WATER TOPICS OVERVIEW COMMITTEE

North Dakota Century Code Section 54-35-02.7 directs the Legislative Management during each interim to appoint a Water Topics Overview Committee in the same manner as the Legislative Management appoints other interim committees and to designate a Chairman. The committee must meet quarterly and is to operate according to the statutes and procedure governing the operation of other Legislative Management interim committees. This section was first enacted in 2009, and the committee was named the Water-Related Topics Overview Committee. The name was changed in 2013.

Section 54-35-02.7 provides the committee is responsible for:

1. Legislative overview of water topics and related matters;
2. The Garrison Diversion Project; and
3. Any necessary discussions with adjacent states on water topics.

In addition, the committee must:

1. Work collaboratively with the State Water Commission to develop policies to further define the state role in major flood control projects.
2. Develop a schedule of priorities with respect to water projects with the required assistance of the State Water Commission and State Engineer and assistance from other stakeholders as deemed appropriate.
3. Study policies regarding the development and financing of municipal projects, including:
   a. Water treatment plants; and
   b. Pipelines, including:
      (1) Pipeline expansion;
      (2) Public and industrial use of water;
      (3) Cost analysis of future projects; and
      (4) Technology, including:
         (a) Technology for permitting; and
         (b) Technology for electronic metering.
4. Review water supply routes and alternatives for the Red River Valley Water Supply Project (RRVWSP).

The committee was assigned two studies in addition to its statutory responsibilities. Section 26 of 2013 Senate Bill No. 2233 requires the Independent Water Providers and the Western Area Water Supply Authority (WAWS) to report to this committee and collaborate with this committee and the State Water Commission to monitor water usage, rates, and market share. The committee must report on the state's ability to maintain its payment schedule.

The committee was assigned a study on water project prioritization in Section 2 of 2013 House Bill No. 1206. The study is to evaluate current water project prioritization processes for effectiveness in determining high-priority water projects for State Water Commission funding. Section 1 of the bill requires the commission to develop and maintain a comprehensive water development plan organized on a river basin perspective, including an inventory of future water projects for budgeting and planning purposes. As part of the commission's planning process, the commission is required to develop a policy that outlines procedures for Commissioner-hosted meetings within the following drainage basins:

1. Red River.
2. James River.
3. Mouse River.
4. Upper Missouri River.
5. Lower Missouri River.
6. Devils Lake.

These meetings are to facilitate local project sponsor participation and project prioritization and to assist in project cost-benefit analysis for projects expected to cost more than $500,000.

The legislative history reveals the bill was meant to:

- Develop and maintain a state water management plan organized on a river basin perspective instead of a use perspective.
- Establish a cost-benefit analysis.
- Require State Water Commission meetings in the six major water basins to facilitate participation by local project sponsors.
- Require a study to prioritize the funding of water projects to refine the present process to make it more effective and efficient.

The committee was assigned the responsibility to receive two additional reports. Section 13 of 2013 Senate Bill No. 2020 requires the State Water Commission to report the findings of a study on the Mouse River and its tributaries to the committee. This study done by the State Water Commission must include a study of:

1. Causes of flooding; and
2. Measures that could be taken to:
    a. Improve waterflows.
    b. Reduce flooding.
    c. Reduce the amount of time flooded land is affected.

House Bill No. 1338 (2013) requires the Board of University and School Lands to report the results of a study of land adjacent to Lake Sakakawea and Lake Oahe. In particular, the board must study concerns of landowners adjacent to land under the control of the Army Corps of Engineers. The study must include:

1. Consideration of control of noxious weeds;
2. Protecting public access for hunting and fishing;
3. The costs of possible transfer of land from the Army Corps of Engineers; and
4. The costs associated with maintaining any property transferred to the state.

Committee members were Senators Tony Grindberg (Chairman), Ray Holmberg, Gary A. Lee, Larry Luick, and Larry J. Robinson and Representatives Bill Amerman, Dick Anderson, Ron Guggisberg, Curt Hofstad, Curtiss Kreun, Scott Louser, Naomi Muscha, Jon Nelson, Todd Porter, Jim Schmidt, and Vicky Steiner.

RED RIVER WATER SUPPLY PROJECT REVIEW

Red River Valley Water Supply Project Background

Garrison Diversion has turned part of its focus toward supplying the Red River Valley with a reliable supply of quality drinking water. Research suggests a strong possibility for a drought, such as the one that occurred in the 1930s, could hit the Red River Valley at some point in the next five decades. This drought could be of the same magnitude as the 1930s drought or may be worse. With the rising population of cities such as Fargo and Moorhead, the water demand during a drought would be even greater than in previous decades.

The Dakota Water Resources Act calls for $200 million of federal appropriations for the RRVWSP. A study began in 2000 with a memorandum of understanding signed between the state, represented by the Garrison Diversion Conservancy District, and the federal government, represented by the Bureau of Reclamation.

The Dakota Water Resources Act of 2000 authorized the RRVWSP to provide a reliable supply of quality drinking water for the Red River Valley. The Act also mandated the preparation of an environmental impact statement with joint leadership between the federal government and the state. The Governor assigned the Garrison Diversion Conservancy District to represent the state in the RRVWSP. The purpose of the environmental impact statement was to evaluate alternatives to meet the long-term water needs of the Red River Valley in North Dakota and three cities in Minnesota--East Grand Forks, Moorhead, and Breckenridge.

A draft environmental impact statement was released by the Bureau of Reclamation and the state in December 2005. The draft environmental impact statement evaluated eight alternatives to meet the water supply needs of the Red River Valley. Of these alternatives, three utilized existing surface water and ground water sources in

North Dakota and Minnesota, four imported water from the Missouri River, and one included the future of the Red River Valley if no project were built. The four import alternatives included water treatment plants to reduce the risk of transferring invasive species. A supplemental draft environmental impact statement was released on January 31, 2007, which contained revisions to the draft environmental impact statement and was written to incorporate responses to substantive comments related to environmental issues received on the draft environmental impact statement. New information became available, and additional analyses relevant to environmental concerns and issues were conducted in response to the comments. After the additional analyses, the supplemental draft environmental impact statement eliminated two of the alternatives contained in the draft environmental impact statement from further consideration and identified the Garrison Diversion Unit import to the Sheyenne River as the state and federal preferred alternative.

The Bureau of Reclamation and the state released the final environmental impact statement on December 21, 2007. This document includes responses to public comments received on the draft and supplemental draft environmental impact statements. The document also contains a final biological assessment prepared in compliance with the Endangered Species Act, an analysis of forecasted depletions and sedimentation on the Missouri River main stem reservoir system, and a review of climate change literature.

After due consideration and evaluation of technical, hydrologic, and design aspects and water permitting and environmental impacts, the state and the Bureau of Reclamation each identified the Garrison Diversion Unit import to the Sheyenne River alternative as the preferred alternative.

Proponents of this alternative note the Garrison Diversion Unit import to the Sheyenne River alternative provides positive benefits to the environment and harbors no significant negative environmental impacts. It meets the water needs of the Red River Valley now and in the future. This option also provides the core infrastructure for all water systems in the Red River Valley, thus offering the flexibility of future expansion. It has no technical constructability issues and is the least costly of the three Missouri River import alternatives. The Garrison Diversion Unit import to the Sheyenne River alternative would transport water through the McClusky Canal, and then utilize a buried pipeline from a biota treatment facility to the Sheyenne River north of Lake Ashtabula. Lake Ashtabula would act as a regulating reservoir. From there, water would be released in the Sheyenne River and flow into the Red River supplying water systems in the Red River Valley with a reliable supply of drinking water.

The RRVWSP has not received a record of decision from the federal government. In addition, 2013 House Bill No. 1020 requires the Water Topics Overview Committee to review during the 2013-14 interim water supply routes and alternatives for the project. Under Section 12 of House Bill No. 1020--the State Water Commission's appropriation bill, of the funds appropriated in the water and atmospheric resources line, $11 million was for the RRVWSP.

Testimony and Discussion

The consulting engineers for the project considered multiple potential alternatives--two of which emerged. The two final alternatives under consideration are a route from Washburn to Baldhill Creek and a route from Bismarck to Lake Ashtabula along the Interstate 94 corridor. The estimated total project cost for the Washburn to Baldhill Creek alternative is $781.4 million, and the Bismarck to Lake Ashtabula estimate is $804.4 million. However, the committee learned there is no significant advantage between the two routes based on cost alone. The Bismarck alternative has slightly lower operating costs due to reduced treatment and less pumping expected and a "higher profile" corridor. The Washburn alternative has equal or slightly lower capital costs, a less-congested corridor, a completed federal environmental impact study for a majority of the route, right-of-way options secured on 76 percent of the required route, completion of 83 percent of the preliminary design, identification of the required permits, and access to the McClusky Canal. In conclusion, the committee learned the Washburn alternative utilizing the previous preferred alternative route is more advantageous and slightly more economical than the Bismarck alternative.

The committee reviewed the present plans for federal involvement in the RRVWSP. However, as the interim passed, the committee reviewed the concept as a state project without federal involvement. The reason for the shift was the lack of a record decision by the federal government. In addition to not receiving a federal record decision, other impediments to the project include concerns of Canada and other states, including Missouri and Minnesota. Committee discussion included that some Canadian legislators are concerned about water supply and the RRVWSP could be perceived as a benefit to the Canadians.

As state and federal involvement in the project changed, so did the project. Committee discussion included that it appears that the RRVWSP will have to depend upon state and local funding. Committee discussion included that at some point, the state needs to declare the project a state project and start the project. The project will take generations and the timing of the funding will take a long time as well.

The committee was informed that the RRVWSP with federal participation is for drought mitigation and not for day-to-day usage. The committee was informed that there has been a history of drought in this semi-arid area, but there

also needs to be additional water for growth. Fargo uses 20 acre-feet per year, and this is projected to double by 2050. All water for Fargo comes from the Red and Sheyenne Rivers and there are no wells to provide water. Devils Lake can provide two years of short-term water supply. In addition, the Red River Valley communities have rights to the water in Lake Ashtabula. Lake Ashtabula can provide one year of short-term water supply.

The primary purpose of the RRVWSP with federal involvement was to provide supplemental water to Fargo in times of drought. Now that the project is being investigated as a purely state project, the project may need to be used for providing water to more places in the state. The Missouri River is the only source of reliable water supply for cities in the state.

The committee was informed that the project as a state project needs to be studied more to avoid legal issues. There are important legal issues anytime water crosses the Continental Divide. The corridors need to be reevaluated if there is not federal involvement to look for federal issues. The federal issues include the federal works at the lake, getting the water out of the Missouri River, and getting pipelines across this state without going over federal lands. In moving water from Devils Lake to the Sheyenne River, water was dropped over land and not directly into the river. The same technique may be able to be used with the RRVWSP. There would be additional cost for the RRVWSP as a state project because of the need for miles of pipeline. If federal works were allowed to be used, then the McClusky Canal could be used instead of more pipeline.

To be a state project, water would have to be taken indirectly from the Missouri River. One option is collector wells. Collector wells would provide the additional benefit of riverbank filtration, which is a form of treatment. The state is committed to addressing Canadian concerns by providing a high level of treatment before the water crosses the Continental Divide.

The United States Highway 200 route is the preferred federal plan and the state cannot get a record decision. Value engineering is being done to address the issues of building the project without a federal nexus. Once the issue of finding a source of water is completed, the next issue will be which corridor. If the only place that water may be taken out of the Missouri River is near Bismarck, then the United States Highway 200 corridor may not make sense.

Committee discussion included that the project should be reviewed to see if there can be an interconnection of water systems across the state. There is an enormous need for water in the middle of the state. To be a water supply project, the pipe capacity would have to be increased to address these needs, and that greatly increases the costs. These considerations will have to be addressed if it is a state project.

Affordability of water for industry and residential use is a major issue for the RRVWSP. The project may raise costs from $1.8 million to $4.3 million for value-added agriculture industry in 2018. Committee discussion included that the affordability for residents is important as well. If the project went forward with 100 percent local funding, it would raise water rates by $10 per 1,000 gallons. If there is a 50/50 split, the water rates would be raised to approximately $7.50 per 1,000 gallons. The committee was informed that entities receiving water from the RRVWSP will pay for the expenses from day one. Fargo will pay based on the amount of capacity received by Fargo and the city expects to pay 40 to 50 percent of the local cost.

COST-SHARE POLICY AND PRIORITIZATION STUDY

The Water Topics Overview Committee had a joint meeting with the State Water Commission on the cost-share policy and prioritization process. The committee received information on 2013-15 water project funding priorities, the draft project prioritization guidance concept, and the draft cost-share policy. The 2015-17 project inventory includes 177 projects that may qualify for some type of funding assistance. The committee approved the project prioritization guidance concept (Appendix A). The State Water Commission will fund in all prioritization categories, but there will be different cost-share. The committee approved the cost-share policy (Appendix B). Appendix B compares the previous cost-share policy with the new cost-share policy.

The prioritization process and the cost-share policy are closely linked. The issues with each overlap with issues of the other. The following are the major issues relating to economic development and rapid growth, rural water systems, tribes, land purchases, and litigation.

Economic Development and Rapid Growth Issues

The water project prioritization assigns a high-priority project status to address severe and anticipated water supply shortages for domestic use. This status would apply in areas with a three-year average population growth of greater than 3 percent. The list within the high-priority projects is not hierarchical.

Committee discussion included that the mission of the State Water Commission is to improve the quality of life and the economy. If an industry comes to an area in which there is not population growth, the industry should not be

treated differently from when there is population growth. It was argued that the prioritization should not contain the three-year average population growth greater than 3 percent as a measure of population growth. A community that is subsidized for growth will indirectly subsidize business, so projects for economic development should be given the same priority.

A person from Grand Forks presented for consideration by the State Water Commission the possibility of having a fertilizer plant as a justification for expanding the water treatment plant. Commission discussion included an understanding of the need, but the commission pointed out that it cannot fund economic development. To the contrary, committee members suggested that water plant expansion is for growth and water quality. Committee discussion included that Valley City has growth in the industrial sector, but the population is down, so the growth factor creates an uphill battle for Valley City.

A water commission member expressed concerns with funding domestic use to support industry. The growth factor relates to domestic use needs. It was argued that the State Water Commission should not choose winners and losers for economic development projects.

Defining rapid growth is a moving target and the 3 percent factor was based on 2012 figures. The 2013 numbers indicate the number may need to be higher. Committee discussion included the observation that 3 percent seems arbitrary, but this is always the case when number thresholds are used. Committee discussion included the suggestion that anything over 4 percent is rapid growth, based on the ability of a political subdivision to absorb the growth in a reasonable amount of time.

The prioritization is not a law or rule but is a policy the State Water Commission can change or make an exception to at any time. The 3 percent is a guideline that can be altered. It was suggested that the policy should have enough support so that the legislature does not feel it needs to statutorily set the growth rate at 3 or 4 percent and take away flexibility from the commission.

The State Water Commission discussed the growth concept and that all cost-share has to be brought through political subdivisions. If there is a large economic development situation, the weight of multiple requests would support the project and the project would not be left out because there was not any population growth. Nothing precludes the State Water Commission from supporting a regional project. There is an expectation of more joint political subdivision applications in the future.

Committee discussion included support for incentives for regionalization and cooperation. High-priority projects have higher cost-share and this supports regionalization which generally expands water supply. Although not explicit in the prioritization, the concept is implicit in the cost-share rates. One group omitted from the cost-share policy is the tribes, and partnerships with the tribes and political subdivisions may help the tribes.

The State Water Commission discussed the objective that the rapid growth policy is for small communities with large population growth. These communities have no recourse to pay for projects and these small towns need an edge.

Committee discussion included that the Legislative Assembly asked for a methodology for the Legislative Assembly to prioritize projects. Commission discussion included that there has been a huge expansion of the water programs and there needs to be a filter for assessing projects. This is a broad filter that allows flexibility. Committee members agreed that the goal is not tie the hands of the State Water Commission because the commission needs flexibility. Commission discussion included that the State Water Commission may make exceptions, and low-priority projects could be funded and high-priority projects not funded. It was the apparent consensus that the committee was comfortable with the prioritization concept and believes it fulfills the Legislative Assembly request expressed in the bill last legislative session.

Rural Water Systems Issues

In reviewing the old cost-share policy and changes to that policy, a 60 percent cost-share grant for rural water systems was considered and received the most comments. The State Water Commission proposed a change to allow for a 75 percent cost-share grant. Commission discussion included the observation that a project receiving 75 percent grant funding could only receive 80 percent total cost-share, which leaves 5 percent for loans. However, exceptions to the policy can be made by the State Water Commission.

Committee discussion suggested that limiting cost-share to 80 percent may make the funding for the remainder through loans more complicated than necessary. Although local buyin may come from loans from the State Water Commission, the commission wanted some of the local buyin to come from other sources available to the local entity, especially when the sources are available and should be used for appropriate projects.

Committee discussion included the suggestion that a 100 percent loan and grant from the State Water Commission provides skin in the game because the skin from the local entity is the loan and it should not make a difference if it all comes from the commission. It was also suggested that applying for funding from one entity would simplify the process by having have a one-stop shop.

A representative of the State Water Commission provided examples of rural water systems being unable to open up new areas with a 60 percent grant and in those examples, the 75 percent grant would have made it possible. This is why the State Water Commission suggested increasing to 75 percent cost-share grants. The commission believes it is important that there be some local stake in projects and the money available for projects will not go very far if there is a 100 percent cost-share.

A commission representative pointed out that there are various loan sources that could help with the local share. A State Water Commission representative suggested keeping loan programs comparable so that all could be used. The commission loans will be comparable with the State Department of Health loans and the state revolving loan fund so the proper program will be chosen based on convenience or fit with the project. It was argued that the Legislative Assembly should keep the statutory interest rate at a comparable rate.

Another proposed change to the draft policy provides that the top one-quarter of projects can be provided up to 80 percent loans for water projects that result in high rates. This quarter will be determined by comparison against those other projects submitted. There are roughly 80 projects submitted and the projects will be divided into peer group, and the top quarter in each peer group would be eligible for the 80 percent. What is the top quarter is determined by the State Water Commission, which provides for flexibility. It would be difficult to categorize based upon statewide cost when there are over 240 cost-share requests and it would be difficult to implement on a statewide basis.

Affordability is considered when there is a lack of water supply and it is factored in when determining grants and the ability to pay for loans. The factors for consideration for water system expansion include affordable and sustainable water rates as determined by the Chief Engineer. Leaving this determination to the Chief Engineer makes the State Water Commission able to calculate the rate over the appropriate amount of users. Affordability is important to each rural water system as end users become more and more difficult to reach, it becomes less affordable. Some end users are willing to pay and some are not. The policy provides that if the people at the end are willing to pay, then there may be a 75 percent grant. This does not guarantee 100 percent service, but helps get in those areas at the end of the line.

Tribal Issues

The Three Affiliated Tribes, the Standing Rock Sioux Tribe, the Turtle Mountain Tribe, and the Spirit Lake Tribe took issue with use of the term local sponsor. The term does not include a tribal entity and it was argued that the term should include the tribes. The tribes want their projects to be judged like any other project. The committee was informed that the rural water users have endorsed tribal projects.

The Turtle Mountain Tribe provided information to the committee on the United States Highway 43 water project. The tribe is the only group that can provide water in the area of the United States Highway 43 corridor. The water projects the tribe wants to do are serving both tribal and nontribal members, and it was argued that it is unfair not to be able to get state cost-sharing.

The State Water Commission does not cost-share with tribes because tribes are sovereign nations and have historically have had access to federal funding, including operating and maintenance. Recently, federal funding has been reduced. There is $4 million for fiscal year 2014 from the Bureau of Reclamation for the tribes. For State Water Commission funding to be used on tribal projects, the tribe needs to enter a cooperative agreement with a political subdivision because the State Water Commission is required by law to work with political subdivisions. This kind of cooperative project has been done with the Three Affiliated Tribes working with McKenzie County.

Land Purchase Issues

The major cost to flood retention projects is the purchase of the land. There would likely not be any retention projects if there was not any cost-share for land purchases. The policy allows for the purchase of land for flood retention projects and it does not allow for the purchase of easements. Most projects do not include money for purchase or easement because it is difficult to know whether the transfer is a good deal. When negotiations are neighbor-to-neighbor, there is one set of negotiations, but if there is state or federal money involved, the negotiations take on a different tenor. It was argued that the allowance for cost-share for purchasing land is an exception to a general rule and should not be expanded to include easements.

Litigation Issues

There is no change to the policy as it relates to litigation and the State Water Commission may defer payment, but the policy does not require the commission to defer payment. Sometimes the State Water Commission needs to fund a project to get into litigation to resolve the issues.

Conclusion

Committee discussion included that the joint meeting provided for good dialogue and valuable interaction. The meeting with the State Water Commission was productive and properly timed. The committee consensus was supportive of the policies presented at the meeting. Members generally were comfortable with the cost-share policy and prioritization schedule. Other members had concerns but supported the prioritization schedule and cost-share policy. It was noted that both are working documents, and there may be changes in the future. The State Water Commission was commended for completing the requested policy and schedule. The committee approved the cost-share policy attached as Appendix B.

The State Water Commission approved the cost-share policy on September 15, 2014, with an effective date of October 1, 2014. Most are satisfied with the policy except for some rural water systems and the city of Grand Forks. Certain rural water systems and cities urged that all water supply projects should be eligible for up to 75 percent grant and loans should be available from the State Water Commission for the remainder. It was argued that all project costs should be eligible for reimbursement, except operations and maintenance costs. The committee was informed that ineligible items in the cost-share policy lower the grant-to-loan ratio. It was argued that rate comparisons are not a fair way to determine affordability. In addition, water projects for industrial growth should be eligible and considered for high-priority projects. It was argued that there is enough money to have a 75-to-25 grant-to-loan ratio.

Grand Forks had requested $77,379,000 for a regional water plant. The State Water Commission provided a $9.6 million grant and a $52 million loan. The Grand Forks project is a moderate-level priority. Although Grand Forks is impacted by sulfates from the Devils Lake outlet when Grand Forks uses Red River water, Grand Forks' primary source of water is the Red Lake River. There was a higher cost-share with Fargo for the sulfate reduction of a 50 percent grant because Fargo obtains water from the Red River and the Sheyenne River is a backup.

MUNICIPAL WATER PROJECTS STUDY

The committee was informed that the municipal water supply infrastructure in the state is aging, and cities cannot pay for the rehabilitation. It was argued that there may need to be more state money for rehabilitation. The committee received testimony from certain cities across the state. For example, the committee was informed of the importance of state investment in strategic water infrastructure needs in Grand Forks.

The committee received testimony on the drinking water state revolving loan fund and was provided a priority list for the fund. The average loan is from $20,000 to $66,000. The repayment of previous loans and bonding is deposited in the fund. The revolving loan fund could provide $700 million in loans for five years. The priority list contains 168 projects with a total cost of approximately $680 million. The entities on the list update the cost of the project every year and stay on the list in the same order after an update. The list is an estimate of costs and is not a list of projects that are ready to be built.

Grand Forks intends to build a new regional water treatment plant that is a regional project to be used for the next 100 years. The new plant will provide 20 million gallons of water each day. The present plant provides 16 million gallons of water each day. The summer demand is 12 million to 14 million gallons of water each day. The usual demand is 8 million gallons of water each day. Because the regional water plant is a multigenerational plant, there needs to be a financing structure to spread the debt out over multiple generations. The regional project plan includes East Grand Forks and financial involvement from Minnesota has to be worked out.

The water tower in Park River was built in 1932 and holds 50,000 gallons. The cost to fix it is around $900,000. A new 250,000-gallon water tower would cost $2.7 million. Although 50 percent cost-share was provided, 75 percent would have been preferred. The state revolving loan fund provides for the remainder, and this is being paid for with a $12 per month increase in water rates. It was argued that water infrastructure in cities is deteriorating, and the state should fund infrastructure needs with a 75 percent grant.

The committee was informed that there needs to be a treatment plant update in Minot for the Northwest Area Water Supply (NAWS) Project. The water treatment plant is critical because the average water usage in 2010 was 4.5 million gallons per day and now is 6.2 million gallons per day. The city cannot take the 12-million-gallon basin out of service to repair because that only leaves a 6-million-gallon basin. There needs to be an improvement in the plant in Minot for redundancy when repairs are needed.

The committee reviewed a bill draft prepared for Representative Robert Frantsvog that was drafted in conjunction with the Governor's office and the North Dakota Public Finance Authority to create a capital infrastructure revolving loan fund of $100 million from the strategic investment and improvements fund for rapid growth communities to build infrastructure, including sewer, storm water, and drinking water supply projects. The bill draft was not considered for approval by the committee but was reviewed because it directly related to the study of the funding of municipal projects.

Committee discussion included that the bill draft should address how the growth rate is determined. The committee was informed that the bill draft is a work in progress and needs a few changes, including lengthening the term of the loan.

Conclusion

The committee does not make any recommendation regarding the study of municipal water projects.

WESTERN AREA WATER SUPPLY AUTHORITY STUDY

Testimony and Discussion

This interim committee received reports on WAWS from the Independent Water Providers and WAWS and information on water usage, rates, and market share and the ability to maintain the payment schedule.

History of Funding

The committee reviewed a financial flowchart for the WAWS Project (Appendix C). The flowchart contains the loan and grant funding for the past, present, and requested for the future.

The state has provided $229 million, with $110 million in loans provided by the 2011 Legislative Assembly to WAWS. The 2011 funding was used to build transmission lines, reservoirs, pump stations, and depots. In the 2013 Legislative Assembly, $119 million was provided, $40 million in loans, and $79 million from the State Water Commission--$39 million through grants and $40 million through a loan. This was used for water treatment plant upgrades and to provide water to rural residents. WAWS did not use all the $79 million provided. The plant in Williston was at 10 million gallons per day and was brought up to 14 million gallons per day and will be at 21 million gallons per day by November 2014. WAWS will request a $30 million loan from the 2015 Legislative Assembly. The total amount that will be requested through 2017 is $349 million. The $30 million loan that will be requested would be from the resources trust fund. The $30 million loan requested can be paid because of the prepayment of debt and will be serviced through industrial sales. It is anticipated that any future additional loans would be difficult to service.

WAWS already has an 80 percent loan-to-grant ratio. The 75 percent grant request next biennium will get WAWS total funding closer to 50 percent loan and 50 percent grant. The grants and loans requested by WAWS will be in the Industrial Commission's 2015-17 budget request. WAWS will live within the budget even if it does not receive the total amount requested. Committee discussion included support for a 75 percent grant and 25 percent loan for all rural water projects.

Sales and Payments

The Industrial Commission has oversight of the money earned from industrial water sales and receives monthly reports. The commission approves additional debt that may form the basis of a claim for territorial or franchise protection for industrial water sales. The commission may revise loan payments, if cashflow is insufficient to meet debt requirements. The commission will provide for the reimbursement of WAWS for industrial water depot capital improvements and the costs of delivery of potable water sold at industrial water depots and lateral lines at a cost no greater than the participating member or submember entity rate at the location of the depot or lateral line. The commission approves water rates for industrial sales, generally on an annual basis. The commission has reviewed and adopted a rate schedule that was developed and proposed by WAWS. The determination of rates is determined by looking at cost and is not a comparison to other rates in other parts of the state.

The committee received testimony from a representative of the Bank of North Dakota on WAWS debt service with a break-even analysis. The level of priority of debt service starts with the highest priority of Public Finance Authority state revolving fund loans, then goes to participating members' other debt, then goes to baseline 2010 industrial water sales revenue requirements, and then to state-guaranteed loans. The state-guaranteed loans are repaid in the order of Bank of North Dakota loans first, followed by the general fund loan, and followed by the resources trust fund loans. The state-guaranteed loans total $150 million. The total debt is $190,220,825. Annual break-even sales are based on a 79.9 percent profit margin. The first big year of debt service is in 2015 with annual payments of $23,370,796 needed, with sales of $29,250,058 needed to meet the payments. The annual payments remain near $21 million until 2020, and the break-even sales remain near $26 million until 2020.

The committee received testimony on the payment of debt service on outstanding state guarantee debt from WAWS industrial water sales. There has been a prepayment of approximately $8.6 million on the guaranteed loans and all interest is current as well. WAWS is ahead of schedule and has made prepayments and the revenue forecast is ahead of projections. In short, things are going as planned or better than planned.

Through August 31, 2014, WAWS has had industrial sales totaling $32,851,816 and has dispersed $26,706,557 from these industrial sales revenues to make payments as outlined by law. The Industrial Commission has approved capital projects that will be paid from industrial sales over the next several months and these projects total $2,373,917. The Industrial Commission approved capital project improvements to two fill stations and approved the movement of the Crosby depot. Other expenditures included signage and the design for water storage in McKenzie County.

Projections for 2017-19 are difficult to make because it is difficult to anticipate the need. There has been no slowdown in the oil development activity in western North Dakota, but there may have been some stability. However, with more wells, there will be an increase in the need for water. WAWS expects $30 million to $34 million in sales in 2015.

Depots

There are 9 operational WAWS depots, 2 planned, and 1 available for a total of 12. All industrial water sales are metered. Not as many depots have been built as were planned because WAWS is waiting for additional need to develop. In addition, WAWS has been working with the Independent Water Providers and WAWS did not build a depot at the 29 Mile Corner because the area was being served by Independent Water Providers.

Depot maintenance is a constant issue, especially due to wet conditions and upkeep is constantly needed. The cost to build a six-lane depot is approximately $1 million. It was reported the depots cash flow well.

The committee was informed that it is difficult to build the Ray and Tioga depot because people do not want a water depot near their property. The depot will be built after zoning is approved. The committee was informed that water was not available at the Ross depot, the Crosby depot needs to be moved out of town, and the use of the Second and Sixth Street depot sites in Williston is declining because access is difficult.

The authority is trying to maximize potential, and companies are looking at pipeline sales instead of depots. WAWS has long-term contracts to provide water through pipelines to certain oil companies. The water is provided to these entities with no capital cost to the authority because the facilities are built by the partner. The partners have priority for industrial water over other users.

Water Use

Population is increasing and the need for water is increasing. In 2011 the projections were for 48,000 in peak population and the plan in 2014 is for a peak population of 160,000. Based on housing studies, the 21 million gallons per day in the future may have to be used for domestic use and industrial sales will have to slow.

Water depot use rapidly increased from 2010 to 2012 and was leveling off in 2013. Water use in the Bakken is not increasing as much as in the past and appears to be leveling off at 18,000 acre-feet to 20,000 acre-feet per year. An acre-foot is 325,851 gallons. The average of water used per frac is leveling off at seven acre-feet.

Industrial water sales include use for oil production, exploration, and fracturing. Maintenance water will be needed for the next 30 years. This amount of water is small at present but is consistent. Frac water usage and maintenance water usage are inversely proportional over time. The committee was informed that there is not any expectation of any large developments as a result of recycling water. There is some recycling of water and the technology is improving, but the cost and logistics do not make it as feasible for use as freshwater.

There is a tremendous variability on the amount of water used each day from zero to 900,000 gallons. The water depot use can be driven by external factors like the number of rigs and the condition of roads. Water usage levels off between March and June and increases dramatically after June. The leveling off from March to June is due to load restrictions for roads and most load restrictions are removed by the end of June. The committee was informed that sales were large in March, but there was a slowdown in June because of the high turbidity in the river. Some depots needed to be shut down. The levels of turbidity were the highest levels seen in recorded history at the water treatment plant. The Missouri River at Williston is dirty in the spring because of the water entering from the Yellowstone River. Some of the $119 million available to WAWS in 2013 is being used to provide pretreatment for the water treatment plant to reduce turbidity. In addition, there was a slowdown in July because of domestic needs for more water.

Rates

WAWS sets domestic rates to member entities. The rates for industrial sales need to be approved by the Industrial Commission. Twenty percent of the rate is used to get the water out to the depot. If industrial rates are $20 per thousand gallons, then $4 of that is used for the operation and maintenance. Depot rates are dynamic and vary from $12 to $20 per thousand gallons and the price varies from location to location based on proximity and access. In addition, there is seasonable variability and the rate may vary based upon whether the water is heated or not heated.

The WAWS Project was based on industrial sales paying for the project. Because there is buildout, there may be an opportunity to collect some revenues from residential users. However, WAWS is a wholesaler for residential use and WAWS provides water to the doorstep of communities and the community still needs to distribute the water within that community. Originally, WAWS was going to run all of the rural water systems within the area. WAWS has stayed a wholesaler and the rural water systems have operated and maintained the lines. WAWS is building projects and turning over the projects to the rural water system when the projects are complete. The committee was informed that residential rates in WAWS communities are the highest rates in the state.

Committee discussion included a suggestion that WAWS may be unfair to other rural water systems because they have a different grant and loan policy. To the contrary, it was argued that WAWS is a unique system like NAWS and the Southwest Water Authority and all three have separate operating models and are working. WAWS is a hybrid local and state system. It is locally led and the state provides money with some of it being repaid. The committee was informed that the expenditures for WAWS are consistent with the water policy for rapid growth areas.

Independent Water Providers

The Independent Water Providers, presented testimony to the committee on WAWS. The committee was informed that the WAWS Project was intended to be a $150 million project, and today is headed toward being a $349 million project. The Independent Water Providers opposed the WAWS Project for three reasons. First, the market already fully served the water needs through the private sector and some political subdivisions. Second, there is more competition as time goes forward. In 2011 there were 9,400 acre-feet of permits for oil and gas development and now there are at least 46,000 acre-feet approved and commencing, and this is four times what is being used. Third, the oil and gas industry will find a new way of managing water.

In the 2013 legislative session, Senate Bill No. 2233 provided $119 million for WAWS to build a trunk line, but it was argued that the trunk line turned into a spider web. The Independent Water Providers objected to this expansion. The Independent Water Providers thought Section 19 of Senate Bill No. 2233 would limit industrial growth. Last legislative session, the Independent Water Providers thought that WAWS was going to focus on people instead of growing industrial sales. Senate Bill No. 2233 did this by requiring the Industrial Commission to manage the cashflow and requiring any expansion to go through the State Water Commission. It was argued that the language which provides "[t]he state water commission shall approve the planning, location, and water supply contracts of any authority depots, laterals, taps, turnouts, and risers for industrial sales for oil and gas exploration and production" was making the State Water Commission the gatekeeper. The commission has delegated this duty to the State Engineer, and the committee was informed that the State Engineer reads the section to require approval, instead of evaluating for approval or disapproval, of the expansion of industrial water sales to the oil and gas industry.

The WAWS Project was paid for by depots sales and the Independent Water Providers objected because of government competing with the private sector. The model was risky at that time because 70 to 80 percent of the water was being provided by the private sector with the remainder provided from communities with water depots.

WAWS has grown from 12 percent of the market in 2011 to 21 percent today. WAWS is concentrated in Williams and McKenzie Counties and has 41 percent of the market in those locations. WAWS in the past has suggested that 20 percent of the market is what is needed.

Over-Appropriations

The committee was informed that the civil penalty for over-appropriation of water was raised from $5,000 a day to $25,000 a day. The purpose of the civil penalty is to try to take profit out of the over-appropriation. Civil penalties are usually settled through a consent agreement. The consent agreements take the amount of over-appropriation from the next year's appropriation. One company--Power Fuels--paid a civil penalty of about $800,000 through a consent agreement. Permits will be pulled for future offenses after a consent agreement. Once the State Water Commission went after profits, there has been a substantial effect on over-appropriation.

There have not been any criminal actions taken against over-appropriators. Most of the state's attorneys in northwest North Dakota are overloaded with work and may not have the scientific background needed to prosecute an over-appropriation case. However, the State Water Commission will be conducting continuing education for law enforcement to enforce over-appropriation laws.

OTHER AREAS OF STUDY

Southwest Water Supply Project

The Southwest Water Authority covers 12 counties and works with Perkins County in South Dakota to provide rural water. The territory goes south to the South Dakota line and west to the Montana border and includes every county in the west river area except Sioux County. The Southwest Water Authority provides 5,332 rural residents water.

The municipal, rural, and industrial funding had a huge impact on the Southwest Water Project and without it, construction would have slowed or stopped. In addition, the resources trust fund has also been a major source of funding. The Southwest Water Authority receives $4 million in income from water depots for industrial use. There is not any concern with competing with the private sector because there is no competition because the naturally occurring water is of such poor quality.

The Southwest Water Authority was a hybrid in matters of funding for rural water projects. The major hurdle is to provide water that is affordable to a few customers. The funding needs to be equitable and include a system of grants, loans, and other repayment options.

Committee discussion pointed out that the legislature has been criticized in the past for being forward-looking, for example when the legislature invested in the Southwest Water Project and made United States Highway 2 four lanes to the Montana border. It was argued that both examples were good ideas and forward-thinking.

The committee received testimony on the transfer of the Southwest Pipeline Project to the Southwest Water Authority. The project is still being constructed, and more money is being spent than is being returned on repayment. The authority makes money through water rates that repay capital expenditures, operation and maintenance, and repair and extraordinary expenses. In short, the money is used to cover expenses, pay off capital, and save money for the future. There is approximately $11 million in reserve for future expenses.

There is no expiration of the capital repayment. The amount of repayment was based on the ability to pay, not the amount borrowed, so the amount of repayment is forever. There was no thought of transfer to the authority when the authority was created. The transfer of ownership is a different issue than the capital repayment.

Northwest Area Water Supply Project

NAWS is an empty pipeline from Lake Sakakawea to Minot. The committee was informed that expansion of 1,200 potential customers around Bottineau and Lake Metigoshe and oil development northwest of Bottineau will need NAWS water.

Biota and depletion are the major issues with using the pipeline. Downstream states do not like depletion. Canada objects Missouri River water going to Canada. Canada does not approve of taking water across the Continental Divide because of biota concerns. NAWS is in court with Canada. The project does not totally treat the water before it crosses the continental divide. The committee was informed that fully treating water at the beginning of the project would, on a technical basis, address biota concerns. However, the state has not been successful since the 1930s in taking water across the Continental Divide.

The state has been in legal controversy with Manitoba and the Canadian government over the NAWS Project for over a decade. There is federal involvement with the NAWS Project, so there is the involvement of federal agencies and federal law. The NAWS Project is in federal court because there is federal involvement in the project. The committee was informed that something definitive on NAWS will most likely not be available before the 2015 legislative session. It was estimated that the environmental impact study will be presented to the court in March 2015. The committee was informed that by the end of 2014, there could be a record decision for the NAWS Project.

Lake Sakakawea

Lake Sakakawea is the main recreation area in western North Dakota. It was argued that as people move in as a result of oil development, the needs of those people for recreation need to be accommodated. There is a great opportunity for recreational use around Lake Sakakawea, which has been lost due to federal management of lands surrounding the lake. For instance, there is not a hotel on Lake Sakakawea. Committee discussion included urging the Army Corps of Engineers to work with the state to provide access through recreational sites, campgrounds, boat ramps, and access points.

Fargo Diversion Project

The committee received testimony on the Fargo-Moorhead diversion project. Oxbow was catastrophically flooded in 2009. The ring dike around Oxbow was included in the project and is a mitigation factor. Oxbow has flood protection, but it is not certified to the 100-year level by FEMA. Early on in the process the plan was to buy out homes in Oxbow and Hickson. There was resistance, so a levee alternative was developed with the Army Corps of

Engineers. The levee project around Oxbow has started because of an advance agreement with the Army Corps of Engineers for advance construction costs being credited to the federal portion of funding. The levee has provided stability as to home prices and for the tax base for the Kindred School District. Committee discussion included that to date, Hickson and Bakke have not flooded and Oxbow now has substantial protection. It was argued that the flood protection in Oxbow is good for 10,000 years if the project in Fargo-Moorhead does not go through.

Committee discussion included the suggestion that it should be in writing that Fargo will pay for the levee if there is not federal funding. It was argued that the state should not be responsible for these costs. The wording in the law was intended to protect the state from the federal government.

The committee was informed that the authority may spend more from the federal funds at first as long as there is the appropriate cost-share at the end. Federal funding is always up to Congress, and if there is no federal funding, the cost of the levee could be a local responsibility. It was argued that the law indicates prior to authorization, state money may be used only for the levee, not the channel.

Money from the Cass County sales tax was used for levy work in small communities and for retention. There are 96 water retention projects that encompass 100,000 acres. The Fargo-Moorhead Diversion Authority supports retention and distributed storage, but it is never a replacement for the diversion and the storage is not part of the diversion project. Retention is supported because it lessens the frequency of which the operation of the project will be required. With the retention projects, it becomes less likely there will be backup of water on other property. Retention projects also lessen the chance of the need to use insurance by agricultural producers. The potential use of the project goes down with retention projects, but it does not affect the cost of the diversion project.

The total amount of acres that will need to be purchased is around 8,000 acres. Around 2,000 acres have been purchased and some has been rented back to the producer. Not all of the 2,000 acres are within the area needed because the purchase of units of land sometimes does not coincide with the land needed for the project. The process of purchasing land started in the fall of 2013 and will most likely pick up again in the fall of 2014 when the harvest season is over.

The authority will pay taxes on the land and has hired a land management company to take care of the land. The authority is not in the land ownership business and most likely will sell the land that is not needed in the footprint.

Agricultural mitigation will provide financial compensation to landowners. It is a complex issue for agricultural producers to be provided a remedy if they will not be qualified for crop protection because of the project. Producers are waiting for funding for the project. A consultant has been hired, and the goal is to come up with amounts that are available for farmers.

Other Flooding Issues

The largest water-related issue for Grafton is permanent flood protection. There is a federal project in place but no funding. The city will go ahead on flood protection without federal funding, if possible. The federal law that takes away the subsidy from the federal flood control insurance program has increased costs from $1,000 to $4,000 to $6,000 per home, per year in Grafton. This has caused sales of homes to plummet. The flood protection is needed to get properties out of the 100-year flood zone designation so there is not a flood insurance requirement.

The flood control project has been in the process for 30 years, and Grafton has waited 10 years for federal funding. Federal regulations have changed over those time periods and the city cannot afford to wait, especially since the federal government is not in the financial condition to help. The cost of the diversion plan is $45 million. The Army Corps of Engineers says a diversion is the most viable, although a levy of 22 feet would provide for a 100-year flood protection.

The national flood insurance program passed in July 2012 and the bill stabilized the flood insurance program for five years. About 20 percent of all policyholders were phased out. These properties included second homes, business property, and grandfathered property. Grandfathered property received the rate that the previous owner had. This caused a problem with real estate markets because flood insurance increased at the extremes from $500 per year to $25,000 per year and some homes became unsalable. New legislation passed recently is the Homeowners Flood Insurance Affordability Act and it allows the assumption of current policy by the new buyer by reinstating the grandfather procedures. The rates will increase but will be affordable. The rates for flood insurance will slowly increase. The debts in the program arose from the Katrina and Sandy hurricanes. The program is becoming more actuarially sound, but it will take time to pay off the debt.

There have not been any private insurance alternatives for federal flood insurance in the past, but new legislation has provided mechanisms for a private market and some is available in Florida. An actuarial review of a program

shows it probably is not something that could be done in this state. The program would be insolvent with 10,000 policyholders. North Dakota benefits from the national insurance program by receiving three-and-one-half times the amount paid in premiums for claims.

PROHIBITION ON RESOURCES TRUST FUND FOR STATE WATER COMMISSION

The committee considered a bill draft [15.0215.02000] to prohibit the principal and income from the resources trust fund from being available to the State Water Commission, or any employees or appointees of the State Water Commission, for wages, salaries, and operating expenses unless otherwise provided by law.

The State Water Commission administrative budget has been paid from the general fund in the past and more recently legislative appropriations for that purpose have shifted back and forth between the general fund and the resources trust fund. The committee was informed that the State Water Commission would like the resources trust fund to be used to fund projects and not commission administration.

The committee amended the "unless otherwise provided by law" language into the bill draft because the committee was informed that there are other sections of law that allow salaries and operations expenses to be paid by the resources trust fund for the Southwest Pipeline Project, NAWS Project, and the Devils Lake outlet. For example, the operating expenses for the Devils Lake outlet include electricity.

WATER TOPICS OVERVIEW COMMITTEE DUTIES BILL DRAFT

The committee considered a bill draft [15.0172.01000] to remove areas that already have been studied from the statutory duties of the Water Topics Overview Committee. Section 54-35-02.7, which provides for the Water Topics Overview Committee, has references to the studies that were completed this interim, and the section must be amended to avoid having to duplicate the studies in the future. The bill draft provides that the committee may work collaboratively with the State Water Commission and may meet with the State Water Commission.

RECOMMENDATIONS

The committee recommends a bill [15.0215.02000] to prohibit the principal and income from the resources trust fund from being available to the State Water Commission for wages, salaries, and operating expenses, unless otherwise provided by law.

The committee recommends a bill [15.0172.01000] to remove topics that already have been studied from the statutory duties of the Water Topics Overview Committee.

MOUSE RIVER REPORT

The committee received a report on the Mouse River enhanced protection plan. The city of Minot looked at the cost-savings of reducing protection from 27,000 cubic feet per second to the 100-year flood level of 10,000 cubic feet per second, and the city only saved 5.6 percent of the cost of the project, so it makes sense to build to the higher level. The city looked at phasing in the flood protection plan. The engineers created 14 phases with a priority of keeping United States Highway 83 open. Minot has worked closely with the Souris River Water Resources Joint Board to determine which phase is constructed at which time. If all the money was available, it would take 11 years to 12 years for the Mouse River enhanced flood protection plan to be completed solely in Minot.

There is a one-half cent sales tax in Minot that raises $6 million to $7 million per year for flood protection. The current state cost-share is 60/40, and if the 40 percent is all local, the local entities cannot afford the flood protection so a 75/25 split is preferred.

The State Water Commission works with Canada through the International Joint Commission and the State Department for management of the Mouse River. The State Water Commission is trying to open the agreement with Canada because of changing hydrology, but this will take time because it is a large undertaking and has international protocol that needs to be followed. The plan with Canada was opened up when the Rafferty and Alemeda Dams were built and the plan is to provide a 100-year protection for snowmelt events. International agreements limit opening the flow through the wildlife refuge. In the last flood, the catastrophic rains overwhelmed the flood control structures for the Mouse River.

Downstream ranchers had concerns with the flood control project. Increased waterflows have helped with flooding but push too much water downstream too fast in the view of downstream ranchers. The main concern is that flood control costs ranchers money by damaging hay crops. Although, from a basin perspective, the urban areas need to have flood control first and the flood management plan for the highest recorded flood is better for river management, downstream ranchers are negatively affected. Almost all of the hay production in the meadows by the river was lost from 2011 through 2013. The water stayed on the land too long. If water is received early, it is an advantage, but it

needs to be removed. The flows need to be reduced by late May for hay production. If water is not drained, the ranchers deal with weeds and no hay. It was argued that because the flooding deprives ranchers of hay and their livelihood, ranchers should be compensated for losses because of the flood control.

Ranchers offered a suggestion for moving the water through quicker. The land is flat on the south side of the J. Clark Salyer National Wildlife Refuge and there is a four-inch drop in one mile. It was argued that dredging would help, but the United States Fish and Wildlife Service will not dredge.

The committee was informed that the 1986 plan allowed for higher levels of water, which created more erosion, cattails, sediment, and pools of water. The problem is a lack of drainage and that would be provided if the old channel was opened up.

It was argued that the Canadian releases are indiscriminate. A rancher argued that it would be useful to be told before the release of water to allow the removal of hay on the land. It was argued that notification of water releases would be especially helpful later in the season and there should not be releases in July. In addition, better forecasting by the Canadians would be helpful.

It was argued that water levels cannot be managed by dams if the dams are kept full, and Canada keeps its dams full and Lake Darling is kept full. It was argued that the dams are not managed for rain events.

BOARD OF UNIVERSITY AND SCHOOL LANDS STUDY OF LAND SURROUNDING LAKE SAKAKAWEA AND LAKE OAHE REPORT

The committee received a report on the outcome of the study by the Board of University and School Lands of the options to address the concerns of landowners adjacent to land under the control of the Army Corps of Engineers surrounding Lake Sakakawea and Lake Oahe. The board's study provided seven options for consideration:

1. Status quo.
2. Return land above the high-water mark to the original owners.
3. Return land above the high-water mark to the state of North Dakota and the state manages the land.
4. Return land above the high-water mark to the state of North Dakota and the tribes owning adjoining land and each would manage their own land.
5. Return the land above the high-water mark to the state of North Dakota and the tribes owning adjoining land and the state, tribal government, or a local government manages the land.
6. Have the Army Corps of Engineers retain ownership of the land above the high-water mark but have the state, tribal government, or a local government manage selected portions of the land, while the corps manages the balance of the land.
7. Transfer the land above the high-water mark to the state of North Dakota and the state would transfer the land to preferential lease holders.