Appalachian Freshwater Initiative. The station also provides useful information for the USGS county study.

With your support, ICWA is keeping eyes and pressure on the Mountain Valley Pipeline, both along its "destruction" corridor and in the courts.

- **Pipeline construction monitoring:** As 2018 saw the onset of pipeline construction, our volunteers have been outside monitoring streams and construction sites to document and report MVP environmental violations. As predicted, MVP's erosion control plans were totally inadequate for our steep slopes, soils, karst, and unpredictable rains. Controls failed even as new measures were added.

- ICWA board members participated in a series of meetings with DEP and citizen groups concerned about environmental enforcement for the many pipelines in WV. Clearly, DEP does not have the staff to inspect and enforce the hundreds of miles of pipeline under way.
- In June, ICWA co-hosted a workshop for interested landowners and other volunteers on what to look for at MVP construction sites and how to report violations.
- In October, ICWA compiled 193 citizen reports of environmental violations observed from April to September 2018. We submitted these to DEP and the FERC with summary findings and called for a full stop-work order to allow time to assess and upgrade all of MVP's plans, or rescind the certificate.



Muddy runoff repeatedly cascaded over MVP's erosion controls. Here it enters a culvert under the Lindside Methodist Church parking lot.

- **Legal challenges:** ICWA is a party to three cases that challenge MVP's permits and certificate. Since 2014, ICWA has joined landowners, experts, and other community and environmental groups to assert that MVP's application was inaccurate, inadequate, and misleading. For now, our cases are:
 - Keeping MVP out of our streams and wetlands (the Fourth Circuit Appeals Court vacated MVP's permit from the Army Corps of Engineers);
 - Contesting DEP's approval of MVP's proposed crossing of the Greenbrier River (decision pending in the Summers County Circuit Court); and
 - Challenging the legitimacy of the FERC Certificate granting MVP permission to build the pipeline (oral arguments to be heard on January 28, 2019 in the D.C. Court of Appeals).

THANK YOU FOR YOUR ONGOING SUPPORT TO PROTECT MONROE COUNTY'S WATER!