

MASTER PLAN

Lower Platte South Natural Resources District



2009

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INTRODUCTION

The Master Plan is the document that expresses the Board of Directors VISION of the future and shapes the direction and activities of the Lower Platte South Natural Resources District. The Plan was developed by the Board of Directors through a retreat and a series of special work sessions over an eighteen month period.

The Board of Directors adopted a set of VISIONS, along with Desired Outcomes and Objectives, in 2008 which are the framework for this Master Plan. The Long Range Implementation Plan for the next five years, which is updated each year, and the annual budget are the primary tools for implementing the Master Plan.

The District must be a **“Conservation Leader”** for the residents, landowners, businesses and governmental agencies and through example, education and programs encourage and assist them to be **“Responsible Conservationists”**. Together, our natural resources will flourish.

We must adjust our attitudes and approaches to have **“Sustainable Water Resources”** for all purposes. Within the District the **“Natural and Unique Resource Areas”** must be protected and enhanced. Other visions include **“Healthy Forests”** and **“Healthy Wildlife Populations.”**

The Board also has developed visions for management of both rural and urban lands. **“Properly Managed Agricultural Lands”** will benefit all natural resources and sustain the agricultural economic base. For urban areas **“Low Impact Development”** should be the goal in both developing and redeveloping areas.

The District will continue to pursue the goal of **“Minimal Flood Threat and Damage”** to our homes, businesses, roads and bridges, and personal safety. Another vision is to ensure there are **“Ample Natural-Resource Based Recreation”** opportunities for all citizens to enjoy. An overarching vision is to work towards having a **“Stable Climate and a Clean Environment”** for the future.



LOWER PLATTE SOUTH NRD

PAST AND PRESENT

The Lower Platte South Natural Resources District (NRD) is a political subdivision of the State of Nebraska. Nebraska is divided into 23 NRDs and each NRD is governed by a locally elected Board of Directors. The NRD is authorized to develop and execute plans, facilities, works and programs related to;

- Erosion prevention and control
- Prevention of damages from flood water and sediment
- Flood prevention and control
- Soil conservation
- Water supply for any beneficial uses
- Development, management, utilization, and conservation of ground water and surface water
- Pollution control
- Solid waste disposal and sanitary drainage
- Drainage improvement and channel rectification
- Development and management of fish and wildlife habitat
- Development and management of recreational and park facilities
- Forestry and range management

The NRD is authorized to levy taxes on property to generate funds to fulfill the mission of the NRD. The Lower Platte South NRD has a 21-member Board that in addition to approving a budget and setting a tax levy also sets policy and makes decisions related to the NRD's work. The Lower Platte South NRD includes the City of Lincoln and contains parts of six counties as shown on the following map. Overall the NRD includes nearly one million acres and 300,000 residents.

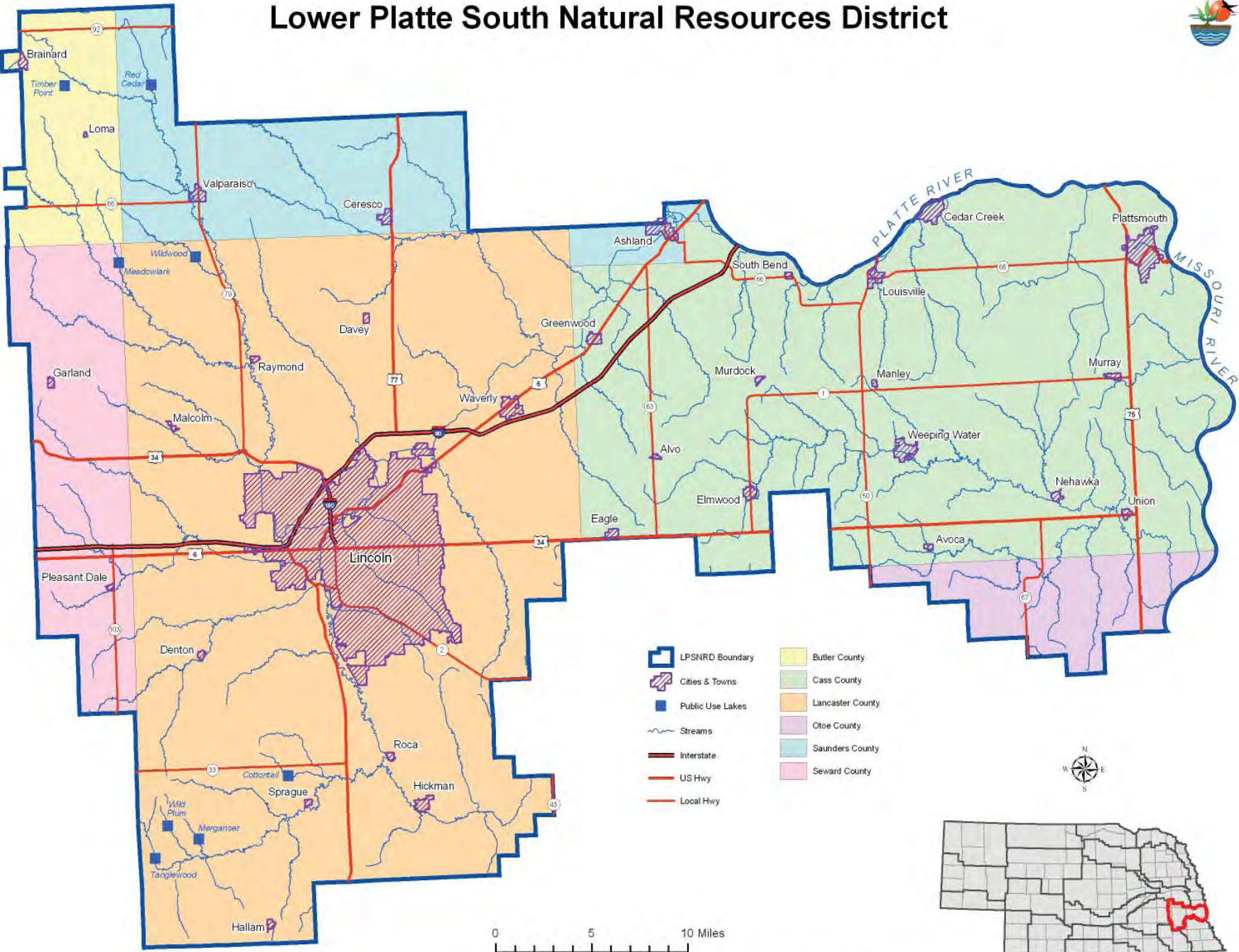
The NRD has a staff of approximately two dozen employees that operate and maintain 200 flood control dams, 13 miles of levees, approximately 12 miles of urban stream channels, 50 miles of trails, 9 wildlife management areas, 11 public wetlands, and monitors ground water quantity and quality. The NRD also provides project planning and management for additional projects/studies, environmental education, and administers programs that provide annually over \$1M in cost-share assistance to landowners to install best management practices (terracing, tree seedlings, meters, buffer strips, well decommissioning, etc.) to improve our water quality and protect our natural resources.

The successful implementation of these programs and projects is due in large part to a commitment of cooperation and collaboration with other local, state, and federal agencies and private organizations and individuals. This NRD has a history of innovation and leadership; for example, being among the first of the NRDs to utilize conservation easements as a resources protection tool, to develop and manage recreation trails, to acquire and restore wetlands, and to partner with the City of Lincoln in stormwater quality and quantity management.

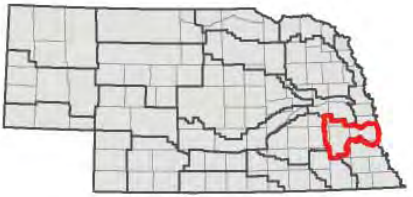
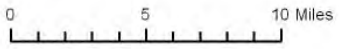
Lower Platte South Natural Resources District



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- LPSNRD Boundary
- Cities & Towns
- Public Use Lakes
- Streams
- Interstate
- US Hwy
- Local Hwy
- Butler County
- Cass County
- Lancaster County
- Otoe County
- Saunders County
- Seward County



Sources: Lower Platte South Natural Resources District, Nebraska Department of Natural Resources, Nebraska Department of Roads

The Lower Platte South NRD Board's VISION for the Future

The following are brief descriptions of the Desired Outcomes from the VISION for the Future:

A. **“Sustainable Water Resources”**- Water resources are a priority for the NRD. The NRD acquires data about the ground water resource, which varies across the District, to the point that the NRD has the ability to predict changes in ground water quality and quantity. Ground water levels are maintained and quality standards are exceeded or met for all domestic and other water uses.



Surface waters also meet or exceed water quality standards and minimum streamflows are determined and maintained for fish, wildlife, and recreational uses. All areas of hydrologically connected ground and surface water are identified, with integrated management plans developed and implemented. Wastewater meets or exceeds regulatory standards and landowners and the public all utilize best management practices.



B. **“Low Impact Developments”**- All developments are compatible with and also conserve natural resources. Developments should also practice sustainability in design, construction, and landscaping.

C. **“Minimal Flood Threat and Damage”**- Flood damages are reduced or eliminated and the public safety risk from flooding is minimized. All floodplains are accurately mapped and regulated under a “no adverse impact” policy.

D. **“Protected Natural and Unique Resource Areas”**- All remaining natural and unique resource areas are identified, assessed, and sustained or enhanced.

E. **“Ample Natural-Resource Based Recreation”**- The NRD provides diverse, safe, outdoor recreation opportunities across the District.



F. **“Properly Managed Agricultural Lands”**- Owners of all agricultural lands utilize best management practices for water quality and quantity, maintain soils at sustainable levels in accordance with their capabilities, and conserve energy.

G. **“Healthy Forests”**- The forestry resources of the NRD are diversified and enhanced in urban areas. Rural forests are preserved and expanded.

H. **“People are Responsible Conservationists”**- The NRD is a credible source of information on natural resources for the public and other agencies and works with schools on providing natural resources education. The public acts responsibly on natural resources and environmental issues and agencies and elected officials include natural resources concerns in their decision-making.



I. **“Healthy Wildlife Populations”**- Diverse, dispersed, and healthy wildlife populations thrive throughout the NRD. Critical habitat for endangered species is identified and managed, with appropriate recovery programs, and wetlands are protected and restored to full functions.

J. **“Stable Climate and Clean Environment”**- Best management practices for energy and conservation are everyday activities for the residents and businesses of the NRD. Local efforts ensure climate changes are stabilized.

K. **“NRD is a Conservation Leader”**- The Lower Platte South NRD is at the forefront of innovative conservation with its projects and programs. New conservation technology, research, demonstrations and education are utilized to promote all best management practices.



The table on the following pages shows how the NRD’s VISION ties in with the 12 statutory purposes of the Lower Platte South NRD:

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT
March 31, 2008

VISION	DESIRED OUTCOMES	OBJECTIVES	STATUTORY PURPOSE
A. Sustainable Water Resources	A1. Ground water quantity and quality is known for the entire NRD	A1a. Create interactive data bases of all hydrogeology and water quality data A1b. Implement a quality and quantity monitoring network of wells in all critical areas A1c. Investigate hydrogeology where data/wells are not available A1d. Develop estimates of ground water availability, yield, and quality at all locations	6
	A2. Ground water levels stable and quality meets standards	A2a. Manage quantity and quality consistent with Ground Water Management Plans	6
	A3. Ability to predict changes in ground water quality and quantity	A3a. Design interactive/predictive models for all geographic areas of management	6
	A4. Areas of interrelated ground and surface water are managed	A4a. Identify and map areas of interrelated ground and surface waters A4b. Implement integrated management plans for each area	6
	A5. Surface waters meet or exceed water quality intended use standards	A5a. Identify and quantify source impairments of desired beneficial uses A5b. Implement plans to preserve or restore desired surface water quality A5c. Install monitoring network in watersheds and in-lakes/streams for water quality	6, 7
	A6. Minimum streamflows are maintained for fish, wildlife, and recreational uses	A6a. Quantify minimum streamflows for each critical stream segment A6b. Acquire instream flow rights on priority segments A6c. Implement a program to protect and/or supplement streamflows A6d. Establish a monitoring network on instream flow stream segments	6, 7, 10
	A7. Wastewaters meet or exceed regulatory standards	A7a. Identify and evaluate all sources of wastewater and treatments A7b. Develop a program to assist with improvements to meet regulatory standards A7c. Establish regional wastewater systems where appropriate	7, 8
	A8. Domestic water supplies meet or exceed regulatory standards and are of adequate quantity.	A8a. Identify and evaluate all domestic water supplies and systems and quality A8b. Develop a plan to protect and enhance existing and future domestic water supplies	5, 6, 7
	A9. Landowners/public all utilize best management practices	A9a. All water users know how much water they use for what purposes A9b. All water users know the quality of their water A9c. Information and education of water users on Best Management Practices A9d. Promote water and energy efficient irrigation practices	1, 4, 5, 6, 7, 10, 12

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STATUTORY PURPOSES

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|---|--|
| <ol style="list-style-type: none"> 1. Erosion prevention and control 2. Prevention of damages from flood water and sediment 3. Flood prevention and control 4. Soil conservation 5. Water supply for any beneficial uses 6. Development, management, utilization and conservation of ground water and surface water | <ol style="list-style-type: none"> 7. Pollution control 8. Solid waste disposal and sanitary drainage 9. Drainage improvement and channel rectification 10. Development and management of fish and wildlife habitat 11. Development and management of recreational and park facilities 12. Forestry and range management |
|---|--|

VISION	DESIRED OUTCOMES	OBJECTIVES	STATUTORY PURPOSE
B. Low Impact Developments	B1. Developments are compatible with and conserve the site's natural resources and use "green" BMPs	B1a. Include open space in all new residential and commercial developments B1b. Water-wise landscaping planted in new developments B1c. Integrate stormwater quantity and quality BMPs into all existing and new developments B1d. Require cluster development and shared infrastructure in rural areas B1e. Educate developers and homeowners on "green" BMPS for developments B1f. Require detailed analysis of water supply availability and quality in developments rural developments B1g. Utilize conservation easements to protect open spaces and natural areas in new developments B1 h. Water practices in new developments meet or exceed regulatory standards.	1 - 7, 9, 10, 12
C. Minimal Flood Threat and Damage	C1. All floodplains have been accurately mapped	C1a. Utilize newest photography, topography, and models to digitally map flood plains C1b. Update flood plain maps periodically with land use and other changes	2, 3
	C2. Flood plains are regulated under a "no adverse impact" policy	C2a. Assist cities and counties to revise ordinances to incorporate "no adverse impact" policy C2b. Assist cities and counties to revise ordinances where appropriate require no net rise/no net loss of storage	2, 3
	C3. Public safety risk from flooding is minimized	C3a. Install and operate flood warning systems in critical areas C3b. Assist in development of flood response plans in place for all communities and C3c. Monument flood plain boundaries in key areas C3d. Assist in establishment of buyer notification of floodplain risks C3e. Educate public about flood threats and response plans	2, 3
	C4. Flood damages are reduced or eliminated	C4a. Cooperate in programs to retain flood plains as open space in new developments C4b. Acquire and hold conservation easements to preserve critical flood plains C4c. Assist in revision to Lincoln's existing urban area ordinances to include storage no rise pensatory C4d. Acquire and relocate high-risk structures from flood plains C4e. Assist in ordinances to require new subdivisions to absorb their stormwater quantity impacts C4f. Implement cost-effective and environmentally sound flood storage projects to reduce existing and future flood impacts	2, 3

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VISION	DESIRED OUTCOMES	OBJECTIVES	STATUTORY PURPOSE
D. Protected natural and unique resource areas	D1. Natural and unique resource areas are identified, assessed, and sustained or enhanced	D1a. Identify the location and extent of natural and unique resources areas D1b. Conduct environmental baseline assessments of natural and unique resource areas D1c. Monitoring program established to assess changes in resources D1d. Programs are developed to respond to changes in resources on natural and unique resource areas D1e. Ownership or conservation easements are secured over natural and unique resource areas D1f. Educate public on the value of natural and unique areas	10, 12
E. Ample natural-resource based recreation	E1. Diverse outdoor recreation opportunities available across the NRD	E1a. New developments incorporate new or replace existing recreation opportunities E1b. Development of recreation trails connecting communities and significant destinations E1c. NRD projects provide public access where it is appropriate and feasible E1d. Inspect and maintain recreation areas to be safe, clean and attractive E1e. Highlight natural resources education at NRD public access areas	11
F. Properly managed agricultural lands	F1. Best management practices utilized on all agricultural lands	F1a. Conservation plans implemented on all agricultural lands F2a. Agriculture producers use energy-efficient practices	1 - 7, 9, 10, 12
	F2. Soil losses at or less than sustainable levels	F2a. Treat and manage all lands to soil losses to less than sustainable levels ("T" rates)	1, 4, 7
	F3. Agricultural lands managed according to their soil survey capabilities	F3a. Identify prime agricultural lands and restrict conversion to other uses F3b. Educate land users and public officials about soil capabilities and restrictions	1 - 4, 7, 10, 12
G. Healthy forests	G1. Urban forests are diversified and enhanced	G1a. New developments include trees/shrubs on streets and public lands G1b. Trees are replaced and diversified in existing urban areas on public lands	10, 12
	G2. Rural forestry is expanded in diversity and scope	G2a. Preserve and enhance wooded riparian corridors G2b. Windbreak, energy conservation and wildlife plantings on all rural homesites	10, 12

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VISION	DESIRED OUTCOMES	OBJECTIVES	STATUTORY PURPOSE
H. People are responsible conservationists	H1. NRD is a credible source of information on natural resources	H1a. Public views and uses NRD as a credible source of information H1b. NRD prepares and directs information on natural resources to the public	1 - 12
	H2. Public acts responsibly on natural resources and environmental issues	H2a. Public becomes conservation-minded in their actions	1 - 12
	H3. Agencies and elected officials include natural resources concerns in decision-making	H3a. NRD serve as an advisor to agencies/officials on natural resources H3b. Agencies/officials include natural resource factors in decisions	1 - 12
	H4. Schools provide natural resources education	H4a. Outdoor classrooms are available to students in all grade levels in all schools H4b. Environmental / natural resources curriculum taught at all grade levels in all schools	1 - 12
I. Healthy wildlife populations	I1. Diverse, dispersed, healthy wildlife populations	I1a. Identify suitable habitats for wildlife throughout NRD I1b. Protect and restore critical habitats/corridors particularly riparian areas I1c. Protect surface water quality in lakes, wetlands, and streams I1d. Public aware and supportive of wildlife habitat protection	10
	I2. Critical habitat for endangered species managed	I2a. Identify and map designated critical habitat for all endangered species I2b. Develop and implement recovery programs for each endangered species I2c. Develop and implement Habitat Conservation Plans as appropriate	10
	I3. Wetlands protected and restored to full functions	I3a. All freshwater and saline wetlands delineated, classified and mapped I3b. Critically sensitive wetlands acquired in fee or by easement by the public I3c. Key wetlands restored to their full function	1 - 7, 10
J. Stable climate and clean environment	J1. Climate changes stabilized	J1a. Anthropogenic greenhouse gases are significantly reduced J1b. Global average temperatures are stabilized or improved J1c. Implement practices to stabilize or improve climate changes	1 - 4, 7, 12
	J2. Energy and conservation practices are everyday activities	J2a. Increase proportion of materials that are recycled and reused J2b. Construct buildings and infrastructure to use sustainable materials and techniques J2c. Energy-efficient and low polluting vehicles become standard.	7, 8
K. NRD is a conservation leader	K1. NRD at the forefront of innovative conservation	K1a. NRD conservation programs and projects utilize leading edge conservation technology K1b. Utilize research, demonstrations, and education to promote use of better BMPs by the public and agencies K1c. Promote use of sustainable products and practices in construction of NRD projects	1 - 12

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