Implementation Strategy

The schematic designs presented in this memorandum represent foundational steps of a longer process toward realizing the vision of resilient park and water infrastructure and a regenerating Fern Hollow Creek ecosystem. Each project area will require additional site investigation, stakeholder coordination, design development, permitting, and funding before construction can begin — with long-term operations and maintenance responsibilities to follow. The five project areas are largely independent and can be developed simultaneously, sequenced, or phased in any combination. Within individual sites, incremental implementation can deliver early benefits and build momentum while more complex elements advance through design and regulatory review. Upstream Pittsburgh and its partners should review these designs with funders and stakeholders to establish a practical sequence that reflects both near-term opportunity and long-term vision.

The Sewer Regionalization Wildcard

A significant wildcard shapes the long-range outlook for the corridor. ALCOSAN is advancing a regionalization strategy that would transfer ownership of primary inter-municipal combined sewer segments — including the large box culvert extending from Nine Mile Run through the Wetland project area, nearly half the valley's length — from the municipalities it serves to ALCOSAN itself. That culvert's broken stone subdrain is the suspected primary driver of Fern Hollow losing baseflow over the lower half of its reach. The potential abandonment and removal of the culvert, replaced by a new sewer microtunneled in parallel, represents a transformational restoration opportunity: restoring baseflow, improving wetland hydrology, and opening the lower valley to comprehensive ecological recovery. The timeline, however, is uncertain — five years at the optimistic end, fifteen to twenty at the other. This plan has been developed accordingly: project areas were selected to be completable before ALCOSAN takes ownership, minimally disrupted by eventual sewer replacement, or understood as near-term improvements that a more comprehensive future effort could build upon.

Near-Term Implementation Priorities

The Biddle Parking Lot GSI retrofit is the clearest early win — the simplest permitting pathway, no in-stream or right-of-way complications, and a project type Upstream Pittsburgh has demonstrated success delivering.

At the Confluence, the USACE Masterplan identifies channel alignment and widening as capable of reducing flooding and erosion, but that scope demands significant design, permitting, and construction investment — and risks being partially superseded if the box culvert is ultimately removed. A near-term approach scoped to Chapter 105 General Permits — GP-1, GP-3, and/or GP-11 — can improve resilience and function now while preserving the opportunity for transformational work later.

The Wetland site offers a similar phasing opportunity, though with added complexity. Raising Tranquil Trail and converting Biddle Trail connections to boardwalks may qualify for General Permits and could be constructed within a year. The full build-out, however — cantilevered overlooks, wetland buffer restoration, and a more accessible and ecologically engaging experience — will most likely require a joint Chapter 105 / Section 404 Individual Permit. Shallow and incompletely mapped sewer infrastructure, steep slope and landslide-prone overlays, and the extent of proposed wetland and boardwalk work make Individual Permit review the prudent base case. Upstream Pittsburgh should plan accordingly, treating General Permit eligibility as an opportunity to accelerate discrete elements rather than a reliable pathway for the project as a whole.

Critical Collaborations for Long-Term Success

The Henrietta Street and Overton Street GSI projects are not directly affected by the regionalization wildcard but require coordination across a broad stakeholder cohort: DOMI, DPW, Pittsburgh Parks Conservancy, Pittsburgh Water, gas, electric, and telecom utilities, the Environmental Charter School, and surrounding neighbors. The success of the Wightman Park and Street GSI demonstrates that networked right-of-way stormwater infrastructure can be built successfully in Pittsburgh — but that project was led by DPW and Pittsburgh Water, who accepted ownership of the finished infrastructure. These projects are presently nonprofit-led, and long-term ownership and maintenance responsibilities for right-of-way improvements have not yet been defined. Resolving that question through early engagement with DPW, Pittsburgh Water, and DOMI is a prerequisite for advancing each project with confidence and reconnecting these upstream neighborhoods with the regeneration of Fern Hollow below.