

CHRONOLOGY

Late OCTOBER 1996: Early snowfall prompts North Dakota farmers and ranchers to tap into hay and feed supplies six weeks earlier than expected.

NOVEMBER and DECEMBER 1996: Three blizzards strike the state causing limited damages, but temporarily disrupting lives. State and local officials monitor conditions and forecasts. The N.D. State Emergency Operation Plan (SEOP) is implemented to support activities in response to winter emergencies.

JANUARY 1997—

January 11: Governor Ed Schafer issues a disaster declaration for the State of North Dakota as a result of the impending severe winter storms and orders the N.D. National Guard (NDNG) to assist with snow removal efforts. The N.D. Division of Emergency Management (NDDEM), *now known as the N.D. Department of Emergency Services*, issued its first situation report for the Severe Winter Storms.

January 12: President Bill Clinton issues a Presidential Major Disaster Declaration (FEMA-1157-DR-ND) for North Dakota.

Four separate blizzards strike North Dakota causing the interstate and highway system to be closed for extended periods as N.D. Department of Transportation (NDDOT) crews and NDNG work around the clock to open these clogged transportation arteries. Snow removal efforts are periodically suspended due to blizzard conditions.

The Grand Forks and Minot Air Force Bases join snow removal efforts, and Emergency Preparedness Liaison Officers (EPLO) representing the U.S. Navy, U.S. Army and U.S. Air Force report to the State Emergency Operations Center (SEOC) to support disaster operations.

The National Weather Service (NWS) reports the three previous months are the third coldest three-month period on record for North Dakota.

Heavy snow causes the collapse of several retail buildings across North Dakota. The south side of the North Dakota Winter Show building in Valley City also collapsed causing more than \$1 million in damages.

The severe cold causes a municipal water tank in the city of Elgin to freeze resulting in a leak and equipment failure.

Several people have been treated for carbon monoxide poisoning due to snow- and ice-blocked vents in their homes preventing adequate circulation of air. Numerous interstate pile-ups and other traffic accidents occur. Stranded motorists also suffer from exposure and frostbite.

The American Red Cross (ARC) sends a trailer filled with blankets, coats, boots and sweaters as well as 87 cases of donated meat to the food pantry at Standing Rock Sioux Tribe Reservation.

Farmers and ranchers, whose access roads are clogged with snow, struggle to maintain water and seed supplies for livestock. Up to 9,000 animal deaths are reported. The N.D. Game and Fish Department (NDGF) receives 647 reports of deer depredation of livestock feed, costing the agency \$600,000. The Farm Service Agency (FSA) reports the winter storms caused \$5.7 million in damages to buildings and machinery.

A N.D. Department of Agriculture (NDAg) survey indicates that up to 500,000 pounds of milk had been dumped between January 10 through January 19. Grocery stores, particularly those in smaller communities, have extremely low inventories. Snow-blocked roads prevent deliveries.

January 31: During a visit to North Dakota, the U.S. Department of Agriculture (USDA) Deputy Secretary learns that livestock producers sustained more than \$32.7 million in estimated losses since the winter storms began. The Deputy Secretary announces the development of the Foundation Livestock Relief Program to provide assistance for producers affected by the storm. The USDA also approves implementation of the Emergency Feed Grain Donation Program.



FEBRUARY 1997—

February 2: Two people receive minor injuries when a DC-9 spins around and skids off of a slippery runway after landing at Grand Forks International Airport.

The NDNG records 3,272 personnel days from January 13 to February 4. NDNG and U.S. Air Force crews complete 52 snow removal missions; however, snow removal efforts continue with 21 missions still underway. On February 20, the final NDNG snow removal missions end. Snow removal costs for the NDNG exceed \$1.1 million, not including maintenance costs.

Nine of the 11 N.D. University System colleges and universities report they have exceeded snow removal budgets or recorded unexpected expenses because of the severe winter storm disaster.

Estimates by the NDAg indicate state livestock industry has sustained \$32.8 million in direct losses.

February 18: Members of the State Hazard Mitigation Team meet to discuss measures to mitigate damages from the winter storms and those likely to occur if spring flooding takes place. Participants include N.D. Division of Emergency Management (NDDEM), U.S. Army Corps of Engineers (USACE), N.D. Aeronautics Commission (NDAero), N.D. Forest Service (NDFS), N.D. National Guard (NDNG), N.D. Parks and Recreation Department (NDPR), N.D. Department of Transportation (NDDOT), N.D. State Radio Communications (NDSR), N.D. Wing Civil Air Patrol (NDCAP), N.D. Department of Health (NDDoH) and N.D. Game and Fish Department (NDGF).

Governor Schafer requests disaster designations designed to provide federal assistance to North Dakota businesses and asks the USDA Secretary for a secretarial Disaster Declaration for physical and production losses. He also asks for a Governor's Certification from the U.S. Small Business Administration (SBA) for low-interest disaster loans for non-agriculture businesses. SBA issues a Declaration of Economic Injury for 49 North Dakota counties and two SBA representatives set meetings in Bismarck, Jamestown, Fargo, Grand Forks and Wahpeton for North Dakota business owners.

MARCH 1997—

March 6: NDDEM issues its first Situation Report summarizing flood preparedness measures underway by local, state and federal officials. The report outlines efforts to stockpile supplies and prepare equipment and manpower resources for potential floodfight activities. The report also notes the Salvation Army has initiated "Operation – We Care," a toll-free emergency hotline number for volunteers and fund raising.

The District Engineer for the St. Paul District of the USACE conducts a briefing with the Governor, the Adjutant General, State Water Commission (SWC) and NDDEM. On March 24, Governor Schafer signs a Disaster Proclamation declaring a flood disaster exists in Dunn, Grant, Hettinger, Mercer, Morton, Sioux and Stark counties. The Governor also issues an Executive Order allowing for a waiver of dike permit requirements, as long as North Dakotans abide by safety standards when constructing temporary dikes.

NDDEM compiles a list of vendors and construction companies that have dozers and sandbag machines available for use. NDNG constructs a sandbagging machine that will be used to help with floodfight efforts. The machine design includes four spouts capable of filling 1,600 to 2,000 bags per hour.

Flood preparedness efforts continue in eastern North Dakota. Walsh County Highway Department staff and private contractors deliver sand to rural residents. The LaMoure County flood team discusses potential flooding along the James River. NDNG members assist with sandbagging operations in the city of Harwood in Cass County. Extension agents distribute flood fighting information. Pembina County emergency management officials discuss communication response efforts with the Radio Amateur Communications Emergency Services (RACES) coordinator. Volunteers in the city of Cavalier filled nearly 20,000 sandbags.

The city of Grafton Public Works Department begins 24-hour work to clear snow and ice from the city's levees. NDSR provides a radio frequency for dike walkers in Grand Forks County. Volunteers in Red River communities continue sandbagging efforts with Grand Forks volunteers already filling 314,210 sandbags; their goal is 500,000.

March 21: Approximately 200 Hettinger, Mercer, Morton and Sioux County residents are evacuated from their homes as rapid snowmelt causes flooding along the Knife, Cannonball and Heart Rivers and their tributaries. Of those, 175 residents in Beulah are evacuated for 48 hours after the Knife River rose rapidly in eight hours to its evacuation stage. Beulah city and Mercer County officials use front-end loaders and boats to evacuate the few residents who did not leave their homes when warned.

The Cannonball River at Regent, North Dakota rises 12 feet in 24 hours and is expected to crest two feet over its 22-foot flood stage. The river rises 3.5 feet in 24 hours to its 16-foot stage at New England. Ice jams are reported along the Heart and Little Missouri Rivers.

March 25: Floodwaters from the Heart River isolate nine Morton County farm families. Adams County officials report flooding along the Cannonball River destroyed an 80-foot steel truss bridge northeast of Hettinger. By March 26, Cannonball, Heart and Knife Rivers begin to recede as runoff flows toward the Missouri River. Burleigh and Morton County officials monitor an ice-covered Missouri River. The river reaches nearly 12 feet; flood stage in Bismarck is 16 feet. To accommodate the increased river level, the USACE reduces its releases from the Garrison Dam to 4,000 cubic feet per second (cfs), the lowest amount since dam construction.

A Preliminary Damage Assessment (PDA) for individual assistance indicates 211 homes in seven western North Dakota counties were affected by flooding during the March 21-23 weekend. ARC reports expenditures of nearly \$17,000 to help flood victims. The ARC, Salvation Army and community volunteers provide shelter and meals for evacuees and flood fighters.

March 28: NWS issues a Spring Snowmelt Flood Outlook, which still calls for a chance for near-record or above-record flooding in the Red River Basin. The NWS expects Devils Lake to rise to 1,440.5 feet, one-half foot below its record level set in 1830.

March 31: NDNG and NDDOT begin “ice dusting” sites along the Sheyenne and Red rivers in an effort enhance snow melt, reduce the formation of ice jams and improve water flow during the spring melt. The NDNG conducts aerial applications while contractors hired by NDDOT perform ground applications. Health and environmental officials from North Dakota, Canada and Minnesota approved the project after evaluating the environmental impact of ice dusting. The city of Grand Forks provides more than 10,000 sandbags for the effort.

NDNG helicopter crews spray a mixture of water and a dye which has been approved by the U.S. Food and Drug Administration (FDA) on a three-mile stretch of Beaver Creek in Emmons County. The mixture was used to test its effectiveness in preventing or reducing the occurrence of ice jams.

Flood warnings are issued for Apple Creek in Burleigh County and the James River in LaMoure and Dickey Counties. Ice-plugged culverts and snow-filled ditches force the James River out of its banks and onto secondary roads.

The Maple River overflows its banks near Enderlin, North Dakota in Ransom County. Six inches of water flow over a nine-mile stretch of east- and west-bound lanes of I-94, between the communities of Oriska and Tower City.

The SWC reports Spiritwood Lake in Stutsman County has risen to 1,446.92 feet, natural overflow elevation is 1,446.30 feet. NDGF installs a screen to capture and retain the lake’s fish. Snow and ice prevent the lake from overflowing.

USACE completes advanced flood preparedness measures – construction of emergency levees and a ring dike – in the cities of Harwood and Wahpeton.

APRIL 1997—

April 2: The N.D. Highway Patrol (NDHP) assists NDNG’s ice dusting efforts by rerouting traffic to enable helicopters to land on N.D. Highway 18 for sandbag loading. More than 300 tons of sand has been dumped on to river ice.

Warmer temperatures and brisk winds initiate spring runoff. Westbound I-94 between the cities of Casselton and Fargo is closed. Gauging stations along tributaries of the Red River show rapid rises in 24 hours.

USACE emergency dike construction operations at Enderlin go to 24-hours. Other USACE emergency projects underway include: dike construction for the city of Fort Ransom; levee construction for the city of Harwood; levee construction outside floodways for the city of Wahpeton; dike construction and ditch clearing and snow and ice removal work at the English Coulee Diversion in Grand Forks; construction of a dike in the city of Pembina and realignment work on dikes for the city of Drayton.

April 3: Citing imminent flooding in the Red River Basin, NDDEM requests USACE to provide technical, manual and material assistance under the emergency operations portion of U.S. Public Law 84-99. USACE begins work on a \$600,000 dike to protect the city of Grafton.

The Red River at Wahpeton reaches its 10-foot flood stage. The Red River at Fargo edges on its 17-foot flood stage. Devils Lake rises to 1,438.03 feet, the highest recorded level in 130 years.

April 4: In 24 hours, the Wild Rice River jumps 7.02 feet to 19.10 feet, far exceeding its flood stage of 10 feet. The Red River at Wahpeton rises to 12.96 feet; flood stage is 10 feet. The Red River at Fargo rises 5.8 feet to 21.6 feet, well above its flood stage of 17 feet.

N.D. Highway 81 is closed after water inundates the bridge at Forest River. The city of Minto is threatened. Valley City officials and volunteers fill 13,800 sandbags in two days.

APRIL 1997 (continued)

April 4-5: A blizzard moves into North Dakota late April 4 and early April 5. NWS reports snowfall amounts ranging from 10 to 24 inches throughout the state, adding up to 2.66 inches of moisture to areas already inundated by spring runoff.

The storm creates life-threatening conditions, causes massive power outages and shuts down road systems throughout the state. More than 30,000 North Dakota households are without power. A combination of freezing rain and high winds topples government and commercial radio and television towers, leaving many North Dakotans without access to emergency information. Both flood and winter storm conditions cause the evacuation of hundreds of North Dakotans from their homes.

The Maple River at Mapleton rises to 15.4 becoming the first North Dakota river to exceed its flood-of-record stage. Flood stage is nine feet; flood of record was 15 feet.

The Forest River at Minto isolates about 35 homes and forces the evacuation of six families in Walsh County. ARC opens a shelter at North Dakota State College of Science (NDSCS) in Wahpeton.

USACE levee construction operations in Grafton go to 24-hours. USACE also loans 70 water pumps to eastern North Dakota communities and prepares to send 900,000 sandbags to Grand Forks.

April 6: Governor Schafer requests President Clinton to issue a Presidential Major Disaster Declaration for North Dakota, as a result of severe flooding and the spring ice/snow storm. Major General Keith D. Bjerke, Adjutant General for the NDNG, is designated as the State Coordinating Officer (SCO).

The Red River at Wahpeton crests at an all-time high of 19.2 feet; flood stage is 10 feet.



April 7: Within one day of Governor Schafer's request, President Clinton issues a Major Presidential Disaster Declaration (FEMA-1174-DR-ND) for North Dakota. Lesli Rucker and Pete Bakersky of FEMA's Region VIII office in Denver are named Federal Coordinating Officer (FCO) and Deputy FCO, respectively.

April 8, Thousands of North Dakotans remain without electricity. Ten electric cooperatives report ice and high winds toppled hundreds of transmission towers and 4,300 power poles.

After being closed for up to 48 hours NDDOT and local road crews push through snowdrifts opening all state and interstate systems except N.D. Highway 11 in Wahpeton.



NDNG initiates 27 additional missions in response to the flooding and snow disaster to include: generator deliveries to cities, emergency transportation, dozers to help clear paths for electrical companies, and assistance with floodfight operations.

April 9: Nearly 10,500 rural electric customers still are without power. Utility companies report that power may not be restored to more remote areas of the state for up to seven days because of widespread damages. Utility crews from South Dakota, Minnesota, Montana, Nebraska and Wisconsin assist with efforts to restore power. FEMA makes arrangements to bring 50 generators and operators to North Dakota. NDNG provides 18 generators to communities.

April 10: NWS revises its forecast for the Red River at Fargo. The river is expected to rise from 37.5 to 38 feet. Flood of record was 37.5 feet.

State agencies responding to the disaster meet with 120 members of the N. D. Legislative Assembly to discuss the interagency effort required to address problems created by the flood. FEMA institutes a toll-free registration number for North Dakota storm and flood victims to apply for state and federal disaster assistance.

April 11: Vice President Al Gore visits Fargo flood victims and tours other flood-stricken Red River areas.

The Red River reaches its flood-of-record stage of 37.5 feet at Fargo as residents reinforce sandbags and earthen dikes. Breaches are identified along dikes in the Sheyenne River Diversion in West Fargo.

Reports of injuries continue to mount with several North Dakotans being treated for carbon monoxide poisoning and hypothermia.

APRIL 1997 (continued)

As a precautionary measure, the Veterans Administration Hospital in Fargo evacuates one-half of its patients to the Veterans Administration Hospital in St. Paul, Minnesota.

A Disaster Relief Task Force organizes to provide products and equipment for emergency response including generators and sump pumps. Members include Lutheran Social Services, Catholic Family Services, Aid Association of Lutherans, Lutheran Brotherhood, Evangelical Lutheran Church of America and the Missouri Synod of the Lutheran Church.

April 12: Many North Dakotans remain without power preventing operation of sump and water pumps. As a result, basements are flooding. NDNG continues to deliver generators, provide traffic control and evacuate families as part of their floodfight efforts, dubbed "Operation Good Neighbor."

April 14: The SEOC operates around-the-clock. FEMA opens a Disaster Field Office in Bismarck initially staffed by 100 people.

April 15: NWS upgrades its predicted crests for the Red River at Wahpeton, Fargo and Grand Forks. The predicted crest for Wahpeton is upgraded from 18.5 feet to 19.5 feet. The NWS expects the Red River to rise to 50 feet in Grand Forks instead of 49 feet, and to 38 feet in Fargo, approximately one-half foot over original projections.

Sandbag work goes to 24-hour operations in Grand Forks. Approximately 12,000 volunteers filled more than 1.3 million sandbags.

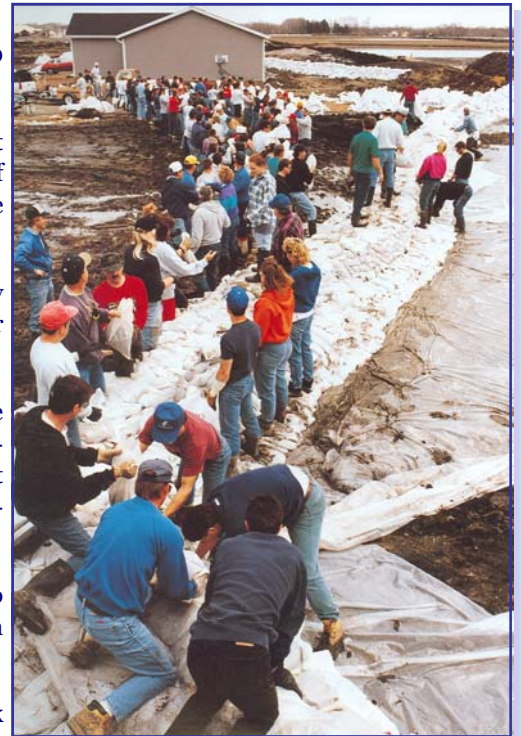
The SEOC and NDAG receive reports of cows suffering from dehydration and weight loss and, as a result, are aborting calves. Power outages prevent operation of electrical pumps used to supply water to livestock. An aerial survey indicates more than 150 head of cattle have drowned in Beaver Creek in Logan County.

April 16: The Governor Schafer announced North Dakotans totally or partially unemployed as a direct result of the disaster may be eligible for disaster unemployment benefits from Job Service North Dakota (JSND).

The Wild Rice River spills out near south Fargo and travels overland toward Rose Creek. NWS forecasts that the Red River at Wahpeton will surpass its 19.2 flood-of-record level set only 10 days prior. The Goose River near Hillsboro rose three feet between April 14 and 15 and is expected to rise another six to seven feet by April 17-19.

Amateur Radio Emergency Services (ARES) provide instantaneous audio and video from all Grand Forks dikes and any trouble spots that arise. The University of North Dakota (UND) closes early so students and staff can join floodfight efforts.

April 17: A sandbag levee in northeast Fargo fails, affecting 23 homes and the Oak Grove School. The Red River at Fargo holds steady at 39.5 feet.



Agriculture officials report approximately 90,000 cattle perished during the blizzard and ice storm compared to 20,000 that died during January and February. With temperatures expected to reach 60 degrees Fahrenheit soon, state and federal officials work to develop strategies for removing the 90,000 carcasses. NDAG, North Dakota State University (NDSU) Extension Service and the FSA open an Agriculture Information Center to assist farmers with problems caused by the winter storm and the spring flood disaster.

Revised flood forecasts cause USACE to raise Grand Forks dikes to 54 feet. Personnel from the U.S. Air Force Base at Grand Forks join Red River floodfight efforts. The Base assigns 500 personnel to that effort. Approximately 540 NDNG members volunteer to assist with the floodfight "Operation Good Neighbor."

April 18: Approximately 1,000 homes in Grand Forks are evacuated in the early morning hours after Red River floodwaters topple private dikes and flow over a public dike in the Riverside Park area. Emergency management officials report that dikes in the Lincoln Drive and Riverside Park areas are becoming unstable. Evacuation of residents living in those areas begins.

The Red River surpasses its 100-year flood event at Grand Forks with record flows of 145,000 cfs. The velocity of water, doubled from April 17 to April 18 through the river channel at Grand Forks, is compounding threats to dikes already experiencing problems with breaches. NWS reports that the Red River at Grand Forks is at 51.55 feet, gaining more than two feet during the past 24 hours. A revised forecast calls for the river to crest at 53 feet later April 19. NDNG pre-positions equipment, such as pumps and helicopters, to allow for a quick response to communities involved in flood fights.

APRIL 1997 *(continued)*

April 19: In the early morning hours, approximately 10,000 Grand Forks residents leave 3,000 homes as city officials call for a citywide voluntary evacuation and a mandatory evacuation of a 10-block area west of the Red River. Residents of the 118-bed Almonte Living Center are among the evacuees. Earthen and sandbag dikes deteriorate allowing floodwaters through to riverside neighborhoods and downtown areas. The city uses buses to transport flood victims to designated shelters.

The Grand Forks Emergency Operations Center (EOC) relocates to the UND Plant Services Building after floodwaters head toward the EOC.

The only Grand Forks transportation link to Minnesota is lost as officials close the Kennedy Bridge when floodwaters reach 52.9 feet. The U.S. Geological Survey (USGS) reports that flows have decreased from 145,000 cfs to 100,000 cfs as water spreads into Grand Forks. NWS expects the Red River at Grand Forks to reach 54 feet.

Three shelters are open at state universities in Mayville, Valley City and Devils Lake. ARC establishes a shelter at the NDNG Armory in Grand Forks and the Grand Forks Air Force Base. Shelters also are opened at Red River High School and Valley Middle School in Grand Forks. ARC mobilizes its national mass care staff. A FEMA truck carrying 1,500 cots and blankets arrives at the Grand Forks Air Force Base shelter.

Grand Forks city and county officials and floodfighters conduct welfare checks on residents to ensure their safe evacuation. With only two weeks left in the semester, UND officials cancel classes for the remaining spring semester.

With the city of Grand Forks' municipal water system in danger of failing, NDNG sends five water purification units to provide bottled water to evacuees. A Guard helicopter crew transports maintenance personnel to the only radio station on air in Grand Forks, KCNN radio, the only radio station still on-the-air, to ensure its continued operation.

Officials for Pembina and Walsh counties review evacuation procedures and prepare to outline those plans with residents. NWS forecasts call for the Red River to rise at least two feet above flood-of-record levels in Pembina and Drayton. Flood-of-record levels are surpassed in Wahpeton where the river reached 19.5 feet, and in Fargo, where the river reached 39.5 feet. The previous records had been 18.5 feet in Wahpeton, and 37.5 feet in Fargo.



APRIL 1997 (continued)

In Devils Lake, a revised NWS forecast calls for the lake to reach 1,442 feet by July, exceeding record level of 1,441 feet set in 1830. NWS revised its forecast because of the additional 2.5 to 3.5 inches of moisture resulting from the April 4-6 blizzard.

SBA opens recovery centers in Fargo and Wahpeton.

A fire rages for more than 24-hours damaging up to 11 buildings in a four-block area of downtown Grand Forks requiring assistance of aerial and ground response units from other cities. Sky crane helicopters with 2,000-gallon dump tanks also are called into action. Flooded streets and lack of water pressure made response to the fire difficult. Northern States Power works shut down power avoiding further risk.

April 20-21: An evacuation order is issued encompassing all areas east of I-29 and all low-lying areas west of I-29, from Grand Forks north to the Walsh County line. Nearly 60 percent of the city has been inundated with floodwaters. Floodwaters are up to roof pitches of homes and damage nearly one-third of the city's river protection system. The city's water system is contaminated. A boil-order is in force. Critically-ill patients from United Hospital are relocated.

The Red River at Grand Forks rises to 54 feet and is expected to remain high for at least one week; flood-of-record was 48.8 feet.

More than 3,000 Grand Forks residents seek shelter at Mayville State University, Grand Forks Air Force Base, UND-Lake Region and NDNG's Camp Gilbert C. Grafton in Devils Lake. The majority of displaced people evacuate to homes of friends and relatives.



Coordinated by the N.D. Department of Human Services (NDDHS), approximately 120 Grand Forks developmentally disabled and severely mentally ill clients are taken to the State Hospital in Jamestown and the Developmental Center in Grafton. The Grand Forks Air Force Base assists with the effort transporting 60 severely mentally ill clients. The North Dakota Long Term Care Association helps secure vehicles for the effort.

Floodfighters conduct massive pumping efforts at the U.S. West telephone company building in Grand Forks keeping critical communications connections and equipment operational. NDHP assists Grand Forks Police Department in neighborhoods patrols. NDCAP pilots transport communications equipment and pumps to Grand Forks and conduct two surveillance flights of the Grand Forks area for SWC and FEMA representatives.

Emergency 911 systems from Grand Forks County, the city of Grand Forks, Grand Forks Air Force Base and UND are transferred to N.D. State Radio Communications (NDSR) in Bismarck, which handles more than 1,000 calls. Motel guests are ordered to evacuate their rooms to allow for sleeping quarters for emergency personnel.

Three NDNG water purification units are activated at midnight to respond to the Grand Forks water crisis. Eight assault bridge boats are dispatched to Grand Forks to assist with evacuation of residents. NDNG forces assist with securing the city. A total of 1,000 NDNG members now assist with floodfight efforts.

NDNG helicopter crews and the U.S. Fifth Army resources help with the evacuation of patients from Altru Hospital (formerly United Hospital).

At the request of the N.D. Health Officer, the U.S. Department of Health and Human Services (HHS) activates three 50-member disaster medical assistance teams to assist flood victims housed at the Grand Forks Air Force Base. The Veterans Administration (VA) is also requested to dispatch its mobile medical van to Grand Forks.

APRIL 1997 (continued)

NDDoH provides information on tetanus vaccinations to state and local governments supporting floodfighting operations.

JSND reports a significant rise in the number of people applying for jobless benefits and federally funded Disaster Unemployment Assistance (DUA).

FEMA establishes a Disaster Field Office (DFO) annex at the Bismarck Civic Center to assist NDDEM in securing federal assets in response to the disaster.

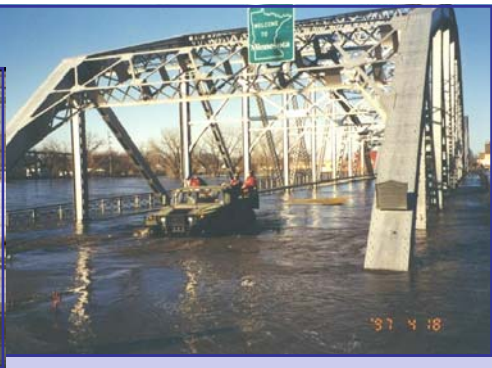
FEMA/N.D. Donations Coordination Center is operational and staffed by Seventh-Day Adventist Disaster Response, United Methodist Council on Relief (UMCOR) and three flood-displaced volunteers from Grand Forks.

To date, the Salvation Army assists 193,161 displaced flood victims and disaster services personnel through "Operation We Care." Staff and volunteers provide meals to 19,000 sandbaggers, emergency/security personnel and evacuees. More than 27,700 volunteers from 14 states participate in Red River flood-relief efforts both in North Dakota and Minnesota.

April 22: President Clinton arrives at Grand Forks Air Force Base to meet with evacuees and state, federal and local leaders. He announces FEMA has been directed to reimburse 100 percent of North Dakota's cost for immediate disaster-related emergency work. The President says he will propose Congress to provide an additional \$88 million in supplemental disaster assistance for North Dakota, South Dakota and Minnesota. During his stay, the President participates in an aerial surveillance of flood-damaged areas along the Red River.



A crack in a levee forces a 3:00 a.m. evacuation for the city of Drayton's nearly 1,100 residents. Law enforcement officials report all residents had left by 6:00 a.m. The town is expected to be inundated by the Red River by 11 a.m. (A reinforced dike ultimately holds the water back.) The river at Drayton rises to 44.82 feet, surpassing its flood-of-record level of 43.8 feet set in 1979. NWS expects the river to crest between 48 and 49 feet by April 23, nearly five feet over projections.



An evacuation order is issued for the more than 640 residents of the city of Pembina. In 24 hours, the Red River at Pembina rises nearly 3.5 feet to 52.1 feet. The NWS expects the river to crest at Pembina at 58 to 59 feet by late April 25.

Area television and radio stations issue an urgent need for assistance spurring several truck drivers and citizens to help the manager of a bulk fertilizer plant in Drayton to relocate his fertilizer supply.

Grand Forks evacuees face the possibility of not returning home for two weeks as the Red River crests at 54.1 feet, nearly six feet above its previous flood-of-record level.

Medical supplies are sent to Grand Forks by NDDoH which also has mobilized public health nurses and staff from the Microbiology and Food and Lodging Divisions.

Representatives for the city of Grand Forks, USACE and SWC meet to establish water distribution and production priorities. The group agrees the first priority is to secure an adequate water supply to Grand Forks Air Force Base, where more than 2,500 evacuees are housed. A second priority is to supply water to shelters in the Grand Forks area, a third priority is to produce one million gallons to start up and sanitize the city's water treatment plant. The city requires seven million gallons a day; the plant's storage capacity is 10 million.

The U.S. Postal Service (USPS) establishes limited service to Grand Forks customers. Plans are to establish a temporary post office at the Grand Forks Air Force Base.

April 23: American Red Cross (ARC) President Elizabeth Dole and North Dakota First Lady Nancy Schafer tour flood-stricken areas in the Red River Valley.

The Red River begins to recede very slowly in Grand Forks, dropping nearly one-half foot in the preceding 24 hours.

APRIL 1997 (continued)

Shelter populations decline as more flood victims return home or seek shelter with friends and relatives. ARC sheltered 1,356 evacuees at six shelters during April 22-23. ARC had sheltered a total of 4,660 flood victims and served 8,200 meals on April 22; bringing the to-date total of meals served to 75,948.

NDDHS initiates an Emergency Food Stamp Program for eight Red River Valley counties. The U.S. Department of Labor (DOL) allocates \$1 million to North Dakota to fund temporary jobs in cleanup and recovery efforts.

The N.D. League of Cities (NDLC) assumes responsibility to support local efforts in delivering donated goods to flood victims. Through its network of city officials, NDLC secures warehouse space throughout the Red River Valley and establishes distribution sites and procedures.

A second fire breaks out at a Grand Forks business and is contained.



April 24: A dike breaks in south Pembina affecting four homes and 16 mobile homes. USACE use freeboard to elevate the levee and sandbags to reinforce it.

At Governor Schafer's request, the N.D. Community Foundation establishes the '97 Flood Relief Fund providing grants to non-profit organizations serving the needs of flood victims and for cleanup and rebuilding. The N.D. Farmers Union establishes the Farmers Union Emergency Relief Fund. Offers of help from across the nation pour into the city of Grand Forks and NDDEM offices. Neighboring counties continue to assist flood victims by providing housing and meals. State officials estimate that approximately 70,000 North Dakotans have been uprooted due to evacuation activity or actual flood damage.

Grand Forks officials try to restore city services by establishing a temporary city hall at the UND Housing Office. Employees from NDDoH help with restoration of Grand Forks rural and city water supply systems.

NDSR sends a base station and 18 portable radios to Grand Forks.

April 25: The U.S. Army Reserve's 348th Quartermaster Unit arrives in Grand Forks to assist with production of potable water. The unit provides three reverse osmosis machines. NDNG has 11 such machines in operation.

U.S. House of Representatives Speaker Newt Gingrich visits Grand Forks to tour the area and discuss federal assistance programs with Governor Schafer, local leaders and area business people. NDNG takes Salvation Army leaders on a tour of flooded areas in Grand Forks. To date, more than 20,000 flood victims and emergency workers have received some form of Salvation Army assistance.

Predictions called for the river to crest at 48 to 49 feet on April 23, but water had spread overland which is attenuating the peak. NWS again revises its forecast for Devils Lake. Revised predictions now call for the lake to rise to 1,444 feet by July, 3; one-half feet over original predictions. USGS reports coulees flowing into Devils Lake Basin are at record levels.

Flood waters in southwest Grand Forks begin to recede. Residents are allowed to see their homes for the first time since evacuation. SWC officials report a South Washington Street emergency dike prevented additional inundation of the southwest portion of the city. The dike was constructed in 30 hours and measured three-quarters-of-a-mile long.

Air crews from NDCAP, NDHP and NDGF provide 24-hour security as they fly surveillance over the eastern portion of Grand Forks County. FEMA Broadcasting Recovery Services provide 15-minute flood updates every day on Prairie Public Radio stations throughout North Dakota.

April 26: The Red River at Pembina crests at 54.94 feet; flood stage is 42 feet. Emergency management officials report the Pembina River rages out of control between Walhalla and Neche forcing the evacuation of 20 Leroy residents. NWS downgrades its predicted crest for the Red River at Pembina as floodwaters widen across the northern Red River Valley. While the waters spread out, the river volume decreases, the likelihood of overland flooding increases. Forecasters predict that the volume of water will be the largest to ever pass across the Canadian border.

Preliminary damage estimates report three neighborhoods in Grand Forks experienced total destruction. Restoration of the Grand Forks water treatment plant continues to be a top priority for recovery efforts as city and contractor crews pump floodwaters away from the facility. A contractor replaces flood-damaged motors, while plumbing and electrical contractors help restore the water system. Crews discover that a reservoir contains 800,000 gallons of clean water, which could be used for scrubbing the plant.

APRIL 1997 (continued)



Shelter populations continue to drop with 350 staying overnight at the Grand Forks Air Force Base. ARC reports volunteers and staff have provided a total of 106,957 meals to date.

Lake Region Human Services Center in Devils Lake sets up a flood victims' counseling center at UND-Lake Region to provide mental health, addiction and medication services, as well as psychological support and stress counseling.

April 27- 28: The Red River crest moves into Canada. Floodwaters from the Red and Pembina rivers cause overland flooding in Pembina County during the weekend. The city of Pembina's lagoon is inundated and the agitator at the water plant is not operational. The city of Walhalla loses its water system when a water main breaks.

Dick Arme, Majority Leader of the U.S. House of Representatives, and seven other House members tour Devils Lake and Grand Forks. Construction of an outlet for Devils Lake and disaster assistance for the Red River Valley are under review by Congress.

The N.D. Secretary of State and the Attorney General open a "one-stop shop" for issuing transient merchant and contractor licenses in Grand Forks. Applications are reviewed and processed by representatives of the city of Grand Forks, the Attorney General's Office, Secretary of State's Office, the Adjutant General's Office and the N.D. Workers Compensation Bureau. The Secretary of State reports that more than 200 licenses are issued on April 28 compared to a daily average of four licenses. The Licensing section of the Attorney General's Office issues three merchant licenses per month, but processes 10 times that many applications in two days.

More Grand Forks residents return home to inspect damages. Access to downtown business and adjacent areas is prohibited until city officials complete inspections of the area and remove all hazards. Areas with restricted access include most areas east of South Washington Street, west of Belmont Road and south of Fourth Avenue South.

April 29: NDDoH officials report the city water plant may be operational April 30 or May 1. Problems with water lines that broke may delay restoration of service. A four-member Centers for Disease Control and Prevention (CDC) team meets with Grand Forks and United Hospital officials to discuss water restoration.

Gauging points along the Red River, from Wahpeton to Pembina, remain above flood stage. NDSR continues to answer 9-1-1 calls from Grand Forks residents. I-29 north of Fargo to Grand Forks reopens. Workers conduct safety and damage inspections of highway bridges inundated by floodwaters.

USACE increases releases from Baldhill Dam to prevent the dam from overtopping. Residents living along the Sheyenne River downstream of the dam are placed on alert. Stutsman County emergency management officials report pool elevation at Jamestown Dam is 1,445.15 feet, which is 0.25 feet higher than the record elevation of 1,444.9 feet set in 1996.

ARC has sheltered 4,974 flood victims and served a total of 132,595 meals to date. In Jamestown, local churches provide evening meals and companionship for evacuees.

April 30: The Red River at Pembina and Drayton continues above record flood levels set in 1979. The Red River at Pembina measured 54.36 feet; flood-of-record was 53.8 feet. In Drayton, the river measured 44.03 feet; flood-of-record was 43.7 feet.

To date, 26,505 North Dakotans have registered for assistance with FEMA's National Tele-registration Center. More than \$3.7 million in FEMA disaster housing assistance checks has been provided to 5,100 flood victims.

Floodwaters recede; utility company workers restore power to Grand Forks residents. Grand Forks officials open the downtown area to the public, but continue to restrict access to some riverside neighborhoods that were heavily damaged by flooding. The Salvation Army opens a supply distribution center in Grand Forks, assisting 1,939 people during its first day of operation.

Most of the water that inundated the Grand Forks Civic Auditorium and Police Department has been pumped out. Groundwater continues to infiltrate the buildings, extending the task longer than expected.

MAY 1997—

May 1: Governor Schafer appoints Dina Butcher, director of the N.D. Office of Intergovernmental Assistance (NDOIA), as state coordinator for disaster housing. The Governor also designates the NDAg and the NDDoH as lead state agencies for coordinating cleanup of flood-damaged fertilizers, pesticides and other agricultural chemicals. The N.D. Housing Finance Agency (NDHFA) grants a forbearance on May payments for flood victims, waiving late charges and not indicating a delinquent status on credit reports.

MAY 1997 *(continued)*

The Grand Forks city water treatment plant becomes operational as crews work to pressurize the southwest quadrant of the city. NDNG sends a 3,000-gallon water tank and a tractor trailer filled with bottled water to the city of Walhalla, which has had a limited supply of water since a water main broke on April 28.

Twenty shelters had been set up across eastern North Dakota; of those, 16 are still in operation. The Salvation Army coordinates nearly 1,000 volunteers for cleanup efforts in Wahpeton during the May 2-3 weekend. A distribution center in Grand Forks is supplying food, personal hygiene items, cleaning supplies and water daily to nearly 3,000 people. The N.D. Historical Society offers architectural assistance with inspections of flood-damaged historic property in the Grand Forks area.

Residents of the city of Center and of Oliver County adopt the flooded Pembina County communities of Bowsmont and Leroy: "Adopt-a-Town" project sponsors conduct fundraisers including a concert, auction and bake sale.

May 3: Pembina residents are allowed to return to their homes after being evacuated for 12 days.

NDDoH reports Grand Forks water system has been pressurized west of U.S. Highway 81 and south of Demers Avenue; however, because the condition of the city's water mains is unknown, the water is not yet drinkable. To date, 32 of the city's 36 lift stations were operational. Approximately 7,500 Grand Forks customers remain without electrical power and 6,550 without natural gas service.

May 5: Foster County reports 43 roads are washed out and nearly 70 additional roads inundated or with water flowing over them.

ARC operates two "drive-thru" feeding sites in Grand Forks and 32 mobile feeding sites throughout the state. Volunteers serve 39,254 meals on May 4, approximately 10,000 more than the previous day. NDDoH officials report 28 percent of Grand Forks restaurants, bars, grocery stores and gas stations have reopened.

State and federal Community Relations teams begin a door-to-door effort in Grand Forks to ensure that the disaster recovery process is underway for residents.

May 6: Governor Schafer issues an Executive Order suspending statutes and administrative rules dealing with contracting, bidding, licensing and public notices for Pembina, Walsh, Grand Forks, Traill, Cass and Richland Counties. The effort is designed to speed recovery and rebuilding efforts in these counties. The Attorney General's office and the State Bar Association of North Dakota conduct a Consumer Education and Legal Rights Issues Forum for Grand Forks flood victims. Participants also include the N.D. Insurance Department, Legal Assistance of North Dakota and FEMA.

Preliminary Damage Assessments (PDA) of 8,000 North Dakota homes indicates 519 homes, 53 mobile homes and 73 apartments have been destroyed by floodwaters; 701 homes, 69 mobile homes and 175 apartments sustained major damages and 5,959 homes, 166 mobile homes and 497 apartments received minor damages.

NDNG places preliminary costs for "Operation Good Neighbor" at nearly \$1.5 million. To date, more than 1,800 Air and Army Guard members have volunteered for duty since "Operation Good Neighbor" began on March 26. Members have completed 257 missions and have 40 in progress.

NDAg reports field crews handled more than 10 million pounds of dead animals, burying 12,000 carcasses and pulling 850 animals from waterways.

Grand Forks Health Department treats 12 people for possible exposure to Hepatitis A.

In the city of Streeter, North Dakota, part of the sanitary sewer system fails after more than two weeks of overland flooding. Water restrictions are in place for the city of Cogswell lift station which has been inundated by floodwaters.

Devils Lake overtops N.D. Highway 57 as well as N.D. Highways 19 and 20 near Devils Lake. Elevation of Devils Lake at Creel Bay was 1,440.14 feet; the elevation of N.D. Highway 57 is 1,440.5 feet. NDDOT closes the highways until further notice.

May 9: Approximately 3,000 Grand Forks electrical and 9,200 natural gas customers remain without service as inspectors conduct safety inspections of homes and businesses before restoring power. NDSR and Motorola work together to provide a portable MHZ-trunked radio system in Grand Forks.

The National Volunteer Organizations Active in Disasters (VOAD) holds a special meeting in Fargo to coordinate member agencies' response to the Upper Midwest floods.



MAY 1997 (continued)

Approximately 7,500 Grand Forks and East Grand Forks households receive \$2,000 from the “Angel Fund,” established after an anonymous California donor donated \$15 million providing direct relief to flood victims.

May 14: The Red River at Wahpeton drops below its 10-foot flood stage.

Governor Schafer and FEMA Director James Lee Witt address 70 participants attending the N.D. Mitigation Recovery meeting. Participants represent state and federal agencies involved in the state’s disaster recovery effort. NDDEM and FEMA hazard mitigation staffs organize applicant briefings and workshops for local officials, which will be held throughout the state from May 20-28. Disaster Recovery Centers are scheduled to open at 11 northeast North Dakota locations during May 19 to June 4.

Devils Lake inflows push the lake level to 1,441.12 feet. Towner County officials report 136 roads sites are either washed out or inundated. The Walsh County Emergency Board estimates 80,000 acres may not be planted this year because of flooding.



SBA estimates 5,200 businesses have been destroyed, damaged or affected by the winter storms and floods. The N.D. Department of Public Instruction reports only one-third of the nearly 9,000 public school students and 1,000 private school students from Grand Forks have re-enrolled in classes.

The Salvation Army, in partnership with Northwest Airlines, plans to send 500 volunteers to Grand Forks to help with cleanup efforts. A Missouri cattlemen’s association, in cooperation with the Salvation Army, plans to hold a barbecue dinner for Grand Forks and East Grand Forks residents.

UND officials make 310 dormitory beds available to flood-displaced people. Currently, 22 mobile homes and 102 travel trailers are at a temporary housing area.

May 21: The Red River in Fargo remains slightly above its 17-foot flood stage and in the cities of Drayton and Pembina the river is about 6 inches above flood stage. Spiritwood Lake water level is 1,446.38 feet, 0.08-foot higher than its natural overflow elevation. Devils Lake continues its steady climb, rising 1,441.43 feet and is forecasted to rise between 1,443.5 feet and 1,444 feet. USACE is modifying plans for elevating the lake level protection system for the city of Devils Lake.



NDDOT opens the final 20-mile stretch of I-29, from Joliette to the Canadian border.

SWC reports the Red River has flooded up to 2,200 square miles in North Dakota and Minnesota, an area approximately twice the size of Rhode Island. The river, approximately 220 miles long in North Dakota, averaged between seven to 10 miles in width at its peak.

May 24: President Clinton releases a federal recovery plan for the Red River states of North Dakota, South Dakota and Minnesota identifying three priorities for federal long-term recovery efforts; mitigation of flood hazards, housing and reestablish community sustainability. The incident period for FEMA-1174-DR-ND, which began on February 28, closes May 24. To be eligible for state and federal assistance programs, local governments or individuals must have sustained damages during that time frame. To date, more than 33,000 North Dakotans report personal property damages, and 297 local governments and private nonprofit organizations providing an essential government service file Notice of Interest applications to participate in the Public Assistance Program.

May 28: To date, contractors in Grand Forks hired by USACE have hauled 34,100 tons of household debris and 92,225 tons of levee material to a landfill completing 75 percent of their first pass through the city.

Mass care workers continue operating four shelters for 281 flood victims. Meanwhile, 425 people are at UND dormitories and nearly 100 people are in travel trailers.

To date, more than 5,755 farmers, farm workers and self-employed persons file Disaster Unemployment Assistance. JSND has paid \$1.24 million in benefits.

May 30: The Red River drops below flood stage at all North Dakota gauging points. Devils Lake continues to rise.

JUNE 1997—

June 3: Governor Schafer meets with members of the N.D. Legislative Council to provide an update on the 1997 flood response and recovery. He reviews four areas: public infrastructure, housing, business and employment.

June 4: JSND receives a \$1.5 million grant for flood recovery jobs from the Disaster Assistance Program. The agency already has received a \$1 million grant.

NDDoH reports up to 30,000 vaccines were administered by Red River Valley public health organizations and Northwood Hospital.

June 6: Dry conditions in the Devils Lake Basin slow the rise of Devils Lake. A revised forecast calls for the lake to rise to 1,443 feet by mid-July, one-half foot less than early predictions. The highest predicted crest remains at 1,444 feet.

The N.D. Psychological Association assists the ARC in providing mental health assistance at shelters and mass care sites. The association is working with NDSU Extension Service providing one-on-one counseling service to disaster-affected farmers.

June 10: Major General Murray Sagsveen is appointed as State Flood Recovery Coordinator.

June 13: Twenty-nine Grand Forks area residents suffer from carbon monoxide poisoning while cleaning their flood-damaged homes with improperly-ventilated gas-powered water pumps or power washers.

The Missouri River at Williston, North Dakota rises above its 20-foot flood stage to 24.07 feet. At this stage, agricultural flooding occurs south and east of Williston. Oil companies temporarily suspend pumping operations.

An Ohio man who had helped with sandbagging efforts in Neche organizes a supply drive for Pembina County, sending a truckload of canned goods, cleaning supplies and a washer and a dryer.

June 15: High winds across Devils Lake wash debris and water onto Woods-Rutten Road causing the road to be closed for the day.

June 16: Plans to voluntarily buy out the city of Bowsmont in northeast North Dakota are finalized. Twenty-two structures, including 14 homes, will be purchased using Hazard Mitigation Grant Program (HMGP) funds, administered by the state of North Dakota and funded by FEMA. These structures have been subjected to repetitive Red River flooding.

NDDoH announces 2,854 patients were seen by United Hospital emergency staff from May 2 through June 5.

FEMA makes available its Mortgage and Rental Assistance Program to help those persons whose homes were not damaged by flooding, but cannot meet their monthly rent or mortgage because of disaster-related conditions.

More than \$100 million from the SBA, representing 4,378 low interest loans has been approved for businesses and individuals to help cover disaster-related losses.

June 18: President Clinton notifies FEMA Director James Lee Witt that the federal share for total eligible Public Assistance costs to North Dakota will increase from 75 to 90 percent. State and local shares total the remaining 10 percent. Reimbursement for debris removal and emergency protective measures remain at 100 percent.

Dry conditions across the Devils Lake Basin continue to inhibit the lake level. A revised NWS forecast calls for the lake to reach 1,442.5 to 1,443 feet, one-half to one foot lower than predicted on June 4. The Missouri River at Williston crests at 27.5 feet, 7.5 feet above flood stage which causes flooding in the Buford-Trenton Bottoms area impacting hundreds of acres of beets and alfalfa.

The U.S. Department of Housing and Urban Development (HUD) allocates \$50 million in Community Development Block Grant (CDBG) funds for expedited disaster relief to Grand Forks and \$60 million for other flood-affected communities.

FEMA Community Relations workers report they have visited more than 10,000 disaster survivors since April 7.

USACE decreases its releases from Jamestown Dam, from 750 cfs to 450 cfs, as the reservoir elevation drops.

June 24: FEMA Director James Lee Witt announces that more than \$17.6 million in federal HMGP funds have been allocated for the acquisition of homes located in the Red River floodplain. The announcement comes the day after the State Hazard Mitigation Team recommends approval of a \$13.9 million acquisition project in Grand Forks to acquire 289 substantially-damaged homes and a \$5.5 million acquisition project in Fargo to acquire 55 at-risk or substantially-damaged homes.

June 25: Runoff from the Yellowstone and Missouri Rivers causes Lake Sakakawea to rise to its second highest level in 22 years. The reservoir level is at 1,852.9 feet. USACE increases releases from 44,000 cfs to 47,000 cfs.

JUNE 1997 *(continued)*

Ward County officials send more than 1,000 sandbags to Mountrail County for protecting mobile homes threatened by a rising Lake Sakakawea. The water poses a threat to Van Hook Park and mobile homes along the lake.

The N.D. Office of Intergovernmental Assistance (NDOIA) allocates more than \$4.4 million for flood recovery efforts in eastern North Dakota through CDBG funds and HOME funds which are for rehabilitation of existing homes and construction of new homes.

NDDHS reports 181 crisis counselors have provided support to more than 10,000 flood survivors.

June 26: Fence posts and barbed wire donated by Iowa farmers and businesses are distributed to 21 North Dakota counterparts coordinated by the Agriculture Disaster Response Center.

June 27: The city of Kingman, Arizona, adopts the city of Pembina, establishing the “Relief Fund for North Dakota.” Both cities are comparable in population.

The deadline for registering for disaster assistance has been extended a second time to August 6 for North Dakota individuals and business owners.

The N.D. Agriculture Commissioner announces North Dakota livestock producers who suffered losses as a result of severe winter weather and spring flooding may be compensated under the Livestock Indemnity Program. The program makes available \$50 million nationwide.

To date, disaster recovery programs and amounts approved are: \$28.3 million in Public Assistance; \$3 million in Disaster Unemployment Assistance; \$44.1 million in Disaster Housing; \$4.3 million in Individual and Family Grant funds; and \$127.5 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$17.6 million.

JULY 1997—

July 2: Devils Lake rises to 1,442.48 feet after a weekend of thunderstorms.

The Salvation Army reports it has distributed 18,053 cleanup kits in the Red River Valley and volunteers have logged more than 83,144 hours for flood-relief efforts.

July 9: Heavy upstream rainfall contributes to high inflows into Garrison Dam, requiring USACE to increase reservoir releases on July 3 from 50,000 cfs to 55,000 cfs and then on July 5 to 57,000 cfs. The releases were again increased on July 9 to 59,000 cfs.

July 10: The N.D. Mental Health Association receives 153 crisis hotline calls in May and 120 calls in June from North Dakota residents troubled by problems created by the winter storm and spring flood.

July 15: Grand Forks city and county officials assume responsibility from state officials for management of undesignated donated goods and services. The city of Grand Forks and Grand Forks County have formed a Donated Goods and Service Board to oversee operations.

July 17: Heavy rainfall during the prior weekend in eastern North Dakota causes the Pembina River to swell nine feet in five days. The river crests at Pembina slightly over its 18-foot flood stage. The additional rains cause Devils Lake to rise to 1,442.84 feet.

Governor Schafer requests Major General Murray Sagsveen, the State’s Flood Recovery Coordinator, to conduct an after-action review of North Dakota’s response and recovery efforts to determine what measures can be taken to minimize the damages in future floods, identify lessons learned and facilitate appropriate changes to the State Emergency Operations Plans (SEOP).

The N.D. State Industrial Commission approves a \$25 million line of credit for the city of Grand Forks to cover costs until FEMA funds and other disaster aid arrives.

July 21: Rick Weiland, FEMA’s newly-appointed director for Region VIII, tours flood-damaged areas and meets with state and local officials in Grand Forks, Devils Lake and Bismarck.

Demolition on flood-damaged structures condemned by the city of Grand Forks begins. It is estimated that approximately 20 structures will be demolished each week. Residents along the Morton and Burleigh County sides of the Missouri River have been rip-rapping or sandbagging their properties.

July 23: Heavy rainfall since mid-June prompts the NWS to issue a revised forecast calling for Devils Lake to crest at 1,443.5 feet by fall to early winter. USACE expects the Missouri River to peak at 14 feet on July 25, the result of continued high outflows from Garrison Dam.

JULY 1997 *(continued)*

The Environmental Protection Agency (EPA) continues efforts to recover empty chemical barrels from the Red River and to recover heating oil from flood-damaged homes and public property.

July 30: Devils Lake at Creel Bay rises to approximately 1,443 feet, its highest recorded level.

July 31: The State Coordinating Officer (SCO) and Federal Coordinating Officer (FCO) sign a memorandum of understanding referring to eligible damages in the Devils Lake Basin. The memorandum states extreme conditions exist in the Devils Lake area and that FEMA will consider applications for private and public assistance for damages that occur during the February 28 to May 24 incident period.

The State Hazard Mitigation Team recommends approval for the acquisition of 36 flood-damaged properties in Cass County and 10 homes and a business in the city of Wahpeton amounting to \$881,308. The Cass County HMGP project totals \$7 million.

N.D. State Electrical Board inspectors assist the city of Grand Forks with electrical inspections and review of wiring inspection reports. The board expects to complete 3,000 inspections by September. Approximately 11,000 wiring certificates had been issued to electricians working in Grand Forks since the city flooded in mid-April. Last year, the board only issued 849 certificates.

Approximately 134 Grand Forks area residents are moving from the UND dormitory rooms to travel trailers, manufactured homes, their repaired homes or rented homes and apartments.

Thirty couples who belong to the Christian Reformed World Relief are in Grand Forks conducting an extensive outreach/needs assessment study for Valley Interfaith Coalition to Recovery (VICTORY). VICTORY plans to make available grants in the amounts of \$1,000, \$5,000 or \$10,000 depending on the need and other assistance obtained by individuals and families.

Disaster recovery programs and amounts approved to date are: \$58.5 million in Public Assistance; \$4 million in Disaster Unemployment Assistance; \$49.3 million in Disaster Housing; \$8.9 million in Individual and Family Grant funds; and \$155 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$23.8 million.

AUGUST 1997—

August 6: The Secretary of HUD announces North Dakota communities will receive \$201.3 million in grants from Development Disaster Recovery Initiative. HUD officials have said the grants include previously announced HUD grants of \$50 million to Grand Forks, \$3.5 million to Fargo, and \$1.5 million to North Dakota for other areas of the state.

August 7: A boil order is issued for the city of Marion, in Barnes County, due to floodwater contamination.

The Agriculture Disaster Response Center closes. The center registered more than 1,850 producers and took thousands of additional phone calls from rural residents seeking assistance. Center personnel coordinated the statewide effort to collect and dispose of more than 11 million pounds of animal carcasses and to distribute thousands of dollars worth of fence posts donated by out-of-state fencing manufacturers and dealers.

SWC, USACE, FEMA's Geographic Information Systems (GIS), and NDDEM compile a hazard mitigation database to include geographic reference points and elevations of structures in the Devils Lake Basin. SWC has compiled levee data for the Red River and will transfer the information to GIS.

August 12: Major General Phillip R. Anderson, Commander Mississippi Valley Division of USACE, meets with local and state officials and tours Devils Lake regarding the continued lake rise problem.

August 13-14: National and regional representatives of FEMA's Infrastructure Program visit the Devils Lake Basin and Grand Forks area accompanied by representatives of NDDEM's Public Assistance Program.

ARC reports it spent \$9 million to date on disaster and recovery work in North Dakota and Minnesota.

August 15: NDDEM and FEMA announce a total of \$27.3 million has been approved to date for the acquisition of up to 400 substantially flood-damaged homes and structures in the Red River Valley. These projects were submitted under the HMGP.

August 29: To date, disaster recovery programs and amounts approved are: \$78.4 million in Public Assistance; \$4.4 million in Disaster Unemployment Assistance; \$51.2 million in Disaster Housing; \$11.5 million in Individual and Family Grant funds; and \$162.4 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$23.8 million.

The city of Minnewaukan declares a flood emergency and requests technical assistance from USACE and NDDEM in developing a flood-protection plan for the city.

SEPTEMBER 1997—

September 4: Disaster victims in Grand Forks move from travel trailers to either permanent housing or to manufactured homes. To date, 321 families remained in travel trailers. There are now 248 requests for mobile homes. A total of 306 manufactured homes are sited in the state; of these, 211 of these are currently leased and occupied.

September 5: NDDHS receives a \$3.7 million crisis counseling grant from FEMA. The grant will allow continued efforts to provide crisis counseling assistance to flood survivors.



September 25: To date, disaster recovery programs and amounts approved to date are: \$79.3 million in Public Assistance; \$4.5 million in Disaster Unemployment Assistance; \$52.1 million in Disaster Housing; \$13.1 million in Individual and Family Grant funds; and \$169.9 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$23.8 million.

September 30: To date, Job Training Partnership Act (JTPA) has provided 643 temporary disaster-related jobs at 43 work sites for people who lost jobs because of the spring disaster. Of those, 346 still employed.

October 1997—

October 9: As winter approaches, NDDHS Crisis Counseling Program reports an increased level of anxiety among flood survivors. Families are experiencing more strife and some children are avoiding school. Families also have expressed concern about potential flooding next spring and their community's level of preparedness for such a possibility.

The N.D. Community Foundation approves \$1.29 million in grants for Red River Valley agencies, organizations and governmental entities that suffered damages during the flood. The Foundation received \$72,675 from proceeds from the Flood Aid Concert headlined by country western singer Travis Tritt.

The residents of Reading, Pa., send 2,500 winter coats to Grand Forks residents. They also donated \$4,500 for hats, gloves, snow pants and other cold-weather gear.

In preparation for winter, manufactured homes provided by FEMA for temporary housing are being winterized. Approximately 142 travel trailers are in use, with plans to discontinue their use by October 15 because the travel trailers are not adequate for winter living. Of the 311 manufactured homes, 242 are occupied. Homes are located throughout the Red River Valley, from the Canadian border to the South Dakota line.

Home repair grants for damages associated with FEMA-1174-DR-ND are 50 percent above national average, according to FEMA Disaster Housing Program officials. To date, 24,447 eligible applicants have received more than \$53 million in minimal repair, transient assistance and rental assistance grants.

Anticipated costs for the Individual and Family Grant Program fall \$10 million below projected estimates of \$25 million, in part of increased Disaster Housing minimal repair grants and SBA loans. The Individual and Family Grant Program has awarded \$13.4 million in grants to flood survivors.

NDDEM is conducting a risk assessment of selected areas across the state to assist local authorities in identifying and implementing mitigation measures for a possible 1998 flood event.

NDNG continues to assist with flood recovery efforts. Guard members are providing a kitchen facility at the National Guard Armory for the Grand Forks Gospel Mission; efforts will continue through November 15. NDNG is also winterizing and storing 500 travel trailers.

October 11: JSND makes the last Disaster Unemployment Assistance (DUA) payments from the week ending October 11, 1997. Grand Forks County had 1,642 registered individuals who were paid \$1,262,339. Nine other counties had more than \$100,000 in DUA payments. In addition, \$3,382,358 was paid in flood-related state unemployment benefits to 7,237 individuals between April 21 and September 30.

October 23: To date, disaster recovery programs and amounts approved are: \$105.9 million in Public Assistance; \$52.8 million in Disaster Housing; \$13.5 million in Individual and Family Grant funds; and \$173.9 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$37 million.

October 30: Governor Schafer signs an Executive Order to extend the waiver of state bidding requirements for the city of Grand Forks through November 28. Last spring, the Governor issued an Executive Order relaxing bidding rules on flood-recovery projects.

NOVEMBER 1997—

November 6: USACE meets with emergency management professionals and officials from selected North Dakota communities to discuss preparedness levels for potential 1998 spring flooding.

November 20: To date, disaster recovery programs and amounts approved to date are: \$115.3 million in Public Assistance; \$53.4 million in Disaster Housing; \$13.8 million in Individual and Family Grant funds; and \$177 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$37 million.

November 27: In a Thanksgiving letter to North Dakotans, Governor Schafer declares Thanksgiving as a Day of Prayer in North Dakota for all victims of the 1997 disaster. He states flood victims have received support from 50,000 relief agencies volunteers and warehouses full of donated food, clothing and supplies from every state. Relief agencies provided 2 million meals to flood victims.

DECEMBER 1997—

December 5: The N.D. Tax Commissioner and Internal Revenue Service (IRS) grant a second extension to individuals and some businesses in Grand Forks County for filing 1996 income tax returns. The deadline is extended to January 13.

NDDEM completes a Risk Assessment in portions of the state affected most by the spring flood. Two teams made up of planners, floodplain experts and engineers worked with officials of 18 counties to look at what effects flooding had or could have on their jurisdictions. The purpose was to identify long-term and immediate actions that could be implemented to reduce future flood losses and hardships.

To date, disaster recovery programs and amounts approved are: \$151.8 million in Public Assistance; \$53.4 million in Disaster Housing; \$13.8 million in Individual and Family Grant funds; and \$178.1 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$37 million.

December 11: Governor Schafer requests a Secretarial Disaster Designation from the USDA for all eligible North Dakota counties. The additional disaster assistance would provide emergency loans and debt restructuring to agricultural producers and agricultural-related businesses. State and local USDA Emergency Boards compiled damage assessment reports to support the request and assist in eligibility determination.

JANUARY 1998—

January 5: The N.D. Office of Intergovernmental Assistance (NDOIA) receives its final allocation of \$3.5 million in CDBG funds for flood-related recovery work. The funds have been designated for infrastructure repair, rental and owner-occupied building rehabilitation and new construction projects. In total, the state of North Dakota, the cities of Grand Forks, Fargo, and Devils Lake and the counties of Ramsey, Richland, Grand Forks, Cass, Pembina, Traill, Walsh and Mercer Counties received a total of \$201.2 million in CDBG funds.

In other flood-related work, NDOIA approved 3,650 furnace rebates totaling \$703,000 for Red River Valley residents whose homes and furnaces were damaged during the 1997 flood. Rebates were for furnaces purchased between March 1 and December 31, 1997.

January 9: Devils Lake waters have frozen at 1,442.6 feet mean sea level (MSL). Since 1993 when flooding at Devils Lake first began, more than \$200 million in state and federal assistance has been provided to deal with impacts and damages to infrastructure, homes and businesses. The loss of land for agriculture production has been among the damage items most difficult to address.

January 12: Governor Schafer announced an initiative to plant 100 miles of living snow fences to reduce snow drifting on roads marking the one-year anniversary of the first Presidential Disaster Declaration issued for the 1997 disasters. The initiative could save the state \$1 million annually in snow removal costs and reduce the number of road closures. The state interstate system was closed 11 times in 1997 because of snow and blizzard conditions.

The Bank of North Dakota (BND), FEMA and the city of Grand Forks sign an agreement that turns over FEMA's manufactured housing program to the state. Cost for administering the program will be covered by FEMA as part of the agreement, and the state will maintain an oversight role. The city has contracted with a local firm to handle day-to-day activities, including maintenance.



JANUARY 1998 *(continued)*

January 13: North Dakota, Minnesota and federal officials meet in Fargo to develop plans for possible ice dusting missions.

NDDoH and the Grand Forks Public Health Department receive more than \$650,000 in flood-related funding from the Robert Wood Johnson Foundation. One grant will fund an epidemiological surveillance program of flood-related physical and mental health problems. A second grant will be used by NDDoH to study post-flood changes in health insurance coverage rates and utilization of health care services. A third grant will place three public health nurses in Grand Forks for two years, where they will provide services to public schools serving flood-displaced students, senior citizens and residents of temporary housing units.

Statewide, the total number of National Flood Insurance Program (NFIP) policies in North Dakota grew from 3,872 to 12,445 in 1997, a 321 percent increase. Additionally, 277 communities are enrolled in the NFIP compared to 241 the previous year.

A survey of approximately 1,500 Grand Forks residents by the Bureau of Governmental Affairs at the UND indicates only 19.8 percent had purchased flood insurance before the 1997 spring flood disaster. The Bureau also surveyed Grand Forks city residents about their reasons for not purchasing flood insurance. The Bureau stated approximately 76 percent of the respondents did not think the Red River would crest above 49 feet. (The river crested at 54.1 feet.) Seventy percent believed that dikes and other flood control measures would prevent personal property damage, and 58 percent did not think that a flood would ever damage their homes.

January 14: Governor Schafer receives notification that North Dakota has been approved for a Secretarial Disaster Designation from the USDA.

January 20: Local North Dakota governments have acquired 267 homes as part of the fastest acquisition program in FEMA's history. The acquisition project is approximately two-thirds of the way toward its goal of acquiring 391 substantially-damaged properties through local government purchases from voluntary sellers.

January 21: Officials in North Dakota, Minnesota and Canada monitor conditions in the Red River Basin. Data indicates river water flows under ice are above normal for this time of year.

January 22: In his 1998 State of the State Address, Governor Schafer praises the resilience of North Dakotans to rebuild the state after last year's catastrophic flooding. While disaster recovery is ongoing, Governor Schafer stated that the following steps must be taken to prevent similar widespread damages in the future: Purchase of homes in flood-prone areas along the entire Red River Valley to keep people and property out of the most dangerous places. Completion of a risk assessment of the Red River Valley to pinpoint flood-related risks that might cause problems in future floods. "Disaster proof" registers of deeds offices to protect critical property and tax records. Re-examine floodplain regulations to ensure they are adequate.

To date, disaster recovery programs and amounts approved are: \$115.7 million in Public Assistance (insurance deductions account for decrease from previous month); \$53.8 million in Disaster Housing; \$14 million in Individual and Family Grant funds; and \$180.1 million in SBA loans. Additionally, \$37 million in HMGP funds are available for North Dakota.

January 26-29: NDDEM and the USACE are sponsoring several interagency flood preparedness meetings for local officials during the week at various locations along the Red River of the North. The International Joint Commission has issued 40 short-term recommendations to prepare for potential floods in the Red River Basin in the next two years.

FEBRUARY 1998—

February 12: USACE, St. Paul District, presented two options for permanent protective measures to Grand Forks city officials. The first option calls for levee protection and is estimated to cost approximately \$300 million. The second option is a levee-diversion combination with a preliminary price tag of \$932 million. Governor Schafer has pledged that the state will pay half the local cost for construction of a permanent dike system for the city of Grand Forks. City officials are expected to decide whether to undergo the project at a February 26 council meeting.

February 13: NWS issued its Spring Snowmelt Flood Outlook indicating minor snowmelt flooding could occur in the Red River Valley. Minor snowmelt flooding is defined by NWS as a general term indicating "minimal or no property damage, but possibly some public inconvenience."

NWS hydrologists do not expect flooding in the Missouri, James and Souris River Basins. Devils Lake is expected to rise to 1,443.5 or 1,444 feet by May or June. The lake level is currently at 1,442.7 feet.

State, federal and local health officials investigate the potential of an immediate threat to public health and safety resulting from basement heating oil contamination in Grand Forks. Approximately 400 Grand Forks homeowners reported fuel oil spills after last year's flood.

FEBRUARY 1998 *(continued)*

To date, disaster recovery programs and amounts approved to date are: \$117.8 million in Public Assistance; \$54 million in Disaster Housing; \$14 million in Individual and Family Grant funds; and \$181.4 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$37 million.

February 19: State and federal disaster recovery officials announce FEMA has approved \$524,039 for a new sewage lagoon for the city of Minnewaukan which has been inundated by Devils Lake flood water.

February 24: FEMA provides more than \$2.2 million in Public Assistance funds for construction upgrades that will protect the Grand Forks water treatment plant. The plant sustained more than \$4.5 million in damages during last spring's flood. Because of these damages, Grand Forks went 13 days without running water and 23 days without drinkable water.

February 25: A blizzard strikes western and north-central North Dakota on February 25 and continues through February 28. Snow depths range from nine to 18 inches. Widespread road closures occur.

February 26: The Grand Forks (ND) and East Grand Forks (MN) city councils select a levees-only protection system to protect their cities against future flooding. USACE will work with state and local officials to develop project details for subsequent federal review.

February 27: Revised, spring flood outlook for the Red River Valley calls for minor to moderate flooding in the Red River Valley. Moderate flooding indicates that evacuation may be required, inundation of secondary roads may occur, and property may have to be relocated to a higher elevation.

The Red River has risen to 20.12 feet at Fargo; flood stage is 17 feet. The Red River at Wahpeton is at 9.1 feet, flood stage is ten feet. The Wild Rice River at Abercrombie is 3.49 feet above its 10-foot flood stage. The Sheyenne River at Cooperstown has risen to 11.73 feet, flood stage is 12 feet.

The revised Spring Snowmelt Flood Outlook reports Devils Lake to rise to 1,444 to 1,444.5 feet, a one-half-foot increase over the February 13 forecast. Devils Lake at Creel Bay reached 1,442.86 feet. A one-foot rise in Devils Lake waters this year could cause up to \$20 million to \$30 million in damages to property and roads, the N.D. State Engineer reported. A one-foot rise should enlarge the lake to around 105,000 acres, an increase of 5,000 acres from last summer.

Applicants who registered for the Individual and Family Grant Program have until April 3 to turn in receipts for disaster-related expenses for preventive measures, moving and storage, medical and transportation costs.

To date, disaster recovery programs and amounts approved are: \$114.8 million in Public Assistance; \$54 million in Disaster Housing; \$14.1 million in Individual and Family Grant funds; and \$181.7 million in SBA loans. Additionally, HMGP funds available for North Dakota amount to \$37 million.

MARCH 1998—

March 13: NWS issues a revised Spring Snowmelt Flood Outlook indicating moderate to major spring flooding could occur along the Pembina River, from the Canadian border to the river's confluence with the Red River. The flood outlook for the Red River at the city of Wahalla calls for a rise to 15 feet; flood stage is 11 feet. The flood of record level is 16.2 feet. The river at the community of Neche is forecasted to rise to 24 feet. Flood-of-record was 24.5 feet in 1997.

Devils Lake is forecasted to peak more than 2.5 feet higher than the 1997 record level of 1,443 feet. The outlook calls for the lake to peak in June or July.

The Red River rises above flood stage at Grand Forks, Drayton and Oslo, Minn., causing limited flooding in low-lying areas. Grand Forks officials placed a crisafulli pump at Belmont Road and 15th Avenue to pump water off the Lincoln Park Golf Course. In Walsh County, Red River rises caused limited flooding in low-lying areas. The river crested at 34.5 feet at nearby Oslo on March 10.

Limited flooding also occurred in Pembina County. Snow-blocked drains caused water to flow over two township roads. Basement seepage was reported throughout the county. The Red River at Drayton rose to 35.8 feet on March 10, and dropped below its 32-foot flood stage on March 16.

March 18, FEMA and Public Assistance personnel for the NDDEM Public Assistance have received 4,376 Damage Survey Reports to date and have obligated funds for 4,133 Damage Survey Reports. Survey work has been completed for 410 of the 440 applicants for the 1997 flood. Nearly \$121.3 million in infrastructure repairs, emergency work and debris removal has been determined to be eligible statewide.

MARCH 1998 (continued)

March 20: The estimated state share of damage recovery costs related to FEMA programs triggered by the Presidential Major Disaster Declaration of April 7, 1997, will total approximately \$18.5 million. Final repair liabilities and costs still are undetermined.

The Federal/State Disaster Field Office in Bismarck and the Satellite Disaster Field Office in Grand Forks established on April 7 to serve as a base of operations for NDDEM, FEMA, SBA and other federal, state and local relief workers closes. A small FEMA program staff will remain in the state until May to continue work with remaining recovery issues.

March 23: NDDEM and FEMA to date have approved the city of Grand Forks' application to begin demolishing 49 flood-damaged homes in the Lincoln Park area. Approximately 700 homes may eventually be part of the acquisition process.

JSND reports 803 people have been placed at 49 job sites as part of its Disaster Assistance Program. The program assists workers who lost their jobs because of a disaster, and assists public agencies and private nonprofit agencies in need of help with recovery efforts. To date, 284 workers still are employed.

The 1997 spring flood Individual and Family Grant Program, administered by NDDEM, has approved nearly \$14.2 million in grants flood losses. The average grant is \$1,341. The staff has closed 23,244 cases.

The State Hazard Mitigation Team has obligated the entire \$37 million available through HMGP for projects designed to reduce or eliminate the risk of future flooding statewide. To date, nearly \$31 million of those available funds have been approved, or are pending FEMA approval.

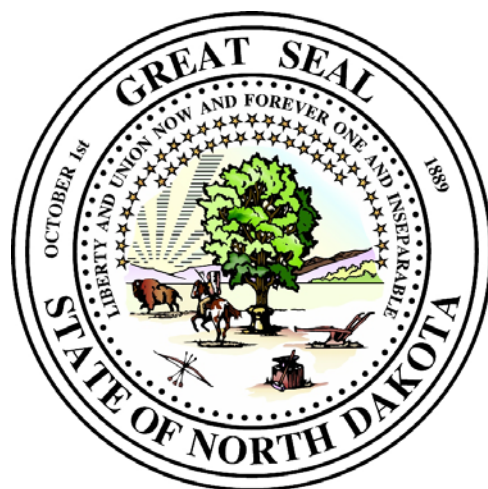
SBA has approved a total of \$182 million in low-interest loans for businesses and individuals; 11,707 loan applications have been received, of which 6,967 have been approved. Of the total amount of money loaned, 54 percent were to home owners and renters for real estate and personal property losses, and 46 percent were to business owners for repairs to businesses and for lost income.

To date, 24,491 awards have been approved for nearly \$54.2 million in Disaster Housing Assistance provided by FEMA.

N.D. Division of Emergency Management (NDDEM) issues its final Situation Report on the 1997 Spring Flood.



This document was assembled by the
N.D. Department of Emergency Services,
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State Emergency Operations Plan.



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