Stormwater - Asset Inventory & Assessment (AIA)

Planning for a Resilient Future for Asheville's Stormwater Infrastructure

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Background & Need

Historical Context

The last city-wide stormwater assessment was conducted late 1980s/early 1990s, an updated assessment is critical.

Regulatory Compliance

This Assessment ensures strict adherence to the NPDES MS4 Permit mandates under the Federal Clean Water Act.

Strategic Goals

The Assessment identifies aging infrastructure, system gaps, critical assets, and areas for improvement that will increase the City's resiliency.

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Impact of Comprehensive Assessment

Resiliency

Proactively upgrade high-risk assets to reduce damages and failures.

Efficiency

Standardized protocol for GIS data “collection and maintenance”

Strategy

Prioritize vulnerable communities and advance nature-based solutions.

Planning

Roadmap for Capital Improvement and Operations Maintenance Projects.

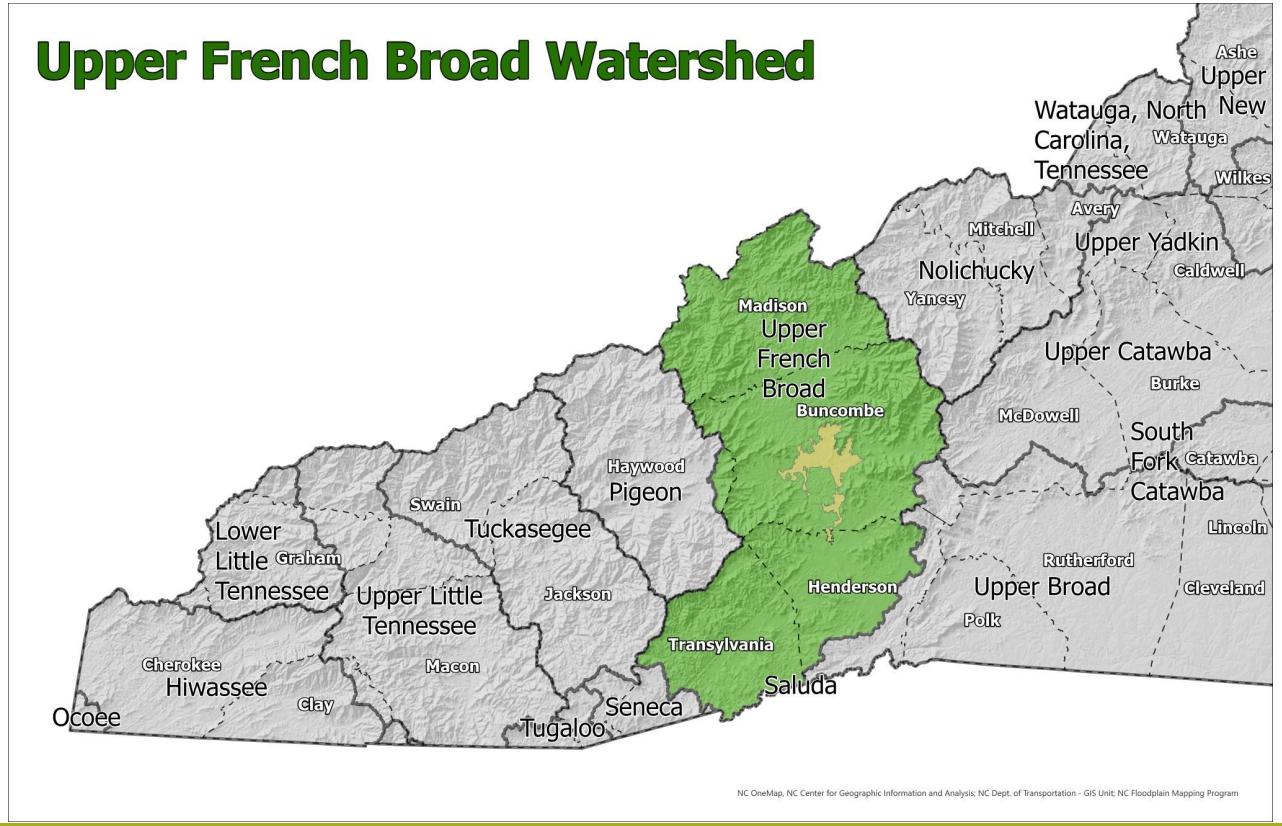
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Comprehensive and Phased Approach

- The overall long-term goal is a City-wide Stormwater Infrastructure Assessment.
- Includes mapping, infrastructure condition, and system capacity modeling for storm events of varying intensity.
- Recommendations incorporated into planning for capital projects and operations and maintenance improvements.
- City-wide Assessment is divided into phases by watersheds and will require multiple years to complete.

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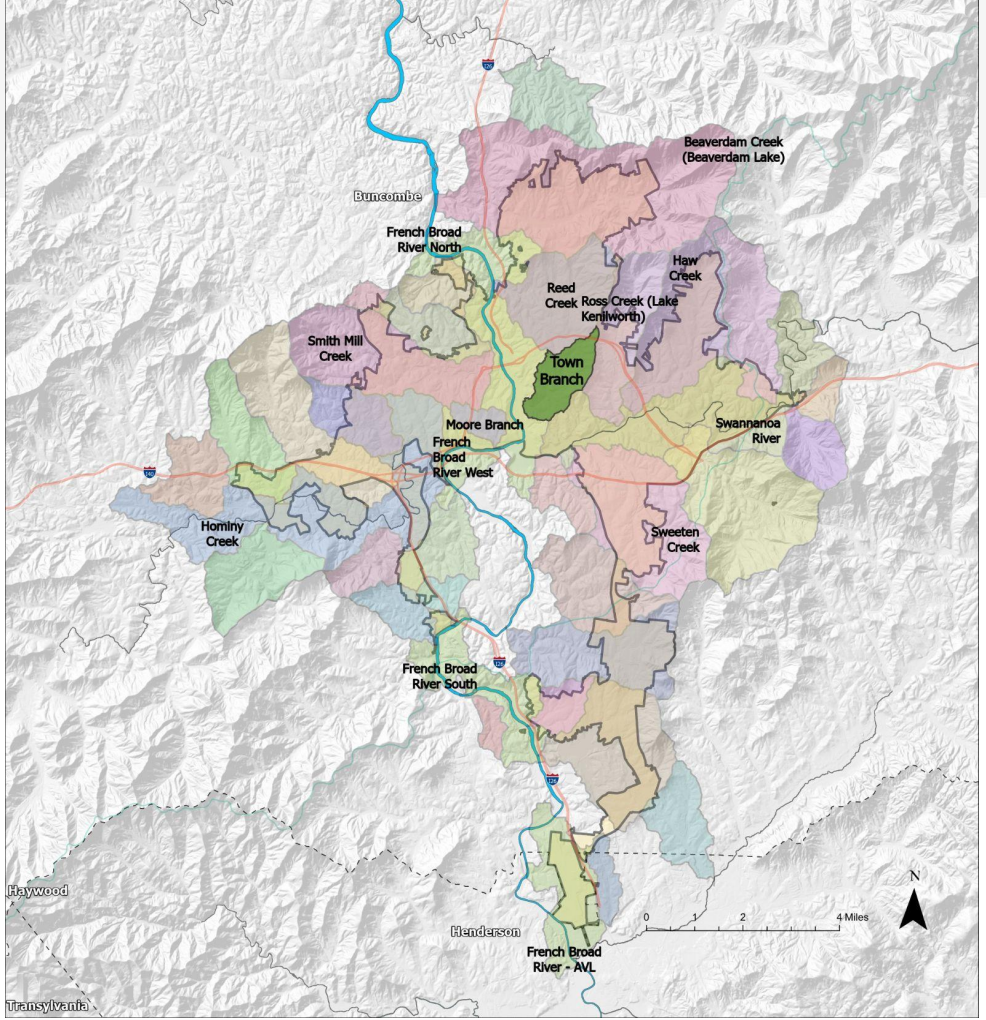
French Broad River Watershed



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Major Watersheds

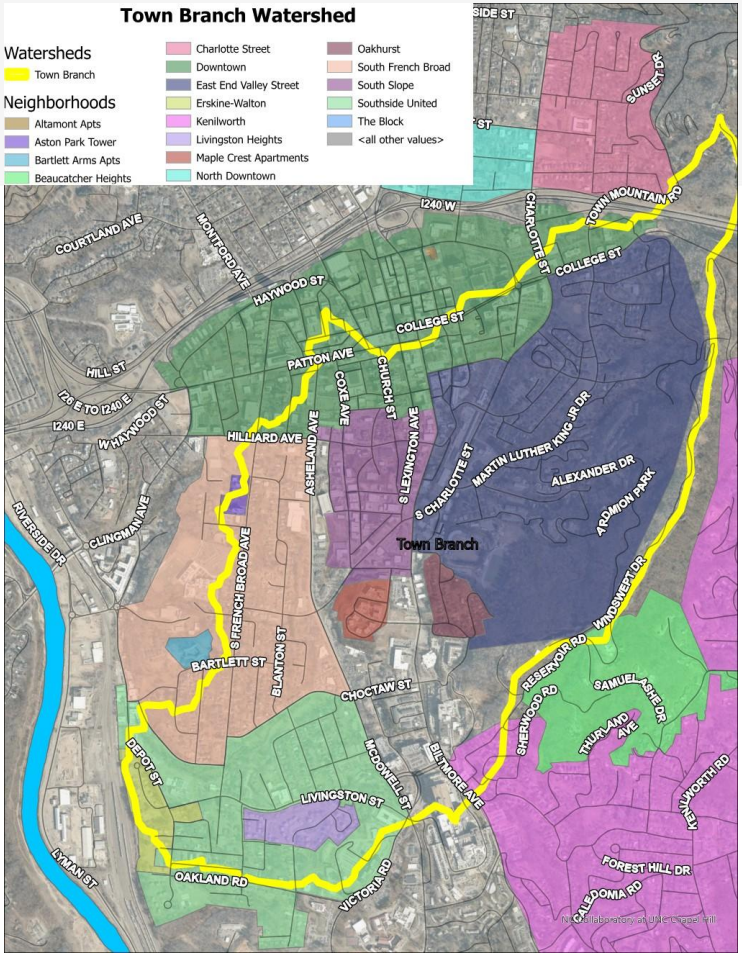
- **Town Branch**
- Beaverdam Creek
- Portions of French Broad River
- Haw Creek
- Hominy Creek
- Moore Branch
- Reed Creek
- Ross Creek
- Smith Mill Creek
- Swannanoa River
- Sweeten Creek



Phase 1

Town (Nasty) Branch Watershed

Neighborhoods: Downtown, South Slope, The Block, S. French Broad, Aston Park Tower, Bartlett Arms Apartments, Southside United, Livingston Heights



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Phase 1: Scope of Work (Key Tasks)

Planning Support

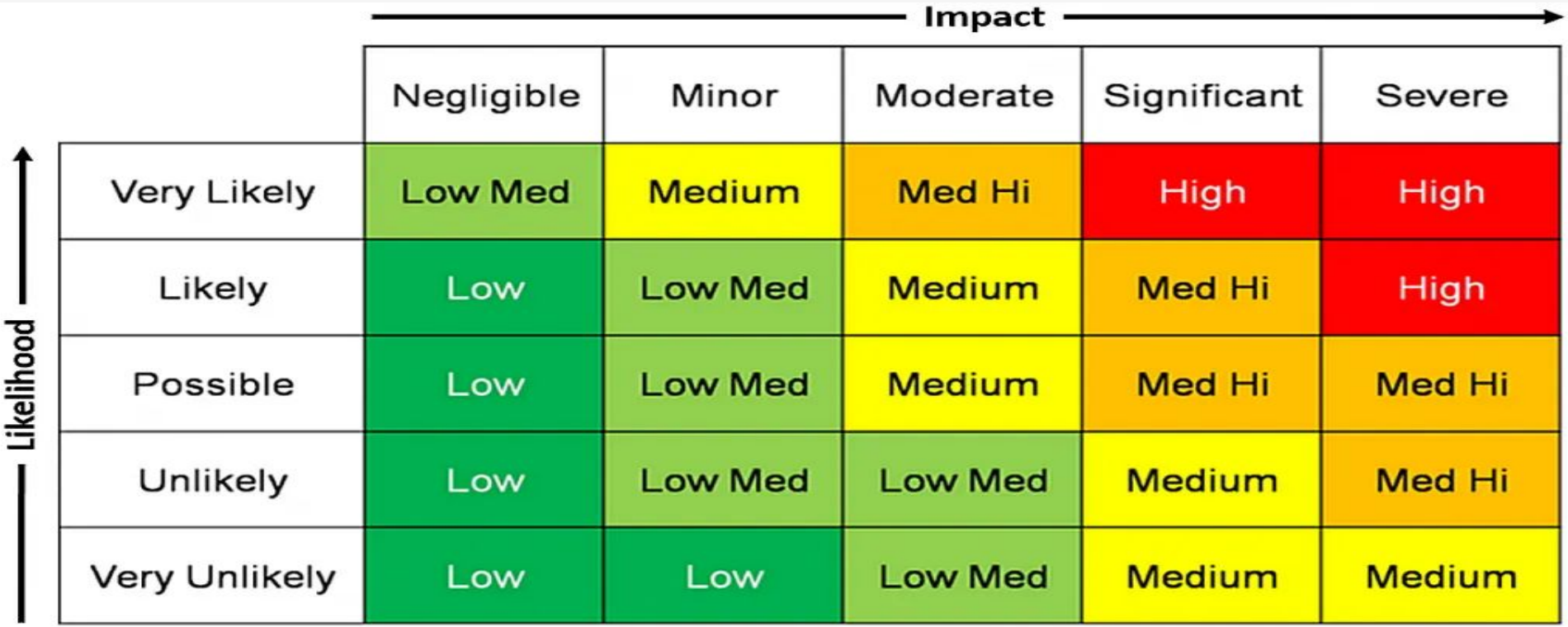
- Risk and prioritization framework development
- Planning and Modeling SOP
- Areas for CIP projects and Prioritizing Maintenance
- Identification of Resilient Infrastructure opportunities

Inventory and Assessment

- Field survey of up to 2600 stormwater structures and pipes
- Protocol for all future phases: data collection and long-term database maintenance SOPs
- Hydrologic and hydraulic system modeling

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Risk-based Approach



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Phase 1: Timeline and Milestones

Winter/Spring 2026 - Complete
Project Initiation and Schedule, Data Review

Summer/Fall 2026 - In Progress
Field surveys and CCTV assessments

Fall 2026 - In Progress
SCM opportunity mapping and system capacity modeling

End of 2026 - Not Started
Final Grant Report & Deliverables

Winter 2027 - Not Started
Framework for prioritizing stormwater system improvements

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Phase 1: Financial Overview

Contract Details

- Contract Amount: **$900,000**
- Consultant: **Ardurra Group, Inc.**

Funding Breakdown

- **$400,000:** Local Assistance for Stormwater Infrastructure Investments (LASII) / ARPA grant
- **$500,000:** City of Asheville Stormwater Operating Budget

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Next Steps

- **Planning for Future Phases**: Deliverables from phase 1 allows us to schedule, budget, and prioritize watersheds for future phases with Phase 2 planned for FY28 budget.
- **Stormwater Capital Projects and In-house Maintenance**:
  - Projects already on the Stormwater CIP list will stay on the list, but may be prioritized differently.
  - Integrate prioritized small projects and maintenance into operations.

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Key Takeaways

- **Proactive, risk-based planning**: Assess system to inform stormwater capital projects and ongoing maintenance, prioritize watershed needs, and focus resources where risk and needs are greatest.

- **Phased, multi-year approach**: The full assessment will be comprised of multiple contracts over many years, with Phase 1 currently underway in the Town “Nasty” Branch watershed.

- **Foundation for future phases**: Phase 1 will guide future watershed prioritization, scheduling, and budgeting.

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Thank You

Questions?

