**2013 HOUSE ENERGY AND NATURAL RESOURCES** 

HB 1140

#### 2013 HOUSE STANDING COMMITTEE MINUTES

### House Energy and Natural Resources Committee Pioneer Room. State Capitol

HB 1140 17407 7 testimonies Jan 18,2013

☐ Conference Committee	
Frineth	

Provide for a loan from the Bank of North Dakota to the Western Area Water Supply Authority.

#### **Minutes**

Rep. Porter: We will call to the hearing on HB 1140

Rep. Skarphol: Last session there was a proposal for a Western Area Water Project they asked for \$150,000.000 and after some considerable consternation on the part of the individuals involved in working through the conference committee it was decided to appropriate \$110,000.000 in varies types of loans to that project and that the balance would be taken care of in this session if the project was moving forward in a successful fashion. The request is being made in this bill for the additional \$40,000.000 to allow for the completion of the project that was brought forward last time.

Rep. Keiser: The additional \$40,000.000 how will that be structured in the repayment?

Rep. Skarphol: That is to be determined by the process during this session.

John Olson: I am a registered lobbyist for the Western Area water Supply Authority and am here today in support of HB1140. Those terms will be negotiated with the Bank of North Dakota should you pass this bill. I do want to call your attention to HB 1020 which is the appropriations bill for the State Water Commission. In that bill there is \$79,000.000 appropriated from the Natural Resources Trust Fund that was presented by the State Water Commission at a hearing recently at the House appropriations committee, the comment by the State Water Commission representatives that perhaps half of that amount of money would also be considered to be loan dollars.

Denton Zubke: Chairman of the board of the Western Area Water Supply Authority; (See testimony 1) the last session created the WAWS and authorized \$110,000.000 in loan funds from the state to begin that project. A capital cost accounting system was developed to track specific WAWS Project segment costs to manage \$110,000.000 loans in the most efficient way possible (page 3)

Rep. Hofstad: Enabling legislation last session which was \$110,000.000 in loan. \$50,000.00 of that goes back to the Bank of North Dakota and the next \$25,000.000 goes to the general fund and then the balance to the resource fund. As we look at that and develop that legislation the water sales that you were projecting that 15-18 percent of that market share was dedicated to this loan repayment. Now we are looking at additional \$50,000.000 I know the resource fund has given another \$40,000.000 plus another 440,000.000 of loans so we are adding \$110,000.000 plus another \$90,000.000 and I am wondering if your business model is enough to repay the loans that we are looking at. My question is are you still comfortable with that method of repayment.

Denton Zubke: We are dealing with question we do have \$79,000.000 in the State Water Commissions budget. When we went through that process we anticipated that \$79,000.000 would be grant dollars pacifically because of all the rural demands that we discovered out there. It wasn't until a couple weeks ago that we found out that the potential \$79,000.000 thru the State Water Commission budget might be a \$40,000.000 loan and \$39,000.000 of grant dollars. We have asked what kind of terms they are anticipating on additional \$40,000.000 of loan and it sounds like the terms of that loan may be acceptable to us because it may be that they will wait with repayment of that \$40,000.000 until after we have paid off this original \$150,000.000. If that doesn't happen or are forced to try and repay that \$40,000.000 during the same process of the \$150,000.000 I do not believe that we will able bear that down.

Rep. Keiser: Of the original \$110,000.000 how much has been spent to date? Have we been able to escalate the servicing of the loan through revenues generated?

Denton Zubke: To date we have contracted for \$112,000.000 of that \$110,000.000 we added a project west of Williston that included some cost share from a private entity and so that is what pushed that contract amount above the \$110,000.000. We have spent to date about \$84,000.000 of that contracted \$112,000.000. No we have not the industrial water sales have come on a little slower than we anticipated because we run into some problems with flooding on the south side of Williston which delayed us about 18 months.

Rep. Bradandt: What percentage of the entire project is functional as of today?

Denton Zubke: That is a difficult question I can't give you that number.

Rep. Porter: When we did this legislation last session your flow chart on page 3 of your testimony goes through first, second, third and fourth and then how they were paid out. The second in was the Bank of North Dakota's \$50,000.000 loan but is the first out. In your discussion and testimony you talked about the Water Resources Trust Fund; looking at a portion of that money being a grant and a portion of that money being a loan. This bill is addressing the loan component from the discussion last session. Shouldn't we set that policy again on the first in, first out policy as we look at this legislation so that it does reduce the risk that you could have and set the policy straight?

Denton Zubke: You get to structure that any way that you would like but we do have some suggested models and some of that came from the previous legislation and I think as we get into some of the business plan do some of that testimony our suggestion will be clearer

Jaret Wirtz: Executive Director of WAWSA; I am here to urge your support of HB 1140 (See testimony 2) this project is on track to be the fastest built regional water system in the state. Turn to page 3 of the testimony; in that picture you can see the previous water in Watford City. The middle glass is the transition period when we were mixing the 2 waters and the third glass is the after the WAWS water was completely through the system. On page 4 the stuff in the yellow was existing infrastructure that was from the members that were already in place. The red stuff is the infrastructure that we constructed in the current biennium.

Rep. Brabandt: Who is your prime contractor is the project?

Denton Zubke: I am not sure we have several contractors.

Rep. Hofstad: In your testimony you talk about payments by selling access capacity in the system and we have also gone from a point where we talked about those users being 37 times the original plan. Have those users used the excess capacity?

Denton Zubke: Yes we have seen a considerable amount of growth and keep in mind the transmission lines and treatment plants are built for peak day demands.

Steve Burian: CEO, Advanced Engineering and Environmental Services, INC.; I am in support of HB 1140. (See testimony 3) to answer your questions Rep. Brabandt there are 15 different prime contractors that were hired for this job of which some of them had electrical and mechanical subs but it was done in that many segments.

Rep. Porter: In that comment did you assume any of the debt on those industrial use projects from those areas and then not get the revenues off of those or is that revenue they maintained their debt if they had any on those industrial projects?

Steve Burian: There was no debt on any of the existing industrial infrastructure with the exception of Stanley and Stanley had never used theirs and so we basically assumed the cost and received all the revenue for that without returning any base line. HB 1140 is consistent with the original proposal and that information that we have at this time.

Rep. Porter: In all of your models you are showing loan #4 as a \$10,000.000 loan and now with the discussion in house appropriations on HB1020 that would change to a \$40,000.000?

Steve Burian: We ended up with two water treatment trust funds loans the first time #1 and #4 both came from the Resources Trust Fund they had different interests terms and different repayment terms. The additional \$40,000.000 loan that you have been talking about that would be half of HB 1020 that would be loan #6. We did somewhat panic when we heard that they thinking 50-50 on that once we got into 1,000 we called Todd, and Todd put a meeting together with us and as we looked at that the Resources Trust Fund has a lot of flexibility.

Bert Anderson: Past board member of the Burke-Divide-Williams Water System and currently serve as a board member on the Western Area Water Supply Authority; I am here is support of HB 1140. (Testimony 4)

Rep. Brabandt: What is the general feeling of the rural people to the cities to the WAWS people to the contractors to the board members?

Bert Anderson: Yes it has been very positive.

Monte Meiers: Director of Public Works/Engineering in Williston North Dakota; in your packet we give some of the impact information that we need as a city. Williston has 400 oil field companies and it says in there 40% work for the oil fields I would dare to say that 100% are because that is going on there is working for the oil fields. (See testimony 5)

Denton Zubke: Thank you; two years ago we brought you a proposal and you developed that into a plan for us. We went out and followed that plan that is a team effort involving not only yourselves but also our employees. In the last session you created a very vital public infrastructure water distribution project which is privately driven by the members of Western Area Water Supply Authority in partnership with you as the legislature and the state of North Dakota.

Pat Wheeler: I represent Independent Water Providers; we support providing water to the people of northwestern people. We oppose providing any funding to Western Area Water Supply through HB 1140 for the following reasons. (See testimony 6)

Rep. Keiser: Could you tell me for yourself and your operation and then since you are representing the Independent Water Providers can you provide the information regarding the water permitted for irrigation for which the Independent Water Users are received a water waiver to use it for commercial use?

Pat Wheeler: I couldn't give you that; I don't know, I am not an irrigator.

Rep. Keiser: What percentage of the water from the Independent Water Users was designated for irrigation purposes and then has now received a waiver for commercial purposes from the state of North Dakota which is a wonderful grant?

Pat Wheeler: The state Water Commission can give you that information, but I can get that information for you for next week when I come back.

Rep. Porter: Even with the current structure of those water depots that were municipally owned and operated prior to the last session with the WAWS project that your group still represents 75% of the industrial water sales in this area and WAWs represents 25 %.

Pat Wheeler: The 25% was in municipal that were on their own in 2010 and some in 2011 that is where those numbers come from.

John McCleary: I live in Williston and am the owner of JMAC Resources (See testimony7)

Rep. Porter: Is there any opposition on HB 1140 I appointing this to a subcommittee that will take additional testimony and will be a good time to present that. The subcommittee is Rep. Keiser, Rep. Hofstad, and Rep. Hunskor to further work on this bill. We are adjourned.

#### 2013 HOUSE STANDING COMMITTEE MINUTES

#### **House Energy and Natural Resources**

Pioneer Room, State Capital

HB 1140
Thursday, January 31, 2013
7:00 a.m.
Job # 18044

Conference Committee

Emineth					
Provide for a loan from the Bank of N.D. to the Western Area Supply Authority					
Minutes:	5 testimony				
Present Rep. Keiser Rep. Hofstad, Rep. Hunskor					

Rep. Keiser: We will open HB 1140

Rep. Keiser: You have committed \$112.000.000 what have we got with that? To provide for a loan from the Bank of Bismarck to the Western Area Water Authority.

Discussion: The Bank of North Dakota shall provide a loan of \$40,000.000 to the western area water supply authority for construction of the project.

Rep. Keiser: x

Rep. Hofstad: x

Rep. Hunskor: x

Steve Burian: presented the WAWS financial flow chart.

Rep. Keiser: The interest with accrue earlier rather than later.

Dick Laschkewitsch: From the water commission; we will be working with you.

Rep. Hofstad: Could we get somebody to walk us through the construction.

Steve Burian: What the \$40,000.000 will do go to the map in the executive summary. I think we could be drawing on this in 2013 not 2014. (See testimony 1-3)

Rep.Hofstad: Do we need the capacity for the tanks?

Steve Burian: We will do a study on the demands.

House Energy and Natural Resources Job # 18044 Jan 31, 2013 Page 2

Rep. Hunskor: We would be serving all of the areas in yellow?

Steve Burian: All of the yellow, green and red by the end of 2013.

Rep. Keiser: How many households are being served now and many will be when

completed?

Steve Burian: About 58,000 population now to 99,000, 200 rural users.

Bob Humman: Bank of North Dakota: this ends up being a moral obligation of the state.

Steve Burian: Financial Excerpt requested by Rep. Keiser: (see testimony4)

Michelle Klose: Suggested a proposed amendment (testimony 5)

Denton Zuke: Western Area Water Supply Authority; that is the way we understand this. HB 1206 this provides that umbrella.

Rep. Keiser: We will not meet tomorrow. The legislative intent is that not only the \$40.000.00 but the \$79.000.000 are all part of the same project and fall under the original concept. WE will close the subcommittee meeting.

#### 2013 HOUSE STANDING COMMITTEE MINUTES

# House Energy and Natural Resources Pioneer Room, State Capital

HB 1140 February 8, 2013 18492

☐ Conference	Committee			
Eniepeth				
To provide for a loan from the Bank of Bismarck to the Western Area Water Authority				
Minutes:	1-2 Attachments			

Rep. Porter: We have HB 1140 in front of us.

Rep. Keiser: This was a simple bill which was in appropriations for \$40,000.000 to be payable to the WAWS project. Last session we allocated \$110,000.000 for the WAWS project with the provision that if you do need the \$40,000.000 they can come back. They did come back and did say they need the \$40,000.000. \$22,000.000 of the \$40,000.000 is for the finishing of the addition to the Williston water treatment plant. The reason we put the emergency bill on this bill once this bill gets to appropriation then they will kill the \$22,000.000 and work just this bill. There is a self-imposed limit by the Bank of North Dakota of \$67,000.000 for a single loan package. Appropriation wants to get to put it together as a package. (1-2 Attachments)

Rep. Keiser: I move the adoption of both sets of the amendments to HB 1140.

Rep. Nathe: second.

Rep. Porter: Voice vote carries we have an amended bill in front of us. We have a motion from Rep. Kesier for a do pass as amended with referral to appropriations and a second from Rep. Nathe. Motion Carried.

Yes 12 No 0 Absent; 1 Carrier Rep. Keiser

13.0314.02001 Title.03000

### Adopted by the Energy and Natural Resources Committee

February 7, 2013



#### PROPOSED AMENDMENTS TO HOUSE BILL NO. 1140

- Page 1, line 2, after "authority" insert "; and to declare an emergency"
- Page 1, remove line 11
- Page 1, line 12, replace "principal and interest due" with "the authority is subject to the default provisions under section 61-40-09"
- Page 1, after line 12, insert:

"SECTION 2. EMERGENCY. This Act is declared to be an emergency measure."

Renumber accordingly

Date:	2-	7-13
Roll Call Vo	te #:	

## 2013 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. 1:140

House Natural Resources				Com	mittee
☐ Check here for Conference C	ommitte	ee			
Legislative Council Amendment Nun	nber _				
Action Taken: Do Pass	Do No	t Pass	☐ Amended ☐ Add	opt Amer	ndment
Rerefer to Ap	propria	tions	Reconsider		
Motion Made By Repteiser		Se	econded By Ref nat	he	
Representatives	Yes	No	Representatives	Yes	No
Chairman Todd Porter	1.55	110	Rep. Bob Hunskor	100	
Vice Chairman Chuck Damschen			Rep. Scot Kelsh		
Rep. Jim Schmidt			Rep. Corey Mock		
Rep. Glen Froseth			<u> </u>		
Rep. Curt Hofstad					
Rep. Dick Anderson					İ
Rep. Peter Silbernagel					İ
Rep. Mike Nathe					Ĭ
Rep. Roger Brabandt					
Rep. George Keiser			·		
			·		
Total (Yes)		No	0		······
Absent					
Floor Assignment			·		
If the vote is on an amendment, brief the adaption of w 13.0314.02001	ily indica	ite inter sets	nt: Voice note of of the amendmen	l L	report
13.0314.02001 2	itle	03	900		

Date:	2-7-	- 13	
Roll Call	Vote #: _		1550

## 2013 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. 1(40)

House Natural Resources				Com	mittee
☐ Check here for Conference C	ommitte	ee			
Legislative Council Amendment Nun	nber _				
Action Taken: Do Pass	Do Not	Pass	Amended Add	opt Amer	dmen
✓ Rerefer to Ap	propria	tions	Reconsider		
Motion Made By Ref Keiser		Se	econded By Rep nath	he	
Representatives	Yes	No	Representatives	Yes	No
Chairman Todd Porter	V		Rep. Bob Hunskor		
Vice Chairman Chuck Damschen			Rep. Scot Kelsh	V	
Rep. Jim Schmidt	~		Rep. Corey Mock	V	
Rep. Glen Froseth	V				
Rep. Curt Hofstad	V				
Rep. Dick Anderson	V				
Rep. Peter Silbernagel	V				
Rep. Mike Nathe	V			_	
Rep. Roger Brabandt	/				
Rep. George Keiser	V				
Total (Yes)		N	1		
Floor Assignment	Ref	0 4	Leiser		
If the vote is on an amendment, brie	fly indica	ate inte	nt:		

Module ID: h\_stcomrep\_24\_028
Carrier: Keiser

Insert LC: 13.0314.02001 Title: 03000

#### REPORT OF STANDING COMMITTEE

- HB 1140: Energy and Natural Resources Committee (Rep. Porter, Chairman) recommends AMENDMENTS AS FOLLOWS and when so amended, recommends DO PASS and BE REREFERRED to the Appropriations Committee (12 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). HB 1140 was placed on the Sixth order on the calendar.
- Page 1, line 2, after "authority" insert "; and to declare an emergency"
- Page 1, remove line 11
- Page 1, line 12, replace "principal and interest due" with " the authority is subject to the default provisions under section 61-40-09"
- Page 1, after line 12, insert:

"SECTION 2. EMERGENCY. This Act is declared to be an emergency measure."

Renumber accordingly

**2013 HOUSE APPROPRIATIONS** 

HB 1140

#### 2013 HOUSE STANDING COMMITTEE MINUTES

#### **House Appropriations Committee**

Roughrider Room, State Capitol

HB 1140 2/14/13 Job 18979

Conference Committee

Committee Clerk Signature	Meredit	Trabelt		
Explanation or reason for in	troduction of bill	/resolution:		
A BILL for an Act to provide for a loan from the Bank of North Dakota to the western area water supply authority; and to declare an emergency.				

You may make reference to "attached testimony."

Rep. Todd Porter, District 34: Introduced the bill.

1:30

Minutes:

Chairman Delzer: Does this change the flow on the dollars?

**Rep**. **Porter**: This becomes loan number 5; it pays back before any of the stuff from the general fund, and it starts its payback prior to anything that came out of the water resources trust fund with the State Water Commission (SWC) from last session. The Bank of North Dakota (BND) loans, there will be two now, loan number 2 for \$50M last session, and this would be considered loan 5, for \$40M. It moves up on the payback schedule. Last out is loan 6.

Chairman Delzer: Does this bill change anything on the setup from last time?

**Rep**. **Porter**: No. This becomes loan 5; Rep. Skarphol's becomes loan 6. It does change the repayment schedule on everything we did last session, and it moves this loan in front of the general fund money that we gave them, and the other water resources trust fund money that we gave them.

Chairman Delzer: Where in the language does it do that?

Rep. Porter: In the default requirements under 61 40 08, I believe.

**Rep. Skarphol**: There are other anticipated revenues flowing to this project if we so pass HB 1020, SWC. The order of payment is a negotiated thing between BND and Western Area Water, it's not set out in law other than through the negotiation process.

House Appropriations Committee HB 1140 2/14/13 Page 2

Chairman Delzer: The only thing you did to the bill was strike the statement that Water Commission shall request funding, added the emergency clause, and changed it to the default provisions under 61-40.

Rep. Porter: Correct.

Rep. Glassheim: What are the default provisions?

**Chairman Delzer**: Basically, SWC takes ownership if the project is defaulted upon. If they so desire, they can let them manage it still.

Rep. Porter: It would turn into an entity similar to the South West Water system, on that default.

**Chairman Delzer**: Further questions by the committee? We'll wait a little and then possibly take action.

Discussion resumed minute 06:25.

Rep. Kempenich moved Do Pass on HB 1140, seconded by Rep. Thoreson.

**Chairman Delzer**: Discussion? Seeing none, a roll call vote was done. The motion carried 21 Yes, 0 No, 1 Absent. **Rep. Skarphol** will be our carrier, but we will return this to the policy carrier, Rep. Keiser.

Date:	2	14	13	
Roll Call	Vote	#: _		

# 2013 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. 140

House Appropriations	·····			Com	mittee
Check here for Conference Co	ommitte	ee			
Legislative Council Amendment Num	ber _				
Action Taken: Do Pass	Do Not	Pass [	Amended	mendme	nt
Rerefer to App	oropriati	ons [	Reconsider		
Motion Made By Lep. Lempt	enich	Se	conded By Rep. Thores	'on	
Representatives	Yes	No	Representatives	Yes	No
Chairman Delzer	χ		Rep. Streyle	X	
Vice Chairman Kempenich	X		Rep. Thoreson	X	
Rep. Bellew	X		Rep. Wieland	X	
Rep. Brandenburg	X				
Rep. Dosch	X				
Rep. Grande			Rep. Boe	X	ŀ
Rep. Hawken	χ		Rep. Glassheim	X	
Rep. Kreidt	X		Rep. Guggisberg	X	
Rep. Martinson	X		Rep. Holman	X	
Rep. Monson	X		Rep. Williams	X	
Rep. Nelson	X				
Rep. Pollert	Y				Į.
Rep. Sanford	X				1
Rep. Skarphol	X				
Total Yes		No	0	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	
Absent					
Floor Assignment Rep	. Skar	phol/	Kuilly		

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

#### REPORT OF STANDING COMMITTEE

Module ID: h\_stcomrep\_29\_006

Carrier: Skarphol

HB 1140, as engrossed: Appropriations Committee (Rep. Delzer, Chairman) recommends DO PASS (21 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed HB 1140 was placed on the Eleventh order on the calendar.

2013 SENATE INDUSTRY, BUSINESS, AND LABOR
HB 1140

#### 2013 SENATE STANDING COMMITTEE MINUTES

#### Senate Industry, Business and Labor Committee Roosevelt Park Room, State Capitol

Engrossed HB 1140 March 20, 2013 Job Number 20259

Conference Committee

Committee Clerk Signature	Ea Lilet
Explanation or reason for intr	oduction of bill/resolution:
A loan from the Bank of North D	akota to the western area water supply authority
Minutes:	Testimony Attached

Chairman Klein: Opened the hearing.

John Olson, Lobbyist for the Western Area Water Supply Authority: Written Testimony Attached (1). (:20-4:12)

Jaret Wirtz, Executive Director of the Western Area Water Supply Authority: Written Testimony Attached (2). (4:30-17:43)

Steve L. Burian, Representing the Western Area Water Supply Authority: Written Testimony Attached (3). (26:30-34:40)

Ron Ness, North Dakota Petroleum Council: In support. He commented on the importance of getting water into the communities. (38:00-40:22)

#### Opposition

Jon Mc Creary, Independent Water Provider: In opposition. He read the written testimony of Steve Mortenson. Written Testimony Attached (4). (41:00-47:08)

#### Neutral

Lynn Helms, Director of the Department of Mineral Resources: Said he was there to answer questions and provide an update. They have provided well, rig and population or job estimates to all the various agencies including the folks that are building and designing WASA. They are still seeing direct jobs within the oil and gas industries, those that work on oil rigs, those that construct natural gas gathering and gas plants, those who fracture oil wells and those who operate the wells will not peak until 2020. He continued to talk about what has happened and what they project to happen through 2035. (48:15-1:15)

Chairman Klein: Closed the hearing.

#### 2013 SENATE STANDING COMMITTEE MINUTES

#### Senate Industry, Business and Labor Committee Roosevelt Park Room, State Capitol

HB 1140 March 25, 2013 Job Number 20415

	Conference Committee	
Committee Clerk Signature	Ea Liebelt	
Explanation or reason for int	roduction of bill/resolution:	
A loan from the Bank of North	Dakota to the western area water supply authority	
Minutes:	Discussion and Vote	

Chairman Klein: Opened the meeting on 1140. At this point we have a forty million dollar loan to the western area water supply. It's an emergency. The primary use of the money would be to upgrade the water treatment facility because of the expansion of the system and the quick growth. They would like to expand it sooner than later. I talked with Appropriations and they also have the water commission budget which has eighty million dollars in for the western area water supply. There is some discussion about the seventy-nine million. The discussion is that the forty is the forty that they were promised last time and also discussion that the forty is part of the eighty. We will pass this and rerefer to Appropriations.

Senator Murphy: Said he is in full support of keeping this intact. They have done a tremendous job of building this out in a hurry. I am not that worried about their ability to pay this back. It's a good move for the state of North Dakota.

Senator Murphy: Moved a do pass and rerefer to Appropriations.

Senator Laffen: Seconded the motion.

Roll Call Vote: Yes - 7 No - 0 Absent - 0

Floor Assignment: Senator Klein

Date: 3/25/2013 Roll Call Vote # 1

#### 2013 SENATE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO. Engrossed HB 1140

Senate Industry, Business, and Labor				Com	Committee	
☐ Check here for Conference C	committe	ee				
Legislative Council Amendment Nur	mber _					
Action Taken: 🗵 Do Pass 🗌 Do Not Pass 🔲 Amended 🔲 Adopt Amendmer						
□ Rerefer to Apple 1     □ Rerefer to Apple 2     □ Rerefer to Apple 2     □ Rerefer to Apple 3     □ Rerefer to Apple 4     □ Rerefer to	opropria	tions	Reconsider			
Motion Made By Senator Murphy		Se	econded By Senator Laff	en		
Senators	Yes	No	Senator	Yes	No	
Chairman Klein	Х		Senator Murphy	Х		
Vice Chairman Laffen	х		Senator Sinner	X		
Senator Andrist	Х					
Senator Sorvaag	X					
Senator Unruh	X					
	<del>-</del>					
	<del> </del>					
	<del> </del>					
	-	ļ				
	+					
	<del> </del>	<del></del>				
		<u> </u>				
Total (Yes) <u>7</u> Absent <u>0</u>		No	0			
Floor Assignment Senator Klein	· · · · · · · · · · · · · · · · · · ·					

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

#### REPORT OF STANDING COMMITTEE

Module ID: s\_stcomrep\_52\_007

Carrier: Klein

HB 1140, as engrossed: Industry, Business and Labor Committee (Sen. Klein, Chairman) recommends DO PASS and BE REREFERRED to the Appropriations Committee (7 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1140 was rereferred to the Appropriations Committee.

**2013 SENATE APPROPRIATIONS** 

HB 1140

#### 2013 SENATE STANDING COMMITTEE MINUTES

#### **Senate Appropriations Committee**

Harvest Room, State Capitol

HB 1140 April 3, 2013 Job # 20832

☐ Conference Committee				
Committee Clerk Signature	Rose Janing			
Explanation or reason for introduction of bill/resolution:				
A BILL for an Act to provide for a loan from the Bank of North Dakota to the western area water supply authority; and to declare an emergency.				
Minutes:	Testimony attached # 1-2.			
Legislative Council - Sheila M. S	Sandness			

Chairman Holmberg opened the hearing on HB 1140. All committee members were present.

#### Jaret Wirtz, Executive Director, Western Area Water Supply

OMB - Laney Herauf

Testimony attached # 1- 2013 Business Plan Update
He started talking from and explaining the business plan and update of the WAWS system.

The revenues will go back to pay for WAWS debt. Agreements have been signed by all members. They are serving 58,000 people.

HB 1140 is to help with the expansion of the Williston WTP (water treatment plant) capacity from 14 to 21 MGD.

Handed out graph - <u>WAWSA Average & Peak Day Water Demand & Water Supply Capacity</u> - attached #2.

**Chairman Holmberg** closed the hearing on HB 1140 and asked the subcommittee to look at this in relation to the HB 1020.

#### **2013 SENATE STANDING COMMITTEE MINUTES**

## Senate Appropriations Committee Harvest Room, State Capitol

HB 1140 April 11, 2013 Job # 21118

☐ Conference Committee				
Committee Clerk Signature Fore Janing				
Explanation or reason for introduction of bill/resolution:				
A BILL for an Act to provide for a loan from the Bank of North Dakota to the western area water supply authority.				
Minutes:				
Legislative Council - Becky J. Keller OMB - Lori Laschkewitsch				
Chairman Holmberg opened the discussion on HB 1140. All committee members were present.				
V.Chairman Grindberg Moved Do Not Pass on HB 1140 Senator Carlisle seconded the motion.				
A roll call vote was taken. Yea: 10 Nay: 3 Absent: 0				
V.Chairman Grindberg will carry the bill on the floor.				

Date:	4-	- //-	13
Roll Call Vote	· #	/	

## 2013 SENATE STANDING COMMITTEE ROLL CALL VOTES

	BILL/RES	OLUTIO	N NO.	114	<u></u>		
Senate Appropriations				Com	mittee		
Check here	for Conference C	Committ	ee				
Legislative Counc	cil Amendment Nur	mber					
Action Taken Adopt Amendment Do Pass Do Pass as Amended Do Not Pass							
Motion Made By	Brinde	No	Se	econded By	Carlin	le	
Sen	ators	Yes	No	Senator		Yes	No
Chariman Ray H	olmberg	1		Senator Tim Mathern			4
Co-Vice Chairma	an Bill Bowman	1		Senator Dav	id O'Connell		-
Co-Vice Chair Tony Grindberg		1		Senator Larr	y Robinson	レン	
Senator Ralph Kilzer		1	-	Senator Johi	n Warner		4
Senator Karen Krebsbach		-					
Senator Robert E	Senator Robert Erbele						
Senator Terry Wanzek			,				
Senator Ron Carlisle		-					
Senator Gary Lee	<u> </u>		-				
Total (Yes)	10	)	No	3			
Absent		0		· · · · · · · · · · · · · · · · · · ·			····
Floor Assignment		vien	de	Ly			
If the vote is on an	amendment, briefl	ly indicat	te inten	x.			

#### REPORT OF STANDING COMMITTEE

Module ID: s\_stcomrep\_65\_007

Carrier: Grindberg

HB 1140, as engrossed: Appropriations Committee (Sen. Holmberg, Chairman) recommends DO NOT PASS (10 YEAS, 3 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1140 was placed on the Fourteenth order on the calendar.

**2013 TESTIMONY** 

HB 1140



# Testimony of Denton Zubke, Chairman, WAWSA IN SUPPORT OF HOUSE BILL 1140 Energy and Natural Resources Committee Bismarck, North Dakota – January 18, 2013

Chairman Porter and members of the Committee, for the record my name is Denton Zubke, Chairman of the Western Area Water Supply (WAWS) Authority. The WAWS Authority is comprised of the City of Williston, McKenzie County Water Resource District (MCWRD), Williams Rural Water District (WRWD), R&T Water Supply Commerce Authority (R&T), and Burke-Divide-Williams (BDW) Water System Association. Each of these Members are represented on the WAWS Authority Board of Directors as is the State Water Commission.

I am here, on behalf of the WAWS Authority, to express our appreciation for your strong support for legislation during the 62<sup>nd</sup> Legislative Assembly that created the WAWS Authority and authorized \$110 million in loan funds from the State to begin construction of the project. I am also here today to update you on the progress of the WAWS Project and to urge your support for House Bill (HB) 1140.

First, I must say - we have a great story and I'm extremely happy to be here today to share it.

In 2011, a total project cost estimate of \$150 million for construction of the WAWS Project was presented to the legislature. The founding legislation, which established North Dakota Century Code Chapter 61-40, appropriated \$110 million in loans from the State to complete initial phases of the project, and stated the intent to consider an additional \$40 million in funding for the 2013 through 2015 biennium. Frankly, I think the legislature was unsure whether the WAWS Authority could build enough infrastructure to spend that first \$110 million during the last two years. I can report that we have made extraordinary progress with that first \$110 million and are ready to move forward with the next phase of the project with the

additional funding. HB 1140 provides the continued construction of the WAWS Project by appropriating the \$40 million in loan funds outlined in the founding legislation.

#### A Great Story - 19 Months of Remarkable Progress

Eighteen months after passage of the founding legislation, water service has been provided to Watford City and McKenzie County, growth areas in City of Williston, and is anticipated to reach nine additional cities by this spring. WAWS Authority Members have come together in a remarkable way. Through countless volunteer hours and significant efforts of our Executive Director, the Members have successfully established a monthly meeting schedule, set up offices, established policy manuals, and hired staff, including a Business Manager, Administrative Assistant, and two operators. We completed the selection process for professional services and retained an engineering firm, Advanced Engineering and Environmental Services (AE2S), to design and oversee construction of this project and assist in financial and operational planning. We have also retained Vogel Law Firm as legal counsel.

Given the exponential and unprecedented growth and demand for municipal, rural, and industrial water in Western North Dakota, the cities and water systems recognized they could not meet all the needs on their own. The WAWS Authority Members have agreed to pool their infrastructure resources, often setting aside individual gain and proprietary concerns in order to achieve great progress for this regional system. For instance, the City of Williston has contracted the management and provided an option to sell its Regional Water Treatment Plant to the WAWS Authority in order to better serve the City as well as the entire WAWS Project service area. Other WAWS Authority Members have turned over parts of their infrastructure and industrial water fill depots for the benefit of all in the region.

Most importantly, all the Members and Sub members have turned over their industrial water sales and water supplies to be more effectively managed for the benefit of all. The unselfish collaborative progress has been, in one word, amazing!

#### This Fast-Paced Project Calls for Diligent Financial Management

We are very mindful of our financial management responsibilities and are running the WAWS Authority as a business. Since June 2011, the Bank of North Dakota approved multiple loan advances to the WAWS Authority for water system construction pursuant to the founding legislation (as shown in Figure 1). A capital cost accounting system was developed to track

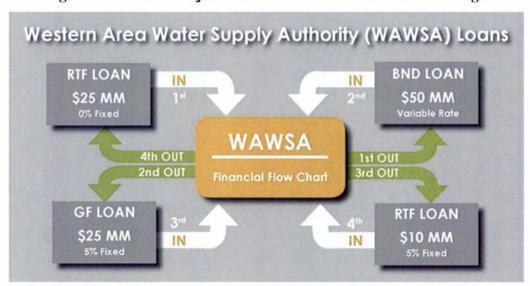


Figure 1: WAWS Project Initial \$110 Million Financial Package

specific WAWS Project segment costs to manage the \$110 million dollar loans in the most efficient way possible. In addition, the WAWS Authority set up proper accounting measures that track the financial position of the WAWS Project through three main monthly financial statements, which include the Balance Sheet, Income Statement, and the Statement of Cash Flows. These are reviewed monthly by the Board of Directors, State Water Commission staff.

#### **Strong Project Oversight**

The WAWS Project has strong ongoing oversight by the State Water Commission. As directed in the founding legislation, the WAWS Authority seeks approval of its overall plan and loan packages as well as ongoing contract plans and specifications for the project. Michelle

Klose, Assistance State Engineer, represents the State Water Commission on the WAWS Authority Board of Directors.

#### Truly Meeting a Public Purpose

The founding legislation makes specific mention of the obligation to provide for future economic welfare and prosperity of the people of the state, and in particular the people of Northwestern North Dakota. The project, first and foremost, is sized and intended to provide domestic water service to portions of the State that have long-needed a higher quality and more reliable water source for domestic needs, and that have recently become further strained by increased demand associated with rapid population growth.

Secondly, the founding legislation protects the public interests of the entire State by creating the project for public use. That is, when and where excess capacity is available, the WAWS Authority has the ability to sell water to private entities such as gas and oil producers to generate revenues to repay the loan funds to the State.

By enacting the founding legislation as an emergency measure, the 62<sup>nd</sup> Legislative Assembly enabled the WAWS Authority to immediately form and begin design and construction which accelerated the timeline for generating revenue from industrial water sales, thereby taking advantage of near-term industrial water needs to pay for the project. The WAWS Authority fully intends to fulfill its financial obligations. We take very seriously our responsibility of protecting the interests of the State. As a result, the WAWS Authority needs to and intends to sell sufficient amounts of industrial water to repay the State of North Dakota loans. The project is moving along according to our plan and we look forward to moving forward with the next phase.

#### In Summary - We Urge Your Support for HB 1140

In closing, I want to reiterate our appreciation for support of the project to date and strongly encourage your support for the next \$40 million of funding. The founding legislation intended this next level of funding. The project is well-managed and on pace to meet the Business Plan presented to the legislature. The domestic water supply needs in Western North Dakota have expanded far beyond what was contemplated when we were here 19 months ago.

In short, Western North Dakota needs this additional funding to continue this important project. The WAWS Authority is committed to completing this project as efficiently as possible, and to providing repayment of all loans from the State by maximizing the opportunity to generate revenue from industrial water sales after meeting the domestic needs.

Thank you for your time and support of HB 1140.



# Testimony of Jaret Wirtz, Executive Director, WAWSA IN SUPPORT OF HOUSE BILL 1140 Energy and Natural Resources Committee Bismarck, North Dakota – January 18, 2013

Chairman Porter and members of the Committee, for the record my name is Jaret Wirtz, Executive Director for the Western Area Water Supply (WAWS) Authority. I am here to urge your support for House Bill (HB) 1140.

HB 1140 includes an additional \$40 million in critical funding for the continued construction of the Western Area Water Supply (WAWS) Project. The total project cost estimate at the time the founding legislation was passed in 2011 was \$150 million.

## What a Difference a Year and Half Can Make – Getting the Authority Off and Running

After garnering overwhelming support in the last legislative session, the WAWS Authority was created when the founding legislation was signed by Governor Dalrymple in May 2011. In the 19 months since that bill was signed, incredible progress has happened both on administrative tasks and system development, design, and construction. The founding legislation appropriated \$110 million to the development of the WAWS Project.

Local leaders came together, giving endlessly of their personal time to develop the Authority. The WAWS Authority Board of Directors has adopted bylaws, and signed multiple agreements including Water Supply Agreements, Output Agreements, Access and Use Agreements, and Infrastructure Operating Agreements.

The WAWS Project hit the ground running with unprecedented speed once legislation was signed. In 19 short months, the WAWS Authority has executed contracts in excess of \$112

million to implement the initial phases of this project using cash generated through water sales for contracts above the approved \$110 million original appropriation.

#### Making a Real Difference in One Biennium

Out of the necessity to serve the rapidly expanding population in northwest North Dakota, this project is on track to be the fastest built regional water systems in the State. This was apparent as the WAWS Project was able to achieve immediate results in the first six months.

Crucial milestones that have either been achieved or will be achieved in the near-term include:

- Constructed the interim Williston By-Pass Transmission Line, a 10.5 mile stretch of pipe that extends north and west from Williston to new industrial growth areas and improvements to the 26th Street Pump Station were completed in 2011.
- Extended service to Basin Electric Power Co-op west of the City of Williston, through a
  cost share with the WAWS Project, to serve a new peaking power generation facility as
  well as providing service to several rural residents served by Williams Rural Water
  District.
- Constructed a five million gallon reservoir northwest of Williston that serves as the primary supply for growth areas around Williston as well as the rest of the northern WAWS service area.
- Extended water service to the City of Watford City and began service the middle of December 2012. This included 30 miles of 20-inch pipeline crossing the Missouri River. Figure 1 shows the before and after of the sodium and hardness in the Watford City water supply on household drinking glasses. The glass on the left reflects the sodium and hardness from Watford City's groundwater while the glass on the right shows the clarity provided by the WAWS water supply.
- Built five water depots which are operational as well as five Member-operated depots which are generating revenue and will be providing debt service payments.
- Extended rural water service to 200 users in Western McKenzie County through the installation of 150 miles of distribution pipe.
- Developed partnerships with oil companies contracting industrial water service to pay for a portion of the WAWS system.

Figure 1: Sodium and hardness on household drinking glasses in Watford City before and after the WAWS Authority began service to Watford City in December 2012



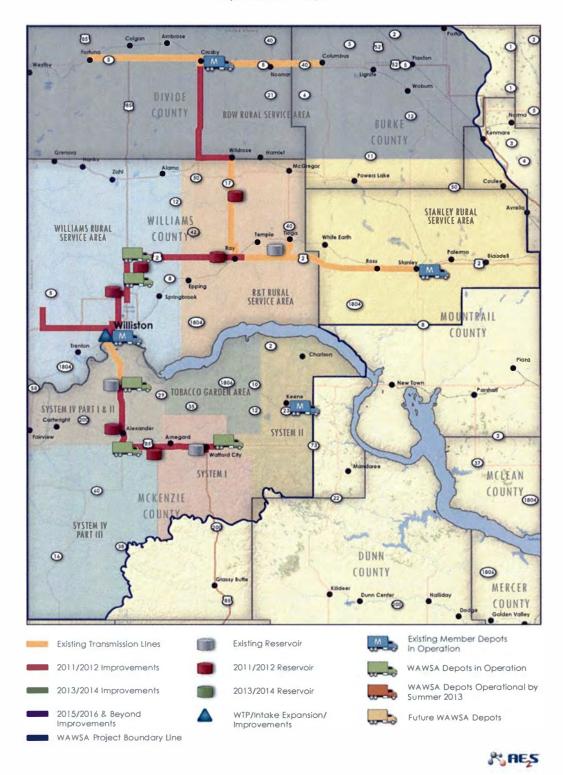
- Currently expanding the Williston Regional Water Treatment Plant from 10 to 14 million gallons per day (MGD).
- Will provide water service to the City of Crosby by the end of this month.
- Will provide water service to the City of Ray by the end of February 2013.

We are most proud of the fact that we will be serving ten cities within 24 months of the WAWS Authority's creation with high quality water through the installation of 100 miles of transmission mains, five reservoirs, and three pump stations. These major milestones are summarized in Figure 2: Major Infrastructure Components 2011-2013 Biennium (on page 4).

Figure 2: Major Infrastructure Components 2011-2013 Biennium

#### WESTERN AREA WATER SUPPLY PROJECT

Major Infrastructure Components

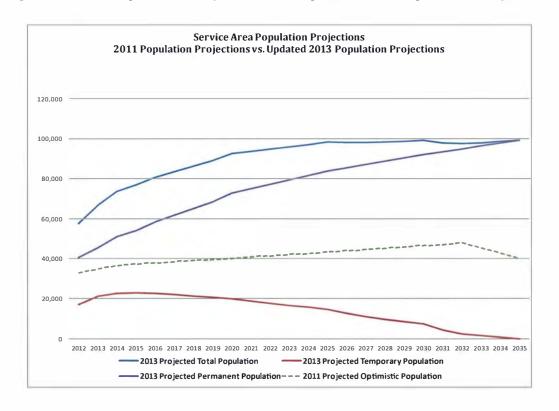


#### Looking Forward Into the 2013-2015 Biennium – Facing Unprecedented Growth

It is interesting to look back at 2011, when it was argued we were overbuilding the WAWS Project. At the time, drilling rigs were anticipated to peak at 120 statewide compared to the current level of 185. Today, there are 115 rigs operating in the WAWS service area alone. The 2011 WAWS Project Business Plan predicted a peak service population within its service area of 48,000.

Fast forward two years. We have a population living in the service area estimated over 58,000 right now – far exceeding the 2011 peak population estimate based upon studies conducted by the firm Ondracek, Witwer and Bertsch on behalf of the North Dakota Housing Finance Agency, North Dakota Department of Commerce, and the Bank of North Dakota. According to the recent 2012 North Dakota Statewide Housing Needs Assessment and Population Estimates for the City of Williston (December 2012) conducted by the Center for Social Research at North Dakota State University, the study forecasts a total population increase for the five-county region serviced by the WAWS Project to reach almost 100,000 (practically the size of Fargo). That bears repeating, our peak service population is projected to be more than doubled what it was projected to be just two years ago. Figure 3 shows the 2011 Population Projections and Updated 2013 Population Projections.

Figure 3: 2011 Population Projections and Updated 2013 Population Projections



The WAWS Project is seeing this population growth first hand. When the WAWS Project planning began in 2010, there were requests for 400 rural users. There were no requests for residential developments, commercial lots, crew camps, or RV parks at that time. Since then, the extraordinary growth in the area has brought the user/service requests to approximately 15,000 – approximately 37 times the original plan. Residents, workers, schools, businesses, healthcare, and industry all need water.

#### A Story of Success, but not without Challenges

While this project has been extraordinarily successful in the expedient manner in which it has been implemented, it is true that we have seen some setbacks and challenges. We would expect nothing less for a project of this magnitude. We have experienced normal construction issues associated with a large-scale project, and have worked through the standard process of resolving such issues.

The WAWS Authority is committed to developing a solid working relationship with all landowners that it impacts, and toward that end has accommodated all reasonable easements requests that could be justified without jeopardizing the project. We found that most landowners understood and agreed that there is a dire need for an improved water supply in the region. But like any large public project, this project is not without objectors. The water transmission pipelines cross through the heart of the Bakken Formation, where oil companies are paying landowners over five (5) times the amount WAWS Authority is paying for easements. There is a simple explanation for that.

The rate set by the WAWS Authority is a reasonable water easement rate, set slightly higher than other public water project easement rates throughout the State, including Southwest Pipeline territory, Red River Valley Water Supply Project, and even water easements by the rural water system immediately adjacent to the City of Fargo. That being said, oil companies are forprofit companies that do not have the power of eminent domain. If they need an oil or gas line easement, they have to pay whatever it takes to get that easement from a farmer, resulting in much higher prices for private oil and gas line easements.

Landowners do not always fully appreciate the distinction between the public water lines and the private oil lines, or the financial ability of each to pay. Some landowners in certain areas have also been disenfranchised by prior waterline installation construction practices. Frankly,

their concerns frequently had merit. The WAWS Authority reinforces best construction practices with its contractors regularly in order to provide a better experience for the landowners.

In addition to easement challenges, we have spent considerable time dealing with ongoing opposition from private water providers. Per the language in the founding legislation, the WAWSA has considered the interests of the private water providers in the siting of industrial water depots. The 2011 WAWS Project Business Plan, upon which construction of the system was based, identified a unique opportunity for debt repayment by selling excess capacity to industrial water users when it is not needed for domestic purposes.

This arrangement was a departure from the traditional approach under which the state has historically funded 75 percent of the cost for construction of a regional water system such as the WAWS Project. As a result, the industrial water sales are vital to the success of this project, and indeed provide a financial benefit to the entire State by addressing a significant water need at a significant savings.

The bottom line is that in the creation of this water system, including the loan configuration and debt repayment strategy, was strongly supported by the 62<sup>nd</sup> Legislative Assembly, who recognized that the need for this project is now, not in 10 or 15 years. The WAWS Authority intends to sell sufficient amounts of industrial water to pay back the State of North Dakota loans, and to provide funding to expand the system to serve the entire region.

#### Critical Funding Needs for 2013-2015 Biennium

HB1140 completes the original funding request brought forth during the 62<sup>nd</sup> Legislative Session, at which time the total project cost was estimated at \$150 million. Although HB 1140 relates only to the remaining \$40 million discussed in the founding legislation, I'd like to summarize the full picture for the next biennium. In total, we've identified approximately \$119 million in water infrastructure needs for the next two years. The WAWS Authority has requested \$79 million in HB 1020 (North Dakota State Water Commission Appropriation) and the \$40 million loan request within HB 1140. Table 1 (on page 8) presents the estimated project costs for Phase III. The funding needs for the 2013 – 2015 biennium are illustrated in Figure 4 (on page 9), and include the following:

1. \$10 million to complete Phases I and II associated with increased project costs due to additional rural user signups, upsized infrastructure in some locations to accommodate the

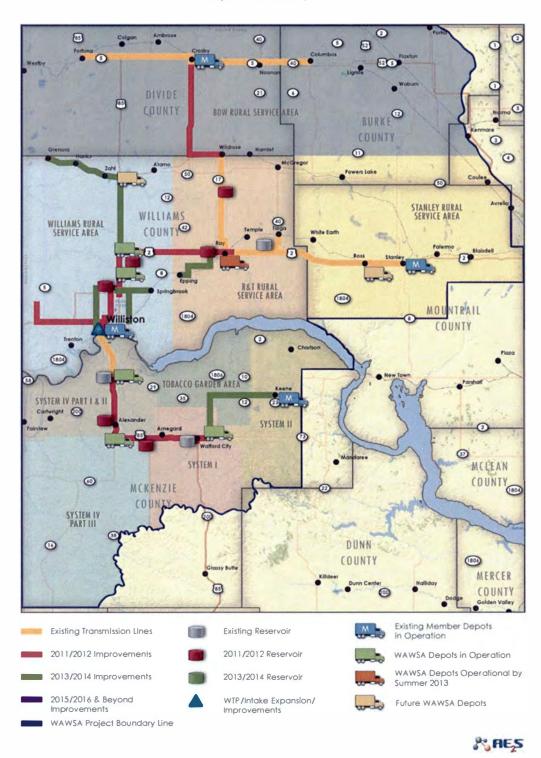
Table 1: Project Summary, Capital Cost Estimate, and Project Timeline for WAWSP
Phase III Improvements

Project Number	Project	Estimated Start Date	Estimated Completion Date	Estimated Construction (2014 Dollars)
	Phase I/II Carryover			\$9,978,178
1	Task Order No. 10 Williston WTP (14-21MGD)	10/2012	04/2015	\$21,993,240
2	Task Order No. 17 – By-Pass Transmission Lines (30" & 36")	10/2012	12/2013	\$8,291,000
3	Task Order No. 18 – WRWD - West Expansion - Part 2 (Tank-Res/Pump Station)	10/2012	12/2013	\$4,578,000
4	Task Order No. 19 Transmission Imp. (Keene Loop)	10/2012	12/2013	\$5,205,000
5	Fill Depots	06/2013	12/2015	\$2,153,915
6	WRWD - East Transmission - Part 1 (Hwy 2 E. 133rd Ave and South)	06/2013	12/2015	\$3,811,000
7	R&T - Epping Transmission - Part 1 (Ray High PT to Epping)	06/2013	12/2015	\$4,326,000
8	MCRWD - System I (Tobacco Garden)	06/2013	12/2015	\$4,815,250
9	WRWD - East Transmission - Part 2 (Epping to Hwy. 1804 and East)	06/2013	12/2015	\$9,455,400
10	Williston Intake Expansion Preliminary Engineering (Beyond 21 MGD)	06/2013	12/2015	\$880,650
11	WRWD - Part 1 (Blacktail Dam Area Distribution)	06/2013	12/2015	\$5,974,000
12	WRWD - Transmission Line (13 mile to 29 mile )	06/2013	12/2015	\$6,489,000
13	WRWD - Grenora (29 Mile to Grenora)	06/2013	12/2015	\$1,648,000
14	R&T - Rural Distribution - Part 1 (Wildrose Area)	06/2013	12/2015	\$2,544,100
15	MCRWD - Rural Distribution (System IV Part 3)	06/2013	12/2015	\$6,695,000
16	WRWD - North Transmission - Part 1 (58th St. to 60th St.)	06/2013	12/2015	\$655,080
17	BDW - Distribution - Part 1 (Crosby Branch and Columbus Branch)	06/2013	12/2015	\$3,646,200
18	Stanley - Distribution - Part 1 (Stanley High Point Branch)	06/2013	12/2015	\$5,562,000
19	WRWD - West Transmission North - Part 3 (Pump Sta. to 60th St.	06/2013	12/2015	\$3,275,400
20	WRWD - Part 2 (Remaining Blacktail Dam Area)	06/2013	12/2015	\$7,889,800
TOTAL PI Phases I a	HASE III (includes carryover from	Mark the		\$119,866,213

Figure 4: Major Infrastructure Components 2013-2015 Biennium

#### WESTERN AREA WATER SUPPLY PROJECT

Major infrastructure Components

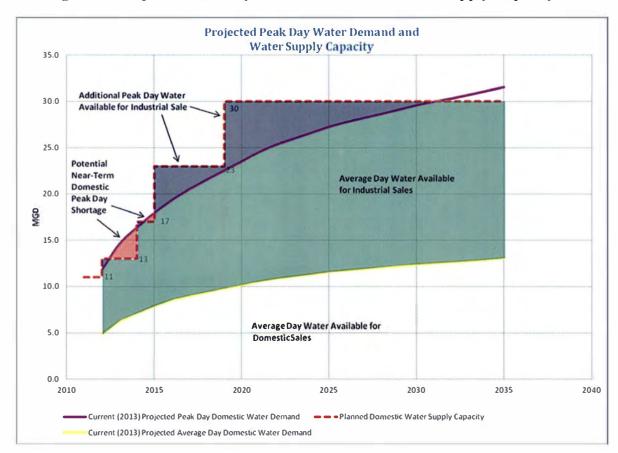


- increased demand, and higher than anticipated bid prices due to the market conditions in the region.
- 2. \$22 million to expand the Williston Regional Water Treatment Plant from 14 million MGD to 21 MGD to avoid projected water shortages in 2015 and beyond. We project the 2013 and 2014 peak day water demands to exceed or very nearly exceed the production capabilities without this expansion as illustrated in Figure 5 (on page 11). Based upon the updated population projections, we are very concerned about possible peak day water shortages in 2013, 2014, and potentially 2015 without immediate expansion of the Water Treatment Plant to 21 MGD.
- 3. \$46 million for transmission main improvements in and around the City of Williston and other parts of Williams County to continue to support rapidly increasing population demands. Williams County service will also include service to the communities of Epping, Grenora, and Springbrook. The \$46 million will also provide transmission main to eastern McKenzie County to serve development around the City of Watford City and rural water expansions throughout the county. In addition to providing services for new developments, many of these transmission mains will provide looping capability or redundant transmission systems in the future.
- 4. \$39 million for rural water distribution systems will provide rural service to Williams, McKenzie, and Mountrail Counties. Based upon current water requests, it is planned that these transmission and rural water distribution system improvements would service approximately 31,000 rural residents, 225 commercial users, and 3,250 temporary housing units.
- 5. \$2M to complete the network of fill stations. These fill stations were included in the construction plan approved by the North Dakota State Water Commission.

An unbelievable amount of work has been accomplished in two very short years in northwest North Dakota. We couldn't have achieved this without the hard work of our staff, our Members, and support from Governor Dalrymple, Todd Sando, and the founding legislation bill sponsors, and the 62<sup>nd</sup> Legislative Assembly. But there is still much to be done. HB 1140 is essential to continuing the success of the WAWS Project.

Thank you for your time and support of HB 1140.

Figure 5: Projected Peak Day Water Demand and Water Supply Capacity



## Steve L. Burian, CEO, Advanced Engineering and Environmental Services, Inc.

(AE2S)

## Western Area Water Supply Authority Testimony Outline January 18, 2013

# TESTIFYING IN SUPPORT OF HB 1140 HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE REPRESENTATIVE TODD PORTER, CHAIRMAN

#### Executive Summary of the WAWSP 2013 Business Plan Update

- Project Development and Progress
- Updated Water Demand Projections
- Updated Project Description
- Loan Terms and Conditions
- Break-Even Analysis
  - o Scenario 1: 10-Year Debt Repayment
  - o Scenario 2: 23-Year Debt Repayment
- Projected WAWSA Service Area Industrial Water Demands

#### WAWSA Capital Accounting—December 31, 2012

#### TM#4 Break-Even Analysis WAWSP 2013 Business Plan Update

- Estimated Water System Revenue Requirements
  - o Existing Water Infrastructure Debt
  - o New Infrastructure Debt
  - o Operation and Maintenance Costs
  - o Industrial Revenue Reimbursements
  - o Reserve Fund Requirements
- Projected Domestic Water Sales
- Projected Break-Even Scenarios
  - o Scenario 1: 10-Year Debt Repayment
  - o Scenario 2: 23-Year Debt Repayment

## **TECHNICAL MEMORANDUM #4**

To: Western Area Water Supply Authority

From: Miranda Kleven, PE, and Tomas Solc

**AE2S Nexus** 

Re: Break-Even Analysis

2013 Business Plan Update

Western Area Water Supply Project

**Date:** January 15, 2013

#### INTRODUCTION

In preparation for the 2013 North Dakota Legislative Session, this Technical Memorandum #4 (TM#4) was developed to support legislation (House Bill 1140) requesting an additional \$40 million in loans to bring the total Western Area Water Supply Project (WAWSP) loan funding package to \$150 million. Whereas the 2011 Business Plan and Business Plan Supplement #1, Version 2, evaluated the financial viability of the WAWSP based on anticipated industrial water sales revenue, the analysis presented herein was completed from a break-even perspective.

#### **BACKGROUND**

In the 2011 Business Plan, a series of financial analyses were completed to gauge the financial viability of the WAWSP. The analyses were utilized as the basis for approaching the 2011 North Dakota Legislature for support and approval of the WAWSP and establishment of the Western Area Water Supply Authority (WAWSA). At that time, the project was estimated at a total cost of \$148.025 million (in 2011 dollars). During North Dakota's 62<sup>nd</sup> Legislative Assembly, House Bill 1206 was voted into law as North Dakota Century Code Chapter 61-40 (NDCC Ch. 61-40). This legislation authorized four loans totaling \$110 million for the WAWSP for the 2011-2013 biennium, and noted that an additional \$40 million loan was anticipated for the 2013-2015 biennium.

In the 2011 Business Plan, total revenue requirements were projected based on existing Member and Sub Member debt obligations, new debt service requirements associated with WAWSP loan funding (varied by scenario), fixed and variable operation and maintenance (O&M) costs, reimbursement of current industrial revenue losses to Members and Sub Members, and anticipated reserve funding requirements. Total revenues were projected based on domestic water sales associated with anticipated service populations and industrial water sales associated with extended and rapid well drill-out conditions (varied by scenario). The 2011 Business Plan recommended that debt repayment for the WAWSP be based on a 20-year



or greater amortization period, to best enable the WAWSA to adequately fund reserves in the near-term and consistently meet annual revenue requirements, although more rapid repayment scenarios were evaluated and anticipated. It was noted that this flexibility was desirable to accommodate fluctuations in oil production and associated industrial water needs.

The \$110 million in loans in NDCC Ch. 61-40 were intended to complete Phases I and II and Phase III Engineering, Legal, and Administration components of the WAWSP. Following the approval of the \$110 million financial package in NDCC Ch. 61-40, the WAWSP construction schedule was updated and financial analyses from the 2011 Business Plan were revisited in a 2011 Business Plan Supplement, titled 2011 Business Plan Supplement #1, Version 2, dated June 20, 2011. The analyses reflected the updated construction schedule, updated total project cost of \$150.025 million (in 2011 dollars), and the loan repayment terms outlined in NDCC Ch. 61-40.

The WAWSP 2011 Business Plan Supplement #1, Version 2, was completed to provide two scenarios regarding contributions to the Capital Reserve. Assumptions associated with annual O&M costs, existing Member and Sub Member debt, and projected domestic water sales were unchanged from those in the 2011 Business Plan. New infrastructure debt was assumed to total \$150.025 million, and projected revenue from industrial water sales was updated to reflect changes to the proposed project construction schedule. The first scenario accounted for a Capital Reserve funded at 25 percent of the original project cost in the year after the WAWSP debt is retired, followed by annual contributions of 2.5 percent of the original project cost each year thereafter. Due to the magnitude of the WAWSP and the likelihood of additional capital needs prior to 2022, a second scenario was developed to illustrate the impact of contributing to a Capital Reserve fund beginning in 2013. In the second scenario, capital reserve contributions of \$2.5 million annually were initiated in 2013 and increased to \$3.75 million annually in 2028. Cash flow analyses completed in the 2011 Business Plan Supplement #1, Version 2, showed that, under either scenario, WAWSA was expected to meet its annual cash flow requirements and complete WAWSP debt repayment by 2022.

The break-even analysis for the 2013 Business Plan Update calculated the amount of revenue needed from industrial water sales based on assumed total revenue requirements and projected domestic revenues. The following formula was used:

Required Industrial Water Sales = Total Revenue Requirements - Domestic Water Sales

Based on the existing WAWSA budget and future projected expenses, total revenue requirements were projected for a planning period through 2036. These revenue requirements accounted for O&M, existing Member and Sub Member debt service, WAWSA debt service associated with the initial \$110 million in loans authorized, industrial revenue reimbursements to Members and Sub Members, and contributions to reserves and escrow accounts. In addition, debt service requirements were estimated for the additional \$40 million in loan funds (Loan #5). The combined five loans were amortized differently with respect to two scenarios:



- Scenario 1 assumed a 10-year time frame for full debt repayment of the \$150 million in loan funds due to the stakeholders' desire to achieve full debt repayment within a short window given the most recent projected drill schedule prepared by the ND Department of Mineral Resources (DMR); Loan #5 was repaid in the seventh year of debt repayment under this scenario.
- Scenario 2 analyzed amortization periods for the initial \$110 million as prescribed by the Bank of North Dakota (BND) in the commitment letter dated December 21, 2012 to the WAWSA, and assumed a 13-year amortization for the new \$40 million Loan #5 beginning in 2015 based on consultation with BND representatives; Loan #5 was repaid in the fifteenth year of debt repayment in this scenario.

The most recent estimated revenue requirements and projected domestic water sales were used in completing both of the break-even cash flow scenarios. Consistent with the 2011 Business Plan, WAWSA industrial water pricing was assumed to fall within the current range of prevailing reported market rates in northwestern North Dakota at \$20 per 1,000 gallons or \$0.84 per barrel. Beginning in 2018, this value was increased by \$1 per 1,000 gallons, or \$0.04 per barrel, every five years.

#### **ESTIMATED WATER SYSTEM REVENUE REQUIREMENTS**

Revenue requirements consist of existing and new debt service principal and interest payments, O&M expenses, reimbursements to communities for lost industrial revenues, and contributions to reserve funds and escrow. The sections below outline the projected revenue requirements for the WAWSP, based on currently available information.

#### **Debt Service**

#### **Existing Water Infrastructure Debt**

Details of the WAWSP infrastructure were outlined in Technical Memorandum #3: Updated Project Description. In addition to the new infrastructure, components of the water system currently operated by the City of Williston, McKenzie County Water Resource District (MCWRD), and the R&T Water Supply Commerce Authority (R&T) are being utilized as part of the WAWSP, some of which has existing outstanding debt. Specifically, the Williston raw water intake and the Regional Water Treatment Plant (WTP) are being used for the supply and treatment components of the WAWSP. There is outstanding debt of approximately \$17,495,000 associated with components of the City of Williston's supply and treatment system. Outstanding debt associated with components of MCWRD and R&T systems that will be utilized by the WAWSA equals approximately \$10,455,000 and \$7,580,000, respectively. Annual debt service payments associated with the Williston, MCRWD, and R&T systems are included as revenue requirements in the cash flow analyses. Table 1 highlights the existing water infrastructure debt repayments that WAWSA is expected to incur on a yearly basis.



Existing Debt Service	2013	2014	2015	2016
Total Williston Debt Service	\$1,701,900	\$1,696,425	\$1,695,038	\$1,687,613
Total R&T Debt Service	\$673,650	\$673,300	\$672,700	\$676,850
Total MCWRD Debt Service	\$551,850	\$552,400	\$552,650	\$552,600
Total	\$2,927,400	\$2,922,125	\$2,920,388	\$2,917,063
Existing Debt Service	2017	2018	2019	2020
Total Williston Debt Service	\$1,679,288	\$1,675,050	\$1,669,763	\$1,663,425
Total R&T Debt Service	\$680,600	\$678,975	\$677,100	\$679,550
Total MCWRD Debt Service	\$552,250	\$551,600	\$550,650	\$549,400
Total	\$2,912,138	\$2,905,625	\$2,897,513	\$2,892,800
Existing Debt Service	2021	2022	2023	2024
Total Williston Debt Service	\$1,651,050	\$1,393,388	\$1,386,563	\$1,144,425
Total R&T Debt Service	\$682,450	\$679,550	\$676,400	\$683,000
Total MCWRD Debt Service	\$552,850	\$550,850	\$548,550	\$550,950
Total	\$2,886,350	\$2,623,788	\$2,611,513	\$2,378,375
Existing Debt Service	2025	2026	2027	2028
Total Williston Debt Service	\$1,142,850	\$1,135,388	. 9	-
Total R&T Debt Service	\$679,075	\$679,900	\$680,350	\$680,425
Total MCWRD Debt Service	\$552,900	\$549,400	\$550,600	\$551,350
Total	\$2,374,825	\$2,364,688	\$1,230,950	\$1,231,775
Existing Debt Service	2029	2030	2031	2032
Total Williston Debt Service	- \			-
Total R&T Debt Service	\$640,125	\$640,625	\$640,750	\$635,500
Total MCWRD Debt Service	\$551,650	\$551,500	\$545,900	-
Total	\$1,191,775	\$1,192,125	\$1,186,650	\$635,500

Table 1: WAWSA Existing Debt Service

#### New Infrastructure Debt

NDCC Ch. 61-40 outlined a series of four loans totaling \$110 million from the State Water Commission via the Resources Trust Fund, BND, and the General Fund to the WAWSA to implement the first two phases of the WAWSP. In addition, the WAWSA is seeking an additional \$40 million loan (Loan #5) from the BND in the upcoming biennium. Preliminary discussions with BND representatives have resulted in the assumptions related to Loan #5 noted in the bullets below. Figure 1 is a flowchart that outlines the current financial package along with the additional \$40 million loan. Specifically, the package includes the following five loans in the order of disbursement as envisioned in NDCC Ch. 61-40 and proposed for Loan #5:

Loan #1: Resources Trust Fund - The first loan is in the amount of \$25 million at a zero percent interest rate. According to the BND commitment letter dated December 21, 2012, monthly payments were to be based on a five-year amortization starting on 6/30/2031 with the first payment due on 7/31/2031. The commitment letter



- established that this would be the fourth loan repaid. With the addition of Loan #5, it is not proposed that Loan #1 be repaid last.
- Loan #2: Bank of North Dakota The second loan is in the amount of \$50 million with a variable rate at 1.50 percent over the 30-day LIBOR (London Interbank Offered Rate), adjusted on the first calendar day of each quarter. The loan will also have a floor rate of two percent. According to the BND commitment letter dated December 21, 2012, monthly payments were to be based on a seven-year amortization with one interest-only payment due on 7/31/2014 followed by 83 principal and interest (P&I) payments beginning 8/31/2014. This loan is the first to be repaid with cash flow from WAWSP.
- Loan #3: General Fund The third loan is in the amount of \$25 million with a fixed interest rate of five percent. According to the BND commitment letter dated December 21, 2012, monthly interest-only payments were to be made starting 1/31/2015 until 6/30/2021, followed by monthly P&I payments based on an eight -year amortization, with the first payment due 7/31/2029. The commitment letter specified that this would be the second loan repaid, but with the addition of Loan #5 it is proposed that this loan be the third loan to be repaid.
- Loan #4: Resources Trust Fund The fourth loan authorized by NDCC Ch. 61-40 is in the amount of \$10 million with a fixed interest rate of five percent. According to the BND commitment letter dated December 21, 2012, monthly interest-only payments were to start after 1/31/2015 and continue until 6/30/2029, followed by monthly P&I payments based on a two-year amortization, with the first payment due on 7/31/2029. The commitment letter specified that this would be the third loan repaid, but with the addition of Loan #5 it is proposed that this loan be the fourth loan to be repaid.
- Loan #5: Bank of North Dakota The fifth loan that the WAWSA is seeking through HB 1140 is in the amount of \$40 million. After discussions with BND representatives, and per their direction, it was assumed that a variable interest rate at 1.50 percent over the 30-day LIBOR adjusted on the first calendar day of each quarter would be appropriate. The loan was assumed to have a floor rate of two percent. BND representatives requested that this loan be the second loan to be repaid.

All loans are pre-payable, in whole or in part, on any payment date, without penalty in the same order as repayment. All loans as listed above have a shared first security interest in all revenues of the WAWSA. The BND will manage the loans from each of the State sources. Upon complete repayment of the WAWSP debt from the State of North Dakota, the WAWSA will remit five percent of its net profits annually to the Resources Trust Fund until June 30, 2040.

#### Operation and Maintenance Costs (O&M)

Revenue requirements associated with operation of the intake, wells, WTPs, pumping systems, storage reservoirs, transmission systems, and all other WAWSA yearly expenses are included in the O&M expense section of the break-even analyses. For expenses not incurred directly by WAWSA, the expenses presented in the cash flow break-even scenarios match the anticipated budgets that have been presented to WAWSA by the Members. Budgets presented by the



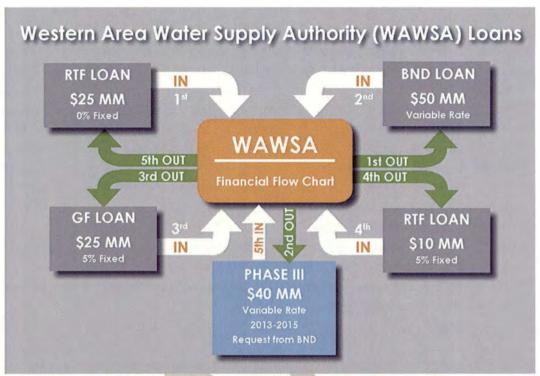


Figure 1: WAWSP Financial Package in NDCC Ch. 61-40 and Proposed for HB 1140

Members also account for O&M associated with Sub Members under each Member, if applicable. Estimated fixed and variable O&M costs were indexed annually at three percent starting in 2014, based on the 20-year average of the Consumer Price Index (CPI) published by the U.S. Bureau of Labor Statistics. In 2019, Payroll Expenses, Professional Fees, Promotional, and Vehicle expenses were adjusted to reflect future anticipated operation of the system. A breakdown of the fixed, variable, and Member O&M expenses is listed below.

#### Fixed and Variable O&M:

- Advertising
- Board of Directors
- Computer Expenses
- Contract Labor
- Dues and Subscriptions
- o Employee Benefits
- o Insurance
- Office Expense
- o Payroll Expense
- Postage

- o Professional Fees
- o Promotional
- o Rent or Lease
- Repair and Maintenance
- Small Tools and Equipment
- o Telephone
- o Travel
- o Utilities
- o Vehicle

#### Member O&M:

- City of Williston
- McKenzie County Rural Water District (MCRWD)
  - Sub Member: Watford City



- Williams Rural Water District (WRWD)
- o R&T Water Supply Commerce Authority (R&T)
  - Sub Members: Ray, Stanley, Tioga, Wildrose
- o Burke-Divide Williams Rural Water (BDW)
  - Sub Members: Columbus, Crosby, Fortuna, Noonan

Table 2 provides a summary of the estimated O&M expenses through 2036, based on the 2013 budget.

1000 · 1	2013	2014	2015	2016	2017
Fixed and Variable O&M:		Ula Aug			
Advertising	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502
Board of Directors	10,000	10,300	10,609	10,927	11,255
Computer Expenses	1,900	1,957	2,016	2,076	2,138
Contract Labor	3,000	3,090	3,183	3,278	3,377
Dues and Subscriptions	2,000	2,060	2,122	2,185	2,251
Employee Benefits	146,100	150,483	154,997	159,647	164,437
Insurance	10,000	10,300	10,609	10,927	11,255
Office Expenses	10,500	10,815	11,139	11,474	11,818
Payroll Expenses	457,000	470,710	484,831	499,376	514,358
Postage	1,000	1,030	1,061	1,093	1,126
Professional Fees	650,000	669,500	689,585	710,273	731,581
Promotional	100,500	103,515	106,620	109,819	113,114
Rent or Lease	16,700	17,201	17,717	18,249	18,796
Repair and Maintenance	100,000	103,000	106,900	109,273	112,551
Small Tools and Equipment	2,500	2,575	2,652	2,732	2,814
Telephone	4,200	4,326	4,456	4,589	4,727
Travel	10,000	10,300	10,609	10,927	11,255
Utilities	3,600	3,708	3,819	3,934	4,052
Vehicle	71,300	73,439	75,642	77,911	80,249
Total Fixed and Variable O&M	\$1,604,300	\$1,652,429	\$1,702,002	\$1,753,062	\$1,805,654
Member O&M:					
City of Williston	1,785,320	1,838,880	1,894,046	1,950,867	2,009,393
MCRWD	650,631	670,150	690,254	710,962	732,291
WRWD	61,755	63,608	65,516	67,481	69,506
R&T	1,354,683	1,395,323	1,437,183	1,480,299	1,524,708
BDW	158,000	162,740	167,622	172,651	177,830
Total Member O&M	\$4,010,389	\$4,130,701	\$4,254,622	\$4,382,260	\$4,513,728
Total O&M	\$5,614,689	\$5,783,130	\$5,956,624	\$6,135,322	\$6,319,382

**Table 2: Projected Operation and Maintenance Costs** 



The second of the second	2018	2019	2020	2021	2022
Fixed and Variable O&M:					
Advertising	\$4,637	\$4,776	\$4,919	\$5,067	\$5,219
Board of Directors	11,593	11,941	12,299	12,668	13,048
Computer Expenses	2,203	2,269	2,337	2,407	2,479
Contract Labor	3,478	3,582	3,690	3,800	3,914
Dues and Subscriptions	2,319	2,388	2,460	2,534	2,610
Employee Benefits	169,370	174,451	179,685	185,075	190,627
Insurance	11,593	11,941	12,299	12,668	13,048
Office Expenses	12,172	12,538	12,914	13,301	13,700
Payroll Expenses	529,788	845,000	870,350	896,461	923,354
Postage	1,159	1,194	1,230	1,267	1,305
Professional Fees	753,528	250,000	257,500	265,225	273,182
Promotional	116,507	25,000	25,750	26,523	27,318
Rent or Lease	19,360	19,941	20,539	21,155	21,790
Repair and Maintenance	115,927	119,405	122,987	126,677	130,477
Small Tools and Equipment	2,898	2,985	3,075	3,167	3,262
Telephone	4,869	5,015	5,165	5,320	5,480
Travel	11,593	11,941	12,299	12,668	13,048
Utilities	4,173	4,299	4,428	4,560	4,697
Vehicle	82,656	150,000	154,500	159,135	163,909
Total Fixed and Variable O&M	\$1,859,823	\$1,658,664	\$1,708,424	\$1,759,677	\$1,812,467
Member O&M:			<u> Kérja</u> tangga		
City of Williston	2,069,675	2,131,765	2,195,718	2,261,590	2,329,926
MCRWD	754,260	776,887	800,194	824,200	848,926
WRWD	71,591	73,739	75,951	78,229	80,5676
R&T	1,570,449	1,617,562	1,666,089	1,716,072	1,767,554
BDW	<b>1</b> 83,165	188,660	194,320	200,150	206,154
Total Member O&M	\$4,649,140	\$4,788,614	\$4,932,273	\$5,080,241	\$5,232,648
Total O&M	\$6,508,963	\$6,447,278	\$6,640,697	\$6,839,917	\$7,045,115

Table 2: Projected Operation and Maintenance Costs (Continued)



MINISTER STATE	2023	2024	2025	2026	2027
Fixed and Variable O&M:		FEET STATE			
Advertising	\$5,376	\$5,537	\$5,703	\$5,874	\$6,050
Board of Directors	13,439	13,842	14,258	14,685	15,126
Computer Expenses	2,553	2,630	2,709	2,790	2,874
Contract Labor	4,032	4,153	4,277	4,406	4,538
Dues and Subscriptions	2,688	2,768	2,852	2,937	3,025
Employee Benefits	196,346	202,237	208,304	214,553	220,989
Insurance	13,439	13,842	14,258	14,685	15,126
Office Expenses	14,111	14,534	14,970	15,420	15,882
Payroll Expenses	951,055	979,587	1,008,974	1,039,243	1,070,421
Postage	1,344	1,384	1,426	1,469	1,513
Professional Fees	281,377	289,819	<b>2</b> 98,513	307,468	316,693
Promotional	28,138	28,982	29,851	30,747	31,669
Rent or Lease	22,443	23,117	23,810	24,525	25,260
Repair and Maintenance	134,392	138,423	142,576	146,853	151,259
Small Tools and Equipment	3,360	3,461	3,564	3,671	3,781
Telephone	5,644	5,814	5,988	6,168	6,353
Travel	13,439	13,842	14,258	14,685	15,126
Utilities	4,838	4,983	5,133	5,287	5,445
Vehicle	168,826	173,891	179,108	184,481	190,016
Total Fixed and Variable O&M	\$1,866,841	\$1,922,846	\$1,980,532	\$2,039,948	\$2,101,146
Member O&M:					
City of Williston	2,399,321	2,471,300	2,545,439	2,621,803	2,700,457
MCRWD	874,394	900,625	927,644	955,474	984,138
WRWD	82,994	85,483	88,048	90,689	93,410
R&T	1,820,581	1,875,198	1,931,454	1,989,398	2,049,080
BDW	<b>2</b> 12,339	218,709	225,270	232,028	238,989
Total Member O&M	\$5,389,627	\$5,551,316	\$5,717,856	\$5,889,391	\$6,066,073
Total O&M	\$7,256,468	\$7,474,162	\$7,698,387	\$7,929,339	\$8,167,219

Table 2: Projected Operation and Maintenance Costs (Continued)



	2028	2029	2030	2031	2032
Fixed and Variable O&M:					
Advertising	\$6,232	\$6,419	\$6,661	\$6,810	\$7,014
Board of Directors	15,580	16,047	16,528	17,024	17,535
Computer Expenses	2,960	3,049	3,140	3,235	3,332
Contract Labor	4,674	4,814	4,959	5,107	5,261
Dues and Subscriptions	3,116	3,209	3,306	3,405	3,507
Employee Benefits	227,619	234,448	241,481	248,725	256,187
Insurance	15,580	16,047	16,528	17,024	17,535
Office Expenses	16,359	16,849	17,335	17,876	18,412
Payroll Expenses	1,102,533	1,135,609	1,169,678	1,204,768	1,240,911
Postage	1,558	1,605	1,653	1,702	1,754
Professional Fees	326,193	335,979	346,058	356,440	367,133
Promotional	32,619	33,598	34,606	35,644	36,713
Rent or Lease	26,018	26,799	27,603	28,431	29,284
Repair and Maintenance	155,797	160,471	165,285	170,243	175,351
Small Tools and Equipment	3,895	4,012	4,132	4,256	4,384
Telephone	6,543	6,740	6,942	7,150	7,365
Travel	15,580	16,047	16,528	17,024	17,535
Utilities	5,609	5,777	5,950	6,129	6,313
Vehicle	195,716	201,587	207,635	213,864	220,280
Total Fixed and Variable O&M	\$2,164,180	\$2,229,106	\$2,295,979	\$2,364,858	\$2,435,804
Member O&M:					
City of Williston	2,781,470	2,864,914	2,950,862	3,039,388	3,130,569
MCRWD	1,013,662	1,044,072	1,075,394	1,107,656	1,140,885
WRWD	96,212	99,099	102,072	105,134	108,288
R&T	2,110,552	2,173,869	2,239,058	2,306,257	2,375,445
BDW	246,159	253,544	261,150	268,984	277,054
Total Member O&M	\$6,248,055	\$6,435,497	\$6,628,562	\$6,827,419	\$7,032,241
Total O&M	\$8,412,236	\$8,664,603	\$8,924,541	\$9,192,277	\$9,468,045

Table 2: Projected Operation and Maintenance Costs (Continued)



SECTION SECTION SECTION	2033	2034	2035	2036
Fixed and Variable O&M:				1000
Advertising	\$7,224	\$7,441	\$7,664	\$7,894
Board of Directors	18,061	18,603	19,161	19,736
Computer Expenses	3,432	3,535	3,641	3,750
Contract Labor	5,418	5,581	5,748	5,921
Dues and Subscriptions	3,612	3,721	3,832	3,947
Employee Benefits	263,873	271,789	279,943	288,341
Insurance	18,061	18,603	19,161	20,723
Office Expenses	18,964	19,533	20,119	20,723
Payroll Expenses	1,278,138	1,316,482	1,355,977	1,396,656
Postage	1,806	1,860	1,916	1,974
Professional Fees	378,147	389,492	401,177	413,212
Promotional	37,815	38,949	40,118	41,321
Rent or Lease	30,162	31,067	31,999	32,959
Repair and Maintenance	180,611	186,029	191,610	197,359
Small Tools and Equipment	4,515	4,651	4, <b>7</b> 90	4,934
Telephone	7,586	7,813	8,048	8,289
Travel	<b>1</b> 8,061	18,603	19,161	19,736
Utilities	6,502	6,697	6,898	7,105
Vehicle	128,776	132,639	136,618	140,717
Total Fixed and Variable O&M	\$2,508,878	\$2,584,145	\$2,661,669	\$2,741,519
Member O&M:		16.		
City of Williston	3,224,487	3,321,221	3,420,858	3,523,483
MCRWD	1,175,112	1,210,365	1,246,676	1,284,077
WRWD	111,536	114,882	118,329	121,879
R&T	2,446,708	2,520,109	2,595,713	2,673,584
BDW	285,366	293,927	302,744	311,827
Total Member O&M	\$7,243,209	\$7,460,505	\$7,684,320	\$7,914,850
Total O&M	\$9,752,087	\$10,044,649	\$10,345,989	\$10,656,369

Table 2: Projected Operation and Maintenance Costs (Continued)

#### **Industrial Revenue Reimbursements**

Based on conditions of the contracts between the WAWSA and the Members, the revenue requirements included reimbursements for the expected industrial revenue losses from industrial water sales to communities in the region as result of the WAWSP beginning in 2013. The projected reimbursements are based on 2010 industrial water sales by the WAWSP Members and Sub Members and total \$3,801,742 annually. These values are static and are not indexed over time. The communities with reimbursements are listed below:

City of Williston - \$1,400,059



- McKenzie County Water Resource District
  - o Watford City \$816,000
- R&T Water Supply Commerce Authority
  - o R&T \$448,563
  - o City of Ray \$77,952
  - o City of Stanley \$800,717
- Burke, Divide, Williams
  - o City of Crosby \$258,451

#### **Reserve Fund Requirements**

As per the terms established by the BND in the commitment letter dated December 21, 2012, the WAWSA will set up Debt Service and Capital Reserve accounts that shall be maintained and controlled by the BND Trust Department. The WAWSA will also be responsible for setting up and maintaining the O&M Reserve Account and Escrow Account. The reserve accounts provide stability within the system by building adequate reserves to address debt repayment assurances, emergency issues, fluctuations in cash flow throughout the year, and required maintenance and rehabilitation. For break-even cash flow analyses, an estimate was made as to the yearly contribution amount into the capital reserve fund. The debt service reserve fund was not funded in either scenario based on discussions with the BND, based on the nature of the break-even analysis. It was assumed that the O&M reserve fund would be fully funded in 2014, and minimal contributions to the fund as a result of inflation would be added on a yearly basis.

#### Debt Service Reserve Fund

The conditions of the BND commitment letter specify that the debt service reserve account will be funded monthly from 25 percent of Free Cash Flow starting on 1/31/2015 until attaining a balance equal to \$9,960,000. The purpose of this account is to meet payment requirements for all State of North Dakota/BND loans. Any disbursement from the reserve account will require prior BND approval. The account balance can be adjusted if/when loans are prepaid ahead of schedule. It should be noted that the Debt Service Reserve was not funded in the break-even analysis, due to the assumed absence of Free Cash Flow from the break-even situation.

#### **O&M** Reserve Fund

The O&M reserve fund will help manage future utility expenses and provide essential services in the event of a short-term financial downturn. The WAWSA will set up and maintain an O&M Reserve Account equal to six months of operating expenses no later than 1/31/2015 as was specified in the BND commitment letter. The WAWSA will provide a monthly report detailing the calculation of the balance of the account and any activity associated with it.

#### Capital Reserve Fund

According to the BND commitment letter, the capital reserve fund will be funded monthly from 25 percent of Free Cash Flow starting on 1/31/2015 until the Debt Service Reserve Account is fully funded. At the time the Debt Service Reserve Account is fully funded, the capital reserve account will be funded monthly from 50 percent of Free Cash Flow until reaching a level of \$30,000,000, or 20 percent of the total project costs. Any disbursements from the reserve



account require prior BND approval. For the purpose of the break-even analyses, the Capital Reserve Fund was funded despite the absence of Free Cash Flow at a pre-determined amount, as the Capital Reserve Fund is an integral part of the WAWSA's future capital holdings.

#### **Escrow Account**

To secure natural gas service to the WAWSP hot water depots, the WAWSA agreed to set aside funds from the proceeds of its water sales at certain stations (specified below) to be placed in an escrow account pursuant to an Escrow Agreement entered into by WAWSA and the party providing gas service. The purpose of the funds in escrow shall be to reduce the amount of the security required to be provided by the natural gas service provider, and the funds shall be available to pay any remaining customer participation balance that has not been retired when the agreements are terminated or expire. The funds set aside by the WAWSA and placed in escrow shall be \$0.02 per barrel from each of the following stations: North Williston, Williston (2<sup>nd</sup> Street), Alexander, Ray, and Watford City. In the break-even cash flow model, contributions to the escrow account were included as a revenue requirement.

#### PROJECTED DOMESTIC WATER SALES

TM#2 of this 2013 Business Plan Update (Updated Water Demands) summarizes the projected long-term domestic water needs of the region. Figure 6 of TM#2 shows the current projected average and peak day domestic water demands based on the updated population projections.

Domestic water sales projections utilized in the break-even analyses are based on average 2012 actual domestic water use for the City of Williston, MCRWD, WRWD, and R&T, as well as the minimum required water purchase per the WAWSA contract for BDW. These are the figures utilized by WAWSA in establishing its 2013 budget and are shown in Table 3. Table 4 shows the projected revenues from domestic water sales through 2036. After 2013, domestic water sales projections were calculated based on population projections from TM#2, with adjustments to account for delayed service dates for various entities and gradual population increases throughout the year, and an assumed annual increase in the 2013 domestic water rate of 1.5 percent.

Project Member Participant	2013 Budgeted Gallons*	Rate Per Thousand	2013 Budgeted Revenue
City of Williston	1,377,049,180	\$1.83	\$2,520,000
MCWRD	329,715,762	\$3.87	\$1,276,000
WRWD	216,000,000	\$3.16	\$682,560
R&T	287,974,684	\$3.16	\$910,000
BDW**	66,455,696	\$3.16	\$210,000
Total	2,277,195,322		\$5,598,560

<sup>\*</sup> Includes demand for both permanent and temporary water users

**Table 3: Projected 2013 Domestic Water Sales** 



<sup>\*\*</sup> Includes projected demand for the City of Crosby.

Member Entity	2013	2014	2015	2016	2017
City of Williston	\$2,520,000	\$2,565,366	\$2,688,944	\$2,828,021	\$2,937,530
WRWD	682,560	811,503	972,866	1,208,884	1,450,925
MCRWD	1,276,000	1,569,288	1,752,546	1,855,443	1,961,097
R&T	910,000	1,193,740	1,266,208	1,336,258	1,4136,961
BDW*	210,000	248,295	284,878	324,435	366,540
Total Water Sales	\$5,598,560	\$6,388,193	\$6,965,441	\$7,553,041	\$8,130,053
Member Entity	2018	2019	2020	2021	2022
City of Williston	\$3,070,699	\$3,196,634	\$3,324,786	\$3,451,892	\$3,578,173
WRWD	1,625,987	1,804,423	1,991,332	2,100,886	2,124,294
MCRWD	2,087,607	2,210,239	2,319,525	2,385,881	2,408,220
R&T	1,493,128	1,576,725	1,711,351	1,871,433	1,998,598
BDW*	388,534	410,929	475,000	536,430	553,115
Total Water Sales	\$8,665,956	\$9,198,951	\$9,821,993	\$10,346,523	\$10,662,400
Member Entity	2023	2024	2025	2026	2027
City of Williston	\$3,707,178	\$3,838,895	\$3,973,313	\$4,104,545	\$4,245,714
WRWD	2,146,948	2,170,450	2,193,776	2,217,003	2,248,514
MCRWD	2,431,125	2,454,583	2,478,582	2,508,560	2,552,665
R&T	2,166,505	2,236,848	2,359,628	2,433,394	2,464,563
BDW*	570,035	587,229	604,932	618,257	628,939
Total Water Sales	\$10,971,791	\$11,288,005	\$11,610,231	\$11,881,759	\$12,140,396
Member Entity	2028	2029	2030	2031	2032
City of Williston	\$4,392,381	\$4,544,330	\$4,701,378	\$4,850,927	\$4,999,199
WRWD	2,282,828	2,319,753	2,359,122	2,385,058	2,402,205
MCRWD	2,599,119	2,647,807	2,698,633	2,738,267	2,769,618
R&T	2,497,967	2,533,453	2,570,889	2,598,312	2,619,406
BDW*	640,219	652,065	664,452	673,991	681,452
<b>Total Water Sales</b>	12,412,514	\$12,697,408	\$12,994,474	\$13,246,555	\$13,471,880
Member Entity	2033	2034	2035	2036	
City of Williston	\$5,162,465	\$5,336,159	\$5,514,245	\$5,699,768	
WRWD	2,429,166	2,462,265	2,496,650	2,534,717	
MCRWD	2,807,735	2,805,216	2,893,884	2,940,317	
R&T	2,648,294	2,682,081	2,716,949	2,754,783	
BDW*	690,677	701,035	711,692	723,061	
<b>Total Water Sales</b>	\$13,738,338	\$14,031,755	\$14,333,419	\$14,652,645	

<sup>\*</sup> Includes projected demand for the City of Crosby

**Table 4: Projected Domestic Revenues** 



#### **PROJECTED BREAK-EVEN SCENARIOS**

Beginning in 2014, the WAWSA is expected to begin loan repayments on the initial \$110 million loans that were approved in NDCC Ch. 61-40. After discussions with BND representatives, and per their direction, the interest rate for Loan #5 was assumed to be the same as the rate for Loan #2. In addition, BND requested that Loan #5 be the second loan repaid, followed by Loans 3, 4, and 1, respectively. Loan #5 was amortized differently with respect to both break-even Scenarios 1 and 2. The ability of the WAWSA to repay these loans is correlated to the amount of industrial water that the WAWSA is expected to sell. For this reason, two break-even scenarios were completed to demonstrate the projected break-even industrial water sales needed to meet the revenue requirements described in this Technical Memorandum. The variables in the two scenarios are the terms and conditions of loans, and the rate at which the Capital Reserve is funded. Scenario 1 analyzes a 10-year window for full debt repayment of all loans, and Scenario 2 analyzes a 23-year time frame for full debt repayment of all loans (Table 5), per the terms of the December 21, 2012 commitment letter. A complete cash balance breakdown for Scenarios 1 and 2 is illustrated in exhibits one and two, respectively.

Loan #	Lender	Loan Amount	Scenario 1 Terms	Scenario 2 Terms
Loan #1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loan #2	Bank of North Dakota	\$50 million	2014 - 2017	2014 - 2021
Loan #3	General Fund Loan	\$25 million	2020 - 2021	2021 - 2029
Loan #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loan #5*	Bank of North Dakota	\$40 million	2017 - 2020	2015 - 2028

<sup>\*</sup>Loan #5: Loan that WAWSA is seeking in the 2013-2015 biennium

Table 5: Summary of Loan Repayment Schedules for Break-Even Analyses

#### Scenario 1

Scenario 1 examines the projected break-even cash flow based on a 10-year repayment plan for the \$150 million in loans. This loan repayment schedule peaks in 2015 at \$20,019,053, with the final loan being repaid in 2023. The 10-year repayment schedule has the advantage of saving the WAWSA over \$20 million in interest expenses that will accrue as a result of the extended repayment schedule (Scenario 2). The aggressive debt repayment approach can be justified by the recent study conducted by Bentek Energy (BENTEK, 2012). According to Bentek's base case study, the number of wells drilled in the future will remain fixed at the 2012 levels, or approximately 2,350 wells per year, through 2021. After this time, the number of new wells is anticipated to decline as the prime drilling locations have been developed across the most prospective acreage. By 2022, the study predicts that the best Williston Basin acreage will be developed and the number of new wells will decline by approximately ten percent annually due to a reduction in well site inventory. The decline in well site completion will result in a reduction of industrial water sales in the WAWSA service area. As a result, an aggressive reserve funding schedule (Table 6) and debt repayment schedule (Table 7) represent the most advantageous



situation for the WAWSA, in which debt repayment is completed during the anticipated period of highest well productivity.

Required industrial water sales peak in 2016 at around \$26,500,000, which translates into approximately 31,550,000 barrels or 1,325,000,000 gallons. A critical year analysis for Scenario 1 is presented in Table 8. Figure 2 illustrates the loan balances and projected break-even revenue requirements for Scenario 1, and Figure 3 shows the projected break-even cash balances for Scenario 1.

#### **Assumptions:**

- Industrial water rate of \$20.00 per 1,000 gallons (\$0.84 per barrel), increasing by \$1 per 1,000 gallons (\$0.04 per barrel) every five years, beginning in 2018
- Domestic water sales revenue as previously described
- 10-Year debt repayment schedule with monthly principal and interest payments and no principal and/or interest payments made through the initial construction period – see loan terms below
- O&M, reimbursements for lost industrial revenues, and existing debt service repayments as previously described
- For break-even purposes and per the direction of the BND, no Debt Service Reserve funding
- Capital Reserve Fund funded starting in 2014 and fully funded by 2026; funding is not based upon free cash flow
- O&M Reserve Fund set-up in 2014 and funded from revenues as previously described
- Contributions to the Escrow account as previously described

#### Loan Terms

- Loan #1: State Water Commission Loan \$25 million Zero percent interest rate.
   Monthly principal payments starting in 2022 and ending in 2023.
- Loan #2: Bank of North Dakota Loan \$50 million Variable interest rate at 1.50 percent over the 30-day LIBOR (London Interbank Offered Rate), adjusted on the first calendar day of each quarter. The loan will also have a floor rate of two percent. The assumed interest rate for this scenario started at two percent and was increased annually by 0.5 percent, for a maximum of 4.5 percent in the final year of repayment. Monthly principal and interest based on a 39-month amortization with the first payment due on 7/31/2014.
- Loan #3: General Fund Loan \$25 million Five percent interest rate. Monthly Interest only starting on 1/31/2014 until 2/29/2020, then monthly principal and interest based on 17-month amortization with first payment due on 3/31/2020.
- Loan #4: Resources Trust Fund Loan \$10 million Five percent interest rate. Monthly interest only starting on 1/31/2015 until 7/31/2021, then monthly principal and interest based on 10 month amortization with first payment due on 8/31/2021.
- Loan #5: Bank of North Dakota Loan \$40 million Variable interest rate at 1.50 percent over the 30-day LIBOR, adjusted on the first calendar day of each quarter. The loan will also have a floor rate of two percent. The assumed interest rate for this scenario started



at two percent and was increased annually by 0.5 percent, for a maximum of 4.5 percent in the final year of repayment. Monthly Interest only starting on 7/31/2015 until 9/30/2017, then monthly principal and interest based on 29-month amortization with first payment due on 10/31/2017.

Reserve Fund	2013	2014	2015	2016
Debt Service Reserve	-	-	-	-
Capital Reserve Fund	-	\$250,000	\$500,000	\$1,250,000
O&M Reserve Fund	8-	\$2,978,312	\$89,349	\$92,030
Total	•	\$3,228,312	\$589,349	\$1,342,030
Reserve Fund	2017	2018	2019	2020
Debt Service Reserve	-		-	+
Capital Reserve Fund	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000
O&M Reserve Fund	\$94,791	\$0	\$65,867	\$99,610
Total	\$1,344,791	\$1,250,000	\$1,315,867	\$1,349,610
Reserve Fund	2021	2022	2023	2024
Debt Service Reserve		1	-	+
Capital Reserve Fund	\$3,000,000	\$4,000,000	\$4,000,000	\$4,000,000
O&M Reserve Fund	\$102,599	\$105,677	\$108,847	\$112,112
Total	\$3,102,599	\$4,105,677	\$4,108,847	\$4,112,112
Reserve Fund	2025	2026	2027	2028
Debt Service Reserve	-	-	-	-
Capital Reserve Fund	\$4,000,000	\$4,000,000	-	-
O&M Reserve Fund	\$115,476	\$118,940	\$122,508	\$126,184
Total	\$4,115,476	\$4,118,940	\$122,508	\$126,184
Reserve Fund	2029	2030	2031	2032
Debt Service Reserve	-	-		
Capital Reserve Fund		-		
O&M Reserve Fund	\$129,969	\$133,868	\$137,884	\$142,021
Total	\$129,969	\$133,868	\$137,884	\$142,021
Reserve Fund	2033	2034	2035	2036
Debt Service Reserve	-	-	-	-
Capital Reserve Fund	-	-		-
O&M Reserve Fund	\$146,281	\$150,670	\$155,190	\$159,846
Total	\$146,281	\$150,670	\$155,190	\$159,846

Table 6: Projected WAWSA Reserve Funds – Scenario 1



Loan Schedule	2014	2015	2016	2017	2018
Loan #1	-	-	11.1	-	-
Loan #2	\$8,459,048	\$16,918,097	\$16,918,097	\$12,688,573	-
Loan #3	\$2,346,619	\$1,254,958	\$1,254,958	\$1,254,958	\$1,254,958
Loan #4	-	\$1,343,918	\$501,878	\$501,878	\$501,878
Loan #5	-	\$502,081	\$1,105,768	\$5,319,789	\$17,460,667
Total	\$10,805,668	\$20,019,053	\$19,780,700	\$19,765,197	\$19,217,503
Loan Schedule	2019	2020	2021	2022	2023
Loan Schedule Loan #1			THE RESERVE		THE RESERVE OF THE PERSON NAMED IN
			THE RESERVE	2022	2023
Loan #1			THE RESERVE	2022	2023
Loan #1 Loan #2	2019 - -	2020	2021	2022	2023
Loan #1 Loan #2 Loan #3	2019 - - \$1,254,958	2020 - - \$15,533,167	2021 - - \$10,726,805	<b>2022</b> \$10,000,000 - -	2023

Table 7: Debt Repayment Schedule – Scenario 1

	2015			2016	
\$	1,702,002	5.1%	\$	1,753,062	5.1%
\$	4,254,622	12.7%	\$	4,382,260	12.8%
\$	3,801,742	11.4%	\$	3,801,742	11.1%
\$	2,920,388	8.7%	\$	2,917,063	8.6%
\$	20,019,053	59.8%	\$	19,780,700	57.9%
\$	775,807	2.3%	\$	1,529,211	4.5%
\$	33,473,614	100.0%	\$	34,164,038	100.0%
\$	6,965,441		\$	7,553,041	
\$	100		\$	100	
\$	26,508,073		\$	26,610,897	
	31,557,229			31,679,639	
:	526 per year			528 per year	
	394 per year 396 per year			ear	
ac .	316 per year			317 per year	
	\$ \$ \$ \$ \$ \$	\$ 1,702,002 \$ 4,254,622 \$ 3,801,742 \$ 2,920,388 \$ 20,019,053 \$ 775,807 <b>\$ 33,473,614</b> \$ 6,965,441 \$ 100 <b>\$ 26,508,073</b> 31,557,229	\$ 1,702,002 5.1% \$ 4,254,622 12.7% \$ 3,801,742 11.4% \$ 2,920,388 8.7% \$ 20,019,053 59.8% \$ 775,807 2.3% \$ 33,473,614 100.0% \$ 6,965,441 \$ 100 \$ 26,508,073 31,557,229	\$ 1,702,002 5.1% \$ \$ 4,254,622 12.7% \$ \$ 3,801,742 11.4% \$ \$ 2,920,388 8.7% \$ \$ 20,019,053 59.8% \$ \$ 775,807 2.3% \$ \$ 33,473,614 100.0% \$ \$ 6,965,441 \$ \$ 100 \$ \$ 26,508,073 \$ 31,557,229	\$ 1,702,002

Table 8: Critical Year Analysis – Scenario 1



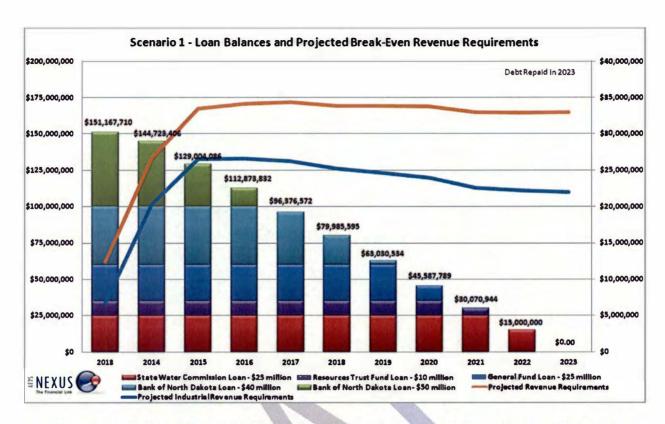
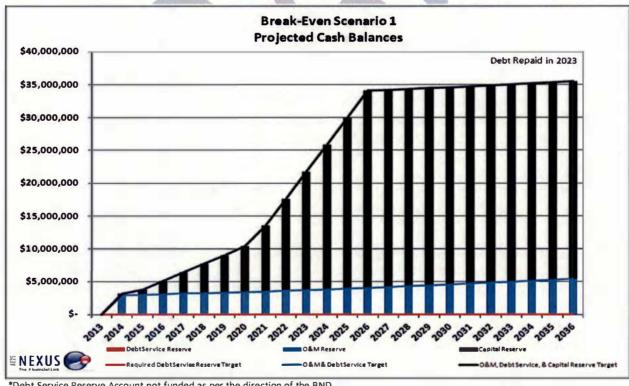


Figure 2: Loan Balances and Projected Break-Even Revenue Requirements - Scenario 1



\*Debt Service Reserve Account not funded as per the direction of the BND

Figure 3: Break-Even Scenario 1 Projected Cash Balances



#### Scenario 2

Scenario 2 examines the projected break-even cash flow analysis from the terms and conditions set forth by the BND in the commitment letter dated December 21, 2012 and the terms of Loan #5 coordinated with BND representatives. This loan repayment schedule peaks in 2015 at \$15,374,646, with the final loan being repaid in 2036. Unlike Scenario 1, Scenario 2 has a reserve fund schedule (Table 9) and debt repayment schedule (Table 10) that extends out to 2036. As a result, the total monetary value of Scenario 2 is much larger due to the interest expenses that occur over the longer repayment period.

Required industrial water sales peak in 2015 at around \$21,500,000, which translates into approximately 25,600,000 barrels or 1,075,200,000 gallons. A critical year analysis for Scenario 2 is presented in Table 11. Figure 4 illustrates the loan balances and projected break-even revenue requirements for Scenario 2, and Figure 5 shows the projected break-even cash balances for Scenario 2.

#### **Assumptions:**

- Industrial water rate of \$20.00 per 1,000 gallons (\$0.84 per barrel), increasing by \$1 per 1,000 gallons (\$0.04 per barrel) every five years, beginning in 2018
- Domestic water sales revenue as previously described
- 23-Year debt repayment schedule with monthly principal and interest payments and no principal and/or interest payments made through the initial construction period – see loan terms below
- O&M, reimbursements for lost industrial revenues, and existing debt service repayments as previously described
- For break-even purposes and per the direction of the BND, no Debt Service Reserve funding
- Capital Reserve Fund funded starting in 2015 and fully funded by 2036; funding is not based upon free cash flow
- O&M Reserve Fund set-up in 2014 and funded from revenues as previously described
- Contributions to the Escrow account as previously described

#### **Loan Terms**

- Loan #1: State Water Commission Loan \$25 million Zero percent interest rate. Monthly payments are based on a five-year amortization starting on 6/30/2031 with the first payment due on 7/31/2031.
- Loan #2: Bank of North Dakota Loan \$50 million Variable interest rate at 1.50 percent over the 30-day LIBOR, adjusted on the first calendar day of each quarter. The loan will also have a floor rate of two percent. The assumed interest rate for this scenario started at two percent and was increased annually by 0.5 percent, for a maximum of five percent in the final year of repayment. Monthly payments based on a seven-year amortization with one interest-only payment due on 7/31/2014 followed by 83 principal and interest payments beginning 8/31/2014.
- Loan #3: General Fund Loan \$25 million Five percent interest rate. Monthly interest-only starting on 1/31/2015 and until 6/30/2021, then monthly principal and interest on an eight-year amortization with the first payment due 7/21/2021.



- Loan #4: Resources Trust Fund Loan \$10 million Five percent interest rate. Monthly interest-only starting on 1/31/2015 and until 6/30/2029, then monthly principal and interest based on a two-year amortization with the first payment due on 7/31/2029.
- Loan #5: Bank of North Dakota Loan \$40 million Variable interest rate at 1.50 percent over the 30-day LIBOR, adjusted on the first calendar day of each quarter. The loan will also have a floor rate of two percent. The assumed interest rate for this scenario started at two percent and was increased annually by 0.5 percent, for a maximum of five percent in the final year of repayment. One monthly interest-only payment due on 7/31/2015 followed by 155 principal and interest payments beginning 8/31/2015.

Reserve Fund	2013	2014	2015	2016
Debt Service Reserve	-	-		-
Capital Reserve Fund	-	0	\$250,000	\$350,000
O&M Reserve Fund	-	\$2,978,312	\$89,349	\$92,030
Total		\$2,978,312	\$339,349	\$442,030
Reserve Fund	2017	2018	2019	2020
Debt Service Reserve		-	- 1	-
Capital Reserve Fund	\$350,000	\$350,000	\$350,000	\$350,000
O&M Reserve Fund	\$94,791	\$0	\$65,867	\$99,610
Total	\$444,791	\$350,000	\$415,867	\$449,610
Reserve Fund	2021	2022	2023	2024
Debt Service Reserve	- 1			-
Capital Reserve Fund	\$1,000,000	\$1,000,000	\$1,250,000	\$1,250,000
O&M Reserve Fund	\$102,599	\$105,677	\$108,847	\$112,112
Total	\$1,102,599	\$1,105,677	\$1,358,847	\$1,362,112
Reserve Fund	2025	2026	2027	2028
Debt Service Reserve		-	-	-
Capital Reserve Fund	\$1,500,000	\$1,500,000	\$1,750,000	\$1,750,000
O&M Reserve Fund	\$115,476	\$118,940	\$122,508	\$126,184
Total	\$1,615,476	\$1,618,940	\$1,872,508	\$1,876,184
Reserve Fund	2029	2030	2031	2032
Debt Service Reserve	-	-		-
Capital Reserve Fund	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
O&M Reserve Fund	\$129,969	\$133,868	\$137,884	\$142,021
Total	\$2,129,969	\$2,133,868	\$2,137,884	\$2,142,021
Reserve Fund	2033	2034	2035	2036
Debt Service Reserve	-	-	-	-
Capital Reserve Fund	\$2,250,000	\$2,250,000	\$2,250,000	\$2,250,000
O&M Reserve Fund	\$146,281	\$150,670	\$155,190	\$159,846
Total	\$2,396,281	\$2,400,670	\$2,405,190	\$2,409,846

Table 9: Projected WAWSA Reserve Funds – Scenario 2



Loan Schedule	2014	2015	2016	2017	2018
Loan #1	-	-		-	- 03
Loan #2	\$3,709,019	\$8,593,602	\$8,593,602	\$8,593,602	\$8,593,602
Loan #3		\$3,691,942	\$1,254,958	\$1,254,958	\$1,254,958
Loan #4		\$1,343,918	\$501,878	\$501,878	\$501,878
Loan #5	-	\$1,745,184	\$3,989,906	\$3,989,906	\$3,989,906
Total	\$3,709,019	\$15,374,646	\$14,340,344	\$14,340,344	\$14,340,344
Loan Schedule	2019	2020	2021	2022	2023
Loan #1	-	-	-	-	-
Loan #2	\$8,593,602	\$8,593,602	\$4,296,801	-	-
Loan #3	\$1,254,958	\$1,254,958	\$2,533,999	\$3,813,040	\$3,813,040
Loan #4	\$501,878	\$501,878	\$501,878	\$501,878	\$501,878
Loan #5	\$3,989,906	\$3,989,906	\$3,989,906	\$3,989,906	\$3,989,906
Total	\$14,340,344	\$14,340,344	\$11,322,584	\$8,304,824	\$8,304,824
Loan Schedule	2024	2025	2026	2027	2028
Loan #1	-	- 1		- 10	-
Loan #2	-	- '	A AP	- 10	
Loan #3	\$3,813,040	\$3,813,040	\$3,813,040	\$3,813,040	\$3,813,040
Loan #4	\$501,878	\$501,878	\$501,878	\$501,878	\$501,878
Loan #5	\$3,989,906	\$3,989,906	\$3,989,906	\$3,989,906	\$1,994,953
Total	\$8,304,824	\$8,304,824	\$8,304,824	\$8,304,824	\$6,309,871
Loan Schedule	2029	2030	2031	2032	2033
Loan #1	( - M	- 1	\$2,500,000	\$5,000,000	\$5,000,000
Loan #2	-	- \	-	-	-
Loan #3	\$1,906,520		-	-	-
Loan #4	\$2,893,107	\$5,284,336	\$2,642,168	-	-
Loan #5	- 1	. 4	-	+	-
Total	\$4,799,627	\$5,284,336	\$5,142,168	\$5,000,000	\$5,000,000
Loan Schedule	2034	2035	2036		
Loan #1	\$5,000,000	\$5,000,000	\$2,500,000		
Loan #2	- 1	-	-		
Loan #3	- 6		-		
Loan #4	-	-	- (+/ t		
Loan #5	·	0 <del>4</del> 4	16/1		
Total	\$5,000,000	\$5,000,000	\$2,500,000		

Table 10: Debt Repayment Schedule – Scenario 2



Revenue Requirements		2015			2016	
Fixed and Variable O&M	\$	1,702,002	6.0%	\$	1,753,062	6.3%
Member Entity O&M	\$	4,254,622	14.9%	\$	4,382,260	15.8%
Lost Industrial Reimbursements	\$	3,801,742	13.3%	\$	3,801,742	13.7%
Debt Service – Existing	\$	2,920,388	10.2%	\$	2,917,063	10.5%
Debt Service – New	\$	15,374,646	53.9%	\$	14,340,344	51.6%
Reserve Fund Requirements	\$	491,136	1.7%	\$	584,297	2.1%
Total Revenue Requirements	\$	28,544,535	100.0%	\$	27,778,768	100.0%
Less: Domestic Water Sales	\$	6,965,441		\$	7,553,041	
Less: Interest Income	\$	100	100	\$	100	
Break-Even Industrial Water Sales	\$	21,578,994		\$	20,225,627	
Required Volume (Barrels)		25,689,279			24,078,128	
			1			
Break-Even Frac Requirements		100				
Required Fracs @ 60,000 barrels/frac	-	428 per y	ear	1	401 per ye	ear
Required Fracs @ 80,000 barrels/frac	321 per year		301 per year		ear	
Required Fracs @ 100,000 barrels/frac	257 per year		241 per year		ear	
		Verilla III				

Table 11: Critical Year Analysis – Scenario 2

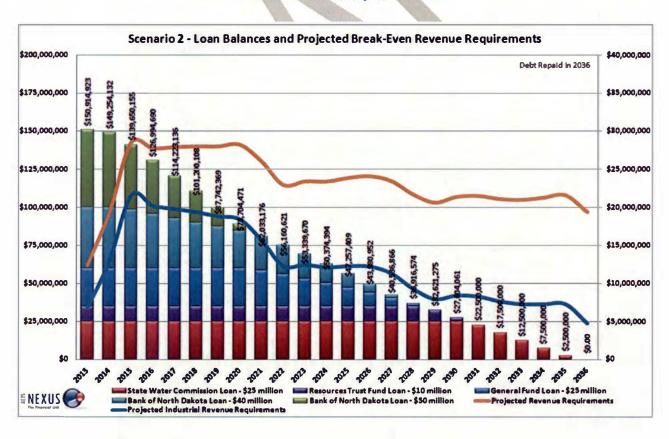
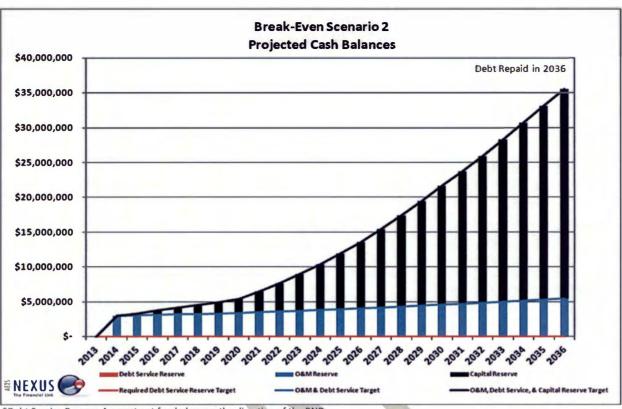


Figure 4: Loan Balances and Projected Break-Even Revenue Requirements - Scenario 2





\*Debt Service Reserve Account not funded as per the direction of the BND

Figure 5: Break-Even Scenario 2 Projected Cash Balances

#### Summary

To illustrate the minimum amount of industrial water sales needed to meet debt repayment requirements for \$150 million of WAWSP debt-funded capital expenses and other revenue requirements, two break-even analyses were completed. Both scenarios included a Loan #5 in the amount of \$40 million that was assumed to be subject to the same interest rate conditions as existing Loan #2, the second to be paid at the request of BND representatives, and with amortization schedules coordinated with BND representatives.

Scenario 1 represents a 10-Year schedule for full debt repayment and requires annual industrial water sales ranging from \$20.0 million to around \$28.0 million, or 24 million to 33 million barrels per year from the period of 2014 to 2023. Scenario 2 represents the current repayment terms as outlined by the BND, resulting in a less aggressive industrial water sales need each year but overall greater interest expense due to a longer repayment period. Scenario 2 requires annual industrial water sales ranging from around \$8.0 million to about \$23.0 million, or 9 million to 27 million barrels per year for the period of 2014 through 2036.

Table 12 summarizes the results of the break-even analysis. Table 13 summarizes the results of the loan analysis.



	Years of Repayment	Highest Req. Industrial Sales Year	Highest Industrial Sales Through Repayment Period	Average Industrial Sales Through Repayment Period
Scenario 1	10	\$26,610,897	1,330,544,850 Gallons	1,124,388,636 Gallons
Scellario 1	(2016)	31,679,639 Barrels	26,771,158 Barrels	
Scenario 2 23	22	\$21,578,994	1,078,949,700 Gallons	584,914,890 Gallons
	. 25	(2015)	25,689,279 Barrels	13,926,545 Barrels

Table 12: Summary of Break-Even Analysis

	Years of Highest Debt Repayment Repayment Year		Total Accumulated P&I Through Repayment Period	Total Interest Paid Through Repayment Period	
Scenario 1	10	\$20,019,053 (2015)	\$174,039,360	\$24,039,360	
Scenario 2	23	\$15,374,646 (2015)	\$195,972,917	\$45,972,917	

Table 13: Summary of Loan Analysis



### WESTERN AREA WATER SUPPLY PROJECT

**JANUARY 16, 2013** 

## 2013 BUSINESS PLAN UPDATE

**EXECUTIVE SUMMARY** 

#### PROJECT DEVELOPMENT AND PROGRESS

The WAWSA is governed by a Board of Directors representing the Members, including the City of Williston, McKenzie County Water Resource District (MCRWD), Williams Rural Water District (WRWD), R&T Water Supply Commerce Authority (R&T), and Burke-Divide Williams Rural Water (BDW). The Board of Directors also includes a member of the North Dakota State Water Commission and meets monthly. To date, Water Supply Agreements have been signed by all Members. In addition, Output Agreements for potable water supplies have been signed with the City of Williston and R&T, and Access and Use Agreements and Infrastructure Operating Agreements have been signed between WAWSA and its Members and Sub Members (entities receiving service indirectly from WAWSA through a Member) for use and operation of infrastructure owned either by a Member, Sub Member, or WAWSA.



#### PROJECT TAKES LARGER SHAPE

POPULATION INCREASE

**RURAL AREA SERVICE CONNECTION INCREASE** 

From 48,000 to 99,000

From 400 to 15,000

Estimated total project cost has increased to \$349 MILLION

DIE A TRU

By the spring of 2013, ten cities beyond Williston are expected to have WAWSA service: Ray, Tioga, Stanley, Ross, Wildrose, Crosby, Columbus, Fortuna, Noonan, and Watford City. The WAWSP will transport Missouri River water that is treated at the Williston Regional Water Treatment Plant to residents in McKenzie, Williams, Divide, Burke, and Mountrail Counties in North Dakota. An additional potable water supply will come from the R&T Water Treatment Plant near Ray to supplement water demand in portions of Williams, Divide, Burke, and Mountrail Counties. Industrial water supplies will also be supplemented with non-potable water from Crosby, Tioga, Stanley, and Watford City.







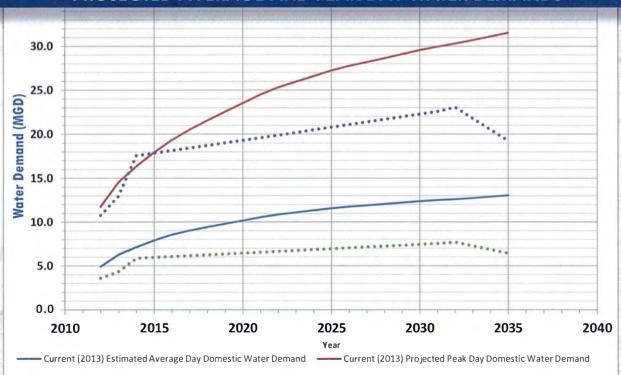
# **UPDATED WATER DEMAND PROJECTIONS**

The 2011 Business Plan was based on water demand projections associated with the best available population data at that time. Growth in the energy industry has exceeded what was originally anticipated, and, as a result, water demands associated with the increased population have exceeded those upon which the 2011 Business Plan was based. As a result, the 2013 Business Plan Update contains revised domestic water demand projections based on population projections completed through housing studies sponsored by the local communities and the North Dakota Housing Finance Agency (2012 North Dakota Statewide Housing Needs Assessment).

SERVICE POPULATION PROJECTIONS FOR THE WAWSP SERVICE AREA							
2010	2012	2025					
30,700	58,000	99,000					

	2035 WATER DEMAND PROJECTION					
	AVERAGE DAY DEMAND	PEAK DAY DEMAND				
2011 BUSINESS PLAN	7.7 MGD	22.9 MGD				
2013 BUSINESS PLAN UPDATE	13.1 MGD	31.5 MGD				

# PROJECTED AVERAGE AND PEAK DAY WATER DEMANDS



Previous (2011) Projected Average Day Domestic Water Demand •••• Previous (2011) Projected Peak Day Domestic Water Demand

# 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY

# UPDATED PROJECT DESCRIPTION

#### 2011- 2013 BIENNIUM LOAN PACKAGE

ne loans provided for the WAWSP were supplied through the North Dakota State Water Commission via the Resources Trust and, Bank of North Dakota assets, and the General Fund. The package included the following loans in the order of sbursement as defined in NDCC Ch. 61-40:

oan I — Resources Trust Fund (0% interest)	\$25,000,000
oan 2 — Bank of North Dakota (Variable 1.5% over 30-day LIBOR, floor rate of 2%)	\$50,000,000
oan 3 — North Dakota General Fund (5% fixed interest rate)	\$25,000,000
oan 4 — Resources Trust Fund (5% fixed interest rate)	\$10,000,000
OTAL 2011-2013 WAWSP FUNDING (100% LOANS)	\$110,000,000

#### e loan funding provided in the 2011- 2013 Biennium was used to complete the following projects:

Nilliston ByPass Transmission Line & Reservoir: A transmission line and 5 million gallon reservoir to serve growth areas north and west of Williston.

Williston Water Treatment Plant (WTP) Expansion: Expansion of the Williston WTP capacity from 10 to 14 million gallons per day (MGD).

Service to Crosby/BDW Rural Water: A transmission line and reservoir to provide service to the City of Crosby and BDW Rural Water from the R&T Water Comnerce Authority.

pice to R&T Water Commerce Authority: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Ray.

pervice to McKenzie County/Watford City: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Watford City.

AcKenzie County Water Resource District — System IV: Distribution lines and pump stations to provide partial rural water service to western McKenzie County.

# 2013-2015 BIENNIUM REQUESTED FUNDING PACKAGE

e following summarizes the funding package the WAWSA is seeking to complete priority projects during the 13-2015 Biennium:

sources Trust Fund (Grant Funding)	\$79,000,000
an (Bank of North Dakota)	\$40,000,000
OTAL 2013-2015 WAWSP FUNDING REQUEST	\$119,000,000

#### e following summarizes broad project categories over which WAWSA intends to allocate 2013-2015 Biennium funds:

Villiston WTP Expansion: Expansion from the Williston WTP capacity from 14 to 21 MGD (\$26.3 million, of which \$4.3 million was interim funding from adustial sales).

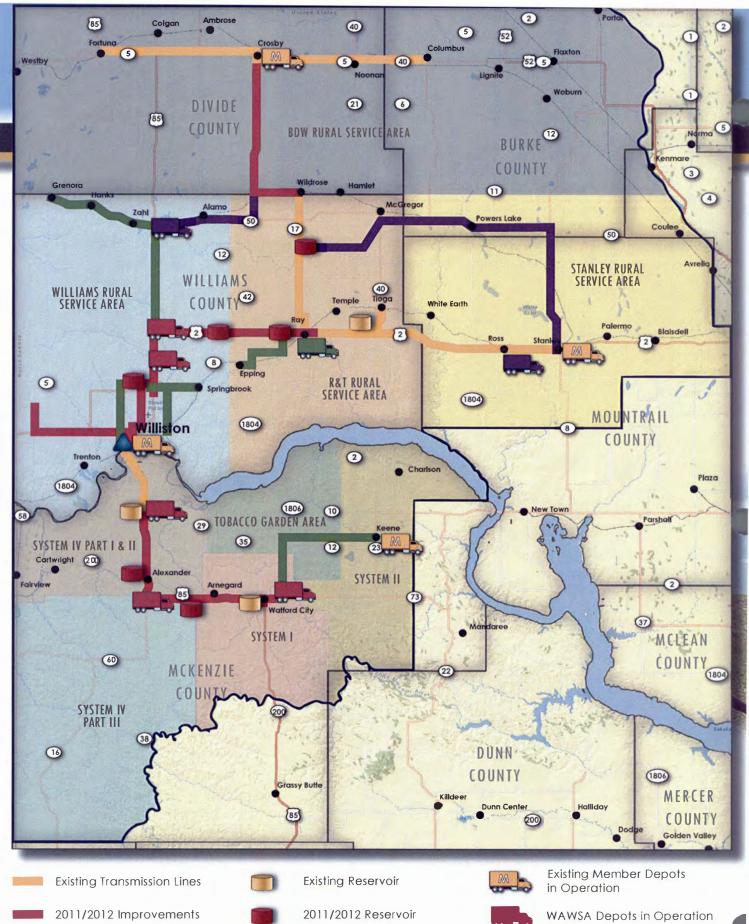
egional Transmission Lines: Regional transmission lines to expand water availability for municipal, rural developments, and rural residences in McKnzie, Williams, Mountrail, Divide, and Burke counties (\$47.4 million).

ural Water Distribution Lines: Rural water distribution lines for service connections to rural developments and rural residences in McKenzie, Williams, Nountrail, Divide, and Burke counties (\$45.3 million).

# **FUTURE BIENNIA ANTICIPATED FUNDING**

AL FUTURE BIENNIA WAWSP FUNDING NEEDS (SOURCES TO BE DETERMINED) \$120,000,000

Total Project Funding Estimate as Envisioned to Date: \$349,000,000



2013/2014 Improvements

2015/2016 & Beyond **Improvements** 

WAWSA Project Boundary Line

2013/2014 Reservoir

WTP/Intake Expansion/ Improvements

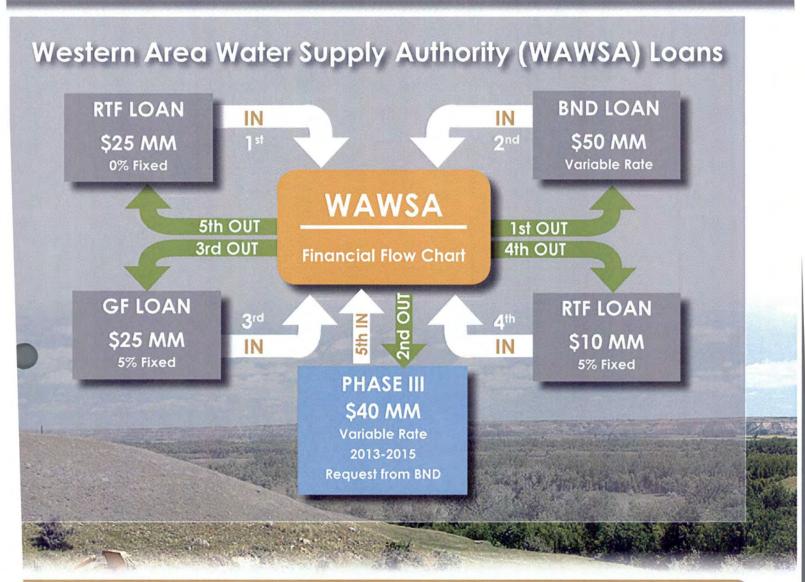




WAWSA Depots Operational by Summer 2013



Future WAWSA Depots



# LOAN TERMS AND CONDITIONS

LOAN#	LENDER	LOAN AMOUNT	SCENARIO 1 TERMS	SCENARIO 2 TERMS
Loan #1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loan #2	Bank of North Dakota	\$50 million	2014 - 2017	2014 - 2021
Loan #3	General Fund Loan	\$25 million	2020 - 2021	2021 - 2029
Loan #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loan #5*	Bank of North Dakota	\$40 million	2017 - 2020	2015 - 2028

st Loan #5: Loan that WAWSA is seeking in 2013-2015 biennium



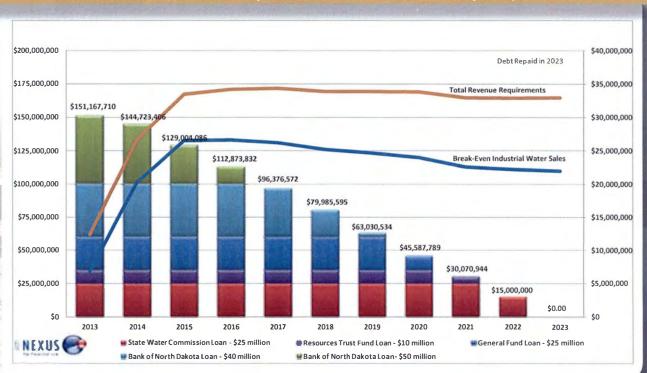
# BREAK-EVEN ANALYSIS | SCENARIO 1

#### **CRITICAL YEAR ANALYSIS FOR 10-YEAR DEBT REPAYMENT**

REVENUE REQUIREMENTS	2015		2016	
Fixed and Variable O&M	\$1,702,002	5.1%	\$1,753,062	5.1%
Member Entity O&M	\$4,254,622	12.7%	\$4,382,260	12.8%
Lost Industrial Reimbursements	\$3,801,742	11.4%	\$3,801,742	11.1%
Debt Service — Existing	\$2,920,388	8.7%	\$2,917,063	8.6%
Debt Service — New	\$20,019,053	59.8%	\$19,780,700	57.9%
Reserve Fund Requirements	\$775,807	2.3%	\$1,529,211	4.5%
Total Revenue Requirements	\$33,473,614	100.0%	\$34,164,038	100.0%
Less: Domestic Water Sales	\$6,965,441		\$7,553,041	
Less: Interest Income	\$100		\$100	
Break-Even Industrial Water Sales	\$26,508,073		\$26,610,897	
Required Volume (Barrels)	31,557,229		31,679,639	

Break-Even Frac Requirements			
Required Fracs @ 60,000 barrels/frac	526 per year	528 per year	
Required Fracs @ 80,000 barrels/frac	394 per year	396 per year	
Required Fracs @ 100,000 barrels/frac	316 per year	317 per year	

# Loan Balances and Projected Break-Even Analysis | Scenario 1



# 2013 BUSINESS PLAN UPDATE **EXECUTIVE SUMMARY**

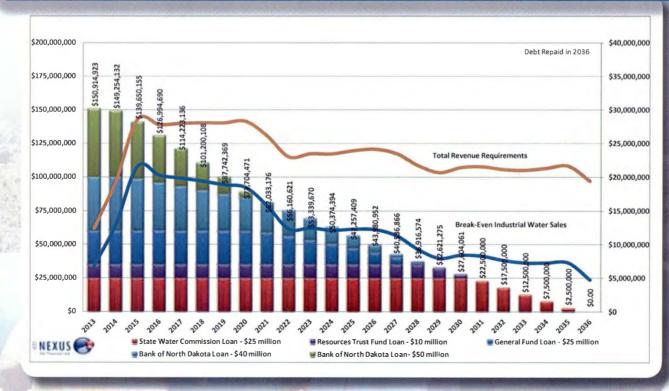
# BREAK-EVEN ANALYSIS | SCENARIO 2

#### **CRITICAL YEAR ANALYSIS FOR 23-YEAR DEBT REPAYMENT**

REVENUE REQUIREMENTS	2015		2016					
Fixed and Variable O&M	\$1,702,002	6.0%	\$1,753,062	6.3%				
Member Entity 0&M	\$4,254,622	14.9%	\$4,382,260	15.8%				
Lost Industrial Reimbursements	\$3,801,742	13.3%	\$3,801,742	13.7%				
Debt Service — Existing	\$2,920,388	10.2%	\$2,917,063	10.5%				
Debt Service — New	\$15,374,646	53.9%	\$14,340,344	51.6%				
Reserve Fund Requirements	\$491,136	1.7%	\$584,297	2.1%				
Total Revenue Requirements	\$28,544,535	100.0%	\$27,778,768	100.0%				
Less: Domestic Water Sales	\$6,965,441		\$7,553,041					
Less: Interest Income	\$100		\$100					
Break-Even Industrial Water Sales	\$21,578,994		\$20,225,627	The same				
Required Volume (Barrels)	25,689,279	To the same of	24,078,128	37				

reak-Even Frac Requirements	THE RELEASE OF THE STATE OF THE	
Required Fracs @ 60,000 barrels/frac	428 per year	401 per year
Required Fracs @ 80,000 barrels/frac	321 per year	301 per year
Required Fracs @ 100,000 barrels/frac	257 per year	241 per year

# Loan Balances and Projected Break-Even Analysis | Scenario 2



# WESTERN AREA WATER SUPPLY PROJECT 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY

# PROJECTED WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS

Industrial water demand plays a critical role in the success of the WAWSP. In an attempt to quantify this demand, AE2S met with the Department of Mineral Recourses (DMR) and the North Dakota State Water Commission (NDSWC) to discuss the key variables associated with projecting industrial water demand. Through continued discussion with the DMR, NDSWC, and industrial water users, AE2S developed a list of key variables associated with industrial water demand and their corresponding values displayed in the table below. The two industrial demand projections used were: 1) DMR based projection – based on the information provided by the DMR and NDSWC, and 2) Adjusted DMR – based on the DMR projection but modified for current rig count, a more conservative frac flow per well, and adjusted for average maintenance flow for all wells over time in the service area. The two projections are displayed graphically along with the 10- and 23-year repayment scenarios to provide an overview of the total industrial water demand within the WAWSA service area compared to the break-even industrial water sales.

#### WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS VARIABLES

VARIABLE	DMR Projection	Adjusted DMR
Rig Count (#)	126	115
Rig Production (wells/rig/yr)	12	12
Total Future Wells (#)	19,780	19,780
Existing Wells (#)	3,613	3,613
Wells Requiring Maintenance Flow (%)	60 increasing to 100%	60 increasing to 100%
Average Well Production Period (years)	45	45
Maintenance Flow (barrels/well/day)	12.5	20 dropping to 10
Fresh Water Required Per Frac (barrels/well)	80,000	60,000
Recycle (% of fresh water frac)	0 increasing to 20%	0 increasing to 20%











Report Name
Capital Costs Incurred Through Date Executive Project Summary: Phases I - IV 12/31/2012

		Business Plan Estimate	E	Baseline Engineering Estimate		Project Growth / Expansion		Contracted Amounts To-Date		Actual To-Date		Best Estimate To-Date
Phase I		10.070.000		0.040.000		THE PERSON NAMED IN	•	0.070.007	•	0.770.004	•	0.040.000
Task Order No. 4 - Regional Water Service Phase I Pipeline	\$	10,070,000	\$	9,810,000	\$		2	9,979,997	\$	9,770,884	\$	9,810,000
Task Order No. 5 - Regional Water Service Phase I Reservoir	\$	4,956,000	\$	5,545,600	\$	700,000	\$	5,225,600	\$	5,093,584	\$	5,545,600
Task Order No. 6 - Regional Water Service to Crosby/BDW	\$	3,910,000	\$	5,152,332	\$	760,339	\$	5,912,671	\$	5,168,870	\$	5,912,671
Fask Order No. 7 - Regional Water Service System IV - Phase I	\$	3,584,000	2	3,940,609	\$	5,158,078	\$	8,648,687	\$	5,601,196	\$	9,098,687
Phase II												
ask Order No. 10 - Williston Water Treatment Facility Expansion	\$	10,846,000	\$	15,868,742	\$		\$	15,164,785	\$	2,062,101	2	15,868,742
ask Order No. 11 - Transmission Pipeline Improvements	\$	36,357,000	\$	34,374,896	\$	1,701,015	\$	35,852,921	\$	31,914,016	\$	36,075,911
ask Order No. 12 - Reservoirs and Pump Stations	\$	13,183,000	\$	15,108,930	\$	435,000	\$	15,082,023	\$	11,949,735	1000	15,543,930
ask Order No. 14 - Fill Depots	\$	2,778,901	\$	8,248,840	\$	1,251,160 275,000	\$	8,452,171 660.000	\$	6,489,169 504,970	\$	9,500,000 660,000
ask Order No. 15a-1 - WRWD West Expansion Engineering ask Order No. 15a-1 - WRWD West Expansion	\$	370,000	\$	385,000	\$	3.362.146	\$	3,142,737	\$	2,582,182	\$	3,362,146
ask Order No. 15a-1 - WRWD West Expansion Cost Sharing	\$		\$		\$	(1,700,000)	\$	(1,700,000)	\$	2,302,102	\$	(1,700,000
	S		\$	1.500.000	\$	(1,700,000)	\$	1,500,000	\$	1,479,664	\$	0.000
ask Order No. 16 - Right of Way Procurement	3		Þ	1,500,000	2		9	1,500,000	2	1,479,004	2	1,500,000
nase III Engineering	\$	4,700,000	\$		\$		\$		\$		\$	
Task Order No. 10 - Williston WTP Expansion from 14 - 21 MGD	\$		\$	1,223,400	\$		\$	1,223,400	\$	842,840	\$	1,223,400
Task Order No. 17 - By Pass Transmission Lines (30" & 36")	\$		\$	494,000	\$		\$	494,000	\$	15,100	\$	494,000
Task Order No. 18 - WRWD - West Expansion - Part 2	\$	***	\$	322,000	\$		\$	322,000	\$		\$	322,000
Task Order No. 19 - Transmission Pipeline Improvements (Keene Loop)	\$	15 15 E	\$	395,000	\$		\$	395,000	\$	5,900	\$	395,000
Other Engineering Task Orders	\$		\$	1,624,600	\$		\$		\$		\$	1,624,600
hase III WTP Expansion from 14 - 21 MGD Filter Fit-Ups	\$		\$	1,363,360	\$		\$	1,363,360	\$		\$	1,363,360
otal Legal and Administrative for Phases I and II - Capitalized	\$	2,270,099	\$	1,051,004	\$		\$	875,836	\$	875,836	\$	1,051,004
Phase III (Indexed @ 3% After Task Order No. 19)												
ask Order No. 10 - Williston WTP Expansion from 14 - 21 MGD	\$	21,000,000	\$	21,993,240	\$		\$		\$	-	\$	21,993,240
ask Order No. 17 - By Pass Transmission Lines (30" & 36")	\$	8,460,000	\$	8,291,000	\$	-	\$		\$		\$	8,291,000
ask Order No. 18 - WRWD - West Expansion - Part 2	\$		\$		\$	4,578,000	\$		\$		\$	4,578,000
ask Order No. 19 - Transmission Pipeline Improvements (Keene Loop)	\$	3,980,000	\$	3,980,000	\$	1,225,000	\$		\$		\$	5,205,000
Il Depots	\$	1,770,000	\$	2,153,915	\$		\$		\$		\$	2,153,91
/RWD - East Transmission - Part 1 (Hwy 2 E. 133rd Ave and South)	\$		\$		\$	3,811,000	\$	- 1	\$		\$	3,811,000
RWD - Epping Transmission - Part 1 (Ray High Point to Epping)	\$		\$		\$	4,326,000	\$	-	\$		\$	4,326,000
WD System I (Tobacco Garden)	\$	2,100,000	\$	2,100,000	\$	2,715,250	\$		\$		\$	4,815,250
D - East Transmission - Part 2 (Epping to Hwy. 1804 and East)	\$		\$		\$	9,455,400	\$		\$		\$	9,455,400
TP Intake Expansion Preliminary Engineering (14mg - 21mg)	\$	855,000	\$	880,650	\$	100	\$	•	\$		\$	880,650
RWD Part 1 (Black Tail Dam Area Distribution)	\$	1,380,000	\$	1,483,000	\$	4,491,000	\$		\$		\$	5,974,00
ansmission Lines (13 mile to 29 mile)	\$	3,525,000	\$	3,525,000	\$	2,964,000	\$		\$		\$	6,489,000
/RWD - Grenora (29 Mile to Grenora)	\$	810,000	\$	1,648,000	\$		\$		\$		\$	1,648,000
ural Distribution - Part 1 (Wildrose Area)	\$	2,275,000	\$	2,544,100	\$		\$		\$		\$	2,544,100
ural Distribution (System IV Part 3)	\$		\$		\$	6,695,000	\$		\$	-	\$	6,695,000
/RWD - North Transmission - Part 1 (58th St. to 60th St.)	\$		\$	NEW TOWN	\$	655,080	\$	•	\$	-	\$	655,080
DW - Distribution - Part 1 (Crosby Branch and Columbus Branch)	\$		\$	TEVEL ESTA	\$	3,646,200	\$		\$	•	\$	3,646,200
tanley - Distribution Part 1 (Stanley High Point Branch)	\$	PER SE	\$		\$	5,562,000	\$		\$		\$	5,562,000
VRWD - West Transmission North - Part 3 (Pump Station to 60th St.)	\$		\$		\$	3,275,400	\$		\$		\$	3,275,400
VRWD - Part 2 (Remaining Blacktail Dam Area) Other Engineering Task Orders	\$		\$	(1,624,600)	\$	7,889,800	\$		\$		\$	7,889,800
	130											
Phase IV (Indexed @ 5%)	s	10.845.000	s	11.761.050	•	109.494.000	\$		\$		•	121.255.050

	Business Plan Estimate	Baseline Engineering Estimate	Project Growth / Expansion	Contracted Amounts To-Date	Actual To-Date	Best Estimate To-Date
Phase I Totals	\$ 22,520,000	\$ 24,448,541	\$ 5,918,417	\$ 29,766,955	\$ 25,634,534	\$ 30,366,958
Phase II Totals	\$ 70,505,000	\$ 81,959,771	\$ 5,324,321	\$ 82,828,234	\$ 58,721,512	\$ 87,284,092
Phase I - II Totals	\$ 93,025,000	\$ 106,408,312	\$ 11,242,738	\$ 112,595,189	\$ 84,356,046	\$ 117,651,050
Phase III Totals	\$ 46,155,000	\$ 46,974,305	\$ 61,289,130	\$ -	\$ -	\$ 108,263,435
Phase I - III Totals	\$ 139,180,000	\$ 153,382,618	\$ 72,531,868	\$ 112,595,189	\$ 84,356,046	\$ 225,914,485
Phase IV Totals	\$ 10,845,000	\$ 11,761,050	\$ 109,494,000	\$ -	\$ -	\$ 121,255,050
Phase I - IV Totals	<u>\$_150,025,000</u>	\$ 165,143,668	\$ 182,025,868	\$ 112,595,189	\$ 84,356,046	\$ 347,169,535

\*1 - A portion of basic engineering services were paid with the \$1.5M State Water Commission grant provided to McKenzie County Water Resource District. These fees are not included in the estimated total project cost so as to only track ted loan dollars utilized for the project. Task Order No. 4 Best Estimate To-Date has been reduced to match its Actual To-Date as the project is being closed out.

ing closed out.		p. 0,00. 000. 0		o, t. 2010			
		Estimated ontingencies					
Phase I	\$	870,000	\$	870,000			
Phase II	\$	1,471,691	\$	1,471,691			
Phase III	_\$_	-	\$	-			
Phases I - III	\$	2,341,691	\$	2,341,691			

Exhibit 1: Scenario – 1



# **Scenario 1: Projected Revenues and Expenditures**

PROJECTED CASH FLOW STATEMENT THROUGH 2036		2013		2014		2015		2016		2017
		Projected		Projected		Projected		Projected		Projected
BEGINNING UNOBLIGATED CASH BALANCE	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,00
CASH IN: Cash From Operations										
Domestic Water Sales	1									
City of Williston	\$	2,520,000	\$	2,565,366	\$	2,688,944	\$	2,828,021	ċ	2,937,53
Williams Rural Water District	\$	682,560	\$	811,503	\$	972,866	\$	1,208,884	\$	1,450,92
McKenzie County Rural Water District	\$	1,276,000	\$	1,569,288	\$	1,752,546	\$		\$	1,961,09
R&T Water Supply Association	\$	910,000	\$	1,193,740	\$	1,266,208	\$	1,336,258	\$	1,413,96
BDW	\$	210,000	\$	248,295	\$	284,878	\$	324,435	\$	366,54
Total Domestic Water Sales	\$	5,598,560	\$	6,388,193	\$	6,965,441	\$		\$	8,130,0
Total WAWSA Member Industrial Water Sales	\$	6,792,953	\$	20,295,442	\$	26,508,073	-		\$	26,197,3
Total Interest Income	\$	100	\$	100	\$	100	\$		\$	10,137,3
TOTAL CASH IN	\$	12,391,613	-	26,683,735	\$	33,473,614	- 1	34,164,038		34,327,5
CASH OUT:	1									
Cash For Operation	1									
Fixed and Variable Operation & Maintenance	1									
Advertising	\$	4,000	Ś	4,120	\$	4,244	\$	4,371	Ś	4,5
Board of Directors	\$	10,000	\$	10,300	\$	10,609	\$		\$	11,2
Computer Expenses	\$	1,900	-	1,957	\$	2,016		2,076	-	2,1
Contract Labor	\$	3,000	\$	3,090	\$	3,183	\$		\$	3,3
Dues and Subscriptions	\$	2,000	-	2,060	\$	2,122	-		\$	2,2
Employee Benefits	\$	146,100	\$	150,483	\$	154,997	-		\$	164,4
Insurance	\$	10,000	\$	10,300	\$	10,609	\$		\$	104,4
Office Expenses	\$	10,500	\$	10,815	\$	11,139	\$	•	\$	11,2
	\$	457,000	\$		\$				\$	514,3
Payroll Expenses Postage	\$	1,000	\$	470,710 1,030	\$	484,831 1,061	\$		\$	1,1
Professional Fees	\$	650,000	-	669,500	\$	689,585	\$	,	\$	731,5
Promotional Promotional	\$				- 1		- 1		1	
	\$	100,500	\$	103,515	\$ \$	106,620	\$		\$ \$	113,1
Rent or Lease	\$	16,700	\$	17,201	-	17,717	\$	•	-	18,7
Repair and Maintenance		100,000	\$	103,000	\$	106,090	\$		\$	112,5
Small Tools and Equipments	\$	2,500	\$	2,575	\$	2,652	\$	•	\$	2,8
Telephone	\$	4,200	\$	4,326	\$	4,456	\$		\$	4,7
Travel	\$	10,000	\$	10,300	\$	10,609	\$	•	\$	11,2
Utilities	\$	3,600	\$	3,708	\$	3,819	\$		\$	4,0
Vehicle	\$	71,300	\$	73,439	\$	75,642	\$	77,911		80,2
Total Fixed and Variable O&M	\$	1,604,300	\$	1,652,429	\$	1,702,002	\$	1,753,062	\$	1,805,6
Member Operation and Maintenance	١.									
City of Williston	\$	1,785,320		1,838,880	\$	1,894,046			\$	2,009,3
MCRWD	\$	650,631		670,150	\$	690,254			\$	732,2
WRWD	\$	61,755	\$	63,608	\$	65,516	\$	•	\$	69,5
R&T	\$	1,354,683		1,395,323	\$	1,437,183	\$		\$	1,524,7
BDW	\$	158,000	\$	162,740	\$	167,622	\$	172,651	\$	177,8
Total Member O&M	\$	4,010,389	\$	4,130,701	\$	4,254,622	\$	4,382,260		4,513,7
Total Operation and Maintenance	\$	5,614,689	\$	5,783,130	\$	5,956,624	\$	6,135,322	\$	6,319,3
Annual Reimbursement for Lost Industrial Revenues										
Williston	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,0
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000	\$	816,0
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,2
BDW	\$	258,451	\$	258,451	\$	258,451	\$	258,451	\$	258,4
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,7
Member Debt Service - Existing										
City of Williston	\$	1,701,900	\$	1,696,425	\$	1,695,038	\$	1,687,613	\$	1,679,2
McKenzie County Rural Water District	\$	551,850	\$	552,400	\$	552,650	\$		\$	552,2
R&T Water Supply Association	\$	673,650	\$	673,300		672,700	\$	676,850	-	680,6
Total Yearly Debt Service - Existing	\$	2,927,400	\$	2,922,125	\$	2,920,388	\$	2,917,063		2,912,1
State Water Commission Loan - \$25 million	\$	-	\$		Ś	_	Ś	-	\$	
Bank of North Dakota Loan - \$50 million	\$		\$	8,459,048	\$	16,918,097	\$		\$	12,688,5
General Fund Loan - \$25 million	\$		\$	2,346,619	\$	1,254,958	\$		\$	1,254,9
Resources Trust Fund Loan - \$10 million	\$		\$	2,5-70,013	\$	1,343,918		501,878	-	501,8
Bank of North Dakota Loan - \$40 million	\$	Ē	\$	- 1	\$	502,081	\$	1,105,768		5,319,7
Total Yearly Debt Service - New Debt	\$	2	\$	10,805,668	\$	20,019,053	-	19,780,700		19,765,1
Total Yearly Debt Service - Existing & New Debt	\$	2,927,400	\$		\$	22,939,441		22,697,762		22,677,3
Reserve Fund Requirements	1	2,327,400	Ą	13,121,133	Ą	22,333,441	Ą	22,037,702	7	22,011,3
	\$	2.0	ċ	2,978,312	ė	90.240	ė	02.020	ċ	047
O&M Reserve Fund Requirement	\$	47.703	\$		\$	•	\$		\$	94,7
(early Free Cash Flow Prior to Contributions	1,	47,782	\$	392,758	Þ	686,458	Þ	1,437,181	Þ	1,434,2
Reserve Contributions		4= ===	_	44	_				_	
Contributions to Escrow	\$	47,782	\$	142,758	\$	186,458	\$	187,181	\$	184,2
Contributions to Debt Service	\$	-	\$		\$	-	\$	-	\$	
Contributions to Capital Reserve	\$	*	\$	250,000	\$	500,000	\$		\$	1,250,0
Total Yearly Reserve Contributions	\$	47,782		392,758	\$	686,458	\$	1,437,181		1,434,2
TOTAL CASH OUT	\$	12,391,613	\$	26,683,735	\$	33,473,614	\$	34,164,038	\$	34,327,5
Excess Cash In Over Cash Out	\$		\$		\$	•	\$		\$	
ENDING UNOBLIGATED CASH BALANCE	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,0



PROJECTED CASH FLOW STATEMENT THROUGH 2036		2018		2019		2020		2021 Projected		2022 Projected
BEGINNING UNOBLIGATED CASH BALANCE	S	Projected 200,000	ć	Projected 200,000	ć	Projected 200,000	\$	200,000	•	200,00
CASH IN:	-	200,000	7	200,000	P	200,000	7	200,000	7	200,0
Cash From Operations	1									
Domestic Water Sales	1									
City of Williston	\$	3,070,699	\$	3,196,634	\$	3,324,786	\$	3,451,892	\$	3,578,1
Williams Rural Water District	\$	1,625,987	\$	1,804,423	\$	1,991,332	\$	2,100,886	\$	2,124,29
McKenzie County Rural Water District	\$	2,087,607	\$	2,210,239	\$	2,319,525	\$	2,385,881	\$	2,408,2
R&T Water Supply Association	\$	1,493,128	\$	1,576,725	\$	1,711,351	\$	1,871,433		1,998,5
BDW	\$	388,534	\$	410,929	\$	475,000	\$	536,430	\$	553,1
Total Domestic Water Sales	\$	8,665,956	\$	9,198,951	\$	9,821,993	\$	10,346,523	\$	10,662,4
Total WAWSA Member Industrial Water Sales	\$	25,194,999	\$	24,654,270	\$	23,976,562	\$	22,597,006	Ś	22,204,5
Total Interest Income	\$	100	Ś	100	\$	100	\$	100	\$	1
TOTAL CASH IN	\$	33,861,055	•	33,853,321	-		\$	32,943,630	-	32,867,0
	1									
CASH OUT:	1									
Cash For Operation	T .									
Fixed and Variable Operation & Maintenance	1									
Advertising	\$	4,637		4,776	\$	4,919	\$	5,067	\$	5,2
Board of Directors	\$	11,593		11,941	\$	12,299	\$	12,668	\$	13,0
Computer Expenses	\$	2,203		2,269	\$	2,337	\$	2,407	\$	2,4
Contract Labor	\$	3,478	-	3,582	\$	3,690	\$	3,800	\$	3,9
Dues and Subscriptions	\$	2,319	\$	2,388	\$	2,460	\$	2,534	\$	2,6
Employee Benefits	\$	169,370	\$	174,451	\$	179,685	\$	185,075	\$	190,6
Insurance	\$	11,593	\$	11,941	\$	12,299	\$	12,668	\$	13,0
Office Expenses	\$	12,172	\$	12,538	\$	12,914	\$	13,301	\$	13,7
Payroll Expenses	\$	529,788	\$	845,000	\$	870,350	\$	896,461	\$	923,3
Postage	\$	1,159	\$	1,194	\$	1,230	\$	1,267	\$	1,3
Professional Fees	\$	753,528	\$	250,000	\$	257,500	\$	265,225	\$	273,1
Promotional	\$	116,507	\$	25,000	\$	25,750	\$	26,523	\$	27,3
Rent or Lease	\$	19,360	\$	19,941	\$	20,539	\$	21,155	\$	21,7
Repair and Maintenance	\$	115,927	-	119,405	\$	122,987	\$	126,677	\$	130,4
Small Tools and Equipments	\$	2,898	-	2,985	\$	3,075	\$	3,167	\$	3,2
Telephone	\$		\$	5,015	\$	5,165	\$	5,320	\$	5,4
Travel	\$	11,593	-	11,941	\$	12,299	\$	12,668	\$	13,0
Utilities	\$		\$	4,299	\$	4,428	\$	4,560	Ś	4,6
Vehicle	\$	•	\$	150,000	\$	154,500	\$	159,135	\$	163,9
Total Fixed and Variable O&M	\$	1,859,823		1,658,664	\$	1,708,424	\$	1,759,677	\$	1,812,4
Member Operation and Maintenance	ľ	1,033,023	*	_,000,000	*	_,,,	•	2,,,,,,,,,	*	_,,
City of Williston	\$	2,069,675	\$	2,131,765	\$	2,195,718	\$	2,261,590	\$	2,329,4
MCRWD	\$	754,260		776,887			\$	824,200	\$	848,9
WRWD	š	71,591		73,739	\$	75,951	\$	78,229	-	80,
R&T	\$	1,570,449		1,617,562		1,666,089	\$	1,716,072		1,767,5
BDW	\$	183,165		188,660	\$		- 1	200,150	\$	206,1
			-	4,788,614	-	194,320	\$			
Total Member O&M	\$	4,649,140	\$		\$	4,932,273	\$		\$	5,232,6
Total Operation and Maintenance	1,	6,508,963	>	6,447,278	\$	6,640,697	Þ	6,839,917	>	7,045,
Annual Reimbursement for Lost Industrial Revenues	١,	4 400 050		1 400 050		1 400 050		1 400 000		1 400 (
Williston	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,0
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000	\$	816,0
R&T Water Supply Commerce Authority	\$	1,327,232		1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,
BDW	\$	258,451		258,451		258,451	\$	258,451	\$	258,4
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,7
Member Debt Service - Existing										
City of Williston	\$	1,675,050		1,669,763		1,663,425		1,651,050		1,393,3
McKenzie County Rural Water District	\$	551,600	\$	550,650	\$	549,400	\$	552,850	\$	550,8
R&T Water Supply Association	\$	678,975	\$	677,100	\$	679,975	\$	682,450		679,5
Total Yearly Debt Service - Existing	\$	2,905,625		2,897,513		2,892,800	\$	2,886,350		2,623,7
State Water Commission Loan - \$25 million	\$	-	\$	-	\$	-	\$	-	\$	10,000,0
Bank of North Dakota Loan - \$50 million	\$	-	\$	-	\$	-	\$	-	\$	
General Fund Loan - \$25 million	\$	1,254,958	\$	1,254,958	\$	15,533,167	\$	10,726,805	\$	
Resources Trust Fund Loan - \$10 million	\$	501,878	\$	501,878	\$	501,878	\$	5,427,269	\$	5,134,5
Bank of North Dakota Loan - \$40 million	\$	17,460,667	\$	17,460,667	\$	2,910,111	\$	-	\$	
Total Yearly Debt Service - New Debt	\$	19,217,503	\$	19,217,503	\$	18,945,156	\$	16,154,074	\$	15,134,9
Total Yearly Debt Service - Existing & New Debt	\$	22,123,128	\$	22,115,015	\$	21,837,956	\$	19,040,424	\$	17,758,2
Reserve Fund Requirements										
O&M Reserve Fund Requirement	\$	-	\$	65,867	\$	99,610	\$	102,599	\$	105,6
early Free Cash Flow Prior to Contributions	\$	1,427,222	\$	1,423,418	\$	1,418,651	\$	3,158,947	\$	4,156,1
Reserve Contributions										
Contributions to Escrow	\$	177,222	\$	173,418	\$	168,651	\$	158,947	\$	156,1
Contributions to Debt Service	\$		\$		\$		\$		\$	
Contributions to Capital Reserve	\$	1,250,000	\$	1,250,000	\$	1,250,000	\$	3,000,000	\$	4,000,0
Total Yearly Reserve Contributions	\$	1,427,222		1,423,418	-	1,418,651	\$	3,158,947	-	4,156,1
OTAL CASH OUT	\$	33,861,055		33,853,321		33,798,656	\$		\$	32,867,0
	\$	,,	Ś	,,	\$	,,	Ś	,,,	\$	,_,,
xcess Cash In Over Cash Out	1.5									



		Projected
BEGINNING UNOBLIGATED CASH BALANCE	\$	200,00
CASH IN:	Ť	200,00
Cash From Operations	1	
Domestic Water Sales	ı	
City of Williston	\$	3,707,17
Williams Rural Water District	\$	2,146,94
McKenzie County Rural Water District	\$	2,431,12
R&T Water Supply Association	\$	2,116,50
BDW	\$	570,03
Total Domestic Water Sales	\$	10,971,79
Total WAWSA Member Industrial Water Sales	\$	21,961,1
Total Interest Income	\$	21,501,1
TOTAL CASH IN	Ś	32,933,04
CASH OUT:	1	
Cash For Operation		
Fixed and Variable Operation & Maintenance	1	
Advertising	\$	5,3
Board of Directors	\$	13,4
Computer Expenses	\$	2,55
Contract Labor	\$	4,03
Dues and Subscriptions	\$	2,68
Employee Benefits	\$	196,3
Insurance	\$	13,43
Office Expenses	\$	14,1
Payroll Expenses	\$	951,0
Postage	\$	1,34
Professional Fees	\$	281,3
Promotional	\$	28,13
Rent or Lease	\$	22,44
Repair and Maintenance	\$	134,39
Small Tools and Equipments	\$	3,36
Telephone	\$	5,64
Travel	\$	13,43
Utilities	\$	4,83
Vehicle	\$	168,82
Total Fixed and Variable O&M	\$	1,866,84
Member Operation and Maintenance	ľ	2,000,0
City of Williston	\$	2,399,32
MCRWD	\$	874,39
WRWD	\$	82,99
R&T	\$	1,820,58
BDW	\$	212,33
Total Member O&M	\$	
Total Operation and Maintenance	S	5,389,67 7,256,40
Annual Reimbursement for Lost Industrial Revenues	1,	7,230,40
	١,	1 400 0
Williston	\$	1,400,05
MCRWD	\$	816,00
R&T Water Supply Commerce Authority		1,327,23
BDW Total Annual Reimbursement for Lost Industrial Revenues	\$	258,45
Member Debt Service - Existing	'	3,801,74
City of Williston	\$	1,386,50
McKenzie County Rural Water District	\$	548,55
R&T Water Supply Association	\$	676,40
Total Yearly Debt Service - Existing	\$	2,611,5
State Water Commission Loan - \$25 million	\$	15,000,00
Bank of North Dakota Loan - \$50 million	\$	13,000,00
General Fund Loan - \$25 million	\$	
Resources Trust Fund Loan - \$10 million	\$	
The state of the s	\$	-
Bank of North Dakota Loan - \$40 million	\$	15 000 00
Total Yearly Debt Service - New Debt	\$	15,000,00 17,611,51
Total Yearly Debt Service - Existing & New Debt	1,	17,011,51
Reserve Fund Requirements	1	100.0
O&M Reserve Fund Requirement	\$	108,84
early Free Cash Flow Prior to Contributions	\$	4,154,47
Reserve Contributions	1.	
Contributions to Escrow	\$	154,47
Contributions to Debt Service	\$	-
Contributions to Capital Reserve	\$	4,000,00
Total Yearly Reserve Contributions	\$	4,154,47
OTAL CASH OUT		32,933,04
xcess Cash In Over Cash Out	\$	



Exhibit 2: Scenario – 2



# **Scenario 2: Projected Revenues and Expenditures**

PROJECTED CASH FLOW STATEMENT THROUGH 2036	1200	2013 Projected		2014 Projected		2015 Projected	-	2016 Projected	-	2017 Projected
BEGINNING UNOBLIGATED CASH BALANCE	\$	200,000	4	200,000	4	200,000	ς.	200,000	\$	200,000
CASHIN:	7	200,000	4	200,000	4	200,000	*	200,000	4	200,00
Cash From Operations										
Domestic Water Sales										
City of Williston	\$	2,520,000	\$	2,565,366	\$	2,688,944	\$	2,828,021	\$	2,937,530
Williams Rural Water District	\$	682,560	\$	811,503	\$	972,866	\$	1,208,884	\$	1,450,925
McKenzie County Rural Water District	\$	1,276,000	\$	1,569,288	\$	1,752,546	\$	1,855,443	\$	1,961,09
R&T Water Supply Association	\$	910,000	\$	1,193,740	\$	1,266,208	\$	1,336,258	\$	1,413,96
BDW	\$	210,000	\$	248,295	\$	284,878	\$	324,435	\$	366,540
Total Domestic Water Sales	\$	5,598,560	\$	6,388,193	\$	6,965,441	\$	7,553,041	\$	8,130,05
Total WAWSA Member Industrial Water Sales	\$	6,792,953	\$	12,896,751	\$	21,578,994	\$	20,225,627	\$	19,827,71
Total Interest Income	\$	100	\$	100	\$	100	\$	100	\$	100
TOTAL CASH IN	\$	12,391,613	\$	19,285,044	\$	28,544,535	\$	27,778,768	\$	27,957,86
CASH OUT:										
Cash For Operation	1									
Fixed Operation & Maintenance										
Advertising	\$	4,000	\$	4,120	\$	4,244	\$	4,371	\$	4,50
Board of Directors	\$	10,000	\$	10,300	\$	10,609	\$	10,927	\$	11,25
Computer Expenses	\$	1,900	\$	1,957	\$	2,016	\$	2,076	\$	2,13
Contract Labor	\$	3,000	\$	3,090	\$	3,183	\$	3,278	\$	3,37
Dues and Subscriptions	\$	2,000	Ś	2,060	\$	2,122	\$	2,185	\$	2,25
Employee Benefits	\$	146,100	Ś	150,483	Ś	154,997	Ś	159,647	\$	164,43
Insurance	\$	10,000	\$	10,300	\$	10,609	\$	10,927	\$	11,25
Office Expenses	\$	10,500	\$	10,815	\$	11,139	\$	11,474	\$	11,81
Payroll Expenses	\$	457,000	\$	470,710	\$	484,831	\$	499,376	\$	514,35
Postage	\$	1,000	\$	1,030	\$	1,061	\$	1,093	\$	1,12
Professional Fees	\$	650,000	\$	669,500	Ś	689,585	\$	710,273	Ś	731,58
Promotional	\$	100,500	\$	103,515	\$	106,620	\$	109,819	\$	113,11
Rent or Lease	\$	16,700	\$	17,201	\$	17,717	\$	18,249	\$	18,79
Repair and Maintenance	\$	100,000	Ś	103,000	Ś	106,090	Ś	109,273	Ś	112,55
Small Tools and Equipments	\$	2,500	\$	2,575	\$	2,652	\$	2,732	\$	2,81
Telephone	\$	4,200	\$	4,326	\$	4,456	\$	4,589	\$	4,72
Travel	\$	10,000	\$	10,300	\$	10,609	\$	10,927	\$	11,25
Utilities	\$	3,600	Ś	3,708	\$	3,819	\$	3,934	\$	4,05
Vehicle	\$	71,300	\$	73,439	\$	75,642	\$	77,911	\$	80,24
Total Fixed and Variable O&M	\$		\$	1,652,429	\$	1,702,002	\$	1,753,062	\$	1,805,65
Member Operation and Maintenance	ΙŤ	2,00 1,000	•	_,00,	•	-,,	•	_,,	*	_,,_
City of Williston	\$	1,785,320	\$	1,838,880	\$	1,894,046	\$	1,950,867	\$	2,009,39
MCRWD	\$		\$	670,150	\$	690,254	\$	710,962		732,29
WRWD	\$	61,755	\$	63,608	Ś	65,516	\$		Ś	69,50
R&T	\$	1,354,683	\$	1,395,323	\$	1,437,183	\$	1,480,299	\$	1,524,70
BDW	\$	158,000	\$	162,740	Ś	167,622	\$	172,651		177,83
Total Member O&M	\$	4,010,389	\$	4,130,701	\$	4,254,622	\$	4,382,260	\$	4,513,72
Total Operation and Maintenance	\$	5,614,689	\$	5,783,130	\$	5,956,624	\$	6,135,322	Ś	6,319,38
Annual Reimbursement for Lost Industrial Revenues	1		٠		•		٠			
Williston	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,05
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000	\$	816,00
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,23
BDW	İş	258,451	Ś	258,451	Ś	258,451	\$	258,451	\$	258,45
Total Annual Reimbursement for Lost Industrial Revenues	s		\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,74
Member Debt Service - Existing	1		-		•	,				
City of Williston	\$	1,701,900	\$	1,696,425	\$	1,695,038	\$	1,687,613	\$	1,679,28
McKenzie County Rural Water District	\$	551,850	\$	552,400	\$	552,650	\$	552,600		552,25
R&T Water Supply Association	\$	673,650	\$	673,300	\$	672,700	\$	676,850	\$	680,60
Total Yearly Debt Service - Existing	\$	2,927,400	-	2,922,125	-	2,920,388	\$	2,917,063	\$	2,912,13
WAWSA Debt Service - New										
State Water Commission Loan - \$25 million	\$		\$	-	\$		\$	5-4	\$	-
Bank of North Dakota Loan - \$50 million	\$		\$	3,709,019	\$	8,593,602	\$	8,593,602	\$	8,593,60
General Fund Loan - \$25 million	\$		\$	-	\$	3,691,942	\$	1,254,958	\$	1,254,95
Resources Trust Fund Loan - \$10 million	\$	2	\$	1	\$	1,343,918	\$	501,878		501,87
Bank of North Dakota Loan - \$40 million	\$		\$	- 1	\$	1,745,184	\$	3,989,906	\$	3,989,90
Total Yearly Debt Service - New Debt	\$		\$	3,709,019	\$	15,374,646	\$	14,340,344	\$	14,340,34
Total Yearly Debt Service - Existing & New Debt	\$	2,927,400	\$	6,631,144	\$	18,295,033		17,257,407		17,252,48
Reserve Fund Requirements		•								-
O&M Reserve Fund Requirement	\$	-	\$	2,978,312	\$	89,349	\$	92,030	\$	94,79
Yearly Free Cash Flow Prior to Contributions	\$	47,782		90,716	\$	401,787	-	492,267		489,46
Reserve Contributions			-				-	,	-	,
Contributions to Escrow	\$	47,782	\$	90,716	\$	151,787	\$	142,267	\$	139,4
Contributions to Debt Service	Š	.,,	\$	- 5,. 20	\$	131,707	Ś	340	\$	=
Contributions to Capital Reserve	\$	5	\$	-	Ś	250,000	Ś	350,000		350,00
Total Yearly Reserve Contributions	\$	47,782	\$	90,716	\$	401,787	Ś	492,267		489,46
TOTAL CASH OUT	\$	12,391,613	\$	19,285,044	\$	28,544,535	\$	27,778,768	\$	27,957,86
excess Cash In Over Cash Out	Š	12,331,013	\$	13,263,044	\$	28,544,555	\$	27,776,706	\$	2,,55,,60
ACCOS CUSH III OVEL CUSH OUT	\$	200,000		200,000	\$	200,000	_		~	-



PROJECTED CASH FLOW STATEMENT THROUGH 2036	7	2018		2019	2020		2021		2022
DECIMALIS HARD LEAVE COMME		Projected		Projected	Projected	_	Projected	-	Projected
BEGINNING UNOBLIGATED CASH BALANCE  CASH IN:	\$	200,000	\$	200,000	\$ 200,000	\$	200,000	\$	200,000
Cash From Operations									
Domestic Water Sales	1								
City of Williston	\$	3,070,699	\$	3,196,634	\$ 3,324,786	\$	3.451.892	\$	3,578,173
Williams Rural Water District	\$	1,625,987	Ś	1,804,423	\$ 1,991,332	Š	2,100,886	\$	2,124,294
McKenzie County Rural Water District	\$	2,087,607	\$	2,210,239	\$ 2,319,525	\$	2,385,881	\$	2,408,220
R&T Water Supply Association	\$	1,493,128	Ś	1,576,725	\$ 1,711,351	Ś	1,871,433	\$	1,998,598
BDW	\$	388,534	Ś	410,929	\$ 475,000	Š	536,430	\$	553,115
Total Domestic Water Sales	\$	8,665,956	\$	9,198,951	\$ 9,821,993	\$	10,346,523	\$	10,662,400
Total WAWSA Member Industrial Water Sales	\$	19,376,916	\$	18,836,187	\$ 18,432,756	\$	15,717,123	\$	12,305,201
Total Interest Income	\$	100	\$	100	\$ 100	\$	100	\$	100
TOTAL CASH IN	\$	28,042,972		28,035,237	\$ 28,254,849	\$	26,063,747	\$	22,967,700
CASH OUT:									
Cash For Operation	1								
Fixed Operation & Maintenance	1								
Advertising	\$	4,637	\$	4,776	\$ 4,919	\$	5,067	\$	5,219
Board of Directors	\$	11,593	\$	11,941	\$ 12,299	\$	12,668	\$	13,048
Computer Expenses	\$	2,203	\$	2,269	\$ 2,337	\$	2,407	\$	2,479
Contract Labor	\$	3,478	\$	3,582	\$ 3,690	\$	3,800	\$	3,914
Dues and Subscriptions	\$	2,319	\$	2,388	\$ 2,460	\$	2,534	\$	2,610
Employee Benefits	\$	169,370	\$	174,451	\$ 179,685	\$	185,075	\$	190,627
Insurance	\$	11,593	\$	11,941	\$ 12,299	\$	12,668	\$	13,048
Office Expenses	\$	12,172	\$	12,538	\$ 12,914	\$	13,301	\$	13,700
Payroll Expenses	\$	529,788	\$	845,000	\$ 870,350	\$	896,461	\$	923,354
Postage	\$	1,159	\$	1,194	\$ 1,230	\$	1,267	\$	1,305
Professional Fees	\$	753,528	\$	250,000	\$ 257,500	\$	265,225	\$	273,182
Promotional	\$	116,507	\$	25,000	\$ 25,750	\$	26,523	\$	27,318
Rent or Lease	\$	19,360	\$	19,941	\$ 20,539	\$	21,155	\$	21,790
Repair and Maintenance	\$	115,927	\$	119,405	\$ 122,987	\$	126,677	\$	130,477
Small Tools and Equipments	\$	2,898	\$	2,985	\$ 3,075	\$	3,167	\$	3,262
Telephone	\$	4,869	\$	5,015	\$ 5,165	\$	5,320	\$	5,480
Travel	\$	11,593	\$	11,941	\$ 12,299	\$	12,668	\$	13,048
Utilities	\$	4,173	\$	4,299	\$ 4,428	\$	4,560	\$	4,697
Vehicle	\$	82,656	\$	150,000	\$ 154,500	\$	159,135	\$	163,909
Total Fixed and Variable O&M	\$	1,859,823	\$	1,658,664	\$ 1,708,424	\$	1,759,677	\$	1,812,467
Member Operation and Maintenance									
City of Williston	\$	2,069,675	\$	2,131,765	\$ 2,195,718	\$	2,261,590	\$	2,329,438
MCRWD	\$	754,260	\$	776,887	\$ 800,194	\$	824,200	\$	848,926
WRWD	\$	71,591	\$	73,739	\$ 75,951	\$	78,229	\$	80,576
R&T	\$	1,570,449	\$	1,617,562	\$ 1,666,089	\$	1,716,072		1,767,554
BDW	\$	183,165	\$	188,660	\$ 194,320	\$	200,150	\$	206,154
Total Member O&M	\$	4,649,140	\$	4,788,614	\$ 4,932,273	\$	5,080,241	\$	5,232,648
Total Operation and Maintenance	\$	6,508,963	\$	6,447,278	\$ 6,640,697	\$	6,839,917	\$	7,045,115
Annual Reimbursement for Lost Industrial Revenues	1								
Williston	\$	1,400,059	\$	1,400,059	\$ 1,400,059	\$	1,400,059	\$	1,400,059
MCRWD	\$	816,000	\$	816,000	\$ 816,000	\$	816,000	\$	816,000
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$ 1,327,232	\$	1,327,232	\$	1,327,232
BDW	\$	258,451	\$	258,451	\$ 258,451	\$	258,451	\$	258,451
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	\$	3,801,742	\$ 3,801,742	\$	3,801,742	\$	3,801,742
Member Debt Service - Existing									
City of Williston	\$		\$	1,669,763	1,663,425	- 1		\$	1,393,388
McKenzie County Rural Water District	\$	551,600	\$	550,650	\$ 549,400	\$	552,850	\$	550,850
R&T Water Supply Association	\$	678,975	\$	677,100	\$ •	\$	682,450	\$	679,550
Total Yearly Debt Service - Existing	\$	2,905,625	\$	2,897,513	\$ 2,892,800	\$	2,886,350	\$	2,623,788
WAWSA Debt Service - New	1								
State Water Commission Loan - \$25 million	\$	-	\$	-	\$ -	\$	5-	\$	
Bank of North Dakota Loan - \$50 million	\$	8,593,602	\$	8,593,602	\$ 8,593,602	\$	4,296,801	\$	-
General Fund Loan - \$25 million	\$	1,254,958	\$	1,254,958	\$ 1,254,958	\$	2,533,999	\$	3,813,040
Resources Trust Fund Loan - \$10 million	\$	501,878		501,878	\$	\$	501,878	\$	501,878
Bank of North Dakota Loan - \$40 million	\$	3,989,906	\$	3,989,906	\$ 3,989,906	\$	3,989,906	\$	3,989,906
Total Yearly Debt Service - New Debt	\$	14,340,344		14,340,344	\$ 14,340,344	\$	11,322,584	\$	8,304,824
Total Yearly Debt Service - Existing & New Debt	\$	17,245,969	\$	17,237,857	\$ 17,233,144	\$	14,208,934	\$	10,928,612
Reserve Fund Requirements	1.				1.0				
O&M Reserve Fund Requirement	\$		\$	65,867	\$ ,	\$	102,599	\$	105,677
Yearly Free Cash Flow Prior to Contributions	\$	486,297	\$	482,494	\$ 479,656	\$	1,110,554	\$	1,086,555
Reserve Contributions									
Contributions to Escrow	\$	136,297		132,494	\$ 129,656	\$	110,554	\$	86,555
Contributions to Debt Service	\$	- 4	\$		\$ *	\$	-	\$	-
Contributions to Capital Reserve	\$	350,000	\$	350,000	\$ 350,000	\$	1,000,000	\$	1,000,000
Total Yearly Reserve Contributions	\$	486,297	\$	482,494	\$ 479,656	\$	1,110,554	\$	1,086,555
TOTAL CASH OUT	\$	28,042,972	\$	28,035,237	\$ 28,254,849	\$	26,063,747	\$	22,967,700
Excess Cash In Over Cash Out	\$	-	\$	-	\$ -	\$		\$	-
ENDING UNOBLIGATED CASH BALANCE	\$	200,000	\$	200,000	\$ 200,000	\$	200,000	\$	200,000



		Projected								
BEGINNING UNOBLIGATED CASH BALANCE	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000
CASH IN:		200,000	•	200,000	*	200,000				
Cash From Operations	1									
Domestic Water Sales	1									
City of Williston	\$	3,707,178	-	3,838,895	\$	3,973,313	\$	4,104,545	\$	4,245,714
Williams Rural Water District	\$	2,146,948	\$	2,170,450	\$	2,193,776	\$	2,217,003	\$	2,248,514
McKenzie County Rural Water District	\$	2,431,125	\$	2,454,583	\$	2,478,582	\$	2,508,560	\$	2,552,665 2,464,563
R&T Water Supply Association BDW	\$	2,116,505 570,035	\$	2,236,848 587,229	\$	2,359,628 604,932	\$	2,433,394 618,257	\$	628,939
Total Domestic Water Sales	\$	10,971,791	\$	11,288,005	\$	11,610,231	\$	11,881,759	\$	12,140,396
Total WAWSA Member Industrial Water Sales	\$	12,449,070	\$	12,118,352	\$	12,271,240	\$		\$	11,316,347
Total Interest Income	\$	100	Ś	100	Š	100	\$	100	\$	100
TOTAL CASH IN	\$	23,420,961	\$	23,406,457	\$	23,881,570	\$	24,105,514	\$	23,456,843
CASH OUT:										
Cash For Operation	1									
Fixed Operation & Maintenance	1									
Advertising	\$	5,376	\$	5,537	\$	5,703	\$	5,874	\$	6,050
Board of Directors	\$	13,439	\$	13,842	\$	14,258	\$	14,685	\$	15,126
Computer Expenses	\$	2,553	\$	2,630	\$	2,709	\$	2,790	\$	2,874
Contract Labor	\$	4,032	\$	4,153	\$	4,277	\$	4,406	\$	4,538
Dues and Subscriptions	\$	2,688	\$	2,768	\$	2,852	\$	2,937	\$	3,025
Employee Benefits	\$	196,346	\$	202,237	\$	208,304	\$	214,553 14,685	\$	220,989 15,126
Insurance	\$	13,439 14,111	\$	13,842 14,534	\$	14,258 14,970	\$	15,420	\$	15,126
Office Expenses Payroll Expenses	\$	951,055	\$	979,587	\$	1,008,974	\$	1,039,243	\$	1,070,421
Postage	\$	1,344	\$	1,384	\$	1,426	\$	1,469	\$	1,513
Professional Fees	\$	281,377	\$	289,819	Ś	298,513	\$	307,468	Ś	316,693
Promotional	\$	28,138	\$	28,982	\$	29,851	\$	30,747	\$	31,669
Rent or Lease	\$	22,443	\$	23,117	\$	23,810	\$	24,525	\$	25,260
Repair and Maintenance	\$	134,392	\$	138,423	\$	142,576	\$	146,853	\$	151,259
Small Tools and Equipments	\$	3,360	\$	3,461	\$	3,564	\$	3,671	\$	3,781
Telephone	\$	5,644	\$	5,814	\$	5,988	\$	6,168	\$	6,353
Travel	\$	13,439	\$	13,842	\$	14,258	\$	14,685	\$	15,126
Utilities	\$	4,838	\$	4,983	\$	5,133	\$	5,287	\$	5,445
Vehicle	\$	168,826	\$	173,891	\$	179,108	\$	184,481	\$	190,016
Total Fixed and Variable O&M	\$	1,866,841	\$	1,922,846	\$	1,980,532	\$	2,039,948	\$	2,101,146
Member Operation and Maintenance City of Williston	\$	2,399,321	ė	2,471,300	\$	2,545,439	\$	2,621,803	ė	2,700,457
MCRWD	\$		\$	900,625	\$	927,644	\$	955,474	\$	984,138
WRWD	\$	82,994	\$	85,483	\$	88,048	Ś	90,689	\$	93,410
R&T	\$	1,820,581	\$	1,875,198	\$	1,931,454	\$	1,989,398	\$	2,049,080
BDW	\$	212,339	\$	218,709	\$	225,270	\$	232,028	\$	238,989
Total Member O&M	\$	5,389,627	\$	5,551,316	\$	5,717,856	\$	5,889,391	\$	6,066,073
Total Operation and Maintenance	\$	7,256,468	\$	7,474,162	\$	7,698,387	\$	7,929,339	\$	8,167,219
Annual Reimbursement for Lost Industrial Revenues	1									
Williston	\$		\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000	\$	816,000
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232
BDW	\$	258,451	\$	258,451	\$	258,451	\$	258,451	\$	258,451
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	Þ	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,742
Member Debt Service - Existing City of Williston	\$	1,386,563	¢	1,144,425	¢	1,142,850	Ś	1,135,388	\$	
McKenzie County Rural Water District	\$		\$	550,950	\$	552,900		549,400	\$	550,600
R&T Water Supply Association	\$		\$	683,000	\$	679,075	\$		\$	680,350
Total Yearly Debt Service - Existing	\$	2,611,513		2,378,375		2,374,825		2,364,688		1,230,950
WAWSA Debt Service - New			-				-	•		
State Water Commission Loan - \$25 million	\$	29	\$	92	\$	1-1	\$	-	\$	-
Bank of North Dakota Loan - \$50 million	\$	- 1	\$	-	\$	1-3	\$	-	\$	-
General Fund Loan - \$25 million	\$	3,813,040	\$	3,813,040	\$	3,813,040	\$	3,813,040	\$	3,813,040
Resources Trust Fund Loan - \$10 million	\$	501,878	\$	501,878	\$	501,878	\$	501,878	\$	501,878
Bank of North Dakota Loan - \$40 million	\$	3,989,906	\$	3,989,906	\$	3,989,906	\$	3,989,906	\$	3,989,906
Total Yearly Debt Service - New Debt	\$		\$	8,304,824	\$	8,304,824	\$	8,304,824		8,304,824
Total Yearly Debt Service - Existing & New Debt	\$	10,916,337	\$	10,683,199	\$	10,679,649	\$	10,669,512	\$	9,535,774
Reserve Fund Requirements	\$	108,847	ė	112 112	ė	115,476	ė	118,940	ė	122,508
O&M Reserve Fund Requirement  Yearly Free Cash Flow Prior to Contributions	\$	1,337,567		112,112 1,335,240	\$	1,586,316		1,585,981		1,829,599
Reserve Contributions	1	1,33/,30/	Þ	1,333,240	Þ	1,360,316	Þ	1,363,361	Þ	1,023,399
Contributions to Escrow	\$	87,567	Ś	85,240	\$	86,316	\$	85,981	\$	79,599
Contributions to Debt Service	\$	67,307	Ś	65,240	\$	30,310	\$	65,561	\$	. 5,355
Contributions to Capital Reserve	\$	1,250,000	\$	1,250,000	\$	1,500,000	\$	1,500,000	\$	1,750,000
Total Yearly Reserve Contributions	Š	1,337,567	\$	1,335,240	\$	1,586,316	\$	1,585,981	\$	1,829,599
TOTAL CASH OUT	\$	23,420,961		23,406,457	\$	23,881,570	\$	24,105,514	\$	23,456,843
Excess Cash In Over Cash Out	\$		\$		\$	-	\$		\$	
ENDING UNOBLIGATED CASH BALANCE	\$	200,000	\$	200,000	\$	200,000	\$	200,000	\$	200,000



PROJECTED CASH FLOW STATEMENT THROUGH 2036		2028		2029		2030		2031		2032
		Projected		Projected		Projected	•	Projected		Projected
BEGINNING UNOBLIGATED CASH BALANCE CASH IN:	\$	200,000	\$	200,000	Ş	200,000	\$	200,000	\$	200,000
Cash From Operations										
Domestic Water Sales	l									
City of Williston	\$	4,392,381	Ś	4,544,330	\$	4,701,378	\$	4,850,927	\$	4,999,19
Williams Rural Water District	\$	2,282,828	Ś	2,319,753	Ś	2,359,122	\$	2,385,058	\$	2,402,20
McKenzie County Rural Water District	\$	2,599,119	Ś	2,647,807	Ś	2,698,633	Ś	2,738,267	\$	2,769,61
R&T Water Supply Association	\$	2,497,967	\$	2,533,453	\$	2,570,889	Ś	2,598,312	\$	2,619,40
BDW	\$	640,219	\$	652,065	\$	664,452	\$	673,991	Ś	681,45
Total Domestic Water Sales	\$	12,412,514	\$	12,697,408	\$	12,994,474	\$	13,246,555	\$	13,471,88
Total WAWSA Member Industrial Water Sales	\$	9,284,501	\$	7,946,101	\$	8,401,132	\$	8,272,254	\$	7,628,99
Total Interest Income	\$	100	Ś	100	Ś	100	Ś	100	Ś	10
FOTAL CASH IN	\$	21,697,114	\$	20,643,609	\$	21,395,706	\$	21,518,909	\$	21,100,97
CASH OUT:										
Cash For Operation										
Fixed Operation & Maintenance										
Advertising	\$	6,232	\$	6,419	\$	6,611	\$	6,810	\$	7,01
Board of Directors	\$	15,580	\$	16,047	\$	16,528	\$	17,024	\$	17,53
Computer Expenses	\$	2,960	\$	3,049	\$	3,140	\$	3,235	\$	3,33
Contract Labor	\$	4,674	\$	4,814	\$	4,959	\$	5,107	\$	5,26
Dues and Subscriptions	\$	3,116	\$	3,209	\$	3,306	\$	3,405	\$	3,50
Employee Benefits	\$	227,619	\$	234,448	\$	241,481	\$	248,725	\$	256,18
Insurance	\$	15,580	\$	16,047	\$	16,528	\$	17,024	\$	17,53
Office Expenses	\$	16,359	\$	16,849	\$	17,355	\$	17,876	\$	18,41
Payroll Expenses	\$	1,102,533	\$	1,135,609	\$	1,169,678	\$	1,204,768	\$	1,240,91
Postage	\$	1,558	\$	1,605	\$	1,653	\$	1,702	\$	1,79
Professional Fees	\$	326,193	\$	335,979	\$	346,058	\$	356,440	\$	367,13
Promotional	\$	32,619	\$	33,598	\$	34,606	\$	35,644	\$	36,71
Rent or Lease	\$	26,018	\$	26,799	\$	27,603	\$	28,431	\$	29,28
Repair and Maintenance	\$	155,797	\$	160,471	\$	165,285	\$	170,243	\$	175,35
Small Tools and Equipments	\$	3,895	\$	4,012	\$	4,132	\$	4,256	\$	4,38
Telephone	\$	6,543	\$	6,740	\$	6,942	\$	7,150	\$	7,36
Travel	\$	15,580	\$	16,047	\$	16,528	\$	17,024	\$	17,53
Utilities	\$	5,609	\$	5,777	\$	5,950	\$	6,129	\$	6,31
Vehicle	\$	195,716	\$	201,587	\$	207,635	\$	213,864	\$	220,28
Total Fixed and Variable O&M	\$	2,164,180	\$	2,229,106	\$	2,295,979	\$	2,364,858	\$	2,435,80
Member Operation and Maintenance										
City of Williston	\$	2,781,470	\$	2,864,914	\$	2,950,862	\$	3,039,388	\$	3,130,56
MCRWD	\$	1,013,662	\$	1,044,072	\$	1,075,394	\$	1,107,656	\$	1,140,88
WRWD	\$	96,212	\$	99,099	\$	102,072	\$	105,134	\$	108,28
R&T	\$	2,110,552	\$	2,173,869	\$	2,239,085	\$	2,306,257	\$	2,375,44
BDW	\$	246,159	\$	253,544	\$	261,150	\$	268,984	\$	277,05
Total Member O&M	\$	6,248,055	\$	6,435,497	\$	6,628,562	\$	6,827,419	\$	7,032,24
Total Operation and Maintenance	\$	8,412,236	\$	8,664,603	\$	8,924,541	\$	9,192,277	\$	9,468,04
Annual Reimbursement for Lost Industrial Revenues										
Williston	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,05
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000	\$	816,00
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,23
BDW	\$	258,451	\$	258,451	\$	258,451	\$	258,451	\$	258,45
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	-	3,801,742	-	3,801,742	\$	3,801,742		3,801,74
Member Debt Service - Existing										
City of Williston	\$		\$		\$		\$		\$	-
McKenzie County Rural Water District	\$	551,350	\$	551,650		551,500	-	545,900		
R&T Water Supply Association	\$		\$	640,125	-	640,625	\$	640,750	-	635,50
Total Yearly Debt Service - Existing	\$	1,231,775	\$		\$	1,192,125	\$	1,186,650		635,50
WAWSA Debt Service - New	Ľ					•		•		•
State Water Commission Loan - \$25 million	\$	4	\$	Ξ.	\$		\$	2,500,000	\$	5,000,00
Bank of North Dakota Loan - \$50 million	\$		\$	2	\$	-	\$		\$	>
General Fund Loan - \$25 million	\$	3,813,040	\$	1,906,520	\$		\$		\$	4
Resources Trust Fund Loan - \$10 million	\$	501,878	\$	2,893,107	\$	5,284,336	\$	2,642,168	\$	
Bank of North Dakota Loan - \$40 million	\$	1,994,953		-	\$	2	\$	5	\$	
Total Yearly Debt Service - New Debt	\$	6,309,871		4,799,627	\$	5,284,336	\$	5,142,168	\$	5,000,00
Total Yearly Debt Service - Existing & New Debt	\$		\$	5,991,402	\$	6,476,461	\$	6,328,818	\$	5,635,50
Reserve Fund Requirements	Ľ		-			. ,				
O&M Reserve Fund Requirement	\$	126,184	\$	129,969	\$	133,868	\$	137,884	\$	142,02
Yearly Free Cash Flow Prior to Contributions	\$	1,815,307		2,055,893	\$	2,059,094	-	2,058,187	\$	2,053,66
Reserve Contributions	ľ	,,- 3 .	•	,,	•	,	•	,,	•	.,,
Contributions to Escrow	\$	65,307	\$	55,893	\$	59,094	\$	58,187	\$	53,66
Contributions to Debt Service	\$	,	\$		\$	,	\$	,	\$	/
Contributions to Capital Reserve	\$	1,750,000	\$	2,000,000	\$	2,000,000	\$	2,000,000	\$	2,000,00
Total Yearly Reserve Contributions	\$	1,815,307	- 1	2,055,893	\$	2,059,094	\$	2,058,187	\$	2,053,66
TOTAL CASH OUT	\$	21,697,114		20,643,609	\$	21,395,706	\$	21,518,909	\$	21,100,97
Excess Cash In Over Cash Out	Š	-,,	Ś		Ś	-,,	Ś	,	Ś	,,
	\$	200,000	-	200,000	-	200,000	·	200,000	•	200,00



PROJECTED CASH FLOW STATEMENT THROUGH 2036		2033		2034		2035		2036
DECIMALING UNOPLICATED CASH DAVANCE	\$	Projected	¢	Projected	è	Projected		Projected 200,000
BEGINNING UNOBLIGATED CASH BALANCE CASH IN:	\$	200,000	\$	200,000	\$	200,000	\$	200,000
Cash From Operations	1							
Domestic Water Sales	1							
City of Williston	\$	5,162,465	\$	5,336,159	\$	5,514,245	\$	5,699,768
Williams Rural Water District	\$	2,429,166	\$	2,462,265	\$	2,496,650	\$	2,534,717
McKenzie County Rural Water District	\$	2,807,735	\$	2,850,216	\$	2,893,884	\$	2,940,317
R&T Water Supply Association	\$	2,648,294	\$	2,682,081		2,716,949	\$	2,754,783
BDW	\$	690,677	\$	701,035	\$	711,692	\$	723,061
Total Domestic Water Sales	\$	13,738,338	\$	14,031,755	\$	14,333,419	\$	14,652,645
Total WAWSA Member Industrial Water Sales Total Interest Income	\$	7,262,759	\$	7,266,317 100	\$	7,270,543 100	\$	4,748,613 100
TOTAL CASH IN	\$	100 21,001,196	\$	21,298,173	-	21,604,062	\$ \$	19,401,358
CASH OUT:								
Cash For Operation	1							
Fixed Operation & Maintenance	1							
Advertising	\$	7,224	\$	7,441	\$	7,664	\$	7,894
Board of Directors	\$	18,061	\$	18,603	\$	19,161	\$	19,736
Computer Expenses	\$	3,432	\$	3,535	\$	3,641	\$	3,750
Contract Labor	\$	5,418	\$	5,581	\$	5,748	\$	5,921
Dues and Subscriptions	\$	3,612	\$	3,721	\$	3,832 279,943	\$	3,947 288.341
Employee Benefits Insurance	\$	263,873 18,061	\$	271,789 18,603	\$	19,161	\$	288,341 19,736
Office Expenses	\$	18,964	\$	19,533	\$	20,119	\$	20,723
Payroll Expenses	\$	1,278,138	\$	1,316,482	\$	1,355,977	\$	1,396,656
Postage	\$	1,806	Ś	1,860	Ś	1,916	\$	1,974
Professional Fees	\$	378,147	Ś	389,492	\$	401,177	\$	413,212
Promotional	\$	37,815	\$	38,949	\$	40,118	\$	41,321
Rent or Lease	\$	30,162	\$	31,067	\$	31,999	\$	32,959
Repair and Maintenance	\$	180,611	\$	186,029	\$	191,610	\$	197,359
Small Tools and Equipments	\$	4,515	\$	4,651	\$	4,790	\$	4,934
Telephone	\$	7,586	\$	7,813	\$	8,048	\$	8,289
Travel	\$	18,061	\$	18,603	\$	19,161	\$	19,736
Utilities	\$	6,502	\$	6,697	\$	6,898	\$	7,105
Vehicle	\$	226,888	\$	233,695	\$	240,706	\$	247,927
Total Fixed and Variable O&M	\$	2,508,878	\$	2,584,145	\$	2,661,669	\$	2,741,519
Member Operation and Maintenance	1.	2 224 427		2 224 224		2 422 252		2 522 402
City of Williston	\$	3,224,487	\$	3,321,221	-	3,420,858	\$	3,523,483
MCRWD	\$	1,175,112		1,210,365 114,882		1,246,676	\$	1,284,077
WRWD R&T	\$	111,536 2,446,708	\$	2,520,109	\$	118,329 2,595,713	\$	121,879 2,673,584
BDW	\$	285,366	\$	293,927	\$	302,744	\$	311,827
Total Member O&M	\$	7,243,209	\$	7,460,505	\$	7,684,320	\$	7,914,850
Total Operation and Maintenance	Š	9,752,087	\$	10,044,649	\$	10,345,989	\$	10,656,369
Annual Reimbursement for Lost Industrial Revenues	1	-,,	•	,,	•		•	,
Williston	\$	1,400,059	\$	1,400,059	\$	1,400,059	\$	1,400,059
MCRWD	\$	816,000	\$	816,000	\$	816,000	\$	816,000
R&T Water Supply Commerce Authority	\$	1,327,232	\$	1,327,232	\$	1,327,232	\$	1,327,232
BDW	\$	258,451	\$	258,451	\$	258,451	\$	258,451
Total Annual Reimbursement for Lost Industrial Revenues	\$	3,801,742	\$	3,801,742	\$	3,801,742	\$	3,801,742
Member Debt Service - Existing	1							
City of Williston	\$	7	\$		\$	-	\$	-
McKenzie County Rural Water District	\$	-	\$		\$	-	\$	-
R&T Water Supply Association	\$	4	\$	2	\$	1	\$	-
Total Yearly Debt Service - Existing	\$	-	\$	-	\$	-	\$	-
WAWSA Debt Service - New	Ι.			F 000 000				2 5 2 2 2 2 2 2
State Water Commission Loan - \$25 million	\$	5,000,000	\$	5,000,000	\$	5,000,000	\$	2,500,000
Bank of North Dakota Loan - \$50 million	\$	7	\$		\$		\$	-
General Fund Loan - \$25 million	\$	5	\$	5	\$	-	\$	5
Resources Trust Fund Loan - \$10 million Bank of North Dakota Loan - \$40 million	\$		\$		\$	-	\$	_ ^
Total Yearly Debt Service - New Debt	\$	5,000,000	\$	5,000,000	\$	5,000,000	\$	2,500,000
Total Yearly Debt Service - Rew Debt  Total Yearly Debt Service - Existing & New Debt	\$	5,000,000	\$	5,000,000	\$	5,000,000	\$	2,500,000
Reserve Fund Requirements	ľ	2,300,000	*	2,000,000	*	2,000,000	*	_,500,500
O&M Reserve Fund Requirement	\$	146,281	\$	150,670	\$	155,190	\$	159,846
Yearly Free Cash Flow Prior to Contributions	\$	2,301,086	\$	2,301,111		2,301,141		2,283,402
Reserve Contributions	ľ	_,,_				-,,,-	•	,,
Contributions to Escrow	\$	51,086	\$	51,111	\$	51,141	\$	33,402
Contributions to Debt Service	\$	-	\$	-	\$	-	\$	-
Contributions to Capital Reserve	\$	2,250,000	\$	2,250,000	\$	2,250,000	\$	2,250,000
Total Yearly Reserve Contributions	\$	2,301,086	\$	2,301,111		2,301,141	\$	2,283,402
TOTAL CASH OUT	\$	21,001,196	\$	21,298,173	\$	21,604,062	\$	19,401,358
Excess Cash In Over Cash Out	\$	-	\$	-	\$	-	\$	-
ENDING UNOBLIGATED CASH BALANCE	\$	200,000	¢	200,000	4	200,000	\$	200,000



# Bert Anderson, Board Member Western Area Water Supply Authority January 18, 2013 TESTIFYING IN SUPPORT OF HB 1140 HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE REPRESENTATIVE TODD PORTER, CHAIRMAN

Good morning Chairman Porter and Members of the Committee, my name is Bert Anderson and I am a past Board Member of the Burke-Divide-Williams Water System Association, commonly referred to as BDW, and currently serve as a Board Member on the Western Area Water Supply (WAWS) Authority. I'm here today to urge your continued support for the development of the WAWS Project though House Bill (HB) 1140. BDW is one of four rural water providers as partners in the WAWS Project. The other three rural water providers include Williams Rural Water District, McKenzie County Water Resource District, and R&T Water Supply Commerce Authority. I'm here to testify to the rural water perspective on the WAWS Project in total.

## Many New Types of Rural Users Contributing to Significant Increase in Requests

While our rural water systems have historically served "traditional rural users" including rural homes, farms, and ranches, requests for rural water service today come from many new types of users. These include suburban subdivisions, commercial developments, and crew camps. In our original WAWS Project business plan, we anticipated 400 rural users to be served through this increased water supply. **Today, we have over 15,000 connection requests - a 37-fold increase in requests in just two short years.** Williams Rural Water District water sales have increased from five million gallons to over 20 million gallons per month within the past year and a half. Their system has been pushed to the limit.

There are over 8,941 housing units in crew camps in Williams County - 2,596 units located in rural areas. Williams Rural Water District is currently serving 20 crew camps and workforce housing units, however; this service has exacerbated the District's ability to serve individual requests at this time. There are currently requests to serve at least 2,000 crew camp

Bert Anderson, Board Member BDW Water Supply Association and WAWS Authority Testimony in Support of HB 1140 Page 1 of 4 units in Williams County but both Williams County and the City of Williston currently have moratoriums in effect on new crew camp units. Similarly, both the McKenzie County Water Resource District and the R&T Water Supply Commerce Authority also have moratoriums in place for new water requests as demands for water service have exceeded water system capacities across our entire region.

To meet these overwhelming needs, the WAWS Project has several rural transmission and distribution projects planned for the coming biennium. These projects will provide the capability to service the following:

•	Rural Residential Population	1,200
•	Suburban Residential Population:	31,000
•	Commercial/Industrial connections:	223

• Temporary housing population: 3,000

Continuing to support the WAWS Project through HB 1140 is essential to meeting these needs. Without this support, service will undoubtedly be delayed to thousands.

Beyond providing direct water service, it also provides an unique opportunity to partner with private developments. We have received many developer requests for service to suburban subdivisions which we do not consider without an approved plat from the county planning and zoning commission. Service to developers creating suburban subdivisions can be very cost effective. The WAWS Project provides transmission line extensions to the development areas and the developers themselves install the subdivision distribution infrastructure. It is estimated private developers could contribute \$25 to \$50 million in water distribution infrastructure and reduce the need for public investment in future years.

It has become common for commercial industrial development sites to be located in rural areas throughout northwestern North Dakota due to the size requirements of these developments. These sites can be several acres in size accommodating large industrial and commercial needs.

# Historic Water Quality Issues in Our Service Areas

This project affords us the opportunity to provide our rural areas with a consistent high quality water supply. Water wells, like oil wells, are easy to find in Western North Dakota and most rural homes, farms, and ranches have long been served by individual water wells.

However, many homeowners supplemented well water with potable drinking water hauled for daily use due to poor water quality.

Northwestern North Dakota has struggled with water quality issues for decades. These water quality issues include high levels of total dissolved solids, nitrates, iron, sulfate, manganese, and hardness. These poor water quality issues result in poor tasting, smelly, and discolored water that stains clothes and ruins plumbing fixtures and water heaters. Beyond these inconveniences of poor water quality, these quality issues can also have adverse health effects, most vulnerable to these health effects are infants, children, and the elderly.

#### Chance of a Lifetime to Serve Remote Areas

Each of the WAWS Project rural system members have long-strived to serve all our residents but have historically been unable to do so. The farther out the users are from the main transmission lines, the more difficult they are to serve. Many potential rural customers have been skeptical that they will ever receive rural water because it's been talked about for thirty years and it has yet to happen. The proposed improvements planned for the next biennium will serve half of the traditional rural users that have requested service. Also, the most cost effective way to provide service within sparsely populated areas is at the time the initial project in that area is completed. As time goes by, there will be less and less opportunity to serve these rural farmsteads.

#### **Rural User Rates**

Our traditional rural users have skin in the game. Each user is required to pay a \$3,000 hook up fee. Typical monthly water rates for our rural users are based upon 6,000 gallons water are as follows:

Williams Rural Water District \$85.40
 McKenzie Water Resource District \$76.50

• BDW Water System Association (new organization currently underway)

According to the 2012 North Central Utility Rate Survey conducted by Advanced Engineering and Environmental Services, regional water system monthly water rates based upon a typical household volume of 6,000 gallons ranged from \$44 to \$91.

#### Conclusion

The WAWS Project affords us the opportunity to extend quality water service to our rural water users that have been waiting since the 1980s as well as meet the demand to serve the new suburban subdivisions, commercial/industrial connections, and workforce housing units. This economic boom and demand for water service throughout northwestern North Dakota gives us that "chance of a lifetime" to do just that. Of the \$119 million of WAWS Project components included in the the 2013-2015 biennial request, \$78.1 million is dedicated to rural water transmission main extensions to new developments and distribution to the traditional rural water users.

HB 1140 is essential to completing the next phase of the WAWS Project and brining rural water service to Northwest North Dakota. On behalf of the rural water systems as partners in the WAWS Project, I urge your support for HB 1140.

# Monte Meiers, Director of Public Works/Engineering City of Williston January 18, 2013 TESTIFYING IN SUPPORT OF HB 1140 HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE REPRESENTATIVE TODD PORTER, CHAIRMAN

Good morning Chairman Porter and Members of the Committee, my name is Monte Meiers. I am the Director of Public Works and Engineering for the City of Williston and I am filling in for Mayor Ward Koeser today. The City of Williston is a member of the Western Area Water Supply (WAWS) Authority. I'm here to speak to the water needs of the City of Williston and other cities throughout the WAWS Project service area. I'm here today to urge your continued support for the development of the WAWS Project though House Bill (HB) 1140.

### We Have Fast and Furious Growth Well Beyond Our Wildest Imaginations

Who would've ever dreamt the City of Williston would be the leader in "micropolitan" growth in the country? Two other North Dakota cities made the same list for the period of April 2010 to July 2011 provided by the US Census Bureau (Dickinson #4 and Minot #8). Williams County was the only North Dakota county to make the same county level list.

In 2010, Williston was a community of 12,500. We are projected to grow beyond 50,000. In 2010, Watford City was a community of 1,500 and now projected to grow beyond 10,000. This type of growth is occurring in every community in Northwest North Dakota, as North Dakota State University projects Region 1's population to grow by 137 percent between 2010 and 2025.

Along with my testimony, I've distributed copies of the Williston Impact Statement 2012 which outlines our growth-related impacts. In 2012, the City of Williston was a leader in many key areas which demonstrate that it's fast and furious in our neck of the woods. A few highlights from the Impact Statement include the City's leadership in the State on the following: taxable sales and purchases statewide, crew camp capacity and occupancy, building permits

statewide, housing shortage and rent inflation, oil truck traffic within city limits, number of oil companies, power usage and consumption, and oilfield water usage. The City of Williston is the epicenter of oil development in the Bakken Formation. The City is home to over 400 oil field service companies with nearly 40 percent of our workers are employed in the oil industry. Approximately 90 percent of the wells drilled and currently being drilled are within 75 miles of Williston.

To accommodate all of this activity, the City has expanded the City limits four miles west and four miles north. The WAWS Project was instrumental in providing water service to these areas. The next expansion is likely east and the planned WAWS Project for the 2013-2015 biennium will assist in supporting this continued growth.

Though Williston is the regional hub for this heightened activity, all of the Cities in the WAWS Project service area are seeing excessive growth. The WAWS Project water supply is critical to support the continued population growth recently projected by the 2012 North Dakota Statewide Housing Needs Assessment completed by North Dakota State University.

#### We're All In

The City of Williston, like the other WAWS Authority members, is all in. We've each remained committed to the necessary steps to support the greater regional system. We've contributed our water supply allocation permits and industrial water sales. The City of Williston has entered an output agreement with a purchase option for the WAWS Authority to purchase the Williston Regional Water Treatment Plant once the City's Water Treatment Plant loans are paid in full for the purchase price of \$1.00.

This "all in" mentality has greatly contributed to the initial success of the WAWS Project.

## Serving Eleven Cities Within 24 Months

The WAWS Project will be serving ten cities beyond Williston by spring 2013 including: Ray, Tioga, Stanley, Ross, Wildrose, Crosby, Columbus, Fortuna, Noonan, and Watford City.

Cities throughout Northwestern North Dakota are being impacted in a similar fashion and this water supply is critical to our growth.

Watford City celebrated turning on the spigot in December 2012. Appreciation for this new water supply was recently relayed by Lindsey Ybarra and her brother-in-law Kody Devlin, two of the owners of the Roosevelt Inn. Lindsey recently unknowingly proclaimed to one of our AE2S surveyors, "You wouldn't believe it, we got a new water system in town! We are so happy to have it; my kids can finally take baths. Before WAWS came to town, if we filled our bathtub it was brown and nasty. Now it just looks so nice and crystal clear." Kody commented on the much lower levels of chemical now necessary to treat the water in the Roosevelt Inn swimming pool. Testimonials such as this drive home the importance of the WAWS Project to our residents.

### Specific Water Needs in Williston

As I mentioned earlier, the City of Williston expanded its city limits and the WAWS Project delivered water to those areas. Two critical pieces of infrastructure that are needed to provide the necessary backup pipelines for both the City and the rural development are the 30-inch transmission line to the west and north and a water supply across the Little Muddy River to the east of Williston. These two WAWS system components are necessary to provide reliable service and fire flows to the massive expansion area that is currently underway. The 30-inch transmission main is part of the original plan that was presented last legislative session. The infrastructure to supply the area to the east of Williston is needed because the growth in that area has exceeded earlier plans.

#### Conclusion

HB 1140 is essential to completing WAWS projects planned for the 2013-2015 biennium and providing the reliable water service that is required inside a City. On behalf of the City of Williston and all municipal partners of the WAWS system, I urge your support for HB 1140.

Jan.

House Energy and Natural Resources Committee 18, 2013 ND Legislature

HB 1140 OPPOSE

Chairman Porter and Members of the Committee:

The Independent Water Providers, is a trade association of private water providers, who are ranchers, farmers, landowners and businessmen in north western North Dakota. Private water providers furnish approximately 75% of the water to the oil industry in our State, which has been a vital component to creating the thriving economy we now enjoy. (Without that water and the private investment, we would not have the oil production and revenues that it produces).

We SUPPORT providing water to the people of northwestern North Dakota. But, we OPPOSE providing any funding to Western Area Water Supply (WAWS) through HB 1140 for the following reasons:

- Sticker shock: WAWS was formed in 2011 by HB 1206. The proponents told the Legislature that they could provide water to northwest North Dakota for \$150 million, and could pay the cost of doing so through industrial water sales to the oil industry---which was to pay 80% of the project.
  - -They now claim they need \$350 MILLION to complete the project
- 2. You authorized \$110 million and told them to come back and you would look at another \$40 million loan (now before you) as per HB 1206. In the interim, they appeared before the State Water Commission and were authorized to spend another \$9 million (beyond the \$110 million the Legislature authorized). They said they would pay for it through a "cash flow strategy". (If you don't have the money, and you spend it----that's debt regardless of how you plan to pay it back).
- 3. They are before this Session asking for \$120 million of new money. \$40 million loan in HB 1140 and \$80 million grant request from the \$500 million State Water Commission appropriations bill (HB 1040) that was heard on Weds. There is no urgency to spend another \$120 million of public money in the next two years. Let me explain further.

WAWS representatives (Chairman Zubke and Executive Director Jaret Wirtz) have expressly stated in open, public meetings of the Water Coalition, (November, 2012) that all of the grant funds (\$80,000,000) is for rural and domestic water supply and none is for industrial use. They provided a detailed map in Water Coalition meetings---which has been distributed to you. THIS system is purportedly to serve rural and domestic water demands in northwestern North Dakota---based upon estimates of population projections to 2025. These estimates are from an ND Housing Authority study that projects the population in the region could go to 89,000 people by 2025. We don't NEED to spend

\$80,000,000 to serve people who are not yet living in North Dakota <u>and</u> loan them another \$40 million that HB 1140 calls for.

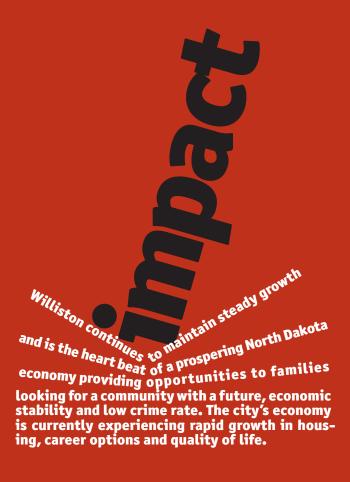
There have been a series of missteps that compound our concerns regarding WAWS. For example:

- They had one bid for the engineering services for the project, which was submitted by the same firm that lobbied for passage of HB 1206 last Session.
- That same firm has been paid a whopping \$10 million in 2012 alone.
- WAWS has spent \$500,000 on the Vogel law firm, who at times has 6 lawyers working on the WAWS file.
- And of course they (WAWS) are represented in the ND Legislature by a publicly funded lobbyist (these are public dollars) at the rate of \$50,000 annually.
- The Indian Hills Water depot---2 million gallons, has failed—with a concrete floor that has broken up, making the facility inoperable.
- Pipeline companies are still trying to meet the schedule set for them by WAWS—last year, and continue to attempt to dig ditches, install pipe, and refill trenches in January in ND. (Local landowners, whose land they are on will be providing you with lots of information related to WAWS activities during the Session).
- Estimate provided by WAWS and its proponents 2 years ago were widely inaccurate.
   They under-estimated rural water needs by a factor of 2 and <u>over-estimated</u> industrial water usage by a factor greater than 2. (They estimated that ND would sell 4.6 BILLION gallons of water in 2011; actual number was less than half that, at 1.9 billion gallons).

These are some of the reasons we oppose loaning WAWS more money this Session. We think a better, more prudent decision to manage these public funds would be to give the State Water Commission the authority to provide the \$80 million that is in its current appropriations bill with appropriate oversight to assure that the WAWS project is true to its mission which was to get clean, potable water to the people of northwestern North Dakota.

Thank you.

A1,20,2



#### **Table of Contents**

city Priorities/Leader: pg. 1
City Preparation: pg. 2
City Growth Projections: pg. 2
Fastest Growing Micropolitan Area: pg. 3
City Growth Map: pg. 4 & 21
City Infrastructure Needs: pg. 5
Western Area Water Supply (WAWS): pg. 5
City Budget: pg. 6
City Employment: pg. 6
City Police, Fire & EMS Service Calls: pgs.
City Traffic Accidents: pg. 8
City School District Enrollment: pg. 8
City Sales Tax: pg.9
City Sales Tax Gain/Loss: pg. 10
City Housing Stock: pg. 11
City Housing Units Built: pg. 11
City Valuation, Building Permits: pg. 12
City Rent Inflation: pg. 12
City Hotel Developments: pg. 13
City/County Crew Camps pg. <b>13</b>
City Airport/Amtrak Boardings: pg. 14
County Business Growth: pg. <b>15</b>
County New Job Creation: pg. <b>15</b>
County Average Annual Wage: pg. <b>16</b>
County Civilian Labor Force: pg. <b>16</b>
County Child Care Costs: pg. <b>17</b>
Williston Ground Zero: pg. 17
City Oil & Gas Companies: pg. 18
City Oil & Gas Employment: pg. <b>18</b>
Oil & Gas Rig Locations: pg. 19
Gas Plant Locations: pg. <b>20</b>

#### The City of Williston

#### **2013 Top State Funded Priorities:**

- Sewage Treatment Plant
- East & West Permanent Truck Reliever Route
- Grade Separation on Current Bypass
- Affordable Housing
- Operational Dollars Provided by Change in Formula Funding

#### 2012 State Leader in:

- Taxable Sales and Use
- Oil Rigs within a 70 Mile Radius
- Mining Employment
- Number of Oil Companies
- Crew Camp Capacity and Occupancy
- Building Permits Statewide
- Average Annual Salary Statewide
- Housing Shortage/Rent Inflation
- Oil Truck Traffic within City Limits
- Power Usage and Consumption
- Oilfield Water Usage
- Micropolitan Growth for the U.S.

#### **Community Preparation for Future Impact**

## City of Williston Growth Projections

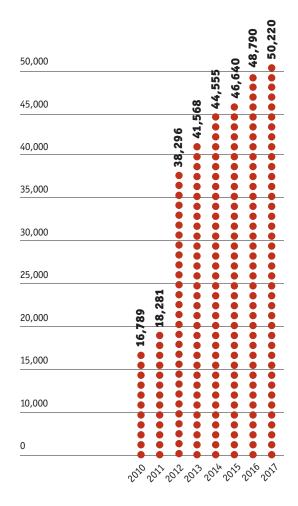
(service population)

Williston first noticed this increasing activity level beginning in 2004. To prepare, the city increased major infrastructure capacity for up to 40% more population.

We have since far exceeded that excess capacity, and are working with the Governor and Legislature to further extend our water, sewer, and road infrastructure for workforce housing and industry facility needs.

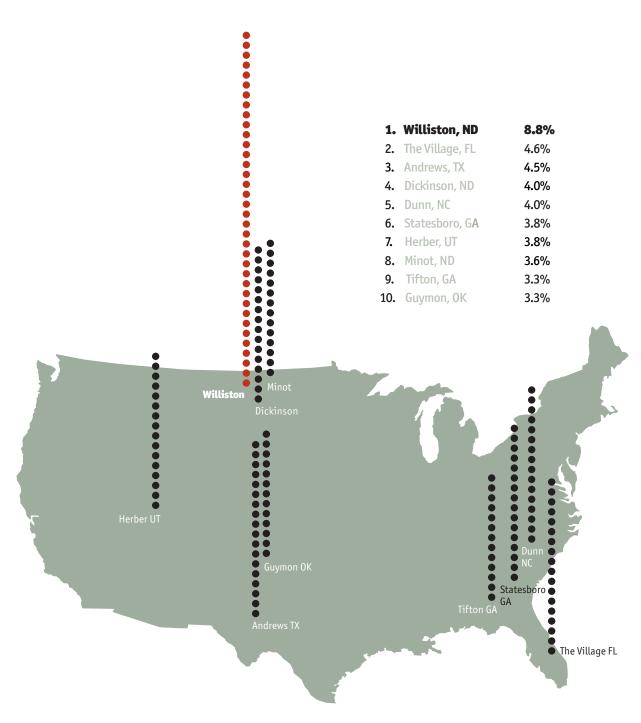
The City of Williston has committed over one million dollars in studies addressing the impact and future needs of the community.

- Comprehensive Master Plan
- Annexation Options and Implications
- Infrastructure Capital Improvement Plan
- Regional Water Study
- Transportation Study
- Housing Study
- Labor Availability
- Petroleum Workforce Needs Study
- Williston Parks and Rec Master Plan
- Williston State College Master Plan
- Williston School Needs Study
- Day Care Master Plan
- Population Study
- Oil and Gas Workforce Needs
- City Facility Study
- Emergency Services Study



**Source:** City of Williston Population Study

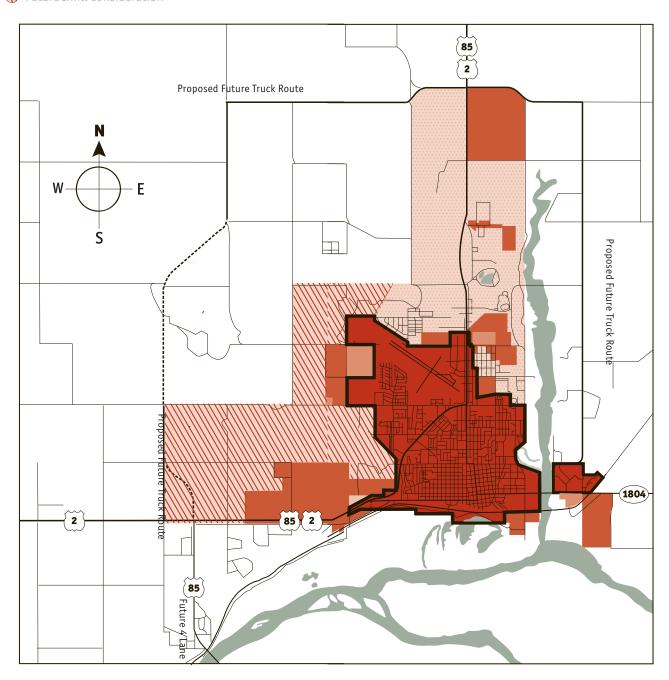




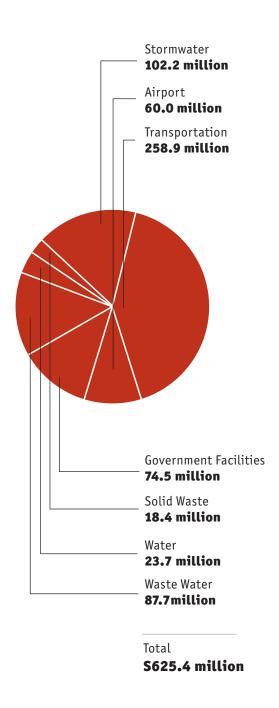
**Source:** U.S.Census Bureau

#### Williston Growth Map\*

- 2010 Old City limits
- **2011** Completed Annexation
- 2012 Annexations in Progress
- **2013** Proposed Annexation
- Future Infill Consideration



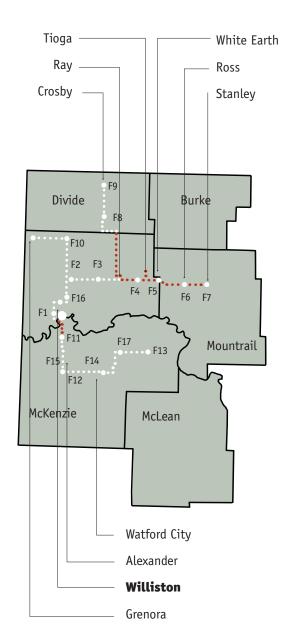
<sup>\*</sup>see page 21 for acreage/square miles amounts



Source: City of Williston

The City of Williston is integral to the Western Area Water Supply as it holds a permit for up to 36 million gallons per day of Missouri River water access from its water treatment plant.

The WAWS system also provides critical water infrastructure for Williston's projected growth needs in expanding the city.

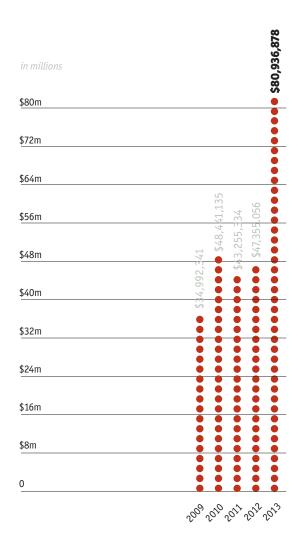


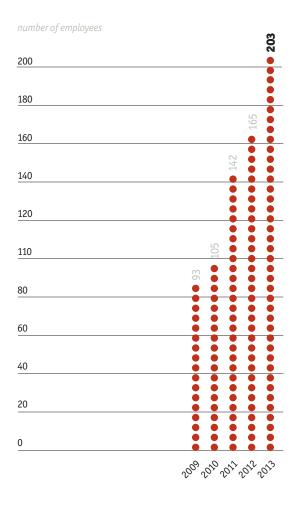
#### For the Year 2013

**Revenue:** 52 million

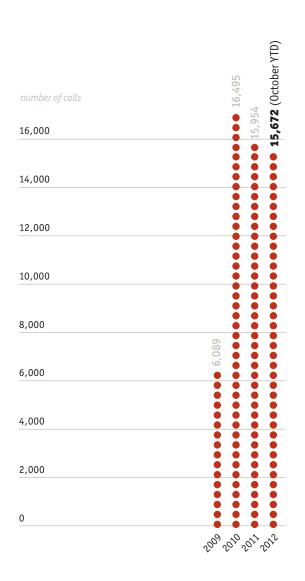
**Expenditures Budgeted:** 81-million **Deficit:** 29-million in projects dependent

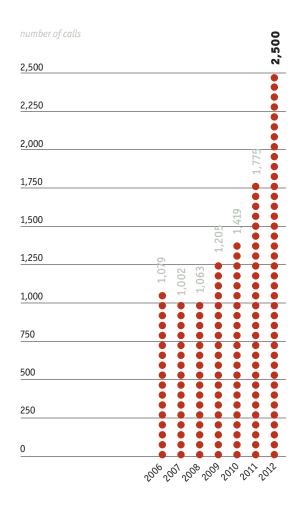
on state aid.





Source: City of Williston Source: City of Williston





**Source:** City of Williston Police Department

**Source:** City of Williston Fire Department

#### **ND City Reportable Traffic Accidents**

As of November 2012

Williston School District 1 Enrollment

Kindergarten through 12th Grade

According to statistics from the ND Highway Patrol, 26 people have been killed in Williams County in 2012, followed by McKenzie County with 16.

The northwestern region of the state has accounted for 64 of the 146 total fatalities.

Bismarck Tribune, November 23, 2012

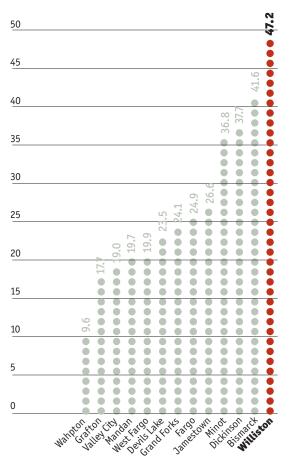
"In the past five years we've had 650 students added to the district... that's an entire school."

#### **Dr. Viola Lafountaine**

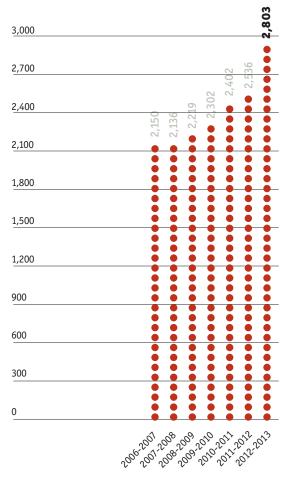
Superintendent, District 1

Williston Herald, November 15, 2012

number of accidents per 1,000 population



number of students



Source: ND Crash Summary 2011

**Source:** Williston School District 1

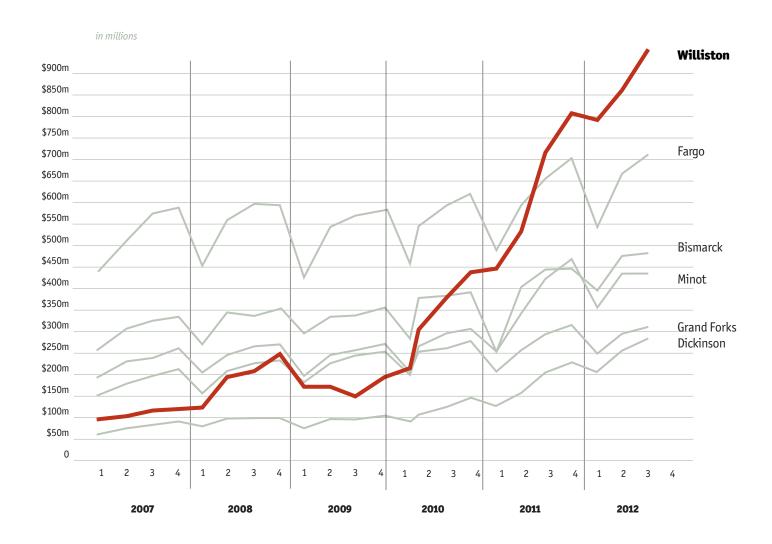


"I trust that the rest of the state recognizes that at the moment, Williston is at the center of the engine that is driving the state's economy"

#### **Ward Koeser**

Mayor, City of Williston

Williston Herald, October 5, 2012

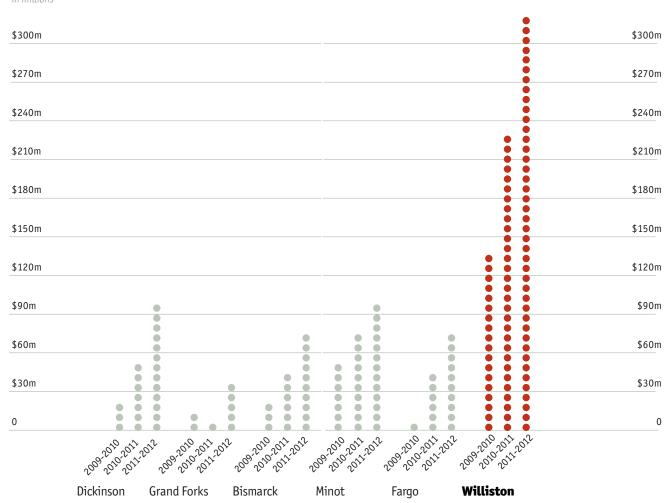


**Source:** ND Office of State Tax Commission

#### **ND City Sales Tax Gain/Loss**

Major Cities Second Quarter Comparison

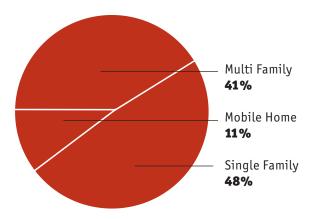


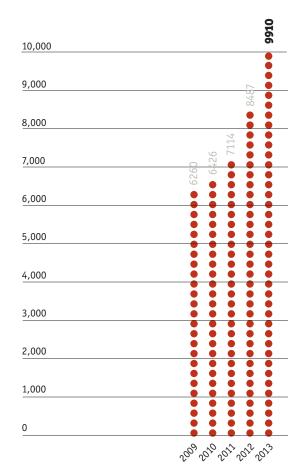


**Source:** ND Office of State Tax Commission

#### **Williston Housing Stock**

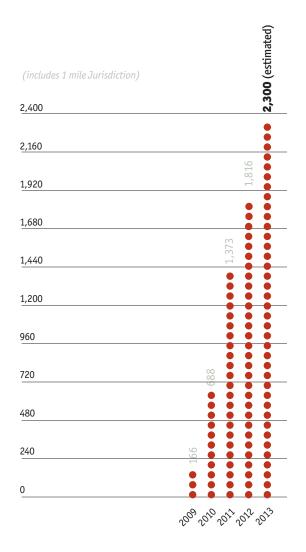
Projection for the year 2013





#### **Williston Housing Units Built**

Includes Single Family, Apartments, Manufactured, Duplex, and Twin Homes



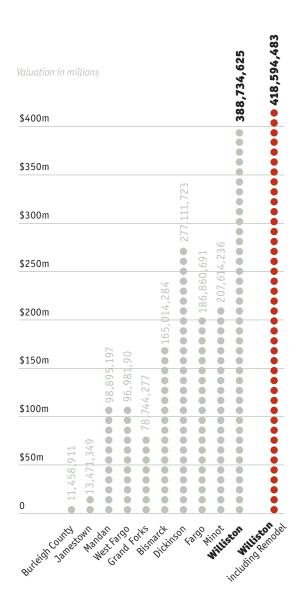
**Source:** City of Williston, Building Department

**Source:** City of Williston Building Department

#### **ND City Valuations of Building Permits**

Year to Date, November 2012 (numbers indicate new build construction only)

Williston is projected to top 470-million in new construction and remodel permit valuation in 2012.



**Source:** ND Association of Builders Permit Data

#### **Williston Rent Inflation**

One/two bedroom apartments

\$ 2,500.00			
		•	
\$ 2,250.00			
\$2,000.00			
\$ 1,750.00			
\$ 1,500.00			,
			)
\$ 1,250.00			,
\$ 1,000.00			,
			_
\$ 750.00			
			_
\$ 500.00			,
			<del></del>
0			,
	\$ 6 5 6 5	2 22 2	<u>ー</u> レ
	500,500,500,500,500,500,500	50, 50,	

**Source:** Williston Economic Development

#### **Williston Hotel Development**

For the Years 2010-2013

#### Williston/Williams Co. Crew Camps

Permitted Capacity

The City of Williston has added 12 new hotel properties since 2010

number of Rooms	23
1,600	958
1,400	
1,200	
1,000	82
800	<del>4</del>
	635
600	9
400	
200	
•	
0	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	2020 2023 2023 2023

**Source:** Williston Economic Development and Convention and Vistors Bureau

Williston	
Blackhawk Energy	30
Sabin Metals	10
Weatherford	500
United Pulse	10
Love's	50
Oasis Petroleum	80
Sun Well	94
Pioneer	144
Flying J	150
Prairie Packing	24
Halliburton	312
Sun Well	24
Burke	224
Total Units:	1,652
Tioga	
Capital Lodge	2,500
Target Tioga	1,250
Total Units:	3,750
Trenton	
Falcon/Solsten XP	343
Moran/Roughrider Holding	604
Total Units:	943
Williams County	/=0
Target North	450
Bear Paw	608
Target Cabins	90
Black Gold	900
Atco	200
Target Muddy River	158
Prairie Packers	90
Judson Lodge	100
Total Units:	2,596

**Note:** A moritorium on future crew camp development within Williams County and Williston is currently in effect

#### **Williston Airport Boardings**

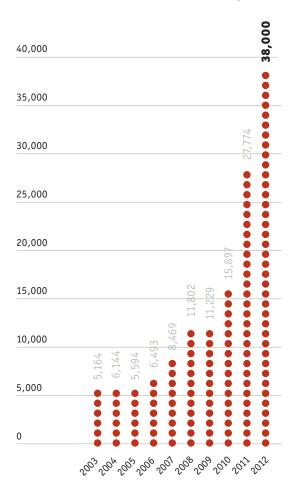
#### **ND AmTrak Station Boardings**

Fiscal Year, 2011

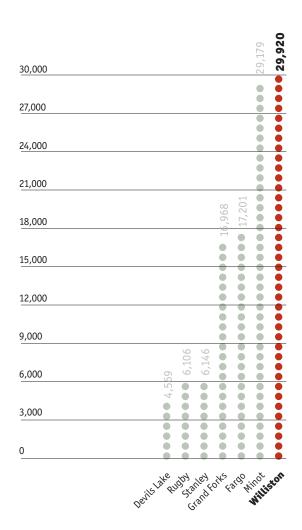
With the increase in airline flights and aircraft size to Sloulin Field, officials estimate 2013 will see between **60,000** to **90,000** enplanements. This does not include private charter traffic.

Sloulin Field's current terminal is designed to handle **6,000** enplanements annually.

estimated year end



**Source:** ND Aeronautics Commission, Sloulin Field



Source: AmTrak

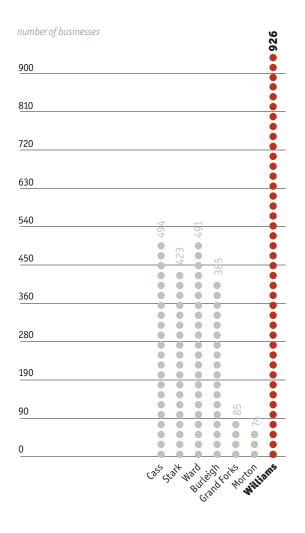
#### **ND County New Business Growth**

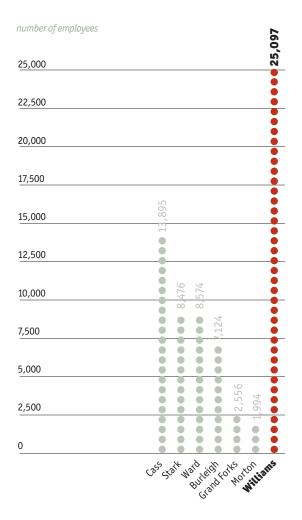
1st Quarter 2007 through 2nd Quarter 2012

#### **ND County New Job Creation**

1st Quarter 2007 through 2nd Quarter 2012

Williams County boasts the lowest unemployment rate in the nation at .7%





source: Job Service North Dakota

source: Job Service North Dakota

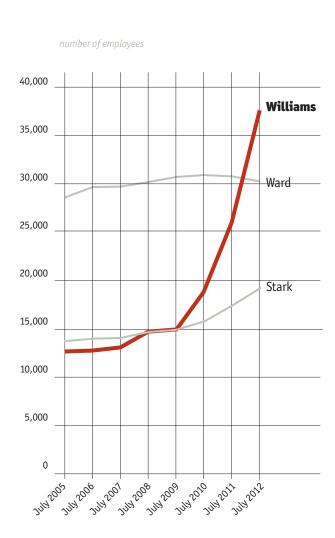
2nd Quarter 2012

#### **ND County Civilian Labor Force**

First Quarter 201

The civilian labor force is a single count by place of residence. The number includes those over the age of 16 who are employed or actively seeking employment.





source: Job Service North Dakota source: Job Service North Dakota

#### **ND County Cost of Child Care**

Average Weekly Cost, Ages 0-5years Family/Group/Center

Williston Ground Zero

- Williams County currently demonstrates a potential need of 1,500 child care spaces
- Williams County meets 18% of it's potential demand for child care

							00
\$150.00				00	00	\$140.00	•••••••145.00
¥130.00			0.	• \$136.00	\$136.00	7	<del>ii</del>
		00	\$132.00	5	S	•	
\$135.00		7.					ě
	0.0	● \$124.00	•	•		•	
t400.00	\$116.00						ě
\$120.00	₩	•	•	-	•	•	-
							•
\$105.00							
	•	•	•	•			
						•	•
\$90.00				_			
	•	•		•	•		
\$75.00							
\$75.00		-	-	-0-	-0-	-0-	
						•	
\$60.00							
				-	-	-	
							•
\$45.00	•	•	-	•	-	-	
\$30.00		•	•				
<del></del>	•	-	-	-	-	-	•
		•	•	•			•
\$15.00		•		•			
							•
						•	
0		Ö					
	Burleidh C	S .	70	4	λç	6,	9
	allifers C	MOL	w 5	840	2. 4	ilia	
	Ø.	`	Ç	8/1/2	4	W.	

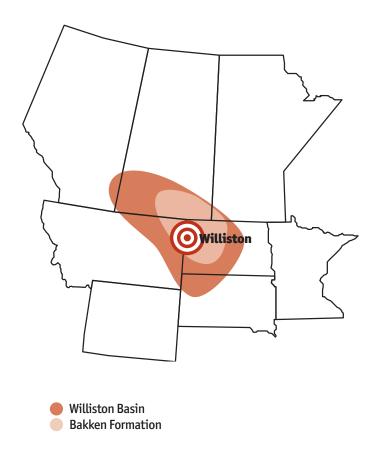
**Source:** Child Care Resource and Referral Williston Economic Development

Western North Dakota is hosting the largest oil play in the lower 48 states.

Due to current State oil tax legislation:

## State resources are in record surplus, estimated \$2 billion annual oil and gas receipts.

Local resources are in deficit and are overwhelmed, Williston's portion of State oil and gas tax formula funding is \$1.5 million per year or .075 % of total State oil and gas collections.



#### **ND City Oil & Gas Companies Locations**

Top Three Cities

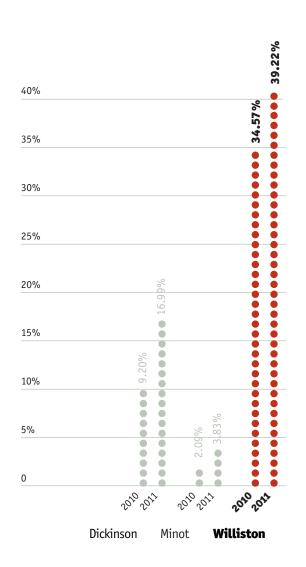
Five of the top ten employers in Williston are related to the Oil & Gas Industry. The top ten Oil & Gas service companies in the world have operations in Williston.

#### number of companies 400 350 300 250 203 200 00000 150 00000 100 000 0000 ě 50 000 ... 0

**Source:** Don's Oil & Gas Directory 2012, Mountain States Directory

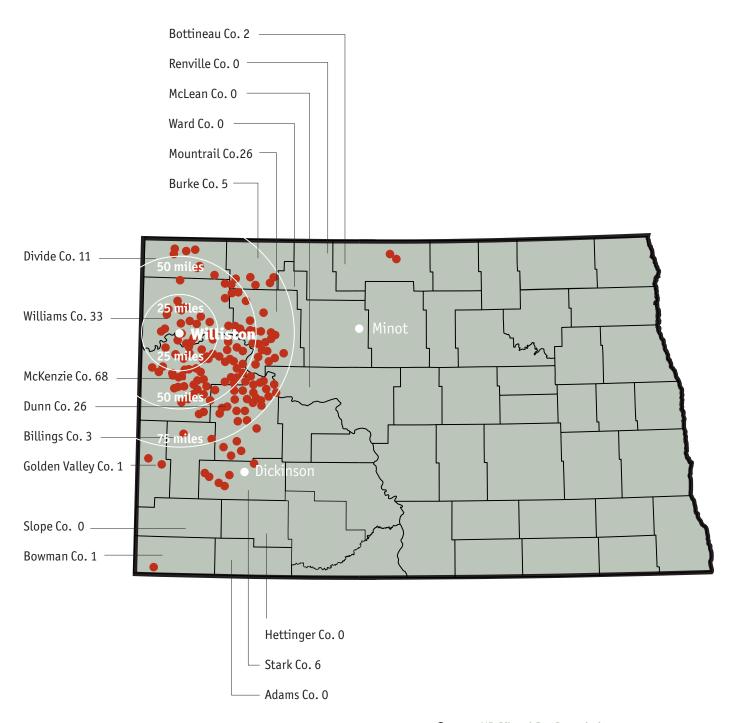
#### ND City Percentage of Oil & Gas Employment

Cities above 7,500 with percentage employment in Mining greater than 2.0% of Covered Private Employment 2011 annual average

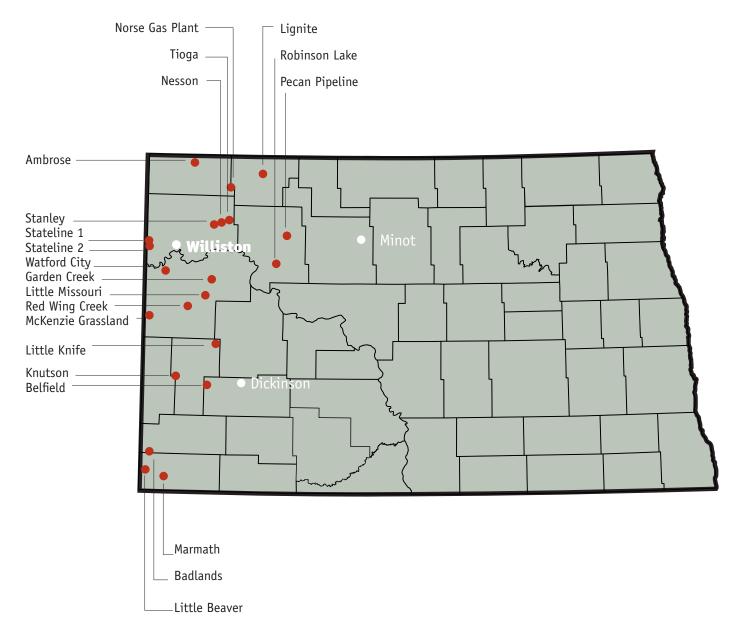


**Source:** Quarterly Census of Employment & Wages, June 12, 2012





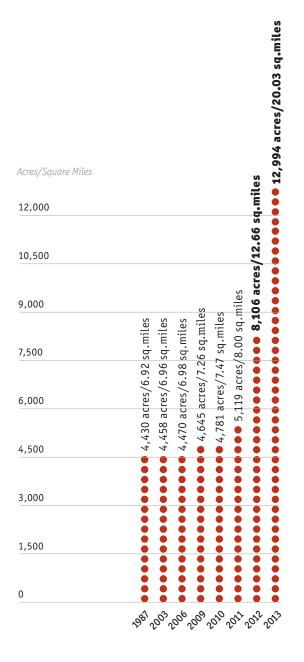
**Source:** ND Oil and Gas Commission



**Source:** ND Oil and Gas Commission

#### Williston Growth in Acres / Sq. Miles

as of 2012, City's total acreage is 8,980



(continued from pages 6/7)



For the latest online Williston related articles from national publications. www.willistonwire.com

Produced by

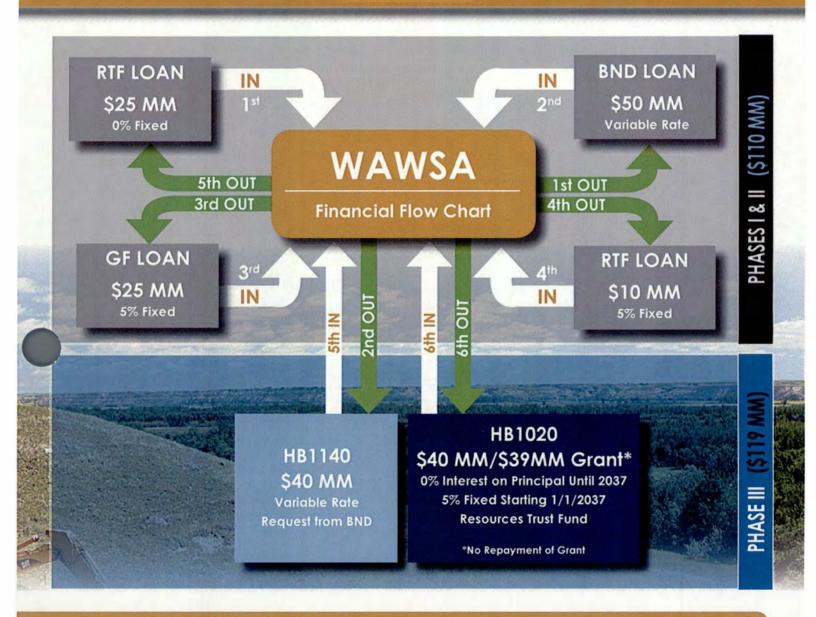
**Williston Economic Development** 

22 East Broadway P.O. Box 1306 Williston ND 58801 www.willistondevelopment.com 701.577.8110



#### WESTERN AREA WATER SUPPLY AUTHORITY (WAWSA) LOANS

#### **JANUARY 28, 2013**



#### LOAN TERMS AND CONDITIONS

LOAN #	LENDER	LOAN AMOUNT	SCENARIO 1 TERMS	SCENARIO 2 TERMS
Loon #1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loon #2	Bonk of North Dokoto	\$50 million	2014 - 2017	2014 - 2021
Loon #3	General Fund Loon	\$25 million	2020 - 2021	2021 - 2029
Loon #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loon #5*	Bonk of North Dokoto	\$40 million	2017 - 2020	2015 - 2028
Loon #6*	Resources Trust Fund	\$40 million	NA NA	2037 - 2056

<sup>\*</sup> Loon #5 and Loon #6: Loons that WAWSA is seeking in the 2013-2015 biennium





## Testimony of Jaret Wirtz, Executive Director, WAWSA HOUSE BILL 1140

Energy and Natural Resources Committee

HB 1140 Subcommittee Chairman Rep. Keiser

Bismarck, North Dakota – January 25, 2013

Good morning Chairman Keiser, Representative Hofstad, and Representative Hunskor, I am Jaret Wirtz, Executive Director of the Western Area Water Supply (WAWS) Authority. I'm here to represent the WAWS Authority, provide a brief WAWS Project summary, and address any specific questions regarding the \$40 million loan request outlined in HB 1140.

The initial WAWS Authority \$110 million loan package approved by the 62<sup>nd</sup> Legislative Assembly has been put to excellent use. As we outlined before the full House Energy Natural Resources Committee a week ago, this initial financing has been fully committed and we've made outstanding progress on project implementation over the past two years.

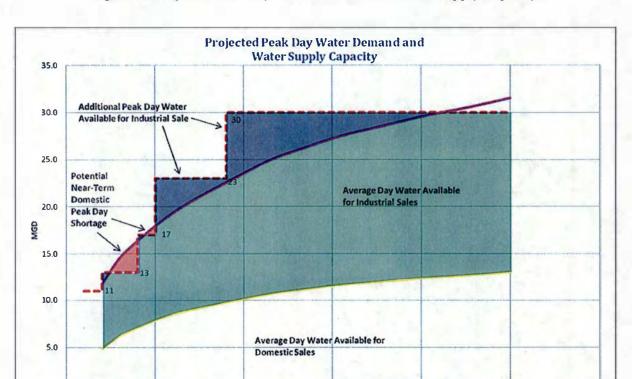
#### HB 1140 Completes the Original Funding Request Presented in 2011

HB1140 completes the original funding request brought forth during the 62<sup>nd</sup> Legislative Session, at which time the total project cost was estimated at \$150 million. Although HB 1140 relates only to the remaining \$40 million discussed in the founding legislation, we also have a funding request of \$79 million in HB 1020 (North Dakota State Water Commission Appropriation). Together, this funding will support approximately \$119 million in water infrastructure needs for the next two years.

The next stage of WAWS Project Construction to be initiated in the 2013-2015 biennium, referred to as Phase III, includes the following:

\$10 million to complete Phases I and II associated with increased project costs due to additional rural
user signups, upsized infrastructure in some locations to accommodate the increased demand, and
higher than anticipated bid prices due to the market conditions in the region.

- 2. \$22 million to expand the Williston Regional Water Treatment Plant from 14 million MGD to 21 MGD to avoid projected water shortages in 2015 and beyond. We project the 2013 and 2014 peak day water demands to exceed or very nearly exceed the production capabilities without this expansion as illustrated in Figure 1. Based upon the updated population projections, we are very concerned about possible peak day water shortages in 2013, 2014, and potentially 2015 without immediate expansion of the Water Treatment Plant to 21 MGD.
- 3. \$46 million for transmission main improvements in and around the City of Williston and other parts of Williams County to continue to support rapidly increasing population demands. Williams County service will also include service to the communities of Epping, Grenora, and Springbrook. The \$46 million will also provide a transmission main to eastern McKenzie County to serve development around the City of Watford City and rural water expansions throughout the county. In addition to providing services for new developments, many of these transmission mains will provide looping capability or redundant transmission systems in the future.



2025

2030

- - Planned Domestic Water Supply Capacity

0.0

2010

2015

Current (2013) Projected Peak Day Domestic Water Demand

Current (2013) Projected Average Day Domestic Water Demand

2020

Figure 1: Projected Peak Day Water Demand and Water Supply Capacity

2035

2040

- 4. \$39 million for rural water distribution systems will provide rural service to Williams, McKenzie, and Mountrail Counties. Based upon current water requests, it is planned that these transmission and rural water distribution system improvements would service approximately 31,000 rural residents, 225 commercial users, and 3,250 temporary housing units.
- 5. \$2M to complete the network of fill stations. These fill stations were included in the construction plan approved by the North Dakota State Water Commission.

These major infrastructure components are illustrated in Figure 2 on Page 4. A complete listing of each project component, start and completion dates, and estimated cost is provided in Table 1 on Page 5.



Figure 2: Major Infrastructure Components 2013-2015 Biennium

#### WESTERN AREA WATER SUPPLY PROJECT

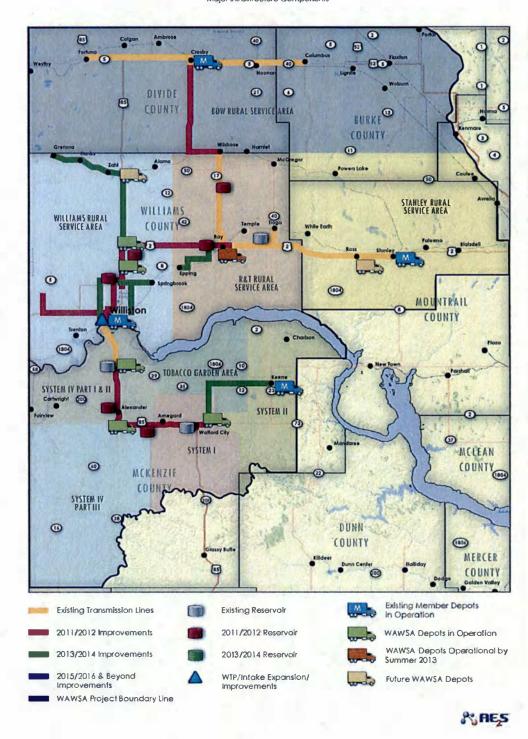


Table 1: Project Summary, Capital Cost Estimate, and Project Timeline for WAWSP
Phase III Improvements - 2013-2015 Biennium

Project Number	Project	Estimated Start Date	Estimated Completion Date	Estimated Construction (2014 Dollars)
-100	Phase I/II Carryover			\$9,978,178
1	Task Order No. 10 Williston WTP (14-21MGD)	10/2012	04/2015	\$21,993,240
2	Task Order No. 17 – By-Pass Transmission Lines (30" & 36")	10/2012	12/2013	\$8,291,000
3	Task Order No. 18 – WRWD - West Expansion - Part 2 (Tank-Res/Pump Station)	10/2012	12/2013	\$4,578,000
4	Task Order No. 19 Transmission Imp. (Keene Loop)	10/2012	12/2013	\$5,205,000
5	Fill Depots	06/2013	12/2015	\$2,153,915
6	WRWD - East Transmission - Part 1 (Hwy 2 E. 133rd Ave and South)	06/2013	12/2015	\$3,811,000
7	R&T - Epping Transmission - Part 1 (Ray High PT to Epping)	06/2013	12/2015	\$4,326,000
8	MCRWD - System I (Tobacco Garden)	06/2013	12/2015	\$4,815,250
9	WRWD - East Transmission - Part 2 (Epping to Hwy. 1804 and East)	06/2013	12/2015	\$9,455,400
10	Williston Intake Expansion Preliminary Engineering (Beyond 21 MGD)	06/2013	12/2015	\$880,650
11	WRWD - Part 1 (Blacktail Dam Area Distribution)	06/2013	12/2015	\$5,974,000
12	WRWD - Transmission Line (13 mile to 29 mile )	06/2013	12/2015	\$6,489,000
13	WRWD - Grenora (29 Mile to Grenora)	06/2013	12/2015	\$1,648,000
14	R&T - Rural Distribution - Part 1 (Wildrose Area)	06/2013	12/2015	\$2,544,100
15	MCRWD - Rural Distribution (System IV Part 3)	06/2013	12/2015	\$6,695,000
. 16	WRWD - North Transmission - Part 1 (58th St. to 60th St.)	06/2013	12/2015	\$655,080
17	BDW - Distribution - Part 1 (Crosby Branch and Columbus Branch)	06/2013	12/2015	\$3,646,200
18	Stanley - Distribution - Part 1 (Stanley High Point Branch)	06/2013	12/2015	\$5,562,000
19	WRWD - West Transmission North - Part 3 (Pump Sta. to 60th St.	06/2013	12/2015	\$3,275,400
20	WRWD - Part 2 (Remaining Blacktail Dam Area)	06/2013	12/2015	\$7,889,800
TOTAL PI Phases I a	HASE III (includes carryover from			\$119,866,213

#### The Big Financial Picture

We are currently in negotiations with the Bank of North Dakota and the State Water Commission to determine the terms of the proposed \$40 million loan included in HB 1140. The Bank of North Dakota proposes the "Phase III" loan would be the fifth State of North Dakota loan invested in the WAWS Project, set with a variable interest rate, and it would be the second loan to be repaid by the WAWS Authority. The proposed arrangement in is outlined in Figure 3 below.

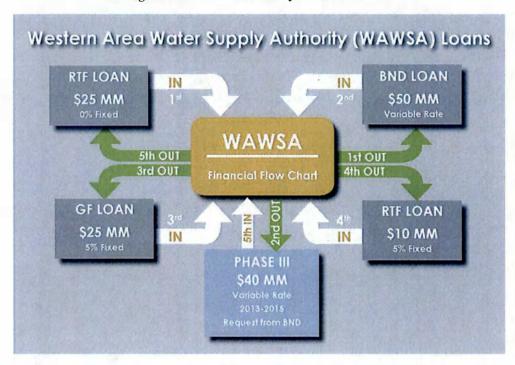


Figure 3: WAWS Authority Loan Structure

The terms of the \$79 million request included in HB 1020 are currently under negotiations as well. The WAWS Authority initiated this request as a grant request. The SWC has suggested this request should be half grant and half loan. The WAWS Authority representative and the BND staff are discussing possible loan structures that could accommodate a sixth loan.

#### Time is of the Essence

The WAWS Authority is seeking consideration of an emergency measure to initiate the expansion of the Williston Regional Water Treatment Plant from 14 MGD to 21 MGD as soon as possible. Passage of HB 1140 as an emergency measure would provide an immediate jump start to this

3

project. This expansion is critical to thwart peak day water demands exceeding the WAWS Project production capabilities in the years 2013 to 2015 as indicated in Figure 1.

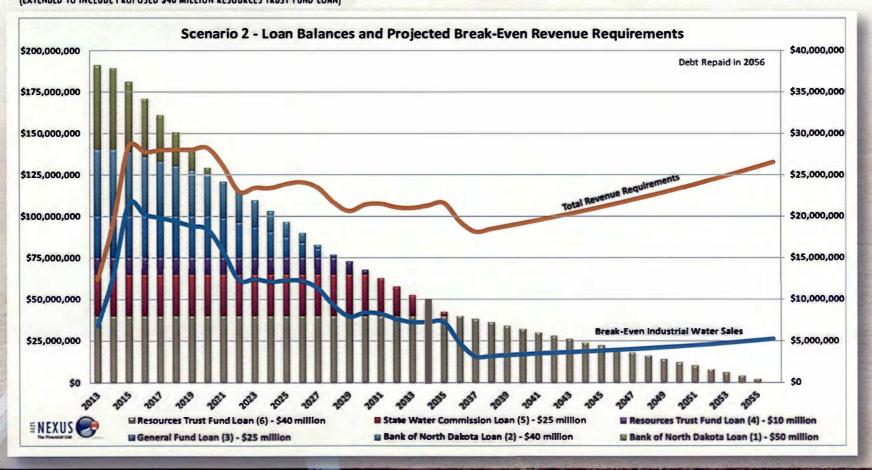
The updated population projections developed in late 2012 has prompted us to seek emergency funding as losing four months of prime construction in 2013 could result in domestic water supply shortages next summer. We estimate construction on this WTP expansion to 21 MGD to take 21 months and the emergency clause would assist in preventing the potential of not meeting projected water demands in 2015. Further, expediting this expansion will allow WAWSA to capture an estimated \$3.6 million to 7.2 million in industrial water sales which is fundamental to the loan repayment ability.



**JANUARY 28, 2013** 

#### 2013 BUSINESS PLAN UPDATE FINANCIAL EXCERPT - REVISED

### FIGURE 1: LOAN BALANCES AND PROJECTED BREAK-EVEN REVENUE REQUIREMENTS — SCENARIO 2 (EXTENDED TO INCLUDE PROPOSED \$40 MILLION RESOURCES TRUST FUND LOAN)





#### PROPOSED AMENDMENTS TO HOUSE BILL NO. 1140

Page 1, line 10, after the comma, insert "the authority shall be subject to the default requirements under section 61-40-09"

Page 1, remove line 11

Page 1, remove "principal and interest due"

Renumber accordingly





## Testimony of John Olson, Lobbyist, WAWS Authority IN SUPPORT OF HB 1140

Senate Industry, Business, and Labor Committee, Sen. Jerry Klein, Chairman
Bismarck, North Dakota – March 20, 2013

#### John Olson - Opening Comments HB 1140

- Good afternoon, my name is John Olson and I am representing the Western Area Water Supply Authority or WAWS as it is commonly known.
- The WAWS Authority strongly supports HB 1140 as a vehicle to provide critical funding to continue the development of the WAWS regional water system. The \$40 million of emergency funding identified in HB 1140, along with the funding in HB 1020 for \$79 million, will serve to address critical infrastructure in the fastest growing region in the State the northwest corner of North Dakota. The economic engine that is the Bakken will continue to thrive as long as we invest in critical infrastructure.
- As you will see from the testimony provided today by Jaret Wirtz, WAWS Executive
  Director, the WAWS project is in desperate need of the \$40 million in HB 1140 to address
  water supply shortages that northwest North Dakotans are experiencing right now and will
  not be elevated without special measures.
- This bill will provide the funds to accomplish the following three projects:
  - 1. Williston WTP Expansion (14 to 21MGD)
  - 2. Williston West By-Pass Transmission Lines (30" and 36")
  - 3. WRWD West Expansion (Tank-Reservoir/Pump Station)
- You will also hear from Steve Burian, PE, WAWS Authority consulting professional engineer, who will present the 2013 Business Plan Update which addresses the need for these projects and the financial implications of funding.
- The WAWS Authority first introduced an extensive business plan during the 2011 legislative session. This business plan was the basis for the original House Bill that created the WAWS Authority and garnered overwhelming support in both the House and Senate.

- Over the past two years, the WAWS Authority has continued to update its business, financial, and operational plans (with the input and oversight of numerous State agencies) to reflect the changing dynamics of the region. Continual planning ensures that:
  - o the system is not over- or under- built;
  - o debt service repayment stays on course;
  - o industrial sales are planned for properly; and
  - o the correct capital tools are used to create a sustainable system for years to come.
- Although this bill is marked as an "emergency measure", there has been thorough analysis performed to identify the right projects to completed, in the priority needed in order to address the dynamic issues that face this region.

#### **Closing Comments**

- In closing, I'd like to reiterate the WAWS Authority support of HB 1140.
- The WAWS Authority respectfully requests that this committee takes consideration of the immediate needs of these funds. The House passed this bill <u>unanimously</u> understanding the urgency of the request and we hope you will do the same.
- The funding provided in this bill is balanced and prioritized with the funding provided in HB 1020 and supports another important step in a well-planned, multi-phase project. This biennium, however, is especially critical with peak water demands exceeding the immediate capacity of the system. Planning for people who might arrive has turned into planning for people that have already arrived! With more on the way!
- In fact, Williston ranks as the fastest-growing micropolitan area in the country for the second year in a row according to a recent report announced last week by the U.S. Census Bureau. The Census population estimates show that the Williston area gained 2,281 residents between July 1, 2011, and July 1, 2012, a 9.3 percent increase in one year's time.
- This changing population and the dynamic nature of the region has lead to adjustments in the business plan but not in the overall concept of the project.
- The WAWS Authority continues to believe in its business model that creates a link between the private sector and public sector needs for water. Let the industry pay for a public water system that benefits residents in northwestern North Dakota as well as the State as a whole. It just makes sense.

- There have been suggestions to limit the WAWS Authority industrial sales is some shape, way, or manner and I expect you will hear more about that later today. The truth is WAWS is already limited by its fixed pipeline route, its own capacity to sell excess latent capacity, and the accountability of its publically elected or appointed board. This has been presented in the original plan and again in the 2013 Business Plan Update.
- Among the strings that the IWP would like to attach to many of the bills this session (they crafted
  two bills and offered amendments to four bills to direct legislation their direction) is the
  restriction of oil companies to hook up directly to WAWSA main transmission mains. There may
  be some confusion about this.
  - o First, WAWSA would not be building any pipelines to the oil companies. No public funds would be used to construct special pipelines directly to wellheads is not and never has been suggested. The oil companies or private developers (including the IWP) can bill their own pipelines and hook up to specific spots along the transmission line that is already there.
  - Also, none of the rural water distribution system pipelines are designed to go to feed wells. Rural water distribution system network of pipelines, as shown on the WAWSA website, are for drinking water to residents, developments, commercial sites, etc.
  - o When IWP seek to restrict laterals, they are illuminating the future for WAWSA. The industry trend is to go to pipelines from everything to oil, gas, water, and produced water in an effort to create efficiencies, reduce truck traffic/wear and tear to roads, and increase safety. Depots will certainly be used less and less overall.
- Creating amendments or strings attached to this emergency bill or other funding provisions to limit the WAWS Authority is making the conscious decision to intentionally accommodate a handful of mega private water developers over the interest of North Dakota taxpayers.
- Whether it is depots or direct hook-ups to its transmission lines (which is where the entire industry is headed), the ability of WAWS to sell industrial water is critical to:
  - o meet its financial obligations;
  - o maintain reasonable user rates; and
  - o keep our promise to use this unique option to free up grant funding for other important drinking water projects in the State.
- We understand the importance of "getting it right". As a public entity, we are under the scrutiny of the State and all of its citizens. We do not have the luxury of not being accountable for the truth of our statements or not revealing our own financial gains. The WAWS Authority has been under the spotlight for the past two years, and we expect to be under the spotlight for many more. That is ok. The WAWS Authority has made great strides in the past two years and we are very proud of that progress. We endeavor to continue that progress and the funding provided under HB 1140 and HB 1020 will support the mission to do so.
- Thank you Chairman Klein and committee members for your time today and continued support of the WAWS project through the passage of HB 1140 as it stands today.

## Testimony of Jaret Wirtz, Executive Director, Western Area Water Supply Authority In Support of House Bill 1140 Senate Industry Business and Labor Committee Sen. Jerry Klein, Chairman Bismarck, North Dakota – March 20, 2013

#### Making a Real Difference in One Biennium

- We've been busy the past two years since WAWSA was created in 2011.
- In 22 short months, WAWSA executed contracts in excess of \$112 million to implement the initial phases of this project using cash generated through water sales for contracts above the approved \$110 million original appropriation.
- Crucial milestones that have either been achieved or will be achieved in the near-term include:
  - o Infrastructure improvements to allow growth in and around Williston.
  - o Serving ten cities within 24 months of WAWSA's creation with high quality water.
  - o Built four water depots that are operational, expanded one member depot, and incorporated four member-operated depots.
  - o Rural water service to western McKenzie County.
  - o Expanding the Williston Regional Water Treatment Plant from 10 to 14 MGD.
  - These major milestones are summarized in red in Figure 1: Major Infrastructure Components 2011-2013 Biennium.



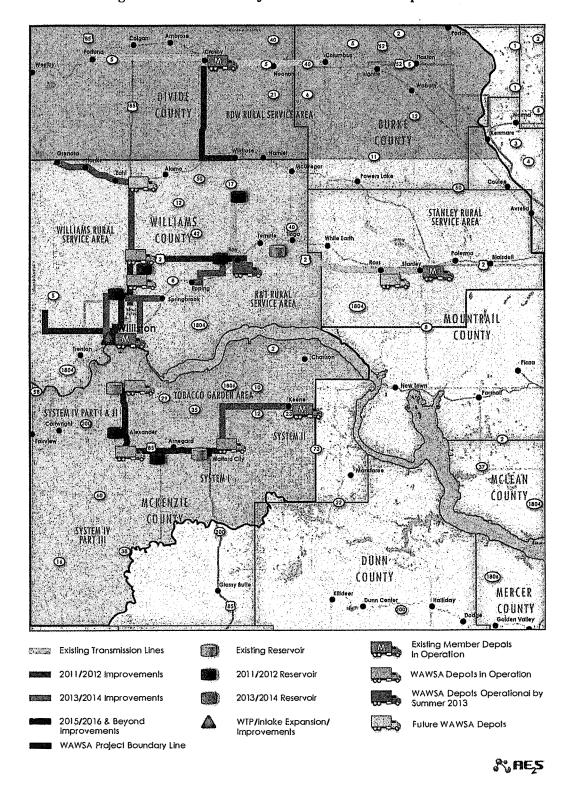


Figure 1: WAWSA Major Infrastructure Components



#### Looking Forward Into the 2013-2015 Biennium – Facing Unprecedented Growth

- It is interesting to look back at 2011, when it was argued we were overbuilding the WAWS Project.
  - O At that time, drilling rigs were anticipated to peak at 120 statewide compared to the current level of 184. As of February 4, 2013, there are 119 rigs, or 65 percent, operating in the WAWSA service area alone.
  - The 2011 WAWS Project Business Plan predicted a peak service population within its service area of 48,000. Fast forward two years.
  - We have a population living in the service area estimated at over 58,000 <u>right now</u> –
     far exceeding our 2011 ultimate peak population estimate.
  - WAWSA's population projections have been updated in the 2013 Business Plan using:
    - NDSU released two updated population projections studies in late 2012 both county level and a Williston-specific.
    - Studies forecast the total population for the five-county region serviced by the WAWS Project reach almost 100,000 (practically the size of Fargo).
  - O That bears repeating, our peak service population is projected to be more than double what it was projected to be just two years ago. The WAWS service area has the fastest growing population in the State including Williston which is the fastest growing micropolitan in the country.
  - Figure 2 shows the 2011 Population Projections and Updated 2013 Population Projections.



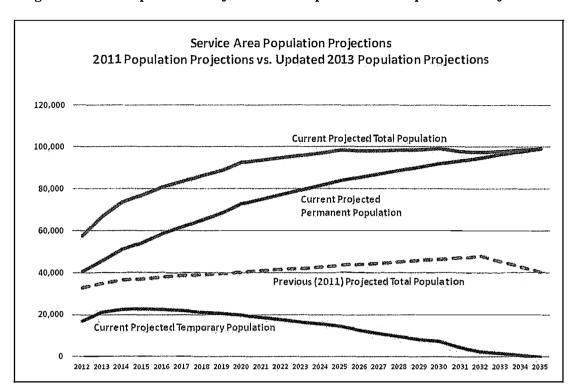


Figure 2: 2011 Population Projections and Updated 2013 Population Projections

#### WAWSA's Long-Term Plan to Address Growth

- With the significant projected population growth, WAWSA authorized its engineer to evaluate the infrastructure required to serve 100,000 people. The total project estimated cost has increased to \$349 million.
- In 2011, WAWSA was provided State loans in the amount of \$110 million.
- WAWSA is requesting \$119 million within HB 1020 and HB 1140 this biennium to fund selectively prioritized project segments to meet the near term growth requirements and priority rural water service.
- The expected \$120 million balance will be funded in the future depending on population growth within the region.
- Large infrastructure projects such as this are planned with a 20-year planning horizon and cannot be reactively planned without significant cost or service consequences.

#### The Total 2013-2015 Request

- The total request pending before the Legislature is \$119 million.
  - o HB 1140 provides a \$40 million loan with an emergency clause to prevent anticipated



water shortages.

- o HB 1020 provides a \$39 million grant and \$40 million loan.
- The 2013 to 2015 biennial funding request is the second phase of funding required to complete incremental steps of construction of the WAWS Project.

#### HB 1140 Provides Funding to Prevent Water Shortages

- HB 1140 completes the original \$150 million request WAWSA made of the 2011 Legislature and would fund the following critical segments during the 2013 biennium:
  - o Williston Regional WTP Expansion (14 to 21 MGD)
  - o Williston West By-Pass Transmission Lines (30" and 36")
  - o WRWD West Expansion (Tank-Reservoir/Pump Station)
- HB 1140 is critical to avoid domestic water shortages on peak days in 2015 and beyond as illustrated in Figure 3.
  - o If the Williston Regional WTP expansion is not completed by 2015 as planned, we expect significant peak day water shortages in the summer of 2015 and beyond until the expansion is completed.
  - o Water treatment plants are designed to address peak day water demands. Peak instantaneous demands are typically provided through system storage and pumping. WAWSA has utilized a peaking factor of 2.5 for permanent residences and 1.3 for temporary housing units. During the summer of 2012, the City of Williston had a peaking factor of 2.7.
  - We learned yesterday that the Southwest Pipeline Project and the City of Dickinson face similar urgent water treatment expansion needs.
  - With anticipated continued population growth, yet another Williston Regional WTP expansion may be required to be completed as early as 2018.
- HB 1140 contains an emergency clause to support expansion of the Williston Regional WTP.
  - Williston Regional WTP is currently being expanded from 10 to 14 MGD and it will be online in 2014.
  - o WTP expansion from 14 to 21 MGD is currently under design with an estimated construction period of 18 months.



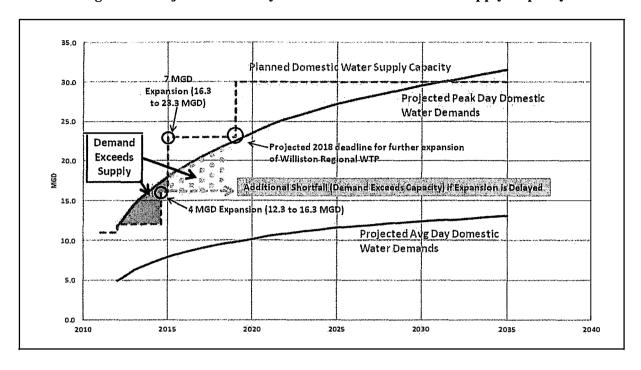


Figure 3: Projected Peak Day Water Demand and Water Supply Capacity

Emergency clause is necessary to not miss a major part of the 2013 construction season and keep the project on schedule.

#### HB 1020 Provides Critical Funding for Water Distribution

- HB 1020 is critical to providing additional funding to meet the extraordinary needs of northwest North Dakota by including \$79 million for the WAWS Project.
- HB 1020 funding will provide funding for the following project segments:
  - Williston Intake Preliminary Engineering
  - William RWD Transmission Lines, Blacktail Dam Area Distribution, Service to Grenora
  - MCRWD System 1 and 2 Transmission Lines and Rural Distribution
  - R&T Epping Transmission Line and Rural Distribution
  - BDW Distribution (Crosby and Columbus)
  - Stanley Distribution
- Every day, our phones ring off the hook with requests for water and inquiries when water service will be available.
  - These calls come from both folks that have been waiting decades for quality water as well as new requests from what we consider "suburban rural" rural subdivisions



- with hundreds of housing units as well as temporary housing units, also known as "crew camps", that are home to thousands of workers in the oil patch.
- O Currently, owners of temporary housing units are either stalled in development or hauling water to meet daily water demands of their housing units using extremely limited groundwater supplies.
- Rural water distribution has been a long-held goal in northwestern North Dakota. Figure
   4 is a detailed presentation of the rural water distribution improvements planned for
   2013-2015 biennium as well as future distribution plans.
  - Goal to begin rural water distribution segments region wide in 2013-2015. These distribution lines are designed for rural farmsteads and crew camps - not industrial water.
- Any requests for hook ups from large industrial water users must be connected to WAWSA's main transmission lines and paid for by the user. These industrial water users cannot be served through the rural distribution lines. The main transmission lines are the bold lines on Figure 2.
- There are and will be private industry pipelines connected to the WAWSA main transmission lines as the industry moves away from depots to more efficient and cost effect pipeline system. Theses pipelines also reduce wear and tear on road systems.

#### We Ask You to Help Us Answer These Calls

- An unbelievable amount has been accomplished in two very short years in northwest North Dakota. Still, we see that there is much to do.
- HB 1140 is critical to avoiding domestic water shortages currently projected.
- Please support WAWSA's request for \$40 million loan included in HB 1



#### WESTERN AREA WATER SUPPLY PROJECT

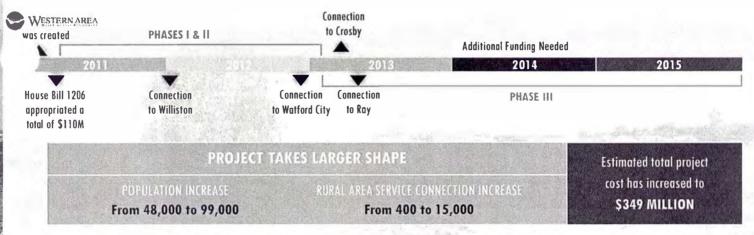
**JANUARY 16, 2013** 

#### 2013 BUSINESS PLAN UPDATE

**EXECUTIVE SUMMARY** 

#### PROJECT DEVELOPMENT AND PROGRESS

The WAWSA is governed by a Board of Directors representing the Members, including the City of Williston, McKenzie County Water Resource District (MCRWD), Williams Rural Water District (WRWD), R&T Water Supply Commerce Authority (R&T), and Burke-Divide Williams Rural Water (BDW). The Board of Directors also includes a member of the North Dakota State Water Commission and meets monthly. To date, Water Supply Agreements have been signed by all Members. In addition, Output Agreements for potable water supplies have been signed with the City of Williston and R&T, and Access and Use Agreements and Infrastructure Operating Agreements have been signed between WAWSA and its Members and Sub Members (entities receiving service indirectly from WAWSA through a Member) for use and operation of infrastructure owned either by a Member, Sub Member, or WAWSA.



By the spring of 2013, ten cities beyond Williston are expected to have WAWSA service: Ray, Tioga, Stanley, Ross, Wildrose, Crosby, Columbus, Fortuna, Noonan, and Watford City. The WAWSP will transport Missouri River water that is treated at the Williston Regional Water Treatment Plant to residents in McKenzie, Williams, Divide, Burke, and Mountrail Counties in North Dakota. An additional potable water supply will come from the R&T Water Treatment Plant near Ray to supplement water demand in portions of Williams, Divide, Burke, and Mountrail Counties. Industrial water supplies will also be supplemented with non-potable water om Crosby, Tioga, Stanley, and Watford City.





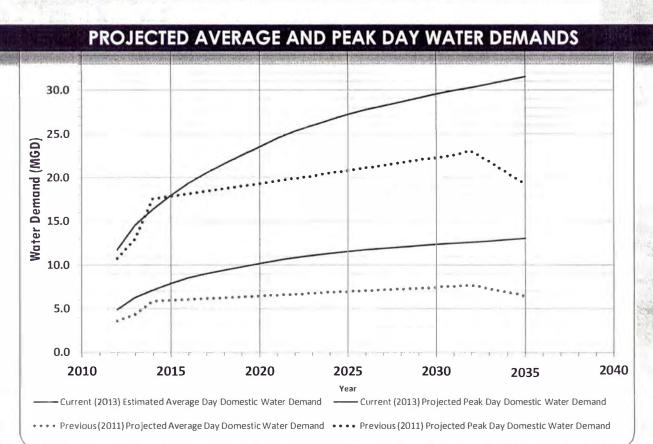
# DIBA

#### **UPDATED WATER DEMAND PROJECTIONS**

The 2011 Business Plan was based on water demand projections associated with the best available population data at that time. Growth in the energy industry has exceeded what was originally anticipated, and, as a result, water demands associated with the increased population have exceeded those upon which the 2011 Business Plan was based. As a result, the 2013 Business Plan Update contains revised domestic water demand projections based on population projections completed through housing studies sponsored by the local communities and the North Dakota Housing Finance Agency (2012 North Dakota Statewide Housing Needs Assessment).

SERVICE POPULATI	ON PROJECTIONS FOR THE WA	WSP SERVICE AREA
2010	2012	2025
30,700	58,000	99,000

	2035 WATER DEMAND PROJECTION		
	AVERAGE DAY DEMAND	PEAK DAY DEMAND	
2011 BUSINESS PLAN	7.7 MGD	22.9 MGD	
2013 BUSINESS PLAN UPDATE	13.1 MGD	31.7 MGD	



# 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY

### **UPDATED PROJECT DESCRIPTION**

### 2011-2013 BIENNIUM LOAN PACKAGE

The loans provided for the WAWSP were supplied through the North Dakota State Water Commission via the Resources Trust Fund, Bank of North Dakota assets, and the General Fund. The package included the following loans in the order of disbursement as defined in NDCC Ch. 61-40:

Loan 1 — Resources Trust Fund (0% interest)	\$25,000,000
Loan 2 — Bank of North Dakota (Variable 1.5% over 30-day LIBOR, floor rate of 2%)	\$50,000,000
Loan 3 — North Dakota General Fund (5% fixed interest rate)	\$25,000,000
Loan 4 — Resources Trust Fund (5% fixed interest rate)	\$10,000,000
TOTAL 2011-2013 WAWSP FUNDING (100% LOANS)	\$110,000,000

#### The loan funding provided in the 2011-2013 Biennium was used to complete the following projects:

- Williston ByPass Transmission Line & Reservoir: A transmission line and 5 million gallon reservoir to serve growth areas north and west of Williston.
- Williston Water Treatment Plant (WTP) Expansion: Expansion of the Williston WTP capacity from 10 to 14 million gallons per day (MGD).
- Service to Crosby/BDW Rural Water: A transmission line and reservoir to provide service to the City of Crosby and BDW Rural Water from the R&T Water Com
  - ce to R&T Water Commerce Authority: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Ray.
- service to McKenzie County/Watford City: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Watford City.
- McKenzie County Water Resource District System IV: Distribution lines and pump stations to provide partial rural water service to western McKenzie County.

### 2013-2015 BIENNIUM REQUESTED FUNDING PACKAGE

The following summarizes the funding package the WAWSA is seeking to complete priority projects during the 2013-2015 Biennium:

Resources Trust Fund (Grant Funding)	\$79,000,000
Loan (Bank of North Dakota)	\$40,000,000
TOTAL 2013-2015 WAWSP FUNDING REQUEST	\$119,000,000

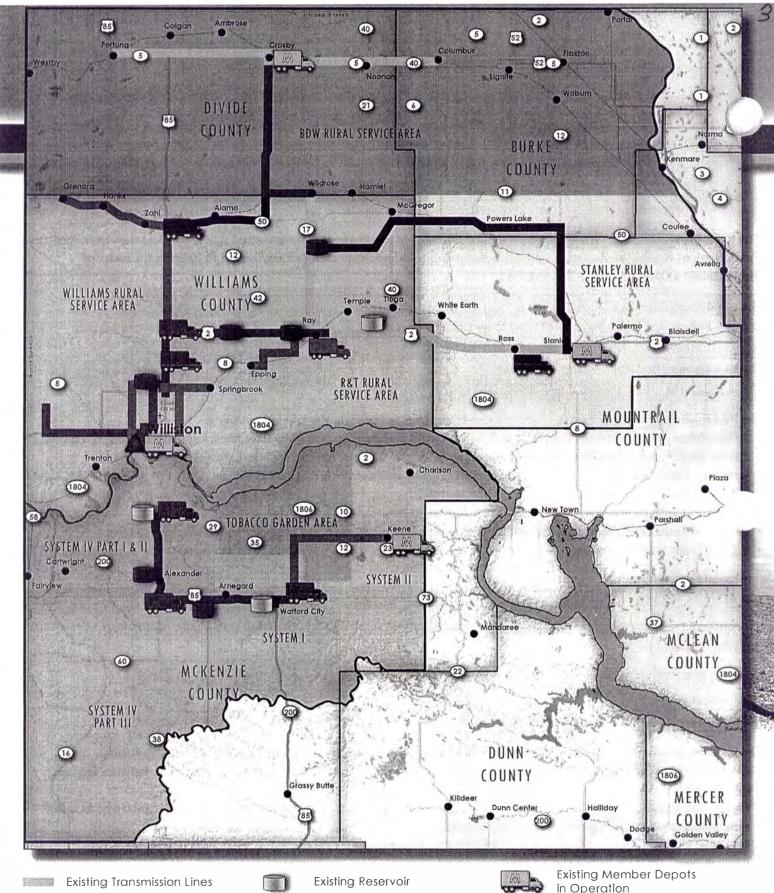
#### The following summarizes broad project categories over which WAWSA intends to allocate 2013-2015 Biennium funds:

- Williston WTP Expansion: Expansion of the Williston WTP capacity from 14 to 21 MGD (\$26.3 million, of which \$4.3 million was interim funding from industrial sales).
- Regional Transmission Lines: Regional transmission lines to expand water availability for municipal, rural developments, and rural residences in McK-enzie, Williams, Mountrail, Divide, and Burke counties (\$47.4 million).
- Rural Water Distribution Lines: Rural water distribution lines for service connections to rural developments and rural residences in McKenzie, Williams, Mountrail, Divide, and Burke counties (\$45.3 million).

### **FUTURE BIENNIA ANTICIPATED FUNDING**

AL FUTURE BIENNIA WAWSP FUNDING NEEDS (SOURCES TO BE DETERMINED)	\$120,000,000
--	---------------

Total Project Funding Estimate as Envisioned to Date: \$349,000,000



2011/2012 Improvements

2013/2014 Improvements

2015/2016 & Beyond **Improvements** 

WAWSA Project Boundary Line

2011/2012 Reservoir

2013/2014 Reservoir

WTP/Intake Expansion/ Improvements





WAWSA Depots In Operation



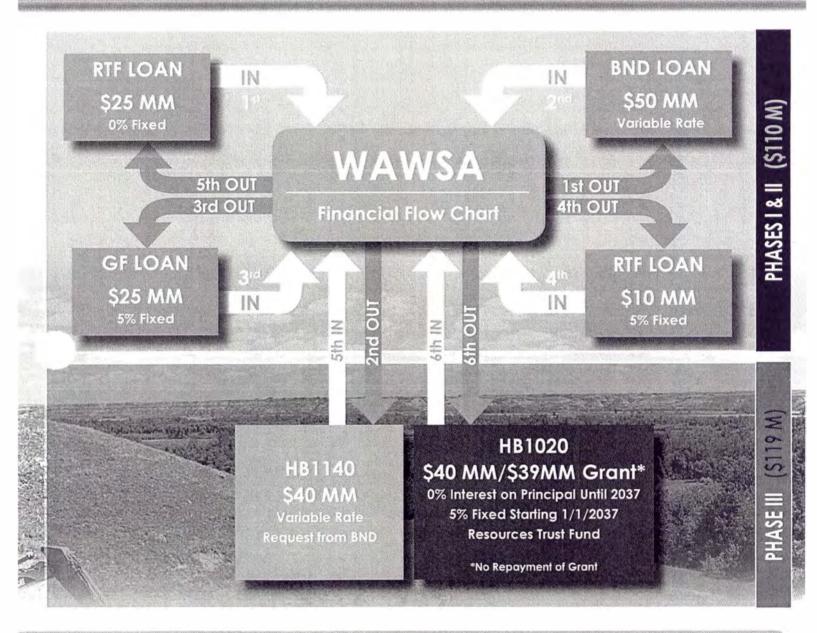
WAWSA Depots Operational by Summer 2013



Future WAWSA Depots

# WESTERN AREA WATER SUPPLY AUTHORITY (WAWSA) LOANS

# **JANUARY 28, 2013**

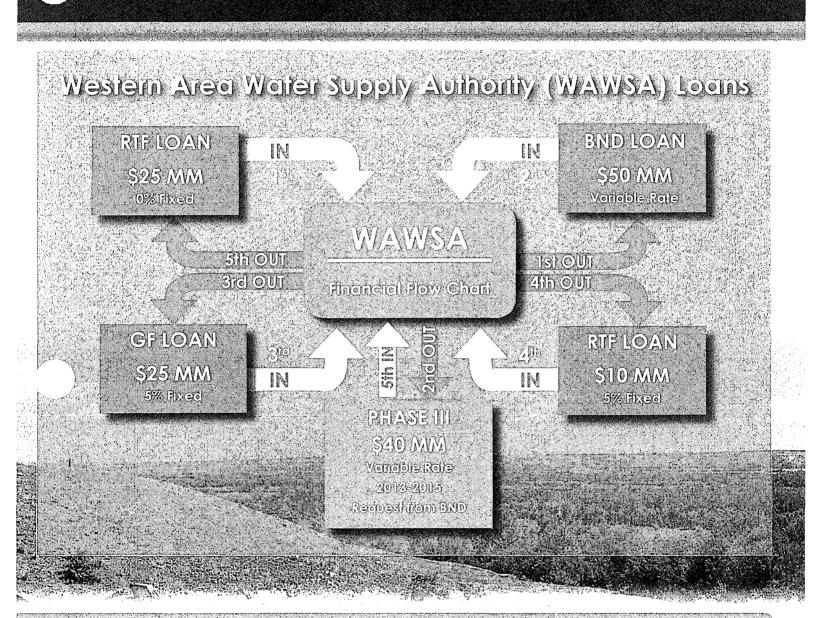


### LOAN TERMS AND CONDITIONS

LOAN#	LENDER	LOAN AMOUNT	SCENARIO 1 TERMS	SCENARIO 2 TERMS
Loan #1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loan #2	Bank of North Dakota	\$50 million	2014 - 2017	2014 - 2021
Loan #3	General Fund Loan	\$25 million	2020 - 2021	2021 - 2029
Loan #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loan #5*	Bank of North Dakota	\$40 million	2017 - 2020	2015 - 2028
Loan #6*	Resources Trust Fund	\$40 million	NA	2037 - 2056

<sup>\*</sup> Loan #5 and Loan #6: Loans that WAWSA is seeking in the 2013-2015 biennium

# 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY



ENOUNDERING SOMETINA OF

LOAN#	LENDER	LOAN AMOUNT	SCENARIO 1 TERMS	SCENARIO 2 TERMS
Loan#1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loan #2	Bank of North Dakota	\$50 million	2014 - 2017	2014 - 2021
Loan #3	General Fund Loan	\$25 million	2020 - 2021	2021 - 2029
Loan #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loan #5*	Bank of North Dakota	\$40 million	2017 - 2020	2015 - 2028

<sup>\*</sup> Loan #5: Loan that WAWSA is seeking in 2013-2015 biennium

DIRA

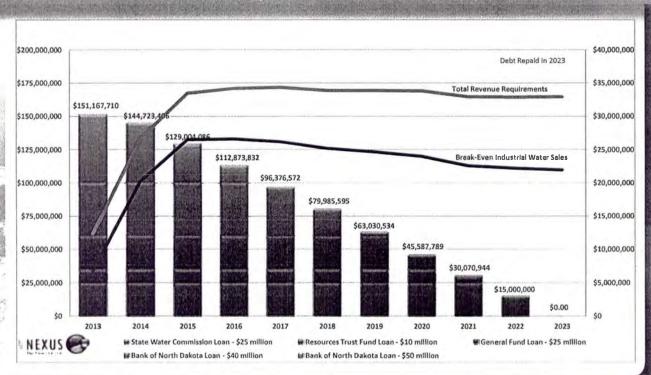
# BREAK-EVEN ANALYSIS | SCENARIO 1

#### CRITICAL YEAR ANALYSIS FOR 10-YEAR DEBT REPAYMENT

REVENUE REQUIREMENTS	2015		2016	
Fixed and Variable O&M	\$1,702,002	5.1%	\$1,753,062	5.1%
Member Entity O&M	\$4,254,622	12.7%	\$4,382,260	12.8%
Lost Industrial Reimbursements	\$3,801,742	11.4%	\$3,801,742	11.1%
Debt Service — Existing	\$2,920,388	8.7%	\$2,917,063	8.6%
Debt Service — New	\$20,019,053	59.8%	\$19,780,700	57.9%
Reserve Fund Requirements	\$775,807	2.3%	\$1,529,211	4.5%
Total Revenue Requirements	\$33,473,614	100.0%	\$34,164,038	100.0%
Less: Domestic Water Sales	\$6,965,441		\$7,553,041	
Less: Interest Income	\$100		\$100	
Break-Even Industrial Water Sales	\$26,508,073	<b>以</b> 对方是有一切	\$26,610,897	
Required Volume (Barrels)	31,557,229		31,679,639	

Break-Even Frac Requirements	医特别氏征 医阿奇氏性畸形	是相称为用。 第二章
Required Fracs @ 60,000 barrels/frac	526 per year	528 per year
Required Fracs @ 80,000 barrels/frac	394 per year	396 per year
Required Fracs @ 100,000 barrels/frac	316 per year	317 per year

# Loan Balances and Projected Break-Even Analysis | Scenario 1



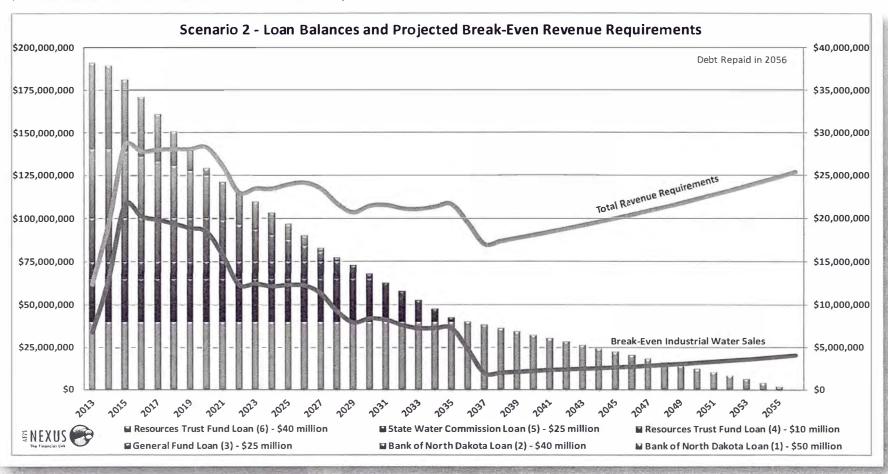


### **JANUARY 25, 2013**

## 2013 BUSINESS PLAN UPDATE FINANCIAL EXCERPT

#### FIGURE 1: LOAN BALANCES AND PROJECTED BREAK-EVEN REVENUE REQUIREMENTS — SCENARIO 2

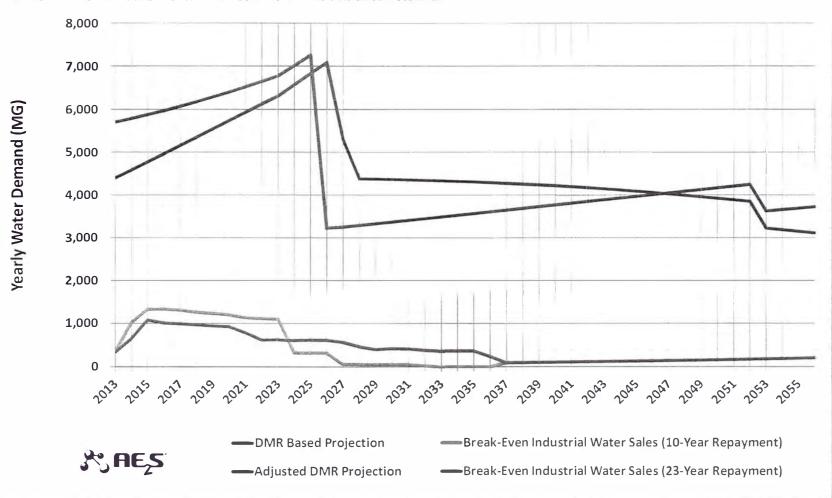
(EXTENDED TO INCLUDE PROPOSED \$40 MILLION RESOURCES TRUST FUND LOAN)



**JANUARY 25, 2013** 

## 2013 BUSINESS PLAN UPDATE FINANCIAL EXCERPT

#### FIGURE 2: INDUSTRIAL WATER DEMAND PROJECTIONS FOR THE WAWSA SERVICE AREA



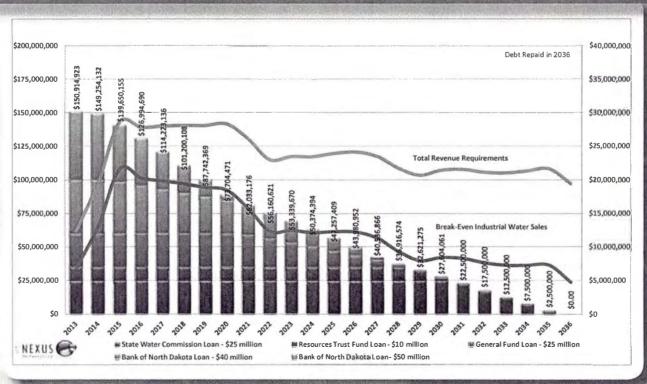
# BREAK-EVEN ANALYSIS | SCENARIO 2

#### **CRITICAL YEAR ANALYSIS FOR 23-YEAR DEBT REPAYMENT**

REVENUE REQUIREMENTS	2015		201	6
Fixed and Variable O&M	\$1,702,002	6.0%	\$1,753,062	6.3%
Member Entity O&M	\$4,254,622	14.9%	\$4,382,260	15.8%
Lost Industrial Reimbursements	\$3,801,742	13.3%	\$3,801,742	13.7%
Debt Service — Existing	\$2,920,388	10.2%	\$2,917,063	10.5%
Debt Service — New	\$15,374,646	53.9%	\$14,340,344	51.6%
Reserve Fund Requirements	\$491,136	1.7%	\$584,297	2.1%
Total Revenue Requirements	\$28,544,535	100.0%	\$27,778,768	100.0%
Less: Domestic Water Sales	\$6,965,441		\$7,553,041	
Less: Interest Income	\$100		\$100	
Break-Even Industrial Water Sales	\$21,578,994		\$20,225,627	
Required Volume (Barrels)	25,689,279		24,078,128	

ak-Even Frac Requirements		化多数分类 医多种性 医多种性
equired Fracs @ 60,000 barrels/frac	428 per year	401 per year
Required Fracs @ 80,000 barrels/frac	321 per year	301 per year
Required Fracs @ 100,000 barrels/frac	257 per year	241 per year

# Loan Balances and Projected Break-Even Analysis | Scenario 2



# 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY

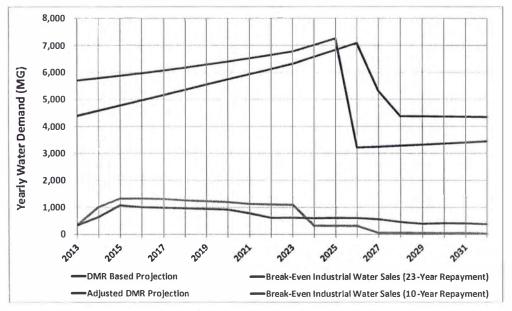
BA RE

## PROJECTED WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS

Industrial water demand plays a critical role in the success of the WAWSP. In an attempt to quantify this demand, AE2S met with the Department of Mineral Recourses (DMR) and the North Dakota State Water Commission (NDSWC) to discuss the key variables associated with projecting industrial water demand. Through continued discussion with the DMR, NDSWC, and industrial water users, AE2S developed a list of key variables associated with industrial water demand and their corresponding values displayed in the table below. The two industrial demand projections used were: 1) DMR based projection – based on the information provided by the DMR and NDSWC, and 2) Adjusted DMR – based on the DMR projection but modified for current rig count, a more conservative frac flow per well, and adjusted for average maintenance flow for all wells over time in the service area. The two projections are displayed graphically along with the 10- and 23-year repayment scenarios to provide an overview of the total industrial water demand within the WAWSA service area compared to the break-even industrial water sales.

#### WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS VARIABLES

VARIABLE	DMR Projection	Adjusted DMR
Rig Count (#)	126	115
Rig Production (wells/rig/yr)	12	12
Total Future Wells (#)	19,780	19,780
Existing Wells (#)	3,613	3,613
Wells Requiring Maintenance Flow (%)	60 increasing to 100%	60 increasing to 100%
Average Well Production Period (years)	45	45
Maintenance Flow (barrels/well/day)	12.5	20 dropping to 10
Fresh Water Required Per Frac (barrels/well)	80,000	60,000
Recycle (% of fresh water froc)	0 increasing to 20%	0 increasing to 20%





# INDEPENDENT WATER PROVIDERS

Senate Industry Business and Labor Committee ND Legislature

March 20, 2013

**HB 1140 OPPOSE** 

Chairman Klein and Members of the Committee:

The Independent Water Providers, is a trade association of private water providers, who are ranchers, farmers, landowners and businessmen in north western North Dakota. Private water providers furnish approximately 75% of the water to the oil industry in our State, which has been a vital component to creating the thriving economy we now enjoy. (Without that water and the private investment our members have made, ND would not have the oil production and revenues that it enjoys today).

We SUPPORT providing water to the people of northwestern North Dakota. But, we OPPOSE providing any funding to Western Area Water Supply (WAWS) through HB 1140 for the following reasons:

- Sticker shock: WAWS was formed in 2011 by HB 1206. The proponents told the Legislature that
  they could provide water to northwest North Dakota for \$150 million, and could pay the cost of
  doing so through industrial water sales to the oil industry---which was to pay 80% of the project.
  -They now claim they need \$350 MILLION to complete the project.
- 2. You authorized \$110 million and told them to come back and you would consider another \$40 million loan (now before you) as per HB 1206. In the interim, they appeared before the State Water Commission and were authorized to spend another \$9 million (beyond the \$110 million the Legislature authorized). They said they would pay for it through a "cash flow strategy". (If you don't have the money, and you spend it-----that's debt regardless of how you plan to pay it back).
- 3. They have also assumed another \$35-45 million of debt from their participating entities. (The correct number is unclear because, WAWS representatives have testified to both numbers at hearings in the House Energy and Natural Resources Committee on March 7 and March 14).
- 4. WAWS is before you this Session asking for \$119 million of new money. \$40 million loan in HB 1140 and \$79 million in the \$500 million State Water Commission appropriations bill (HB 1020). We testified in support of HB 1020 yesterday in the Senate Appropriations Committee and believe that is sufficient to meet the WAWS needs for the next two years—including the Williston water treatment plant that is \$26 million dedicated in this bill.
- 5. This bill-----HB 1140 is <u>not</u> in the Governor's budget---you will see no one from OMB, or the Governor's Office promoting or supporting this appropriation.

- 6. There is no urgency to spend another \$120 million of public money in the next two years. Let me explain further. \$79 million in HSB 1020 is sufficient. (Keep in mind that much of WAWS asserted need for ALL of this money is to build for population projections that are 12-22 years from now). WE HAVE THE TIME TO DO THIS RIGHT. WAWS representatives (Chairman Zubke and Executive Director Jaret Wirtz) have expressly stated in open, public meetings of the Water Coalition, (November, 2012) that all of the funds (\$79,000,000) is for rural and domestic water supply and none is for industrial use. They provided a detailed map in Water Coalition meetings---which has been distributed to you. THIS system is purportedly to serve rural and domestic water demands in northwestern North Dakota---based upon estimates of population projections to 2025. These estimates are from an ND Housing Authority study that projects the population in the region could go to 89,000 people by 2025. We don't NEED to spend \$80,000,000 to serve people who are not yet living in North Dakota and loan them another \$40 million that HB 1140 calls for.
- 7. In talking with representatives of BND---I am also concerned about their level of oversight and the confidence we can have with regard to the financial projections WAWS has provided them.

There have been a series of missteps that compound our concerns regarding WAWS. For example:

- They had one bid for the engineering services for the project, which was submitted by the same firm that lobbied for passage of HB 1206 last Session.
- That same firm has been paid a whopping \$11 million in 2012 alone.
- WAWS has spent \$500,000 on the Vogel law firm, who at times has 6 lawyers working on the WAWS file.
- And of course they (WAWS) are represented in the ND Legislature by a publicly funded lobbyist (these are public dollars) at the rate of \$50,000 annually.
- The Indian Hills Water depot---2 million gallons, has failed—with a concrete floor that has broken up, making the facility inoperable.
- Pipeline companies are still trying to meet the schedule set for them by WAWS—last year, and continue to attempt to dig ditches, install pipe, and refill trenches in January in ND. (Local landowners, whose land they are on will be providing you with lots of information related to WAWS activities during the Session).
- Estimate provided by WAWS and its proponents 2 years ago were widely inaccurate. They
  under-estimated rural water needs by a factor of 2 and <u>over-estimated</u> industrial water
  usage by a factor greater than 2.
- They've threatened landowners with eminent domain for water lines to oil wells, and threatened them with not getting water, IF they were forced to use eminent domain.

These are some of the reasons we oppose loaning WAWS more money this Session. We think a better, more prudent decision to manage these public funds would be to give the State Water Commission the authority to provide the \$79 million that is in its current appropriations bill with appropriate oversight to assure that the WAWS project is true to its mission which was to get clean, potable water to the people of northwestern North Dakota.

Thank you.

Steve Mortenson,

**JANUARY 16, 2013** 

# 2013 BUSINESS PLAN UPDATE

EXECUTIVE SUMMARY

Aaret Wirtz

HB 1140

4-3-13

DRARY

#### PROJECT DEVELOPMENT AND PROGRESS

The WAWSA is governed by a Board of Directors representing the Members, including the City of Williston, McKenzie County Water Resource District (MCRWD), Williams Rural Water District (WRWD), R&T Water Supply Commerce Authority (R&T), and Burke-Divide Williams Rural Water (BDW). The Board of Directors also includes a member of the North Dakota State Water Commission and meets monthly. To date, Water Supply Agreements have been signed by all Members. In addition, Output Agreements for potable water supplies have been signed with the City of Williston and R&T, and Access and Use Agreements and Infrastructure Operating Agreements have been signed between WAWSA and its Members and Sub Members (entities receiving service indirectly from WAWSA through a Member) for use and operation of infrastructure owned either by a Member, Sub Member, or WAWSA.



#### PROJECT TAKES LARGER SHAPE

POPULATION INCREASE

RURAL AREA SERVICE CONNECTION INCREASE

From 48,000 to 99,000

From 400 to 15,000

Estimated total project cost has increased to **S349 MILLION** 

By the spring of 2013, ten cities beyond Williston are expected to have WAWSA service: Ray, Tioga, Stanley, Ross, Wildrose, Crosby, Columbus, Fortuna, Noonan, and Watford City. The WAWSP will transport Missouri River water that is treated at the Williston Regional Water Treatment Plant to residents in McKenzie, Williams, Divide, Burke, and Mountrail Counties in North Dakota. An additional potable water supply will come from the R&T Water Treatment Plant near Ray to supplement water demand in portions of Williams, Divide, Burke, and Mountrail Counties. Industrial water supplies will also be supplemented with non-potable water from Crosby, Tioga, Stanley, and Watford City.



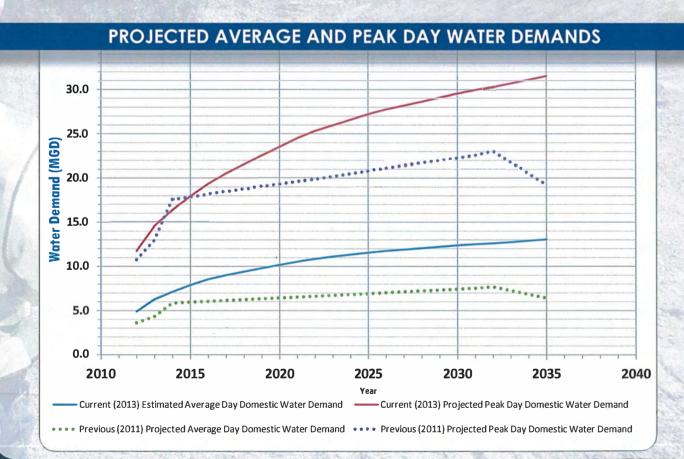


### **UPDATED WATER DEMAND PROJECTIONS**

The 2011 Business Plan was based on water demand projections associated with the best available population data at that time. Growth in the energy industry has exceeded what was originally anticipated, and, as a result, water demands associated with the increased population have exceeded those upon which the 2011 Business Plan was based. As a result, the 2013 Business Plan Update contains revised domestic water demand projections based on population projections completed through housing studies sponsored by the local communities and the North Dakota Housing Finance Agency (2012 North Dakota Statewide Housing Needs Assessment).

SERVICE POPULATI	ON PROJECTIONS FOR THE WA	WSP SERVICE AREA
2010	2012	2025
30,700	58,000	99,000

	2035 WATER DEMAND PROJECTION		
	AVERAGE DAY DEMAND	PEAK DAY DEMAND	
2011 BUSINESS PLAN	7.7 MGD	22.9 MGD	
2013 BUSINESS PLAN UPDATE	13.1 MGD	31.7 MGD	



## WESTERN AREA WATER SUPPLY PROJECT 2013 BUSINESS PLAN UPDATE

# **EXECUTIVE SUMMARY**

### UPDATED PROJECT DESCRIPTION

### 2011- 2013 BIENNIUM LOAN PACKAGE

The loans provided for the WAWSP were supplied through the North Dakota State Water Commission via the Resources Trust Fund, Bank of North Dakota assets, and the General Fund. The package included the following loans in the order of disbursement as defined in NDCC Ch. 61-40:

Loan 1 — Resources Trust Fund (0% interest)	\$25,000,000
Loan 2 — Bank of North Dakota (Variable 1.5% over 30-day LIBOR, floor rate of 2%)	\$50,000,000
Loan 3 — North Dakota General Fund (5% fixed interest rate)	\$25,000,000
Loan 4 — Resources Trust Fund (5% fixed interest rate)	\$10,000,000
TOTAL 2011-2013 WAWSP FUNDING (100% LOANS)	\$110,000,000

#### The loan funding provided in the 2011-2013 Biennium was used to complete the following projects:

- Williston ByPass Transmission Line & Reservoir: A transmission line and 5 million gallon reservoir to serve growth areas north and west of Williston.
- Williston Water Treatment Plant (WTP) Expansion: Expansion of the Williston WTP capacity from 10 to 14 million gallons per day (MGD).
- Service to Crosby/BDW Rural Water: A transmission line and reservoir to provide service to the City of Crosby and BDW Rural Water from the R&T Water Commerce Authority.
  - vice to R&T Water Commerce Authority: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Ray. ce to McKenzie County/Watford City: Transmission pipeline, pump stations, reservoirs, and fill depots from Williston to Watford City.
- McKenzie County Water Resource District System IV: Distribution lines and pump stations to provide partial rural water service to western McKenzie County.

### 2013-2015 BIENNIUM REQUESTED FUNDING PACKAGE

The following summarizes the funding package the WAWSA is seeking to complete priority projects during the 2013-2015 Biennium:

Resources Trust Fund (Grant Funding)	\$79,000,000
Loan (Bank of North Dakota)	\$40,000,000
TOTAL 2013-2015 WAWSP FUNDING REQUEST	\$119,000,000

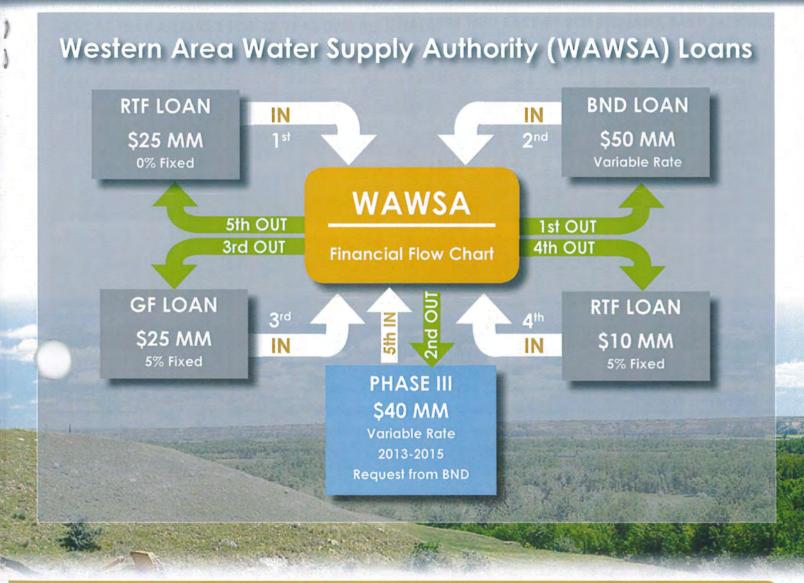
### The following summarizes broad project categories over which WAWSA intends to allocate 2013-2015 Biennium funds:

- Williston WTP Expansion: Expansion of the Williston WTP capacity from 14 to 21 MGD (\$26.3 million, of which \$4.3 million was interim funding from
- Regional Transmission Lines: Regional transmission lines to expand water availability for municipal, rural developments, and rural residences in McKenzie, Williams, Mountrail, Divide, and Burke counties (\$47.4 million).
- Rural Water Distribution Lines: Rural water distribution lines for service connections to rural developments and rural residences in McKenzie, Williams, Mountrail, Divide, and Burke counties (\$45.3 million).

### **FUTURE BIENNIA ANTICIPATED FUNDING**

AL FUTURE BIENNIA WAWSP FUNDING NEEDS (SOURCES TO BE DETERMINED)	\$120,000,000
--	---------------

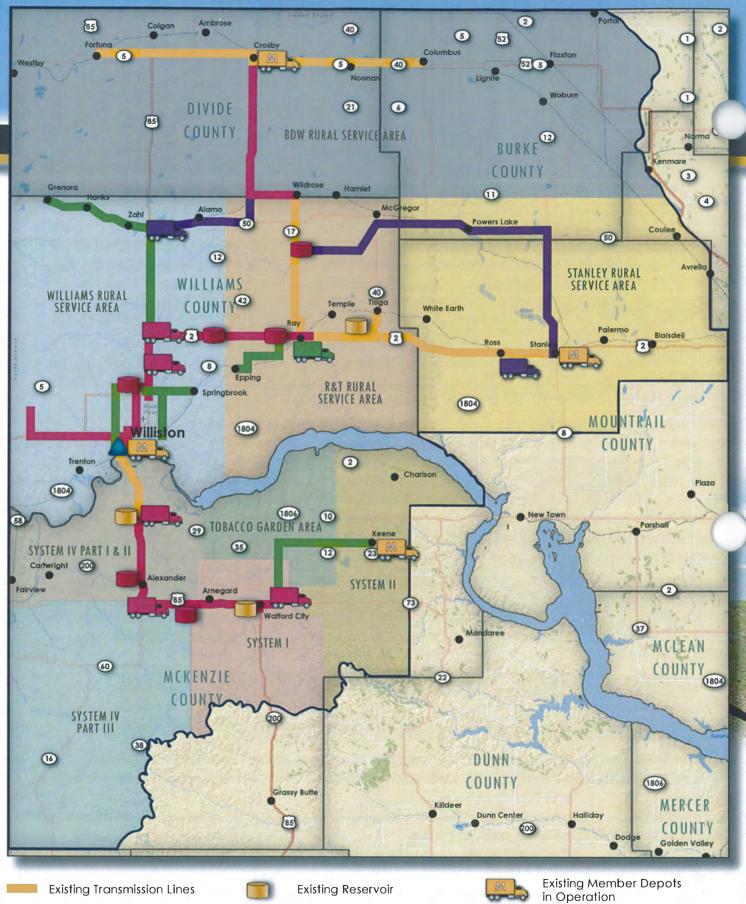
Total Project Funding Estimate as Envisioned to Date: \$349,000,000



## LOAN TERMS AND CONDITIONS

LOAN#	LENDER	LOAN AMOUNT	SCENARIO 1 TERMS	SCENARIO 2 TERMS
Loan #1	State Water Commission	\$25 million	2022 - 2023	2031 - 2036
Loan #2	Bank of North Dakota	\$50 million	2014 - 2017	2014 - 2021
Loan #3	General Fund Loan	\$25 million	2020 - 2021	2021 - 2029
Loan #4	Resources Trust Fund	\$10 million	2021 - 2022	2029 - 2031
Loan #5*	Bank of North Dakota	\$40 million	2017 - 2020	2015 - 2028

<sup>\*</sup> Loan #5: Loan that WAWSA is seeking in 2013-2015 biennium



- **Existing Transmission Lines**
- 2011/2012 Improvements
- 2013/2014 Improvements
- 2015/2016 & Beyond Improvements
- WAWSA Project Boundary Line

- Existing Reservoir
  - 2011/2012 Reservoir

2013/2014 Reservoir

**Improvements** 

WTP/Intake Expansion/

WAWSA Depots in Operation



WAWSA Depots Operational by



Future WAWSA Depots

# BREAK-EVEN ANALYSIS | SCENARIO 1

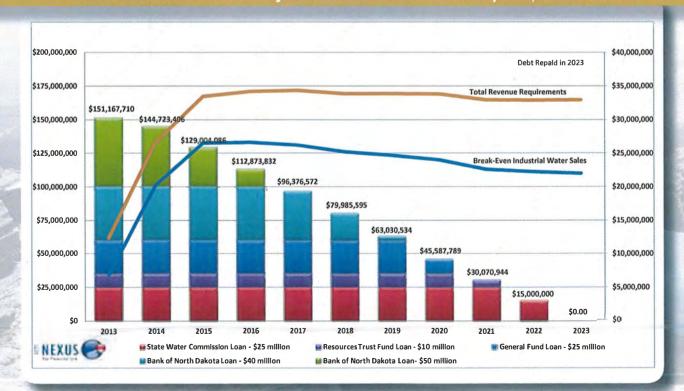
# BREAK-EVEN ANALYSIS | SCENARIO 2

### CRITICAL YEAR ANALYSIS FOR 10-YEAR DEBT REPAYMENT

REVENUE REQUIREMENTS	2015		2016	
Fixed and Variable O&M	\$1,702,002	5.1%	\$1,753,062	5.1%
Member Entity 0&M	\$4,254,622	12.7%	\$4,382,260	12.8%
Last Industrial Reimbursements	\$3,801,742	11.4%	\$3,801,742	11.1%
Debt Service — Existing	\$2,920,388	8.7%	\$2,917,063	8.6%
Debt Service — New	\$20,019,053	59.8%	\$19,780,700	57.9%
Reserve Fund Requirements	\$775,807	2.3%	\$1,529,211	4.5%
Total Revenue Requirements	\$33,473,614	100.0%	\$34,164,038	100.0%
Less: Domestic Water Sales	\$6,965,441		\$7,553,041	
Less: Interest Income	\$100		\$100	
Break-Even Industrial Water Sales	\$26,508,073		\$26,610,897	
Required Volume (Barrels)	31,557,229		31,679,639	

Break-Even Frac Requirements		
Required Fracs @ 60,000 barrels/frac	526 per year	528 per year
Required Fracs @ 80,000 barrels/frac	394 per year	396 per year
Required Fracs @ 100,000 barrels/frac	316 per year	317 per year

## Loan Balances and Projected Break-Even Analysis | Scenario 1



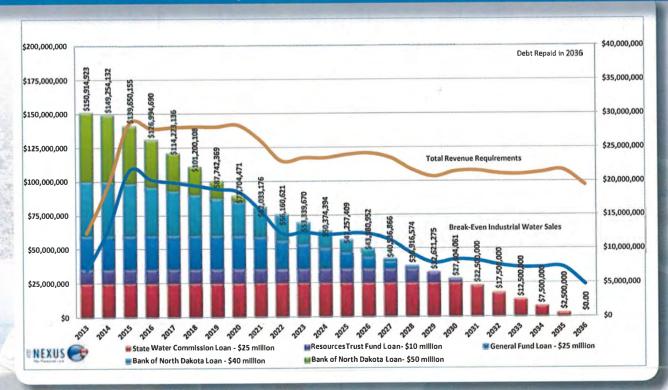
### CRITICAL YEAR ANALYSIS FOR 23-YEAR DEBT REPAYMENT

BI	u	P	
0,	u		

REVENUE REQUIREMENTS	2015		2016	
Fixed and Variable O&M	\$1,702,002	6.0%	\$1,753,062	6.3%
Member Entity 0&M	\$4,254,622	14.9%	\$4,382,260	15.8%
Last Industrial Reimbursements	\$3,801,742	13.3%	\$3,801,742	13.7%
Debt Service — Existing	\$2,920,388	10.2%	\$2,917,063	10.5%
Debt Service — New	\$15,374,646	53.9%	\$14,340,344	51.6%
Reserve Fund Requirements	\$491,136	1.7%	\$584,297	2.1%
Total Revenue Requirements	\$28,544,535	100.0%	\$27,778,768	100.0%
Less: Domestic Water Sales	\$6,965,441		\$7,553,041	
Less: Interest Income	\$100		\$100	
Break-Even Industrial Water Sales	\$21,578,994		\$20,225,627	
Required Volume (Barrels)	25,689,279		24,078,128	

reak-Even Frac Requirements		
equired Fracs @ 60,000 barrels/frac	428 per year	401 per year
Required Fracs @ 80,000 barrels/frac	321 per year	301 per year
Required Fracs @ 100,000 barrels/frac	257 per year	241 per year

# Loan Balances and Projected Break-Even Analysis | Scenario 2



# 2013 BUSINESS PLAN UPDATE EXECUTIVE SUMMARY

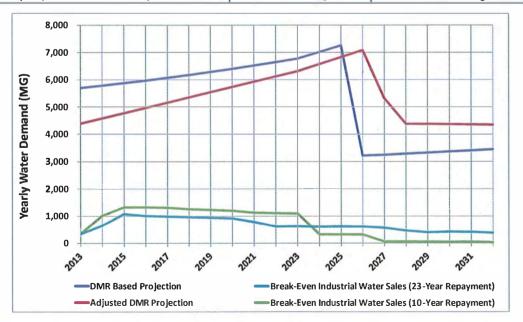
DIBARY

### PROJECTED WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS

Industrial water demand plays a critical role in the success of the WAWSP. In an attempt to quantify this demand, AE2S met with the Department of Mineral Recourses (DMR) and the North Dakota State Water Commission (NDSWC) to discuss the key variables associated with projecting industrial water demand. Through continued discussion with the DMR, NDSWC, and industrial water users, AE2S developed a list of key variables associated with industrial water demand and their corresponding values displayed in the table below. The two industrial demand projections used were: 1) DMR based projection – based on the information provided by the DMR and NDSWC, and 2) Adjusted DMR – based on the DMR projection but modified for current rig count, a more conservative frac flow per well, and adjusted for average maintenance flow for all wells over time in the service area. The two projections are displayed graphically along with the 10- and 23-year repayment scenarios to provide an overview of the total industrial water demand within the WAWSA service area compared to the break-even industrial water sales.

#### WAWSA SERVICE AREA INDUSTRIAL WATER DEMANDS VARIABLES

VARIABLE	DMR Projection	Adjusted DMR
Rig Count (#)	126	115
Rig Production (wells/rig/yr)	12	12
Total Future Wells (#)	19,780	19,780
Existing Wells (#)	3,613	3,613
Wells Requiring Maintenance Flow (%)	60 increasing to 100%	60 increasing to 100%
Average Well Production Period (years)	45	45
Maintenance Flow (barrels/well/day)	12.5	20 dropping to 10
Fresh Water Required Per Frac (barrels/well)	80,000	60,000
Recycle (% of fresh water frac)	0 increasing to 20%	0 increasing to 20%





Faret Wirtz #2

