

Conservation Security Program Enhancement Payment List for FY 2006 Signup Red Lakes Watershed



Natural Resources Conservation Service
United States Department of Agriculture

Minnesota, 2006

Enhancement – Energy Management

Enhancement	Unit	Cost per Unit (\$)
EEM40 Energy Audit	Each	500
EEM41 Recycling of all used motor oil for tractors and lubricating oil for other farm equipment such as irrigation pumps or grain drying motors	Year	200
EEM42 Use of perennial legumes in the crop rotation to reduce energy need for production of nitrogen	Acre	0.70
EEM43 Use of annual legumes in the crop rotation to reduce energy need for production of nitrogen	Acre	0.10
EEM44 Use of manure to supply at least 90% of nutrient needs of plants	Acre	1.10
EEM45 Soil Tillage Intensity Rating (STIR) is less than 15	Acre	0.90
EEM45 Soil Tillage Intensity Rating (STIR) is less than 30	Acre	0.70
EEM45 Soil Tillage Intensity Rating (STIR) is less than 60	Acre	0.50
EEM46 Use of renewable energy fuel (Biodiesel or Ethanol). Payments are made in \$25 increments for each 100 gallons <u>actual</u> biofuel used per year.	100 gal	25
EEM47 Renewable energy generation (solar, wind, water, geothermal, methane).	100 kWh	2.50
EEM48 10% energy reduction	BTU's	200
EEM48 20% energy reduction	BTU's	500
EEM48 5% energy reduction	BTU's	100

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Enhancement – Air Resource Management

Enhancement	Unit	Cost per Unit (\$)
EAM40 - Investigate various Greenhouse Gas (GHG)/Carbon sequestration scenarios by utilizing the Carbon Management Evaluation Tool for Voluntary Reporting (COMET-VR) online web tool.	Each	500
EAM60 – Improve odor control by using a waste facility cover	Year	400.00
EAM61 – Improve odor control by using a compost facility for manure	Year	400.00
EAM06 – Improve the control of dust and pesticide drift through the use of cross wind trap strips	Acre	10.00
EAM62 - Improve air quality by controlling concentrated animal odors through the use of bio-filters for curtained barns	Year	400.00
EAM62 - Improve air quality by controlling concentrated animal odors through the use of bio-filters for enclosed barns	Year	800.00
EAM06 - Improve air quality by managing field windbreaks to control dust and pesticide drift	Acre	27.00
EAM06 - Improve air quality by managing shelterbelt(s) adjacent to feedlot and/or waste holding areas by controlling odors and dusts	Acre	27.00
EAM10 – Improve snow management by managing standing unharvested corn (8 row minimum) to serve as an annual snow fence.	Linear Foot	0.50

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Enhancement – Grazing Management

Enhancement	Unit	Cost per Unit (\$)
EGM04 - Limit access to all livestock ponds and watering areas to protect water quality and improve livestock performance	Year	500
EGM09 - Manage pastures to promote species diversification and improve forage quality	Acre	10.00
EGM10 - Reduce travel distance to watering facilities to uniformly distribute grazing pressures and avoid erosion by prevention of the formation of trails	Year	500.00
EGM12 - Rotate feeding and salting areas to prevent bare soil areas from livestock concentration	Year	300.00
EGM14 - Monitor pasture using the "Pasture Condition Score Sheet" to monitor the condition of the soil, water, and plan resources in the pasture so that corrective action may be taken in a timely manner	Acre	5.00
EGM02 - Manage over wintering plan to eliminate livestock concentration concerns, prevent erosion, protect water quality, and improve forage quality	Year	300.00
EGM05 - Utilize crop residues for fall grazing to extend rest, particularly in the fall, allowing the pasture forages to build up root reserves for winter survival and for a healthier more vigorous stand	Acre	3.00

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Enhancement – Habitat Management

Enhancement	Unit	Cost per Unit (\$)
EHM01 - Enhance winter wildlife food through no fall tillage residue management.	Acre	5.00
EHM01 - Leave grass hayfield strip $\geq 100'$ uncut to provide habitat for wildlife including native pollinators (minimum of 10% each field and a maximum of 10 acres)	Acre	135.00
EHM01 - Leave legume hayfield strip $\geq 100'$ uncut to provide habitat for wildlife including native pollinators (minimum of 10% each field and a maximum of 10 acres)	Acre	180.00
EHM03 - Time haying of grass hay to avoid period (5/1 to 7/1) when wildlife are nesting, fawning, etc. & to allow for the establishment of residual cover for wildlife (maximum of 10 acres)	Acre	100.00
EHM03 - Time haying of legume hay to avoid period (5/1 to 7/1) when wildlife are nesting, fawning, etc. & to allow for the establishment of residual cover for wildlife (maximum of 10 acres)	Acre	135.00
EHM09 - Improve utilization of buffer practices by wildlife by increasing width of existing buffer strips. Maximum payment on 80 feet.	Acre	50.00
EHM18 - Enhance wildlife habitat by reducing snow deposition into existing shelterbelts	Acre	27.00
EHM19 - Use a flushing bar when harvesting forages to allow the exit of wildlife from the path of harvest equipment	Acre	5.00
EHM23 - Encourage use of nest structures and brush piles for habitat for cavity nesting birds, mammals & herptiles. (acres where there is a least one nesting structure)	Acre	10.00
EHM21 - Enhance wildlife habitat by converting existing non-beneficial (non-pasture) grass areas to native grass/forb species.	Acre	20.00

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Enhancement – Nutrient Management

Enhancement	Unit	Cost per Unit (\$)
ENM01 - Implement a Nutrient Management Enhancement Component	Acre	3.00
ENM01 - Implement two (2) Nutrient Management Enhancement Components	Acre	6.00
ENM01 - Implement three (3) Nutrient Management Enhancement Components	Acre	9.00
ENM01 - Implement four (4) Nutrient Management Enhancement Components	Acre	12.00
ENM01 - Implement five (5) Nutrient Management Enhancement Components	Acre	15.00
ENM03 - Manage filter strips on all fields bordering permanent streams, lakes, and type 3-8 wetlands to filter potential nutrient runoff	Acre	3.00
ENM14 - Base manure app rates on P on all enrolled fields bordering perm streams, lakes, & type 3-8 wetlands to better utilize nutrient & address water quality concerns	Acre	3.00
ENM09 - Operator analyzes manure at least annually for nutrient content and applies manure with calibrated applicator to better utilize fertilizer & address water quality concerns	Acre	0.50
ENM07 - Soil sampling that represents an area less than or equal to 20 acres on large/uniform fields or less than or equal to 5 acres on hilly/rolling ground to better utilize nutrients & address water quality concerns	Acre	0.30

Enhancement Components for Nutrient Management Enhancement Bundles

Band or row apply all commercial P ₂ O ₅ fertilizer to better utilize nutrients and address water quality concerns
Inject or incorporate all manure applications within 24 hours to decrease the potential for manure loss to runoff
Apply all commercial nitrogen fertilizer in spring and/or after planting and incorporates within 24 hours to better utilize nutrients and address water quality concerns
Apply commercial N and P fertilizer and/or manure at rates less than UMN fertilizer recommendations to better utilize nutrients and address water quality concerns
Use a Nitrogen Inhibitor with commercial N fertilizer on labeled crops (primarily corn) to better utilize nutrients and address water quality concerns

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Enhancement – Pest Management

Enhancement	Unit	Cost per Unit (\$)
EPM01 - Implement a pest management enhancement component	Acre	3.00
EPM01 - Implement two (2) pest management enhancement components	Acre	6.00
EPM01 - Implement three (3) pest management enhancement components	Acre	9.00
EPM01 - Implement four (4) pest management enhancement components	Acre	12.00
EPM01 - Implement five (5) pest management enhancement components	Acre	15.00
EPM40 - Reducing pesticide spray overlap through guided measure technology	Acre	8.00
Enhancement Components for Pest Management Enhancement Bundles		
Band apply, split apply, spot apply or variable rate apply pesticides to protect water quality		
Utilize one or more non-chemical controls as the primary methods of weed control to protect water quality		
Improve pest management by applying approved products according to USDA organic farming requirements		
Utilizing crop rotations with small grains and/or hay to protect water quality		
Scout fields to determine pest and infestation levels and need for pest control to target pesticide applications and to protect water quality		

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Enhancement – Soil Management

Enhancement	Unit	Cost per Unit (\$)
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 0.1 to 0.3.	Acre	2.32
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 0.4 to 0.6.	Acre	5.80
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 0.7 to 0.9.	Acre	9.28
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 1.0 to 1.2.	Acre	12.76
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 1.3 to 1.5.	Acre	16.24
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 1.6 to 1.8.	Acre	19.72
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 1.9 to 2.1.	Acre	23.20
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 2.2 to 2.4.	Acre	26.68
ESM40 - Improve soil conditioning and quality by implementing conservation measures that result in a Soil Conditioning Index (SCI) score of at least 2.5 or greater.	Acre	29.00
ESM41 - Reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) between 16 and 30	Acre	1.00
ESM41 - Reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) between 31 and 60	Acre	0.50
ESM41 - Reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) of 15 or less	Acre	2.00
ESM42 - Using GPS or other similar guided measure technology, reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) between 16 and 30	Acre	2.00
ESM42 - Using GPS or other similar guided measure technology, reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) between 31 and 60	Acre	1.00
ESM42 - Using GPS or other similar guided measure technology, reduce soil compaction by controlling areas of traffic that result in a Soil Tillage Intensity Rating (STIR) of 15 or less	Acre	4.00

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Enhancement – Water Management

Enhancement	Unit	Cost per Unit (\$)
Irrigation Enhancement Index - Level 1 - 60 - 64%.	Acre	2.00
Irrigation Enhancement Index - Level 2 - 65 - 69%.	Acre	4.00
Irrigation Enhancement Index - Level 3 - 70 - 74%.	Acre	6.00
Irrigation Enhancement Index - Level 4 - 75 - 79%.	Acre	8.00
Irrigation Enhancement Index - Level 5 - 80 - 84%.	Acre	10.00
Irrigation Enhancement Index - Level 6 - 85% or greater.	Acre	12.00
EWM 41 - Participate in a field poly tubing recycling program (participant agrees to participate in a formal annual recycling program for poly tubing including polypipe and drip tape products)	Year	300
EWM42 - Remote Monitoring of Irrigation Pumping Plants (farmer incorporates sensing and remote notification technology as an integral part of the water management system.)	Year	250
EWM43 - Evaporative loss reduction enhancement 1 - Using methods to reduce evaporative losses as an integral part of an irrigation water management(IWM) system.	Acre	3.00
EWM43 - Evaporative loss reduction enhancement 2 - Using methods to reduce evaporative losses as an integral part of an irrigation water management(IWM) system.	Acre	4.00

Enhancement – Drainage Water Management

Enhancement	Unit	Cost per Unit (\$)
EDR40 - Drainage Water Mgt Level 1 - 20 - 29	Acre	2.00
EDR40 - Drainage Water Mgt Level 2 - 30 - 39	Acre	4.00
EDR40 - Drainage Water Mgt Level 3 - 40 - 49	Acre	6.00
EDR40 - Drainage Water Mgt Level 4 - 50 - 59	Acre	8.00
EDR40 - Drainage Water Mgt Level 5 - 60 or more	Acre	10.00

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Enhancement – Plant Management

Enhancement	Unit	Cost per Unit (\$)
EPL40 - Improve plant management by establishing or maintaining native, culturally significant plants in field borders, vegetative barriers, contour buffer strips, waterways, shelterbelts, windbreaks riparian forest and herbaceous buffers.	Acre	50
EPL41 - Improve plant health and vigor by establishing or maintaining nectar producing plant corridors in field borders, vegetative barriers, contour buffer strips, waterways, shelterbelts, windbreaks, riparian forest and herbaceous buffers.	Acre	50
EPL42 - Improve plant management by implementing sustainable harvest techniques in cropped woodland and marshes that allow for natural regeneration of the desired species.	Acre	25
EPL43 - Improve plant health and vigor by utilizing tubing (with or without vacuum) and health spout taps ($\leq 5/16"$) based on the live circumference of each tree: 10-17" dia. (36-54" circ.) = 1 tap; $\geq 18"$ dia. ($\geq 55"$ circ.) = 2 taps	Acre	50
EPL44 - Improve plant health and vigor by collecting sap in buckets using health spout taps ($\leq 5/16"$) based on the live circumference of each tree: 10-17.9" dia. = 1 tap; 18-23.9" dia. = 2 taps; $>24:$ diam. = 3 taps	Acre	125
EPL45 - Improve plant health and vigor by utilizing a minimum 28" dropline to evenly distribute taps along each tree trunk	Acre	20
EPL46 - Improve plant health and vigor by managing sugarbush with a minimum 25% non sugar maple species to minimize and reduce intensities of disease and pest outbreaks.	Acre	30
EPL47 - Improve plant health and vigor by selective thinning of cropped woodland and marshes to remove undesirable species and/or sustain the growth of the desired species according to a Management Plan.	Acre	40
EPL48 - Improve plant health and vigor by utilizing intercropping to increase biodiversity and minimize the number and intensity of pest and disease outbreaks.	Acre	20
EPL60 – Carries out assessment and evaluation activities by managing invasive species through the development of an invasive species plan, including a monitoring plan.	Year	300

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