

**Practice:** 393 - Filter Strip

**Scenario:** #1 - Filter Strip, Native species: Forgone Income Included

**Scenario Description:** A strip or area of native herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of native species. The area of the filter strip is taken out of production from a corn-wheat-soybean crop rotation.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of native species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

**Scenario Feature Measure:** number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$867.12

**Scenario Cost/Unit:** \$433.56

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	4	\$63.70
One Species, Warm Season, Native Perennial Grass	2322	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$70.93	2	\$141.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	4	\$24.44
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Foregone Income**

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$361.74	1	\$361.74
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$302.45	0.5	\$151.22
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$163.26	0.5	\$81.63

**Practice:** 393 - Filter Strip

**Scenario:** #2 - Filter Strip, Introduced species: Forgone Income Included

**Scenario Description:** A strip or area of Introduced herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of introduced species. The area of the filter strip is taken out of production from a corn-wheat-soybean rotation.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of introduced species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$939.72

**Scenario Cost/Unit:** \$469.86

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	2	\$99.29
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	2	\$31.85
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	80	\$48.19
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	80	\$62.50
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.44	80	\$34.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	2	\$12.22
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.84	2	\$13.69
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Foregone Income**

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$361.74	1	\$361.74
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$302.45	0.5	\$151.22
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$163.26	0.5	\$81.63

**Practice:** 393 - Filter Strip

**Scenario:** #3 - Filter Strip, Native Species w/ Land Shaping: Forgone Income Included

**Scenario Description:** A strip or area of Native herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of native species. The area of the filter strip is taken out of production from a corn-wheat-soybean rotation.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of native species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation (including any shaping needed to ensure even entry of water into the strip), seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$1,247.84

**Scenario Cost/Unit:** \$623.92

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Labor**

Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$29.32	4	\$117.29
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**Materials**

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	4	\$63.70
One Species, Warm Season, Native Perennial Grass	2322	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$70.93	2	\$141.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	4	\$24.44
Dozer, 80 HP	929	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$65.86	4	\$263.43
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Foregone Income**

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$361.74	1	\$361.74
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$302.45	0.5	\$151.22
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$163.26	0.5	\$81.63

**Practice:** 393 - Filter Strip

**Scenario:** #4 - Filter Strip, Introduced Species w/ Land Shaping: Forgone Income Included

**Scenario Description:** A strip or area of herbaceous vegetation, introduced species, situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep, land shaping and planting of approved species. The area of the filter strip is taken out of production from a corn-wheat-soybean rotation.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of introduced species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation (including any shaping needed to ensure even entry of water into the strip), seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas. The area of the filter strip is taken out of production.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$1,306.75

**Scenario Cost/Unit:** \$653.38

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	2	\$99.29
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	2	\$31.85
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	80	\$48.19
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	80	\$62.50
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.44	80	\$34.85

**Labor**

Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$29.32	4	\$117.29
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**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	2	\$12.22
Dozer, 80 HP	929	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$65.86	4	\$263.43
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Foregone Income**

FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	\$361.74	1	\$361.74
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	\$302.45	0.5	\$151.22
FI, Wheat Dryland	1963	Dryland Wheat is Primary Crop	Acre	\$163.26	0.5	\$81.63

**Practice:** 393 - Filter Strip

**Scenario:** #5 - Filter Strip, Native species

**Scenario Description:** A strip or area of native herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of native species.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of native species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas.

**Scenario Feature Measure:** number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$272.53

**Scenario Cost/Unit:** \$136.27

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	4	\$63.70
One Species, Warm Season, Native Perennial Grass	2322	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$70.93	2	\$141.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	4	\$24.44
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Practice:** 393 - Filter Strip

**Scenario:** #6 - Filter Strip, Introduced species

**Scenario Description:** A strip or area of Introduced herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of introduced species.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of introduced species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation, seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$345.13

**Scenario Cost/Unit:** \$172.56

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	2	\$99.29
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	2	\$31.85
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	80	\$48.19
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	80	\$62.50
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.44	80	\$34.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	2	\$12.22
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.84	2	\$13.69
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Practice:** 393 - Filter Strip

**Scenario:** #7 - Filter Strip, Native Species w/ Land Shaping

**Scenario Description:** A strip or area of Native herbaceous vegetation situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep and planting of native species.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of native species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation (including any shaping needed to ensure even entry of water into the strip), seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$653.25

**Scenario Cost/Unit:** \$326.63

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Labor**

Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$29.32	4	\$117.29
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**Materials**

Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	4	\$63.70
One Species, Warm Season, Native Perennial Grass	2322	Native, warm season perennial grass. Includes material and shipping only.	Acre	\$70.93	2	\$141.85

**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	4	\$24.44
Dozer, 80 HP	929	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$65.86	4	\$263.43
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54

**Practice:** 393 - Filter Strip

**Scenario:** #8 - Filter Strip, Introduced Species w/ Land Shaping

**Scenario Description:** A strip or area of herbaceous vegetation, introduced species, situated between cropland, grazing land or disturbed land and sensitive areas. Practice includes seedbed prep, land shaping and planting of approved species.

**Before Situation:** Annual cropland, grazing land, or disturbed land (including forestland) allows for runoff of suspended solids, dissolved and/or associated contaminants into environmentally-sensitive areas such as wetlands, riparian zones, critical habitat and neighboring non-ag properties. Water Quality resource concerns are associated with this practice.

**After Situation:** The planned filter strip will be established and maintained per the practice plan that will meet the criteria for the planned purpose(s). The vegetation will consist of introduced species. The filter strip will have adequate width to filter the planned pollutants. The practice includes seedbed preparation (including any shaping needed to ensure even entry of water into the strip), seeding, and operation and maintenance to maintain the vegetation and the function of the filter strip. Species selected shall be able to withstand partial burial by sediment and tolerant of herbicides used on contribution area while protecting environmentally-sensitive areas.

**Scenario Feature Measure:** Number of acres

**Scenario Unit:** Acre

**Scenario Typical Size:** 2

**Total Scenario Cost:** \$712.16

**Scenario Cost/Unit:** \$356.08

**Cost Details**

Component Name	Id	Description	Unit	Cost	Qty	Total
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**Materials**

Four Species Mix, Cool Season, Introduced Perennial (2 grasses, 2 legumes)	2317	Cool season grass and legume mix. Includes material and shipping only.	Acre	\$49.65	2	\$99.29
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.93	2	\$31.85
Nitrogen (N), Urea	71	Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.60	80	\$48.19
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.78	80	\$62.50
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.44	80	\$34.85

**Labor**

Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$29.32	4	\$117.29
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**Equipment Installation**

Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$6.11	2	\$12.22
Dozer, 80 HP	929	Track mounted Dozer with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$65.86	4	\$263.43
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acre	\$21.27	2	\$42.54