

Collaboration amidst a Decentralized Regulatory System: A Case Study of Integrated Water Quantity and Quality Planning in Nebraska

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Setting the Conditions for Success of IWRM
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Overview of Presentation

- Overview of Nebraska Water Management
- State-Local Water Management
 - Integrated Management Plans (quantity)
 - Water Quality Management Plans
- Upper Big Blue Natural Resources District case study

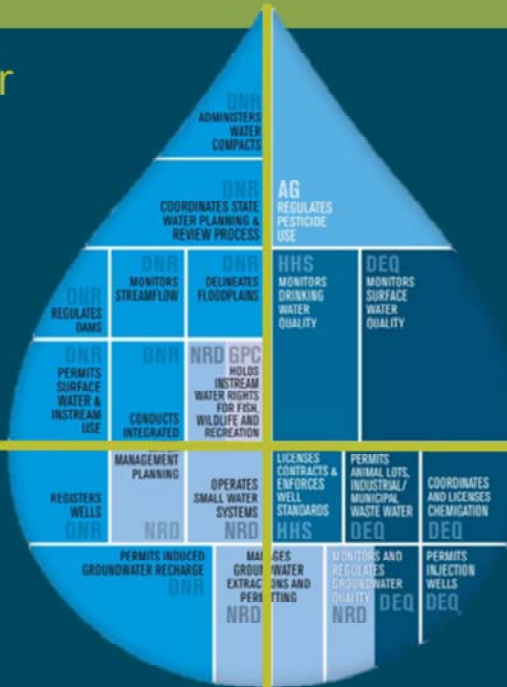
Nebraska Water Management

Surface Water Quantity

Surface Water Quality

Ground-water Quantity

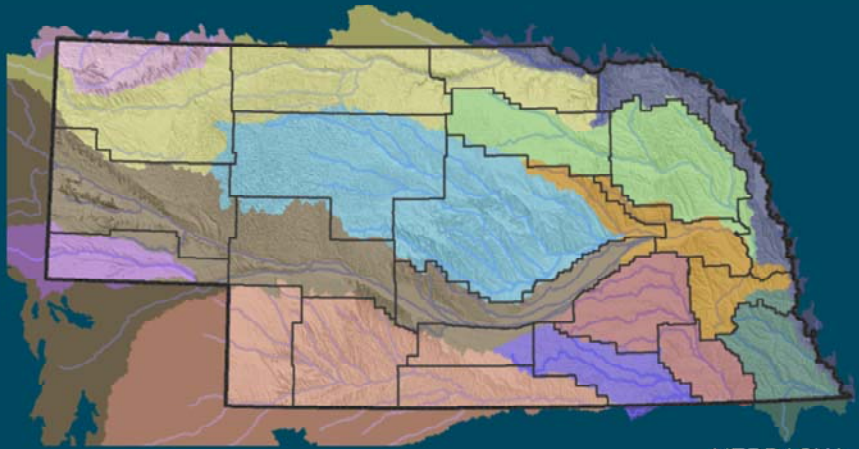
Ground-water Quality



NRDs—responsible for managing groundwater quality and quantity.

Nebraska Water Management

- 23 Natural Resources Districts (NRDs)
- Boundaries based on river basins
- Governed by a locally-elected board of directors



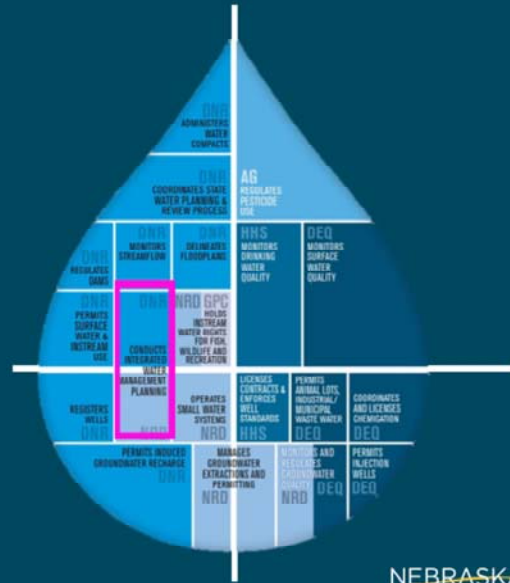
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NRD system is unique to Nebraska, 23 in the state. River basins here are shown in different colors.

State-Local Water Quantity Management

- Integrated Water Management
 - Collaborative process
 - Natural Resources Districts
 - Nebraska Department of Natural Resources



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Nebraska legislature in 2004 put integrated water management planning into place.

State-Local Water Quantity Management

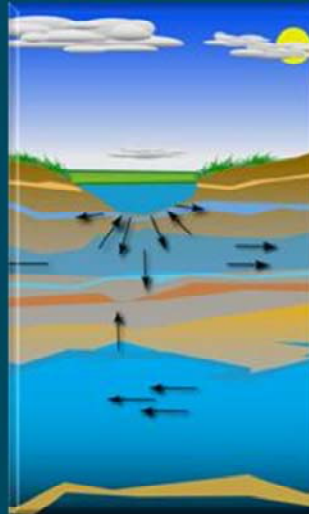
State (Nebraska DNR)
regulates surface water



Integrated Management Plans



Local Natural
Resources Districts
regulate groundwater

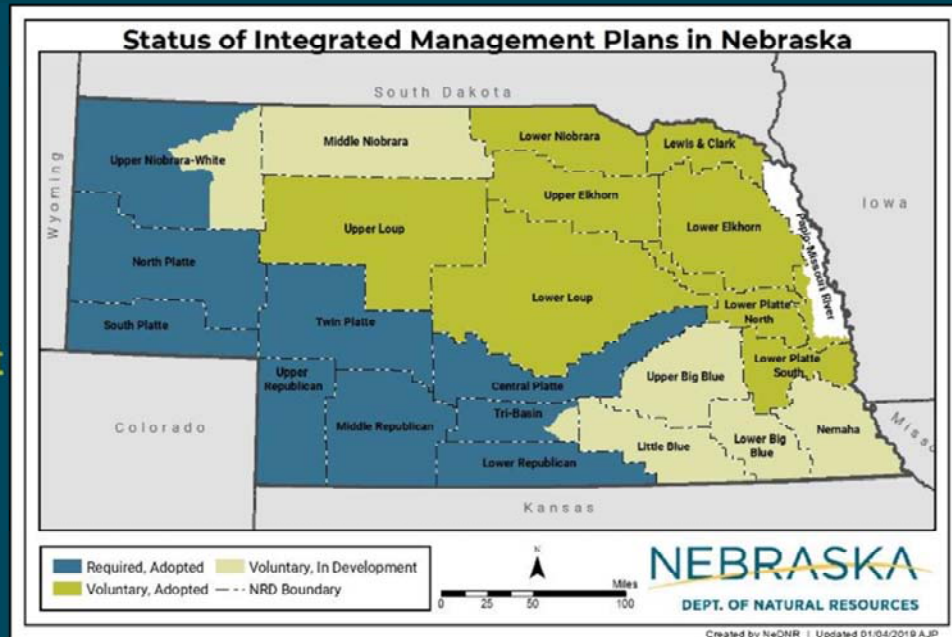


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Framework for Integrated Management planning is laid out in state statute.

State-Local
Water
Quantity
Management

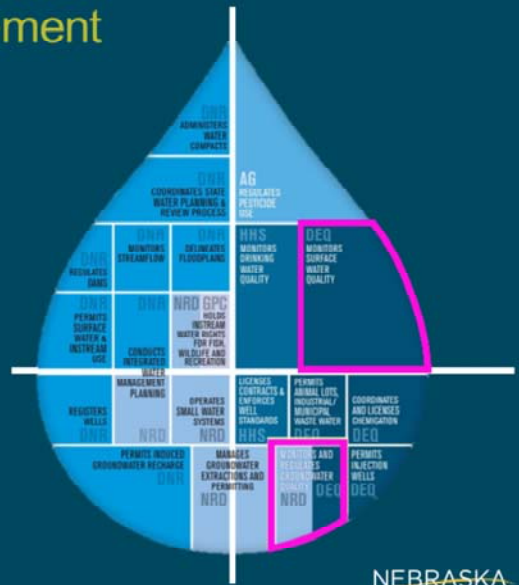


Map that your looking at has evolved over the past 15 years. IMPs for the blue areas were developed between 2004 and 2009; these areas have been determined to fully- or over-appropriated; so any new water use requires an offset for that use. Voluntary planning, initiated by a specific NRD, has been taking place since 2010 (another piece of legislature), with all NRDs in some phase of IWM since 2016. Plans take quite a while to develop, there is an in depth stakeholder process, and a of coordination between DNR and NRDs.

State-local Water Quality Management

Water Quality Management Plans

- o Community Based Planning
- o Natural Resources Districts
 - On the ground implementation
- o Nebraska Department of Environmental Quality
 - Nonpoint Source Pollution, surface water 'impairments'



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Geographic areas don't match. Many times time of plan development doesn't match. So, we look for opportunities.

State-local Water Quality Management

➤ Nonpoint Source Pollution

- From landscapes, not pipes (Pipes = point sources)
- Runoff/leaching transports pollutants
- Affects lakes, rivers, wetlands and groundwater

➤ Common pollutants in Nebraska

- Sediment
- Nutrients
- Phosphorus
- Bacteria



NDEQ Nonpoint Source Pollution

- State Nonpoint Source Programs funded via EPA, Clean Water Act, Section 319(h).
- Nebraska receives annual '319' grant.
- ~\$1.2 million has gone out annually to project sponsors (e.g. NRDs) for planning and on-the-ground projects.



Non-point Source Pollution Watershed Management Plans (WMS)



➤ '9 Element' WMPs

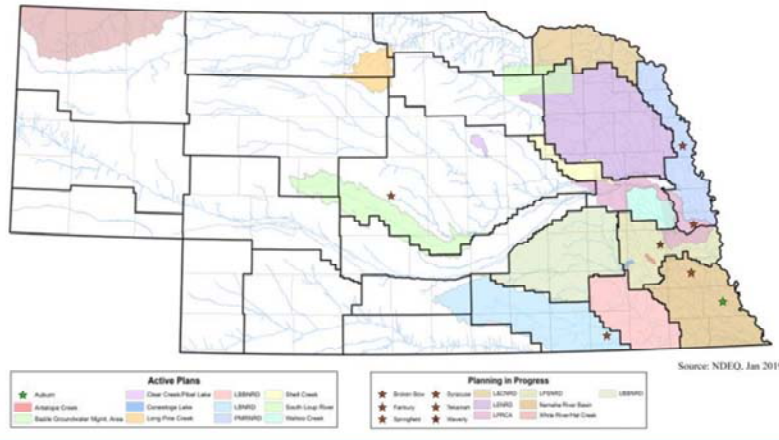
- Roadmap for water quality improvement
- Focus on 'Impairments'
- Voluntary plans

➤ Why do a 9 Element WMP?

- Community Based Planning
- Funding for Nonpoint Source Projects (319)

State-local Water Quality Management Plans

NRDs ARE WORKING ON PROTECTING GROUNDWATER & SURFACE WATER WITH LONG-TERM WATERSHED PLANS



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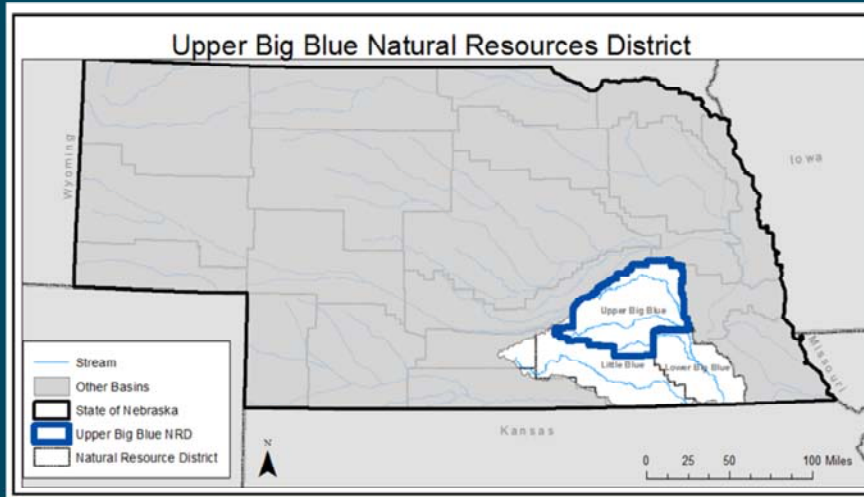
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Recap of Water Quality and Quantity Plans

NDEQ-9 Element	NeDNR-IMP
Surface Water and Groundwater	Surface Water and Groundwater
Water Quality	Water Quantity
Voluntary	Mandated, voluntary (depends on area)
Federal Clean Water Act (319 Nonpoint Source Pollution)	Nebraska State Statutes

Upper Big Blue Natural Resources District Case Study



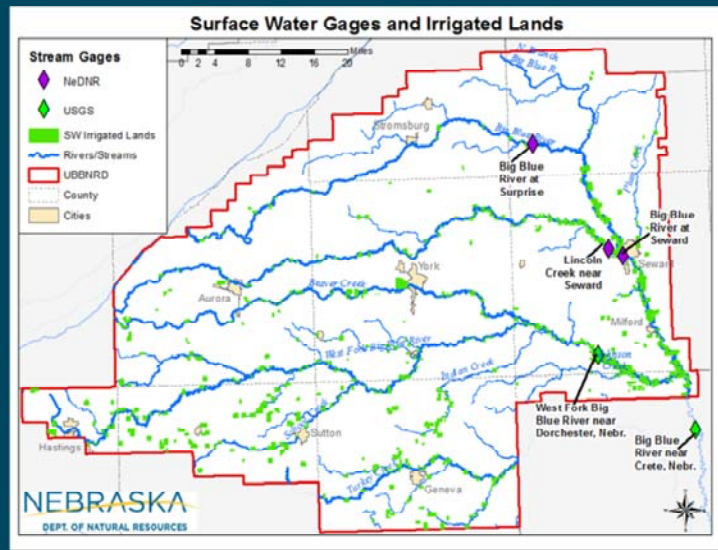
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- Potential Benefits
 - Streamline planning for the NRD
 - Opportunity for NeDNR and NDEQ to collaborate on planning with a willing NRD
 - Save money and time (stakeholders)
 - *Complementary Goals and Objectives*

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- Plan of action: Conduct a joint stakeholder process but keep the plans separate
 - One primary stakeholder group for both plans
 - A separate Technical Advisory Committee for DEQ 9-element plan
 - Hire one consultant to assist with stakeholder process (facilitation, meeting prep, etc.)
 - Use this process as a learning opportunity for DEQ, NeDNR

Upper Big Blue Natural Resources District Case Study

NDEQ– 9 Element	NeDNR - MMP
Guidelines for Stakeholder Group	Statutory requirements for Stakeholder Group
Technical AND Citizen Advisory Committee	Stakeholder Committee Only
<ul style="list-style-type: none"> • Nebraska Game and Parks • NRCS • University Extension • NeDNR, Dept. of Ag 	<ul style="list-style-type: none"> • Surface water Irrigators • Groundwater irrigators • Municipalities • Other

Upper Big Blue Natural Resources District Case Study

Challenges: Financing the Process

NDEQ- 9 Element	NeDNR - MMP
Quality Only	Quantity Only
Strict timeline for grant	Not a strict timeline
Contract with NRD (60/40 split)	Contract with NRD (50/50 split)
Consultant facilitates AND drafts plan	Consultant facilitates only (in this case)

Upper Big Blue Natural Resources District Case Study

➤ Planning process

- Four stakeholder meetings were held in 2018
- Four Technical Advisory Committee (quality focused) were also held
- An additional TAC meeting will be held Monday, April 1, 2019
- A public open house is scheduled for Tuesday, April 2, 2019
- Water quality plan is in writing stages (shorter timeframe)
- NeDNR and NRD will write their plan over the next few months

Upper Big Blue Natural Resources District Case Study

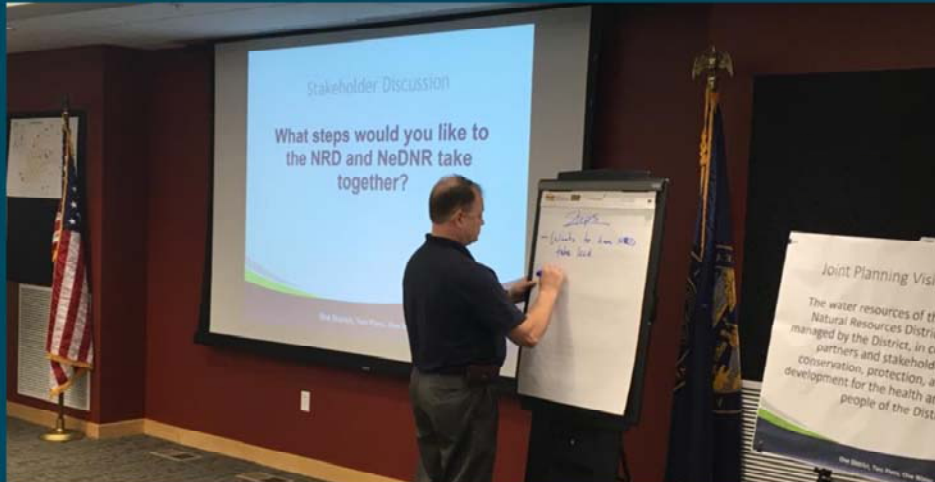


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Addressed both the water quality
and water quantity plans
Operated under joint planning vision
Developed goals and objectives for
each plan
Proposed projects would address
both quality and quantity

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Upper Big Blue Natural Resources District Case Study

➤ Benefits thus far....

- Stakeholders get a more holistic view of water issues.
- More consistent goals and objectives
- Stakeholders appreciated the streamlined process
- More robust conversations, productive meetings
- Can duplicate some parts of plans (figures, etc.)
- Multi-directional learning between NDEQ, NeDNR, NRD and stakeholders

Conclusions

- A unique opportunity was presented to combine water quality and water quantity planning for a local Natural Resources District
 - We were ready for it (multiple NDEQ, NeDNR meetings prior)
- There was no legislative framework for this integration of water quality and quantity planning
- Many challenges as different frameworks, but overall a success
- We are all busy, but even small steps towards IWRM can make a significant difference
- NDEQ and NeDNR are better prepared for future opportunities to combine water quality and quantity planning/implementation

THANK YOU

Questions?

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