

Restoring Beaver Dominated Headwater Stream Systems in Central Indiana

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For over 20 years the Marian University Nina Mason Pulliam EcoLab has demonstrated that it is possible to have a functioning beaver dominated headwater stream and wetland complex in a developed area. Using the lessons learned at that site and recent work from the Restoration Consortium at Utah State University we are currently developing plans to restore more areas at the EcoLab and at two additional degraded headwater systems in central Indiana. All three sites are tributaries of the West Fork White River (hereafter “White River”), a river that has been highlighted for its significant nutrient contribution to the Mississippi River Basin by way of the Wabash and Ohio Rivers. Land use in the White River has historically been primarily row crop agriculture. The tributary streams have been heavily modified by ditching and draining into modified headwater streams, putting more water into the receiving stream faster than before. Mitigating some of the lost functions of the headwater streams has been a goal for years on the White River, but there has never been a cost-effective solution. Soil health practices have helped, but restoring at least some of the headwater systems is the next step. Using some Stage 0 areas, beaver dam analogues and other Low-Tech Process Based Restoration (LTPBR) methods may be the solution. Previously it has been hard to fund this type of long-term project. Fortunately, teaming with the Indiana Stream and Wetland Mitigation Program (IN-SWMP) and local stakeholders provides the perfect support for projects like these. We look forward to telling you more about this work.

