

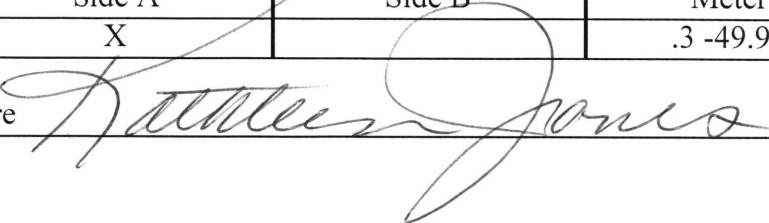
1999 HOUSE APPROPRIATIONS

HB 1476

1999 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. House Bill 1476

House Appropriations Committee
Hearing Date January 26, 1999

Tape Number	Side A	Side B	Meter #
ONE	X		.3 -49.9
Committee Clerk Signature 			

Minutes:

A BILL for an ACT to amend and reenact section 6-90.13-03 of the North Dakota Century Code, relating to agricultural loans; and to provide an appropriation.

1A: Chairman Dalrymple called the hearing on HB 1476.

1A: Eric Hardmeyer, Senior Vice President of the Bank of North Dakota, expressed the concept of expanding the AG PACE program to allow for the initial investment for irrigation projects and for the purchase of equity shares in value-added agricultural enterprises. (Note enclosed testimony.)

1A: Dennis Hill, Executive Vice President of the ND REC's outlined six objectives to assist in implement an aggressive plan for increasing research and emerging crops, livestock and appropriate new technology. Note enclosed testimony.

1A: David Kohler of the North Dakota Irrigation Caucus spoke in support of HB 1476. Note enclosed testimony.

The hearing on HB 1476 was closed.

(The tape for this hearing did not record at all. These are taken from brief note.- Kathleen Jones)

1999 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. 1476

House Appropriations Committee

Conference Committee

Hearing Date 2/8/99

Tape Number	Side A	Side B	Meter #
2	x		36.0-53.3
Committee Clerk Signature <i>Kevin Kaack</i>			

Minutes:

(35.7) Chairman Dalrymple called the meeting on HB 1476 into order in the Roughrider Room.

(36.0) Amendment 90733.0101 was introduced.

(46.7) Rep. Delzer wished for some technical amendments to be added onto HB 1476, which were adopted, along with 90733.0101

HB 1476 was acted on as a DO PASS AS AMENDED motion.

Date: 2/18/99
 Roll Call Vote #: 1

1999 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 1476

House _____ Committee _____

Subcommittee on _____

or

Conference Committee

Legislative Council Amendment Number _____

Action Taken _____

Motion Made By Byerly Seconded By Monson

Representatives	Yes	No	Representatives	Yes	No
Chairman Dalrymple			Nichols		
Vice-Chairman Byerly			Poolman		
Aarsvold			Svedjan		
Bernstein			Timm		
Boehm			Tollefson		
Carlson			Wentz		
Carlisle					
Delzer					
Gulleson					
Hoffner					
Huether					
Kerzman					
Lloyd					
Monson					

Total (Yes) 20 *Click here to type Yes Vote* No 0 *Click here to type No Vote*

Absent _____

Floor Assignment *Click here to type Floor Assignment*

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

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1476

Page 1, line 17, replace "\$2,000,000" with "\$1,000,000"

Page 1, line 18, replace "Bank of North Dakota" with "agriculture partnership in assisting community expansion fund established by section 6-09.13-04" and replace "making" with "buying down interest on"

Renumber accordingly

STATEMENT OF PURPOSE OF AMENDMENT:

DEPARTMENT 471 - BANK OF NORTH DAKOTA

HOUSE - This amendment reduces from \$2 million to \$1 million the general fund appropriation to the agriculture partnership in assisting community expansion (Ag PACE) fund.

Date: 2/8/99
Roll Call Vote #: 1

1999 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 1476

House _____ Committee _____

Subcommittee on _____
or
 Conference Committee

Legislative Council Amendment Number 90733.0102

Action Taken Do Pass

Motion Made By Dalrymple Seconded By Poolman

Representatives	Yes	No	Representatives	Yes	No
Chairman Dalrymple			Nichols		
Vice-Chairman Byerly			Poolman		
Aarsvold			Svedjan		
Bernstein			Timm		
Boehm			Tollefson		
Carlson			Wentz		
Carlisle					
Delzer					
Gulleson					
Hoffner					
Huether					
Kerzman					
Lloyd					
Monson					

Total (Yes) 20 *Click here to type Yes Vote* No *Click here to type No Vote* 0

Absent _____

Floor Assignment *Click here to type Floor Assignment*

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

Date:
Roll Call Vote #:

1999 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 1476

House _____ Committee _____

Subcommittee on _____

or

Conference Committee

Legislative Council Amendment Number _____

Action Taken Do Pass As Amended

Motion Made By Wentz Seconded By Nichols

Representatives	Yes	No	Representatives	Yes	No
Chairman Dalrymple	X		Nichols	X	
Vice-Chairman Byerly	X		Poolman	X	
Aarsvold	X		Svedjan	X	
Bernstein		X	Timm	X	
Boehm		X	Tollefson	X	
Carlson		X	Wentz	X	
Carlisle	X				
Delzer		X			
Gulleson	X				
Hoffner	X				
Huether	X				
Kerzman	X				
Lloyd	X				
Monson	X				

Total (Yes) 16 *Click here to type Yes Vote* No 4 *Click here to type No Vote*

Absent 0

Floor Assignment Click here to type Floor Assignment Wentz

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

REPORT OF STANDING COMMITTEE

HB 1476, as engrossed: Appropriations Committee (Rep. Dalrymple, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (16 YEAS, 4 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1476 was placed on the Sixth order on the calendar.

Page 1, line 18, replace "Bank of North Dakota" with "agriculture partnership in assisting community expansion fund established by section 6-09.13-04" and replace "making" with "buying down interest on"

Renumber accordingly

1999 SENATE APPROPRIATIONS

HB 1476

1999 SENATE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. HB1476

Senate Appropriations Committee

Conference Committee

Hearing Date March 4, 1999

Tape Number	Side A	Side B	Meter #
3	X		31-1300
4/1/99 1	X		3897-4305
Committee Clerk Signature <i>Kathy C. Kottelerock</i>			

Minutes:

SENATOR NETHING: Opened the hearing on HB1476; A BILL FOR AN ACT TO AMEND AND REENACT SECTION 6-09.13-03 OF THE NORTH DAKOTA CENTURY CODE, RELATING TO AGRICULTURAL LOANS; AND TO PROVIDE AN APPROPRIATION.

JACK DALRYMPLE: Representative from District 22, to testify in support of HB1476 (tape 3, side A, meter 31-590). I would like to give you a few comments about HB1476. The gist of the bill is in section 1 and it is language that is needed to support the Governor's new initiative in the area of Ag PACE. Ag PACE is now being contemplated to expand substantially beyond its original scope. Originally we had language talking about investment by farmers in nontraditional enterprises that related to their farm operation and the loan levels were in the \$5000 to \$10,000 dollar range usually in the nontraditional livestock or something in that nature. The Governor now has envisioned a much different program that would give farmers an opportunity to invest in larger enterprises, such as value added agricultural enterprises, that also initial investments in irrigation as a diversification for their farm. So I think in section 1, we need to clarify the language that those types of investments in irrigation or in the purchase of shares in a value added enterprise are allowable under the program. Section 2 adds an additional \$1 million dollars to Ag PACE and I think that is simply with the thought that the \$1.5 million provided in the Governor's budget is very nice and is quite a bit more than we had in that program but with the expanded scope of this project it is still far below what we ought to have available for this type of project. If we could get that funding up in the \$2 million dollar range, as I understand it, we might be able to buy down interest on a couple of hundred loans each of which could be up to an allowable maximum of a \$100,000. The interest rate on that loan would be 2 ½%. That is enough of an incentive to give an operator a reason to invest in irrigation perhaps for the first time. It is an incentive to get seriously involved in the construction of a value added enterprise and I think that those kinds of incentives will require some money. The interest buy down is a big part of making that happen. Section 3, is the appropriation you may

have heard about before in connection with the water commission budget, \$75,000 for the purpose of a strategic plan for irrigation in North Dakota. This is coming out primarily from the high value irrigated task force but it certainly is going to be appropriate statewide for the area north of Bismarck-Mandan or the Jamestown area. All of the places where irrigation is ready to expand. In regard to section 3, just for your information I think that the water folks would just as soon see that appropriation as part of the water commission budget. And that can certainly be accommodated if you would choose to do that. Section 4 is one of the ideas that came out of the commission on the future of agriculture dealing with the identification of brands or preserved identity for North Dakota produced products. Those ideas range all the way up to national branding of food products and what not. Personally I was never able to quite get a grip on how we would begin to go down that road with a reasonable financial commitment. But I think that section 4 is the first step in doing that. I think we need to put some money into developing our own premium standards for North Dakota commodities and for North Dakota produced products. Giving an example of that so you can get an idea what I am talking about, in the area of edible beans there is a tremendous demand in the international marketplace for pinto beans that have a high content of zinc. We are not doing anything at this point to really exploit that opportunity. We could very easily develop a standard in North Dakota called North Dakota Certified High Zinc Pinto Beans and that standard could become recognized world wide for having a laboratory test that determines those beans meet a particular criteria. That is a simple example of what we could do in virtually every commodity that we have and those of you in the West for many years have talked about a premium hard red spring wheat that is high test weight and high protein that could be identified by class. So the start to going down that road, in my opinion, is to put \$50,000 in the experimentation station let them work with the commodity groups and develop these standards and then give us some ideas on how to best utilize them. Mr. Chairman that is basically the purpose of the bill. Any questions.

SENATOR NETHING: You sent the bill over with the \$1M in Section 2 and you want us to add another \$1M.

JACK DALRYMPLE: Nice idea but, no, the bill was introduced with \$2M, was reduced by the House to \$1M. I would like to emphasize that we believe that section 1 is needed in any case.

SENATOR BOWMAN: Is this new money or is this in the budget.

JACK DALRYMPLE: This is all new money.

SENATOR KRAUTER: To clarify that, there is currently funding for in the Governor's budget for Ag PACE, this is a additional money, correct?

JACK DALRYMPLE: That is correct. The Governor's budget contains \$1.5M.

SENATOR TOMAC: I appreciate Representative Dalrymple's testimony in bringing these 4 sections, specifically sections 3 and 4. Both were killed by the Senate on straight up and down votes and so maybe we just need another stab at it to convince the Senators to do it this time.

JACK DALRYMPLE: These are two things that I think will work and that is why they are in the bill.

SENATOR WANZEK: Senator from District 29 to testify in support of HB1476 (tape 3, side A, meter 772-996). I wanted to comment in particular on the Ag PACE program and concept. In our area, irrigation has seriously had an impact maybe not in the immediate area although the plant that processes a lot of the production of irrigation is there and that definitely has had an impact. I personally have seen impact not just to the people that are developing the irrigation directly but also indirectly. There are a number of farmers who have found additional employment besides their own farm production in hauling and with helping with potato line and in providing different services for potato production. It is a high value crop that generates a lot of dollars that are in the community and Ag PACE can be used in this bill. It is intended to expand the use for irrigation. On another note, I have got to be honest and I've personally utilized Ag PACE. We worked with our local bank, Norwest, we accessed an Ag PACE loan. We developed a seed plant mainly for the purposes of processing, bagging, cleaning pinto beans, dry edible beans. We are working with a marketing outfit, an export marketing outfit, which is based out of the Minneapolis area as we speak. They are talking about a marketing agreement and potentially bringing some production from Aberdeen up to our farm where we would process bringing new business into town. The whole point being this program works very well, you can go to your local bank and participate with them and actually generate some new wealth and some new added value to the farm. I know the resources are tight, I know that in the past we have had a limit of a lot less dollars. I will leave it up to your wisdom as to what that figure can be but, I think it is very worthwhile program.

ERIC HARDMEYER: Senior Vice President of the Bank of North Dakota to testify in support of HB1476 (testimony attached (tape 3, side A, meter 1036-1230).

SENATOR NETHING: As I look at this, is there a reason we just don't put this at the Bank of North Dakota, out of your funds instead of general funds. Is the other Ag PACE money used the same way, is that general fund.

ERIC HARDMEYER: Yes, that's a general fund to the fund itself. This would be the same mechanism.

SENATOR NETHING: Closed the hearing on HB1476.

=====
4/1/99 **Tape 1, Side A, Meter 3897-4305**

SENATOR NETHING: Opened the hearing on HB1476.

SENATOR NETHING: Called for the motion on HB1476.

SENATOR GRINDBERG: Motioned a Do Not Pass on HB1476.

Page 4
Senate Appropriations Committee
Bill/Resolution Number HB1476.lwp
Hearing Date March 4, 1999

SENATOR KRINGSTAD: Seconded the motion.

ROLL CALL: 10 YEAS, 4 NAYS, 0 ABSENT & NOT VOTING.

Yeas: Nething, Naaden, Solberg, Tallackson, St. Aubyn, Grindberg, Holmberg, Kringstad,
Bowman, Andrist.

Nays: Lindaas, Tomac, Robinson, Krauter.

CARRIER: SENATOR GRINDBERG

SENATOR NETHING: Closed the hearing on HB1476.

Date: 4-1-99
 Roll Call Vote #: 1

1999 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. Reengrossed HB1476

Senate APPROPRIATIONS Committee

Subcommittee on _____
 or
 Conference Committee

Legislative Council Amendment Number _____

Action Taken Do Not Pass

Motion Made By Senator Grindberg Seconded By Senator Kringstad

Senators	Yes	No	Senators	Yes	No
Senator Nething, Chairman	✓				
Senator Naaden, Vice Chairman	✓				
Senator Solberg	✓				
Senator Lindaas		✓			
Senator Tallackson	✓				
Senator Tomac		✓			
Senator Robinson		✓			
Senator Krauter		✓			
Senator St. Aubyn	✓				
Senator Grindberg	✓				
Senator Holmberg	✓				
Senator Kringstad	✓				
Senator Bowman	✓				
Senator Andrist	✓				

Total (Yes) 10 No 4

Absent 0

Floor Assignment Senator Grindberg

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

REPORT OF STANDING COMMITTEE (410)
April 1, 1999 12:43 p.m.

Module No: SR-59-6223
Carrier: Grindberg
Insert LC: . Title: .

REPORT OF STANDING COMMITTEE

HB 1476, as reengrossed: Appropriations Committee (Sen. Nething, Chairman)
recommends **DO NOT PASS** (10 YEAS, 4 NAYS, 0 ABSENT AND NOT VOTING).
Reengrossed HB 1476 was placed on the Fourteenth order on the calendar.

1999 TESTIMONY

HB 1476

TESTIMONY TO THE
HOUSE APPROPRIATION COMMITTEE
HOUSE BILL NO. 1476
ERIC HARDMEYER - BANK OF NORTH DAKOTA

The Bank of North Dakota supports House Bill no. 1476 which amends Section 6-09.13-03 and expands the eligible uses of the AG PACE program to allow for the initial investment for irrigation projects and for the purchase of equity shares in value-added agriculture enterprises. It also appropriates \$2 million to buydown the interest on loans made for specific eligible uses.

To move agriculture forward in North Dakota we will need to do the following: 1) increase value-added agriculture processing and 2) diversify and increase the value of agriculture production. With regard to the first objective listed, there have been recent successes with Dakota Growers pasta, North American Bison Cooperative, Agrow Oils, and others. North Dakota farmers who are part of these ventures are moving up the production chain and by so doing, are retaining a larger part of the economic pie. This bill will allow more farmers and ranchers the ability to purchase equity shares in a value added processing facility through the use of a low interest loan program, AG PACE.

Relating to the second objective, a recent article in AG Week stated that North Dakota could soon see an increase in the amount of irrigated farmland by 30% to about 300,000 acres. It also states that North Dakota would be able sustain farmland irrigation of about 600,000 acres a year either with the Missouri River or through groundwater development. Additionally, the article states, "Agricultural diversification is feeding the thirst for irrigation. Farmers are attracted to irrigation by the lure of high-value crops and value-added agriculture, such as agricultural processing plants." An example cited indicates that irrigated potatoes could show net cash flow of about \$392 an acre in western North Dakota and \$490 in central North Dakota compared to net cash flow of \$6 to \$19 an acre for non-irrigated wheat. This bill will provide another alternative to aid in North Dakota's advancement of irrigation.

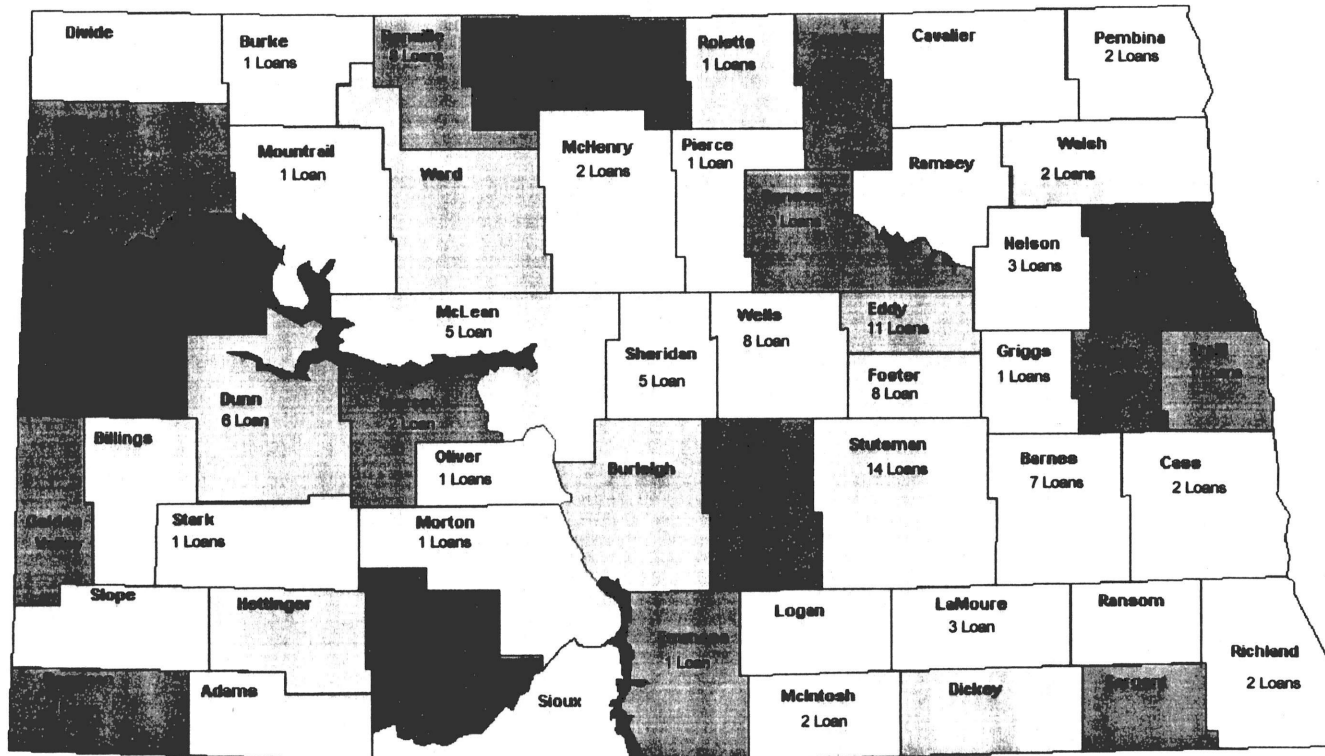
The eligible use changes to this program and the appropriation are positive steps towards helping farmers and ranchers diversify their operations. The Bank of North Dakota recommends that you approve this bill.

AG PACE LOAN PROGRAM

	<u>FUNDED LOANS</u>	<u>COMMITTED LOANS</u>	<u>TOTAL LOANS</u>
NUMBER	143	0	143
AMOUNT	\$ 7,311,755	\$ 0	\$ 7,311,755
BUYDOWN	\$ 1,866,664	\$ 0	\$ 1,866,664

1997-1999 Biennium Buydown Fund	
Total Available Funds	\$ 487,248
Buydown Funds - Funded/Committed Loans	\$ 125,878
Remaining Buydown Funds	\$ 361,370

COUNTIES WHICH HAVE PARTICIPATED IN THE AG PACE PROGRAM



This graph depicts loan activity in the AG PACE Loan Program from its inception on July 1, 1991 to December 31, 1998

NOTE: Each AG PACE loan represents the creation of a new-farm business or the expansion of an on-farm business (non-traditional agriculture).

Testimony
by Dennis Hill, Executive Vice President
of North Dakota Association of Rural Electric Cooperatives
January 26, 1999

My name is Dennis Hill and I am Executive Vice President of the North Dakota Association of Rural Electric Cooperatives. I serve as a member of the Steering Committee of the Commission on the Future of Agriculture. More than a year ago when we embarked on the path that led to the Commission Report, I had no idea what a comprehensive document it would turn out to be. It represents the best thoughts of more than 1,000 North Dakota residents. These ordinary citizens who participated in the process, and tried to envision just what the future of agriculture should be. After many public meeting and much give-and-take there emerged five goals, 27 objectives, and 54 action items that participants felt needed to be implemented to ensure a solid future for agriculture in our state. I want to focus on just one goal today, goal three, which is to diversify and increase the value of agricultural production. House Bills 1419 and 1476 contain several objectives of goal three.

Let me quickly outline the six objectives in goal three. Objective one is to develop and implement an aggressive plan for increasing animal agriculture within the state. Objective two is to focus research on new and emerging crops, livestock species, and appropriate technology that is suitable for production and processing of food, fiber, energy, and other industrial products. Objective three is to retain the ownership and control of production agriculture in the hands of family farms. Objective four is to reduce transportation costs for North Dakota agricultural commodities and food products. Objective five is to create and implement an aggressive plan to develop and conserve water resources within the state. Objective six is to establish an agricultural marketing web site to link buyers and sellers of North Dakota produced and processed commodities and products.

If there has been any bright spot in agriculture in recent years, it is the many successful efforts by farmers to expand their influence in the marketplace. That quest to gain and retain more control over their production and more money for their bottom line has led to an explosion of value-added cooperatives in our state. While farmers have been successful at the cooperatives that they have created, they realized that they would not be successful in the future if they just keep reinventing the wheel. There are only so many pasta plants necessary to capture the available market share and still return a profit. With bulk commodity prices at record low levels, it's becoming more apparent that the value of agricultural production needs to be increased. In view of these challenges and with this background, the Commission strongly endorses the legislative initiatives that are designed to focus research on new and emerging crops, livestock species and appropriate new technology. Equally as important is research that increases cost, like the proposed study that decreases transportation cost or increases efficiency, is movement in the right direction. Efforts aimed at increasing profits, like strategic planning for irrigation, is movement in the right direction. Adding marketing options, like a user-friendly web site, these are all movements in the right direction. We in the Commission on the Future of Agriculture give our whole-hearted support to the bills that you are hearing this morning. We want to become the trusted provider of the highest-quality food in the world. We want prosperous family farms, thriving rural communities and world-class stewardship of our natural resources. We believe that we need to start on that path to a strong, vibrant, health and prosperous agriculture in North Dakota today.

Thank you.

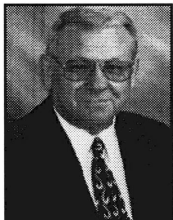
Irrigation

Building and Diversifying North Dakota's Economy



Herb Grenz, Linton
Horsehead Irrigation Project
North Dakota Irrigation Caucus
Chairman

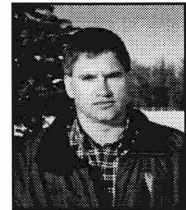
“There is no question that irrigation provides tremendous economic development. It is a bright spot for North Dakota farmers. The North Dakota Irrigation Caucus intends to be a vigorous advocate for irrigators and irrigation projects in North Dakota. If irrigation is to reach its potential, we must work together and be united.”



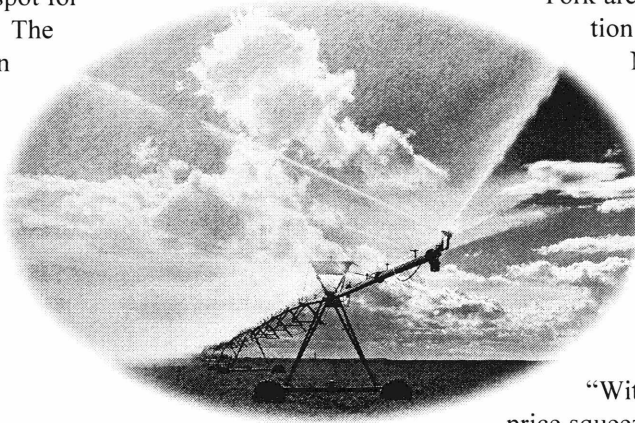
Maynard Helgaas
Midwest
Agri-Development
Corporation
Chairman

“Irrigation development requires the introduction of a high-value crop to the area and generally requires manufacturing processing or a process of adding value to the production before it leaves the area and the state. For this reason, it is an opportunity and a need for irrigation districts and economic development entities within those communities to form regional development teams to bring these high-value crops to the area.”

Bill Van Ray, Pettibone, Farmer
Central Dakota Irrigation District



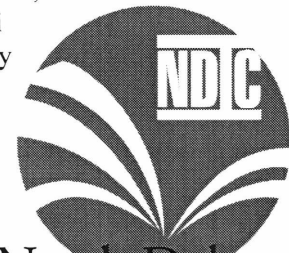
“Unlike most rural areas, Kidder County development is intense. CRP land is coming out for production and even absentee landowners living in places like New York are developing their land for irrigation and reinvesting money back into North Dakota.”



Wayne Vance,
Nesson Valley
Farmer
Chairman



“With the present cost-price squeeze relative to growing the traditional small grain crops such as wheat and barley, it is important to North Dakota farmers to have alternative crops from which to choose, especially in semi-arid northwestern North Dakota, where the Missouri River flows right by us.”



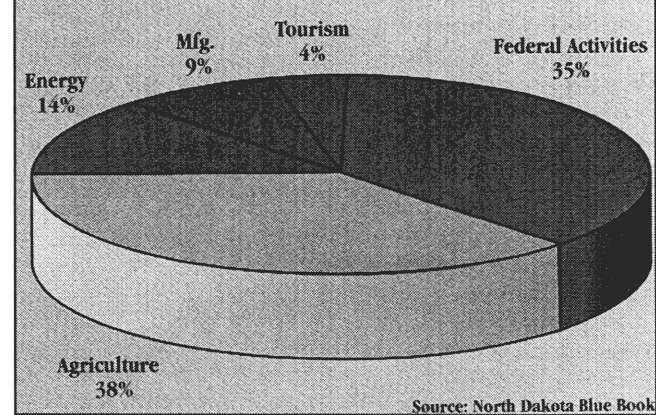
**North Dakota
Irrigation Caucus**

North Dakota Irrigation Caucus
P.O. Box 2254
Bismarck, ND 58502
701-223-4615 (fax) 701-223-4645

North Dakota Agriculture

Agriculture, North Dakota's leading industry, makes up 38 percent of the state's economic base (See Figure 1) and generated more than \$3 billion in revenue in 1997. Ninety percent of the land in North Dakota is in farms, making the state fourth in the nation in percentage of total acres devoted to agriculture and in the percentage of economic base derived from agriculture.

FIGURE 1. NORTH DAKOTA'S ECONOMY IN THE 1990s



Farming in North Dakota

Total Acres	45,200,000
Farms and Ranches	42,900,000
Under Cultivation	27,725,000
-CRP or Fallow	6,500,000
-Crops	21,300,000

Source: ND Ag Statistic Service 1997

North Dakota's main agricultural products are wheat and cattle. With 1950s prices and 1990s costs, living expenses have surpassed net farm income as shown in Figure 2 & 3, making alternative crops grown under irrigation attractive.

FIGURE 2. NET RETURNS PER ACRE FOR WHEAT IN N.D.

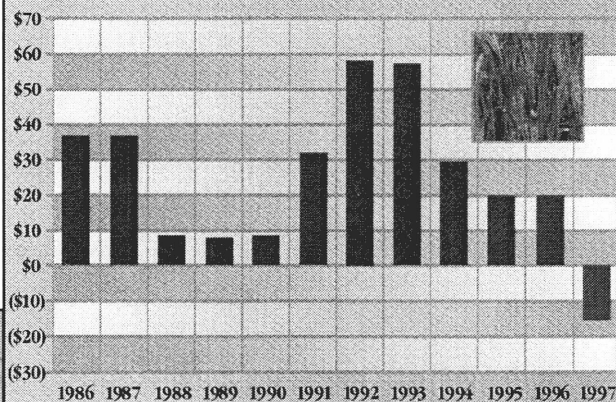
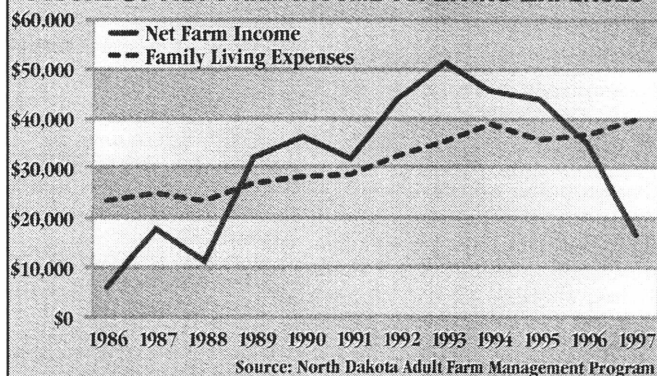


FIGURE 3. NET FARM INCOME VS. LIVING EXPENSES



Current Irrigation

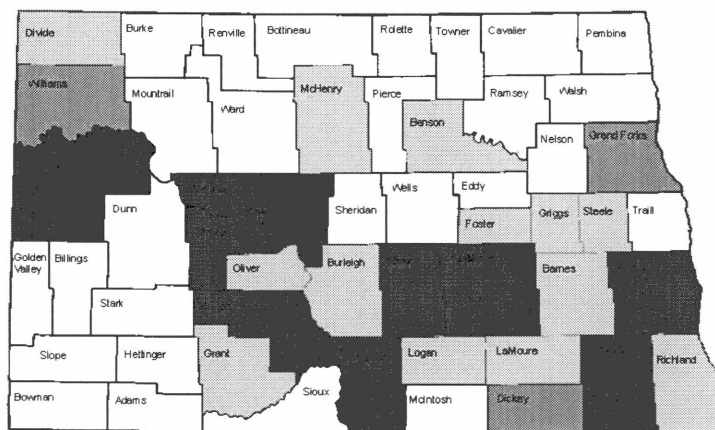
In 1998, about 235,000 acres of crops were irrigated, as shown below. Although irrigated acreage only makes up one percent of the cultivated land in North Dakota, it produces 4.1 percent of the total cash receipts according to information published by the North Dakota Ag Statistics Service (1997).

North Dakota farmers are successfully growing potatoes, carrots, alfalfa, sugarbeets and other specialty crops. Figure 4 shows where irrigation is taking place in North Dakota.

Irrigated Acres in North Dakota	
235,000 acres - 1% of Cultivated Land	
Corn	75,000
Alfalfa and Hay	50,000
Wheat and Barley	35,000
Potatoes	35,000
Dry Beans	24,000
Sugarbeets	16,000

Source: NDSU Ext. Service 1998

Figure 4 Map of Current North Dakota Irrigation



> 20,000 Acres
15,000 - 20,000

7,000 - 15,000
2,000 - 7,000

Source: NDSU Ext. Service 1998

Irrigation Systems

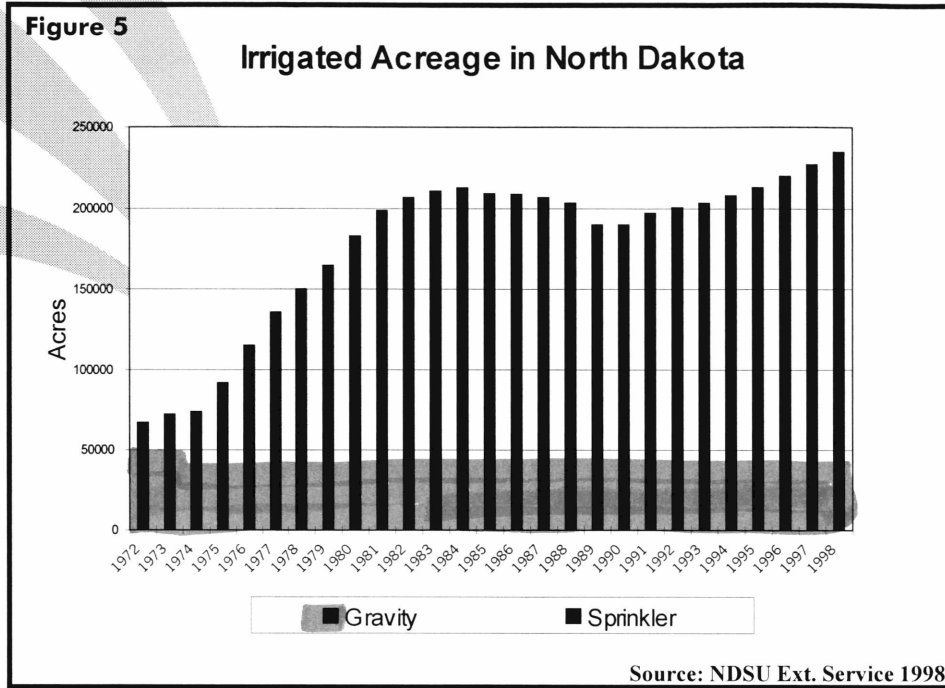
75% Center Pivot Sprinkler Systems

20% Gravity Systems

5% Other Sprinkler Systems

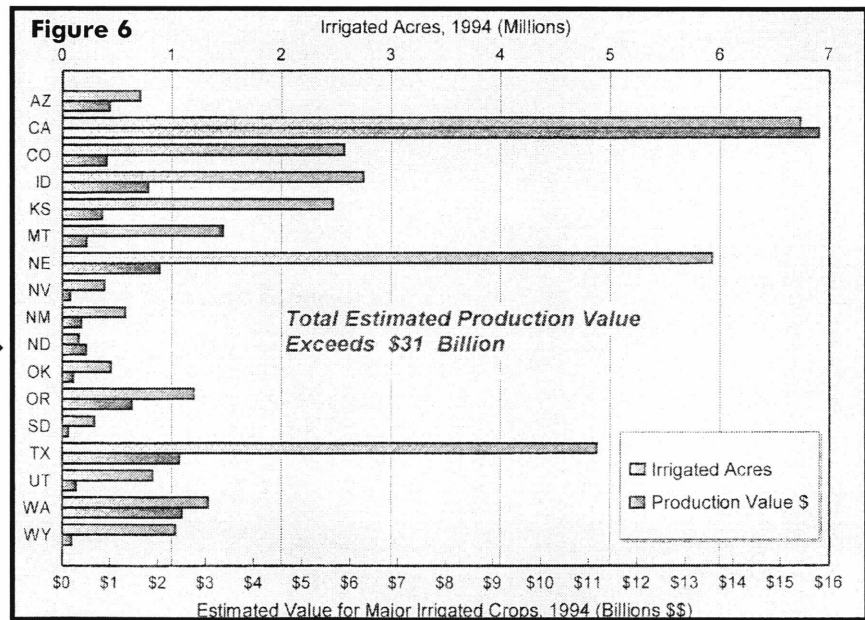
According to Tom Scherer, NDSU Extension Agricultural Engineer, center pivots are the sprinkler systems of choice in areas of good groundwater and irrigable soils. Center pivots are used because of their low labor requirement and adaptability. Practically all irrigation development has been away from the river systems, where irrigation began in North Dakota. However, much of the older irrigated land has experienced conversion of land to new irrigation methods - primarily center pivots.

Figure 5 demonstrates the rate of irrigation development in recent years.



Since 1990, North Dakota has been gaining 5 to 6 thousand acres of new irrigated land every year.

North Dakota has not seen the irrigation development that was envisioned before statehood. **Figure 6** compares North Dakota irrigated acres and production values to other states in the nation.



Economics

In North Dakota it seems only natural that economic prosperity would come from a trade North Dakotans know best – farming. Rudy Radke, NDSU Extension Ag Diversification Specialist, says North Dakota should concentrate on the production of high-value crops and the processing of these crops.

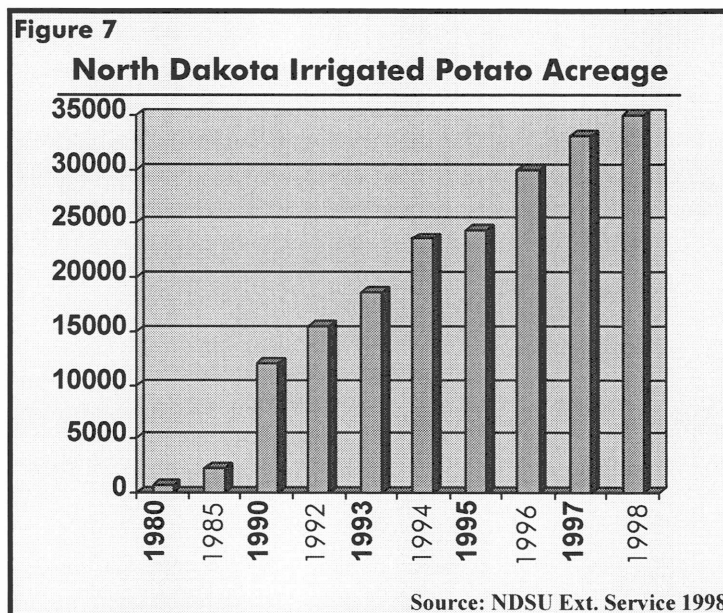
“Farmers in the nation have \$700 billion invested in production agriculture, which produces \$100 billion in value,” Radke said. “Agricultural processors have \$100 billion invested, but produce almost \$200 billion in value. Thus it only makes sense for farmers to get involved in agricultural processing and add value to their production of crops.”

Although irrigation has always been considered an important part of the social and economic development of North Dakota, to date, irrigation development has not been what was anticipated. However, since 1988 interest in irrigation has increased due to several factors:

- * Drought from 1988 to 1990
- * Increase in market demand for processed potatoes, in particular French fries
- * Processors demanding high quality, uniform size potatoes.

Potatoes

Irrigated potato acreage has increased substantially due to market demand as shown in **Figure 7**.



According to Tom Scherer, NDSU Extension Agricultural Engineer, potatoes are a high risk, high economic return crop. Private financing is the standard method of paying for irrigation development in North Dakota. The U.S. government is not involved with financing any of the irrigation expansion currently taking place in North Dakota. The net cash flow for irrigated high value crops such as potatoes is much higher than traditional wheat crops, as shown in **Figure 8**.

Figure 8
Projected 1998 Crop Budgets
NDSU Extension Service

<u>Area of North Dakota</u>	<u>Crop</u>	<u>Net Cash Flow/Acre</u>
North Central	Spring Wheat	\$18.87
South West	Spring Wheat (recrop)	\$7.36
South West	Spring Wheat (fallow)	\$5.65
South Valley	Spring Wheat	\$12.37
Western	Irrigated Potatoes	\$382.29
Central	Irrigated Potatoes	\$489.94

Ag Processing

The increased production of high-value crops is driving the development of new agricultural processing plants in North Dakota. These processing plants want the quality, uniformity and crop stability found only in crops grown under irrigation. Holly Sugar, Simplot, and AVIKO understand the great potential of irrigation development as they plan for future expansion.

AVIKO

AVIKO has contracted 4.6 million hundred weight of potatoes for 1999. This includes 11,000 irrigated acres and 2,000 dry acres, which would produce 240 million pounds of processed potatoes annually. If the AVIKO plant expansion is completed, the plant could process an additional 4.6 million hundred weight of potatoes annually.

Holly Sugar

Predicted expansion of the Holly Sugar operation in nearby Sidney, Montana offers Nesson Valley farmers even more incentive to irrigate crops. The company is planning a two-phase expansion, from 38,800 acres to 47,500 acres in the first phase in 1998 and up to 70,000 acres for the second phase.

Simplot

Simplot contracted nine million hundred weight of potatoes in 1998. This includes 24,000 irrigated acres and 6,000 dry acres, which produced 850 million pounds last year. When the Simplot plant expansion is completed, the plant will produce approximately another million hundred weight.

North Dakota Commission on the Future of Agriculture

In 1997, the Commission on the Future of Agriculture was organized to significantly increase net farm income, improve the quality of rural life, and increase North Dakota's rural population. The Commission's goals include implementing high quality production and value-added processing, diversifying ag production, increasing farm and non-farm cooperation, and creating a favorable political, regulatory, economic, trade, financial, and natural resource environment so we can compete in the global marketplace.

One of the objectives is the development of a strategic plan for economic development through irrigation, to be supported by state funding.

North Dakota State Board of Agricultural Research (SBAR)

The State Board of Agricultural Research (SBAR), formed by the legislature in 1997, recommended initiatives to the legislature concerning ag research. Initiative #20 requests funding for water quality, crop rotation and other irrigation research. Funding requested by SBAR was \$372,800, while the Governor's budget installed \$356,183.

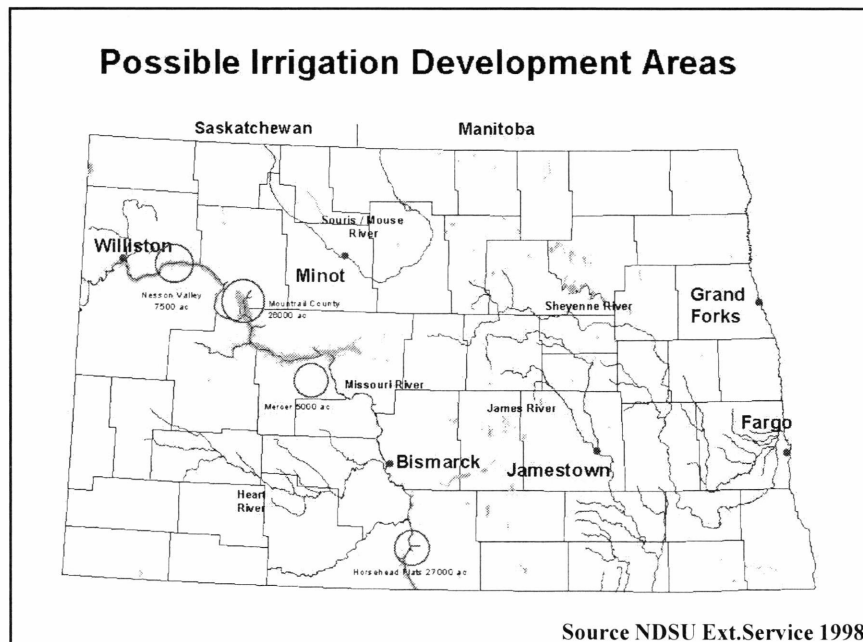
The Irrigated High-Value Crop Production Initiative with efforts in Carrington and Fargo, would help producers choose crops that work best under irrigation and develop management techniques that make the most of the investment in irrigation equipment.

Potential Areas for Irrigation Development

Tom Scherer, NDSU Agricultural Engineer, has done substantial research on the potential areas for irrigation development. He has found that North Dakota could sustainably irrigate a total of 600,000 acres each year with Missouri River and groundwater development. This would still only be 2.5 percent of the cultivated land, but this irrigated land could add over 15 percent to the total crop cash receipts in the state. As envisioned by the optimistic delegates to the constitutional convention of 1889, this could have a significant impact on the North Dakota's economy and people.

Ironically, much of the potential irrigation development is located along the Missouri River – just like the early irrigation development in North Dakota. Some of the potential areas where this development could take place within the Missouri River Basin are the Turtle Lake Water Management Area (TLWMA), Elk/Charbonneau, Nesson Flats and Buford-Trenton bench lands (Williams and McKenzie Counties), Horsehead Flats (Emmons County), New Rockford Canal side service (Eddy and Wells Counties), Oliver-Mercer, and perhaps smaller scattered tracts along the McClusky Canal. In addition, the old irrigation districts located along the Lower Yellowstone are exploring irrigation expansion into the bench lands near the existing district boundaries.

In addition, it is estimated that an additional 250,000 acres of land could be sustainably irrigated from identified groundwater resources available in North Dakota.



Irrigation Potential

Potential Irrigation Development Projects North Dakota State Water Commission 1999 State Water Management Plan

<u>Project</u>	<u>County</u>	<u>Cost</u>
Horsehead Irrigation Project	Emmons	\$59,300,000
Mountrail Co. Irrigation Project-Study	Mountrail	\$100,000
Mercer/Oliver Irrigation Project-Study	Mercer/Oliver	Unknown
James River Irrigation Project-Study	Stutsman/LaMoure/Dickey	Unknown
Tobacco Garden Irrigation Project	McKenzie	\$8,000,000
Elk Charbonneau Irrigation Project	McKenzie	\$7,384,000
McKenzie County Long-Term Irrigation Development	McKenzie	\$96,000,000
Charlson Irrigation Project	McKenzie	\$20,000,000
Cartwright Charboneau Irrigation Project	McKenzie	\$14,000,000
Nesson Valley Irrigation	Williams	\$6,500,000
Buford-Trenton Irrigation District Expansion-Phase I	Williams	\$1,500,000
Little Muddy Irrigation Project	Williams	\$20,000,000
Buford-Trenton Irrigation District Expansion-Phase II	Williams	\$1,500,000
Total		\$234,284,000

North Dakota Irrigation Caucus

Mission:

To expand irrigation to build and diversify our economy.

Goals:

1. Secure federal hydropower for irrigation projects
2. Federal and state funding for irrigation development
3. Favorable financing programs for irrigation development
4. Legislative and regulatory improvement
5. Ag processing and marketing
6. Education
7. Research

Board:

Representatives of irrigation districts, projects and areas will serve as the Board of Directors. Advisory members will include NDSU irrigation specialists, economic development, irrigation dealers and suppliers, and others.

Membership:

Individual Member - \$45

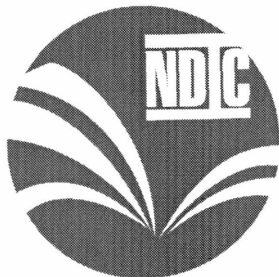
For any individual irrigator or person.

Irrigation Member - \$245 (Irrigation Districts - \$100 per 1,000 acres)

For any business, company, organization, agency, irrigation district, or other entity which supports and is dependent on or has a significant stake in irrigation in North Dakota. For irrigation districts, membership is \$100 for each 1,000 acres of irrigation.

Sustaining - \$1,200

For any business, company, organization, agency, or other entity which supports and is dependent on irrigation.



North Dakota Irrigation Caucus
P.O. Box 2254
Bismarck, ND 58502
701-223-4615 (fax) 701-223-4645

TESTIMONY TO THE
SENATE APPROPRIATION COMMITTEE
HOUSE BILL NO. 1476
ERIC HARDMEYER - BANK OF NORTH DAKOTA

The Bank of North Dakota supports House Bill no. 1476 which amends Section 6-09.13-03 and expands the eligible uses of the AG PACE program to allow for the initial investment for irrigation projects and for the purchase of equity shares in value-added agriculture enterprises. It also appropriates \$1 million to buydown the interest on loans made for specific eligible uses.

To move agriculture forward in North Dakota following must occur: 1) increase value-added agriculture processing and 2) diversify and increase the value of agriculture production. With regard to the first objective listed, there have been successes with American Crystal Sugar and more recently Dakota Growers Pasta, and the North American Bison Cooperative. North Dakota farmers who are part of these ventures are moving up the production chain and by so doing, are retaining a larger part of the economic pie. This bill will allow more farmers and ranchers the ability to purchase equity shares in a value added processing facility through the use of a low interest loan program, AG PACE.

Relating to the second objective, a recent article in AG Week stated that North Dakota could soon see an increase in the amount of irrigated farmland by 30% to about 300,000 acres. It also states that North Dakota would be able sustain farmland irrigation of about 600,000 acres a year either with the Missouri River or through groundwater development. Additionally, the article states, "Agricultural diversification is feeding the thirst for irrigation. Farmers are attracted to irrigation by the lure of high-value crops and value-added agriculture, such as agricultural processing plants." An example cited indicates that irrigated potatoes could show net cash flow of about \$392 an acre in western North Dakota and \$490 in central North Dakota compared to net cash flow of \$6 to \$19 an acre for non-irrigated wheat. This bill will provide another alternative to aid in North Dakota's advancement of irrigation.

The eligible use changes to this program and the appropriation are positive steps towards helping farmers and ranchers diversify their operations. The Bank of North Dakota recommends that you approve this bill.

Thirsting for growth

■ Irrigation expansion tied to high-value farm crops, value-added agriculture

By Kevin Bonham
Staff Writer

BISMARCK, N.D. — Ladies and gentlemen, start your sprinklers.

The race to irrigate is under way.

North Dakota could increase the amount of farmland under irrigation 30 percent in the next few years — from 235,000 acres to more than 300,000 acres.

While that's a drop in the bucket in terms of total cropland — 235,000 acres is only about 1 percent of the cultivated land in North Dakota — it represents a new splash of interest in irrigation, which was a collective dream of the state's founders more than a century ago.

North Dakota is not alone.

In Montana, Vision 2005, a state development plan, calls increasing irrigation 20 percent, from 2 million acres to 2.5 million acres, by 2005.

Minnesota is seeing slow, but steady growth in irrigation. While the number of farms being irrigated is decreasing, the number of acres is gradually increasing. Officials estimate the state has 370,000 to 380,000 acres under irrigation.

Over the past decade, the state has seen a gradual decrease in the number of farms being irrigated, but an increase in acres under irrigation.

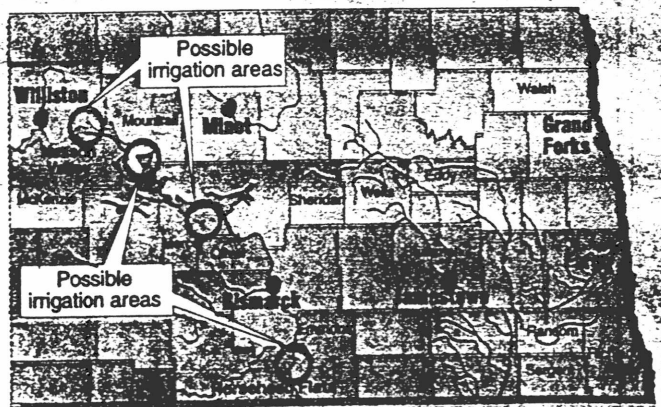
South Dakota, on the other hand, has not seen substantial growth in irrigation development since the drought years of the late 1970s. Although about 750,000 acres were permitted for irrigation in the late 1970s and early 1980s, only about half of that amount has been developed.

Today, officials estimate the state has about 370,000 acres under irrigation, according to Ron Duvall, a natural resources engineer for South Dakota's Department of Environment and Natural Resources.

He says while there have been several

Possible irrigation development areas

The North Dakota Irrigation Caucus has identified four possible irrigation projects to develop over the next few years, all near the Missouri River.



Source: NDSU Extension Service 1998

Agweek graphic

attempts to expand irrigation, public funding has dried up and, at least so far, people interested in development have not been able to raise the necessary money privately.

Need for ag diversification

Agricultural diversification is feeding the thirst for irrigation, according to Mike Dwyer, executive vice president of North Dakota Water Users Association. Farmers are attracted to irrigation by the lure of high-value crops and value-added agriculture, such as agricultural processing plants.

"Irrigation provides some opportunity for diversification," he says. "Wheat can be profitable one year and down the next. With irrigation, you have more options."

Farmland under irrigation in North Dakota is producing a variety of crops. Although the acreage changes from year to year, because of crop rotation practices, here is the breakdown of crops on irrigated acres in 1998, according to the North Dakota State University Extension Service in Fargo:

■ Corn — 75,000 acres.

- Alfalfa and hay — 50,000 acres.
- Wheat and barley — 35,000 acres.
- Potatoes — 35,000 acres.
- Dry beans — 24,000 acres.
- Sugar beets — 16,000 acres.

Carrots, canola and other high-value specialty crops also are being planted on irrigated acres.

A recent irrigation study conducted by NDSU agricultural engineer Tom Scherer found that North Dakota could sustain farmland irrigation of about 600,000 acres a year, either with the Missouri River or through groundwater development.

That, he says, still would be only 2.5 percent of the state's cultivated land. However, that irrigated land could add more than 15 percent of the state's total crop cash receipts.

Most of the state's irrigation development has been away from river systems, according to the study. And the most popular and practical irrigation is through center pivot irrigation systems. Much of the early gravity irrigation in the state is being converted to center pivot systems as well, according to the study.

Although North Dakota's founding fathers envisioned a state filled with irri-



1998 estimated irrigated acres

gated fields of wheat and other crops, it was not until the 1960s that irrigation started to spread across the state.

That growth was slow but steady through the 1970s. Between 1972 and 1990, irrigated acreage in North Dakota grew from about 70,000 to 200,000 in 1981. It then leveled off, and even dropped until 1990, when irrigated acreage totaled about 190,000.

Since then, irrigation acreage has been growing by 5,000 to 6,000 acres a year.

The new interest in irrigation is being sparked by a variety of factors, according to Rudy Radke, North Dakota State University ag diversification specialist. Among the factors are:

- Drought in the state from 1988 to 1990.
- Increase in market demand for processed potatoes, particularly french fries.
- Processors demanding high-quality, uniform-size potatoes.

That helped irrigation acreage grow in the Red River Valley early 1990s, particularly in Walsh and Grand Forks counties in northeastern North Dakota, which produce potatoes for specialty companies such as Simplot and RDO Foods Co. in Grand Forks.

Potato is latest seed

The second wave started in 1996, when AVIKO USA, a Dutch-owned company, opened a potato processing plant in Jamestown, N.D. The company helped to

ANA
1,000

NORTH
DAKOTA
235,000

MINNESOTA
380,000

SOUTH
DAKOTA
370,000

finance much of the irrigation development in east-central North Dakota over the past few years.

The company, based in The Netherlands, currently is producing about 240 million pounds of packaged french fries annually and has been the major force behind the recent increase in irrigation.

The company plans to double its capacity in 2000, to produce 9 million to 9.5 million hundredweight of potatoes and nearly 500 million pounds of frozen packaged French fries annually.

In order to produce that volume, the company expects to have about 26,000 acres of irrigated land under contract by 2000, according to Steve Galbraith, field manager for AVIKO USA.

"We are going to be looking for farmers within a 150-mile radius of the plant to fill those contracts," he says.

At a recent meeting in Bismarck, N.D., Galbraith highlighted the company's expansion:

■ In 1996, the company's first year of production in North Dakota, it contracted 8,000 acres of potatoes, of which 6,000 were irrigated. That year, the plant processed 2.6 million hundredweight of potatoes, producing 140 million pounds of packaged french fries.

■ In 1997, the company's contracted irrigated acres grew to 8,000. The 10,000 total acres reaped 3.8 million hundredweight of potatoes.

■ In 1998, the irrigated acres grew to 11,000, with total production rising to 4.6 million.

The company estimates that irrigated acreage and production will remain steady this year, as the company prepares for expansion in 2000.

Today, 10 counties in central and south-central North Dakota each have more than 20,000 acres of irrigated farmland. They are Cass, Ransom and Sargent counties in the southeastern corner of the state, McKenzie, McLean, Mercer, Morton and Emmons counties in the south-central and western part of the state, and Stutsman County — home of the AVIKO USA plant — and Kidder County, just west of Stutsman.

A Central Dakota Irrigation District in the Pettibone, N.D., area of Stutsman and Kidder County was established in 1997. The district includes 15,000 acres for irrigation, although only slightly more than half of that district has developed irrigation. The district is seeking financing to complete the project.

Most of AVIKO's potatoes come from Stutsman and Kidder counties, although the company has reached as far away as Pierre, S.D., nearly 300 miles away, to find contract growers with irrigation.

Spreading the word

The North Dakota Irrigation Caucus is compiling an informational brochure to il-

lustrate the value of irrigation in North Dakota.

Among the findings of the recent NDSU study is one that shows projected 1998 crop budgets. Irrigated potatoes, according to the projections, could show net cash flow of about \$382 an acre in western North Dakota and \$490 in central North Dakota. That compares with net cash flow for wheat ranging from less than \$6 to \$19 an acre for nonirrigated wheat.

The North Dakota Irrigation Caucus is an outgrowth of the 1997 Commission on the Future of Agriculture. One of the commission's objectives is the development of a strategic plan for economic development through irrigation, to be supported by state funding.

"Farmers in the nation have \$700 billion invested in agriculture, which produces \$100 billion in value," Radke says. "Agricultural processors have \$100 billion invested, but produce almost \$200 billion in value. Thus it only makes sense for farmers to get involved in agricultural processing and add value to their production of crops."

Several other potential irrigation development projects have been identified in the North Dakota State Water Commission's 1999 State Water Management Plan.

The state Water Commission has included \$800,000 for irrigation development in its biennial budget that is currently being reviewed by the North Dakota Legislature, according to Dwyer.

The state Irrigation Caucus has identified four possible irrigation development areas, along with some other development in along the McClusky Canal district in Sheridan, Wells and Eddy counties, as those that could develop within the next couple of years:

■ Horsehead Flats — 27,000 acres are proposed, mostly in the Linton and Strausburg areas of Emmons County. It is an old irrigation district in which irrigation development stalled in the 1970s. Leaders of that group hope to grow potatoes, with corn and beans in a three-year rotation.

■ Mercer-Oliver Joint Irrigation District — 5,000 acres are proposed in the initial plan, although Mercer County already has 8,100 acres and Oliver has 7,700 acres permitted for irrigation. Studies have indicated a potential of 260,000 acres of irrigated acres in Mercer County and 140,000 acres in Oliver County.

■ Mountrail County — 20,000 acres are proposed in southern Mountrail County and nearby areas.

■ Nesson Valley — 7,500 acres are proposed near the confluence of the Yellowstone and Missouri rivers in McKenzie County. The force behind the proposal is a Holly Sugar processing plant in Sidney, Mont. Besides sugar beets, officials have spent the past several months trying to identify crops for rotation. Alfalfa is one leading choice for the three-year rotation.

Montana expansion nearby

The sugar beet processing plant in Sidney also is key to one of Montana's targeted areas of irrigation expansion, according to John Tubbs, chief of the resource development bureau for the state's Department of Natural Resources and Conservation.

The West Crane project is located south of Sidney, Mont., and not far from the Nesson Valley area of North Dakota. There also is some interest in attracting a potato processing plant to that region, either in eastern Montana or western North Dakota.

Tubbs says the 500,000-acre reference in the state's Vision 2000 is not a precise target.

"The goal in general is to take any opportunity possible to expand Montana's agricultural economy," he says. "One of those opportunities is to expand irrigation."

Most of Montana's expanded irrigation likely will be along the Missouri River and Yellowstone River basins. Development will occur, he says, where it is feasible and when it is demand.

That's a lesson agricultural and economic development leaders in North Dakota have taken to heart as well. In recent years, they have helped the value-added processing industry gain a firm foothold in the state.

They understand that while irrigation is part of the formula, although timing is critical.

"Most of the expansion we're seeing now is tied to high-value crops," Dwyer says. "So if you have a market for your crops, the timetable is pretty fast. The market for the crop and the irrigation go hand-in-hand." □

COMMISSIONER OF AGRICULTURE
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State of North Dakota
600 E. Boulevard Ave. Dept. 602
Bismarck, ND 58505-0020

House Bill 1476
4 March 1999
11:15 AM
Harvest Room
Roger Johnson

Testimony before the Senate Appropriations Committee

Mr. Chairman and members of the committee, my name is Roger Johnson and I am the Commissioner of Agriculture for the State of North Dakota. I am appearing today in support of House Bill 1476.

House Bill 1476 has three sections and addresses three issues that could be key segments of a plan to address the future needs of agriculture in this state. Taken together the separate initiatives address to two goals I believe are necessary for the legislature to address if we are to play a role in agriculture's long term recovery. Those goals are (1) to make North Dakota synonymous with high quality, dominating the premium markets and (2) to diversify and increase the value of agricultural production.

Section two would add \$1,000,000 to the agriculture partnership in assisting community expansion fund (Ag PACE). The purpose of Ag PACE is to buy down the interest on loans to first-time investors so that they can extend or vertically integrate their farm enterprises beyond traditional agriculture. With the passage of this bill, an important component will be added to the program. A farmer would be able to have the interest buy down apply to obtaining equity in a value-added processing facility. This money along with that contained in the Governors budget proposal would go along way toward meeting a critical need for farmers to share in the valued-added initiatives that can help to market what they produce.

Section three of the bill address a critical need as farmers seek to intensify agricultural production on their existing land. A strategic plan for irrigation development that looks at all the opportunities and the potential problems before anticipated irrigation development occurs in an area could save a great deal of money not only for farmer investors in irrigation, but also for the infrastructure that supports them. This small investment in planning will return a great deal to the irrigation initiatives that are on the drawing board and in the planning process.

The vision of North Dakota as the highest quality supplier of the world's premium markets requires that those market have total confidence in the standards that are used to determine what they will receive. If buyers are going to pay a premium for quality, they must be assured that the quality is in the product and that that standard of quality will be maintained over time. The modest investment called for in HB 1476 will begin to address this need for premium standards.

Mr. Chairman, members of the Senate Appropriations Committee, I urge you to pass HB 1476 as an investment in the future of agriculture.

I will answer any questions you may have.