

The Pipelining Newsletter

SOUTH PLATTE NATURAL RESOURCES DISTRICT

Fall Ground Water Level Readings Remain Lower Than Historic Average

Ground water level readings show that fall aquifer levels continue to be lower than average historical benchmarks. That's according to the 2008 Fall Groundwater Report released by the South Platte Natural Resources District (SPNRD).

Three year rolling averages show declines in each of the District's subareas, ranging from three foot decline on the east edge of the District to a 21-foot drop in its midsection. Three year rolling averages take ground water level averages from the past three seasons and compare them with a 10-year average ending a decade before. Readings are averaged from nearly 48 monitoring wells in five subareas.

Lowest three-year rolling averages are in the South Platte Valley. There, average 2006-2008 ground water levels are 3.89 feet lower than those from 1989-1998. The highest average drop is in the subarea from Buffalo Bend to Sidney, where levels were 21.22 feet below the 10-year mark. Other subarea figures: Pine Bluffs, Wyo. to Oliver Reservoir, -13.9 feet; Oliver Reservoir to

Buffalo Bend, -7.11; Sidney to Colo., -5.91; and the Fully Appropriated Area, -5.41.

District wide, ground water levels were comparable from last year's fall report. Wells measured since last year showed an average one-foot incline in Deuel County and a .39-foot incline in Kimball County. The county-wide average in Cheyenne County dropped .43 feet.

The further back in history averages go, the lower current levels compare. For instance, today's average district wide water level is 10.26 feet lower than 20 years ago. Some areas remain more than 30 feet lower.

More than half the wells within the District showed declines. Of those, 66.30 percent were in Cheyenne County, 48.48 percent in Kimball County and 29.17 percent in Deuel County.

Weather-wise, the District's west end was the driest, with reports from Kimball County showing an average of 10.26 inches of moisture from the March 1 to October 31 growing season. The area's historical average is 14.32 inches of moisture. Cheyenne

See **WATER LEVELS** pg. 2

Change of Guard On Board Of Directors

Last November's elections brought about a change of guard on the SPNRD board, who bid farewell to outgoing Sub-district 1 board member Deb Crago at December's meeting.

Deb chose not to run for re-election after her term on the board, making the hard choice between a life-long dream and the public service she enjoyed so much.

After serving the city of Aurora, Colo. for many years, Deb came to the Nebraska Panhandle and the city of Kimball to help with economic development. In that position she saw the potential affects that LB962 could have on communities.



Deb Crago

That's when she chose to run for the SPNRD Board, defeating the incumbent.

She sat through one of the board's most tumultuous times, wrestling with the challenge of developing and implementing a plan to balance the water needs of cities and surrounding agricultural uses.

In the end she feels establishing the Integrated Management Plan, particularly

See **CHANGE** pg. 3

Tree Programs Available For Both Urban And Rural Needs

The South Platte NRD has a number of tree programs available to help meet the needs of those wanting to develop, enhance or replace tree needs on properties no matter where they are.

A number of cost assistance programs are available through the NRD, the Natural Resources Conservation Service and the Nebraska Game and Parks Commission depending on the landowner's goal.

The Conservation Tree Program offers a number of options for protecting farmsteads, fields and providing wildlife habitat.

Since the Conservation Tree Program began, about three million trees have been purchased through it. In addition, NRD-approved contractors have added many more. Through the program, the District provides containerized and bare-root tree seedlings for establishing farmstead windbreaks, shelter belts and wildlife habitat.

But the program isn't limited to tree purchases. It also provides for assistance in purchasing weed barrier fabric, drip watering systems, planting services and other steps necessary to successful projects. SP-

NRD and NRCS personnel can also draw up conservation planting plans.

Landowners wanting to plant trees on their property have several options to choose from. They can have District approved contractors do the work of planting, or rent the District's tree planter and plant their own.

Bare root trees and shrubs remain the least expensive of the District's offerings at 80 cents each. Small potted specimens are 90 cents apiece, while regular potted trees are \$1.25 each. There is a 10-tree minimum

See **TREE PROGRAMS** pg. 4

Directors Add To Scholarship Opportunities

The SPNRD board of directors recently added an additional scholarship to the District's educational assistance efforts.

This year the SPNRD is offering one local producer a sponsorship to attend the annual No Till On The Plains winter conference in Salina, Kans. in late January.

At the 2009 Winter Conference, producers will have the opportunity to visit with other no-tillers from various regions. This year, about one dozen "producer speakers" - each in a different stage of continuous no-till with a variety of unique conditions - will offer presentations. In addition, another dozen No-tillage experts - some of the world's foremost authorities in no-till systems, will engage the crowd. Growers will have the opportunity to ask questions, share trade secrets and interact with other attendees, participants and presenters.

The SPNRD sponsorship, covering the conference's \$150.00 registration fee, will be awarded to one SPNRD producer who attended a no-till workshop by NRCS Panhandle No-Till Educator Mark Watson.

SPNRD offers a number of resources related scholarship opportunities to a variety of recipients. Those include students attending camps, teachers and others.

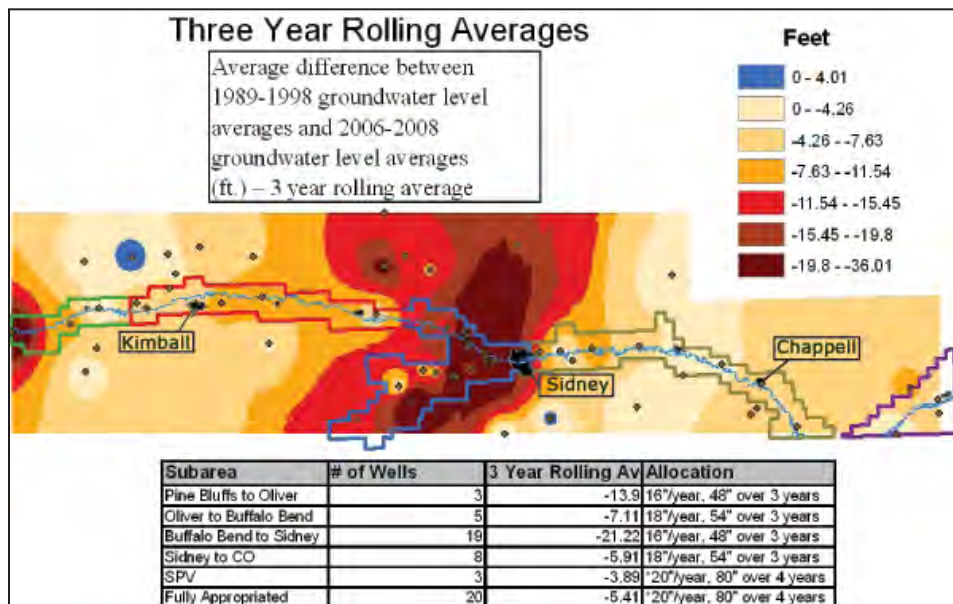
Allocations Subcommittee Begins Review

The District's Allocation Subcommittee is currently holding a series of meetings to review the effectiveness of current water allocations which went into effect in March of 2007.

The upcoming irrigation season marks the end of the first allocation period within the District. The current review is in accordance with the Districtwide Ground Water Management Area Rules and Regulations, which state that allocations are set at the end of each three-year period for the following allocation period. The rules provide that changes to the allocation are established a year before the next allocation period begins.

Four of the District's Allocation Subareas are currently under review. They are Wyoming state line to Oliver Reservoir, Oliver Reservoir to Buffalo Bend, Buffalo Bend to Sidney, and Sidney to the Colorado state line. Allocations in the two remaining subareas, the Tablelands and South Platte Valley, go into effect in March of this year.

A number of factors will be taken into ac-



WATER LEVELS A Management Tool continued from Page 1

County sites received an average of 14.44 inches, compared to a 15.67 historical mark. Deuel County was above its 15.49 historical average, receiving 16.07 inches of rain.

SPNRD's board of directors uses the fall report, along with measurements taken in the spring, to determine the effectiveness of allocations and other rules and regulations while managing water resources. Fall readings show how much areas of the aquifers have been drawn down during the growing season, while spring readings, taken before

the high demand period, show levels where aquifer levels have stabilized.

The entire report can be seen at the South Platte NRD office, 551 Parkland Dr. in Sidney or on the Web site, www.spnrd.org.

SOUTH PLATTE

NATURAL RESOURCES DISTRICT

Board of Directors

Keith Rexroth	Chair
Cheryl Burkhardt-Kriesel	Vice-Chair
Tom Biggs	Secretary
James C. Johnson	
Bill Halligan	
Paul A. Hutchison	
Larry L. Rutt	

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Kyle Liebig	Water Resources Coordinator
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Don Ogle	Information & Ed. Coordinator
Jane Joyce	NRCS/NRD Field Office Secretary
Hilary Cook	NRCS/NRD Field Office Secretary

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Information & Education Coordinator.

For the latest NRD news and program updates, visit our Website at www.spnrd.org

SPNRD Joins Panhandle No-Till Effort

The South Platte NRD has joined other Nebraska Panhandle agencies in the promotion of no-till farming efforts as part of the Panhandle No-Till Partnership.

The Panhandle No-Till Partnership was formed late last summer with officials from the SPNRD, the Natural Resources Conservation Service (NRCS), the North Platte and Upper Niobrara-White NRDs, and the Panhandle Resource Conservation & Development, Inc. (RC&D).

The intent is to provide as much information as possible to producers about new no-till systems, which are far different from the chemical-fallow practices developed in the 80s. In that effort, weeds in fallow fields were controlled chemically. It did reduce the number of passes made with tillage im-

plements, but didn't address soil improvement like current no-till practices.

No-till today still employs some chemical weed control, but also stresses crop rotation and residue management as part of the weed



control formula. Long time practitioners of today's no-till methods have also found the methods increase the amount of organic matter in the soil, improve overall soil health and can result in better use of water.

In November, the Panhandle No-Till

Partnership hosted a two-day conference in Gering, bringing no-till experts together to pass on their experiences. Additional meetings and conferences will follow, as well as field days, which allow producers a hands-on look at other operations.

One of the region's main no-till advocates is Alliance area farmer Mark Watson. Along with his brother Bruno, Watson has practiced no-till applications on both dryland and irrigated farm ground for more than a decade.

Watson has been serving as the Panhandle No-Till Educator for NRCS and holds numerous meetings with producers to help them develop no-till programs. Watson has also contributed No-Till Notes, a weekly newspaper column.

CHANGE *New Assignments Set* continued from Page 1

the municipal and industrial use sections, would be counted as the biggest accomplishments during her service.

She learned a lot, she says, particularly from a scientific level, about ground water.

Her long-time love of plants changed her direction recently. Deb says she's always been interested in trees and plants. As a result, she's wanted to have her own greenhouse or nursery for many years.

That dream was realized in 2007 when she and her husband Richard opened Cottage Gardens, a floral gift shop and garden center. But it also took a toll, she says.

"The number of hours we worked was incredible," she says. "I was not always comfortable that I would be able to get to meetings."

It might have been different, she says, if the IMP hadn't been approved. But now, "I felt it was a good time for me to leave."

As it turns out, Deb's replacement is familiar with the workings of the SPNRD, both from historical and current involvement.

Bill Halligan, from Bushnell, served on the SPNRD board of directors from 1983-1986. But he has remained involved with area issues, most recently serving on the district's allocation sub-

committe during development of the IMP.

Bill's primary occupation is a little different that normal for western Nebraska - he and his family operate an 800 head sheep dairy.

He does have irrigated farm ground, which is devoted to producing feed for his ewes.

Bill has several resources areas he feels are important to the NRD's mission. First is that of the area's water tables, which he deems "very critical" to the area. Another area of particular interest is in no-till farming systems. He hopes for better soil quality, which could also result in a possible solution to a growing problem throughout the region - the wide proliferation of tumble weeds and their adverse affect on the land.

Joining Bill in taking his oath of office at the January board meeting were three directors who were re-elected. They are Cheryl Burkhart-Kriesel, Subdistrict 3; Keith Rexroth, Subdistrict 5; and Larry Rutt, Subdistrict 7.

Each year the board re-aligns, with members choosing its leadership and those who will represent the District on other boards.

Chosen as board president was Keith Rexroth. Cheryl Burkhart-Kriesel will be vice-chair and board secretary will be Tom Biggs.

Representing the board on the Nebraska Association of Resources Districts is Jim Johnson and alternate Larry Rutt.



Bill Halligan

Grant Program Available For Community Resources Projects

The South Platte NRD Community Assistance Grant program is an authorized program of the District to provide financial assistance to communities within the South Platte NRD for projects that support the NRD funding categories.

Any project or portion of a project funded by the South Platte Natural Resources District must achieve one or more of the following NRD purposes, established by the Nebraska State Legislature in 1972. These category areas are equally important.

Funding Categories

- Erosion prevention and control
- Prevention of damages from flood water and sediment
- Flood prevention and control
- Soil conservation
- Water supply
- Development, management, utilization, and conservation of ground water and surface water
- Pollution control
- Solid waste disposal and drainage
- Drainage improvement and channel rectification
- Fish and wildlife habitat
- Recreational and park facilities
- Forestry and range management
- Outdoor Classroom / Education

If you have questions or would like to discuss a project, you are encouraged to contact the NRD office.

The District in Brief

New Offices In Use

The board of directors held its first meeting in the District's newly remodeled offices in January, marking the culmination of a project that began last fall.

The remodeling and the addition of shop space comes in response to increased demands on District staff and facilities.

The new board room is in what was previously a garage area and the former board room has been split into additional office space. Capping the project is a new 40'x80'

shop which will house a new tree cooler, a small office, vehicles and equipment.

EQIP Funds Available

The Natural Resources Conservation Service (NRCS) has announced continued availability of funds through the Environmental Quality Incentive Program (EQIP).

The funds are available to assist producers who choose to implement conservation practices that would be additionally beneficial to the environment.

Among the target practices within the

District are conversion of irrigated cropland to grassland or wildlife habitat, conversion of irrigated cropland to dryland, terracing, livestock water development, and incentive payments for conversion to no till or organic farming.

To find out more about acceptable projects and practices, contact your NRCS office or SPNRD. Project application deadline is February 13.

Local Tax Request Down

The South Platte Natural Resources District (SPNRD) board of directors approved the District's annual budget at its September monthly meeting, approving a property tax request of \$820,586.66.

Despite an increased budget due to greater funding needs in water resources management areas, the SPNRD property tax request is about \$87,000, or 9.59%, less than last year. SPNRD is able to keep its local property tax requests to a minimum by leveraging assistance from state and federal programs.

Two components make up the \$2,612,237.54 SPNRD budget, one for the NRD's operation and a second for the Citizen's Monitoring Committee, which provides for local monitoring of the Clean Harbors hazardous waste facility near Kimball. The components are merged in the state's budget format.

More than 56% of the SPNRD budget goes into the District's projects and programs.



Kimball High School's Brad Weisbrook, Erin Knicely, Brady Baker, Cody Simms and advisor Alan Held were among teams competing at State Land Judging in Scottsbluff in November. Simms led the team to state with a third place individual finish at regional competition in Lodgepole. Knicely paced Kimball at state with a 26th place finish among 77 participants.

TREE PROGRAMS *Adding Protection and Value To Properties* continued from Page 1

for each species ordered.

For urban enhancement, the District's Community Forestry Program, like its country counterpart, is designed to improve overall tree populations at a lower cost to property owners.

The program, open to urban neighborhood groups, businesses, cities and villages, provides up to a 50 percent cost share to help pay for the cost of purchasing, planting, maintaining and removing trees. Property owners purchase trees together through a cooperative effort, increasing purchasing power and lowering their overall costs.

One of the unique and beneficial parts of the program is the variety of ways that participants can pay for their share. Applicants can use private funding, community grants and budgets, or even donated in-kind labor. Using donations and labor, applicants could possibly accomplish tree planting projects with no out-of-pocket expenses.

Galen Wittrock, program coordinator, says the program is set up in a way that it

encourages neighbors to cooperate in adding trees not just to their individual properties, but throughout their entire neighborhood.

Wittrock said residents can form a neighborhood group that will share in the labor and expense while at the same time enhancing the neighborhood as a whole.

In the District's towns and villages, Wittrock said residents have in the past participated in cooperation with their town board, although they could still form an independent neighborhood group if they choose.

School groups within the SPNRD's three counties, Kimball, Deuel and Cheyenne, can also participate.

Qualifications are relatively simple. In addition to meeting their cost-share requirement, applicants will agree to maintain the trees for 10 years, with 3-5

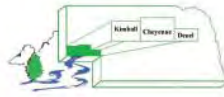
and 5-10 year guidelines. Applicants need to consult their local tree board or town authorities to make sure their plan meets local ordinances.

To apply, or for more information on either program, interested parties are encouraged to contact Wittrock at the SPNRD for an application and information. Applications for the Community Forestry Program will be taken through the end of February. Those wishing to receive assistance through either program are encouraged to apply as soon as possible, as competition for available funds is great.

Order forms for the Conservation Tree Program are also available on the District Web site, www.spnrd.org. The form shows the tree varieties available through the program.



KNOW YOUR NRD



**SOUTH PLATTE
NATURAL RESOURCES DISTRICT**

Nebraska's Natural Resources Districts
Making the Good Life Better Since 1972

Winter 2008

SOUTH PLATTE NRD



Protecting People and Resources

Over 100 ground water wells monitored for water levels twice a year within the District.

Districtwide ground and surface water quality checks performed regularly, testing for nitrates, bacteria and pesticides that could cause harm.

Over 3 million trees provided through conservation and community tree programs, protecting and adding value to property and providing hundreds of acres of wildlife habitat.

Did You Know?

About half of 220-mile long Lodgepole Creek runs the length of the District.

The South Platte River runs for 9 miles in the District's southeast corner.

The Right Tools to Protect Your Interests

IMP Review Continues

District and state officials are continuing work that will bring the District into full compliance under requirements of the Nebraska Groundwater Management Protection Act.

In June, the heads of the South Platte NRD and the Nebraska Department of Natural Resources (NDNR) exchanged initial letters of agreement regarding the District's Integrated Management Plan (IMP).

One section of the IMP, covering the District's overappropriated areas, is being reviewed against the Basin-Wide Plan for the Overappropriated Portions of the Platte River.

The basin-wide plan is being developed to manage needs within the entire Platte River Basin, which stretches across much of the state. That plan is expected to be approved in the next few months.

Science Provides Information

Two innovative technologies are being used to help the District learn more about our water resources.

The HEM, or Helicopter Electromagnetic, system uses electromagnetic pulses sent out at very high and very low frequencies to map underground features, much like an x-ray reveals various tissues in the human body. The resulting high definition relief maps can reveal a lot about an area's aquifers.

Scientists expect HEM can help determine the volumes in an aquifer, plus the textures. Texture information can give officials a good idea on ground water movement.

METRIC - for Mapping EvapoTranspiration with High Resolution and Internal Calibration. Developers refer to it as a "hybrid" energy balance program
(Continued next page)

Management Tool Updated

In its continuing efforts to stay up to date on the latest District ground water management needs, the District's board of directors recently updated one of its primary tools.

District officials regularly review the Districtwide Ground Water Management Area Rules and Regulations, which are used to manage ground water uses in a number of areas.

The goal is to facilitate the proper management of ground water for quality, quantity, and integrated management.

In accepting the responsibility of managing water resources throughout the district, the directors recognize without water, life as we know it cannot continue. No segment of society can survive without water and maintaining proper management is key to
(Continued next page)

Facilities for Many Uses

Oliver Reservoir, which lies eight miles west of Kimball, is a prime example of a Natural Resources District multi-function facility.

Owned by the SPNRD, the 917-acre property features a 270-acre lake originally designed as an irrigation impoundment on Lodgepole Creek. Through years of service it helped feed irrigated crops, caught the waters of dangerous floods and provided many recreational opportunities.

The irrigation ditches no longer flow and flooding has been a rare threat, but Oliver is still a valuable area asset.

Like many other water-dependent resources within the District, the recent lengthy drought has left the reservoir's water levels low. As a result, the number of visitors has dropped and concern over the reservoir's future has grown.

District officials are currently working with concerned citizens to find ways to not only maintain current interest and use, but also to bring about a brighter future for the facility.

Currently operated by the Nebraska Game and Parks Commission, Oliver Reservoir is the only recreation area of its kind in the southern Panhandle.

Two other District-managed wildlife management areas also sport unique outdoor offerings. Golden Eye WMA, near Big Springs, has a small pond with surprising fishing opportunities. Near Chappell, the 97-acre Goldenrod WMA is enjoyed by a variety of hunters. Both also feature excellent bird watching and wildlife viewing.



Natural Resources Information Superstore



The South Platte NRD has a number of educational and information programs serving District residents of all ages and needs.

One of the District's largest educational programs is the Western Nebraska Children's Water Festival. The Festival allows participants to see where their water comes from, how it is used in every day life and how to be good stewards of its use.

Other youth programs include the Nebraska Environment and range and land judging contests.

Children aren't the only ones to benefit from the District's educational efforts. District residents are offered or can request training in regard to a number of needs, whether it be tree planting, water management or soil conservation.

Currently, the District participates in bringing no till information to producers seeking alternative ways to manage their resources.

The District has a library available with information in many resource areas and staff members ready to assist you with your natural resource questions and needs.

Science Information

(Continued from previous page)

that uses Landsat (satellite) imagery to compute ET (evapotranspiration). The system combines the satellite data with ground-based data to determine ET.

ET, the rate of the combined loss of water from a combination of soil evaporation and plant transpiration, can be used to help determine how much water has been used in crop production. Combining those numbers with known crops, researchers should be able to develop locally calibrated crop coefficient curves.

The technologies' information can help the SPNRD board of directors make educated management decisions.

Tool Updated

(Continued from previous page)

assure that safe, useable water is available to users throughout the district for generations to come.

Recent changes help bring an amount of continuity between the recently completed Integrated Management Plan and the districtwide rules and regulations.

A major change resulting from the rules and regulations update is a moratorium, rather than a stay, on well construction permits.

No expansion of irrigated acres is allowed, nor are new or expanded uses that would result in an increase of consumptive water use. Other changes provide for allocations and water transfers.

Nebraska's NRDs:

- Protect lives and property with flood protection
- Are leaders in groundwater management
- Use taxpayer dollars efficiently

The Nebraska Legislature enacted laws in 1972 to combine 154 special purpose entities into 23 NRDs. These districts are unique to Nebraska. NRDs are local government entities with broad responsibilities to protect natural resources. Major Nebraska river basins form the boundaries, enabling districts to respond best to local needs.

Learn more at www.nrdnet.org

Your SPNRD in Service

- Seven locally elected directors manage natural resources concerns on your behalf. Their actions protect properties and help assure public safety while managing your tax dollars wisely.

Landowners can receive cost-share assistance from the South Platte NRD for installing conservation practices such as terraces, tree planting, erosion control dams, buffer strips and livestock pipelines. Some areas of the district are designated "target areas" for increased emphasis on improving conservation efforts.

Talk About Value!

On a property valued at \$100,000 the South Platte NRD's property tax share in the current budget year is just \$54.00, less than the cost of a 20 oz. bottle of pop once each week of the year!

Wise use of grants, such as those from the Nebraska Environmental Trust, allows the NRD to use nearly half of its revenues to carry out projects and programs directly for your benefit!

NRD Directors: *Your Resources Management Representatives*

In 1972, the Nebraska Legislature enacted laws combining 154 special purpose entities into 23 Natural Resources Districts.

The NRDs, which are unique to Nebraska, are charged with broad responsibilities to protect the state's natural resources. The challenges facing each NRD are as unique as the terrain in different parts of the state's 93 counties. Often, they build partnerships with other agencies and organizations, including the USDA Natural Resources Conservation Service, the Nebraska Natural Resources Commission, other state and federal agencies, municipalities, counties and private organizations.

To meet those widely varying needs, each district is a local governmental entity, run by an elected board of directors. Those directors oversee a wide variety of programs. The programs are funded by a combination of local property taxes and grants from state and federal resources.

In the South Platte Natural Resources District, board members represent constituents in seven subdistricts across Kimball, Cheyenne and Deuel counties. They provide local solutions to the District's natural resources challenging needs. Board members are elected to four-year terms.

In recent years, the SPNRD Board of Directors has faced the huge challenge shared by many of the nation's officials – managing precious water resources. The directors have faced the unenviable task of interpreting new laws established to govern the hotbed subject, working to apply them as fairly as possible to the District's water users.

To implement Board decisions, eight

staff members are tasked with running the programs servicing more than 16,000 people and 1.65 million acres of land within the District. In carrying out the Board's objectives, staff members run the programs that help keep track of and enhance the District's natural resources. The staff also uses a number of educational programs and opportunities to assist constituents learn how to manage resources on their own land.

We continue to highlight SPNRD board members, allowing you to get to know them a little better.

Director Tom Biggs was born and reared in Cheyenne County, giving him life-long knowledge of the area and its needs.

Tom earned a bachelor's degree from the University of Nebraska at Lincoln, then returned to the area to farm and ranch. Tom's operation includes a cow-calf/backgrounding operation, and also farms both dryland and irrigated ground.

Tom's interest in serving on the board of directors arose out of a wish to become better informed, not only as a producer, but also as a citizen concerned with the issues addressed by the natural resources district.

His service began with his appointment in July of 1999. His current term expires at the end of 2010. Tom currently serves as board secretary and represents residents in SPNRD Subdistrict 6.

It's the ability for the District to assist individuals with questions or concerns about natural resources that Tom thinks is one of the District's greatest services.

As for the future - Tom wants to see the continuance of refining methods to address the many water-related situations that have appeared on the District and state level.

When he's not wrangling cattle or resources issues, Tom enjoys traveling and spending time with his family, which includes wife Leslie, a registered nurse, and

three children. Two of his children are in Wyoming and the other lives in Sidney. His main hobby interest is woodworking.

Paul Hutchison, a Potter High graduate, has served on the board of directors since June of 1995 and represents Subdistrict 4.

Paul earned a Bachelor of Science degree in Animal Science from Colorado State University before returning to the area, where he has a cow-calf operation, dryland and irrigated farm ground.

Even before he joined the board, conservation practices were commonplace in his farming operation. More than a half mile of terraces protect parts of his operation from erosion, as do a trio of field windbreaks.

Trees have always been a big part of his operation and interest. He works to fill gaps in his treelines with replantings.

In his irrigated fields, Paul has been a leader in tracking his irrigation effectiveness and has used a number of tools, including ET gauges and moisture sensors to aid his irrigation scheduling. He actively participates in the SPNRD's nitrogen management program.

Paul enjoys spending time hunting and fishing. His appreciation of the outdoors and environment are apparent in wildlife habitat plantings on his ground.

Paul's family includes his wife, Colleen four children and nine grandchildren.

His grandchildren's generation is a big factor in his interest for the District's future.

"I want to see our natural resources be here for our grandkids in at least as good a condition or better than they are now."

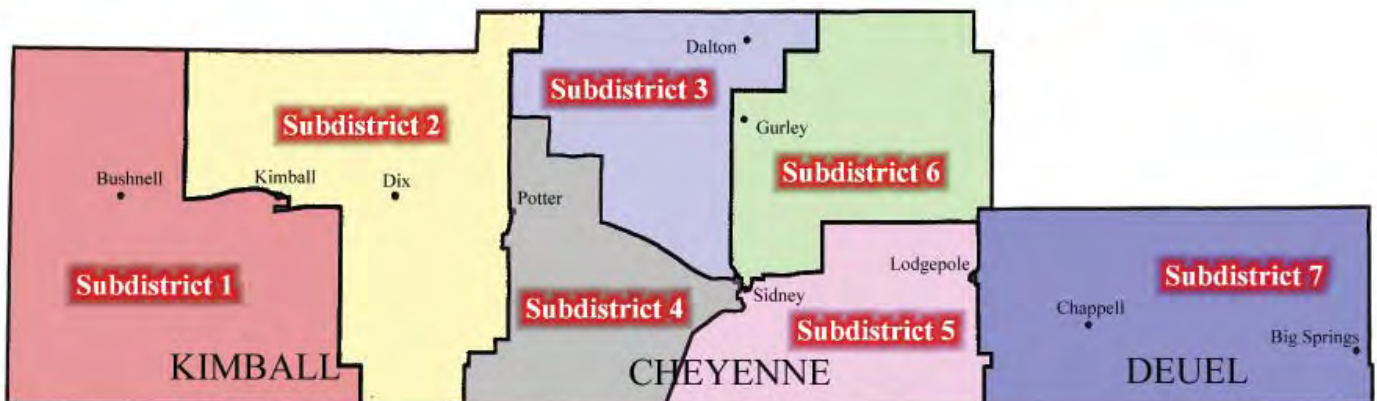


Tom Biggs



Paul Hutchison

South Platte NRD Subdistrict Area Map



South Platte Natural Resources District
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Sidney, NE 69162

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Change Service Requested

Nitrate-Nitrogen Averages Lower Across District

The District has completed its 17th year of water quality monitoring and overall, water quality remains good throughout the District. The report shows composite averages of nitrate-nitrogen were lower district wide.

Through the Ground Water Quality Monitoring Program, monitoring wells are sampled quarterly, while irrigation and domestic wells are sampled twice a year between May and October.

By using the same wells each year, staff can establish consistent values for areas throughout the district and determine the overall composite nitrate-nitrogen values. This year, samples were taken from 137 wells at least once during the year. Sixty-two of those were domestic wells and 75 were for irrigation. Those samples are sent to a lab and checked for concentrations of nitrate-nitrogen.

Seven Ground Water Management Areas (GWMA) are established within the District for the purpose of managing either ground water quality or quantity. Four Ground Water Management Areas were initially formed in the late 1990s when nitrate-nitrogen levels rose drastically. Additional areas were

formed later in response to water quantity concerns due to drought and resulting declining water levels.

The District is monitored for both water quality and quantity. Management practices, such as allocations for quantity or use of “contamination triggers” for water quality, are based on various measurements.

There are three phases of management practices based on the contamination triggers, which reflect the amounts of nitrate-nitrogen found in water samples.

When it comes to quality, about three-quarters of the District’s 1.65 million acres are not affected by those triggers. Of the remaining lands, about half are in Phase I management because composite nitrate-nitrogen values are above the 6.5 ppm trigger level and require minimal additional practices. Ground water management areas are reported as a collective area, although further reading breakdowns are made.

Two management areas, the Sidney GWMA and the South Platte GWMA in southern Deuel County, are currently in Phase II. Management of those areas includes stricter monitoring, including additional soil and water sampling. Those

controls come into affect when composite nitrate-nitrogen remain at 8.0 ppm for three consecutive years.

If nitrate-nitrogen remains at 9.5 ppm or above for three years, Phase III controls, which include intensive management practices, could become necessary.

This past year, there was a slight decrease noted in the Sidney GWMA, dropped to 8.08 parts per million (ppm). The SGWMA remains below the 10 ppm federal standard for safe levels in potable water.

The East Lodgepole Valley GWMA, saw its lowest nitrate-nitrogen level in 16 years. For the past three years that management area has dipped below 7 ppm and this year was just 6.18 ppm. That area is currently in Phase I management.

Wells in the Kimball County Lodgepole Valley GWMA also showed continued decline, marking the fourth straight year of lower averages. This year, the GWMA dipped to 4.76 ppm.

The entire report can be seen by contacting the District office or on the District Web site at www.spnrd.org.