







DAKOTA AUGUST



Tom and Phyllis Hofsommer of West Fargo installed window well covers to keep moisture out of their basement.

### **Preventive Measures Reduce Damage**

om and Phyllis Hofsommer's basement and home have remained dry ever since they purchased and installed window well covers and drain tiles.

"The water was coming in from everywhere," said Tom Hofsommer, who was spending most of his time cleaning up water in the basement. "The window well covers are working very well and kept out the unbelievable rain we've had recently." The excessive water caused structural damage and distorted the framework. Window well covers are shields that keep out rain, snow, ice and debris. Drain tiles now direct water to a sump pit where a sump pump draws water out of the pit and away from the house.

"Inadequate drainage is a cause of basement flooding," Steve Pratt, the Federal Emergency Management Agency's (FEMA) deputy federal coordinating officer for mitigation, said.

"Installation of drain tiles might cost around \$500 when building your house, but it may cost \$5,000 or more to have a contractor fix it after there's a problem. It's less costly to protect your home than to have to repair or rebuild time and again."

For fellow North Dakotan Steve Silewski, installation of an interior drain and sump pump kept his basement and contents dry this year after getting flooded the previous two years. Silewski's washer and dryer, furnace and hot water heater – all located in the basement – were flooded by more than 6 feet of water. He couldn't afford to replace everything again. "Ever since I put the sump pump in, my basement's been dry. It's unbelievable," Silewski said.

Funding for measures that prevent or reduce future damage may be available to eligible households from FEMA, the U.S. Small Business Administration (SBA) or the state-administered Individual and Family Grant programs.

#### **Register First For Help**

As the wet weather trend continues in North Dakota, residents are beginning to think about the future. Federal and state emergency management officials are encouraging people to take precautions now to break the damagerepair-damage cycle.

On June 8 President Clinton declared a federal disaster that now includes 42 counties and four Indian Reservations in North Dakota. This made grants and loans available to homeowners and business owners who suffered damage or loss from severe storms, flooding, tornadoes, ground saturation, snow, ice, landslides and mudslides from March 1 through July 19. Access to federal and state disaster assistance programs begins with a call to the toll-free registration line, 1-800-462-9029. Registration ends Sept. 7, 1999.

A wide variety of disaster assistance is available including grants to help pay for temporary housing, minor home repairs and other serious disaster-related expenses. Low-interest loans from the U.S. Small Business Administration also are available to cover uninsured and under-insured private and business property losses.

"The rebuilding and repair phase of a disaster is the ideal time to limit future damage," Federal Coordinating Officer Lesli A. Rucker said. "It is safer, cheaper and ultimately much easier to limit future damage than to repair it afterward."

APPLY BY PHONE

1-800-462-9029

(TTY: 1-800-462-7585)

8 a.m. to 5 p.m. Mon. — Fri. **Toll Free** 





A MESSAGE FROM

### FEDERAL COORDINATING OFFICER AND STATE COORDINATING OFFICER

Lesli A. Rucker

Keith D. Bjerke

Helping you make your home and community resistant to disasters is the long-range goal at the North Dakota Division of Emergency Management and the Federal Emergency Management Agency. Working together with federal and state agencies, local officials, businesses and voluntary agencies, we are making progress on this front by looking at creative solutions to long-term problems to help break the cycle of damage and repair. With your help, we can move further ahead.

The successes of past years' expanded disaster assistance programs have allowed us to increase programs this year. Additional disaster assistance funds are now available for measures that prevent or reduce future damage to eligible households, such as installing sump pumps with battery backup, basement drains or above-ground utility rooms.

A majority of the homes that took these measures in past years received either no new damages, significantly less damage or only damage to areas without the preventative measures. Water entry was eliminated or significantly reduced in housing authority homes, which completed preventive measures using public assistance funds.

Water tables are continuing to rise. Even without disaster funding, it's well worth your investment to take steps to protect your home. The next time there's excessive moisture, we'd like to see even more residents who are prepared for the disaster – and come through with little or no damage.

### **Disaster-Resistant Communities**

Fargo and Valley City are enhancing their preparations for future disasters by joining *Project Impact*, a national initiative launched by the Federal Emergency Management Agency (FEMA) to build disaster-resistant communities. *Project Impact* is supported by state, local and voluntary agencies, and businesses.

The city of Fargo became North Dakota's first *Project Impact* community in November 1998 and currently has scheduled 10 major projects including constructing tornado shelters in mobile home parks, enhancing emergency warning sirens and planning with the county to lessen the risks associated with overland flooding.

"Through this initiative, we are changing the face of emergency management in this country," FEMA Region VIII Director Rick Weiland said. "Working with communities such as Fargo and in partnership with the North Dakota Division of Emergency Management, we can make mitigation the foundation of community-wide interest to create a safer and more economically viable future."

Valley City, which joined *Project Impact* in December 1998, is enhancing its disaster resistance by developing a pilot training exercise to assess the community's risks and vulnerability from natural disasters. The exercise will include a flood and straight line winds simulation to determine what preventive measures are needed to offset future problems. Participants will include individuals responsible for the planning, training and response to disasters including members of local, state and voluntary agencies, and business communities.

"Valley City is building a non-traditional community partnership with private industry and voluntary agencies who are committed to improving the community as a whole," Doug Friez, director of the North Dakota Division of Emergency Management, said. "Communities impacted by disasters can use sustainable redevelopment strategies not only to reduce future damage but also to improve the local economy, preserve the environment and enhance quality of life."

# **Relocation Offers Best Protection**

If you live in a flood hazard area you may want to consider moving your home and family to a safer location. Although this offers the greatest protection from flooding, it is also the most expensive method. If you are seriously considering moving a house, you need to take into account the house's condition; size, design, and shape; possible routes between the old and new sites; and the length of time during which the house cannot be occupied.

If you decide to relocate your house, pay special attention to the new site. Consider the natural hazards that might be faced in the new location, how utilities can be connected, the site's accessibility and local zoning ordinances. You may want to involve your design professional and a moving contractor in the process so you won't face any surprises as the move occurs.

Check with your local community for compliance with local building codes.

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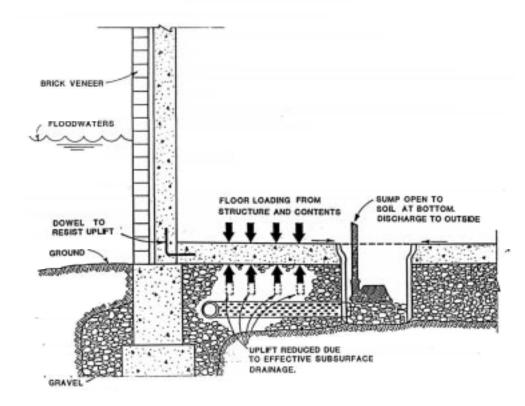
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### SUBSURFACE DRAINAGE



A system of perforated drainpipes may be used to direct seepage to a sump pump for discharge above the flood level.

# **Protecting Your Home**From Future Damage

Many North Dakotans are tired of repeatedly cleaning up basements, tearing out wet drywall and carpeting and replacing water heaters and furnaces.

Following are cost-effective measures to keep these kinds of damages from happening again, or to lessen their effects.

- Elevate or relocate water heaters, heating systems, washers and dryers to at least 12 inches above the safe flood elevation heights, referred to as "baseflood elevation," or to a higher floor. The washer and dryer can be put on a pressure-treated wooden platform in the basement. Stairs to the platform may be needed.
- Elevate the main electric panel or relocate it to a higher floor, and elevate electric outlets to the recommended 12 inches above the base-flood elevation.

It's a good idea to hire an electrician for these tasks.

- Install a septic backflow valve to prevent sewage backup. Flooding can force sewage back into the home, presenting an unpleasant health risk for the occupants. Installing an interior or exterior septic backflow valve minimizes the chance of this happening.
- Install a floating floor-drain plug at the lowest point of the lowest finished floor. Drains can sometimes allow floodwater to force its way back into the home. Installing a floating floor-drain plug at the lowest point of the drain's run can prevent backup. The floating plug allows drainage during normal times, but when water backs up in the drain, such as in a flood, the float rises and plugs the drain.

- Landscape the yard so that surface water flows away from the house. This may mean grading a lawn or leveling a tilted sidewalk.
- Cover basement windows. Window wells or other openings more than 12 inches below existing grade can be filled with poured concrete. Window openings also can be replaced with removable, waterproof panels.
- Improve drainage systems. In some cases, burying gravel and perforated drain-pipes beneath a basement floor and along foundation walls can significantly reduce groundwater uplift pressure on the basement floor. This sort of drainage system also may be used to direct seepage to a sump pump, a "dry well" or a street drain.
- Sewage Mounds Sewage mounds are designed for locations that have soils with poor drainage and/or high water tables. A sewage mound is an elevated rock absorption bed with sand fill over the existing ground. On soils with poor drainage, the area must be large enough to allow sewage to seep into the soil surface. In high water table conditions the elevated bed allows sewage treatment to take place before the sewage contacts the soil water table.
- Install a sump pump to collect and carry away groundwater. This can help protect some houses against damage from seepage and low-level floods. A battery backup system can keep the pump working if there is a power outage.
- Fill in the basement. Gravel or other suitable material can be used to fill a basement to the exterior grade, but no higher than 30 inches below the main floor joists. Utilities can be moved upstairs. In some cases, a loan from the SBA can be used to build a "safe room" for a tornado shelter and to replace the basement as space for the furnace and other utilities.
- Elevate the home. For this solution, local building officials can determine base flood elevations. The structure is jacked up so that the main living floor is above the base flood elevation. A new foundation may be added. New stairs provide access to the main floor.

Before any alterations or repairs are made, contact your local building official to obtain any necessary permits.

### **Utility Safe Rooms: An Alternative to Flooded Basements**

Ground saturation, as a result of the recent wet weather trend, is causing continual recurrences of water-logged basements for homeowners. There are, however, measures that can be taken to protect these homes from future flood damage.

"When building a new home or repairing an existing one, you should consider building a house addition to replace the basement as space for the furnace and utilities and for a tornado shelter," Steve Pratt, FEMA deputy federal coordinating officer for mitigation, said. He suggests that a good alternative is to fill in the basement and build a safe room above ground in the home or as part of a separate utility/ mechanical room. Heating and hot-water systems, washers and dryers, electrical panels and utilities are typical items that can be relocated into this room.

"The thought of giving up a basement is a pretty tough thing to do, but a safe room is essentially built to withstand extreme winds such as occur in tornadoes and they can save your life," Adjutant General Keith D. Bjerke, state coordinating officer, said.

"Taking the necessary measures to protect yourself and your family just makes good sense," Federal Coordinating Officer Lesli A. Rucker said.



These 9 X 17 ft. safe rooms are ready for a developer to install in houses in a new subdivision.

Costs of safe rooms vary, depending on size, type and building material. For information on *safe room* design specifications, you can order the Federal Emergency Management Agency (FEMA) publication *Taking Shelter from the Storm* by calling

1-888-565-3896. Ask for publication number 320. The publication, and the construction plans can be downloaded from the FEMA website at www.fema.gov/mit/tsfs01.htm

## CLIP AND SAVE IMPORTANT PHONE NUMBERS

Federal Agencies	Dept. of Health
FEMA Registration 800-462-9029	Dept. of Human Services
TTY for hearing/speech-impaired 800-462-7585	Aging Services
Disaster Information Helpline 800-525-0321 TTY for hearing/speech-impaired 800-462-7585	Job Service North Dakota 800-472-2222
Rural Development (USDA)800-582-7584	Dept. of Taxation
FEMA Fraud Detection 800-323-8603	Economic Development and Finance
National Flood Insurance Program 800-720-1090	Attorney General's Office, Consumer Protection 800-472-2600
Small Business Administration 800-366-6303	Crisis Counseling
Internal Revenue Service 800-829-1040	Dept. of Insurance
Housing and Urban Development 800-669-9777	Dept. of Transportation
Department of Veterans Affairs 800-827-1000	Legal Services (ND Bar Association) 800-634-5263
Social Security Administration 800-772-1213	Voluntary Agencies
State Agencies	American Red Cross
Dept. of Agriculture	Salvation Army
Agriculture Mediation Service 800-642-4752	United Methodist Upper Midwest
Individual & Family Grant Program 800-472-2911	Recovery Project