Biohydrochemical Enhancement structures for Streamwater Treatment

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Summary: A method to remove stream water contaminants

Description: This invention utilizes manipulations to streambed sediment to passively drive hyporheic exchange and remove stream water contaminants. These modular manipulations to sediment permeability and reactivity increase stream-streambed exchange flows and contaminant removal, respectively. Biohydrochemical enhancement structures can be designed and built into streams or artificial channels to efficiently attenuate common pollutants such as nutrients, metals, pathogen indicators, and organics.

Potential Areas of Application:
- Stormwater Management
- Stream Restoration
- Green Infrastructure / Low Impact Development
- Wastewater Treatment

Main Advantages of this Invention:
- Treats nonpoint source pollution in-stream
- Passive, low cost, low maintenance

Intellectual Property Status: US utility patent pending (application #14/715,088)

ID number: 14029

Opportunity: We are seeking an exclusive or non-exclusive licensee for implementation of this technology.

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