

Riverside Watershed Environmental Living Lab Systems

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Abstract

The project is named as Riverside Watershed Environmental Living Lab Systems (RWELLS). This project proposes extensive collaboration between community and university. The project pursues several goals related to both community development and university research. Firstly, the project develops technical solutions for underground infrastructure systems such as water and wastewater pipelines. Secondly, Riverside community utilizes technical solution (advanced infrastructure technologies) to convert to entrepreneurship within the community. Existing underground infrastructure systems in the City of Indianapolis has been deteriorated and requires extensive capital investment. Living lab concept is well suited to testing a technology prior to implement in city wide. This also provides a priority to improve existing infrastructure in the testing community area. The community will be a living lab to develop and apply new underground infrastructure technologies. Advanced technologies include, not limited to, energy harvesting and generation, community planning and housing, water leak detection and loss management, and sewer system renewal technologies.