

River Inflows - Pittsburgh Pool

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3 Rivers 2nd Nature  
STUDIO for Creative Inquiry  
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Ohio

Allegheny

Monongahela

## I. Abstract

3 Rivers 2nd Nature is conducting an ongoing photographic survey of significant sites that illustrate water outfalls from the land into our region's rivers. With recreational uses of the rivers on the rise, it is important to understand the interface between the land we live on, the water that runs over it, and the rivers that run through it. The river inflows are coming from the surrounding land. The locations with a more natural context and consistent flow are more likely to be a natural stream. Sites that are either concrete or pipe can be identified as NPDES outfalls, CSO outfalls, or Stormwater outfalls.

Drains serve to remove unwanted water, however, unlike our garbage, this cannot be simply carted out of the county in the backs of trucks. Instead, it enters a system that, for better or worse, funnels all wastewater/stormwater into the rivers, and down the Ohio. The system is composed of both natural and constructed urban drainage schemes, with the two not necessarily acting in harmony. The built urban element constitutes a legacy of past decisions that may not be appropriate for the rivers' recreational future. The rivers and streams that drain our cities, towns, and farms can no longer be thought of as bottomless black holes for waste.



**Outfall Typologies (Described from the land into the water)**

**Natural**

1. Naturally occurring streams outfalls are the surface flowing waters that occur in a region with significant rainfall. Many of these streams will run year round; perennial streams that dry up from time to time are described as intermittent streams. Stream outfall points are often vegetated, although they can be channelized or otherwise hardened. Stream outfalls can also be identified by substantial downriver sandbars that build up over time due to sediment erosion in the upper stream watersheds.



**Man-made**

2. NPDES outfalls (National Pollution Discharge Elimination System) are permitted pollution outfall sites with frequent flow. They are legal outfalls that often run consistently.

3. Combined sewer overflows (CSO'S), are engineered pollution "release valves" that protect the sewer infrastructure from overload during a rainstorm. CSO's should only be flowing during or after a rainstorm, when the CSO flags are flying at your marina. When they are malfunctioning (running in dry weather), a call to the responsible authority will result in a quick maintenance solution. They will smell of sewage.

4. Stormwater infrastructure occurs in most communities. This is infrastructure that drains city streets, roofs, etc. They should not smell of sewage, and for the most part should be dry in dry weather and running in wet weather.





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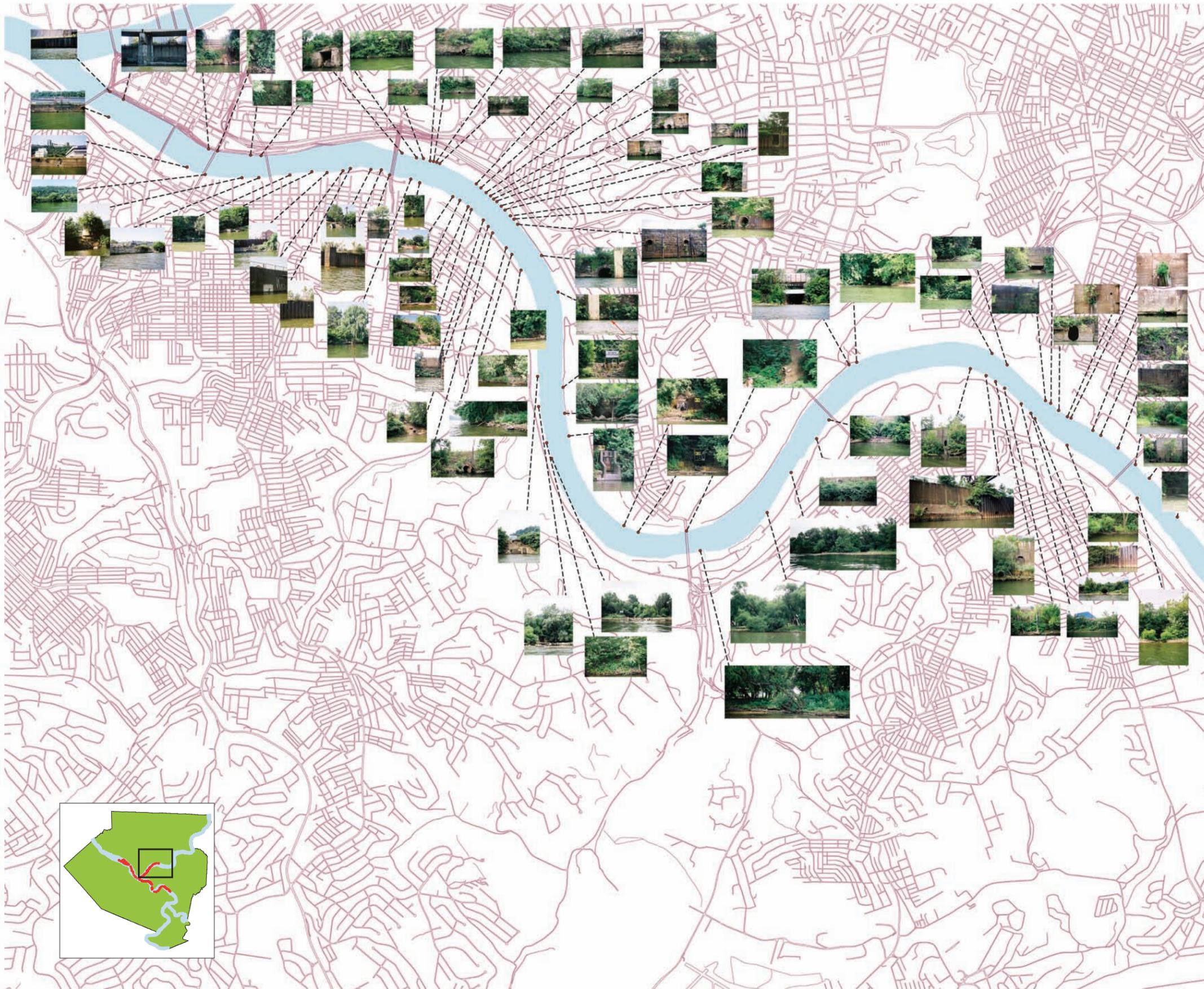
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