

## **ECOPIO** Hartland Stream Restoration and Planting Lexington, KY **August 2023 - October 2023**

Hartland Homeowners Association worked with Earthcycle Design to submit a proposal to rebuild a section of stream that was overgrown with invasive plants and eroding banks causing soil build-up in a stormwater pipe. This project was awarded grant funding in part by the Lexington-Fayette Urban County Government's Water Quality Management Fee and the Stormwater Quality Projects Incentive Grant Program.

Once designs were approved, EcoGro was hired for the project installation. We started by installing the construction entrance and cutting out the overgrown honeysuckle along both streambanks. Several trees were identified for removal, either due to prior storm damage or access issues for necessary equipment. All woody material was cut, chipped and left on the ground to provide a mulch for protecting soil. Other erosion controls were installed along the

creek banks. 811 was called to have the utilities marked. Next, repairs were made to the rock foundation of the bridge crossing the creek and excess soil excavated from the clogged outlet pipe. Along the toe of each bank, a narrow trench was excavated, lined with geotextile fabric, then filled with class III rock and covered with soil. This structural support prevents further erosion of soil from the banks. We worked our way upstream towards the bridge, first installing one side and then the other. Excess topsoil was stockpiled. Soil of poor quality was hauled offsite for disposal. Once a section of stream was rebuilt, the soil was cleared of exposed roots and erosion control blanket was staked down on the streambank.

During all this work, our team was also working on replacing a ~90ft. section of sidewalk that needed to be moved further from the stream. We also planted trees, shrubs, and herbaceous perennials to improve aesthetics, reduce erosion, provide habitat and food for native wildlife, and to help prevent invasives from re-establishing in the space. The result was a backyard stream habitat.









