

2011 SENATE NATURAL RESOURCES

SB 2054

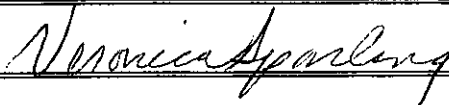
# 2011 SENATE STANDING COMMITTEE MINUTES

## Senate Natural Resources Committee Fort Lincoln Room, State Capitol

SB 2054  
January 13, 2011  
12881

☐ Conference Committee

Committee Clerk Signature



### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to authorize construction of a Devils Lake east end flood control structure; to provide an appropriation; and to declare an emergency.

### Minutes:

Testimony Attached

**Chairman Lyson:** Opened the hearing on SB 2054.

**Jeff Nelson**, staff attorney with Legislative Council explained and reviewed the bill. The Water Related Topics Overview Committee is a statutory committee created by the legislative assembly. The committee is responsible for legislative overview of water related topics and related matters and for any necessary discussions with adjacent states on water related topics. During the interim the committee held meetings on a number of topics, one of which was the issue of Devils Lake. The committee members toured the Devils Lake basin. They received testimony from the Devils Lake Joint Water Resources Board and the State Water Commission that flooding in Devils Lake has cost approximately \$656 million up to that time. These costs include: \$342 million in transportation infrastructure costs, \$173 million in construction costs of the Devils Lake levee, \$44.5 million in Federal Emergency Management Agency costs, \$42 million for the Devils Lake outlet, \$26 million in Corps of Engineer expenditures, \$25 million in rail transportation repairs and \$3 million in Housing and Urban Development expenditures. They also received testimony on the impact the Devils Lake flooding is having on the agriculture industry and the community as well as the economic impact on the recreational interests.

The flooding has impacted the agriculture, recreational, law enforcement and emergency services. There is also the human factor, the emotional and stress factors. Based on this testimony the committee developed SB 2054. The bill authorizes the construction of a Devils Lake east end flood control structure. Section 3 ...declared to be an emergency... so it would be enacted immediately when signed by the governor.

**Chairman Lyson:** Did the discussions specify what the operating level of Devils Lake should be?

**Jeff Nelson:** There was discussion, but there was no consensus among the committee members.

**Chairman Lyson:** Do you think we should amend this bill and put in an elevation level?

**Jeff Nelson:** That is a policy question best left to the legislative assembly and not to me.

**Senator Triplett:** Do you have written testimony?

**Jeff Nelson:** I will get a copy of the interim committee report. See Attachment #1.

**Senator Tom Fischer,** District 46, Fargo, spoke in support of the bill. He chaired the Water Related Topics Overview Committee. The committee held several meetings dealing with water statewide. There is no doubt that Devils Lake is an emergency situation. This bill was unanimously approved to bring it forward to Legislative Council for review. To answer Chairman Lyson's question about elevation, the figures we have heard that have been most popular are 1446-1448. I'm sure there are various opinions. We asked the Water Commission and the Health Dept. to design and build the best structure for the region in relation to moving of water, and concern everyone has about dissolved solids, and how we blend the water. The State Engineer could address that better than I. There has been discussion on other options, or projects on Devils Lake basin. Those projects are not impossible to do. The Water Commission has the latitude through their appropriations bill. Applications can be made to do a number of things and through their permitting process and their examination of projects they have the ability to fund and build other pertinences to the Devils Lake outlet.

**Senator Triplett:** Can you explain why this is necessary? Why does the Water Commission not have the authority to do this if they consider this important? Is it appropriate for the legislature to be directing the Water Commission to do a specific project as opposed to letting the Water Commission work through its usual authority?

**Senator Tom Fischer:** The Water Related Topics Committee was not in place in the last session. When it was created it was to review all water projects in the state. We felt by bringing this bill forward, it would bring it to the attention of the legislature. If we don't do something immediately, we will be facing a catastrophe that will affect 44% of the people of North Dakota.

**Senator Triplett:** It is not a question of whether it is important but rather it is a matter of the legislature has long since given the Water Commission the authority to make decisions about what the priorities are and to follow through on them without specific legislative project approval. Could that oversight committee creation during the last session have somehow changed that and now we are going to get into telling the Water Commission project by project what is the next priority?

**Senator Tom Fischer:** As the board of Directors of the State of North Dakota we have the responsibility to make decisions that affect all agencies. We put amendments in and

legislative intent in appropriations bill quite frequently. We do direct agencies to specifically do one project or another. I think it is appropriate.

**Representative Curt Hofstad** from District 15 which is all of Ramsey County and most of Towner County, the heart of the 2.5 million acre basin we call the Devils Lake Basin. Devils Lake Basin is unique in that it is a closed basin. With that uniqueness we have all kinds of problems. I would like to speak to the real issues such as loss of life. See Attachment #2. The fatalities are from people driving on a road that was there yesterday and is no longer there today because it ends in the middle of the water. It is about loss of life and of livelihood as farmers have lost their land. We need to look at the human aspect of this problem. It affects 40% of the population of our state. It is time for us to have the courage to act and solve this issue. I also serve on the Water Related Topics Overview Committee. For years we have taken the east end discussion out of the realm of possibility. We have always said we will take water out of the west side because of the water quality. Those issues are important. It is only lately that we have begun to talk about taking water out of the east side. When we met in June we discussed the west side and how we could get more water. This bill is intentionally vague and was crafted so we could begin the discussion to move the Water Commission to the east side of the lake. I am perfectly comfortable with the action the Governor has taken. The Governor understands it. The Water Commission understands it. I am comfortable with the direction they have taken. I think we are finally at a point where we can begin to stabilize the lake and begin to draw it down.

**Chairman Lyson:** Do you think we should have an elevation level in this bill?

**Representative Curt Hofstad:** No, I don't. There are a number of considerations when we talk about elevation. The direction that the State Water Commission is taking is moving water off east Devils Lake primarily because of water quality. That divide elevation is 1446.5 or 1447. That would be a natural elevation to draw the lake down to. That would give us an opportunity to operate the lake like a dam. We would have the capacity to draw it down and have some protection and some storage capacity for our downstream interests.

**Senator Burckhard:** Explain to me how the water quality is better on one end of the lake than the other.

**Representative Curt Hofstad:** The lake is stagnant. It has no outlet, so as water drains off of the upper basin and drains into the lake it generally comes from the west side and migrates its way through to the east side of the lake. As the water is held there it evaporates. The solids in the water tend to stay there. If we don't have any inflows to the lake, the lake progressively gets worse and worse. Over the past couple of years as we have gotten more water into the lake, the lake has freshened. It has dramatically freshened itself but it is fresher on the west side of the lake. The farther east you go, the quality of the water degrades.

**Representative Dennis Johnson** from District 15: I agree with what Representative Hofstad said. There was talk of a 2 foot rise in the lake and now, with the amount of snowfall, that has been adjusted to a 3 foot rise. When you add that to the present elevation, it will bring it to within 3 ½ feet of the natural outlet on the east end. We are

pleased with what the Governor and the State Water Commission have done but we do need to do more.

**Senator Triplett:** Is there a need for an extra appropriation? Are we changing the state's policy? Should we as a legislative body be micromanaging the State Water Commission and telling them project by project what to do? You and Representative Hofstad have just told us that the Governor "gets it", the Water Commission "gets it", you are happy with what they are doing, you are happy with how they are proceeding, so why don't we just let them put it in their budget and go with it. I understand this is an emergency but if it is an emergency that is all the more reason that we don't want to get into micromanaging because we are only here 80 days out of every two years. We are not available to handle emergencies. Isn't that what we have the State Water Commission for? For year round, day by day dealing with these issues on our behalf. I am not opposed to what is going on here, I just don't know why we are having this hearing in this committee when we have a Water Commission that's been given the authority to do this work.

**Representative Dennis Johnson:** This just reinforces the work they are doing.

**Senator Triplett:** Did the members of the Water Related Topics Overview Committee take it as their assignment to supplant the Water Commission in terms of decision making about project priority? Is that the tenor of the committee?

**Representative Dennis Johnson:** I have not been part of that committee. Others could answer that question.

**Senator Joan Heckaman,** from District 23 serves on the Water Interim Topics Committee. One of the reasons the committee wanted to bring this bill forward was to give a jump start to the Water Commission. There have been a number of legal barriers to getting going on this and it is an impetus for them to get going on this a little stronger and harder. In addition to Devils Lake, my district has Stump Lake which is very impacted by this. I am interested in some kind of control structure on the Tolna Coulee that will possibly prevent some damage downstream. Stump Lake never gets associated with this and it is a very important part of the whole picture.

**Dennis Miller,** a farmer in the upper basin of Devils Lake, spoke in favor of the bill. Some people claim that the upper basin is drained and that we could store water in the upper basin. He showed a map that represented his crop yield from his harvest generated by the yield monitor on his combine. The field depicted is in the Upper Basin. It is 319 acres of cropland, but he harvested only 200 acres of it. That is only 60%, and of the 200 acres he harvested, 40% had very poor yields. This field could be improved immensely by drainage. This depicted an average field on his farm of 22,700 acres. In order to harvest some of his fields, he had to put railroad ties across the wet spots to get across field. That area could be drained into Devil Lake in 5 minutes if he had that option. For map see Attachment # 3. Roads are under water, it is causing arguments among farmers. We hope something can be done to avert a disaster.

**Mike Dwyer:** representing the ND Water Users who strongly support North Dakota doing everything it can possibly do to address this issue. To address the question Senator

Triplett has been asking, we have a long standing partnership between the Water Commission and the legislature in terms of water infrastructure. When we have had major projects the legislature has taken it upon itself to express intent that we received with whatever project it might be. For example, in 1999 there were 2 major issues that the legislature expressed intent. It wasn't to replace or supplement or take the place of the Water Commission doing what it would have done anyway. We had the Grand Forks flood control project because of the 1997 major disaster in Grand Forks so the legislature expressed intent that we should build this Grand Forks flood control project and the legislature should put money into it. That same session we had the legislature express intent that we should build a Devils Lake outlet, the state outlet that's in place today and we should put money towards it. The legislature has expressed similar intent on the project south of this pipeline project and others. While the Water Commission provides cost sharing for hundreds of projects, for these major infrastructure projects you have expressed some kind of intent that we should move forward. That has never been a conflict of any kind. It has just been we are all together on this. We have to address this problem. Obviously the Water Commission is moving forward and will move forward whether or not we have this bill, but the bill is an attempt for the legislators to say this is a serious problem and we need to do something about it. ND Water User strongly supports North Dakota putting every resource it can to doing whatever possible to solve this problem.

**Chairman Lyson:** With ND Water Users, do you have any research on the cyclic nature of the flooding problem on Devils Lake? The cycle is long, even up to 50 years.

**Mike Dwyer:** There is research and analysis of the cycle available. 1993 was the start of the present wet cycle. We don't know how long it will last. The biggest issue is not so much what elevation we should set for Devils Lake, but can we do something to avoid the catastrophic impacts?

**Senator Triplett:** This bill provides for an east end structure. Does your Water Users group have the same passion for the proposal for the armoring of the Tolna Coulee ?

**Mike Dwyer:** It might be appropriate to amend it to make it even more vague because the Water Commission is looking at 3 or 4 different projects, another west end, a couple east end control structures. That way it would express the intent that we want to direct the Water Commission to do everything it can, considering all options, to address this problem, one of which could include armoring of the Tulna Coulee.

**Senator Triplett:** That has been my point in asking these questions. Why are we picking one project and ordering them to do it when this group of people does not have the expertise to decide. With all due respect to Senator Burckhart, he asked a question about why the lake has cleaner water on one side of the lake than the other. We as a group do not have the expertise to tell the Water Commission which of these projects is the most important, the most pressing, or should be done first. For us to put this kind of detail into state law seems highly inappropriate to me. I like the suggestion about making it more vague, so it will say "We get it that Devils Lake is a real problem and we need to do something about that. You would be in favor of that kind of amendment?"

**Mike Dwyer:** There is nothing wrong with just expressing the intent of the legislature to direct the Water Commission to explore all possible options.

**Ben Varnsen:** resident of Nelson County and serves on the Water Resource District there and is active in three different joint boards that make up eastern North Dakota including the Devils Lake basin. During the interim meetings, it was indicated it is an east end outlet and Devils Lake seemed to be the east end. The natural coulee that some of you were speaking of is in the Stump Lake portion of the Devils Lake chain. I want to clear up for you where that is. Our county was working with the Devils Lake Joint Board. We were looking at getting that Tolna Coulee cleaned. When we were doing so, because we had a vision that when Stump Lake was 1424 we wanted to clean that to 42 or 48 or something that would expedite an emergency that may occur. You try to plan ahead. We were basically shut down in that approach by doing that because as you know this natural coulee has 2000 to 3000 years of beach sediment in it. It isn't a hill or a bunch of clay; it's a natural outlet. In Devils Lake you hear about a closed space and that's because it may not have over flown for 1000 years or 1500 years. We do know that it has over flown 4 or 5 times in the last 3000 years. The reason we have to talk about this and support the legislative vision through your committee on the east end, it seems like it was being jerked around and delayed, "Oh, no; it's like a sacred cow that can't be touched." So we commend you for your research and looking at the east end. Now we are at not 1424 in Russell County and the Stump Lake region, but we are at 1452 with Devils Lake. The dilemma is before us. It may be close to 1455 this spring. At 1455 what happens when we have a natural flow over the top of the sediment? We may have from 6-8 foot waves, moving the south end of the shore 6-8 feet up. We are too late. Devils Lake, Spirit Lake and Minnewaukan are a mess; we are in a very serious dilemma. We are looking at an elevation of 1448 that might be equitable to that Stump Lake can have some kind of a mix or flow into it. We are hoping that the natural outlet is still to be considered.

**Mike McEnroe,** representing the ND chapter of the Wildlife Society: See Attachment #4

**Senator Schneider:** Could you explain why your organization supports the natural elevation of 1458 feet?

**Mike McEnroe:** We support the natural elevation for this outlet structure. The other outlets, one that is in place and two that are being discussed could manage the lake at a different level. Two years ago we would not have supported an east outlet because it was just looked at as aiding in getting rid of the water. We thought there were other outlet solutions. Now that the water has come up, it threatens to wash out that thing. If Tolna Coulee is unarmored and washes, the outflow could be as much as 15,000 cubic feet per second in the Sheyenne. The flood of record in Valley City is 6,000 cubic feet per second. We can't allow 2 ½ times the flood of record to occur in the lower Sheyenne or the Red.

**Senator Triplett:** I need to clarify something about storage. Are you suggesting that all the water that will be running into Devils Lake this spring will not have any additional impact on the perimeter of the lake?

**Mike McEnroe:** Certainly not. For every one foot rise in Devils Lake extends over another 10,000 acres. But 90% of the new flood water would be stored above the water column of the existing lake.

No one presented testimony in opposition to the bill.

**Joe Belford,** Ramsey County Commissioner spoke in a neutral position. I have been working with the flood since it started in 1993. If we get the 3 foot rise, the lake is going to go up to cover 210,000-215,000 acres. The consumption of agricultural land has taken the livelihood away from our area tremendously. I work with our Social Services Board; we are seeing cases where people have lost everything. Also the County Commission: roads are not safe for school buses. Amtrak officials are meeting next week. Three feet would take the Amtrak line off the rail in the Churches Ferry area. Houses have been moved, people have been displaced. The county has borrowed one million dollars to work on roads. The county has cut taxes back to wasteland tax base so farmers don't lose their land. If you haven't lived it, you don't understand it because that's how complex it is.

**Arnie Berg** farms near Devils Lake and serves on the State Water Commission. In 1995 the lake was approaching 1430, we thought that was too high. Now the lake is 1451. We have gone by all the numbers. The last two years we got 900,000 acre feet of inflow into Devils Lake. We got the state outlet going in 2009 at 100 cfs and last year we got it going to 250 cfs, and we got 90,000 acre feet out in the last 2 years. 90,000 acre feet is 10% of the inflows. We simply need more of an outlet. It is costing us \$300,000/month to run those pumps on the west end outlet. We're looking for a gravity solution. 10% or 20% of the inflows is not going to do it.

**Dick Johnson,** Mayor of Devils Lake, spoke in a neutral position. The dam protecting the 7200 residents of Devils Lake has a top elevation of 1460. The elevation of the lake is 1452 and there is a 50/50 chance that we will add 3 feet to that. That presents a big problem. That dam does not meet dam safety requirements. This puts the residents at risk. Commerce, roads, everything has been affected.

**Todd Sando,** Chief Engineer for the State Water Commission spoke in a neutral position. This afternoon is the appropriations hearing on this issue. It is in our budget to address Devils Lake. The forecast for Devils Lake is for an all time record inflow this year. The lake is forecast to rise to 1454.6. If it goes to 1454.6, the lake will increase in surface area 34, 000 acres. The lake would be within 3 ½ feet of overflowing.

We are tackling this on 3 different fronts: 1) Getting water out of the lake by expanding the west end outlet. We expanded the outlet from 100cfs to 250cfs outlet along Peterson Coulee. Our outlet starts at Round Lake just south of Minnewauken. We are looking at expanding it an additional 100 cfs. 2) Building a gravity outlet from the east end where it flows into Stump Lake. We want to be able to blend water from the east end to water from the west end. We want to get additional cfs out of Devils Lake as soon as we can. We are doing the engineering right now on these projects. 3) Build a control structure on Tolna Coulee. If we could get these outlets in place so we would get 500-600 cfs out, we could keep up with the average wet cycle inflows. We could not keep up with a flood of record that is projected for this year. Hopefully addressing the Tolna Coulee would help with the



management of the record flows. With the heavy snowfall this year we are having to go full speed ahead on these plans. We would like to build a control flow coming out of Tolna Coulee. If we would armor Tolna Coulee at 1458, there would be 300,000 acres of land under water. We'd like to build a structure that would still allow Tolna Coulee to do what it naturally would do. This would be good for the people downstream and for the people of Devils Lake

**Senator Triplett:** Would you like this committee to start micromanaging your agency and telling you every session what the priorities are?

**Todd Sando:** I would rather not get in the middle of that.

**Joe Belford:** Ground water is also a very serious problem in Devils Lake.

**Todd Sando:** We are addressing downstream impacts too. For example we provided Valley City with \$15 million to treat water to remove the sulfates. There will be \$15 million for Fargo to deal with sulfates. Money has gone to armor the Sheyenne Diversion Project.

**Chairman Lyson:** Closed the hearing on SB 2054.

# 2011 SENATE STANDING COMMITTEE MINUTES

## Senate Natural Resources Committee

Fort Lincoln Room, State Capitol

SB 2054

1/20/11

13143

☐ Conference Committee

Committee Clerk Signature

*Veronica Spaulding*

### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to authorize construction of a Devils Lake east end flood control structure; to provide an appropriation; and to declare an emergency.

### Minutes:

No Attachments

**Chairman Lyson:** This bill does not have to be there for them to do it. It is a bill to see that the water commission gets something done. It is in the governor's budget to do what this bill says. It will come through the appropriations committee.

**Senator Triplett:** I sat in on the appropriations hearing for the state water commission and heard Mr. Sando's presentation of his budget. There is something like \$120 million in the governor's budget for things relating to Devils Lake. The impression I get is that this came out of the interim committee and was intended to push the water commission to do something. Since that time the water commission is fully engaged and has presented a credible budget and the governor has proposed to fund it at a reasonable level. I feel this bill sends the message that this one particular project is the priority and they have a multi-pronged attack. I move a Do Not Pass.

**Senator Uglem:** Seconded the motion.

**Senator Schneider:** I would oppose this as a matter of tactics. I would like to see Appropriations address this first before we get rid of it.

**Senator Hogue:** I would like to address the question about the legislative body micromanaging the water commission. I feel the legislature may need to use their muscle if the Water Commission has not done their job. I oppose the motion.

### Senator Triplett:

I would agree with you if the water commission had not taken any action. What they have done and what they are proposing is not just the east end flood control structure, but also expanding the existing drain on the west side of Devils Lake and a control structure on the Tolna Coulee. This particular project is one of three and it is not the first priority they have right now. If we pass this bill we may be implying that this one is most important. The

emergency is the other project. It is bad government for us to pick out one project and put this kind of emphasis on it.

**Senator Uglem:** It is my understanding that they want appropriation bills to come through soon. If the rest of the committee feels we need to sit on it awhile, I would have no objection to that.

**Chairman Lyson:** Asked for roll call vote.

**Roll Call Vote:** 1-6-0

**Chairman Lyson:** Do Not Pass Motion has been defeated.

**Senator Hogue:** I make a Do Pass Motion.

**Senator Schneider:** Second

**Senator Triplett:** I move to **table** the motion until the Appropriations Committee has acted on the water commission's budget.

**Senator Schneider:** Second.

The **motion to table** the bill carried by voice vote.

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Natural Resources Committee**  
Fort Lincoln Room, State Capitol

SB 2054  
1/21/11  
13208

☐ Conference Committee

Committee Clerk Signature

*Veronica Spaulding*

**Explanation or reason for introduction of bill/resolution:**

A BILL for an Act to authorize construction of a Devils Lake east end flood control structure; to provide an appropriation; and to declare an emergency.

**Minutes:**

No Attachments.

**Chairman Lyson:** I checked with the people who have been involved with this and they would like us to hold onto until next Thursday. I think they will ask for a Do Not Pass, but they want some power there.

# 2011 SENATE STANDING COMMITTEE MINUTES

## Senate Natural Resources Committee Fort Lincoln Room, State Capitol

SB 2054  
January 28, 2011  
13632

☐ Conference Committee

Committee Clerk Signature

*Veronica Spurling*

### Explanation or reason for introduction of bill/resolution:

A BILL for an Act to authorize construction of a Devils Lake east end flood control structure; to provide an appropriation; and to declare an emergency

### Minutes:

No Attachments

**Chairman Lyson** opened the discussion of SB 2054. He reported backed that he had spoken with the Water Commission, the governor, and Senator Tom Fischer to try to get this worked out. He said to the Water Commission and to the governor that he wanted something in black and white or this bill would be passed. The governor has come out with his proclamation that everything has been moved up two months and that the Water Commission will have the plan done to take care of it. With that, Senator Fischer said kill it. I think we have their attention. Senator Fischer is the one that brought this bill in.

**Senator Hogue:** Made a Motion to take the bill off the table.

**Senator Burckhart:** Seconded the motion.

Motion carried by voice vote.

**Senator Hogue:** made a Do Not Pass motion.

**Senator Burckhart:** Seconded the motion.

**Senator Schneider** expressed concern over killing the bill before the action had been taken by the Water Commission. Due to his caution he will be voting "no" on this Do Not Pass motion.

**Roll Call Vote:** 5-1-1

**Carrier:** Lyson

Date: 1-20-11  
Roll Call Vote # 1

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 2054

Senate Natural Resources Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken: ☐ Do Pass ☒ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Triplett Seconded By Senator Uglem

Senators	Yes	No	Senators	Yes	No
Chairman Lyson		✓	Senator Schneider		✓
Vice-Chair Hogue		✓	Senator Triplett	✓	
Senator Burckhard		✓			
Senator Freborg		✓			
Senator Uglem		✓			

Total (Yes) 1 No 6

Absent 0

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

Date: 1-20-11  
Roll Call Vote # 2

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 2054

Senate Natural Resources Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken: ☒ Do Pass ☐ Do Not Pass ☐ Amended ☐ Adopt Amendment  
☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Senator Hogue Seconded By Senator Schneider

Senators	Yes	No	Senators	Yes	No
Chairman Lyson			Senator Schneider		
Vice-Chair Hogue			Senator Triplett		
Senator Burckhard					
Senator Freborg					
Senator Uglem					

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

Date: 1-20  
Roll Call Vote # 3

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 2054

Senate Natural Resources Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

*motion to Table Voice Vote - Carried*

Motion Made By Senator Triplett Seconded By Senator Schneider

Senators	Yes	No	Senators	Yes	No
Chairman Lyson			Senator Schneider		
Vice-Chair Hogue			Senator Triplett		
Senator Burckhard					
Senator Freborg					
Senator Uglem					

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:



Date: 1-28  
Roll Call Vote # 1

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 2054

Senate Natural Resources Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Hogue Seconded By Burckhart  
off table (carried by voice vote)

Senators	Yes	No	Senators	Yes	No
Chairman Lyson			Senator Schneider		
Vice-Chair Hogue			Senator Triplett		
Senator Burckhard					
Senator Freborg					
Senator Uglem					

Total (Yes) \_\_\_\_\_ No \_\_\_\_\_

Absent \_\_\_\_\_

Floor Assignment \_\_\_\_\_

If the vote is on an amendment, briefly indicate intent:

Date: 1-28  
Roll Call Vote # 2

2011 SENATE STANDING COMMITTEE ROLL CALL VOTES  
BILL/RESOLUTION NO. 2054

Senate Natural Resources Committee

Legislative Council Amendment Number \_\_\_\_\_

Action Taken: ☐ Do Pass ☒ Do Not Pass ☐ Amended ☐ Adopt Amendment  
☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Hogue Seconded By Burckhard

Senators	Yes	No	Senators	Yes	No
Chairman Lyson	✓		Senator Schneider		✓
Vice-Chair Hogue	✓		Senator Triplett		
Senator Burckhard	✓				
Senator Freborg	✓				
Senator Uglem	✓				

Total (Yes) 5 No 1

Absent 1

Floor Assignment Lyson

If the vote is on an amendment, briefly indicate intent:

**REPORT OF STANDING COMMITTEE**

**SB 2054: Natural Resources Committee (Sen. Lyson, Chairman) recommends DO NOT PASS (5 YEAS, 1 NAYS, 1 ABSENT AND NOT VOTING). SB 2054 was placed on the Eleventh order on the calendar.**

2011 TESTIMONY

SB 2054

# WATER-RELATED TOPICS OVERVIEW COMMITTEE

North Dakota Century Code Section 54-35-02.7 directs the Legislative Management, during each interim, to appoint a Water-Related Topics Overview Committee in the same manner as the Legislative Management appoints other interim committees. The committee must meet quarterly and is responsible for legislative overview of water-related topics and related matters and for any necessary discussions with adjacent states on water-related topics. The committee consists of nine members, and the Legislative Management designates the chairman of the committee. The committee operates according to the statutes and procedure governing the operation of other Legislative Management interim committees. Section 54-35-02.7 is effective through November 30, 2013.

Committee members were Senators Tom Fischer (Chairman), Arden C. Anderson, Joan Heckaman, and Gary A. Lee and Representatives Rick Berg, Duane DeKrey, Curt Hofstad, Jon Nelson, and Darrell D. Nottestad.

The committee submitted this report to the Legislative Management at the biennial meeting of the Legislative Management in November 2010. The Legislative Management accepted the report for submission to the 62<sup>nd</sup> Legislative Assembly.

## WATER IN NORTH DAKOTA

North Dakota is located in a region of central North America that bridges the divide between "too wet" and "too dry." The 100<sup>th</sup> meridian line of longitude roughly splits the state in half. East of this line, there is generally more precipitation in the form of snow and rain than west of the 100<sup>th</sup> meridian. North Dakota's extreme climate is largely driven by air masses from three areas--the Rocky Mountains, where the mountains block much of the Pacific moisture; the polar region, which brings much of the state's cold weather; and the Gulf of Mexico, which brings much of the state's precipitation. Several studies of lake sediment in North Dakota have demonstrated that the state is subject to long-term climatic variation, alternating between extended wet and dry cycles.

### Surface Water Resources

North Dakota is separated into two major drainage basins by a continental divide running from the northwest to the southeast corners of the state. The northeastern portion of the state falls generally within the Hudson Bay drainage, while the southwestern part is drained by the Missouri River to the Gulf of Mexico. For planning purposes, the State Water Commission has divided the state into five major watersheds--the Missouri River Basin, James River Basin, Souris River Basin, Red River Basin, and Devils Lake Basin.

The Missouri River drainage system includes the major subbasins of the Missouri and James Rivers. The tributaries on the south and west sides of the Missouri River typically occupy small but sharply defined valleys. This area is well-drained with few natural lakes. The topography is characterized by rolling, hilly plains with

numerous flat-topped, steep-sided buttes. The most prominent are located in the Badlands along the Little Missouri River. Areas east of the Missouri River include glaciated areas that are characterized by many small lakes and wetlands.

The James River, which is a major tributary of the Missouri River, begins in the drift prairie of central North Dakota but does not join the Missouri River until it reaches Yankton, South Dakota. The James River system is poorly to moderately drained with a large number of wetlands.

The Hudson Bay drainage includes the Souris River and Red River systems and the Devils Lake Basin. The Souris River (officially designated the Mouse River by Section 61-01-24) originates in Saskatchewan and then loops through North Dakota before it reenters Canada west of the Turtle Mountains. The topography is varied within the basin with hilly terrain in the southwest, a flat glacial Souris Lake plain in the east, and forested hills of the Turtle Mountains in the northeast.

The Red River winds northward almost 400 miles, forming the border between North Dakota and Minnesota. From the international boundary with Canada, the Red River flows another 155 river miles to Lake Winnipeg in Manitoba. The valley through which the river flows is the former bed of glacial Lake Agassiz. The ancient lakebed is extremely flat and is home to some of the most productive farmland in the world.

The Devils Lake Basin is currently a noncontributing subbasin of the Red River Basin. The drainage system is formed by chains of waterways and connecting lakes, many of which ultimately terminate in Devils Lake itself.

The flow in all North Dakota streams and rivers is seasonably variable. Runoff is greatest in early spring as a result of snowmelt water and spring rainfall. Many smaller streams experience little or no flow for extended periods during summer months, although dramatic flow variations in river discharges can be caused by changes in weather patterns, isolated storm events, evaporation rates, and snowpack conditions.

According to information in North Dakota's assessment database provided by the State Department of Health to the United States Environmental Protection Agency, there are 138 manmade reservoirs and 109 natural lakes in North Dakota. Reservoirs comprise approximately 71 percent of North Dakota's total lake and reservoir surface acres, accounting for a surface area of 543,156 acres. Of this total, 480,731 acres, or 62 percent, of the state's entire lake and reservoir acres are contained within the two main stem Missouri River reservoirs--Lake Sakakawea and Lake Oahe. The remaining 136 reservoirs share 62,425 acres with an average surface area of 459 acres.

The 109 natural lakes in North Dakota cover 218,616 acres with approximately 132,246 acres, or 60 percent, attributed to Devils Lake at an elevation of 1,446 feet mean sea level. The remaining 108 lakes average 800 acres with one-half being smaller than 250 acres.

There is an estimated 59,607 miles of rivers and streams in the state. These estimates are based on rivers and streams entered into the assessment base.

### **Ground Water Resources**

Ground water underlies the land surface throughout the state. Ground water generally occurs in two major types of rock--unconsolidated deposits and bedrock. Unconsolidated deposits are loose beds of gravel, sand, silt, or clay of glacial origin. Bedrock consists primarily of shale and sandstone.

Aquifers of glacial origin are generally more productive to wells than aquifers found in the underlying bedrock. Bedrock aquifers underlie the entire state and tend to be more continuous and widespread than aquifers in the unconsolidated deposits. It is estimated that 60 million acre-feet of water is stored in the major unconsolidated aquifers in the state. The amount of water available in the major bedrock aquifers is estimated to be approximately 435 million acre-feet.

### **Water Permitting**

North Dakota follows the prior appropriation doctrine for water appropriation. Prior appropriation also is known as the "first in time, first in right" appropriation system with the first entity to put water to a beneficial use acquiring the right to use the water over later or junior water appropriators.

When there are multiple water permit applications for water from the same source and that source is insufficient to supply all the applications received by the State Engineer within a 90-day time period, the following order is used to determine priority, from first to last: domestic; municipal; livestock; irrigation; industrial; and fish, wildlife, and recreation. In 2008 there were a total of 3,628 water use permits in North Dakota. Irrigation represents the largest proportion, 62 percent; followed distantly by industrial, 9 percent; fish and wildlife, 8 percent; municipal, 8 percent; recreation, 5 percent; rural water, 3 percent; stock, 2 percent; and flood control, 1 percent; with the remaining comprising less than 1 percent each.

### **Water Project Funding**

North Dakota funds the majority of its water projects through the State Water Commission. Funding funneled through the State Water Commission for water development has come from several sources, including the state's general fund; the Dakota Water Resources Act; the municipal, rural, and industrial water supply program; the resources trust fund; and the water development trust fund. In addition to these sources, the State Water Commission is authorized to issue revenue bonds for water projects, and the commission has shared control of the drinking water state revolving loan fund.

### **Municipal, Rural, and Industrial Water Supply Program**

A major source of grant funding for water supply development in North Dakota is the municipal, rural, and

industrial water supply program. This program's funding was authorized by Congress through the Garrison Diversion Unit Reformulation Act of 1986. Federal funding channels through the Bureau of Reclamation to the state's federal fiscal agent--the Garrison Diversion Conservancy District. This program is administered jointly by the conservancy district and the State Water Commission. The Rural Development Agency provides funding through the United States Department of Agriculture for a majority of loans to cover the local share for municipal, rural, and industrial water supply projects.

The 1986 Garrison Diversion Unit Reformulation Act authorized a federal municipal, rural, and industrial water supply grant program of \$200 million. This funding has been exhausted. Additional federal funding was authorized for the municipal, rural, and industrial water supply program with passage of the Dakota Water Resources Act of 2000. That Act provided resources for general municipal, rural, and industrial water supply projects, the Northwest Area Water Supply Project, the Southwest Pipeline Project, and a project to address water supply issues in the Red River Valley. An additional \$600 million, indexed for inflation, was authorized which includes a \$200 million grant for state municipal, rural, and industrial water supply programs; \$200 million for North Dakota tribal municipal, rural, and industrial water supply programs; and a \$200 million loan for the Red River Valley Water Supply Project.

Annual municipal, rural, and industrial water supply funding is dependent upon congressional appropriation. As of September 2008, \$228 million in federal funds had been approved for North Dakota's municipal, rural, and industrial water supply program with \$30 million for federal fiscal years 2007 and 2008.

### **Resources Trust Fund**

The resources trust fund was created pursuant to passage of measure No. 6 in the November 1980 general election. Measure No. 6 created a 6.5 percent oil extraction tax, 10 percent of which was to be allocated to the resources trust fund. In June 1990 the Constitution of North Dakota was amended to establish the resources trust fund as a constitutional trust fund and provide that the principal and income of the fund could be spent only upon legislative appropriations for constructing water-related projects, including rural water systems, and energy conservation programs. In November 1994 the voters of North Dakota approved a constitutional amendment, which is now Article X, Section 24, of the Constitution of North Dakota, to provide that 20 percent of oil extraction taxes be allocated as follows: 50 percent to the common schools trust fund and 50 percent to the foundation aid stabilization fund. Section 57-51.1-07 provides that oil extraction tax revenues be distributed as follows: 20 percent to the resources trust fund; 20 percent allocated as provided in Article X, Section 24, of the Constitution of North Dakota; and 60 percent to the general fund.

### **Water Development Trust Fund**

Section 54-27-25 establishes a water development trust fund to be used for the long-term water development and management needs of the state. This section creates a tobacco settlement trust fund for the deposit of all tobacco settlement money obtained by the state. Money in the fund must be transferred within 30 days of its deposit in the fund with 10 percent going to the community health trust fund, 45 percent to the common schools trust fund, and 45 percent to the water development trust fund. In the November 2008 general election, voters approved initiated measure No. 3 that amended Section 54-27-25 to establish a tobacco prevention and control trust fund. The measure provides for a portion of tobacco settlement funds received by the state to be deposited in this new fund rather than the entire amount in the tobacco settlement trust fund. Tobacco settlement money received under subsection IX(c)(1) of the Master Settlement Agreement, which continues in perpetuity, will continue to be deposited into the tobacco settlement trust fund and allocated 10 percent to the community health trust fund, 45 percent to the common schools trust fund, and 45 percent to the water development trust fund. Beginning in 2009, tobacco settlement money received under subsection IX(c)(2) of the Master Settlement Agreement relating to strategic contribution payments will be deposited in the newly created tobacco prevention and control trust fund. The measure also provides that if in any biennium the tobacco prevention and control trust fund does not have adequate funding for the comprehensive plan, money may be transferred from the water development trust fund to the tobacco prevention and control trust fund in an amount determined necessary by the Tobacco Prevention and Control Executive Committee to adequately provide for the comprehensive plan. In 2009 the Legislative Assembly provided that any money deposited in the water development trust fund under Section 54-27-25 may be spent only pursuant to legislative appropriation.

The tobacco settlement payment received by the state in April 2008 was the first payment that included funds relating to subsection IX(c)(2) of the agreement. This payment was received before the approval of the initiated measure and was deposited in the tobacco settlement trust fund and disbursed as provided for in Section 54-27-25 before amendment by the measure. Future tobacco settlement payments will be deposited in the tobacco settlement trust fund and the tobacco prevention and control trust fund pursuant to Section 54-27-25 as amended by the measure.

Section 61-02.1-04 provides that the principal and interest on bonds issued for flood control projects, the Southwest Pipeline Project, and an outlet to Devils Lake must be repaid with money appropriated from the water development trust fund.

### **Bonding**

Section 61-02-46 authorizes the State Water Commission to issue revenue bonds of up to \$2 million per project. The Legislative Assembly must authorize revenue bond authority beyond \$2 million per project. In

1991 the Legislative Assembly authorized full revenue bond authority for the Northwest Area Water Supply Project. In 1997 the Legislative Assembly authorized \$15 million of revenue bonds for the Southwest Pipeline Project. In 2001 the Legislative Assembly raised the Southwest Pipeline Project bonding authority to \$25 million. As of June 30, 2008, the State Water Commission has outstanding bonds totaling \$18.7 million for the Southwest Pipeline Project. There are no outstanding bonds for the Northwest Area Water Supply Project.

In 1999 the State Water Commission was authorized to issue up to \$84.8 million in appropriation bonds under the provisions of Senate Bill No. 2188. The Legislative Assembly's intent was to partially fund flood control projects at Grand Forks, Devils Lake, Wahpeton, and Grafton and to continue funding for the Southwest Pipeline Project. In March 2000 the State Water Commission issued bonds generating \$27.5 million, thus reducing available bonding authority to \$57.3 million. Recognizing the need for water development projects in addition to those identified in Senate Bill No. 2188, the 2003 Legislative Assembly allowed authority for the unissued \$57.3 million to expire but then authorized \$60 million of bonding authority for statewide water development projects. In June 2005 the State Water Commission issued bonds generating \$60 million. As of June 30, 2008, the State Water Commission has outstanding bonds totaling \$87.7 million for other statewide water projects.

Because tobacco settlement dollars are not projected to remain uniform each year, the State Water Commission has established a repayment schedule to correspond with the projected tobacco receipts. Although repayment amounts are based on the projected receipts, the scheduled repayments must be made regardless of the actual receipts. Payments for existing water development and bonds will be \$16.9 million for the 2009-11 biennium; however, funds must be available to make the August 1, 2011, payment. This payment occurs the second month of the new biennium before the receipt of any of that biennium's tobacco settlement dollars. That repayment will be \$8.4 million.

### **Drinking Water State Revolving Loan Fund**

An additional source of funding for water supply development projects is the drinking water state revolving loan fund. Under this program, funding is distributed in the form of a loan program through the Environmental Protection Agency and administered by the State Department of Health. The fund provides below market rate interest loans of 3 percent to public water systems for capital improvements aimed at increasing public health protection and compliance under the federal Safe Drinking Water Act.

The State Water Commission's involvement with the fund is twofold. First, the State Department of Health must administer and disburse funds with the approval of the State Water Commission. Second, the State Department of Health must establish assistance priorities and expend grant funds pursuant to the priority

list for the drinking water treatment revolving loan fund after consulting with and obtaining the commission's approval. The process of prioritizing newer modified projects is completed on an annual basis. Each year the State Department of Health provides an intended use plan, which contains a comprehensive project priority list and a fundable project list. The 2008 comprehensive project priority list includes 91 projects with a cumulative total project funding need of \$326.7 million. The funding list of 18 projects includes \$36.4 million in loans from the total federal grants of \$100 million for fiscal years 1997 through 2008. Available funding for the program for 2009 is anticipated to be approximately \$8 million.

## **GARRISON DIVERSION CONSERVANCY DISTRICT**

### **The Pick-Sloan Missouri Basin Program**

On December 22, 1944, the United States Congress authorized the Flood Control Act of 1944, later renamed the Pick-Sloan Missouri Basin program. The primary purpose of the Pick-Sloan Missouri Basin program was for flood control, navigation, irrigation, and hydropower which would be facilitated by the construction of dams on the main stem of the Missouri River. These dams include Fort Peck, Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point.

Under the plan, North Dakota was originally to receive its irrigation from water diverted from the Fort Peck Dam in eastern Montana. Originally known as the "Missouri-Souris Project," the project included 1.275 million acres of irrigation.

Between 1944 and 1965, soil surveys and studies were conducted to assess the feasibility of irrigating the 1.275 million acres originally planned for North Dakota. The studies indicated that the soil in northwestern North Dakota was not suitable for irrigation according to federal irrigation standards. Drainage problems caused by the unusual high density of glacial subsoil was a primary factor. As a result, the Bureau of Reclamation revised the diversion plan proposing instead to take water from the Garrison Dam and Reservoir and irrigate other lands to the east. With the new name "Garrison Diversion," the Bureau of Reclamation 1957 feasibility study on the redesigned project recommended irrigation of 1.007 million acres and other water development in central and eastern North Dakota.

### **Garrison Diversion Unit**

Because of changes to the original plan and the language in the 1964 appropriations act requiring specific reauthorization for all units of the Pick-Sloan Missouri Basin program, the Bureau of Reclamation returned to Congress for reauthorization. During the process of reauthorization, supporters of the project pointed to the many benefits for North Dakota and the need to compensate the state for land inundated by the construction of the Garrison Dam and Reservoir. Others in Congress criticized the large cost of even the scaled-down project, the conflict with federal farm policies, and the relatively small amount of money to be repaid by water users.

On August 5, 1965, Congress addressed these concerns by enacting legislation for the Garrison Diversion Unit. The primary focus of the plan was to include in the initial stage municipal and industrial water fish and wildlife development, recreation, and flood control along with irrigation of 250,000 acres. Between 1968 and 1984, construction and preparatory activities progressed on many features.

### **Garrison Diversion Unit Commission**

Even as construction advanced on Garrison Diversion throughout the 1970s and 1980s, it became increasingly apparent that major issues, such as the environment, acquisition of land, economics of irrigation, and Canadian concerns about water flowing from the Missouri River Basin into the Hudson Bay Basin, would require reformulation of the project if it were to be completed. In 1984 construction was halted and a high-level commission was appointed by the Secretary of the Interior to study and recommend a change in direction.

The Garrison Diversion Unit Commission, in its final report issued December 20, 1984, recommended development of a Garrison Diversion Unit significantly different from the project described in the 1957 feasibility report and the project authorized in 1965.

The major recommendations were:

- Irrigation of 130,940 acres of land, none of which drains to the Hudson Bay. Of these, 17,580 acres would be located on the Fort Berthold and Standing Rock Indian Reservations.
- A grant program of \$200 million to facilitate municipal, rural, and industrial water service for many as 130 towns and cities, rural areas, and three Indian reservations.
- A water treatment facility to treat Missouri River water that would be transferred into the Hudson Bay drainage via the Sheyenne River and then the Red River. This would provide municipal, rural, and industrial water for Fargo, Grand Forks, and other cities and rural systems. The cost of building and operating the treatment plant was declared nonreimbursable.
- Mitigation of wildlife impacts on a new basin with specific wildlife features authorized beyond the mitigation requirements.
- Recreation development on a 50-50 cost-share basis.
- The cost of the commission plan was estimated at a total of \$1.12 billion in capital costs, including expenditures to date, and \$15.8 million in annual operation, maintenance, and replacement costs. Of major concern to North Dakota and the Garrison Diversion Conservancy District was the proposed elimination of the Lonetree Dam and Reservoir and replacement with the Sykeston Canal. The Lonetree Reservoir was to be the project's principal regulating reservoir; without future expansion was limited. The Lonetree Dam and Reservoir remained an authorized feature of the commission plan, but construction funds may only be requested after a finding of need by the



Secretary of the Interior and satisfactory consultation with the government of Canada.

### **Garrison Diversion Unit Reformulation Act**

As a provision of the fiscal year 1986 appropriation, Congress stipulated that new construction contracts not be awarded or additional land acquired unless the project was reauthorized by March 31, 1986. The state and the Garrison Diversion Conservancy District subsequently elected to support reauthorization of the project. The Garrison Diversion Unit Reformulation Act of 1986 was signed into law May 12, 1986, to authorize the recommendations of the Garrison Diversion Unit Commission's final report. In conjunction with the new Act, a "statement of principles" was signed by all the primary stakeholders in the previous project conflicts.

Following the 1986 Act, activities began on municipal, rural, and industrial water supply projects; mitigation of wildlife habitat; and construction continued on some of the water delivery features. The continuing evaluation of a smaller Lonetree Reservoir as a project feature and further analysis of the recommended Sykeston Canal deferred progress with construction of the principal water delivery facilities. In 1990 the President failed to include any funding for the Garrison Diversion Project in his submitted fiscal year 1991 budget.

In connection with the administration's decision to terminate Garrison Diversion funding in fiscal year 1991, the Secretary of the Interior established a task group to develop a policy on support for future funding of the authorized project. The task group's decision was to continue funding only those features of the reformulated project which are consistent with the contemporary water needs, national priorities, and the history of Garrison Diversion, but not to fund features which would be used for mitigation. The recommendations also included continuation of the municipal, rural, and industrial water supply grant program; Indian municipal, rural, and industrial water supply programs; irrigation development on 17,580 acres to include two Indian reservations; continued operation of the Oakes Test Area research activities; recreation, fish, wildlife mitigation, and enhancement initiatives; and a minimum level of operation and maintenance on the already constructed main supply system facilities. Funding for these features would be considered by the administration within the context of national priorities.

### **Collaborative Process**

In November 1993, the North Dakota Congressional Delegation and the Governor requested that the Bureau of Reclamation initiate a collaborative process to find a consensus plan that would meet the contemporary water development and stewardship needs of the state. The collaborative process included representatives of the Standing Rock Sioux, Devils Lake Sioux, Three Affiliated Tribes, the Congressional Delegation offices, and the Governor's office. The Bureau of Reclamation provided technical and administrative support. Under the guidance of the collaborative group, the bureau began a series of studies for the water supply needs of the state. In 1995 the North Dakota Legislative Assembly repealed

a portion of the state laws dealing with the preservation of wetlands. The National Wildlife Federation interpreted this action as withdrawal of state support for the statement of principles and withdrew from the collaborative process.

### **Garrison Diversion Today**

Garrison Diversion has turned part of its focus toward supplying the Red River Valley with a reliable supply of quality drinking water. Research suggests that 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 maybe 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 Red River Valley Water Supply Project. 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.

Also included in the Dakota Water Resources Act were appropriations for a \$200 million increase in a municipal, industrial, and rural water supply fund; \$200 million to meet Indian water needs; and \$32.5 million for environmental and recreational needs.

### **RED RIVER VALLEY WATER SUPPLY PROJECT**

The Dakota Water Resources Act of 2000 authorized the Red River Valley Water Supply Project 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 designated the Garrison Diversion Conservancy District to represent the state in the Red River Valley Water Supply Project. 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, 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 federally 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 incurs 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, 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.

### **GARRISON DIVERSION PROJECT Red River Valley Water Supply Project**

The committee reviewed the history of the Garrison Diversion Project and the status of the Red River Valley Water Supply Project. Concerning the Red River Valley Water Supply Project, the committee learned that the Garrison Diversion Conservancy District submitted a comprehensive report to Congress in December 2008. The report identified selected alternatives, summarized the environmental impact statement, outlined effects on Minnesota-Missouri states, and indicated compliance with the Boundary Waters Treaty of 1909. The selected alternative to deliver water to the Red River Valley is the Garrison Diversion import to the Sheyenne River alternative. The Garrison Diversion Conservancy District

is obtaining right of way for the selected alternative, performing permitting and environmental services, developing an operational plan, and working on the preliminary design. The next steps are to obtain a record of decision and congressional authorization for use of Missouri River water. In the future, a master repayment contract must be developed as well as a Red River Valley Water Supply Project construction contract. Representatives of the Garrison Diversion Conservancy District reported that as of December 7, 2009, \$21,416,987 has been expended on the Red River Valley Water Supply Project. These funds include \$17,217,560 in reclamation funds, \$2,223,428 in state funds, \$1,302,343 in conservancy district funds, and \$673,657 in Lake Agassiz water authority funds.

### **Municipal, Rural, and Industrial Water Supply Program**

The committee reviewed the municipal, rural, and industrial water supply program. As of November 30, 2009, \$178,462,347 in funds have been approved for the program. As of that date, \$18,774,659 in state grant funds remain, and \$75,079,427 in federal municipal, rural, and industrial water supply program funding remain. Representatives of the Garrison Diversion Conservancy District briefed the committee on current municipal, rural, and industrial water supply program projects. These projects include the All Seasons Water Users District System I (Upham Water Supply), the City of Garrison Water System, the North Central Rural Water Consortium, the Northwest Area Water Supply Project, the South Central Regional Water System, the Southwest Pipeline Project, the Traill Rural Water District Regional Water Supply Project, the Tri-County Water District (Lakota Water Supply) Project, and the Walsh Rural Water District Water Supply Project. The committee also reviewed all applications that have been submitted for municipal, rural, and industrial water supply program funds and projects that have been approved for funding.

### **STATE WATER COMMISSION Testimony and Committee Activities**

The committee reviewed the operations of the State Water Commission and State Engineer's office. The State Engineer's office was created in 1905 to regulate and administer matters concerning the allocation of North Dakota's water resources. The State Water Commission was created in 1937 in response to the 1930s drought and for the specific purpose of fostering and promoting water resource development throughout the state. The State Engineer's office is a regulatory agency that regulates drainage, water rights, and the appropriation of water while water development is promoted by the State Water Commission.

The committee reviewed specific water projects. The committee learned the current primary project of the State Water Commission is Fargo flood control. The Fargo flood control project is a United States Army Corps of Engineers project to develop a plan for flood damage reduction in the Fargo-Moorhead metropolitan area. The State Water Commission is a cooperating

agency in the environmental impact statement and National Environmental Policy Act process. The Fargo flood control project consists of two projects--a state flood control project in south Fargo and a main project in the center and northern portions of the city. The committee learned the United States Army Corps of Engineers has estimated the total cost of Fargo flood control at between \$650 million and \$1 billion, depending on which alternative is selected.

The committee learned the State Water Commission has committed \$74 million--\$45 million during the 2009-11 biennium--for the south Fargo flood control project. In addition, the Legislative Assembly has appropriated \$500,000 to the State Water Commission to conduct a Red River Basin long-term solutions study. This study will consist of three phases--inventory of potential solutions, an analysis of solutions and how the solutions might be integrated, and development of an implementation strategy.

The committee reviewed State Water Commission expenditures for the 2007-09 biennium from the resources trust fund and municipal, rural, and industrial water supply funds. There are three projects owned by the state of North Dakota--the Northwest Area Water Supply Project, the Southwest Pipeline Project, and the Devils Lake Outlet Project. During the 2007-09 biennium, \$26,823,628 was expended on the Northwest Area Water Supply Project, including \$9,895,651 from the City of Minot and \$14,521,638 in federal funds. A total of \$15,905,336 was expended on the Southwest Pipeline Project during this period, of which \$6,650,910 was federal funds and \$3,005,000 was bond proceeds. Expenditures on the Devils Lake Outlet Project during this period were \$1,357,552, including \$51,837 from political subdivisions. Total State Water Commission project expenditures during the 2007-09 biennium were \$64,086,525. The committee also reviewed the resources trust fund, the contract fund, and the list of State Water Commission anticipated projects for the 2009-11 biennium.

### **2009 State Water Management Plan**

The committee reviewed the *2009 State Water Management Plan*. The State Water Commission is required by Sections 61-01-26 and 61-02-14 to develop and maintain a comprehensive water plan for the sound management of North Dakota's water resources. Over the years, the commission has developed numerous state water management plans to identify statewide water resource management and development project needs and funding required for implementation. The most recent comprehensive plan prior to 2009 was completed in 1999.

Since 1999 the state water management plan has been updated with supplements every biennium with water development reports published prior to the Legislative Assemblies. Reports serve to assist the Legislative Assembly in the decisionmaking process in appropriating funds for water management and development.

The purpose of the *2009 State Water Management Plan* is to provide information regarding current and

projected water use, identify areas where water is generally available for new beneficial uses, identify goals and objectives for water resource management and development, identify potential water resource management and development projects and programs, provide current information regarding North Dakota's revenue sources for water resource management and development, serve as a formal request for funding from the resources trust fund, and broadly identify water resource management and development opportunities and challenges as well as recommendations to address them. One of the most important components of this plan is to identify where water may be available for new development and use. The State Engineer appropriates water for beneficial use in North Dakota. Some aquifers and streams in North Dakota are on the brink of becoming fully appropriated, meaning that much of the state's available water resources have been permitted for municipal, agricultural, industrial, and recreational purposes. The *2009 State Water Management Plan* provides general information and assists development interests in identifying potential water uses when locating facilities. The plan also assists development interests in the very early planning stages of project development, thus avoiding unnecessary expense and delay in project implementation.

The *2009 State Water Management Plan* identifies six goals to more clearly define where North Dakota's long-term water management and development efforts will be directed in the future. These goals are to:

- Regulate the use of water resources for the future welfare and prosperity of the people of North Dakota;
- Develop water resources for the future welfare and prosperity of the people of North Dakota;
- Manage water resources for the future welfare and prosperity of the people of North Dakota;
- Educate the public regarding the nature and occurrence of North Dakota's water resources;
- Collect, manage, and distribute information to facilitate improved management of North Dakota's water resources; and
- Conduct research into the processes affecting the hydrologic cycle to improve the management of North Dakota's water resources.

The plan identifies North Dakota's water resources, contains a vision for the 21<sup>st</sup> century, and reviews special water topics. The plan identifies several recommendations for future study intended to serve as a starting point in addressing long-term water management issues. These water management recommendations include:

- Funds must be secured to address dam safety issues and dam repairs.
- Drought planning, including monitoring, impact assessment, and mitigation planning efforts, must be implemented.
- Reliable quality water to eastern North Dakota must be provided during drought conditions.
- Conservation measures must be evaluated and implemented so that water requirements for all water users and interests can be met.

- The State Engineer should continue to study and collect water resource data that is essential in identifying available water sources for agricultural and industrial users, for meeting municipal demands, and for fish and wildlife and recreation purposes.
- The state must continue to protect and preserve North Dakota's right to Missouri River water now and for future generations.
- Climate change and the possible effect on the state's water resources is an unknown factor that should be monitored and assessed closely in the future.
- The state must continue to work to address the flooding crisis involving the rise of Devils Lake.
- Several counties do not have the revenue or capability of raising revenue to meet their local cost-share requirements in funding much-needed water development projects, and the commission should study the ability-to-pay concept to determine if a more equitable cost-share policy may be developed and implemented for local entities that have difficulty in complying with their cost-share requirement based upon current policy.
- New partnerships involving cooperative and collaborative efforts should be sought to resolve water management problems and issues.
- Water resource managers at all levels should be encouraged to partner in efforts not only to educate the public about the potential problems involving aquatic nuisance species but to monitor and mitigate for the occurrence of aquatic nuisance species in North Dakota's waters.
- The commission should continue to educate potential future industrial water users about the quality and availability of North Dakota's surface and ground water resources.
- In response to declining water levels in the Fox Hills aquifer, the State Engineer should continue to direct large-scale ground water diversions to other sources.
- The summer advanced watershed applications workshop should be designed through Project WET to provide up to 20 secondary educators per year the tools they would need to connect their classroom students with practicing watershed scientists and scientific methods and techniques.
- A youth technology and career exploration program should be designed through Project WET for a select group of grades 9 through 12 students whose teachers have been involved in the summer advanced watershed applications workshop.
- Project WET, with a cooperative effort of many organizations, associations, and government agencies, should develop water and natural resource education programs that involve individuals in their own communities.

### ***North Dakota Sovereign Land Management Plan***

The committee reviewed the *North Dakota Sovereign Land Management Plan*. The plan was published in January 2007. North Dakota's sovereign lands are those areas, including beds and islands, lying within 1 ordinary high watermark of navigable lakes and streams. The state plays an important role in the management of sovereign land through the State Engineer, who is responsible for administering the state's nonmineral interests in North Dakota's sovereign land.

The goal of the State Engineer in managing this vital resource is to manage, operate, and supervise North Dakota sovereign land for multiple uses that are consistent with the public trust doctrine and are in the best interest of present and future generations.

On January 3, 2005, the Attorney General issued an opinion regarding the ability of land developers to construct wildlife habitat on sovereign land to satisfy federal mitigation requirements. In that opinion, the State Engineer was advised to issue sovereign land permits only when they are consistent with a comprehensive sovereign land management plan. The State Engineer's authority to manage sovereign land is derived from Section 61-33-05, which states the State Engineer is to manage, operate, and supervise sovereign land. The State Engineer has adopted administrative rules to create a framework to follow legislative directives. However, the Attorney General has indicated management of sovereign land requires the State Engineer to incorporate the public trust doctrine into any management scheme. Specifically, the State Engineer is to create a plan pursuant to the public trust doctrine to manage sovereign land. In response to this directive, the State Engineer has developed the sovereign land management plan to continue to fulfill the State Engineer's duty to manage sovereign land pursuant to the public trust doctrine, satisfy requirements of opinions issued by the Attorney General, provide approved consistency in the management of sovereign land and administration of regulations, serve as a complement to administrative law concerning sovereign land management, and generally improve management of the state's sovereign land for present and future generations. The committee reviewed the sovereign land management plan recommendations and action strategies and advancements that have occurred as a result of the recommendations included in the plan.

### **SOUTHWEST PIPELINE PROJECT**

The Southwest Pipeline Project is a state-owned project administered by the State Water Commission and operated and maintained by the Southwest Water Authority. The Southwest Pipeline Project transports raw water from Lake Sakakawea to Dickinson where it is treated and delivered to customers throughout southwest North Dakota and Perkins County, South Dakota. In 1983 the Legislative Assembly authorized the State Water Commission to construct and operate the Southwest Pipeline Project. Construction of the project began on the main transmission lines in Mercer County in 1986. In October 1991, water delivery began to Dickinson. The Legislative Assembly established the

Southwest Water Authority in 1991 to manage, operate, and maintain the Southwest Pipeline Project. The authority is governed by a board of directors. Today the pipeline serves 28 communities, more than 4,000 rural service locations, 14 small businesses, and 15 raw water customers.

The committee learned construction is substantially complete for Phase 3 of the Medora-Beach regional service area. Recent construction included providing rural service to residents in the north Fairfield service area, the Grassy Butte service area, as well as the west Killdeer Mountain pocket in northern Dunn County. The Fairfield Reservoir, a 197,300-gallon potable water reservoir, located northwest of Fairfield, was placed into service in 2009.

With the completion of the Medora-Beach regional service area, the focus for the Southwest Pipeline Project has turned to completion of the Oliver, Mercer, and north Dunn regional service area. Construction of the main transmission line from north of Zap to Hazen is underway.

To date, \$177.48 million has been expended on the Southwest Pipeline Project. Of this total, \$54.83 million is from the resources trust fund; \$73.92 million is from municipal, rural, and industrial water supply funds; \$.93 million is from the Natural Resources Conservation Service; \$7.04 million is from revenue bond proceeds; \$15.70 million is from United States Department of Agriculture Rural Development loans; \$15.09 million is from United States Department of Agriculture Rural Development grants; \$1.5 million is from the drinking water state revolving loan fund; and \$8.47 million is from the water development trust fund.

## DEVILS LAKE

The Devils Lake Basin is a 3,810-square-mile subbasin of the Red River of the North. At current water levels, the lake itself has no natural outlet. A natural surface water connection from the northeast edge of the Devils Lake Basin boundary to the Red River Basin has been documented during several years since 1997. On April 2, 2010, Devils Lake reached a new record level, surpassing the previous record of 1,450.73 feet mean sea level, set on June 22, 2009. Since that time, the lake has continued to rise to 1,451.71 feet mean sea level. Devils Lake naturally spills into Stump Lake at 1,446.5 feet mean sea level. Since water began trickling into Stump Lake in 1999, Stump Lake has been filling and has become part of Devils Lake--rising 43.5 feet in the process. From its lowest 1993 elevation of 1,422.62 feet mean sea level to its end of April 2010 elevation of 1,451.5 feet mean sea level, Devils Lake has risen 28.88 feet.

Devils Lake naturally overflows into the Sheyenne River at 1,458.0 feet mean sea level. The Sheyenne River is a tributary of the Red River of the North, which flows into Canada. Since glaciation, Devils Lake has been fluctuating from overflowing to dry. This variability is the normal condition of the lake reflecting climate changes. Devils Lake has reached its spill elevation of 1,458.0 feet mean sea level and overflowed into the Sheyenne and Red Rivers at least twice during the past

4,000 years. The last Devils Lake spill into the Sheyenne River occurred less than 2,000 years ago. At its spill elevation, Devils Lake will cover more than 261,000 acres. In March 1993, Devils Lake had a surface area of 44,230 acres. As of April 30, 2010, Devils Lake covered approximately 177,100 acres, or about 208 square miles. During that same period, the volume of water in Devils Lake has grown more than six times.

In response to forecasted lake levels in 2009, the United States Army Corps of Engineers began working on another levy raise and extension for the City of Devils Lake. The cost of this project is estimated at approximately \$100 million. The City of Minnewaukan continues to be threatened by Devils Lake. The community's school, which is currently at or above capacity, is at an elevation of 1,458 feet mean sea level, but the city's sewer, water lines, and water tower are expected to start experiencing problems with ground water and soil saturation at the lake's current elevation.

The state completed construction of an outlet to the Sheyenne River in the summer of 2005. The original outlet pumps were designed for a maximum operating capacity of 100 cubic feet per second. Modifications constructed in early 2010 increased that capacity to 250 cubic feet per second. Representatives of the Devils Lake Joint Water Resource Board and State Water Commission testified that the flooding of Devils Lake has cost approximately \$655,978,408. These costs include \$341,702,941 in transportation infrastructure costs, \$172,987,729 in construction costs of the Devils Lake levee, \$44.4 million in Federal Emergency Management Agency costs, \$42 million for the Devils Lake Outlet, \$26,215,000 in United States Army Corps of Engineers' expenditures, \$25,672,737 in rail transportation repairs, and \$3 million in Housing and Urban Development expenditures.

Representatives of the Devils Lake Joint Water Resource Board testified on the agricultural impacts of Devils Lake flooding. For every foot of elevation increase, 9,000 acres to 10,000 acres of farmland is lost. The annual agricultural economic impact of Devils Lake flooding is estimated at \$83 million and 530 jobs lost.

The committee received testimony from resort owners concerning the economic impact to recreational interests of Devils Lake flooding and from Lake Region Human Service Center personnel concerning the emotional impact of Devils Lake flooding. The committee also received testimony from representatives of the Greater Ramsey Water District concerning challenges facing the district in supplying water and sewer services in the face of rising lake levels. The committee received testimony from Lake Region regional law enforcement representatives concerning problems of emergency responders, law enforcement, and fire departments responding to emergencies in the face of closed roads and roads that are underwater.

The committee learned the State Department of Health recently increased the allowable sulfate level for the upper reach of the Sheyenne River to Baldhill Dam from 450 milligrams per liter to 750 milligrams per liter for all designated uses except municipal use. However,

there are no municipal water users on the upper reaches of the Sheyenne River. The standard on the Red River is 250 milligrams per liter, and the objective at the Canadian border is also 250 milligrams per liter. The Federal Environmental Protection Agency is reviewing this determination.

The committee learned the State Department of Health has requested that the Environmental Protection Agency allow the state to amend stream standards for sulfate downstream of the Baldhill Dam and along the Red River. The state supported this request by noting above-normal precipitation, saturated conditions in the upper basin, and the ever-increasing risk of an uncontrolled discharge from Stump Lake necessitates immediate government action. An uncontrolled discharge from Stump Lake through the Tolna Coulee to the Sheyenne River would result in the loss of all designated water quality uses in the Sheyenne River as well as a substantial reach of the Red River of the North.

The state noted that in order to accommodate increased flows from Devils Lake and greatly reduce the risk of an uncontrolled discharge of very poor quality water, a change in the numeric criterion in the lower Sheyenne River for sulfates from 450 milligrams per liter (30-day arithmetic average) to 750 milligrams per liter is necessary. Furthermore, the Environmental Protection Agency must work with the state to adjust the sulfate water quality standard for the Red River which could, up to 500 milligrams per liter, accommodate moving water out of Devils Lake.

In addition to Devils Lake flooding, the committee reviewed proposed studies of the James River watershed, Knife River watershed, Red River Basin long-term flood solutions, and the Sheyenne River watershed. The committee also reviewed several studies that are currently underway, including the Antelope Creek feasibility study, Beaver Creek watershed study, Boise de Sioux River water retention feasibility study, Devils Lake Basin studies, Fargo-Moorhead upstream area study, Fargo-Moorhead metropolitan area study, Fargo southside flood control project study, Pembina River Basin study, and the Red River Basin watershed study.

### **Committee Consideration**

The committee considered a bill draft to authorize construction of a Devils Lake east end flood control structure. The bill draft provided that in order to protect the health, safety, and general welfare of the people of the Devils Lake Basin, Sheyenne River drainage basin, and Red River drainage basin, the State Water Commission shall design and construct a structure on the east end of Devils Lake to prevent a catastrophic, uncontrolled release of water from Devils Lake. The bill draft was declared to be an emergency measure.

Members of the committee determined that an appropriate source of funding would be the resources trust fund, and the amount of the appropriation for the project should be \$5 million.

### **Recommendation**

The committee recommends Senate Bill No. 2054 to appropriate \$5 million from the resources trust fund for construction of a Devils Lake east end flood control structure as an emergency measure.

## **WATER RESOURCE DISTRICTS IN NORTH DAKOTA**

The committee reviewed the organization and operation of water resource districts in North Dakota. The Legislative Assembly enacted authority to establish legal drain boards in 1895. In 1935 the Legislative Assembly established water control and conservation districts separate from legal drain boards. In 1973 the Legislative Assembly determined that each county should have a water conservation and resource district and also changed the name of these districts to water management districts. In 1977 the Legislative Assembly authorized joint boards under which authority two or more water management districts could do what one board could do alone. The first joint board was the Red River Joint Board, which was created in 1979.

During the 1979-80 interim, the Legislative Council studied water organizations. At that time, there were drain boards, water management districts, and joint boards, all of which were designed to manage water. The Legislative Council reviewed the Nebraska system under which one district does all of the functions done by separate water organizations and which are organized on watershed boundaries as opposed to political boundaries. The result of this study was to change the name of water management districts to water resource districts and to change the name of legal drains to assessment drains. Also, legal drain boards were abolished, and authority for drainage was placed with water resource districts.

The committee learned that rural water systems patterned after the rural electrification movement in the 1930s began to be established in the 1970s. These systems were developed to supply water to underserved rural areas. Today there are 31 rural water systems in North Dakota. The Legislative Assembly next authorized water districts with additional powers, and most rural water systems have converted to water districts. The committee received testimony that North Dakota has an excellent water management system that is nonduplicative, effective, and serves the people with an emphasis on local governance.

### **RED RIVER BASIN MAPPING INITIATIVE**

The committee reviewed the Red River Basin mapping initiative. The objectives of the initiative are to collect high-resolution data for the Red River Valley, establish third-party quality assurance and control, establish a web-based data archival and dissemination vehicle, and engage in public outreach.

#2

01/10/2011

## North Dakota Department of Transportation

Page 1 of 1

## Crash Reporting System

## Crash Severity and Number Killed and Injured by Month

Selection Criteria: County = Benson or Ramsey, Most harmful event = Immersion, Crash type = Traffic, Begin crash date = 1/1/2005, End crash date = 12/31/2010

Month	Crashes				Persons		Pedestrians	
	Fatal	Injury	PDO	Total	Fatalities	Injuries	Fatalities	Injuries
January	-	-	-	0	-	-	-	-
February	-	-	-	0	-	-	-	-
March	-	-	-	0	-	-	-	-
April	3	1	4	8	3	1	-	-
May	-	1	2	3	-	1	-	-
June	-	-	4	4	-	-	-	-
July	-	2	4	6	-	2	-	-
August	1	-	1	2	1	1	-	-
September	-	-	1	1	-	-	-	-
October	2	-	1	3	2	2	-	-
November	-	1	1	2	-	1	-	-
December	-	-	1	1	-	-	-	-
Total:	6	5	19	30	6	8	0	0

The information being provided is only as accurate as the crash data that was submitted by law enforcement. All crashes listed on this report show the 'most harmful event' as immersion, if an officer coded the crash differently, it would not be reflected in this report.

Mark

Mark A. Nelson, Director  
 Safety Division  
 North Dakota Department of Transportation  
 608 E. Boulevard Ave.  
 Bismarck, ND 58505-0700  
 Phone: 701-328-4559 (O)  
 701-426-5987 (C)  
 Email: [mnelson@nd.gov](mailto:mnelson@nd.gov)

BUCKLE UP, EVERY TRIP, EVERY TIME!

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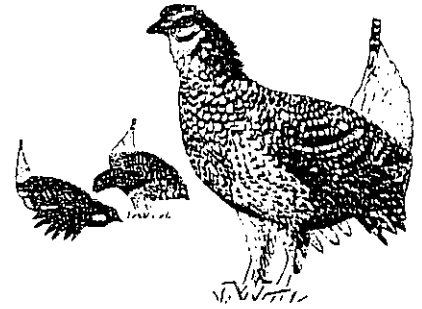




North Dakota Chapter

# THE WILDLIFE SOCIETY

P.O. BOX 1442 • BISMARCK, ND 58502



Testimony of Mike McEnroe  
North Dakota Chapter of The Wildlife Society  
On Senate Bill 2054  
Senate Natural Resources Committee  
January 14, 2011

Chairman Lyson and Members of the Senate Natural Resources Committee:

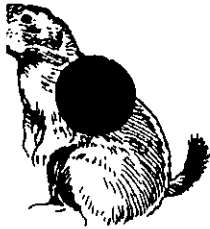
For the record, my name is Mike McEnroe and I am representing the North Dakota Chapter of The Wildlife Society. I have included a copy of the Chapter's membership brochure as a way of further introducing you to the Chapter.

The Chapter supports the design and construction of the east end/Tolna Coulee outlet from the Devils Lake/Stump Lake complex to prevent the catastrophic, uncontrolled release of water from Devils Lake to the Sheyenne River and the Red River Basin. We ask that the control structure be an armored embankment at the natural elevation of 1458 feet msl. This emergency outlet will be in addition to the west end outlet (capacity 250 cfs, to be increased to 350 cfs) and the proposed other east end outlet to be constructed with a 250 cfs capacity.

*cubic  
feet per second*

While we recognize the magnitude of the flooding impacts in and around Devils Lake, the downstream watershed along the Sheyenne and Red rivers can and must be protected. We also believe that as difficult as it is to accept, that the most cost effective means to contain Devils Lake water is in Devils Lake. Therefore, we ask that the views and concerns of the downstream residents be given every consideration in the design and operation of this proposed east end outlet structure.

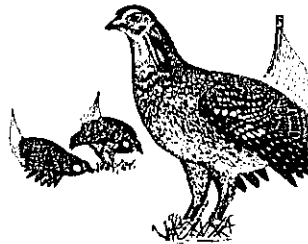
Thank you for the opportunity to comment on SB 2054.



## SCHOLARSHIP PROGRAM

College scholarships are awarded annually to outstanding undergraduate natural resource students at Minot State University- Bottineau, North Dakota State University, Sitting Bull College, University of North Dakota, and Valley City State University. In addition, two outstanding graduate student awards are presented each year. Natural resource instructors at each of the universities and colleges nominate students for the scholarship awards.

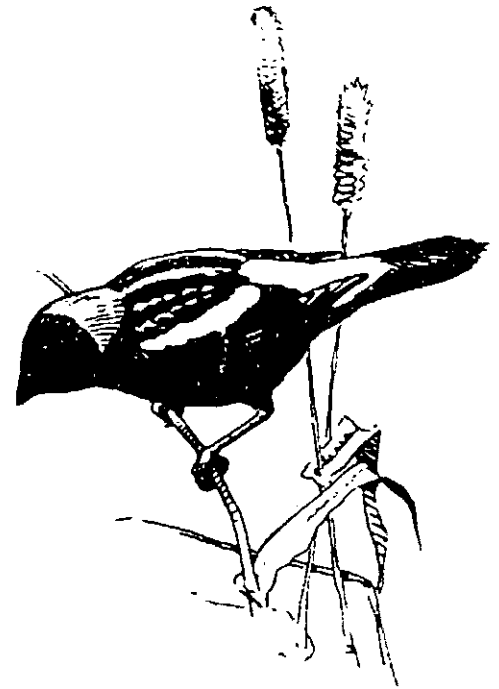
The Chapter has also implemented a Legacy Trust Initiative to strengthen the connection between natural resource students, educators, and the wildlife profession. Included in this endeavor are job fairs, career lesson panels, and opportunities for students to attend and engage in professional meetings.



NORTH DAKOTA CHAPTER  
THE WILDLIFE SOCIETY  
P.O. Box 1442  
Bismarck, ND  
58502-1442  
(WWW.NDCTWS.ORG)

# North Dakota Chapter

*The Wildlife Society*



NORTH DAKOTA CHAPTER  
The Wildlife Society

*Dedicated to the wise use of North  
Dakota's natural resources*

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## ORGANIZATION

The Chapter is governed by an elected Executive Board composed of a President, President-elect, Past President, four Executive Board members, and an appointed Secretary-Treasurer.

A Field Representative for the Central Mountains and Plains Section of The Wildlife Society represents the Chapter on regional and national levels.

During legislative sessions, the Chapter employs a legislative liaison to provide expert testimony on Senate and House bills relating to natural resource issues, and where appropriate lobbies for bills that promote natural resource conservation.

## CHAPTER PROGRAMS, ACTIVITIES, AND SERVICES

An annual winter meeting is held for the membership to elect and install new officers, for hearing of committee reports and for the general business meeting.

The meeting also features research and management presentations, panel discussions of timely issues, and poster

sessions. An annual fundraiser provides for social time and raises funds targeted for Chapter programs and activities. A formal banquet includes annual awards, recognition of achievements, and special speakers or entertainment.



## AWARDS

The chapter presents awards to recognize and commend outstanding achievement in wildlife related activities in North Dakota.



-The NORTH DAKOTA AWARD is presented to an individual for outstanding contribution to the profession of wildlife management in North Dakota.

-The NORTH DAKOTA HABITAT AWARD is presented to an individual or group that has made an outstanding contribution toward preserving and/or establishing high quality wildlife habitat on the lands of North Dakota.

-The NORTH DAKOTA CASE-OF-THE-YEAR AWARD is presented annually to the person or persons primarily responsible for the conviction of persons guilty of a serious natural resource violation in the state.

-Other awards may be given to individuals or groups that show outstanding achievements in wildlife-related fields.

## DAKOTA PRAIRIE LEGACY ENDOWMENT

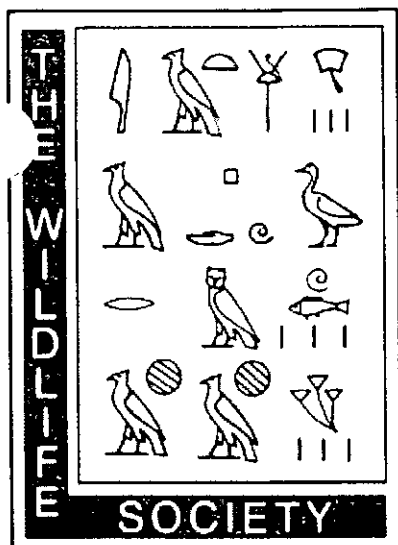
The Dakota Prairie Legacy endowment is a Chapter initiative to provide income to meet the many urgent challenges confronting wildlife and their habitats. The Dakota Prairie Legacy accepts gifts of cash, property, and deferred gifts (estates) from its members and interested parties.

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## WHAT IS THE WILDLIFE SOCIETY?

Founded in 1937, The Wildlife Society is an international, nonprofit, scientific and educational organization composed of professionals, students and laypersons interested and active in wildlife research, management, education, and administration.

## NORTH DAKOTA CHAPTER OF THE WILDLIFE SOCIETY

The North Dakota Chapter is an active affiliate of The Wildlife Society, a national organization. The Chapter is specifically concerned with effective management of North Dakota's plant and wildlife communities. The Chapter provides expertise in advising legislative and judicial processes concerning conservation of natural resources. It advocates the holistic treatment of environmental questions. The Chapter

was founded in 1963 and has played an active role in North Dakota wildlife management since that time.

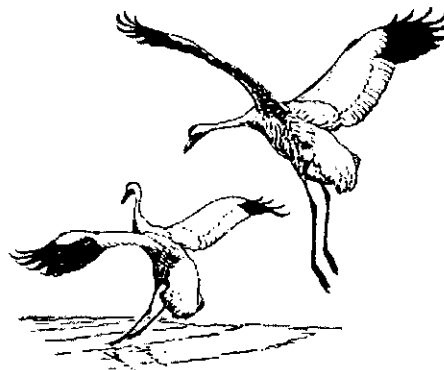
## CHAPTER MEMBERSHIP

Membership in the Chapter is open to any person who has an interest in the objectives and activities of the Chapter and is formally trained or employed in the wildlife field.

Those not meeting the education or employment requirements may also affiliate with the Chapter.

Association with the Chapter provides opportunities to be informed and participate in resolving conservation issues. Each member or affiliate receives the Chapter Newsletter.

Chapter members are encouraged to join the parent group, The Wildlife Society and the regional organization, the Central Mountain and Plains Section.



## CHAPTER OBJECTIVES

Consistent with the objectives of The Wildlife Society, the Chapter's objectives are:



- To advance the science and art of wildlife management.
- To improve public understanding and support of scientific management of wildlife and related resources.
- To provide a common meeting ground for people interested in wildlife conservation.
- To promote and maintain high professional standards.
- To recognize and commend outstanding accomplishments in wildlife conservation.
- To leverage the influence of The Wildlife Society at the national level on important wildlife issues in North Dakota.
- To follow the North American wildlife conservation model and its conservation objectives.

## CERTIFICATION

The Wildlife Society promotes a certification program for its members that constitute official recognition that qualified members meet professional, educational, experience, and ethical criteria to be a "Certified Wildlife Biologist."

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## COMMITTEE ACTIVITIES

Chapter work is carried out by committees that focus on natural resource issues.

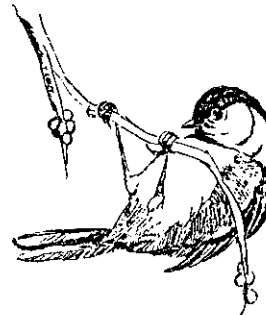
Examples of committees include: the Endangered Species committee, which is composed of expert biologists who make recommendations on rare species and their conservation.

The Wetlands committee takes an active role in working to preserve wetlands in North Dakota.

The Alternative Energy committee is composed of Biofuels and Wind subcommittees and is engaged in keeping the emerging industry of alternative energy compatible with natural resources.

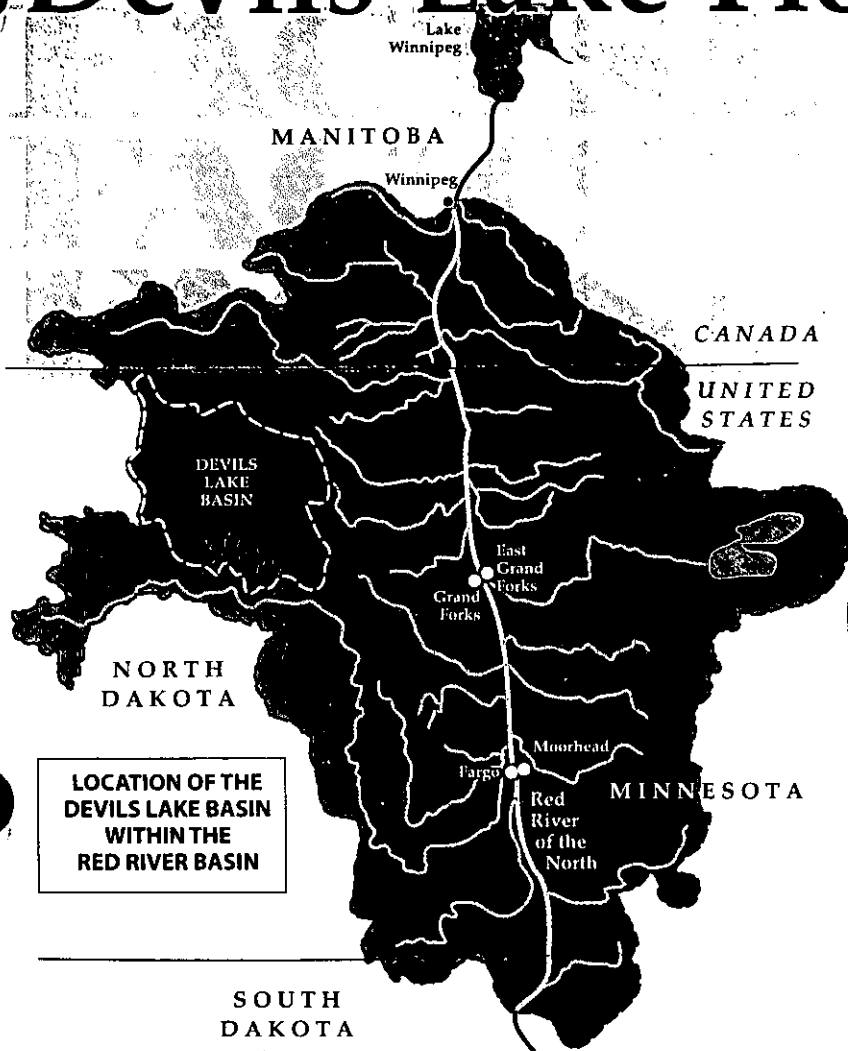
A variety of natural resource issues are addressed through the Chapter's Missouri River committee.

The Chapter's Education committee is involved in a wide range of activities that include writing and updating the elementary text books PROJECT WILD, the Junior Duck Stamp contest, and a number of other publications concerning natural resource management.



Examples of other committees include: Legislative, Wildlife Commercialization, Western Lands, Invasive Species, Tribal Wildlife, Prairie Resources, and Professional Women in Natural Resources.

# ● Devils Lake Flood Facts



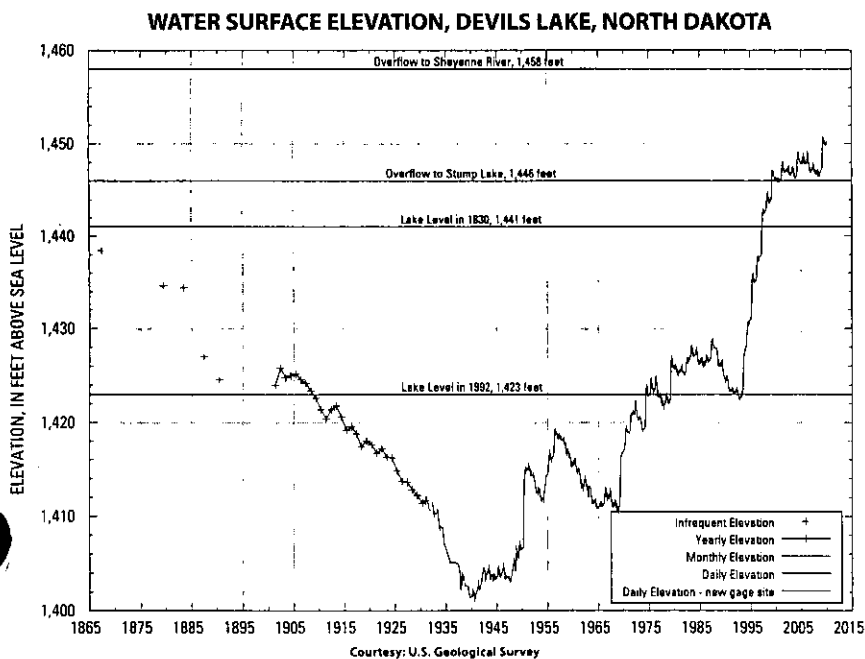
■ The Devils Lake basin is a 3,810 square-mile sub-basin of the Red River of the North. At current water levels, the lake itself has no natural outlet.

■ A natural surface water connection from the northeast edge of the Devils Lake basin boundary to the Red River basin has been documented during several years since 1997. This is significant because it has provided a natural route for biota exchange between Devils Lake and the rest of the Hudson Bay watershed.

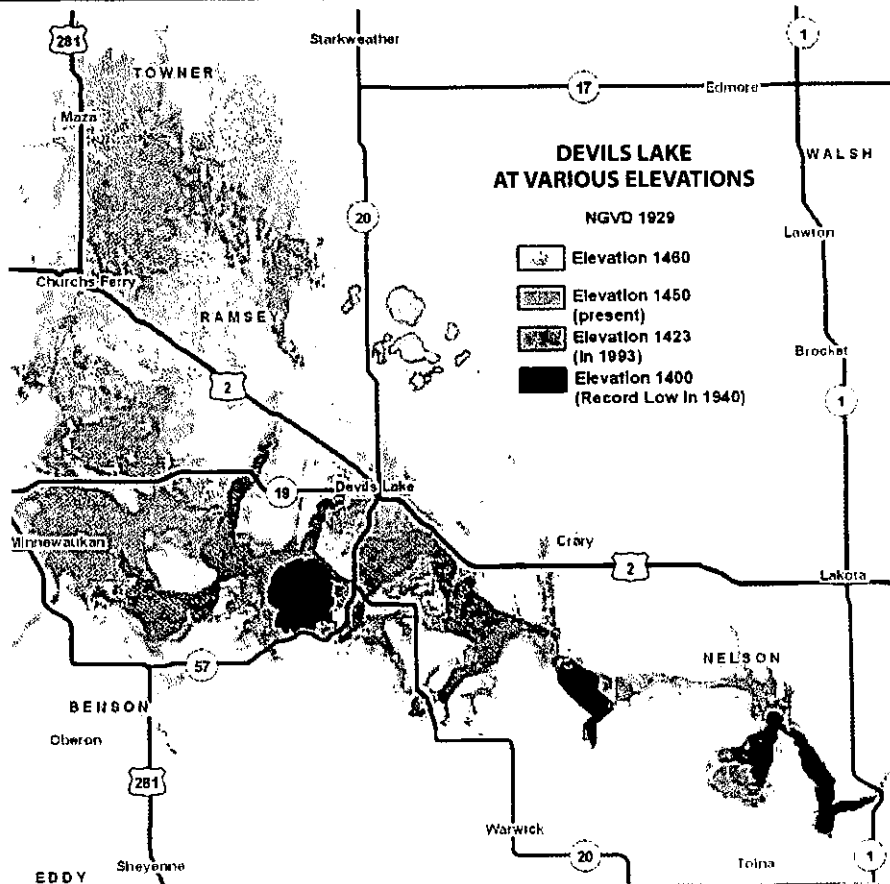
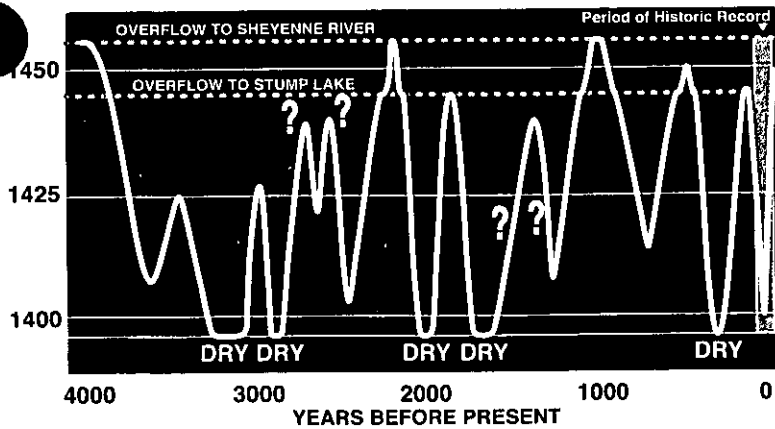
■ On April 2, 2010, Devils Lake crept to a new record level, surpassing the previous record of 1450.73 feet above mean sea level (amsl), set on June 27, 2009. *At the time this publication was published, the lake was continuing to rise.*

■ Devils Lake naturally spills into Stump Lake at 1,446.5 feet amsl. Since water began trickling into Stump Lake from Devils Lake in 1999, Stump Lake has now been filled and has become part of Devils Lake – rising 43.5 feet in the process.

■ From its lowest 1993 elevation of 1422.62 feet amsl to its end of April 2010 elevation of 1451.5 feet amsl, Devils Lake rose 28.88 feet.



## DEVILS LAKE WATER LEVELS: 4000 YEARS OF FLUCTUATIONS



Devils Lake naturally overflows into the Sheyenne River at 1458.0 feet amsl. The Sheyenne River is a tributary of the Red River of the North, which flows into Canada.

Since glaciation, Devils Lake has been fluctuating from overflowing to dry. This variability is the normal condition of the lake – reflecting climate changes.

Devils Lake has reached its spill elevation of 1,458.0 feet amsl and overflowed into the Sheyenne and Red Rivers at least twice during the past 4,000 years. The last Devils Lake spill into the Sheyenne River occurred less than 2,000 years ago.

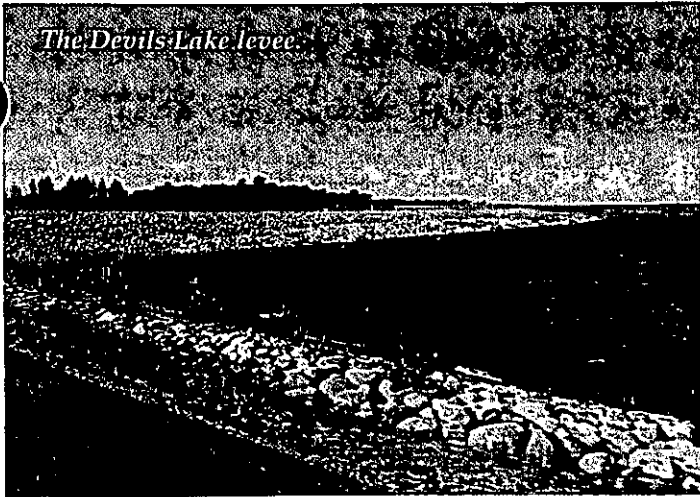
At its spill elevation, Devils Lake will cover more than 261,000 acres.

In March 1993, Devils Lake had a surface area of 44,230 acres. At its April 30, 2010 elevation, Devils Lake covered about 177,100 acres – an increase of 132,870 inundated acres, or about 208 square miles. During that same time period, the volume of water in Devils Lake had grown by more than six times.

*Flooded Devils Lake farmland.*



*The Devils Lake levee.*



■ In response to forecasted lake levels in 2009, the U.S. Army Corps of Engineers began working on another levee raise and extension for the city of Devils Lake. The cost of this project is estimated at about \$100 million.

■ The city of Minnewaukan continues to be threatened by Devils Lake. The community's school, which is currently at or above capacity, is at an elevation of 1,458 feet amsl, but the city's sewer, water lines, and water tower are expected to start experiencing problems from groundwater and soil saturation at the lake's current elevation.

*The city of Minnewaukan.*



■ The State of North Dakota completed construction of an outlet to the Sheyenne River in the summer of 2005. *Specific facts pertaining to the outlet can be referenced from the Devils Lake Outlet section of the State Water Commission website at [www.swc.nd.gov](http://www.swc.nd.gov) (click on Devils Lake Flooding, then Outlet).*

■ The original outlet pumps were designed for a maximum operating capacity of 100 cubic feet per second (cfs). Modifications constructed in early 2010 will increase that capacity to 250 cfs.

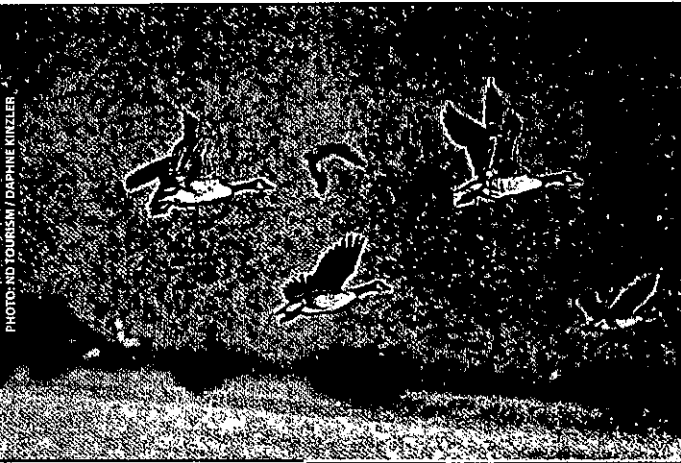


*The Devils Lake outlet.*



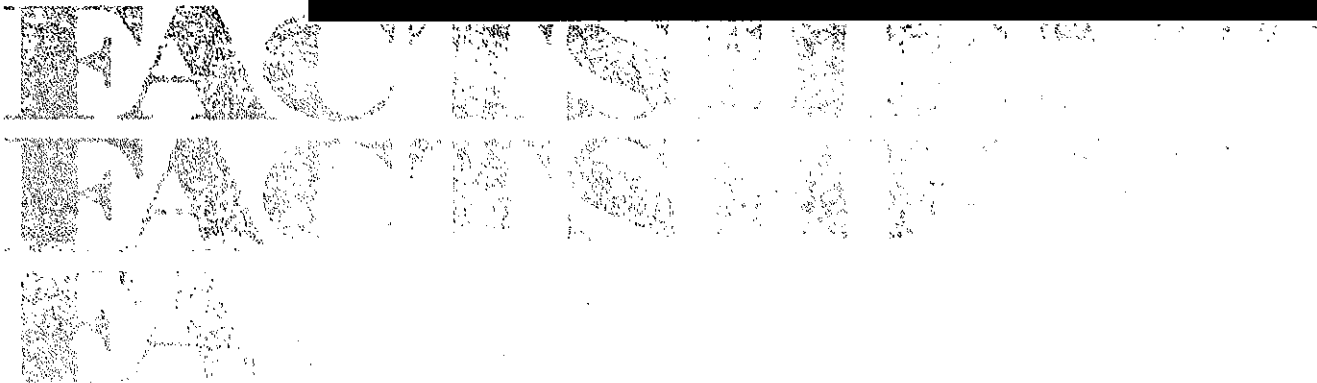
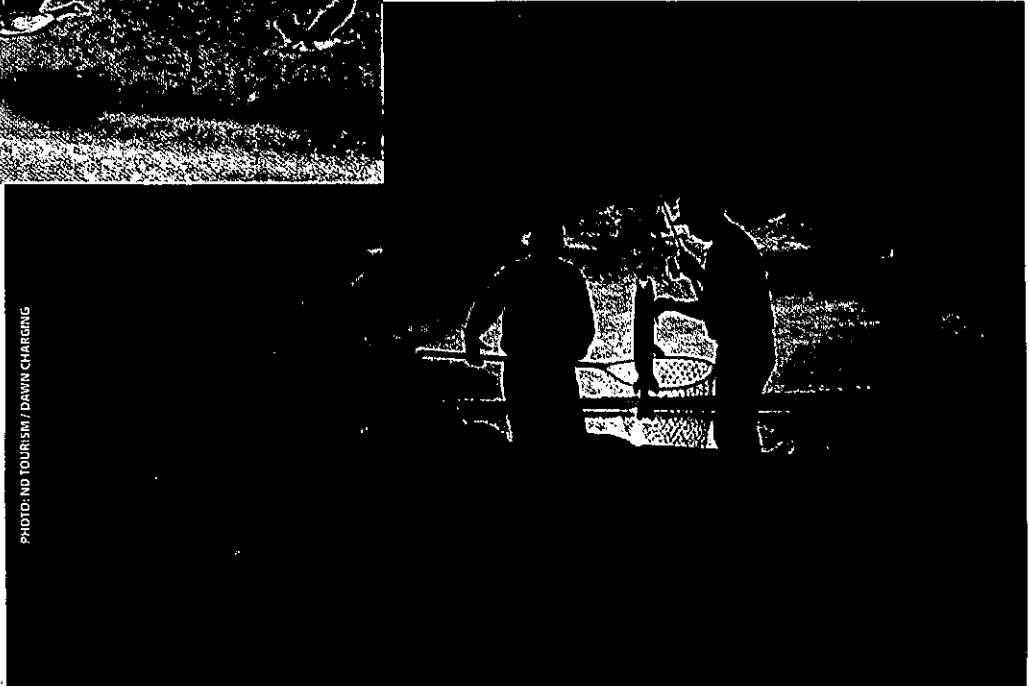


PHOTO: ND TOURISM / DAPHNE MINZLER



■ The Devils Lake area provides world-class fishing and hunting opportunities, attracting sportsmen from all across North America and around the world. It is estimated that fishing alone contributes \$40 million annually to the Devils Lake area economy.

PHOTO: ND TOURISM / DAWN CHARGING



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