

Coordinated Water Quality and Water Quantity Planning for the Upper Big Blue NRD

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Presentation outline

- Introduction
- Joint water **quality** plans
- Joint water **quantity** plans
- Challenges and opportunities in coordinating water quality and quantity plans
- The UBBNRD approach

Introduction

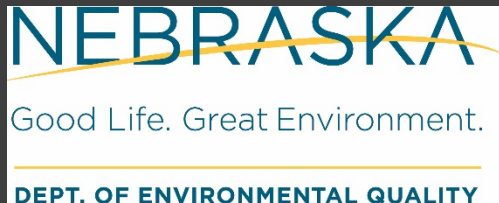
- Several types of joint water management plans are developed between:
 - NRDs and NeDNR
 - NRDs and NDEQ
- Various plans serve specific purposes and have different requirements.
- Unique opportunity to coordinate planning efforts in the Upper Big Blue NRD
 - Timing, geographic area
 - First of its kind in Nebraska

Introduction

Upper Big Blue NRD Planning Initiatives

Plan Name	Water Quality Management Plan (WQMP)	Voluntary Integrated Management Plan (V-IMP)
Partners	NRD, NDEQ	NRD, NeDNR
Focus	Surface Water and Groundwater Quality	Surface Water and Groundwater Quantity & Hydrologic Connectivity
Authority	Federal Clean Water Act (319 Nonpoint Source Pollution)	Nebraska State Statutes (LB962, 2004; LB764, 2010)

Coordinated Water Quality and Quantity Planning: Joint Water Quality Plans



NDEQ - Nonpoint Source Pollution

- From landscapes, not pipes
- Runoff transports pollutants
- Affects lakes, rivers, wetlands and groundwater
- Common pollutants are sediment, nitrogen, phosphorus and bacteria



NDEQ - Nonpoint Source Pollution Program

- Nonpoint Source Program funded via EPA through the Federal Clear Water Act, Section 319(h).
- Nebraska receives annual '319' grant and has 5 years to spend the grant funds.
- ~\$1.2 million has gone out annually to project sponsors (e.g. NRDs) for on-the-ground projects.



NDEQ - Nonpoint Source Pollution Program

- Requirements to qualify for 319 funds for project funds:
 - 9-Element or Alternative Plan.
 - Plan must be accepted by NDEQ and EPA R7.
 - Plan must be no more than five years old.
 - Projects require a 40% non-federal match.

NDEQ Nonpoint Source Plans

9-Element Plans	Alternative (to a 9-Element Plan)
Watershed	Groundwater Protection
Basin (NRD)	Drinking Water Protection

NDEQ Nonpoint Source Plans

9-Element Plans	Alternative (to a 9-Element)
Watershed	Groundwater Protection
South Loup Watershed	Bazile Groundwater Management Plan
Long Pine Creek Watershed	
Basin (NRD)	Drinking Water Protection
Papio-Missouri Basin Plan	Auburn
Lower Elkhorn Basin Plan	Waverly

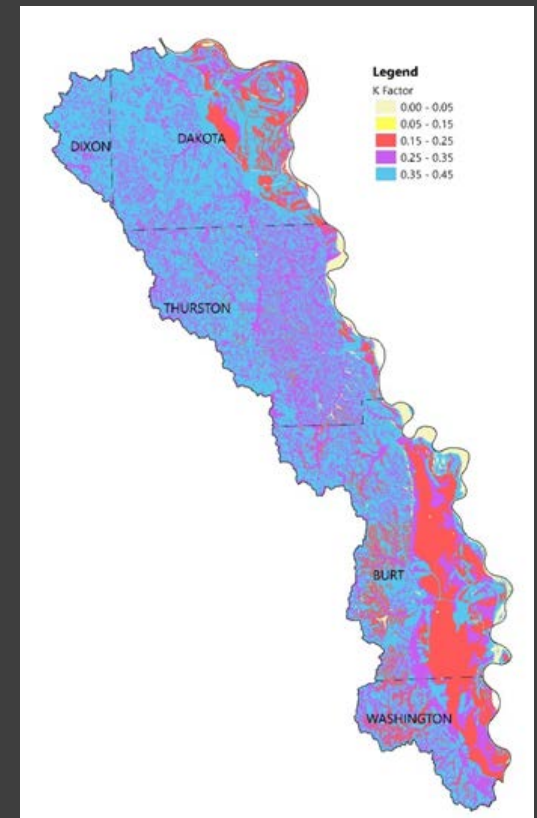
9-Element Watershed Management Plans



- What are 9 Element WMPs?
 - Roadmap for water quality improvement
 - Voluntary plans
- Why do a 9 Element WMP?
 - Community Based Planning
 - Funding for Nonpoint Source Projects

9-Element Watershed Management Plans

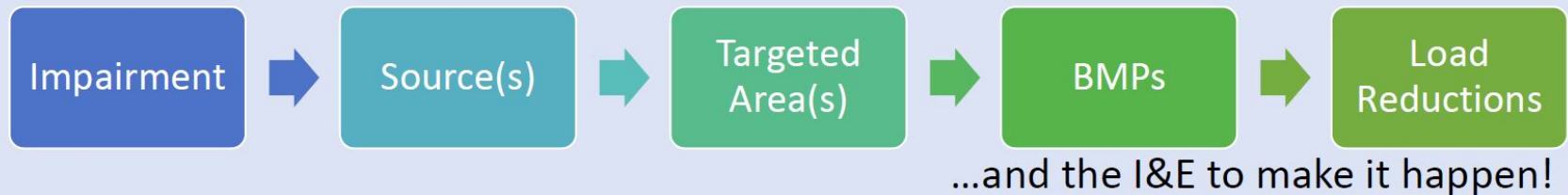
1. Identification of Pollutant Sources
2. Estimation of Pollutant Loads
3. ID Best Management Practices
4. Communication & Outreach
5. Implementation Schedule
6. Milestones to Measure Progress
7. Evaluation Criteria
8. Monitoring
9. Technical & Financial Assistance



From Papio-Missouri NRD Draft Plan, Fyra.

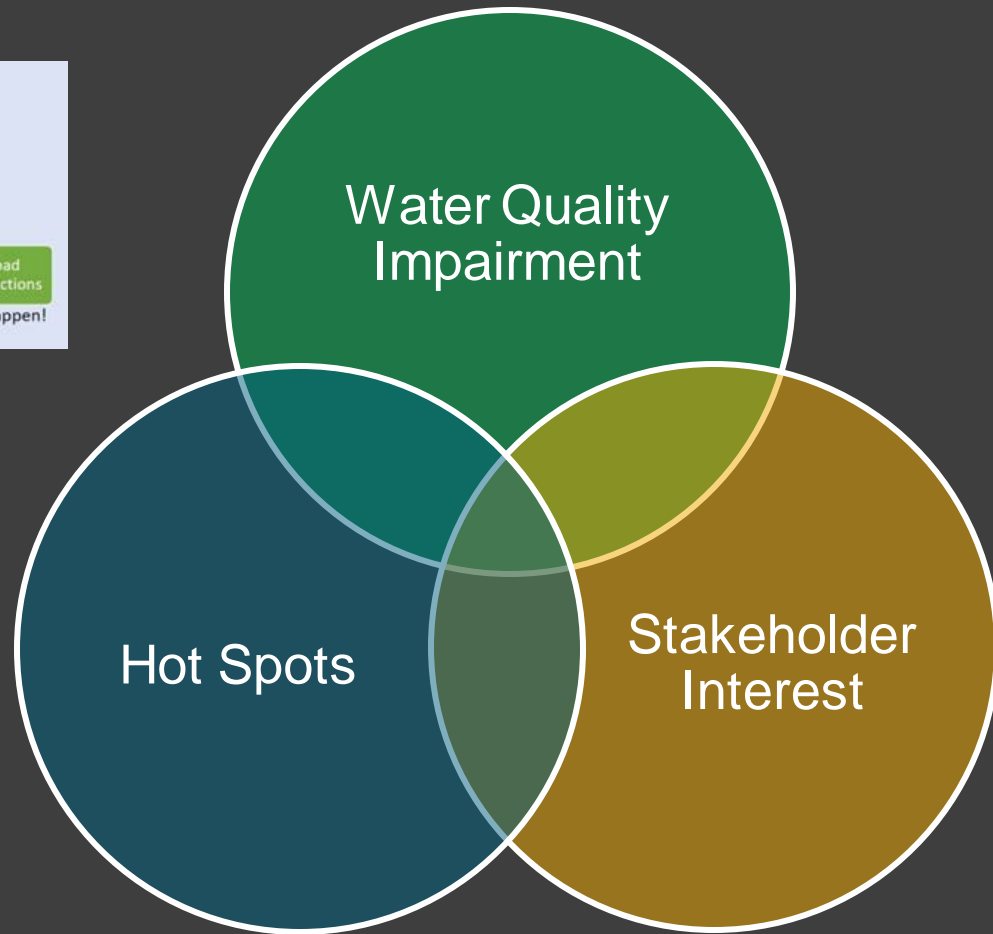
NDEQ – Writing Acceptable Plans

The Path of Least Resistance



NDEQ –Targeted Areas

The Path of Least Resistance



NDEQ - Implementing Plan with Projects

The Path of Least Resistance



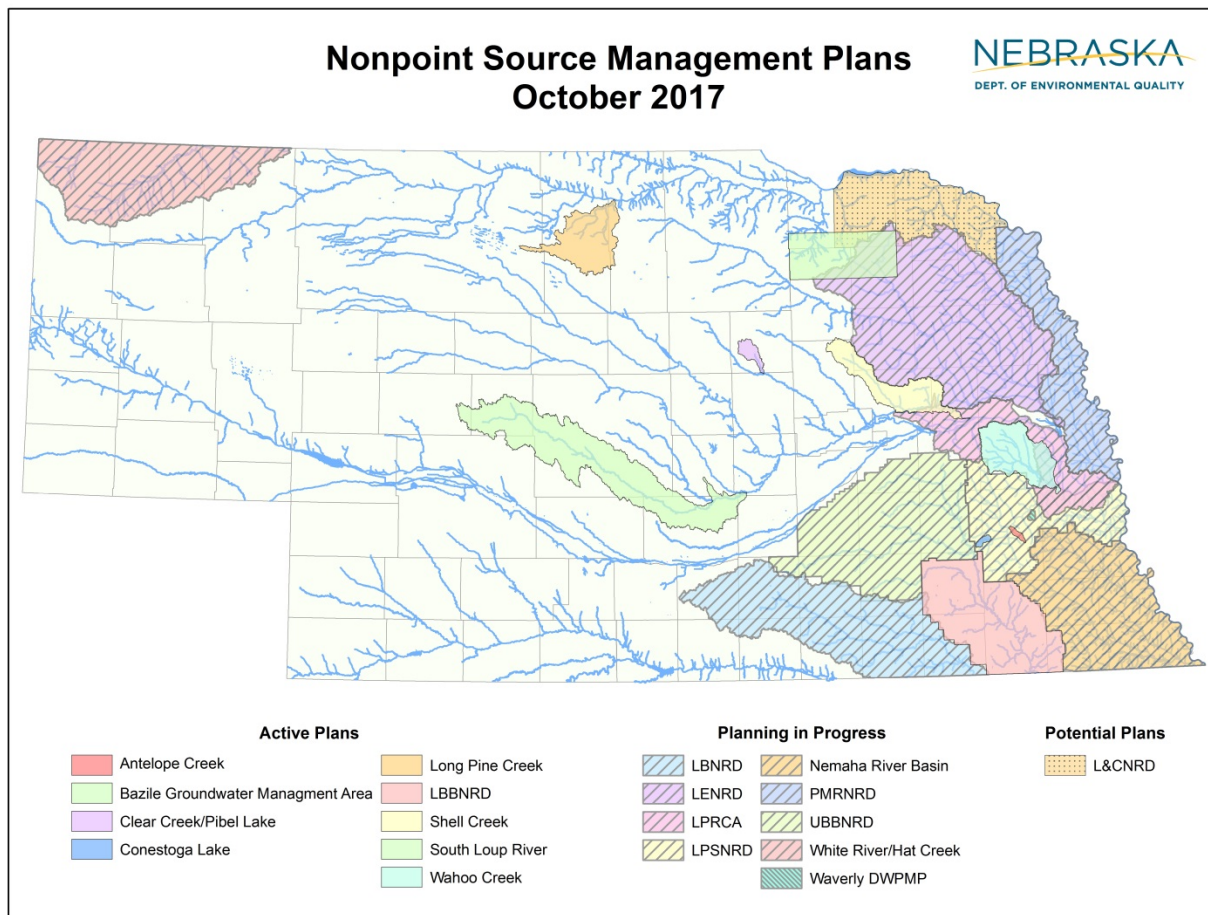
- Project Implementation Plan (PIP)
- Contract signed between NDEQ and Sponsor
- Project starts
 - Cost-share for BMPs
 - Watershed Coordinator
 - Evaluate results

Plan

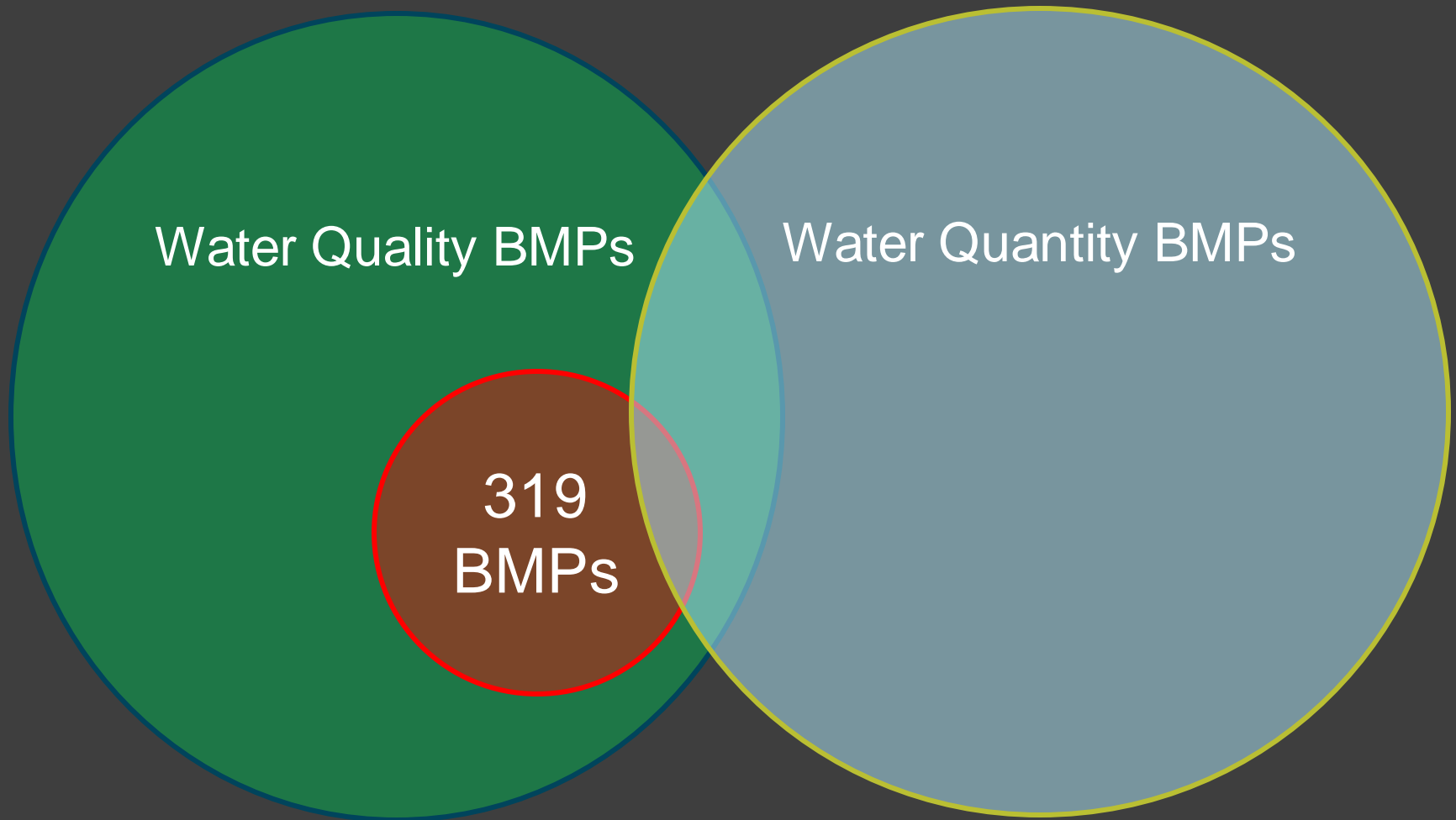
PIP

Project

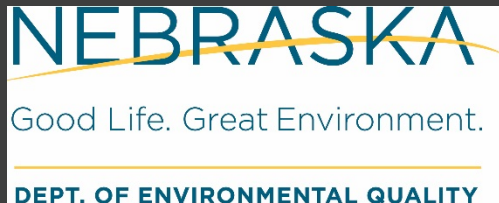
NDEQ – Where are we planning?



NDEQ – Plan Implementation



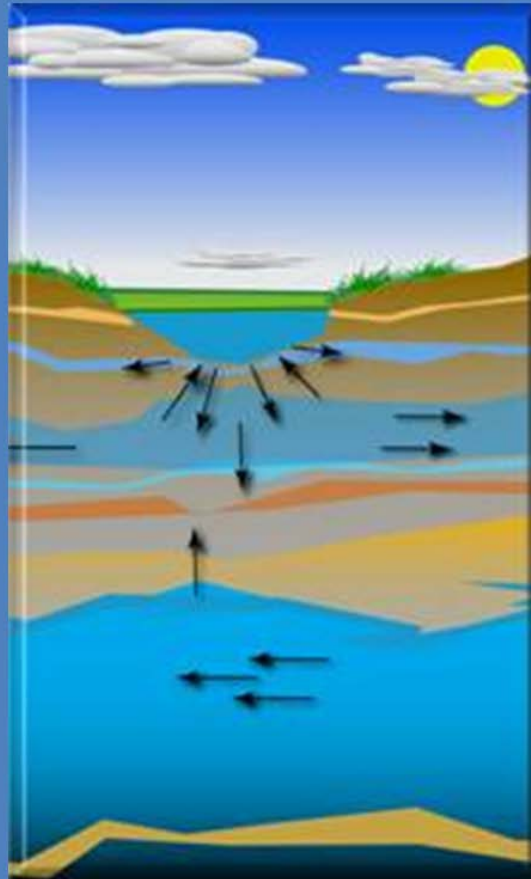
Coordinated Water Quality and Quantity Planning: Joint Water Quantity Plans



Integrated Water Management

- Jointly managed ground and surface water uses/supplies
- Recognizes hydrologic connection between ground and surface water

EFFECTIVE MANAGEMENT OF HYDROLOGICALLY CONNECTED WATERS



Surface Water Quantity

- Regulated by NeDNR
- Prior appropriations system



Groundwater Quantity

- Regulated by NRDs
- Correlative rights system

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Integrated Water Management

- LB962, 2004
 - Required joint NRD and NeDNR planning for fully-appropriated basins
- LB764, 2010
 - Inclusion of voluntary integrated management planning
- LB1098, 2014
 - Water sustainability fund
 - Improved ranking for NRDs with IMPs



Governor Johanns
signed LB962 into law
on April 15, 2004

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Integrated Management Plans

- IMPs address hydrologically connected ground and surface water
- Joint plan between an NRD and NeDNR
 - Tailored to local issues and opportunities
- IMP primary components
 - Goals and objectives
 - Action items
 - Non-regulatory
 - Regulatory (at least one SW and one GW control)
 - Monitoring plan
- Voluntary or mandatory IMPs

Integrated Management Plans

Mandated IMP	Voluntary IMP
Overarching purpose: Achieve and sustain a balance between water uses and water supplies for the long term, protect existing water uses	
Statutory framework: Neb. Rev. Stat. §46-715 to §46-718	
Fully appropriated basins, sub-basins	Non-fully appropriated basins, sub-basins
<u>May</u> have more stringent controls	<u>May</u> have more “encouraging” controls
Moratorium (GW, SW) initiated	No moratorium initiated

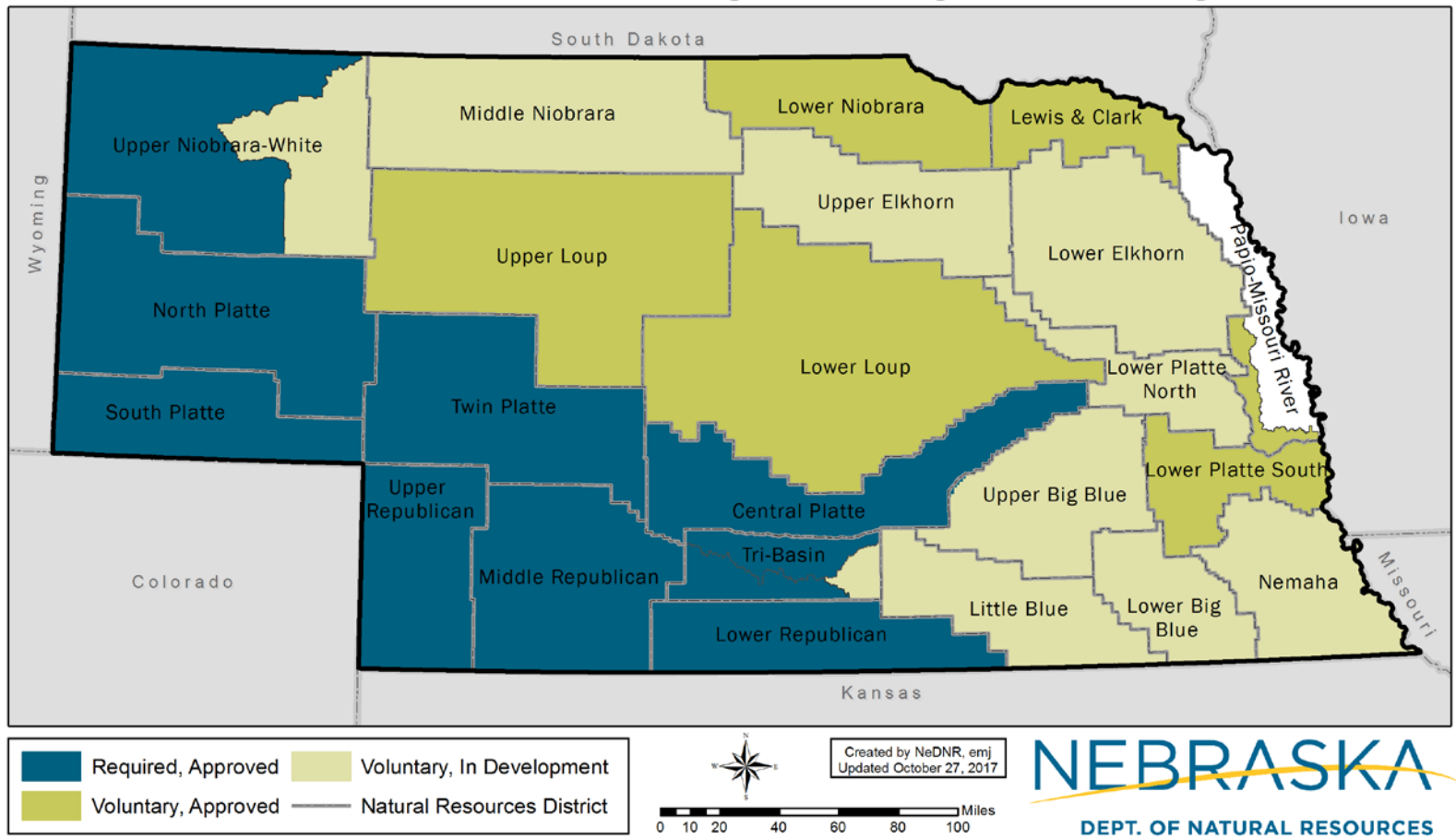
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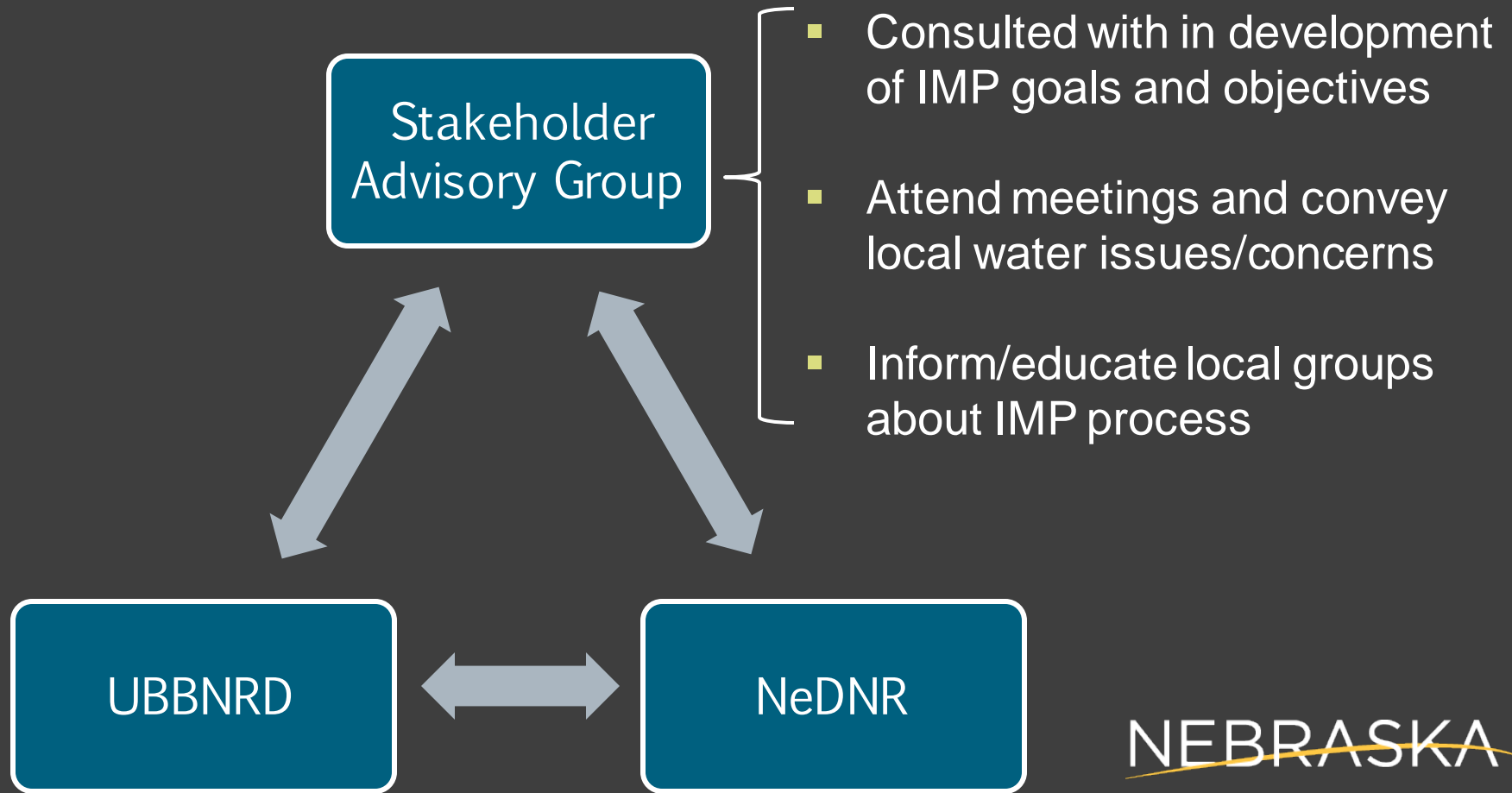
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Integrated Management Plans

NRD Areas Involved in Integrated Management Planning



Integrated Management Plans



Coordinated Water Quality and Quantity Planning: Challenges and Opportunities

Coordinated water quality and quantity planning: Challenges

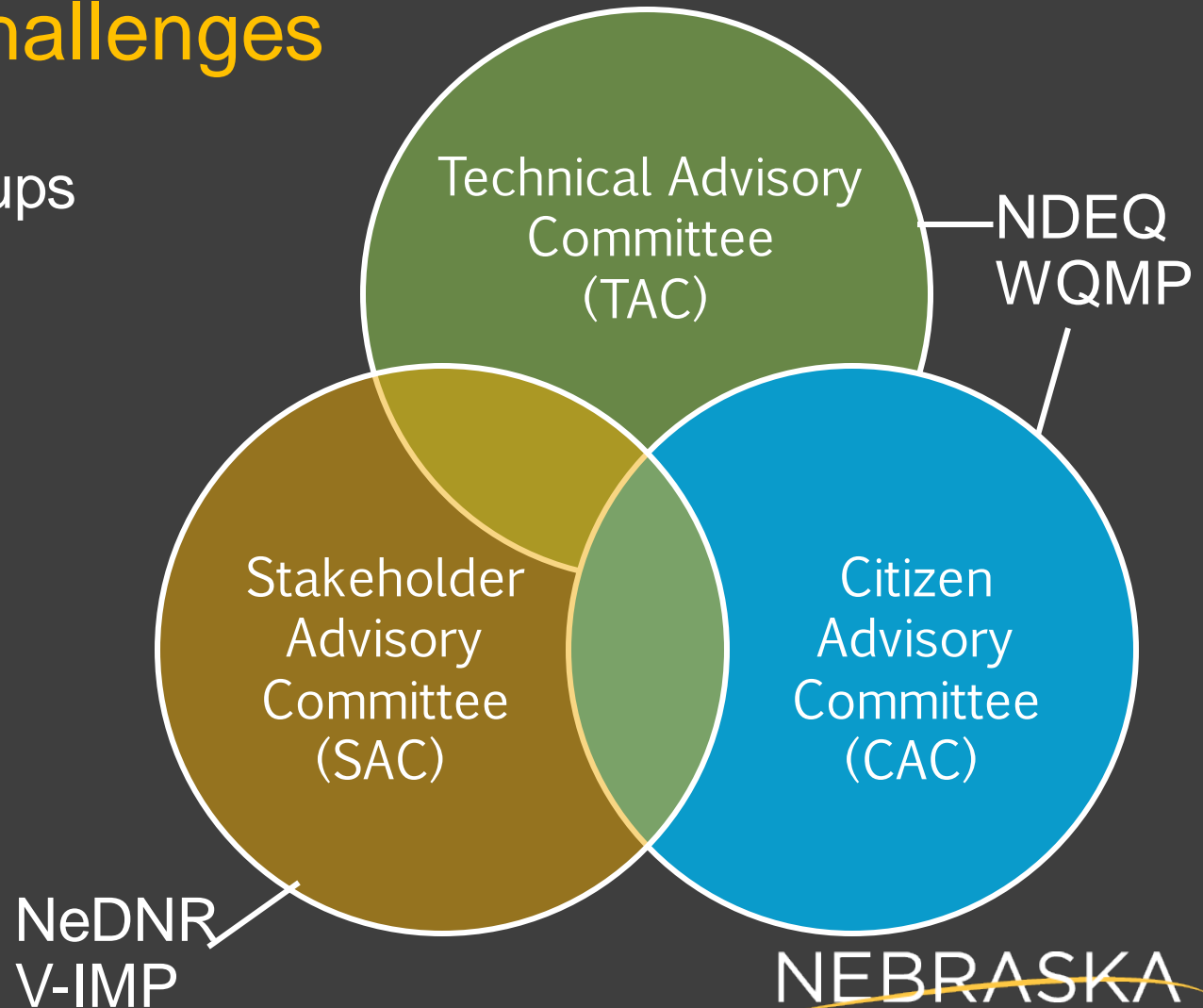
- Statutory framework
 - Nebraska State Statutes for water quantity
 - Federal Clean Water Act for water quality
- Timelines
 - WQMP has less than 2 years to write/accept plan
 - NDEQ and EPA reviews for acceptance
 - V-IMPs may take 3 to 5 years
 - NeDNR and NRD agree to adopt

Coordinated water quality and quantity planning: **Challenges**

- Differing Funding Mechanisms
 - EPA funding for NDEQ plans
 - Plan development and project implementation
 - 40% non-federal match
 - NeDNR plans
 - NRD and NeDNR share cost of development & implementation
 - Various grants available for implementation (WRCF, WSF, NET, etc.)

Coordinated water quality and quantity planning: Challenges

- Stakeholder groups
 - WQMP has two committees
 - TAC
 - CAC
 - V-IMP has one committee
 - SAC



Water Quality Management Plans Committees

- Technical Advisory Committee (TAC)
 - Generally, agency representatives
 - Input on WQMP, advise CAC
- Citizen Advisory Committee (CAC)
 - Town residents, land owners, producers
 - Input on WQMP, advocate plan in community

Voluntary Integrated Management Plan Committee

- Stakeholder Advisory Group (SAC)
 - Required interests listed in Neb. Rev. Stat. §46-717
 - Surface water irrigators
 - Municipalities
 - Other interests as deemed appropriate by the NRD and NeDNR, such as
 - Groundwater irrigators
 - Agricultural business
 - Wildlife interests

Coordinated water quality and quantity planning: Opportunities

- Improved communication with public and between agencies about multiple water plans
- Minimized redundancy in planning efforts
- Time/cost savings for NRD
- Complimentary goals and objectives between plans
- More holistic approach to water management
- Great learning opportunity for agencies/NRD

Coordinated Water Quality and Quantity Planning: The Upper Big Blue NRD Approach

Upper Big Blue WQMP and V-IMP-Coordination Approach

- Two separate plans (WQMP, V-IMP)
- Separate contracts for consultation services
- Potential common advisors (stakeholders) between plans
- NDEQ representative at V-IMP meetings, NeDNR representative at WQMP meetings
- Joint NRD, NDEQ, NeDNR coordination meetings throughout process



Questions?

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Thank You

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