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## Nebraska's **Decentralized Water** Planning Framework

Carol J. Myers Flaute **Integrated Water Management Coordinator** 

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Providing the sound science and support for managing Nebraska's most precious resource. Water Planning Surface Water Floodplain Vanagement Groundwater

Dam Safety



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## Nebraska's decentralized water planning framework

- 1. Purpose of integrated water management planning
- 2. Nebraska's water planning process is unique
- 3. State, local, and public participation
- 4. Benefits and examples

## How is this relevant to me?

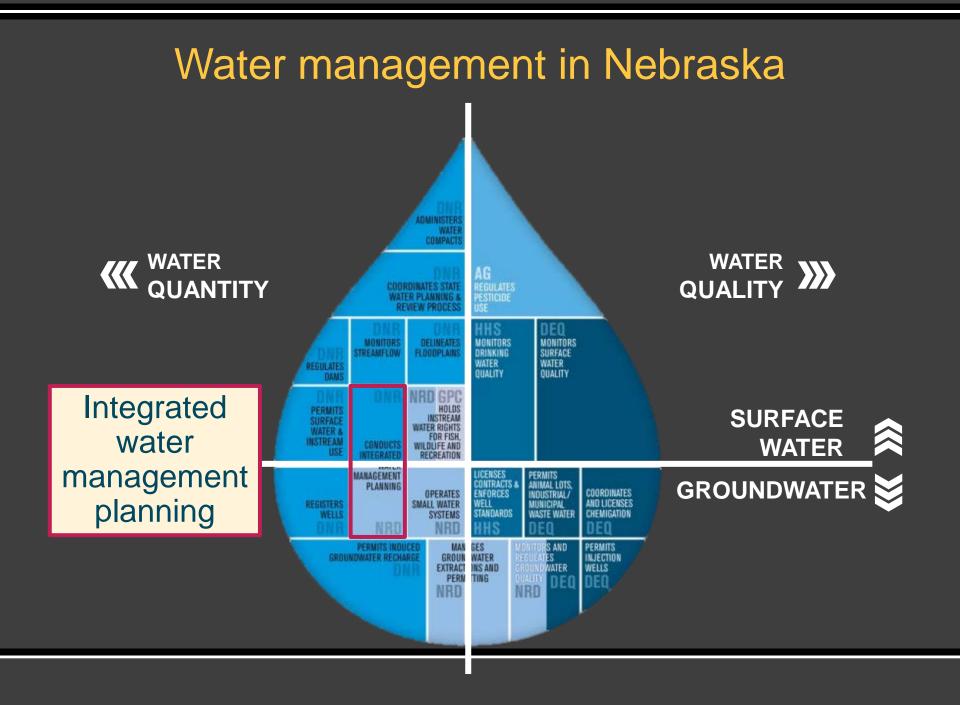




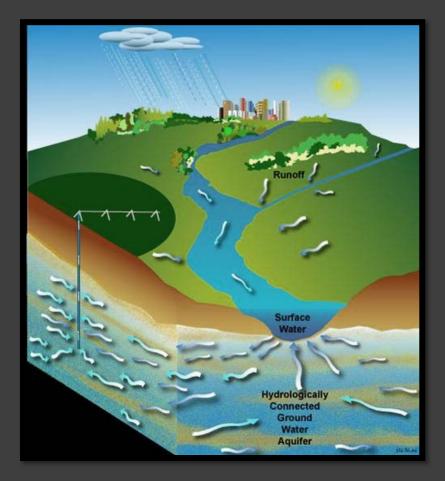


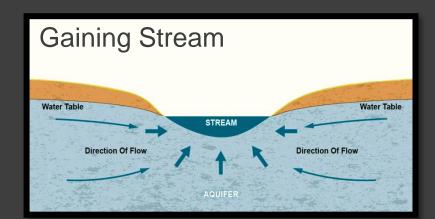
Integrated water management

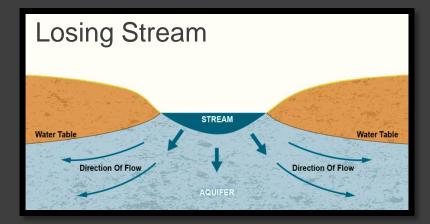
What is it? Why do we do it?

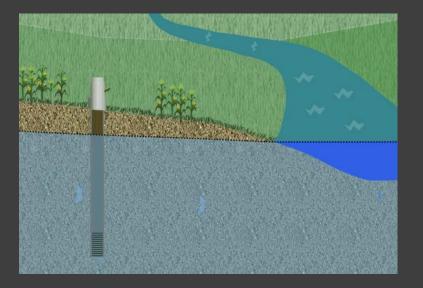


# Hydrologically connected surface water and groundwater











# Regulation and administration of water supplies in Nebraska



#### Surface water

- Regulated by NeDNR
- Prior appropriations

Integrated water management

#### Groundwater

- Regulated by NRDs
- Correlative rights

## Integrated management in Nebraska

- Pre-1963 Surface water & groundwater managed separately
  - **1963** Wells < 50 feet of a stream considered part of surface water system
  - **1983** Intentional and incidental recharge on surface water canal systems
  - **1996** Joint action plans; NRDs' first authority to regulate groundwater to protect streamflow
  - 2004 Integrated management plans (fully and overappropriated) Basin-wide plan (overappropriated)
  - **2010** Integrated management plans (voluntary)
  - 2014 Basin-wide plan (fully appropriated)

## Purpose

...An integrated management plan shall include... Clear goals and objectives with a purpose of sustaining a balance between water uses and water supplies

so that the economic viability, social and environmental health, safety, and welfare of the river basin, subbasin, or reach

can be achieved and maintained for both the near term and the long term...

from Neb. Rev. Stat. § 46-715 (2)



## Other objectives

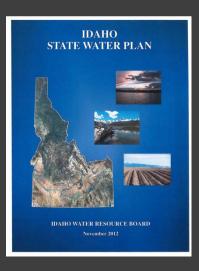
- Ensure compliance with interstate water compacts, decrees, or agreements
- Protect existing water users
- Monitor water supplies and uses
- Increase collaboration and communication between the state and local water managers

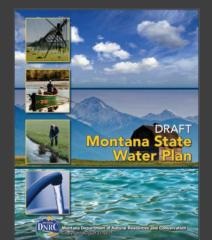
State water planning

Nebraska's decentralized framework is unique



### State water plans

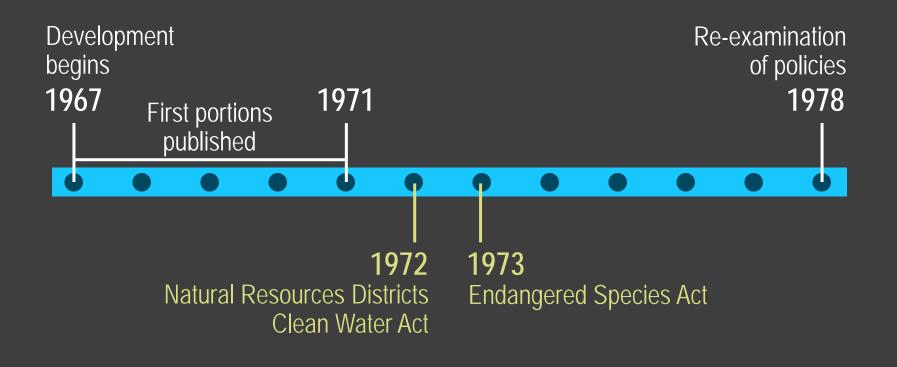






### Nebraska's State Water Plan

#### Development of The Nebraska State Water Plan



Report to the Legislature and Governor on the Nebraska State Water Planning and Review Process

Natural Resources Commission and Work Plan Development Committee



"Experience has shown that published plans frequently become outdated rapidly, and some serve only to collect dust after a short time."



"those involved in the state's water planning activities have been attempting to correct the misconception that the State Water Plan would be a blueprint and present their work as a continuing process that would provide flexible guides for future decisions."



"the agencies involved ...felt that it was necessary to eliminate any reference to a State Water Plan and concentrate on the Process."



Nebraska's approach, then and now

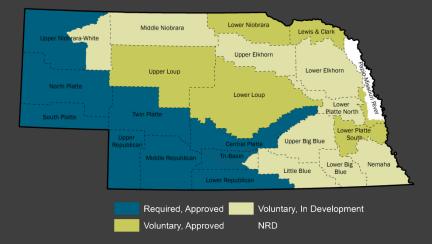
**1967-1978** State Water Plan

**1978-presen**t Focus on the process

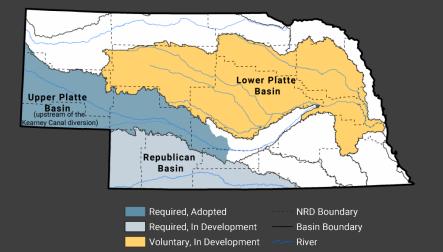


# Nebraska's decentralized water planning framework

#### Integrated management plans



#### Basin-wide plans



#### A state water planning process, not a state water plan

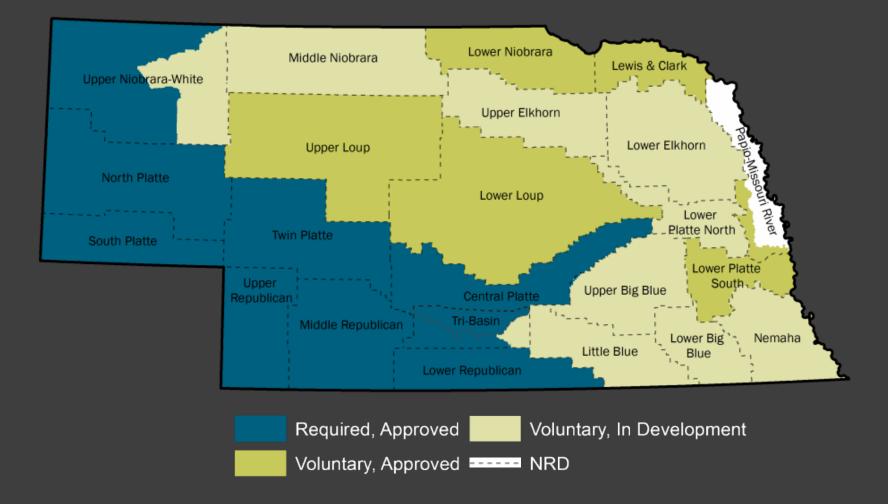
## Integrated management plans

- 1 NRD & NeDNR
- Goals, objectives, & controls
  - Tailored to local issues and opportunities
  - May be more specific
- Must be consistent with basin-wide plan, if there is one

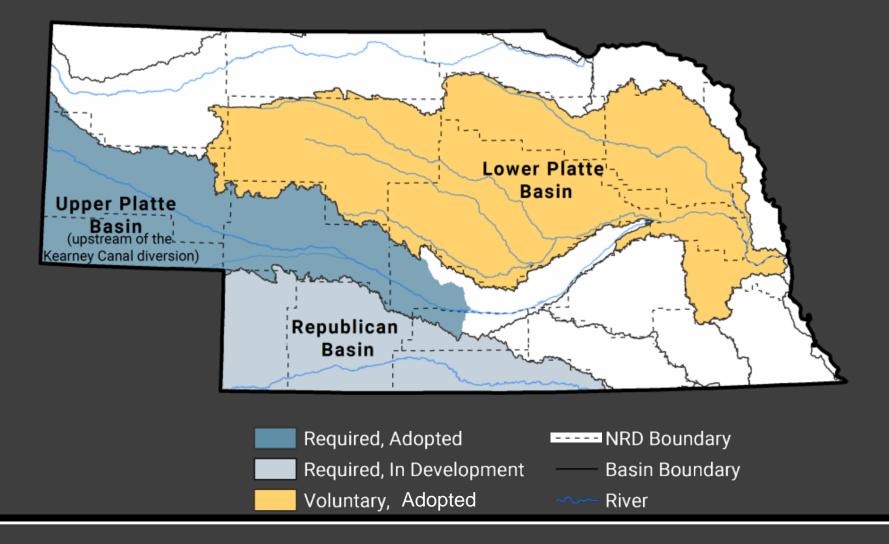
#### Basin-wide plans

- All basin NRDs & NeDNR
- Goals & objectives
  - Focused on regional, cross-boundary issues and opportunities
  - May be more of a general framework

## Integrated management plans (IMPs)



### **Basin-wide plans**



## Natural resources districts (NRDs)

- Established 1972
- Conserve and protect natural resources
  - Manage and regulate groundwater
- Local government entities
  - Local control; elected boards
  - Address local issues with local solutions
- Roughly follow basin boundaries



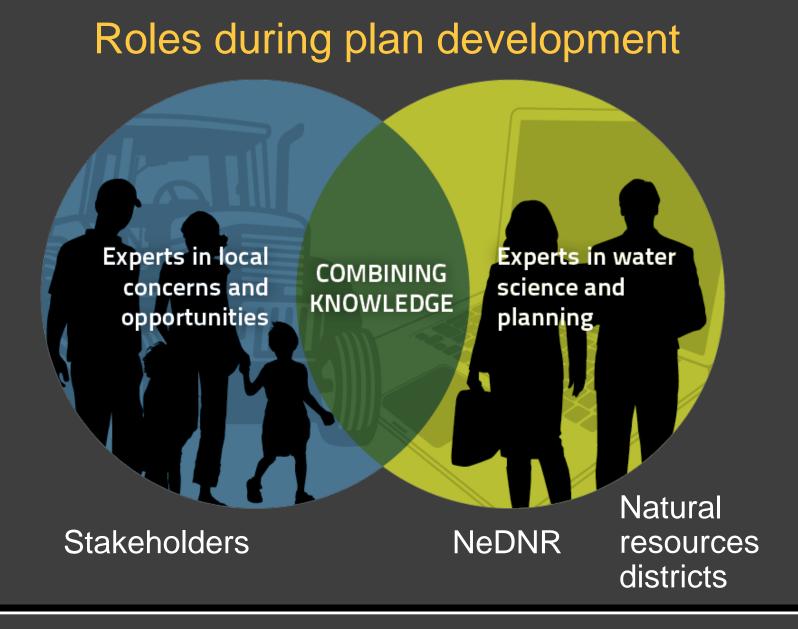
### Nebraska's NRDs are unique

- Differences from other states
  - Local
  - Based on watershed boundaries
  - Regulatory powers
  - Taxing authority

- Benefits
  - Flexible, specific, and quick action
  - Targets regulation and projects where they are needed
  - Local meetings: easier for citizens to be heard and participate
  - Funding for projects that reduce the need for regulation
  - Leverage state and federal match

Participation and collaboration

Who is involved? What does each bring to the process?



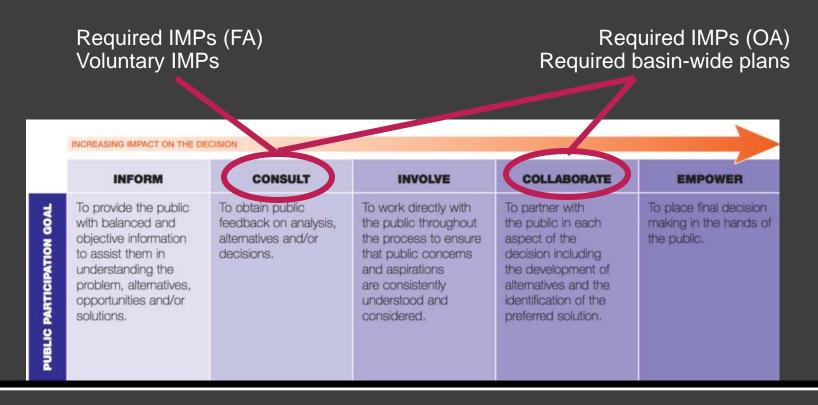
## Stakeholder committee

- Required representation\*
  - Irrigation districts, reclamation districts, public power and irrigation districts, mutual irrigation companies, canal companies, ground water users, range livestock owners, the Game and Parks Commission, <u>and</u> <u>municipalities</u> that rely on water from within the affected area
  - NeDNR and NRDs may choose to include others

\*list differs slightly by plan type

## Stakeholder participation

 Required minimum level of stakeholder involvement



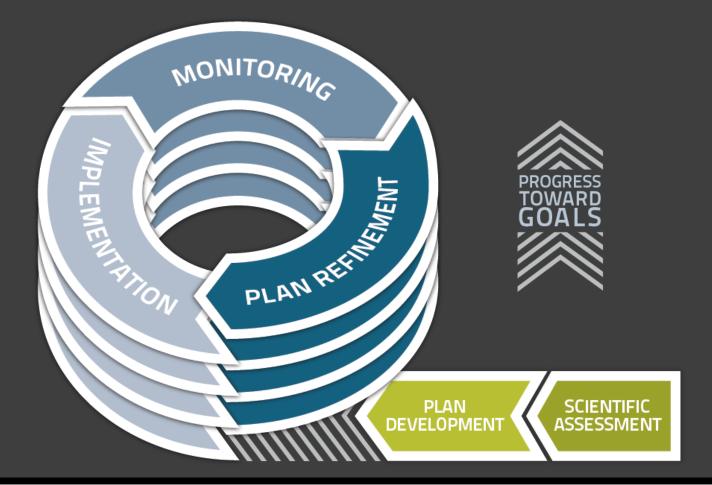
## **Public participation**

- General public
  - At least one public meeting
  - Public hearing on final draft

## Role of municipalities

- Development
  - Stakeholder representation
- Implementation
  - Data
  - Partner in management actions
  - Can attend annual meetings and/or read annual reports

### Adaptive management



Benefits and examples

How a decentralized planning framework helps address Nebraska's water management needs

## **Benefits**

- Builds a collaborative relationship between state and local water managers
  - Development & implementation
  - Annual meetings
  - Decision-making
- The state gains a better understanding of local or regional issues and data needs
- Encourages focused and proactive management

## Examples

- Reduce or limit demands
  - No new or expanded uses
  - Reduce pumping by 20% from baseline
  - Incentive programs (e.g., conservation measures, acreage retirements)
  - Mandatory water meters
  - Limit transfers' consumptive use
  - Allocations



- Increase or re-time supplies
  - Augmentation
  - Offset requirements
  - Recharge projects
  - Increase surface water storage

## Examples

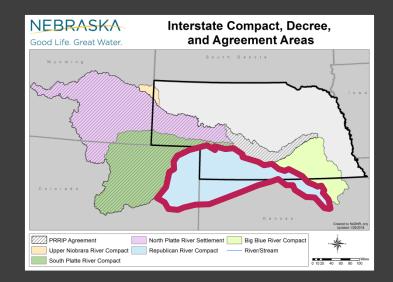
- Identifying and filling information gaps
  - Identify/Inventory
    - Critical hydrologic areas
    - Current and future demands
    - Where additional data is needed
    - Location and source of supplies and uses
  - Additional streamgages
  - Voluntary water use reporting
  - Groundwater meters (often voluntary)



- Proactive planning
  - Assess potential impacts to existing users
  - Study opportunities for future projects or programs
  - Project changes due to growth
  - Potential for future moratoriums, allocations, or other controls if needed
  - Future drought mitigation plan
  - Review and research conservation programs
  - Evaluate current irrigation practices

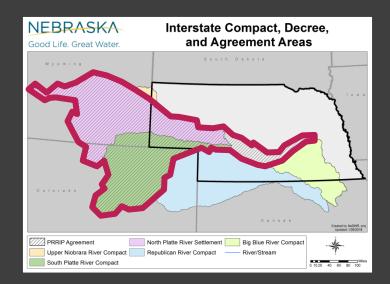
# Examples: compliance with interstate agreements

- Compliance with Republican River Compact
  - Rapid Response Area
  - Forecast/Compact Call Year procedures
  - Apportionment of NE's allocation among NRDs



# Examples: compliance with interstate agreements

- Compliance with Platte River Recovery Implementation Program (PRRIP)
  - Compliance with Nebraska New Depletions Plan
  - Ability to transfer existing surface water appropriations to instream flow
  - Water banking for credits or offsets



## Examples: urban issues

- Stormwater BMPs
- Landscaping water conservation
- Wastewater reuse
- Rainwater harvesting



- Urban growth
- Indoor water conservation practices

The collaborative integrated management process allows **flexibility** in meeting the state's objective of balancing water supplies and uses **in a manner that fits each area's unique needs and conditions** 

## In summary

- Nebraska has a state water planning process, not a state water plan
  - Decentralized and flexible
  - Not one size fits all
  - Focuses on the water needs of each area
- Plans work together for the benefit of the state
  - Improve water availability
  - Improve ability to respond to emergencies
  - Provide mechanisms for compliance with interstate obligations



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http://dnr.nebraska.gov/water-planning

carol.flaute@nebraska.gov