Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 1

Scenario Name: Basic, Two Crop Types

Scenario Description: Planning of an annual crop rotation with a minimum of two different crop types. Payment is provided to the producer and includes the time needed to plan and implement the logistics of changing the rotation to effectively implement a conservation crop rotation.

Before Situation: A monoculture system is in place and no cover crop is utilized.

After Situation: An annual crop rotation was planned that includes a minimum of two different crops and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground over time.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Area planted

Scenario Unit: Acre

Scenario Typical Size: 100.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$0.00	$0.00
Labor	$1,698.85	$16.99
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$1,698.85	$16.99

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 5

Scenario Name: Specialty Crops

Scenario Description: Development of an annual crop rotation of specialty crops (herbaceous fruits and vegetables), with a minimum of two different crops on the same ground over time. Typical crop rotation includes multiple plantings of annual crops during the growing season and within the current crop year.

Before Situation: The crop rotation consists of growing one specialty crop type per crop year.

After Situation: A crop rotation was planned that includes a minimum of two different specialty crops and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground as multiple plantings over the crop year.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Area planted

Scenario Unit: Acre

Scenario Typical Size: 50.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$0.00	$0.00
Labor	$2,265.13	$45.30
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$2,265.13	$45.30

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 72

Scenario Name: Irrigated to Dryland

Scenario Description: Conversion of an irrigated cropping system to a dryland cropping system to improve water use efficiency. The cost represents typical situations for conventional (non-organic) producers converting from irrigated cropping to dryland farming. Foregone income is included and based on standard crop rotation of corn and soybean.

Before Situation: The rotation consists of growing row crops that receive a significant (more than half) amount of the required water via irrigation. The water demands are impacting the area's water availability.

After Situation: The dryland rotation was planned using the same crops, or a rotation that grows a minimum of two different crops over time and meets the practice criteria. The crop implementation sequence was designed to utilize available rainfall and soil more efficiently.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Area planted

Scenario Unit: Acre

Scenario Typical Size: 200.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$0.00	$0.00
Labor	$1,698.85	$8.49
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$32,016.43	$160.08
Risk	$0.00	$0.00
Total	$33,715.28	$168.58

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 85

Scenario Name: Specialty Crop, Small

Scenario Description: Development of a crop rotation for a small scale or diversified small farm growing specialty crops, with a minimum of two different specialty crop types. The planned sequence allows for multiple plantings of specialty crops on the same ground in one crop year. Payment includes the costs associated with acquiring the technical knowledge and skills necessary to effectively implement a conservation crop rotation on a typical specialty crop farm. The cost represents typical situations for organic and non-organic producers.

Before Situation: The rotation consists of growing specialty crops. Residue removal from the planted area is a common practice resulting in bare soil and soil erosion which are concerns.

After Situation: A rotation was planned that includes a minimum of two different specialty crops and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground as multiple rotations in a crop year.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: area planned

Scenario Unit: 1,000 Square Feet

Scenario Typical Size: 15.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$19.10	$1.27
Labor	$675.52	$45.03
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$0.00	$0.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$694.61	$46.31

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 108

Scenario Name: Perennial, Short-Term

Scenario Description: Addition of a short-term perennial (e.g. alfalfa or intermediate wheatgrass) into a crop rotation that currently includes a minimum of two different crops to effectively implement a conservation crop rotation. The short-term perennial can be for forage, grain, or dual-purpose use in the cropping system while the crop is intended to be harvested and must be grown for a minimum of two years after planting. Payment includes the time needed to plan and implement the logistics of adding a short-term perennial. The cost represents typical situations for conventional and organic producers.

Before Situation: Crop rotation includes at least two different annually planted crops, cover crops are not part of the crop rotation or are infrequently used, and perennials have not been grown on the field within the past three years.

After Situation: A conservation crop rotation was established with a perennial crop for a short-term (3-5 years) and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground over time. The perennial crop rotation provides the same, or greater, conservation benefits than the annual crop plus cover crop system.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Treated acres

Scenario Unit: Acre

Scenario Typical Size: 40.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$1,024.34	$25.61
Labor	$1,878.67	$46.97
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$119.92	$3.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$3,022.93	$75.57

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 109

Scenario Name: Winter or Spring Annual

Scenario Description: Addition of a winter annual or small grain to a crop rotation that includes at least two different crop types. Payment includes the time needed to plan and implement the logistics of adding a winter annual or spring-planted small grain into the crop rotation to effectively implement a conservation crop rotation. The cost represents typical situations for conventional and organic producers.

Before Situation: Crop rotation does not include a winter annual or spring-planted small grain grown on the field within the past three years and is not designed to conserve resources.

After Situation: A rotation was planned that includes a minimum of two different crops and a winter annual or small grain and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground over time.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Treated acres

Scenario Unit: Acre

Scenario Typical Size: 40.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$1,024.34	$25.61
Labor	$1,029.25	$25.73
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$119.92	$3.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$2,173.50	$54.34

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 111

Scenario Name: Improved Resource Conserving Crop Rotation

Scenario Description: Improve crop rotation that already includes at least one resource conserving crop by adding a perennial.

Before Situation: Annual field crops being grown. Cover crops are not part of the crop rotation or are infrequently used. Perennials have not been grown on field within the past 3 years.

After Situation: A conservation crop rotation is established with a perennial crop for a short-term (3-5 years). The crop rotation achieves resource conserving benefits by returning and building soil organic matter, reduces wind and water erosion, improves soil fertility and tilth, interrupts pest cycles, and improves soil moisture retention. The perennial crop rotation provides same or greater conservation benefits than annual crop plus cover crop system.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Acre

Scenario Unit: Acre

Scenario Typical Size: 40.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$1,024.34	$25.61
Labor	$2,514.11	$62.85
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$119.92	$3.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$3,658.37	$91.46

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 112

Scenario Name: Resource Conserving Crop Rotation

Scenario Description: Establish a crop rotation with at least one State designated resource conserving crop.

Before Situation: Crop rotation does not include a winter annual or spring-planted small grain grown on the field within the past three years and is not designed to conserve resources.

After Situation: A rotation was planned that includes a minimum of two different crops and a winter annual or small grain and meets the practice criteria. The implementation requirements provide the sequence of crops grown on the same ground over time.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: Acre

Scenario Unit: Acre

Scenario Typical Size: 40.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$1,024.34	$25.61
Labor	$3,351.42	$83.79
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$119.92	$3.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$4,495.68	$112.39

Practice Code Name: 328 - Conservation Crop Rotation

Scenario Number: 140

Scenario Name: Add Crop Organic System

Scenario Description: Addition of new crop types to the conservation crop rotation to facilitate building soil organic matter, capturing nitrogen, breaking pest cycles, or other purposes that maintain or enhance natural resources. The producer is changing to organic production, with the existing crop rotation being conventional, non-organic, and has at least two different crop types. Payment includes the labor of the supervisor/decision maker and costs associated with acquiring knowledge about new crop types.

Before Situation: Crops are grown non-organically and crop rotation is not designed to conserve resources. Conventional operations and chemical use may degrade soil and require mitigation to protect natural resources and address health concerns.

After Situation: Implementation requirements were delivered to the producer and meet the practice criteria. Crop types were added to the crop rotation which have improved diversity and soil resource concerns. Operations and management decisions align with National Organic Program (NOP) requirements.

Associated Practices: Additional practices may be required to ensure effective implementation. The costs associated with these practices are not included in the current practice scenario.

Resource Concerns: The conservation practice standard provides implementation specifications to achieve the desired conservation objective(s) by addressing identified natural resource concern(s).

Feature Measure: acres

Scenario Unit: Acre

Scenario Typical Size: 40.00

Cost Summary:

Cost Category	Total Cost	Scenario Cost/Unit
Materials	$0.00	$0.00
Equipment Installation	$2,246.74	$56.17
Labor	$2,251.72	$56.29
Mobilization	$0.00	$0.00
Acquisition of Technical Knowledge	$239.83	$6.00
Foregone Income	$0.00	$0.00
Risk	$0.00	$0.00
Total	$4,738.29	$118.46