NEBRASKA'S WATER MANAGEMENT RESOURCE

Providing the sound science and support for managing Nebraska's most precious resource.

WATER PLANNING IN NEBRASKA, INTEGRATED MANAGEMENT AND ITS SUCCESS STORIES

JENNIFER J. SCHELLPEPER, M.S., IWM DIVISION HEAD

Nebraska Department of Natural Resources

NEBRASKA'S WATER MANAGEMENT RESOURCE

Providing the sound science and support for managing Nebraska's most precious resource.

Water Planning and Integrated Management









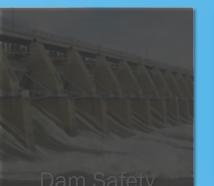


Providing the sound science and support for managing Nebraska's most precious resource.

Water Planning and Integrated Management









WATER PLANNING IN NEBRASKA, INTEGRATED MANAGEMENT AND ITS SUCCESS STORIES

Partnerships and stakeholder input enhance Nebraska's successful integrated management process



Overview

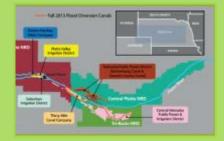
Integrated water management planning



Stakeholder involvement



Planning successes





INTEGRATED MANAGEMENT PLANNING OVERVIEW

An IMP is a proactive, collaborative approach to managing hydrologically connected surface and groundwater



INTEGRATED WATER MANAGEMENT

IMPLEMENTATION

Water Management Projects

Strategic Planning Actions



Goals and Objectives for Water Planning

Stakeholder Involvement

Water Availability and Water Shortages

Water Supplies and Water Uses

SCIENCE

Hydrologic Models, Data, and Analyses



Integrated Management Planning: What is it?

➢ Proactive

- Protects existing investments
- Adaptive management
- Surface water and groundwater management
 Jointly developed with NRD
 Suited to local conditions





Collaboration

 DNR + a Natural Resources District (NRD)
 IMP development

• Plan implementation

Stakeholder Input





STAKEHOLDER INVOLVEMENT

Stakeholders participation is an essential part of the integrated management planning process



IMPLEMENTATION

Water Management Projects

Strategic Planning Actions



Goals and Objectives for Water Planning

Stakeholder Involvement

Water Availability and Water Shortages

Water Supplies and Water Uses

SCIENCE

Hydrologic Models, Data, and Analyses



Stakeholder process engages the public

- Gives them a place at the table
- Meets their desire and need to be a part of the process
- Lets us know about needs now and in the future





Variety of Stakeholders

- Districts irrigation, reclamation, public power and irrigation
- Companies mutual irrigation, canal
- Municipalities
- Groundwater Users
- Other water users and stakeholders, for example:
 - Fish & wildlife
 - Recreation
 - Economic interests





Stakeholder participation

 Goals and objectives
 Activities designed to identify needs and related importance

 Breakout sessions
 Dot exercise (e.g. identify likes, dislikes)
 Quadrant (e.g. effort and



 Quadrant (e.g. effort ar time requirements)



Participant Comments

* "We also knew that in our district, you don't do any planning without any broad comprehensive public involvement process. That is what we felt we needed to make sure we were going to be able to engage all the stakeholders and do our best to try and bring them into the process...." -Voluntary IMP Interviewee #1

"You had people who drill wells. You had people that run the water systems: rural and urban. You had ag representation in 2-3 different forms....Yes environmental was there and University Extension....Then there was a pure row crop representation, pivot system irrigation representation. So we spent really that entire first meeting getting a handle on everybody was, who they represented, what they saw as issues."

-Voluntary IMP Interviewee #3



IMP PLANNING SUCCESSES

Nebraska's collaborative approach has created social capital and cooperative projects continue into the implementation phase of the plans



Creating Social Capital

"The stakeholder group was a very hard working group. It turned out to be a well selected group. Those meetings were set up for them, very specific agendas. They were meaty issues. They were working on, directly on, the vision, the goals ,and having their input into those."

-Voluntary IMP Interviewee #1

"It was a great process. It really was. Lots of people were involved. Lots of data and information was presented...lots of really nice, thoughtful conversation on the part of different groups and people who were involved. Their comments and suggestions were taken very seriously and incorporated into the final wording of those goals."

-Voluntary IMP Interviewee #6

Reed & Abdel-Monem (2015)



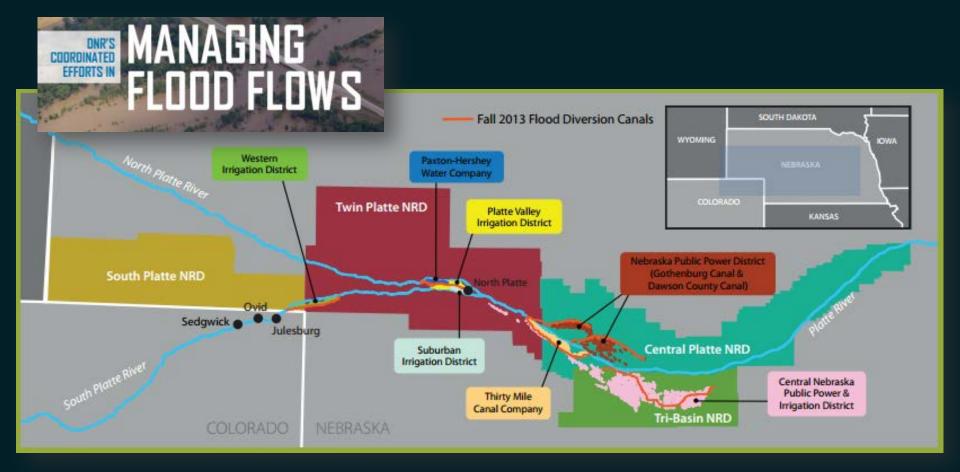
Developing Relationships

Annual Meetings Data Sharing Project Partnerships: Natural Resources Districts **oIrrigation Districts** oThe Department of Natural Resources





Conjunctive Water Management Example





Summary of Excess Flow Diversions

>2011, 2013 & 2015

 Over 200,000 acre-feet of excess flood flows diverted since 2011

Resulting recharge near 100,000 acre-feet

 Accretions will benefit Platte River flows for many years into the future

Process in place for future successes



Conjunctive Water Management

- Project Impacts
- Collaborative approach with groundwater and surface water users
- Maintain surface water operations
- Meets multiple objectives
- Optimize water supplies

Expand work to Other Basins



WRAP UP





Collaborative Efforts Continue

Better prepared to address future water supply challenges and opportunities



NEBRASKA'S WATER MANAGEMENT RESOURCE

Providing the sound science and support for managing Nebraska's most precious resource.

THANK YOU

JENNIFER J. SCHELLPEPER, M.S., IWM DIVISION HEAD

Nebraska Department of Natural Resources 402-471-2363 dnr.nebraska.gov