Habitat Restoration and Conservation in Turkey Creek

February 27, 2018

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Purpose of Meeting

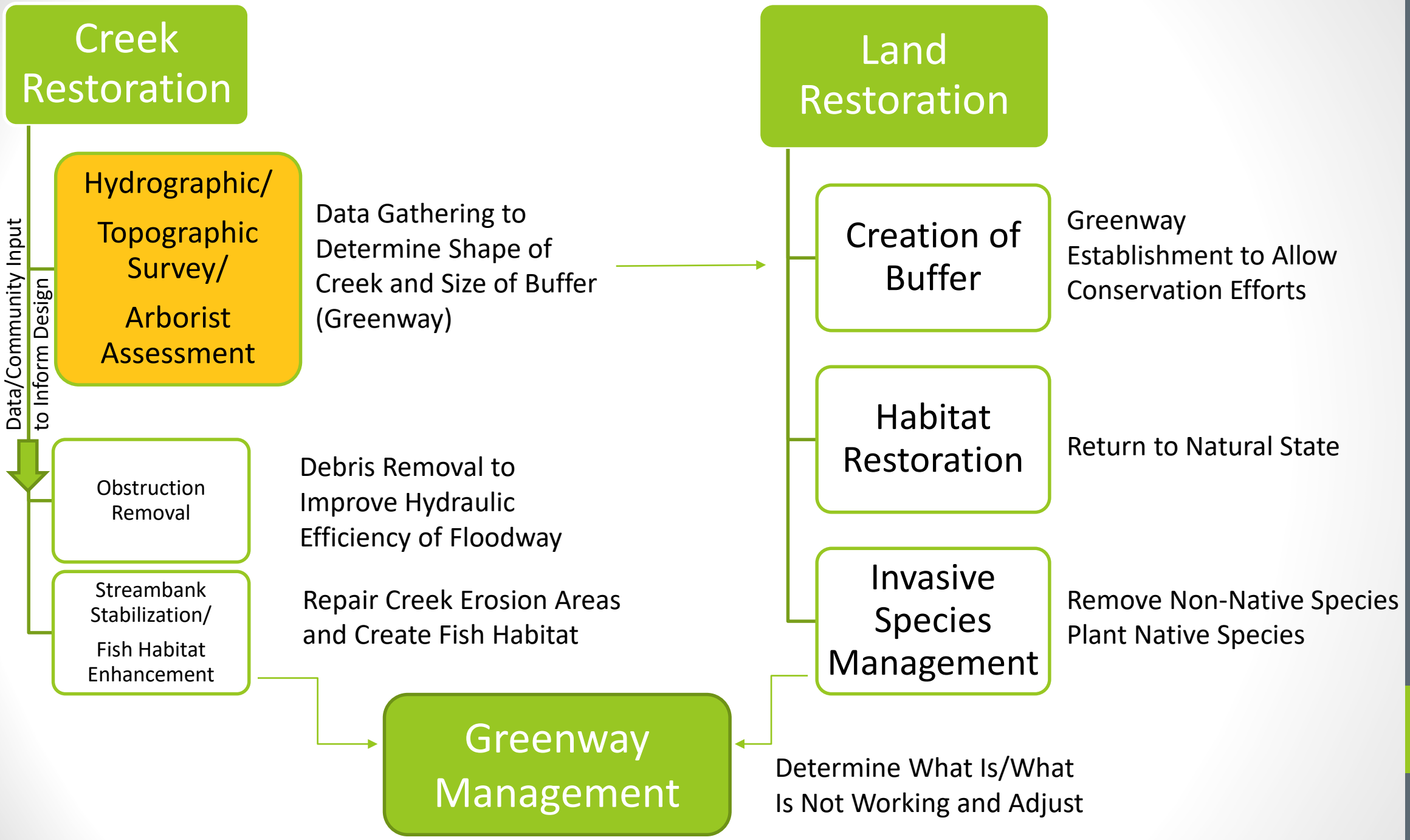
- Keeping Everyone Informed - Prior to the commencement of any work, MDEQ committed to coming back together and keeping the community informed of the project's progress, introduction of Team Members, and what to expect once work begins.

- Team Members & Partners:
  - Environmental Management Services, Inc. (EMS)
  - Conservation Corps Network
  - Land Trust for the MS Coastal Plain
  - Secretary of State

Overview of Last Meeting

What are Greenways and Why are They Important:

- Protection & Restoration of Wetlands
- Leading to Improved Water Quality
- Creates Land Buffers
- Conserves Habitat for Wildlife
- Preserves the Legacy of the Land
- Greenways can Never be Developed


Creek Restoration
Land Restoration
Hydrographic/
Topographic Survey/
Arborist Assessment
Data Gathering to Determine Shape of Creek and Size of Buffer (Greenway)
Data/Community Input to Inform Design
Creation of Buffer
Greenway Establishment to Allow Conservation Efforts
Habitat Restoration
Return to Natural State
Obstruction Removal
Debris Removal to Improve Hydraulic Efficiency of Floodway
Invasive Species Management
Remove Non-Native Species
Plant Native Species
Streambank Stabilization/
Fish Habitat Enhancement
Repair Creek Erosion Areas and Create Fish Habitat
Greenway Management
Determine What Is/What Is Not Working and Adjust

Introduction to EMS Team

- Project Management, Community Outreach, Engineering, Surveying, Design, Initial Limited Debris Removal Permitting
- Engineering, Quality Control/Quality Assurance, Initial Limited Debris Removal
- Arborist Assessment, Tree Identification, Invasive Species Identification
- Stream Bank Stabilization, Hydrogeological Design, Eco-Restoration
- Evaluation and Design of Fish Habitat Creation and Placement
- Initial Limited Debris Removal/Hauling; Community Relations

EMS Team - Scope of Services

- Initial Limited Clearing & Debris Removal from Waterway for Navigation to Complete Survey
- Hydrographic Surveying
- Topographic Surveying
- GIS Development
- Arborist Assessment
- Engineering and Design for Stream Bank Stabilization and Fish Habitats
- Assist in Permit Applications

Initial Limited Clearing of Waterway for Navigation/Access

- Provide Access for Arborist Assessment

- Provide Access for Hydrographic & Topographic Survey

Interim Debris Removal

- Waste/Foreign Objects Will be Removed as Encountered

Hydrographic Surveying

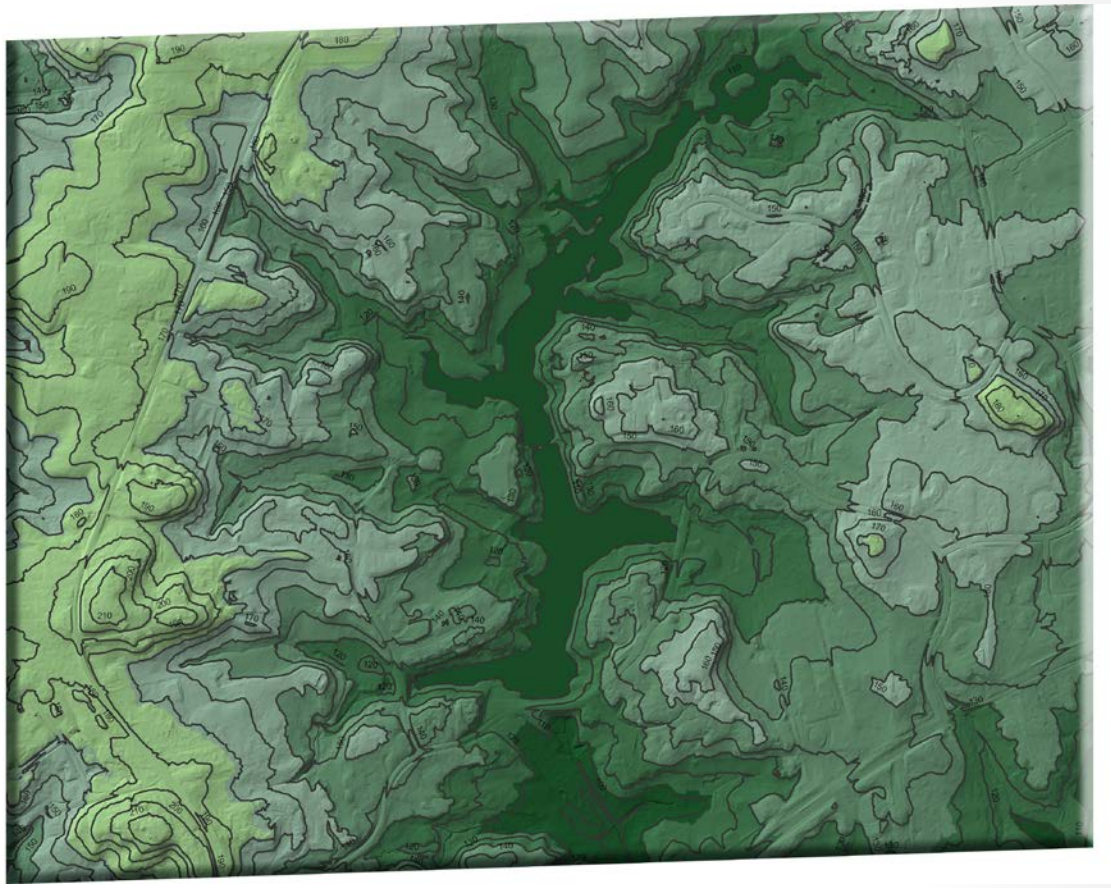
- Define Stream Path
- Depth and Characteristics
- Detailed Information to Feed Later Design/Modeling Efforts

Topographic Surveying

- Provide Upper Bank and Riparian Habitat Data
- Document Important Features (culverts, drainages, etc.)
- Collect Detailed Information for Design/Modeling Efforts

GIS Development

- A Geospatial Database will be Created to Document Data Obtained
- Topographic Data Invasive Species Identified/Mapped
- Identify Point Source Discharges
- Erosional Features Mapped



Arborists Assessment

- Invasive Species Identification/Mapping
- Trees to be Considered for Removal to be Identified; Stakeholder Input

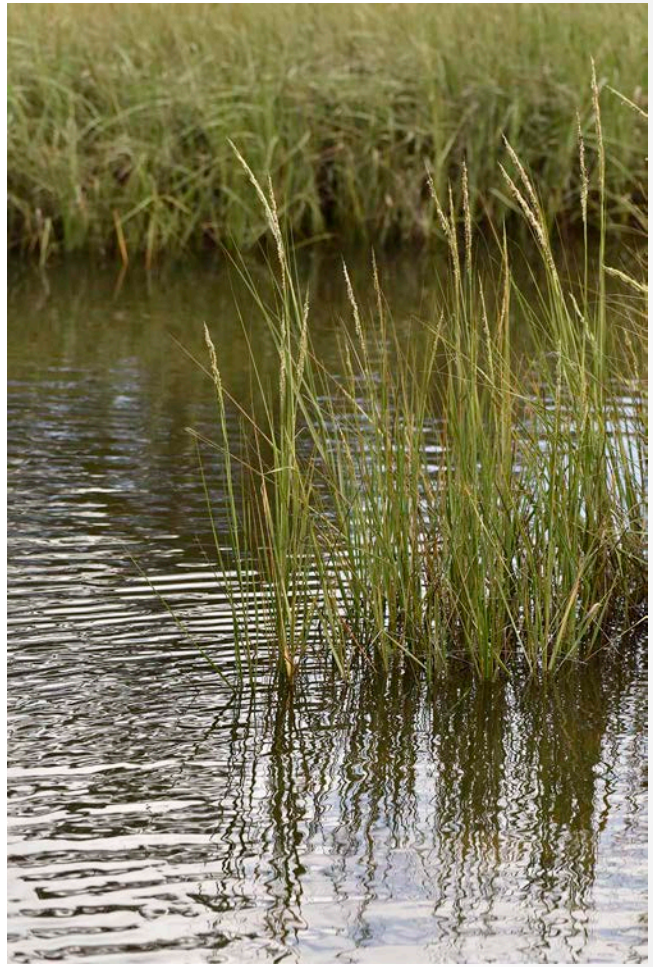



Engineering and Design

- The best approach to habitat recovery is to restore a fully functional, well-vegetated stream corridor within a well-managed watershed.
- Man-made structures are less sustainable and rarely as effective as a stable channel.
- Over the long-term, design should rely on natural fluvial processes, interacting with riparian zone vegetation and associated woody debris to provide high-quality aquatic health.

Streambank Stability/Habitat Enhancement

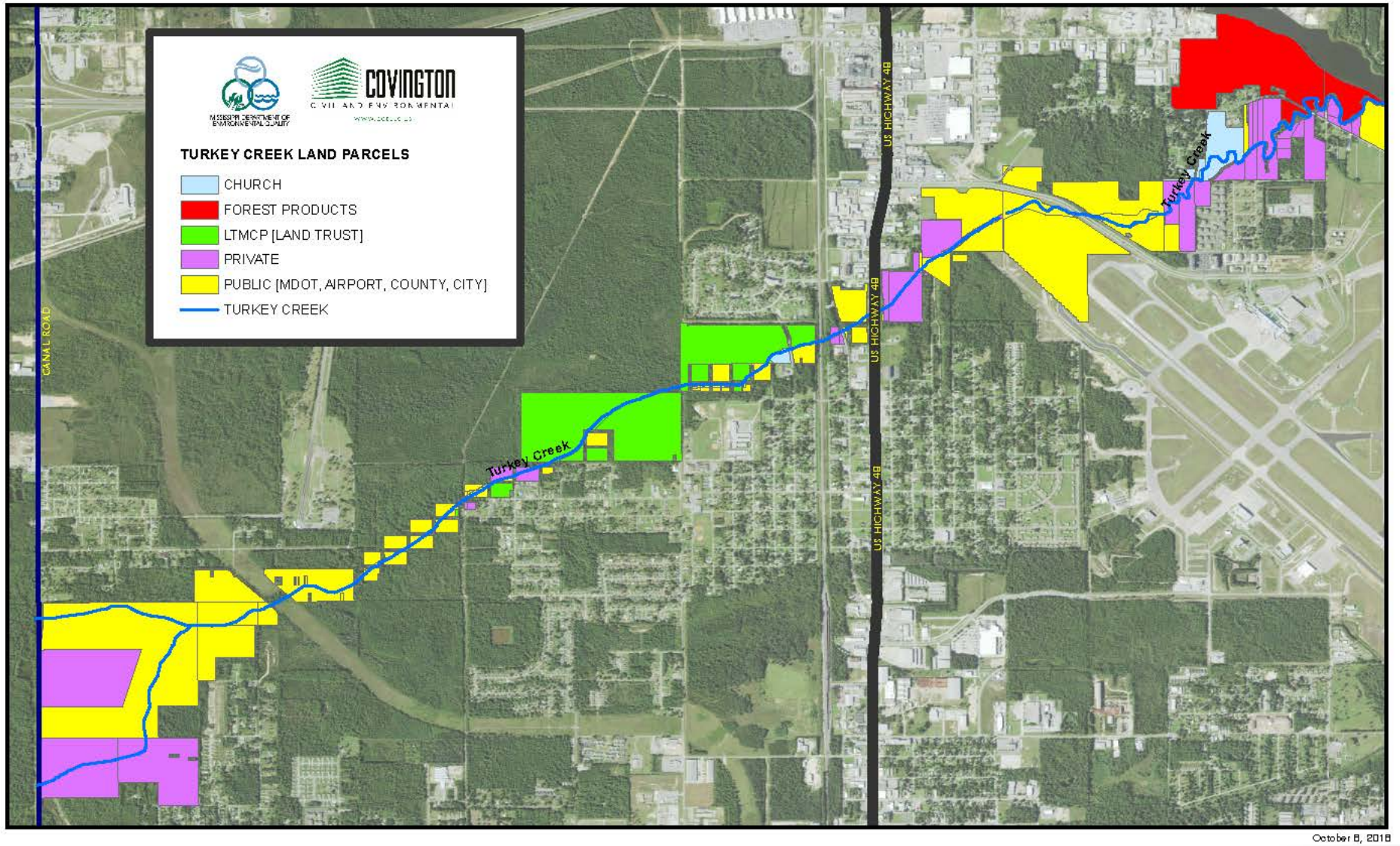
- EMS envisions a holistic approach to the design criteria marrying both instream habitat and bank stability.
- Balance the need for a “usable” stream corridor, water management, and streambank stability.
- Create a strategy that will ensure the long-term viability of the design plan through partnerships with the local stakeholders.



Fish Habitat Enhancement

- The creation of fish habitat must not impede or compete with other components of the project, i.e. flow impingement.
- Initial fish habitat should be “green” in nature and designed to encourage natural processes to take hold in the future.
- Will be intrinsically tied to other elements of the design such as bank stabilization.

Temporary Right-of-Entry Needed for Data Collection along these Properties



A New Beginning…

The final outcome of the design and construction should be to create a situation where we can “leave it alone and let it heal itself”.

Project Path Forward in 2018

- Gather all Surveying & Engineering Data – 4 to 6 months
- Prepare GIS Maps to Delineate Proposed Greenway Corridor – 2 months
- Community Input – Present all Data and Maps Indicating Proposed Greenway & Stabilization Areas as well as new Fishing Habitats – Late 2018
- Development of Permit Package for De-Snagging and Streambank Stabilization Efforts – 2 months
- Formally Submit and Enter Permitting Process with MDMR, MDEQ, Secretary of State and Corps of Engineers – Could take as long as a year – maybe longer

Question and Answer

If you would like ask a question there are comment cards available for you to write your question on. Please raise your hand and a comment card will be delivered to you.

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