



Soil and Water Conservation District

Presented by

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Agriculture and Land Resources



Who We Are



BUNCOMBE COUNTY
SOIL & WATER
CONSERVATION DISTRICT
Conservation. Water Quality. Education.

Mission: to conserve the soil, water, and related natural resources of Buncombe County by providing education, information, technical assistance, and economic incentives to County residents



What We Do

- **Technical Assistance** – Open to all county residents
- **Cost Share** – Programs available for both ag and urban landowners to protect water quality and water quantity
- **Farmland Preservation** – Encourage the voluntary preservation and protection of farmlands from non-farm development
- **Environmental Education** – Programs for all ages



Cost Share Programs



Water **quality** funding
for agriculture



Water quality funding
for **urban** sites



Water **quantity** funding
for agriculture



Partner Programs



Conservation Stewardship Program

Program to design conservation plans to address natural resource concerns and attain higher stewardship levels



Environmental Quality Incentives Program

Program for farmers to implement water quality conservation practices



“Sedimentation is the most widespread cause of nonpoint source pollution in the state

and results from land-disturbing activities including agriculture, building and highway construction, uncontrolled urban runoff which erodes streambanks, mining and timber harvesting. Unpaved roads and driveways on steep slopes are also significant sources of sediment.” - NC DEQ

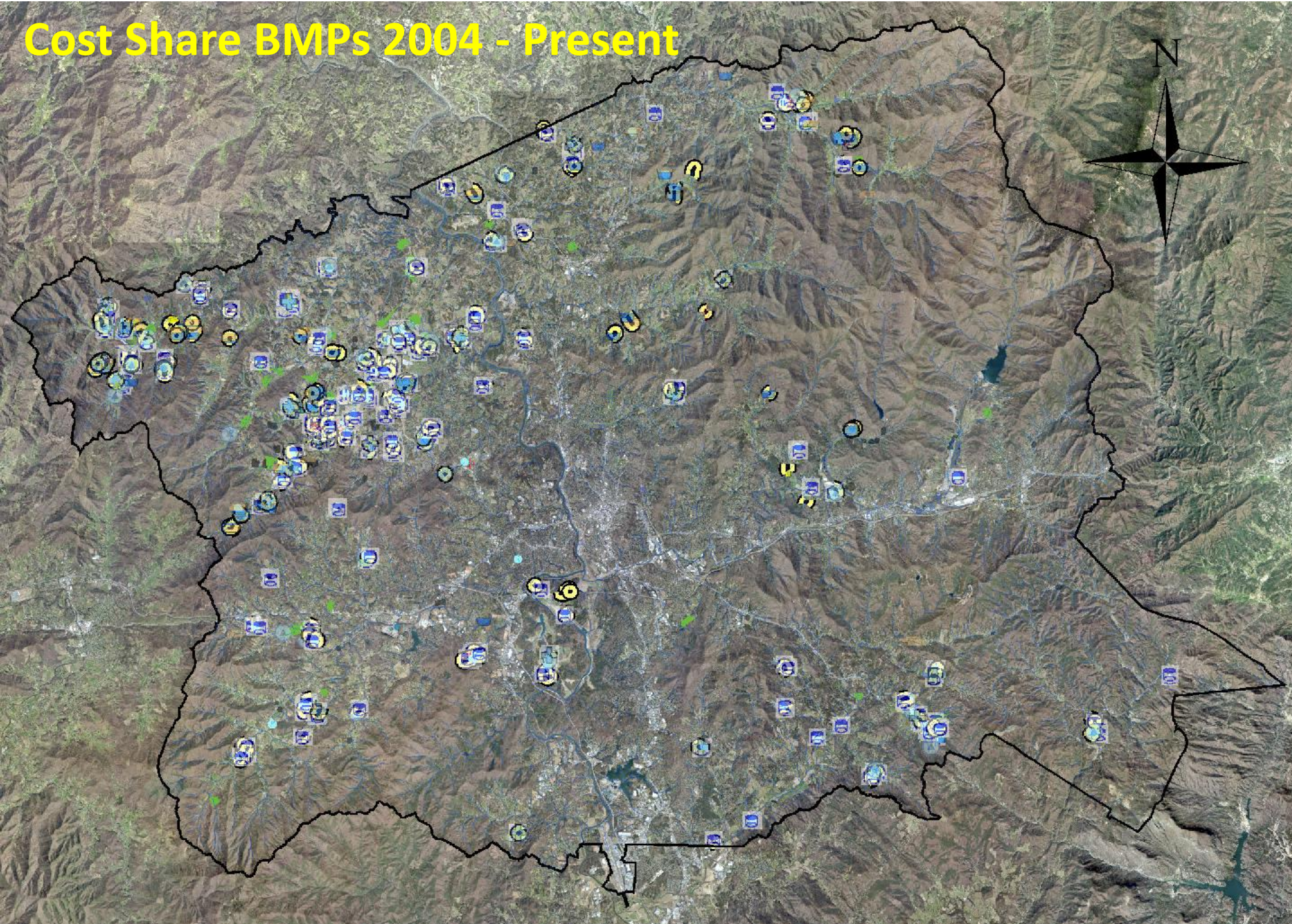


Cost Share Summary 2012 - 2022

Category	Total	Unit
Number of Projects	130	
Total Allocation	\$1,004,656	
Area Affected	6,142	Acres
Livestock Exclusion Fencing	56,571	Linear Feet
Water Saved (Water collection)	329,000	Gallons
Soil Saved	3,825	Tons
Phosphorus Saved	125	Pounds
Nitrogen Saved	3,150	Pounds








Cost Share BMPs 2004 - Present



Legend





BMP_points

Type

-  Cost Shared Water Well
-  Existing Water Well
-  Gravity feed Tank
-  Pressurized Water Tank
-  Spring Development
-  Stream Crossing



BMP_Lines

type

-  Animal Trails and Walkways
-  Existing Cost Shared Fencing
-  Planned Fencing
-  Water Line

BMP_polygons

Type

-  Heavy Use Area Protection
-  Ponds
-  Critical Area Planting
-  Riparian Forest Buffer
-  Pasture Land Conversion
-  Conservation Crop Rotation
-  Grassed Waterway
-  Contour Orchard and Other Fruit Area
-  Waste Storage Pond



Exclusionary Fencing and Streambank Stabilization



Riparian Buffer Established



Streambank Stabilization and Debris Removal – TS Fred

- **44 Project sites with funding**
 - Total estimated project costs = \$4,106,687
 - Total funding received = \$2,886,913
 - Unmet funding needs = **\$1,219,774**
- **18 Sites unfunded**
 - Total estimated project costs = **\$1,340,586**

* Emergency Watershed Protection – USDA/NRCS

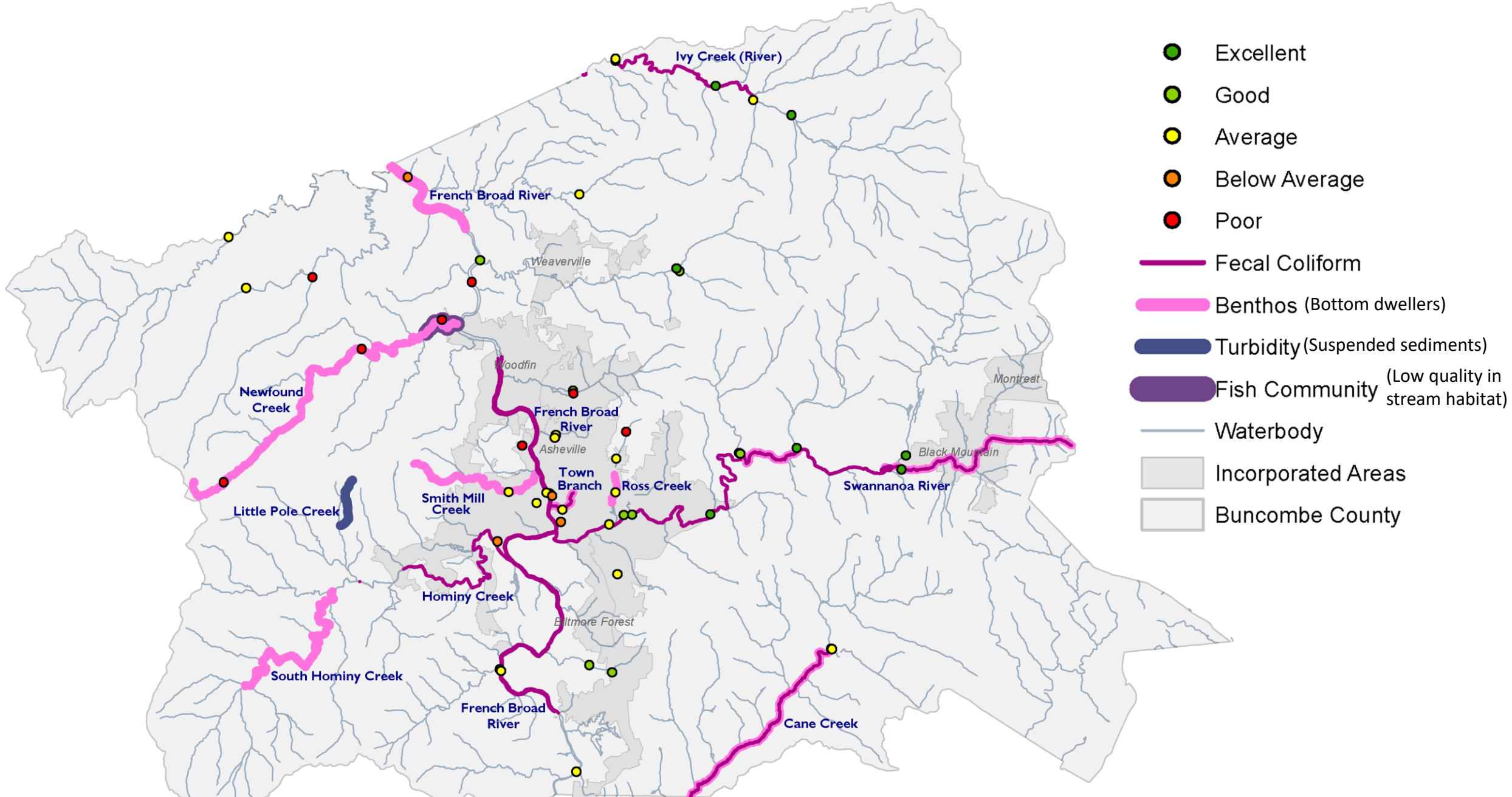


Unfunded StRAP* Projects

Watershed	Number of Sites	Length of Damage (linear feet)	Type of Repair	Cost Estimate	Engineering
Sandymush	2	1,925	Cobble Debris Removal	\$79,250	\$15,850
Sandymush	16	13,255	Bank Stabilization	\$2,333,250	\$466,650
Turkey Creek	7	6,500	Bank Stabilization	\$1,015,000	\$203,000
Newfound	8	6,550	Bank Stabilization	\$1,117,500	\$223,500
Newfound		2,000	Cobble Debris Removal	\$50,000	\$10,000
Hominy	5	5,200	Bank Stabilization	\$805,000	\$161,000
Hominy	7	37,700	Debris Removal	\$657,000	\$131,400
Hominy		800	Cobble Debris Removal	\$38,000	\$7,600
			Total	\$6,095,000	\$1,219,000
				Unmet Need	\$7,314,000

* Streamflow Rehabilitation Assistance Program - NCDA





2022 303(d) Listed Impaired Waters & 2021 VWIN Water Quality Rating

Projects in Cane Creek Watershed

Program	Linear Feet	Project	Total Cost	Progress
NRCS RCCP	2,989	Stream Restoration	\$346,286	Complete
NRCS RCCP	4,069	Stream Restoration	\$1,156,602	Funded – Awaiting Construction
NRCS RCCP	3,400	Stream Restoration	\$575,848	Funded – Awaiting Construction
NRCS RCCP	8,200	Stream Restoration	Awaiting Estimate	Potential Application
StrRAP/EWP	34,100	Debris Removal	\$487,210	Mostly Funded (Need Design \$)
EWP	415	Streambank Stabilization	\$197,175	Funded – Awaiting Design
SWCD - ACSP	175	Livestock Exclusion with tank	\$4,500	Funded – Awaiting Construction
Private Funding	670	Streambank Stabilization	\$140,000	Complete
SWCD - ACSP		Manure Lagoon Closure	\$40,000	Funded – Awaiting Landowner
SWCD – CCAP	931	Stream Restoration	\$62,500	Funded – Awaiting Design
SWCD – CCAP		Stormwater Control	\$31,250	Applied for Funding

Totals 54,534

\$3,095,905



Potential Projects

- Streambank Stabilization/Ongoing Debris Removal
- Riparian Cover/Buffers
- Livestock Exclusionary Fencing with Alternate Water Source
- Septic and Sewage leak Repair Programs
- Stormwater Management/Treatment Program
- Improved Inspection of Stormwater and Erosion Control Permits



Water Quality Goal Setting

Sample Goal:

- Improve water quality in the Cane Creek watershed by reducing
 1. Fecal coliform by X% by X (year) and
 2. Sedimentation by X% by X (year)
- Improve water quality in the French Broad River by reducing
 1. Fecal coliform by X% by X (year) and
 2. Sedimentation by X% by X (year)

