

HYPER HUMUS RESTORATION PROJECT

Paulinskill River WMA

STAKEHOLDER MEETING

February 21, 2019

Agenda

- 6:30 Open House / Viewing of Conceptual Plans and Preferred Alternative
- 7:00 – 7:30 Presentation
- Welcome and Introductions, Melissa Woerner, NJ DEP
 - Review of Project Goals and Stakeholder Engagement
Beth Styler Barry, The Nature Conservancy
 - Presentation of Preferred Restoration Plan
Jennifer Brunton and Ed Samanns, Louis Berger
- 8:45 Conclude and Adjourn

Welcome and Introduction

Melissa Woerner, NJDEP

New Jersey Division of Fish and Wildlife Mission

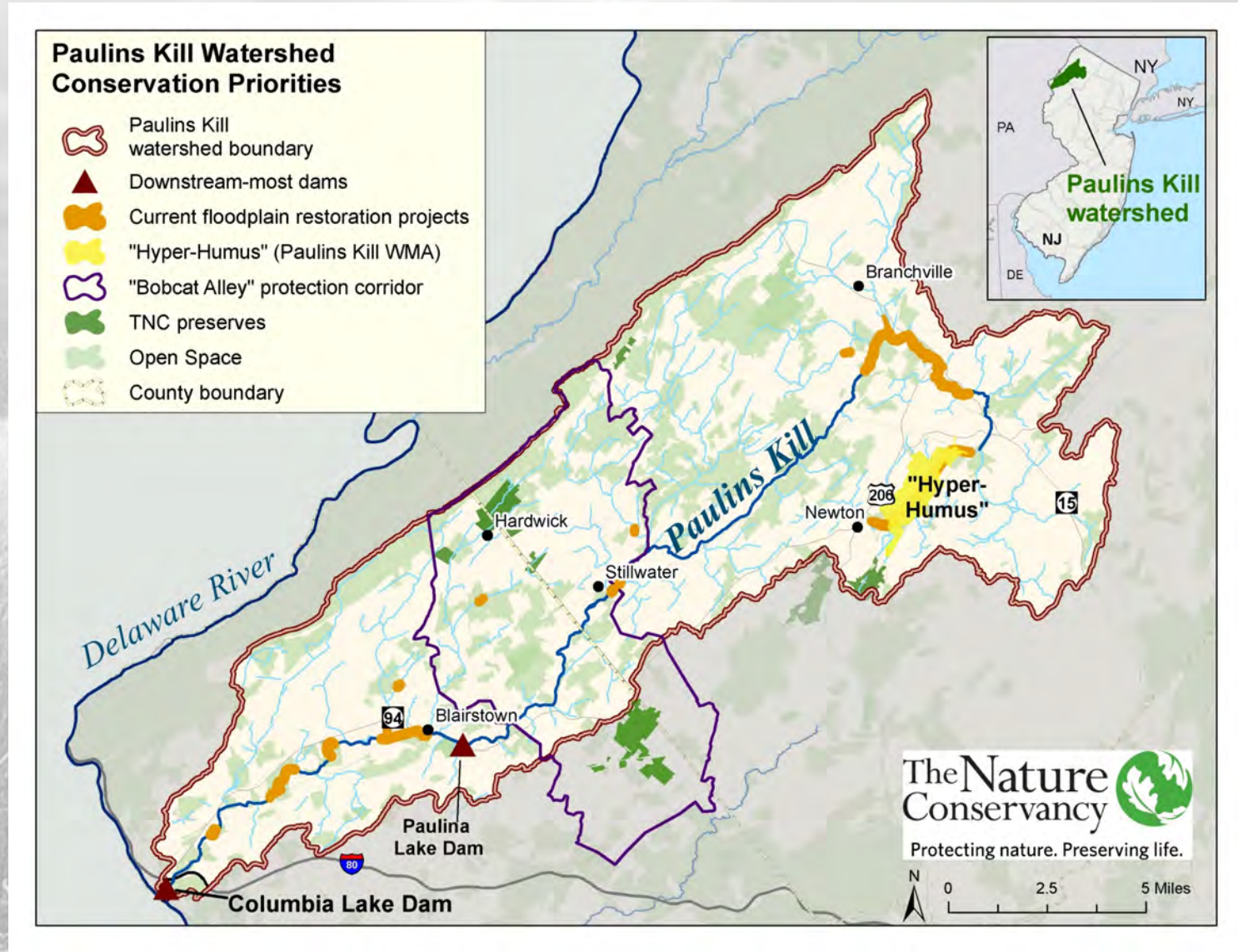
Protect and manage the State's fish and wildlife to maximize their long-term biological, recreational and economic values for all New Jerseyans.

Agency Goals

- To maintain New Jersey's rich variety of fish and wildlife species at stable, healthy levels and to protect and enhance the many habitats on which they depend.
- To educate New Jerseyans on the values and needs of our fish and wildlife and to foster a positive human/wildlife co-existence.
- To maximize the recreational and commercial use of New Jersey's fish and wildlife for both present and future generations.

Project Overview

Beth Styler Barry,
The Nature Conservancy













Project Goals

- **Improve flow regime**
 - Reestablish sinuous river channel form with robust riparian and floodplain zone
 - Reestablish groundwater dominance on habitat establishment
 - Separate river flow from shallow impoundments to improve thermal characteristics
 - Manage 2-, 5-, 10-, 50-year storm for water quality and climate change
- **Provide ecological uplift**
 - Comply with Natural Land Trust Conservation Easement in designated area
 - Maintain, enhance, expand targeted habitats for key species and wildlife guilds
- **Improve recreational opportunities**
 - Provide adequate public access with low maintenance requirements
 - Maintain/enhance consumptive recreational uses (hunting, trapping, fishing)
 - Maintain/enhance non-consumptive recreational uses (hiking, nature photography)
 - Enable understanding of history and natural processes



Stakeholder Engagement

Public Meeting

June 5, 2018

Core Stakeholder* Meetings

June 29, 2018

November 5, 2018

January 10, 2019

Extensive Outreach

Sussex County Bird Club

Newton Town Council

Lafayette Town Council

Hampton Township

Committee

Sussex County Water

Quality Policy Advisory

Committee (PAC)

Morris County Chapter

NJ Federation of Sportsmen

Sussex County Chapter

NJ Federation of Sportsmen

Warren County Chapter

NJ Federation of Sportsmen

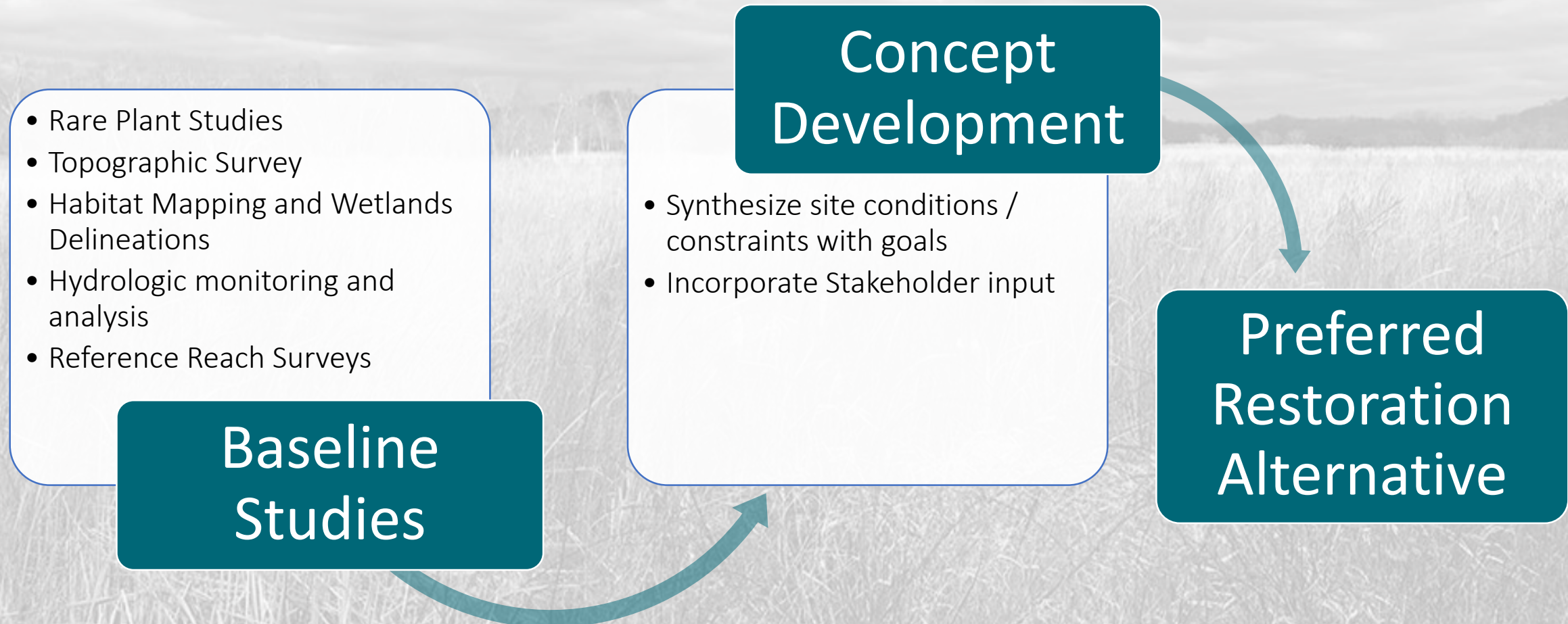
NJ Trappers Association

April 2018 Public Hike

Core Stakeholders: NJDEP: Division of Fish and Wildlife, Office of Natural Land Management, Natural Lands Trust, Office of Natural Resource Restoration; NJ Audubon; Ducks Unlimited; River Watershed Management Group

Restoration Design Process

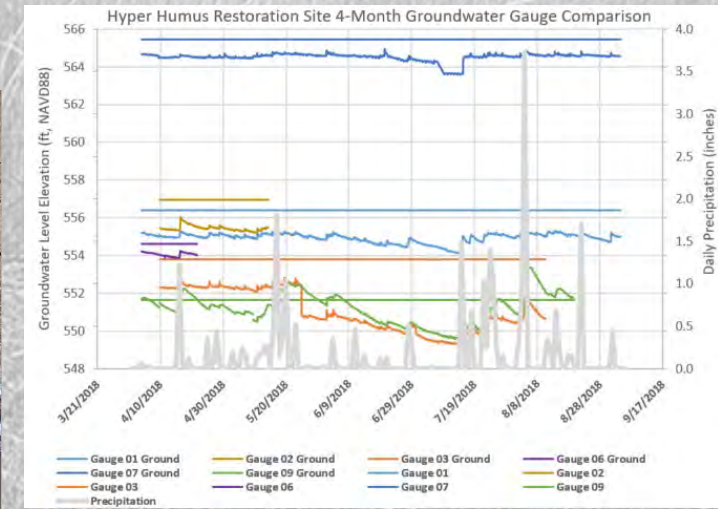
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Restoration Design Process

Baseline Studies

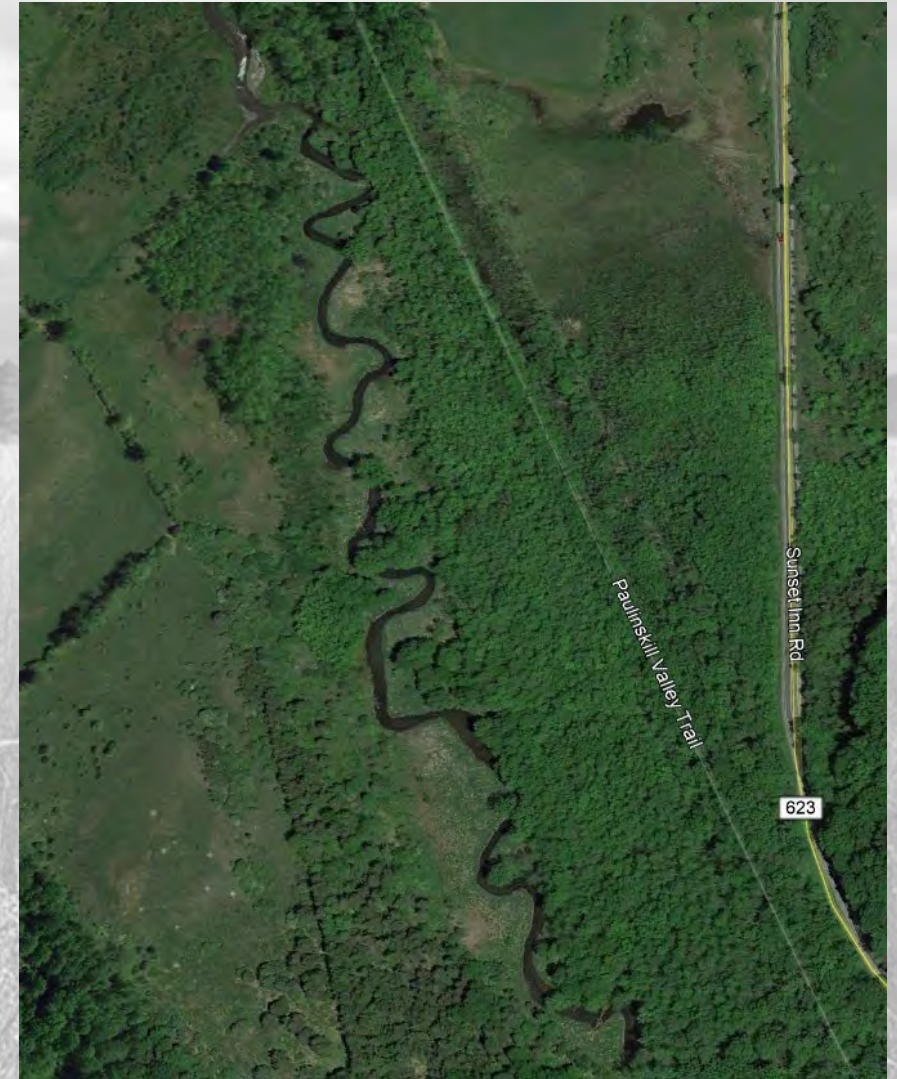
- Reviewing existing data and reports
- Rare plant study
- Preparing topographic and existing features survey
- Habitat mapping
- Hydrology and hydraulic analysis



Restoration Design Process

Reference Reach Survey

- Channel Dimensions
 - Bankfull Depth
 - Width
 - Bend Curvature/Radius
 - Sinuosity
- Channel Slope
- Channel Bed Material
- Channel Bank Material
- Bank Vegetation



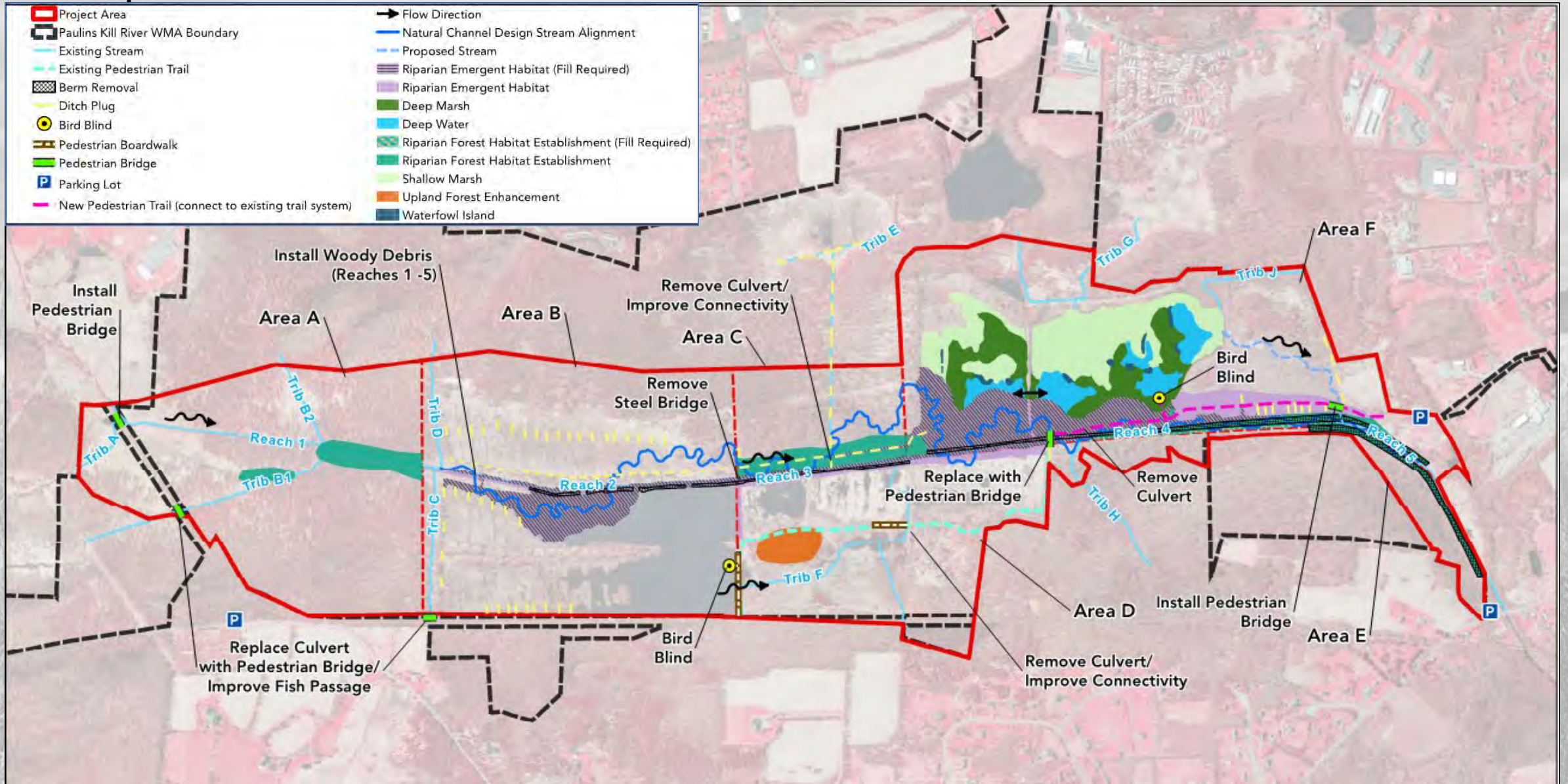
Restoration Design Process

Concept Development



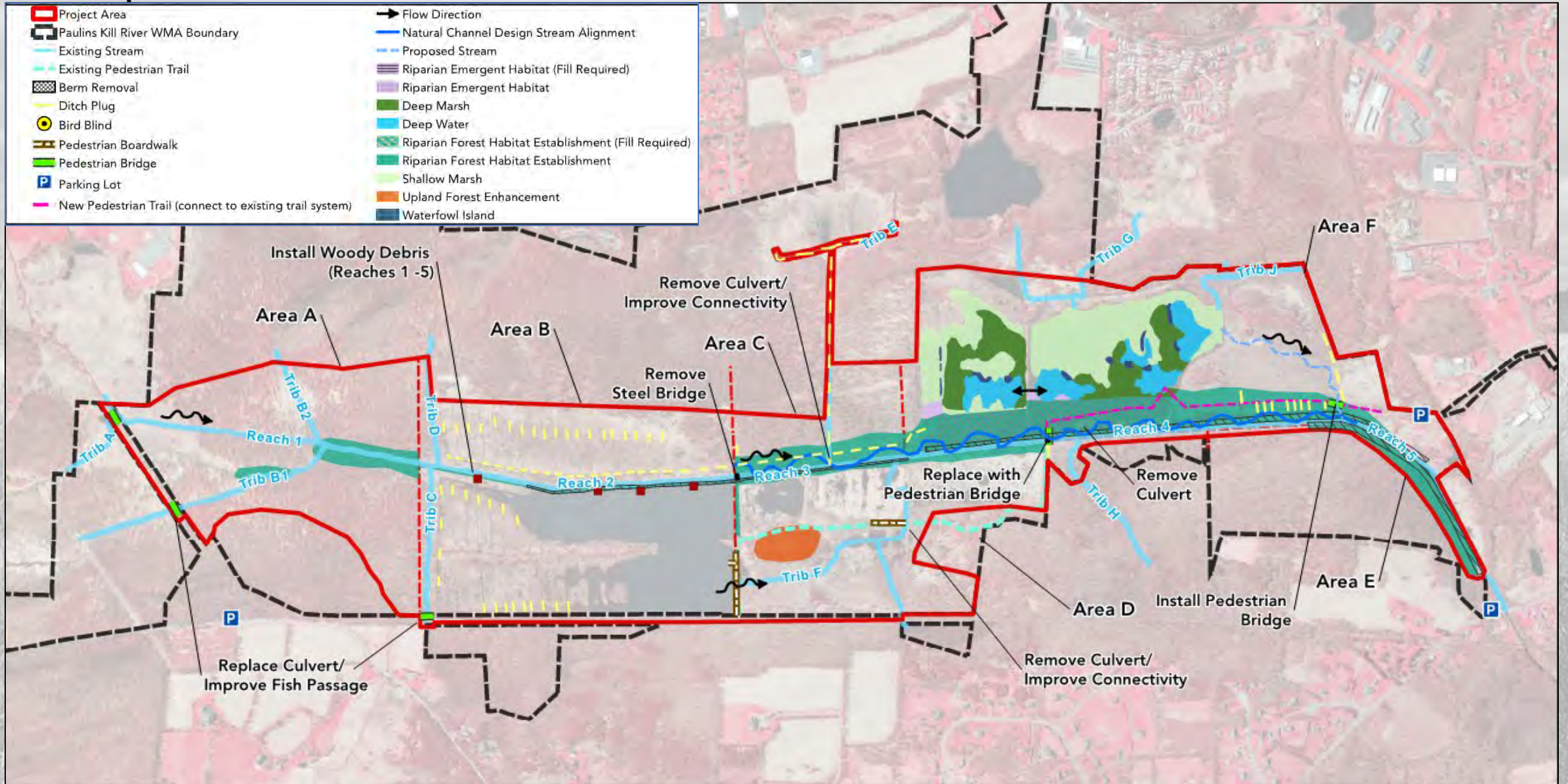
Concept 1

Evaluation results: maximizes stream sinuosity but requires too much fill



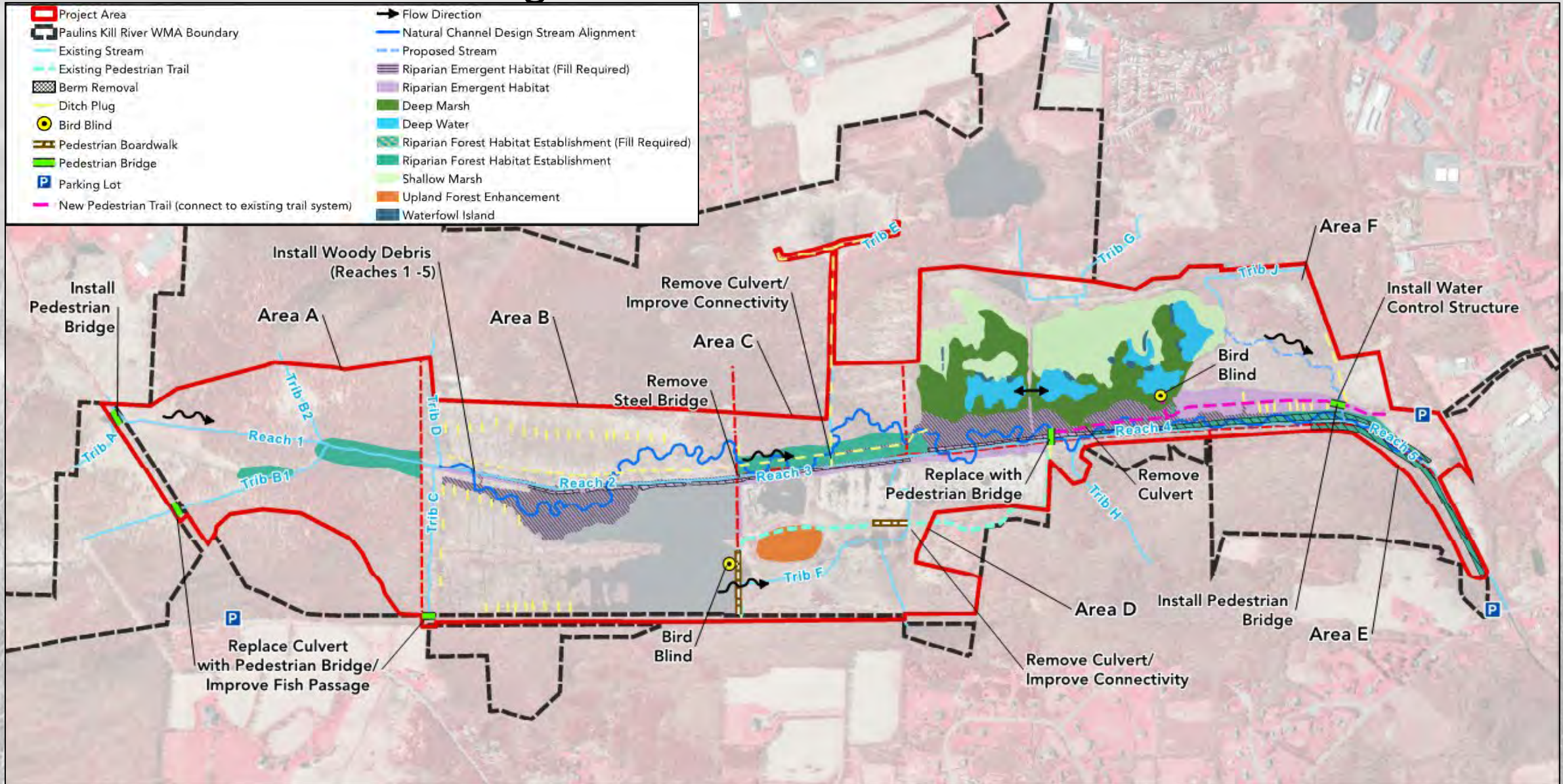
Concept 2

Evaluation results: design would not achieve project goals in a suitable timeframe

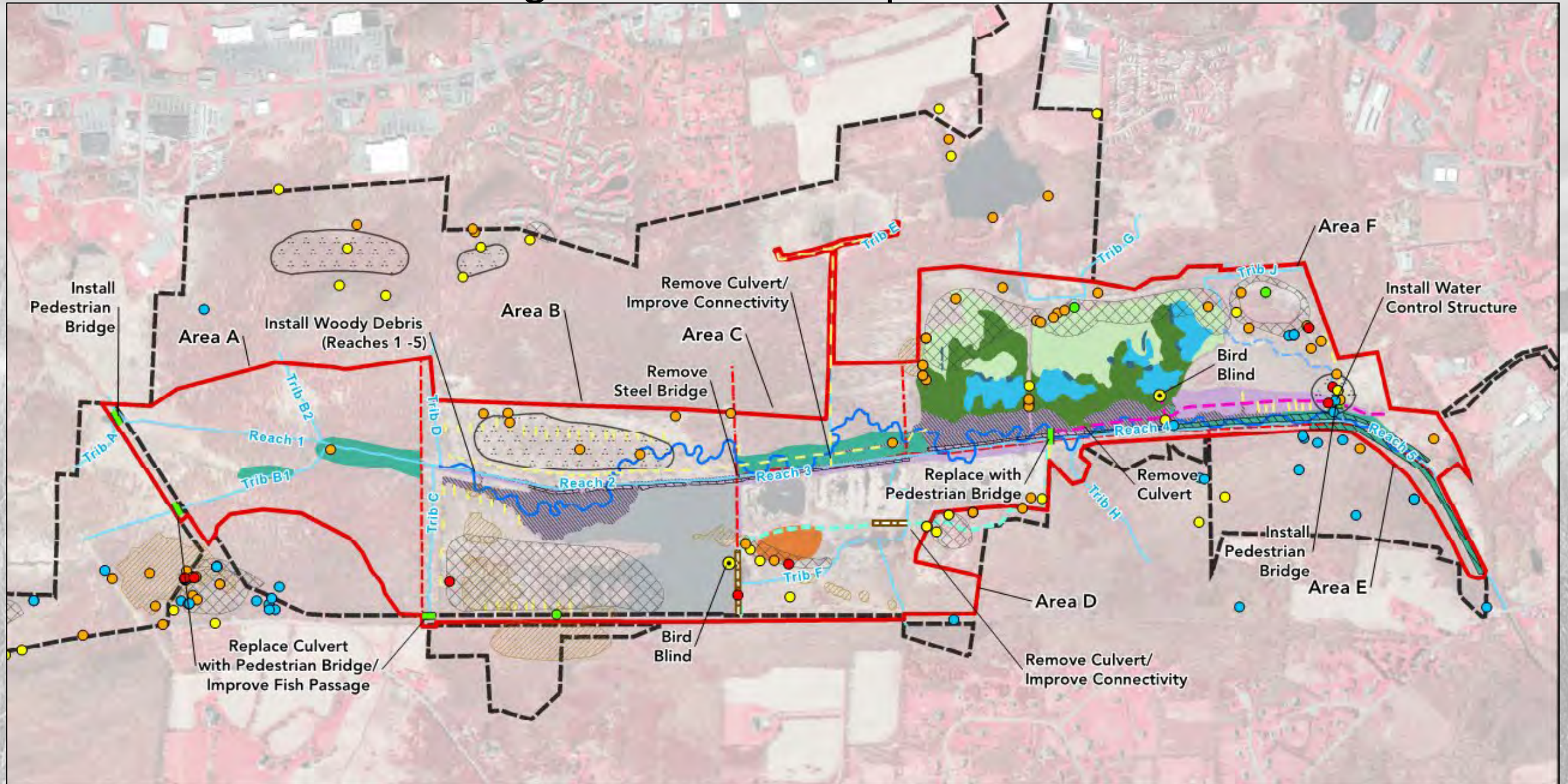


Preferred Restoration Design

Evaluation results: greatly improves stream sinuosity while reducing fill from Concept 1; project goals can be attained in a shorter time frame than Concept 2



Preferred Restoration Design – Rare Plant Population





Next Steps

- Advancing preferred alternative to 30% design / permit plan set
- Preparing summary report
- TNC engaging Sussex County Bird Club to conduct bird surveys

Next Steps

Want to keep track of the project?
Check out the NJDEP Division of Fish
& Wildlife website at:

http://www.njfishandwildlife.com/wma_restoration-paulinskill.htm

