

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 | P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

Memorandum

Date: June 19, 2019

To: Board of Directors

From: David Potter, Assistant General Manager

RE: Land Resources Subcommittee Meeting Minutes.

The Land Resources Subcommittee met at 5:30 pm on Tuesday, June 18, 2019 in the NRD large conference room in Lincoln to discuss and/or take action on four agenda items. Subcommittee members present included Gary Hellerich, Mark Spangler, Vern Barrett, Dave Landis, Gary Aldridge, and Bruce Johnson. Members absent included Mike DeKalb and Karen Amen. Others present included Larry Ruth, Bob Andersen, Greg Osborn, Don Jacobson, Paul Zillig, David Potter, and Cory Schmidt. Director Hellerich called the meeting to order at 5:30, gave a brief welcome, and reviewed the agenda.

(a.) LPSNRD Water Quality Management Plan.

The first item was to review and consider the LPSNRD District-wide Water Quality Management Plan. Potter gave a brief introduction to the plan and introduced Adam Rupe with JEO. Rupe gave power point presentation on the plan and the process.

In order to secure future 319 project funds for priority area projects and best management practices, a District-wide water quality management plan (WQMP) first needs to be approved. A request was been made to NDEQ for Section 319 grant funds, pursuant to the Federal Clean Water Act and the Nebraska Nonpoint Source Management Plan, which have been made available to NDEQ through the Region VII Office of the U.S. Environmental Protection Agency. An agreement between the District and NDEQ to develop said plan was prepared and approved by the Board to proceed and receive \$150,000 in 319 Program Funds. The remaining \$100,000 of the project cost (60-40 cost share) was provided by the District. The agreement began September 15th, 2016 and closed this month with the recent approval of the plan by EPA and submission of the final report and request for reimbursement to NDEQ.

The main purposes for developing the WQMP were to provide a concise summary of the condition of water resources in LPSNRD and to provide direction and a coordinated approach for addressing nonpoint source pollution. The WQMP provides one overarching plan that identifies and focuses on district-wide priorities. With the approved plan, efforts can be directed to project development and funding acquisition. District-wide plans provide numerous benefits including allowing access to Section 319 funding for groundwater and surface water projects, enhancing project buy-in and grant funding potential by integrating LPSNRD, agency, and community priorities, providing supporting information for project and grant application development, aiding



in LPSNRD and agency budget planning, and allowing for more effective leveraging of funds for projects and activities.

The WQMP documents a list of projects and practices aimed at improving water quality and removing impaired waters from the 303(d) list and provides specific project plans for implementation over the next 3-5 years. The WQMP area includes watersheds on a HUC8 scale within the district boundary, which include the Salt Creek watershed, Lower Platte watershed, and Keg-Weeping Water watershed. The Upper Salt Creek Basin and Upper Little Salt Creek Wetlands are listed as priorities for nonpoint source management in the State's 2015 NPS Management Plan. For each watershed on the HUC8 scale in the district, the WQMP identifies pollutant sources, pollutant loads, pollutant load reductions, an implementation strategy, schedule and monitoring.

Management approaches provided support for the goals set forth by NDEQ's "Nonpoint Source Pollution Management Plan: Strategic Plan and Guidance for Implementing the Nebraska nonpoint Source Management Program – 2015 through 2030" and by other programs targeted at reducing impacts of nonpoint source pollution by other agencies such as the NRCS and existing programs offered by the LPSNRD.

The WQMP requires an update every five (5) years, therefore the format takes this into consideration, and it was designed to be dynamic rather than fixed, allowing for minimal updating effort. Future updates will include a revised assessment of water quality data as compared to WQMP criteria and a determination of whether the current strategy is on track to meet plan goals and, if needed, new nonpoint source load estimates, revision of goals and objectives, updated management strategies and priorities, and updates to the resource and budget needs. When the plan is revised in five years, new areas may be targeted.

Specifically, the WQMP addresses the following 9-elements, as defined in Appendix C of EPA's Nonpoint Source Program and Grants Guidelines for States and Territories (issued 04/12/2013), for both surface water and groundwater resources:

- 1. Identification of pollutant sources;
- 2. Estimation of pollutant loads collectively or for separate identified water bodies or subbasins and expected load reductions from management measures;
- 3. Identification of management practices appropriate to address resource threats or impairments;
- 4. An outreach strategy to educate and engage residents in protection and conserving water resources in the District;
- 5. A schedule for implementing activities to address identified resource threats or impairments;
- 6. Milestones to assess effective progress in implementing components of the WOMP;
- 7. Evaluation criteria to determine the effectiveness of actions taken to implement the WOMP;
- 8. A monitoring strategy to assess the impact of actions taken in implementing the WOMP;
- 9. Estimate needed technical and financial assistance, associated costs, and the sources and authorities that will be relied upon to implement the WQMP.

The WQMP had been vetted through expert and public reviews, and was accepted by NDEQ and EPA on May 6, 2019. With its approval, the WQMP will be the guiding document for water quality management in the District. A plan summary was provided to the subcommittee and the complete plan is available on the LPSNRD website at: https://www.lpsnrd.org/publications/lpsnrd-plans.

It was moved by Landis, seconded by B. Johnson, and unanimously approved by the Subcommittee to recommend the Board of Directors approve the LPSNRD Water Quality Management Plan.

(b.) Surface Water Quality Cost-Share Applications.

The second item was to review and consider four applications for cost-share that qualify for the Summer Conservation Program which provides 75% up to \$15,000. One application is located in a targeted area (Salt Valley Lakes Watershed – Pawnee Lake) and is eligible for 85% cost share up to \$20,000. Funding for the four applications will come from the FY20 budget. Maps showing the locations of the proposed conservation practices were provided.

The four applications include:

- Cindy and Robert Arias \$15,000 (75% SCP) for terraces, 14-12-6, Lancaster County
- Orville Pearson \$11,796 (85% SCP-targeted) for terraces, 35-11-4, Seward County
- Josh Capp \$15,000 (75% SCP) for terraces, 22-12-10, Cass County
- Landon Farms, Inc. \$15,000 (75% SCP) for terraces, 18-12-9, Cass County

It was moved by Landis, seconded by Barrett, and unanimously approved by the Subcommittee to recommend the Board of Directors approve the four identified cost-share applications totaling an amount of \$56,796.

(c.) Modifications to the NRD Cover Crop Program.

The third item was to discuss and consider modifications to the NRD's Cover Crop Program. Staff provided some background on the district's cover crop program and identified many important benefits of cover crops, including soil health, erosion control, and water quality.

In 2017 the District implemented a "Pilot Cover Crop Program" for two Community Water System Protection Areas (CWSPA). The CWSPA areas selected were the Phase 3 Elmwood CWSPA and the Phase 3 Weeping Water/Otoe RWD #2 CWSPA. This program was developed as another way to help improve ground water quality in CWSPA areas. The District received a couple applications and only one of those was planted and received cost-share.

In 2018 the Board of Directors approved NRD Cover Crop Program for the Salt Valley Lakes and Stevens Creek Targeted Areas, the Community Water System Protection Areas, and any Groundwater Management Phase 2 and 3 areas located within the Lower Platte South NRD and authorize the General Manager to approve applications up to the budgeted amount of the current fiscal year and report those approvals to the Land Resources Subcommittee. In the current program there are limitations to number of acres and cost-share, limitations on cover crop use, and other rules and specifications that are similar to the NRCS cover crop program.

Last year the District received three cost-share applications for cover crop. Only one of those was actually executed. There were many factors, mainly weather and late harvest, contributing to the limited applications and for only one of those 80-acre tracts being planted. During the FY20-24 LRIP process, members of the Land Resources Subcommittee discussed additional areas eligible for the Cover Crop Program and to recommend including fields where conservation practices (terraces) are currently being installed in the NRD's Summer Conservation Program.

Cory Schmidt, NRCS District Conservationist discussed other cover crop programs offered by NRCS and provided information on planting dates, types of seed, etc.

Although there may be interest district-wide, the identified areas, as modified, will benefit from the cover crop program the most at this time. The proposed changes to the NRD Cover Crop Cost-Share Program, application, and brochure were provided to the subcommittee for review, as well a map illustrating the targeted areas, CWSPAs, and the Phase 2 and 3 areas.

It was moved by Barrett, seconded by Landis, and unanimously approved by the Subcommittee to recommend the Board of Directors approve the modifications to the NRD Cover Crop Program.

(d.) Cost-share Application Prioritization Policy.

The final item was to discuss the NRD's cost-share application prioritization policy. With more cost-share applications being approved for the Summer Conservation Program and those payments coming out of the following fiscal year's budget, it was suggested that we discuss including them as part of the prioritization process.

As the fall applications for the FY20 Surface Water Quality BMP Cost-Share Program are considered in July-September, the District will review FY20 budgeted amounts, the allocated funds, obligated dollars, and the available funds. Depending on the number of applications received, staff, the review committees, and the Land Resources Subcommittee will also refer to the prioritization commonly used by the District (attached). It's important to note that FY2020 cost-share program budgets will take into account those payments made in FY2020 for jobs completed in the previous fiscal year, the summer applications that were approved this year, and the fall applications.

The subcommittee discussed possible scenarios, implications, and limitations. No changes were recommended at this time and the subcommittee may discuss it in the future.

There being no further business the meeting adjourned at 6:35 pm.

Ce: Cory Schmidt

Water Quality Management Plan



Plan Summary

The Lower Platte South Natural Resources District (LPSNRD), with technical and financial assistance from the Nebraska Department of Environmental Quality (NDEQ), has prepared a District-Wide Water Quality Management Plan (WQMP) to address issues and present solutions regarding nonpoint source pollution within the LPSNRD. The WQMP planning area is intended to align with the LPSNRD boundary as closely as possible, while following watershed boundaries (the Platte and Missouri Rivers are not included as a part of this plan). The plan was approved by the EPA in May 2019 and is required to be updated every five years.

Stakeholders and the general public were engaged throughout the planning process to identify issues and possible solutions which were then used to develop goals and objectives for the plan. This effort produced a <u>voluntary plan</u> which advises the LPSNRD by providing a framework of planning activities, identifies strategies to address and meet water quality standards, and identifies target areas where more detailed planning was completed. Target areas were then determined based on the land area that impacts the water quality of priority waterbodies which were selected based on stakeholder input and water quality data.

A Strategy to Increase Conservation

The plan relies on the following strategies:

- Promote soil health, which increases productivity and profitability.
- Promote a reduction in the use of manure, commercial fertilizers, and pesticides.
- Promote the use of voluntary BMPs to reduce the potential for pollutant transport to streams, lakes and groundwater.
- Promote healthy, undisturbed riparian areas, including adequate buffers.

This plan emphasizes that effective outreach, education, and involvment of those responsible for land management decisions is critical to faciliate behavioral changes. This includes outreach and education to producers, farm managers, propery owners, land managers, water users, and the general public. This plan is non-regulatory; therefore, the success of this plan depends of the engagement and education of participants. Emphasizing the value and benefits of improved water quality will be key to the acceptance and implementation of this plan.







Water Quality Management Plan



Funding for Implementation

Funding will be critical to implement this WQMP. The planning level opinion of cost for needed improvements to achieve water quality goals in identified target areas is estimated at over \$118 million dollars. Local funding (from the LPSNRD) will not be enough to address a problem of this magnitude, nor will it be solved in just 5-years. Therefore, prioritization of target areas or projects by the Board of Directors will be essential in focusing efforts. Additional funding from federal, state, and other local sources, along with grants will need to be leveraged. This plan makes the LPSND eligible for Section 319 grant funding from the NDEQ, which will be an important funding tool for implementation efforts.

Both district-wide and targeted implementation efforts to address sediment, nutrients, bacteria, and atrazine will be accomplished primarily through existing programs administered by the LPSNRD, NRCS, and other partners. Generally, these programs provide landowners and producers, both in and outside of target areas, access to technical and financial assistance. To enable targeted implementation, these programs (to the greatest extent possible) will be focused within target areas.

A Roadmap to Cleaner Water

This planning document serves as a road map to improve the water resources and water quality within the LPSNRD. Specific projects were not identified, however the recommended type, number, and location of BMPs were identified. The implementation of these BMPs is intended to be accomplished through multiple projects. The focus of each of those projects should be determined by the LPSNRD Board of Directors at the time they are ready to move forward. Some examples of project types to consider are:

- A project that provides cost-share on the full list of BMPs within a specific target area
- A project that provides higher cost share on select BMPs or for BMPs within critical source areas
- A project that focusses on implementing only certain BMPs







Water Quality Management Plan



Target Area Name	Water Quality Impairment	Recommended Practices	Recommended Data Collection	Total Acres	Estimated Cost
Decker Creek	E. coli bacteria	Drainage Area Practices In-Stream Practices	Bacteria monitoring	7,590	\$9,416,265
Antelope Creek (below Holmes Lake)	E. coli bacteria	Urban Practices	n/a	4,931	Not calculated for this planning effort*
Pawnee Lake and Middle Creek	Sediment, nutrients, atrazine and algal biomass	Drainage Area Practices In-Stream Practices In-Lake Practices	Bathymetric Survey	20,972	\$47,064,689
East and West Twin Lakes	Sediment and nutrients	Drainage Area Practices In-Stream Practices In-Lake Practices	Bathymetric Survey	6,835	\$10,552,076
Little Salt Creek	E. coli bacteria and sediment	Drainage Area Practices In-Stream Practices Wetland Restoration Practices	n/a	29,326	\$51,393,947

^{*}Detailed information can be found in the 2012 Antelope Creek Watershed Basin Management Plan

Drainage Area Practices:

Education and Outreach, Avoidance, Terraces, Cover Crops, No-Till, Contour (Filter) Buffer Strips, Grassed Waterways, Water and Sediment Control Basins, Wetlands, Riparian Buffers, Grazing Management, Onsite Wastewater Treatment System Upgrades, Non-Permitted AFO practices.

In-Stream Practices:

Streambank/Channel Stabilization and Restoration, Grade Control at Bridges (Little Salt Creek Only)

In-Lake Practices:

Lake Deepening/Sediment Removal, In-lake Sediment Basin, Lake Shore (Bank) Stabilization, Nutrient Inactivation, Jetties and Breakwaters.

Urban Practices:

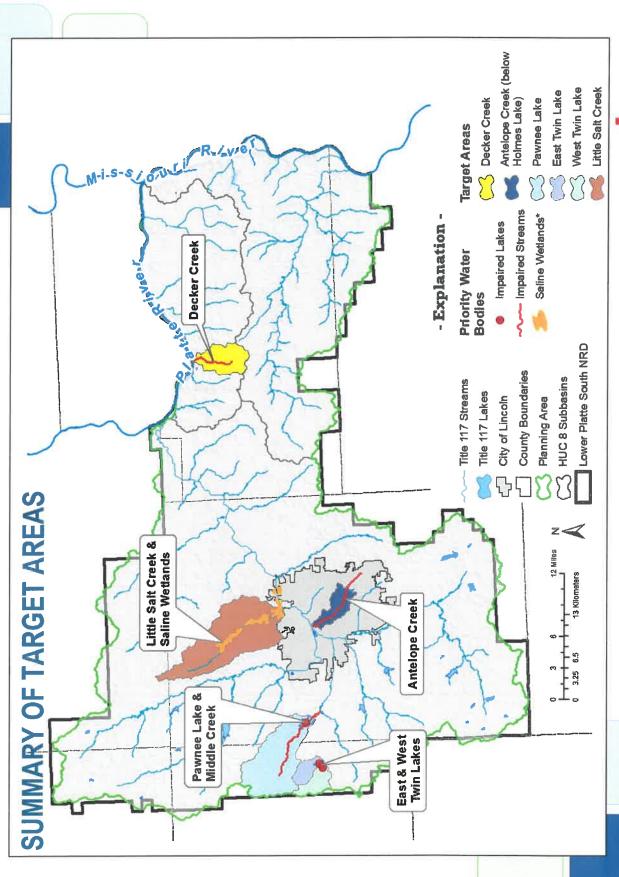
Education and Outreach, Pet Waste Reduction Education, Sewer Line Inspection and Maintenance, Wildlife Control on Bridges, Rain Barrels and Bioretention Areas, Structural Projects.

Prepared for the Lower Platte South NRD by JEO Consulting Group, INC.





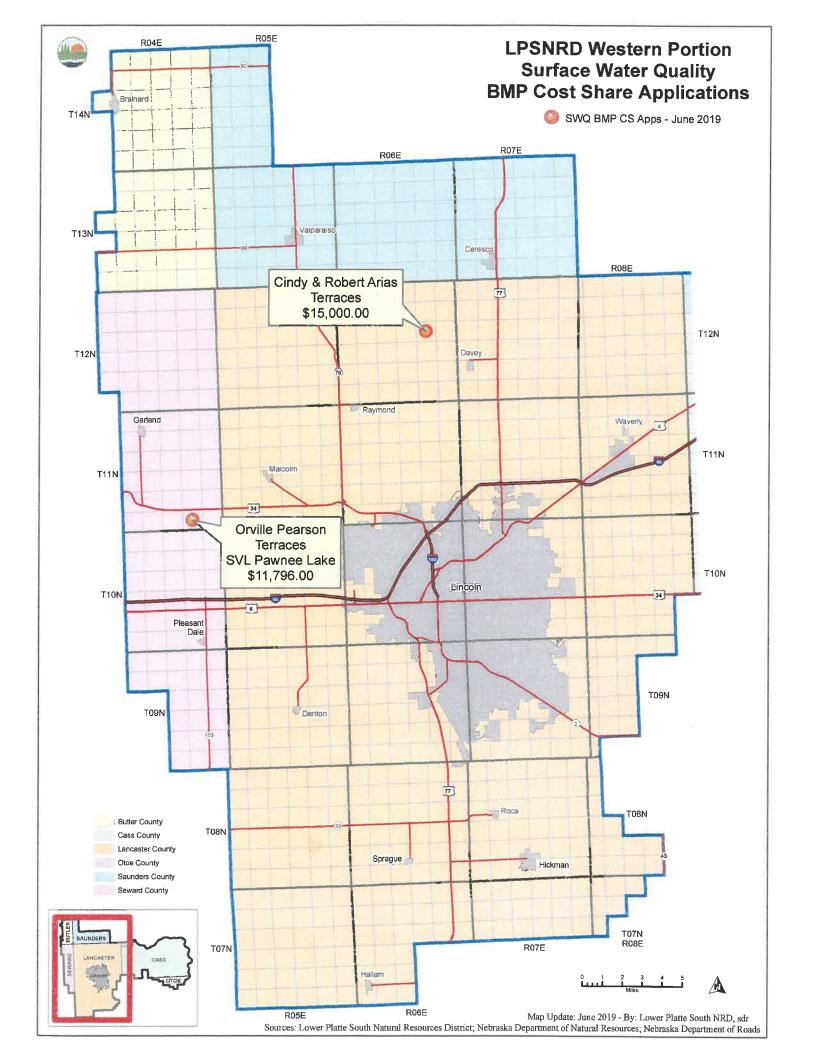
Lower Platte South Natural Resources District Water Quality Management Plan

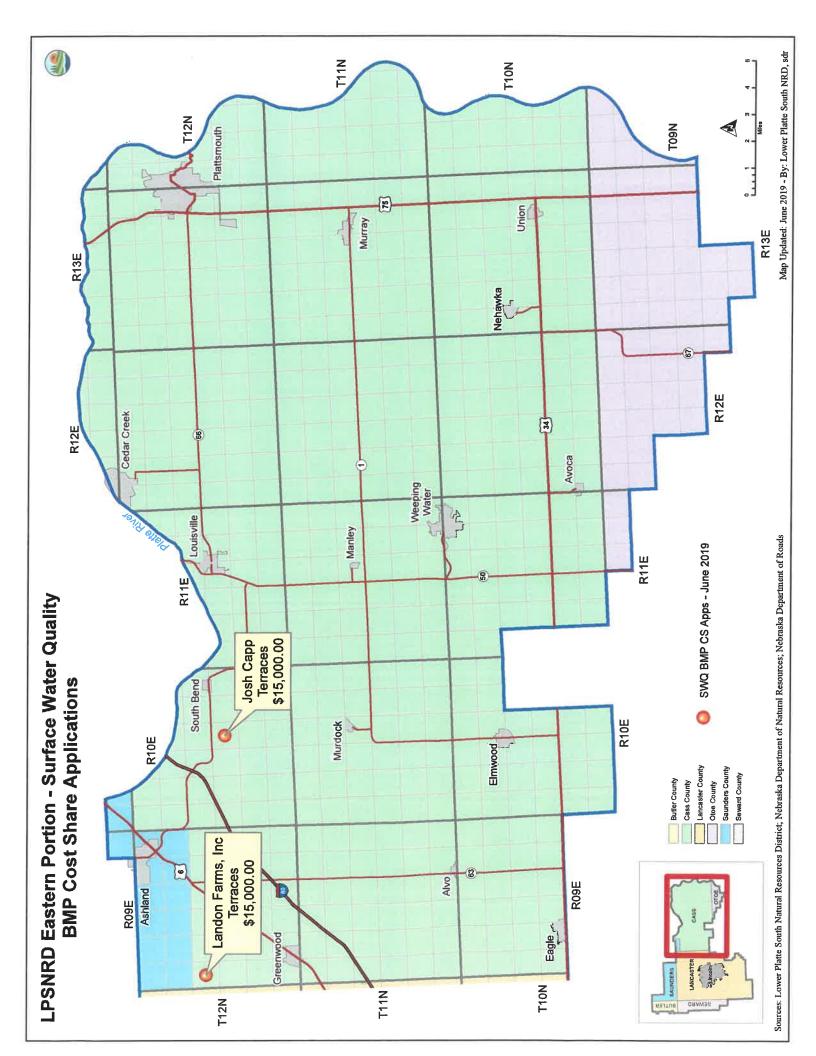


Prepared for the Lower Platte South NRD by JEO Consulting Group, INC.









Lower Platte South Natural Resources District Cover Crop Program

Purpose: Reduce erosion, increase soil organic matter, capture and recycle nutrients, increase biodiversity, suppress weeds, manage soil moisture, and minimize/reduce soil compaction by utilizing cover crops within selected areas of the LPSNRD.

Eligibility: Land shall be located in a Community Water System Protection Area, a Targeted Watershed, a Groundwater Management Phase II or III Area within LPSNRD (see Cover Crop Cost-Share Areas map), or fields where terrace systems are currently being installed in the NRD's Summer Conservation Program. Cover crops may be established on Highly Erodible (HEL) and Non-Highly Erodible (NHEL) land that is currently in a continuous no-till cropping system. HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested, hayed or grazed. Each participant will enroll a total of 20 – 80 acres.

Procedure: Landowners will contact their local NRCS Field Office to determine land eligibility and prepare an application prior to October 1st. Applications will be reviewed by NRD staff and approved by the General Manager.

How To Apply:

- 1. Contact your County NRCS Office
- 2. Meet with NRCS/NRD Personnel to complete application
- 3. Submit application to NRCS (NRCS will forward completed application to NRD).

Priority: Priority will be given based on the date of application. The earliest applications will be approved up to the District's budgeted amount of the current fiscal year. Once the budgeted amount is reached, applications will not be approved.

Terms:

- Cover crop options include: #1 rye only; #2 rye/rape/radish; or #3 "deluxe cocktail" mix (5 species minimum).
- Payment rate/acres: Single species \$25/acre; multiple species \$30/acre.
- Annual Payment Limit of \$2,000 per farm/landowner.
- All Cover Crops must be planted prior to October 1st for aerial application and November 1st for drilling.
- NRCS will certify successful completion to the NRD upon termination of cover crop per NRCS Cover Crop Termination Guidelines, without inversion tillage. The NRD will make payment to the landowner after certification by NRCS.
- The program will also comply with NRCS Code 340 Cover Crop Conservation Practice Standards that may be found at https://efotg.sc.egov.usda.gov/

Deleted: or

Deleted: August 2018

APPLICATION FOR ASSISTANCE Cover Crop Cost-Share Program Lower Platte South Natural Resources District

Terms

Cropland must be located in a Community Water System Protection Area, a Targeted
Watershed Area, a Groundwater Management Phase II or III Area located within the LPSNRD,
or fields where terrace systems are currently being installed in the NRD's Summer
Conservation Program.

Deleted: or

- Cover crop options include: #1 rye only; #2 rye/rape/radish; or #3 "deluxe cocktail" mix (5 species minimum).
- Payment rate/acre: Single species \$25/acre; multiple species \$30/acre.
- Annual payment limit of \$2,000 per farm/landowner.
- Application deadline is October 1st
- Cover crops must be seeded prior to October 1st for aerial application and November 1st if
 planted with a drill. The producer is responsible for arranging seeding (either by aerial or
 ground application).
- The producer will obtain NE-CPA-7 Cover Crop Design Worksheet from NRCS prior to seeding cover crop for approved species, seeding rates, and seeding dates.
- The program will also comply with NRCS Code 340 Cover Crop Conservation Practice Standards that may be found at https://efotg.sc.egov.usda.gov/
- HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested, hayed or grazed.
- Landowner will provide NRCS with completed NE-CPA-7, seed bills, and aerial/drill application bills prior to NRCS certification of cover crop.
- NRCS will certify successful completion to the NRD upon termination of cover crop per NRCS Cover Crop Termination Guidelines, without inversion tillage. The NRD will make payment to the landowner after NRCS certification.

Landowner Name:				
Address:				
	City:	State: ZIP:		
Phone:				
Email:				
Location of Cropland:	, Sec, TN,	RE,	County	
Number of Acres:	Type of Application	on: (aerial) (ground)	
Tenant/operator, if not pro	operty owner:			
The undersigned (landown assistance.	er) agrees to the terms liste	ed above and hereby a	pplies for cost-share	
Landowner Signature:	-	Dat	e:	Deleted: August 2018

APPLICATION

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Address (include City, State Zip):
Phone
Email:
Location of Cropland:
., Sec, TN, RE,
County
Number of Acres:
Type of Application:aerial
Tenent/Operator (if not property owner):
The undersigned (landowner) agrees to the terms listed herein and hereby applies for cost-share assistance.

ABOUT THE NRD

Cass counties and parts of Seward, Saunders, District is one of 23 districts in the state of Nebraska formed in 1972 for the all areas of natural resource management and development: tree planting, flood protection, wildlife habitat, stream bank stabilization, environmental education, land treatment, water monitoring and of directors-elected representatives who The Lower Platte South Natural Resources purpose of managing the state's natural resources, with an emphasis on watershed management. Programs and activities include by property taxes and governed by a board serve four-year terms. The NRD system is local government working to protect local natural resources. The Lower Platte South NRD includes nearly all of Lancaster and many others. The districts are partially funded Otoe, and Butler counties.



LOWER PLATTE SOUTH natural resources district Lower Platte South NRD • 3125 Portia Street PO Box 83581 • Lincoln, Nebraska 68501-3581 Phone: (402) 476-2729 • Fax: (402) 476-6454

Contact: David Potter, Assistant Manager The Lower Platte South NRD is an Equal Opportunity Provider and Employer



PURPOSE

Reduce erosion, increase soil organic matter, capture and recycle nutrients, increase biodiversity, suppress weeds, manage soil moisture, and minimize/reduce soil compaction by utilizing cover crops within selected areas of LPSNRD.

ELIGIBILITY

continuous no-till cropping system. HEL fields hayed or grazed. Each participant will enroll a Land shall be located in a Community Water installed in the NRD's Summer Conservation LPSNRD.org. Click on Programs, Landowner Watershed, or a Ground Water Management eligible. Cover crops shall not be harvested, where terrace systems are currently being to the Cover Crop Cost Share Areas map at Cost-Share, then Land Treatment.) or fields Erodible (NHEL) land that is currently in a where corn has been cut for silage are not Phase II or III Area within LPSNRD (Refer Program. Cover crops may be established on Highly Erodible (HEL) and Non-Highly System Protection Area, a Targeted total of 20-to-80 acres

PROCEDURE

Landowners will contact their local NRCS
Field Office to determine land eligibility and
prepare an application prior to October 1st.
Applications will be reviewed by NRD staff and
approved by the General Manager.



TERMS

- Cropland must be located in a Community
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APPLY

- 1. Contact your county NRCS office
- 2. Meet with NRCS/NRD personnel to complete enclosed application and other required supplemental applications
- 3. Submit enclosed application to NRCS (NRCS will forward completed application to LPSNRD)

PRIORITY

Priority will be given based on the date of application. The earliest applications will be approved up to the district's budgeted amount for the current fiscal year. Once the budgeted amount is reached, applications will not be approved.

WHERE TO BEGIN

1. Contact your county NRCS office to complete enclosed application and other required supplemental applications:

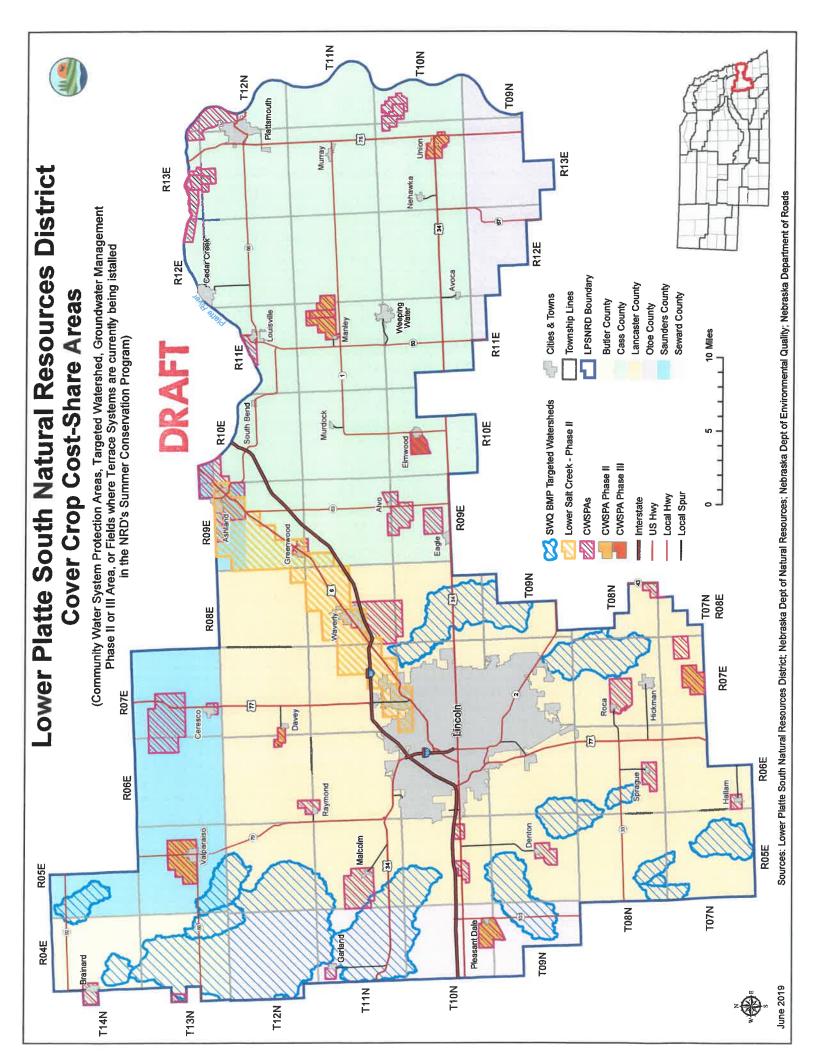
Cass County NRCS Weeping Water: (402) 267-2015 ext 3

Lancaster County NRCS Lincoln: (402)423-9683 ext 3 Butler County NRCS David City: (402) 367-3074 ext 3

Otoe County NRCS Syracuse: (402) 269-3466 ext 3

Saunders County NRCS Wahoo: (402) 443-4106 ext 3

Seward County NRCS Seward: (402) 649-5231 ext 3 2. If you have questions, contact the LPSNRD office at (402) 476-2729



PRIORITIZATION COMMONLY USED

In determining the criteria to select applications for approval the NRD felt that we should again give priority to landowners who haven't received cost-share most recently. The following priorities were used to eliminate applications and determine approvals.

1. Landowners who received NRD District-wide cost-share (>\$4,000) this year wouldn't be approved, continuing back until enough applications were eliminated to reach the NRD's approval limit.

Limits utilized

- NRD-wide (non-summer): \$10,000
- NRD-wide (summer): \$15,000
- Salt Valley Lakes (varies, last several years): \$20,000
- Stevens Creck (varies, last several years): \$20,000



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Memorandum

Date: June 13, 2019

To: Board of Directors

From: David Potter, Assistant General Manager

RE: Background Information for June 18th Land Resources Subcommittee meeting

The Land Resources Subcommittee will meet on Tuesday, June 18th at 5:30 p.m. in the large conference room. There are four agenda items, three of which will require action. Listed below is a brief explanation of each item.

(12a.) LPSNRD Water Quality Management Plan. [Action]

In order to secure future 319 project funds for priority area projects and best management practices, a District-wide water quality management plan (WQMP) first needs to be approved. A request was been made to NDEQ for Section 319 grant funds, pursuant to the Federal Clean Water Act and the Nebraska Nonpoint Source Management Plan, which have been made available to NDEQ through the Region VII Office of the U.S. Environmental Protection Agency. An agreement between the District and NDEQ to develop said plan was prepared and approved by the Board to proceed and receive \$150,000 in 319 Program Funds. The remaining \$100,000 of the project cost (60-40 cost share) was provided by the District. The agreement began September 15th, 2016 and closed this month with the recent approval of the plan by EPA and submission of the final report and request for reimbursement to NDEQ.

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Staff recommends the Land Resources Subcommittee recommend the Board of Directors approve the LPSNRD Water Quality Management Plan.

(12b.) Surface Water Quality Cost-Share Applications. [Action]

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The applications include:

- Cindy and Robert Arias \$15,000 (75% SCP) for terraces, 14-12-6, Lancaster County
- Orville Pearson \$11,796 (85% SCP-targeted) for terraces, 35-11-4, Seward County
- Josh Capp \$15,000 (75% SCP) for terraces, 22-12-10, Cass County
- Landon Farms, Inc. \$15,000 (75% SCP) for terraces, 18-12-9, Cass County

Staff recommends the Land Resources Subcommittee recommend the Board of Directors approve the three identified cost-share applications totaling an amount of \$56,796.

(12c.) Modifications to the NRD Cover Crop Program. [Action]

Cover crops have many important benefits, including soil health, erosion control, and water quality, and consideration should be given to all of these.

In 2017 the District implemented a "Pilot Cover Crop Program" for two Community Water System Protection Areas (CWSPA). The CWSPA areas selected were the Phase 3 Elmwood CWSPA and the Phase 3 Weeping Water/Otoe RWD #2 CWSPA. This program was developed as another way to help improve ground water quality in CWSPA areas. The District received a couple applications and only one of those was planted and received cost-share.

In 2018 the Board of Directors approved NRD Cover Crop Program for the Salt Valley Lakes and Stevens Creek Targeted Areas, the Community Water System Protection Areas, and any Groundwater Management Phase 2 and 3 areas located within the Lower Platte South NRD and authorize the General Manager to approve applications up to the budgeted amount of the current fiscal year and report those approvals to the Land Resources Subcommittee. In the current program there are limitations to number of acres and cost-share, limitations on cover crop use, and other rules and specifications that are similar to the NRCS cover crop program.

Last year the District received three cost-share applications for cover crop. Only one of those was actually executed. There were many factors, mainly weather and late harvest, contributing to the limited applications and for only one of those 80-acre tracts being planted. During the FY20-24 LRIP process, members of the Land Resources Subcommittee discussed additional areas eligible for the Cover Crop Program and to recommend including fields where conservation practices (terraces) are currently being installed in the NRD's Summer Conservation Program.

Although there may be interest district-wide, the identified areas, as modified, will benefit from the cover crop program the most at this time. The proposed changes to the NRD Cover Crop Cost-Share Program, application, and brochure are attached, as well a map illustrating the targeted areas, CWSPAs, and the Phase 2 and 3 areas.

Staff recommends the Land Resources Subcommittee recommend the Board of Directors approve the modifications to the NRD Cover Crop Program.

Cost-share Application Prioritization Policy. [Discussion]

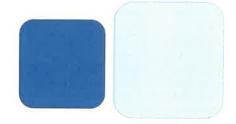
As the fall applications for the FY20 Surface Water Quality BMP Cost-Share Program are considered in July-September, the District will review FY20 budgeted amounts, the allocated funds, obligated dollars, and the available funds. Depending on the number of applications received, staff, the review committees, and the Land Resources Subcommittee will also refer to the prioritization commonly used by the District (attached). It's important to note that FY2020 cost-share program budgets will take into account those payments made in FY2020 for jobs completed in the previous fiscal year, the summer applications that were approved this year, and the fall applications.

With more cost-share applications being approved for the Summer Conservation Program and those payments coming out of the following fiscal year's budget, it was suggested that we discuss including them as part of the prioritization process.

DP/dp

pc: Cory Schmidt, DC, NRCS

Water Quality Management Plan



Plan Summary

The Lower Platte South Natural Resources District (LPSNRD), with technical and financial assistance from the Nebraska Department of Environmental Quality (NDEQ), has prepared a District-Wide Water Quality Management Plan (WQMP) to address issues and present solutions regarding nonpoint source pollution within the LPSNRD. The WQMP planning area is intended to align with the LPSNRD boundary as closely as possible, while following watershed boundaries (the Platte and Missouri Rivers are not included as a part of this plan). The plan was approved by the EPA in May 2019 and is required to be updated every five years.

Stakeholders and the general public were engaged throughout the planning process to identify issues and possible solutions which were then used to develop goals and objectives for the plan. This effort produced a <u>voluntary plan</u> which advises the LPSNRD by providing a framework of planning activities, identifies strategies to address and meet water quality standards, and identifies target areas where more detailed planning was completed. Target areas were then determined based on the land area that impacts the water quality of priority waterbodies which were selected based on stakeholder input and water quality data.

A Strategy to Increase Conservation

The plan relies on the following strategies:

- Promote soil health, which increases productivity and profitability.
- Promote a reduction in the use of manure, commercial fertilizers, and pesticides.
- Promote the use of voluntary BMPs to reduce the potential for pollutant transport to streams, lakes and groundwater.
- Promote healthy, undisturbed riparian areas, including adequate buffers.

This plan emphasizes that effective outreach, education, and involvment of those responsible for land management decisions is critical to faciliate behavioral changes. This includes outreach and education to producers, farm managers, propery owners, land managers, water users, and the general public. This plan is non-regulatory; therefore, the success of this plan depends of the engagement and education of participants. Emphasizing the value and benefits of improved water quality will be key to the acceptance and implementation of this plan.







Water Quality Management Plan



Funding for Implementation

Funding will be critical to implement this WQMP. The planning level opinion of cost for needed improvements to achieve water quality goals in identified target areas is estimated at over \$118 million dollars. Local funding (from the LPSNRD) will not be enough to address a problem of this magnitude, nor will it be solved in just 5-years. Therefore, prioritization of target areas or projects by the Board of Directors will be essential in focusing efforts. Additional funding from federal, state, and other local sources, along with grants will need to be leveraged. This plan makes the LPSND eligible for Section 319 grant funding from the NDEQ, which will be an important funding tool for implementation efforts.

Both district-wide and targeted implementation efforts to address sediment, nutrients, bacteria, and atrazine will be accomplished primarily through existing programs administered by the LPSNRD, NRCS, and other partners. Generally, these programs provide landowners and producers, both in and outside of target areas, access to technical and financial assistance. To enable targeted implementation, these programs (to the greatest extent possible) will be focused within target areas.

A Roadmap to Cleaner Water

This planning document serves as a road map to improve the water resources and water quality within the LPSNRD. Specific projects were not identified, however the recommended type, number, and location of BMPs were identified. The implementation of these BMPs is intended to be accomplished through multiple projects. The focus of each of those projects should be determined by the LPSNRD Board of Directors at the time they are ready to move forward. Some examples of project types to consider are:

- A project that provides cost-share on the full list of BMPs within a specific target area
- A project that provides higher cost share on select BMPs or for BMPs within critical source areas
- A project that focusses on implementing only certain BMPs







Water Quality Management Plan

SUMMARY OF TARGET AREAS

Target Area Name	Water Quality Impairment	Recommended Practices	Recommended Data Collection	Total Acres	Estimated Cost
Decker Creek	E. coli bacteria	Drainage Area Practices In-Stream Practices	Bacteria monitoring	7,590	\$9,416,265
Antelope Creek (below Holmes Lake)	E. coli bacteria	Urban Practices	n/a	4,931	Not calculated for this planning effort*
Pawnee Lake and Middle Creek	Sediment, nutrients, atrazine and algal biomass	Drainage Area Practices In-Stream Practices In-Lake Practices	Bathymetric Survey	20,972	\$47,064,689
East and West Twin Lakes	Sediment and nutrients	Drainage Area Practices In-Stream Practices In-Lake Practices	Bathymetric Survey	6,835	\$10,552,076
Little Salt Creek	E. coli bacteria and sediment	Drainage Area Practices In-Stream Practices Wetland Restoration Practices	n/a	29,326	\$51,393,947

^{*}Detailed information can be found in the 2012 Antelope Creek Watershed Basin Management Plan

Drainage Area Practices:

Education and Outreach, Avoidance, Terraces, Cover Crops, No-Till, Contour (Filter) Buffer Strips, Grassed Waterways, Water and Sediment Control Basins, Wetlands, Riparian Buffers, Grazing Management, Onsite Wastewater Treatment System Upgrades, Non-Permitted AFO practices.

In-Stream Practices:

Streambank/Channel Stabilization and Restoration, Grade Control at Bridges (Little Salt Creek Only)

In-Lake Practices:

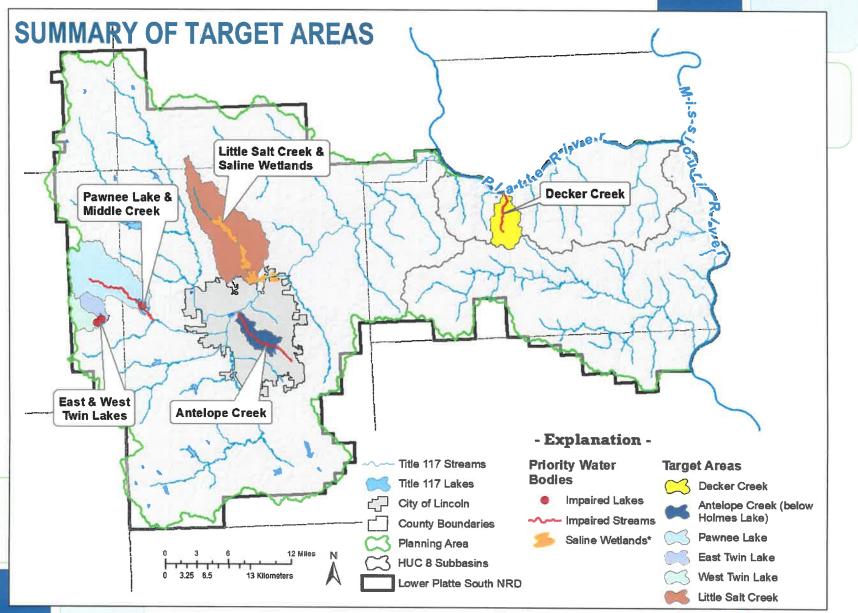
Lake Deepening/Sediment Removal, In-lake Sediment Basin, Lake Shore (Bank) Stabilization, Nutrient Inactivation, Jetties and Breakwaters.

Urban Practices:

Education and Outreach, Pet Waste Reduction Education, Sewer Line Inspection and Maintenance, Wildlife Control on Bridges, Rain Barrels and Bioretention Areas, Structural Projects.

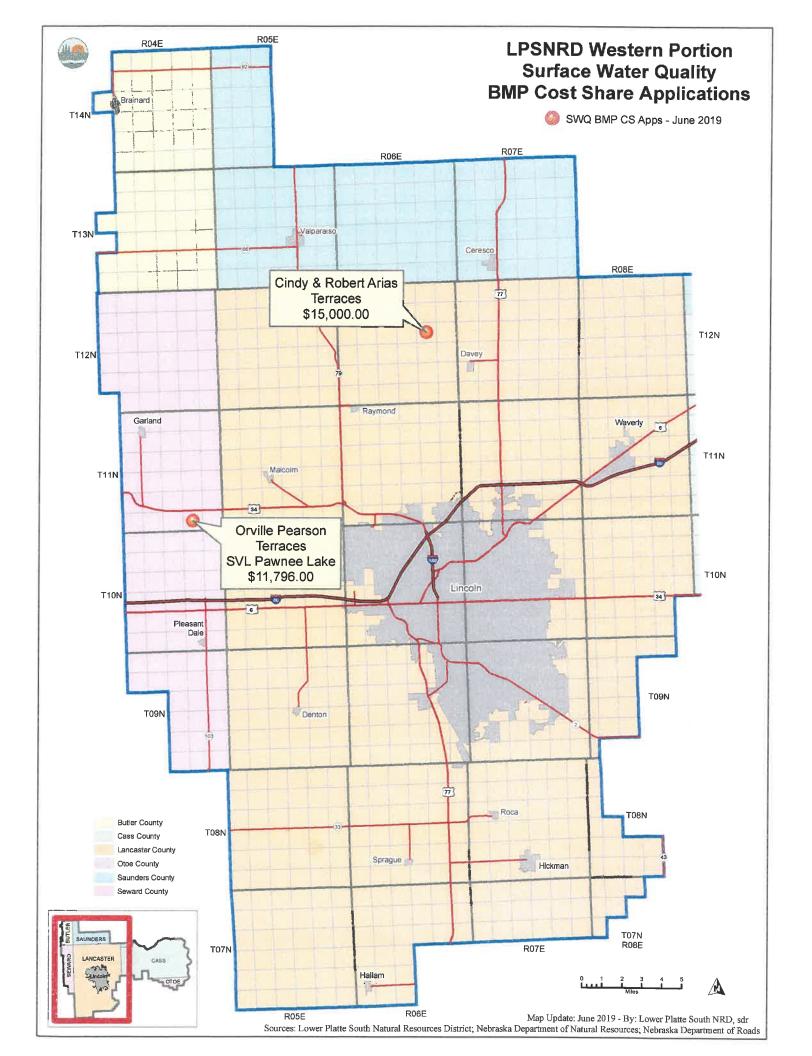


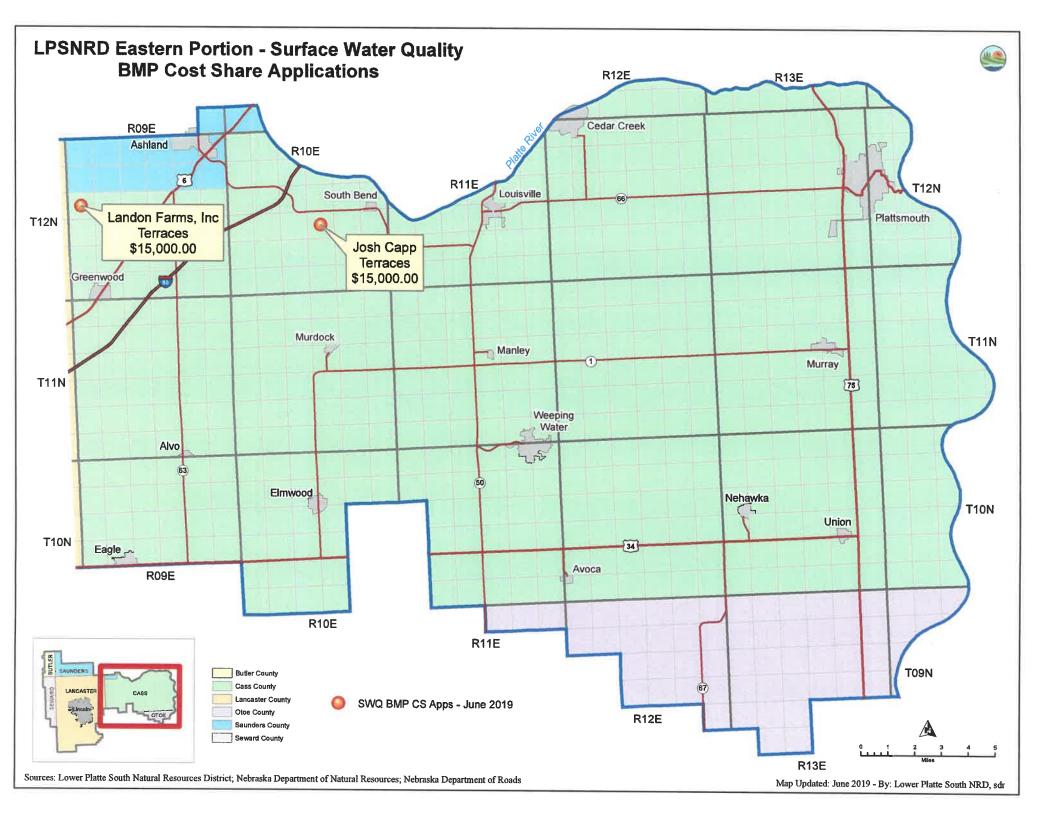
Water Quality Management Plan











Lower Platte South Natural Resources District Cover Crop Program

Purpose: Reduce erosion, increase soil organic matter, capture and recycle nutrients, increase biodiversity, suppress weeds, manage soil moisture, and minimize/reduce soil compaction by utilizing cover crops within selected areas of the LPSNRD.

Eligibility: Land shall be located in a Community Water System Protection Area, a Targeted Watershed, a Groundwater Management Phase II or III Area within LPSNRD (see Cover Crop Cost-Share Areas map), or fields where terrace systems are currently being installed in the NRD's Summer Conservation Program. Cover crops may be established on Highly Erodible (HEL) and Non-Highly Erodible (NHEL) land that is currently in a continuous no-till cropping system. HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested, hayed or grazed. Each participant will enroll a total of 20 – 80 acres.

Procedure: Landowners will contact their local NRCS Field Office to determine land eligibility and prepare an application prior to October 1st. Applications will be reviewed by NRD staff and approved by the General Manager.

How To Apply:

- 1. Contact your County NRCS Office
- 2. Meet with NRCS/NRD Personnel to complete application
- 3. Submit application to NRCS (NRCS will forward completed application to NRD).

Priority: Priority will be given based on the date of application. The earliest applications will be approved up to the District's budgeted amount of the current fiscal year. Once the budgeted amount is reached, applications will not be approved.

Terms:

- Cover crop options include: #1 rye only; #2 rye/rape/radish; or #3 "deluxe cocktail" mix (5 species minimum).
- Payment rate/acres: Single species \$25/acre; multiple species \$30/acre.
- Annual Payment Limit of \$2,000 per farm/landowner.
- All Cover Crops must be planted prior to October 1st for aerial application and November 1st for drilling.
- NRCS will certify successful completion to the NRD upon termination of cover crop per NRCS Cover Crop Termination Guidelines, without inversion tillage. The NRD will make payment to the landowner after certification by NRCS.
- The program will also comply with NRCS Code 340 Cover Crop Conservation Practice Standards that may be found at https://efotg.sc.egov.usda.gov/

Deleted: or

Deleted: August 2018

APPLICATION FOR ASSISTANCE Cover Crop Cost-Share Program Lower Platte South Natural Resources District

Terms

Cropland must be located in a Community Water System Protection Area, a Targeted
Watershed Area, a Groundwater Management Phase II or III Area located within the LPSNRD,
or fields where terrace systems are currently being installed in the NRD's Summer
Conservation Program.

Deleted: or

- Cover crop options include: #1 rye only; #2 rye/rape/radish; or #3 "deluxe cocktail" mix (5 species minimum).
- Payment rate/acre: Single species \$25/acre; multiple species \$30/acre.
- Annual payment limit of \$2,000 per farm/landowner.
- Application deadline is October 1st
- Cover crops must be seeded prior to October 1st for aerial application and November 1st if planted with a drill. The producer is responsible for arranging seeding (either by aerial or ground application).
- The producer will obtain NE-CPA-7 Cover Crop Design Worksheet from NRCS prior to seeding cover crop for approved species, seeding rates, and seeding dates.
- The program will also comply with NRCS Code 340 Cover Crop Conservation Practice Standards that may be found at https://efotg.sc.egov.usda.gov/
- HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested, hayed or grazed.
- Landowner will provide NRCS with completed NE-CPA-7, seed bills, and aerial/drill application bills prior to NRCS certification of cover crop.
- NRCS will certify successful completion to the NRD upon termination of cover crop per NRCS Cover Crop Termination Guidelines, without inversion tillage. The NRD will make payment to the landowner after NRCS certification.

Landowner Name:				
Address:		 :		
	City: State: ZIP:			
Phone:				
Email:				
Location of Cropland:_	, Sec, TN, RE,	County		
Number of Acres:	Type of Application: (aerial) (§	ground)		
Tenant/operator, if not	property owner:			
The undersigned (lando assistance.	owner) agrees to the terms listed above and hereby ap	oplies for cost-share		
Landowner Signature:	Date	B: 1 <u>2</u>	Deleted: August 2018	

APPLICATION

Landowner Name:
Address (include City, State Zip):
Phone:
Email:
Location of Cropland:
, Sec, TN, RE,
County
Number of Acres:
Type of Application:aerialground
Tenent/Operator (if not property owner):
The undersigned (landowner) agrees to the
terms listed herein and hereby applies for cost-
share assistance.
Landowner Signature:
Date:

ABOUT THE NRD

The Lower Platte South Natural Resources District is one of 23 districts in the state of Nebraska formed in 1972 for the purpose of managing the state's natural resources, with an emphasis on watershed management. Programs and activities include all areas of natural resource management and development: tree planting, flood protection, wildlife habitat, stream bank stabilization, environmental education, land treatment, water monitoring and many others. The districts are partially funded by property taxes and governed by a board of directors-elected representatives who serve four-year terms. The NRD system is local government working to protect local natural resources. The Lower Platte South NRD includes nearly all of Lancaster and Cass counties and parts of Seward, Saunders, Otoe, and Butler counties.



LOWER PLATTE SOUTH natural resources district

Lower Platte South NRD • 3125 Portia Street PO Box 83581 • Lincoln, Nebraska 68501-3581 Phone: (402) 476-2729 • Fax: (402) 476-6454

Contact: David Potter, Assistant Manager The Lower Platte South NRD is an **Equal Opportunity Provider and Employer**



natural resources district



PURPOSE

Reduce erosion, increase soil organic matter, capture and recycle nutrients, increase biodiversity, suppress weeds, manage soil moisture, and minimize/reduce soil compaction by utilizing cover crops within selected areas of LPSNRD.

ELIGIBILITY

Land shall be located in a Community Water System Protection Area, a Targeted Watershed, or a Ground Water Management Phase II or III Area within LPSNRD (Refer to the Cover Crop Cost Share Areas map at LPSNRD.org. Click on Programs, Landowner Cost-Share, then Land Treatment.) or fields where terrace systems are currently being installed in the NRD's Summer Conservation Program. Cover crops may be established on Highly Erodible (HEL) and Non-Highly Erodible (NHEL) land that is currently in a continuous no-till cropping system. HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested. hayed or grazed. Each participant will enroll a total of 20-to-80 acres.

PROCEDURE

Landowners will contact their local NRCS
Field Office to determine land eligibility and
prepare an application prior to October 1st.
Applications will be reviewed by NRD staff and
approved by the General Manager.



TERMS

- Cropland must be located in a Community
 Water System Protection Area, a Targeted
 Watershed Area, a Ground Water Management
 Phase II or III Area located within the LPSNRD,
 or fields where terrace systems are currently
 being installed in the NRD's Summer
 Conservation Program.
- Cover crop options include: #1 rye only; #2 rye/rape/radish; or #3 "deluxe cocktail" mix (5 species minimum).
- Payment rate/acre: Single species \$25/acre; multiple species \$30/acre.
- Annual payment limit of \$2,000 per farm/ landowner.
- Application deadline is October 1st
- Cover crops must be seeded prior to October 1st for aerial application and November 1st if planted with a drill. The producer is responsible for arranging seeding (either by aerial or ground application).
- The producer will obtain NE-CPA-7 Cover Crop Design Worksheet from NRCS prior to seeding cover crop for approved species, seeding rates, and seeding dates.
- The program will also comply with NRCS Code 340 - Cover Crop Conservation Practice Standards that may be found at https:/lefotg. sc.egov.usda.gov/
- HEL fields where corn has been cut for silage are not eligible. Cover crops shall not be harvested, hayed or grazed.
- Landowner will provide NRCS with completed NE-CPA-7, seed bills, and aerial/drill application bills prior to NRCS certification of cover crop.
- NRCS will certify successful completion to the NRD upon termination of cover crop per NRCS Cover Crop Termination Guidelines, without inversion tillage. The NRD will make payment to the landowner after NRCS certification.

APPLY

- 1. Contact your county NRCS office
- 2. Meet with NRCS/NRD personnel to complete enclosed application and other required supplemental applications
- 3. Submit enclosed application to NRCS (NRCS will forward completed application to LPSNRD)

PRIORITY

Priority will be given based on the date of application. The earliest applications will be approved up to the district's budgeted amount for the current fiscal year. Once the budgeted amount is reached, applications will not be approved.

WHERE TO BEGIN

 Contact your county NRCS office to complete enclosed application and other required supplemental applications:

Cass County NRCS Weeping Water: (402) 267-2015 ext 3

Lancaster County NRCS Lincoln: (402)423-9683 ext 3

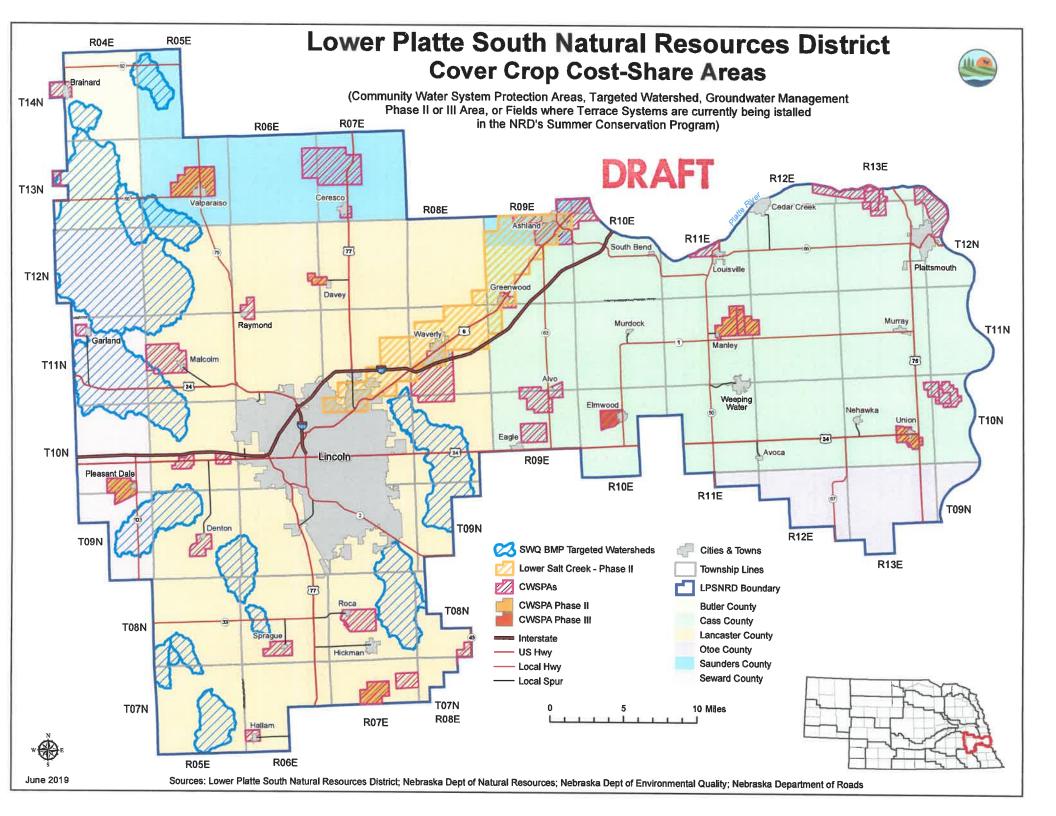
Butler County NRCS David City: (402) 367-3074 ext 3

Otoe County NRCS Syracuse: (402) 269-3466 ext 3

Saunders County NRCS Wahoo: (402) 443-4106 ext 3

Seward County NRCS Seward: (402) 649-5231 ext 3

2. If you have questions, contact the LPSNRD office at (402) 476-2729



PRIORITIZATION COMMONLY USED

In determining the criteria to select applications for approval the NRD felt that we should again give priority to landowners who haven't received cost-share most recently. The following priorities were used to eliminate applications and determine approvals.

1. Landowners who received NRD District-wide cost-share (>\$4,000) this year wouldn't be approved, continuing back until enough applications were eliminated to reach the NRD's approval limit.

Limits utilized

- NRD-wide (non-summer): \$10,000
- NRD-wide (summer): \$15,000
- Salt Valley Lakes (varies, last several years): \$20,000
- Stevens Creek (varies, last several years): \$20,000