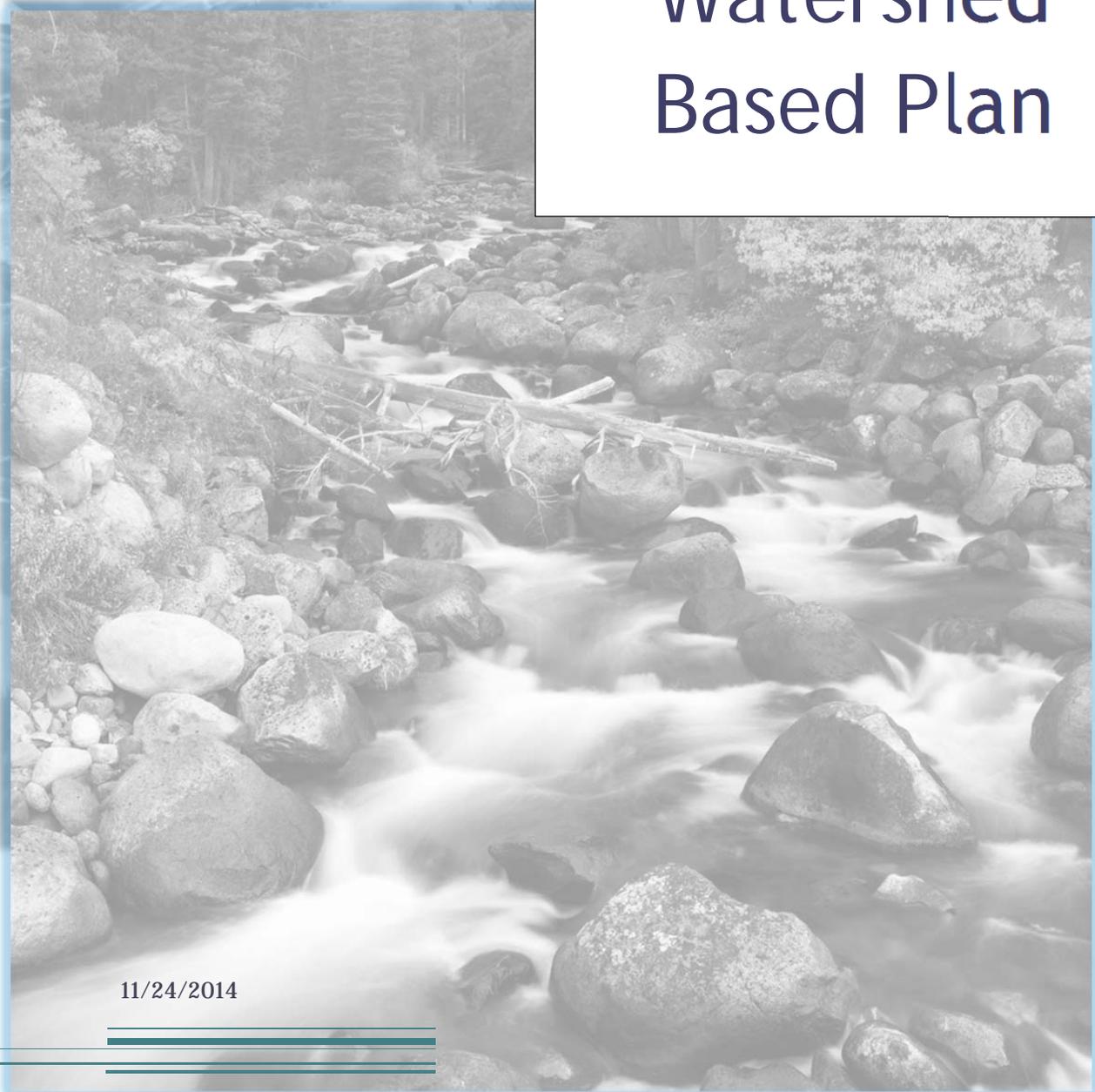


Watershed Based Plan



11/24/2014

Hinds Creek

Watershed Restoration Initiative



Union County Soil Conservation District

Hinds Creek

Watershed Restoration Initiative

Name of Project

Hinds Creek Watershed Restoration Initiative.

Lead Organization

Anderson County Soil Conservation District.

Watershed Identification

Hinds Creek Watershed 06010207-020 in the Lower Clinch Watershed 06010207.

Causes and Sources of Nonpoint Source Pollution in the Watershed

| | | | | | | |
|-----------------------|-------------|----------------|-----|--|-----------------|---|
| TN06010207 016 – 1000 | HINDS CREEK | Anderson | 6.7 | Loss of biological integrity due to siltation L Alteration in stream-side | Pasture Grazing | Stream is Category 5. Impaired, but EPA has approved a pathogen TMDL that addresses some of the known |
| TN06010207 016 – 3000 | HINDS CREEK | Anderson Union | 8.9 | Escherichia coli NA | Pasture Grazing | Stream is Category 5. Impaired, but EPA has approved a pathogen TMDL that addresses some of the known |

Estimate of Load Reductions

It is estimated that the load reduction for the Hinds Creek Watershed due to the implementation of the practices in the following BMP/ Educational Activities and Budget table is as follows:

Nitrogen (N) = 1, 4091 lbs. per year.

Phosphorus (P) = 1,847 lbs. per year.

Sediment= 620 tons per year.

BMP/ Educational Activities and Budget

| BMP NAME | Quantity | Cost/Unit | Budget Estimate |
|----------------------------|-----------------|--------------------|------------------------|
| Watering Facility | 4 | \$2800/each | \$11,200.00 |
| Stream Crossing | 1,429 | \$7.36/square foot | \$10,517.00 |
| Stream bank Stabilization | 283 | \$72.32/CuYd | \$20,466.00 |
| Livestock Pipeline | 3,829 | \$2.77 /foot | \$10,606.00 |
| Access Control Fencing | 4,125.5 | \$3.03/foot | \$12,500.00 |
| Rotational Grazing Fencing | 3,758 | \$2.32/foot | \$8,719.00 |
| Water Well | 2 | \$8,192/each | \$16,384.00 |
| Pumping Plant | 2 | \$3,241/each | \$6,482.00 |
| Spring Development | 1 | \$1,758 each | \$1,758.00 |
| Heavy use Area Protection | 2,000 | \$3.97/square foot | \$7,940.00 |
| Critical area Planting | 2 | \$1,297/Acre | \$2,594.00 |
| Pasture Renovation | 50 | \$200/acre | \$10,000.00 |
| | | TOTAL | \$119,166.00 |

| Educational Event | Quantity | Cost/Unit | Budget estimate |
|--------------------------|-----------------|------------------|------------------------|
| Farm Tour | 1 | \$5,834/each | \$5,834.00 |
| | | TOTAL | \$5,834.00 |

| | |
|---------------------------------|---------------------|
| TOTAL BUDGET FOR PROJECT | \$125,000.00 |
|---------------------------------|---------------------|

Timeline Tasks and Assessment of Progress

| Year of Plan | 2015 | | | | 2016 | | | | 2017 | | | | 2018 | | | | 2019 | | | |
|--|-------------|----------|----------|----------|-------------|----------|----------|----------|-------------|----------|----------|----------|-------------|----------|----------|----------|-------------|----------|----------|----------|
| Quarter | 1 | 2 | 3 | 4 |
| Activity | | | | | | | | | | | | | | | | | | | | |
| <u>Outreach</u> | | | | X | X | X | | | X | | | | X | | | | | | | |
| Farm Tour | | | | | | | | | | | | | | X | | | | | | |
| <u>Agricultural BMPs</u> | | | | | | | | | | | | | | | | | | | | |
| Implement Agricultural BMPs | | | | | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| <u>Evaluation</u> | | | | | | | | | | | | | | | | | | | | |
| Meet with partners and make changes to the Plan if needed. | | | | X | | X | | X | | X | | X | | X | | X | | X | | |

Outreach will consist a community meeting in quarter 4 of 2015 and of adds in the local paper in quarters 2015-4/2016-1,2,3/2017-1/2018-1. A farm tour will be held in quarter 2 of 2018. BMPs will be installed throughout the contract. Partners will meet to evaluate progress every other quarter from 2015-4 to 2019-2.

Criteria to Assess Achievement of Load Reduction Goals

Progress will be measured by the installation of BMPs on agricultural lands that drain into Hinds Creek. Before and after pictures of vegetation, ground cover, runoff and erosion will be reviewed to assess reduction of the pollutant load.

Monitoring and Documenting Success

TDEC water quality data will be reviewed after the next monitoring cycle for Hinds Creek to determine the success of BMP installation in the area.