

Needs Assessment Practice Information

State average Cost-Share per contract FY 08 Dollars with average acres per practice

*** Means FY 07 Dollars

Sheet and Rill Erosion: The removal of layers of soil from the land surface by the action of rainfall and runoff. It is the first stage in water erosion. The reason that taxpayer dollars are spent on this concern is the fact that protecting the soil from runoff stops potential land degradation and assists with water quality protection. The state cost-share practices that can reduce or eliminate this concern are as follows. (These practices are measured by the total number of acres in the field. **For reporting purposes terraces will be recorded by acres in the field. Terrace practices will be qualified based on either sheet and rill or gully erosion to solve erosion issues.**)

DSL-1: Permanent Vegetative Cover Establishment **\$1,719.62** -21.60 acres

DSL-2: Permanent Vegetative Cover Improvement **\$1,547.50**- 27.15 acres

DSL-4: Terrace Systems **\$2,010.73**- 13.59 acres

DSL-44: Terrace Systems with Tile **\$6, 614.44**- 13.65 acres

DSL-15: No-Till Systems **\$600**- 40 acres

N380: Windbreak/Shelterbelt Establishment \$

Gully Erosion: The process whereby the removal of soil is characterized by large incised channels in the landscape; severe erosion in which trenches are cut into the soil. The reason taxpayer dollars are spent on this concern is the fact that protecting the soil from runoff stops potential land degradation and assists with water quality protection. These practices are measured by the number of actively eroding gully sites. The state cost-share practices that can reduce or eliminate this concern are as follows. **(For reporting purposes diversions will be recorded by site. Diversion practices will be qualified based on either sheet and rill or gully erosion to solve erosion issues.)**

DSL-11: Permanent Vegetative Cover-Critical Area **\$2,310.63**

DWC-1: Water Impoundment Reservoir **\$6,619.67**

DWP-1: Sediment Retention, Erosion or Water Control Structure **\$2,271.98**

DSL-5: Diversions **\$3, 580.50**- 6.16 acres

DWP-3: Sod Waterways **\$2,665.78**

Woodland Erosion: The process where by the removal of soil or vegetation (including trees) through animal presence or tree harvesting allows soil to become susceptible to sheet and rill and gully erosion. The reason taxpayer dollars are spent on this concern is to exclude livestock, people or vehicles from the woodland area and to develop a plan for harvesting trees in an appropriate manner to protect soil integrity and water quality. The state cost-share practices that can reduce or eliminate this concern are as follows. (For reporting purposes the practices are measured by the total number of acres in the field. **The N655 will be figured based on site since it is addressing gully erosion.)**

DFR-4: Forest Plantation **\$1,065.17-** 9.36 acres

DFR-5: Woodland Protection through Livestock Exclusion **\$2,029.78-** 44.79 acres

N472: Use Exclusion **\$2,731.14-** 60.84 acres

C100: Timber Harvest Plans \$

N655: Restoration of Skid Trails, Logging Roads, Stream Crossings and Log Landings \$

Irrigation Management: The artificial application of water to land to assist in the production of crops. The reason taxpayer dollars are spent on this concern is for the protection of water quality through efficiently and uniformly applying water to control runoff, application of nutrients and chemicals and to conserve water supplies. The state cost-share practices that can reduce this concern are as follows. (For reporting purposes the practices are measured by the total number of acres in the field.)

N442: Irrigation Systems, Sprinkler **\$1,905.99-** 114.93 acres

N443: Irrigation System, Surface and Subsurface **\$1,621.27-** 66.34 acres

N447: Irrigation System, Tail Water Recovery \$

N430: Irrigation Water Conveyance **\$5,005.23-** 63.32 acres

N587: Structure for Water Control \$

N554: Drainage Water Management \$

Sensitive Areas: A strip or area of vegetation along one end of a field, surrounding a field or alongside a stream. The reason that taxpayer dollars are spent on this concern is for the protection of water quality through buffers collecting and filtering out sediment and other nutrients, herbicides and pesticides that could runoff of crop fields, and the exclusion of livestock from streams keeps them from defecating in the streams preventing high nutrient and E. coli content while protecting the streambank from soil degradation at the same time. The practices are measured by the total number of acres in the field. The state cost-share practices that can help reduce or eliminate this concern are as follows.

N386: Field Boarder **\$2,414.91-**7.28 acres

N393: Filter Strip **\$1,802.42-** 4.10 acres

N391: Riparian Forest Buffer **\$4,009.80-** 3.20 acres

N380: Windbreak/Shelterbelt Establishment **\$13,500.00-** 2.8 acres

WQ10: Stream Protection **\$11,917.46-** 20.63 acres

Animal Waste Management: To manage waste from agricultural production. The reason that taxpayer dollars are spent on this concern is to try and reduce or prevent degradation of the soil and water resources. Such systems are planned to preclude discharge of pollutants to surface or groundwater and to recycle waste through correct soil application to agricultural land. The state cost-share practices that help reduce or eliminate this concern are as follows. (The practice is measured by each site.)

N312: Waste Management System **\$18,371.40**

Nutrient Management: To demonstrate the environmental and economic advantages of following a nutrient management plan, and to provide operators an incentive to encourage the adoption of new management techniques and/or technologies for applying commercial fertilizer. The reason that taxpayer dollars are spent on this concern is water quality. If nutrients in the soil or the ones that are applied are managed to the point of the best and appropriate use, there will be less nutrient runoff and leeching of the soil after a rainfall event into the streams. The state cost-share practices that help reduce or eliminate this concern are as follows. (The practices are measured by the total number of acres in the field.)

N590: Nutrient Management **\$1,007.50**- 85.27 acres

N633: Waste Utilization **\$1,902.41**- 81.38 acres

Pest Management: To demonstrate the benefits of applying the correct amount and type of pesticides so that operators minimize entry of contaminants to ground and surface water. The reason taxpayer dollars are spent on this concern is to protect water quality by reducing the amount of pesticides used on cropland or pasture that could potentially runoff and contaminate a stream or other water sources. The state cost-share practice that helps reduce or eliminate this concern is as follows. (This practice is measured by the total number of acres in the field.)

N595: Pest Management **\$901.92**- 74.36 acres

Groundwater Protection: Water beneath the earth's surface that fills pores between materials such as sand, soil or gravel. Groundwater is a major source of water for agricultural and industrial purposes and is an important source of drinking water. The reason taxpayer dollars are spent on this concern is for the protection of soil and water quality. The state cost-share practices that help reduce or eliminate this concern are as follows. (The practices are measured by each site.)

DSP-31 Sinkhole improvement (Only Perry, St. Genevieve, Cape Girardeau Counties)
\$2,039.44

N317: Composting Facility **\$21,476.67*****

N316: Incinerator **\$3,689.44*****

N725: Sinkhole Treatment **\$798.28*****

N574: Spring Development **\$1,355.13**

N351: Well Decommissioning **\$441.36**

Grazing Management: In pastureland where non-woody, permanent vegetative cover is established. The reason taxpayer dollars are spent on this concern is to promote economically and environmentally sound agricultural land management on pastureland by demonstrating the best use of soil and water resources through the use of rotational grazing as well as the reduction or prevention of soil erosion and water quality protection. The state cost-share practices that could reduce or eliminate this concern are as follows. (The practices are measured by the total number of acres in the field.)

DSP-2: Permanent Vegetative Cover Enhancement **\$1,519.96-** 28.56 acres

DSP-3: Planned Grazing System **\$4,221.14-** 108.18 acres

DSP-33: Planned Grazing System with Pond **\$2,943.19-** 47.25 acres

DSP-333 Planned Grazing System with a Well **\$2,766.85-** 93.42 acres

Streambank Erosion: For use on agricultural land along streams where significant streambank erosion problems exist. The reason taxpayer dollars are spent on this concern is to protect streambanks from accelerated erosion, provide adequate streambank vegetation and improve water quality on a watershed basis. The state cost-share practice that could reduce or eliminate this concern is as follows. (This practice is measured in number of feet.)

C650: Streambank Stabilization **\$3,923.41-** 572.50 feet