

A REPORT FROM A WORKSHOP ON FUNDING WATER DEVELOPMENT IN NEBRASKA

Premise

While the advocates of comprehensive water development financing in Nebraska have waited in line for state funding, many other priorities have jumped ahead and received generous financing packages from the Nebraska Legislature and with Governors' approval. These funded priorities have included education, human services, economic development and state owned infrastructure. Though they are important priorities, water is arguably the cornerstone of the state's development, for without water there are no opportunities for economic development – both in rural and urban communities.

Historically there have been a number of calls for dedicated sources of water funding – some related to a statewide water plan – others to infrastructure needs. A review of some of these calls is found in the section of this report entitled “**Previous and Current Major Water Development Funding Activities**” beginning on page four.

The premise for convening a water development funding workshop was that the experience of the past 45 years has given adequate grounds for what is a long overdue solution for ongoing funding to address Nebraska's water development needs.

The Workshop

On September 21, 2011, twelve Nebraskans with over 500 years of combined experience working with Nebraska water development funding and policy met to answer the following questions:

- 1st - What are annual funding needs for water development in Nebraska?
- 2nd - What qualifies as water development?
- 3rd - Who decides how funds for water development are spent?
- 4th - What are the funding sources?

Contributors to this report are listed at the conclusion.

Why

Nebraska's Water Funding Crisis

Nebraska has a water funding crisis. There are clearly unmet needs, with recent extremes showing us the need to better manage both wet weather flooding and dry weather drought.

Comprehensive funding for water development would address these issues with preparation and mitigation rather than with reactive solutions after a destructive emergency occurs.

Existing dams, irrigation projects, hydropower facilities, and urban water supply and disposal systems all provide examples of aging infrastructure in the state.

There are immediate water quality threats beyond the potential concerns posed by commercial developments (e.g., the Keystone XL pipeline) – most notably agricultural practices and mineral extraction, among others.

Water development relies upon research and studies to expand the applicability of credible models of groundwater/surface water relationships. Understanding these relationships is absolutely critical to future water development.

It makes sense to invest relatively little now rather than pay a lot later. As an example, Nebraska has spent nearly \$50 million on interstate lawsuits with Kansas, Colorado, Wyoming and other states along the Missouri River. Imagine what this state would have looked like if that \$50 million had been spent on managing our water resources, rather than defending how we manage those resources. Arguably such investment could have precluded the expenses we must currently endure.

With advances in technology and energy distribution since 1956, considerable private investment has been made in groundwater irrigation. Only a small percent of public investment has been put into groundwater irrigation development, as compared to the public investments made in surface water irrigation.

State government should be able to plan and prepare for on-the-ground development. Previous attempts to develop a comprehensive water funding system have not gone as far as was needed. The amounts were not adequate to meet the needs. The inventory of needs was not comprehensive or prioritized. And most notably, since Nebraska was one of the last western states to legally recognize the interrelationship between groundwater and surface water, until recently funding did not address conjunctive management and the benefits that can be gained from managing surface and ground water supplies together.

Water policies and programs have been developed in direct response to specific pressures on the Platte and the Republican River Basins; but even in these basins, the responses did not address the needs in a comprehensive basin-wide fashion. Nebraska needs a strong commitment to fund a comprehensive water quantity and quality management and infrastructure planning process to allow us to carry the “Good Life” into the future.

Preserve the Nebraska Environmental Trust

During much of its existence the Nebraska Environmental Trust has been subject to periodic Legislative earmarking whenever there appeared to be a shortage of funds to correct

environmental problems. Most Trust supporters believed legislative branch interference of Trustee responsibilities was addressed in 2004 when the voters approved shifting some funds to the Nebraska State Fair and adding additional protection to the remaining Trust funds, but this is evidently not the case.

Recently, the Trust was again tapped as a dedicated source of additional water project funding. As originally introduced, Legislative Bill (LB) 229 (2011) would have transferred \$7 million per year from the Nebraska Environmental Trust Fund to the Water Resources Cash Fund from 2011 to 2021.

As adopted, LB 229 (2011) directed the Department of Natural Resources (DNR) to apply to the Trust for a three-year grant to benefit any river basin designated as fully appropriated or over-appropriated. As instructed, the grant proposal would automatically receive 50 points in the ranking process if, as expected, the Legislature appropriates \$3,300,000 in matching funds on an annual basis. A second three-year grant application would receive similar benefit in ranking against other proposals if certain criteria are met. While providing additional resources for specific needs, LB 229 does not provide a comprehensive, long-term solution to Nebraska's water development funding needs.

During the passage of LB 229 (2011), several prominent Nebraskans concluded that if such a compromise was not reached, they were prepared to seek judicial review based on the 2004 constitutional safeguard.

Now is the time to secure both the future of water development funding and the Trust.

Precedent for Action

Water development action in the state is not without precedent. Nebraska has a history of taking bold approaches to water management such as in the creation of natural resources districts (NRDs). They are a unique form of statewide local government with the taxing and other authorities to raise revenue, develop and implement programming, and construct water projects. Nebraska is rightly proud of this system and the national attention focused on our structure.

Another source of pride is Nebraska's commitment to public power. Nebraska's unique customer-owned public power system provides reliable electrical service at the lowest possible cost. The purpose and programs of the state's public power districts include water development for hydropower, energy production cooling, irrigation and recreation.

Previous and Current Major Water Development Funding Activities

Small Watershed and Flood Control Fund – 1963

LB 71 (1963) established this fund to help local sponsors acquire land rights for flood control projects. Most of the tracts have been associated with US Department of Agriculture Public Law (PL) 566 Watershed Projects planned and designed by the Natural Resources Conservation Service. However, three projects have been associated with levee work along the Missouri River, seven with a channel improvement project and one with a Nebraska Resources Development Fund Project. Current funding is limited to revenue from project land sales.

Modernization of Local Resource District Legislation – 1969

This Special Recommendation of the State Water Plan resulted in the adoption of legislation in 1969 authorizing the consolidation of a number of special purpose political subdivisions with limited authority over water and land resources matters into a new system of NRDs. The NRDs commenced operation in 1972 consolidating approximately 156 such limited subdivisions into 24 NRDs, since reduced by merger to 23. Local general and special taxing authorities were granted to the NRDs and those authorities have been modified and added to since then.

Framework Study of Nebraska's State Water Plan – 1971

This publication was intended to present a broad assessment of the means by which Nebraska's water and related land resources could be developed. It was intended to be the foundation for a continuing process of inventorying resources, defining needs, problems and opportunities, setting objectives, and examining available alternatives to meet the objectives identified. Funding of water and related land resources activities were recommended in the Study Report.

Funding Nebraska's Future Natural Resources Development - 1972

The Nebraska Legislature directed this statewide assessment of water resources needs and guide for future development. This study did not describe details of projects, but concentrated on the broad aspects of planning. It outlined a broad plan for the development of Nebraska's surface water resources and proposed reorganizing the many special purpose water districts into 24 NRDs to be organized along basin lines. The state water plan did not address groundwater development in any organized fashion, the inter-relationship between groundwater and surface waters, or address the possibility of conjunctive management, but suggested that these omissions should be addressed in future water planning efforts.

Natural Resources Development Fund - 1974

This fund assists with the development and wise use of Nebraska's water and land resources by providing grants and/or loans to political subdivisions of the state or a state agency. DNR can also use these funds to acquire an interest in a project in the name of the state. In total, over 70

projects across Nebraska have received these funds. Since the initial \$1 million appropriation in 1975 through 2011, \$97.5 million has been appropriated by the Nebraska Legislature and has been matched by \$79 million in Federal funds and over \$69 million in local funds for a total of over \$245 million. The fund currently has an \$18.5 million cap on projects that can be approved for future funding, but has many more projects that are seeking approval.

Platte River Level B Study - 1976

“In the 1960’s, it became evident from reduced streamflows and lowering groundwater levels that there was not enough water for unlimited future use. Framework and other studies completed late in that decade indicated that competition between water uses would continue....”

This study was made possible by federal funds (\$2.7 mil. FY 1972-1975). The Nebraska Legislature provided specific funding for several state agencies to participate in the study (estimated \$400,000-\$500,000). The overall purpose of the study was to formulate a comprehensive plan for conservation, development, and management of water and related land resources in the Platte Basin, thus providing a major contribution to planning in six of the thirteen river basins delineated by Nebraska in the Framework Study.

This study identified and analyzed specific problem areas. Specific projects and programs were analyzed for economic justification and environmental acceptability, but needed more detailed studies prior to implementation to reconfirm justification under current conditions. The study focus is on 10-25 years in the future, but problems and needs are analyzed to the year 2020.

Nebraska Soil and Water Conservation Fund - 1977

This fund provides state assistance to Nebraska landowners for installation of approved soil and water conservation measures that improve water quality, conserve water and help control erosion and sedimentation. The fund is administered by DNR and is coordinated by the NRDs at the local level with technical assistance by the Natural Resources Conservation Service. Initial funding of \$500,000 in 1979 grew to a high of over \$4 million in 1990, but has fallen to \$2.3 million for 2012.

Water Independence Congress – 1983

In the early 1980s a 1/10% sales tax was proposed as part of Governor Bob Kerrey’s Water Independence Congress. A Water Management Board was created to distribute these funds – upwards of \$10 million annually. The dedicated tax proposal was rejected, and no projects were funded by this board.

A Study of Resource Development Financing for Nebraska – 1983

The study undertaken by the NRDs developed a plan to address both rural and urban water funding needs, but the plan was not implemented.

Nebraska Resources Water Quality Fund - 2001

This fund was created in 2001 to provide state funds to NRDs for water quality programs. The fund receives money from the receipt of portions of certain fees levied by the Nebraska Department of Agriculture for pesticide registration and applicator licenses which yield about \$1 million per year. NRDs are required to provide \$3 match for each \$2 of state funds received. The rules establish a formula for distribution of monies to NRDs: 50% based on proportion of fertilizer sales in the NRD; 20% distributed equally among all participating districts; 20% on the basis of whether a district has a groundwater management area or clean water lakes designated area; and 10% can be withheld by the Natural Resources Commission (NRC) to distribute to NRDs for special projects.

Interrelated Water Management Plan Program (IWMPP) - 2006

The IWMPP was created in 2006 by LB 1226, Section 20. This grant program is meant to facilitate NRDs' duties arising under the Nebraska Groundwater Management and Protection Act. Funds distributed from the program to NRDs are based on NRC guidelines and must be supported by a minimum local revenue match comprising 20% of the total project cost. Initial funding in 2006 was \$2,424,436. In 2012 funding is \$500,000.

Water Resources Cash Fund (LB 229) - 2011

This fund is administered by the DNR to aid management actions taken to reduce consumptive use of water or to enhance stream flows or groundwater recharge in river basins, sub basins or reaches which are deemed by DNR as over or fully appropriated or are bound by an interstate compact, decree or a formal state contract or agreement. DNR may conduct a statewide assessment of short-term and long-term water management activities and funding needs to meet requirements of statutes, compacts or decrees. The Nebraska Legislature authorized annual general fund appropriations of \$3.3 million for each fiscal year from FY 2011-12 through FY 2018-19. This legislation directs DNR to apply for a \$9.9 million grant from the Nebraska Environmental Trust Fund for use over a three year period to match the general fund appropriation for the Cash Fund.

Legislative Resolution (LR) 314 - 2011

Nearly 100 volunteers are currently working with the Legislature on LR 314 (2011) to "study all possible sources of revenue that could be used to establish a dedicated funding source for water management activities in Nebraska." During a briefing for LR 314, references to "A Study of Resource Development Financing for Nebraska" were made because the recommendations of this study are still sound. While the amounts have changed with inflation, it was suggested

that this study provides the last, best analysis of institutional structure, funding needs, infrastructure financing concepts, sources of capital for resources projects, managing private development, and future financing.

With this substantial history in mind, the workshop participants offer the following proposal and plan for water development funding to all those working on the LR 314 study.

A Proposal: Water for Nebraska's Future

The workshop participants propose establishing a process the legislature could use to work with all private and public water interests and users. The process would prioritize their needs and balance the needs of the state as a whole according to the individual basin.

Nebraska is a state where water development can still expand. Even in basins that are designated as “fully appropriated”, with careful planning and management, many new development opportunities still exist. The current use of available water resources allows for expansion for all water development requirements to include protection, supply, production and conservation. Such expansion will need well founded research, comprehensive planning and coordinated management.

Past support of data gathering and analysis by the University of Nebraska's Conservation and Survey Division and other state and federal agencies, such as the U.S. Geological Survey, have provided Nebraska with excellent baseline data on the status of Nebraska's water quantity and quality. Such support was the foundation of the state's groundwater development that is the backbone of our current agricultural economy. Such support must not only be continued but also enhanced if we are to successfully meet the significant challenges of the future.

Recent climatic events in the U.S., including flooding on the Platte and Missouri Rivers, demonstrated the potential threats of climate change. However, they also point toward opportunities. With careful management and investment in infrastructure, there is further opportunity to prevent floods and capture water for beneficial use at different locations and times. The State cannot afford to simply rest on 20th century research and water development. We must commit to doing more to better understand our water resources in the 21st century.

Continued development of crops that use less water as agronomists and geneticists have done and are doing is needed. Programs such as deficit irrigation and growing higher value crops are essential. Agriculture's contribution to Nebraska's gross domestic product is well known and recognized. This contribution will increase, since production needs to double in the next 30 years to meet growing demands. But this will require greater capacity to send water where and when it is needed.

The Plan: Water for Nebraska's Future

As the workshop participants considered the questions, they revised the 3rd question to “Who *should* decide how funds for water development are spent?” and the 4th question to “What are *possible* funding sources?”

All agreed that the use of a percent of the Nebraska state sales tax to support critical infrastructure has set a successful precedent for other advocates to follow. Like roads, water infrastructure is the lifeblood of Nebraska's economy, and while a vast majority of workshop participants clearly voiced their distaste for earmarks, all but one also agreed that the time to propose such an earmark for water development is now.

1st - What are annual funding needs for water development in Nebraska?

The group believes a starting point for the state to consider to meet the state's water development funding needs is \$60 million per fiscal year. This amount must be dependable from year to year and protected for its expenditure purposes.

2nd - What qualifies as water development?

Water development includes:

- science, technology and research to gather and manage data needed for modeling, etc. of the state's water quantity resources and water quality threats and problems,
- rehabilitating/restoring quantity and quality related infrastructure, and
- new projects in areas related to conjunctive management, storage, quality protection and restoration, etc.

Water development must emphasize maximizing investment through more product, i.e. desirable outcomes (water resources) per unit of input (financial resources). Water development would require matching from a sponsor to ensure that state funding will be used as the seed to augment and attract additional funds through public/private partnerships.

3rd - Who should decide how funds for water development are spent?

To insure that such funding is a priority for the citizens of the state and that its creation is protected after passing the enabling legislation, it would be put to a vote by the people so that this fund may become state law through a referendum.

Allocation of funds would be by a 7-member board with:

- 3 appointed by the governor (at least 2 of which are from the private sector),
- 3 by the legislature (at least 2 of which are from the private sector), and
- 1 by the University of Nebraska Board of Regents.

The board members would serve staggered four year terms, nonrenewable initially, with four replaced in the first two years and three in first four years, with this rotation then continuing. Board members would be selected based upon their water development and related

experience and expertise. Staff support and administration for the board would be provided by the Nebraska Department of Natural Resources.

4th - What are possible funding sources?

According to the Nebraska Department of Revenue, in the previous four years, $\frac{1}{4}$ of 1% of the Nebraska state sales tax would have generated the following revenue:

Fiscal Year	\$ Amount (in millions)
2007-2008	\$60.085
2008-2009	\$60.28
2009-2010	\$58.627
2010-2011	\$62.399

The workshop participants recommend that $\frac{1}{4}$ of 1% of the Nebraska state sales tax be used to raise annual revenue specifically for water development. Water development funds would be disbursed according to the following:

- 30% for science, technology and research to gather and manage data needed for modeling, etc. of the state's water quantity resources and water quality threats and problems – approximately \$18 million given recent state revenue.
- 30% for rehabilitating/restoring quantity and quality related infrastructure – approximately \$18 million given recent state revenue.
- 40% for new projects in areas related to conjunctive management, storage, quality protection and restoration, etc. – approximately \$24 million given recent state revenue.

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