

ORDINANCE No. 3754

AN ORDINANCE OF THE CITY OF HASTINGS, NEBRASKA, AMENDING CHAPTER 32, ARTICLE VI, OF THE HASTINGS CITY CODE PERTAINING TO WATER, AND CHAPTER 38 PERTAINING TO SUBDIVISIONS; ESTABLISHING THE HASTINGS INSTITUTIONAL CONTROL AREA; PROHIBITING CERTAIN ACTS; REQUIRING REGISTRATION OF CERTAIN EXISTING WELLS; REQUIRING PERMITS FOR ALL NEW WELLS; DEFINING TERMS; REPEALING INCONSISTENT PROVISIONS; AND ESTABLISHING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF HASTINGS, NEBRASKA:

SECTION 1. That Hastings City Code Section 32-601 be amended to read as follows:

32-601. Definitions.

For the purposes of this Article, the following words and phrases shall have the meanings respectively ascribed to them by this Section:

- (1) Available. A water main shall be deemed to be available to a property when such main lies within two hundred (200) feet of the property line of such property unless, in the judgment of the Board of Public Works, connection to such main cannot be reasonably and practically made.
- (2) Belt Line, Main or Commercial Main. Any pipe, other than a supply pipe, used for the purpose of carrying water to or distributing it in the city.
- (3) Board. The City's Board of Public Works, sometimes referred to as Hastings Utilities, and any department or employee designated by the Board to carry out any of the functions assigned to the Board under the terms of this Article.
- (4) City Engineer. Use of the term "City Engineer" in this Article shall be deemed to include the City Engineer or any designee or representative of the City Engineer.
- (5) Contaminated water or groundwater. Water or groundwater shall be deemed to be contaminated if testing results show that the amount of any element, substance, compound, or mixture, including disease-causing agents, exceeds the maximum contaminant level established for such substance under the drinking water standards established by Title 179, Nebraska Administrative Code, Chapter 2, Section 002.
- (6) Department. The City's Department of Development Services, which is generally charged with the functions of planning, inspections, code compliance and community development.

(7) Domestic Water Well. A water well providing water to any water supply system furnishing water for human consumption other than a public water supply system, or for the watering of livestock, poultry, farm and domestic animals used in operating a farm, and for the irrigation of lands not exceeding a total of two acres in area.

(8) Domestic Use. Any use of groundwater required for human needs of health and sanitation, including but not limited to drinking, cooking, washing, bathing, showering, and other similar household uses of water.

(9) Effective Date. The effective date of this ordinance shall be January 1, 2001.

(10) Institutional Control Area. An area wherein contaminated soils and groundwater are located, and which has been designated by city ordinance as an institutional control area.

(11) Institutional Controls. Non-engineering measures, such as governmental controls, proprietary controls, enforcement tools, and informational devices, intended to affect human activities in such a way as to prevent or reduce exposure to hazardous substances within an institutional control area.

(12) Nonpotable Water Well. Any water well other than a domestic water well or a public water supply well.

(13) Person. This term shall be deemed to include any person, whether one or more, and any corporation, partnership, limited liability company, limited liability partnership, or other entity.

(14) Public Water Supply Well. A water well designed and used to provide water for a public water supply system which provides the public piped water fit for human consumption, where such system has at least 15 service connections or regularly serves at least 25 individuals.

(15) Separate Premises. When considering the expediency of permitting deduct meters or more than one consumer to secure water from the same service or supply pipe shall be construed to mean a separate dwelling or apartment, a building or structure used for a separate business or each distinct business in a business building or structure; provided, that if deduct meters for two or more consumers be allowed or permitted on the same service or supply pipe, each customer shall be billed for and shall pay the monthly minimum; and provided further; that where a separate business and a dwelling are used in connection by the same owner or by the same tenant and are on the same city lot and are occupied by the same person and his family, the same shall constitute a separate premises.

(16) Service Pipe. The pipe extending from the curb cock or valve to the meters.

including the curb cock or valve, to the curb line of the street; and when used in connection with a fire main or sprinkler system shall mean the pipe extending from the main or belt line to the wall of the building.

(18) Water Main. A pipe transporting water produced by one or more public water supply wells.

(19) Water Well. Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed for the purpose of exploring for ground water, monitoring ground water, utilizing the geothermal properties of the ground, obtaining hydrogeologic information, or extracting water from or injecting water into the underground water reservoir.

(20) Well Owner. (Also referred to herein as the owner of a well.) The person who is the record title owner of the real estate upon which a well is located.

SECTION 2. That Hastings City Code Section 32-606 be amended to read as follows:

32-606. Connection to public water system required; domestic water wells allowed under certain circumstances.

(1) It shall be unlawful to operate or maintain any domestic water well within the city, or the city's two mile extraterritorial jurisdiction, except as provided hereinafter and in Code sections 32-611 through 32-623.

(2) Any person desiring to install any domestic water well within the city, or the city's two mile extraterritorial jurisdiction shall make application with the Department for the right to install, operate or maintain such well, and shall pay an application fee in the amount established in the City Council Fee Resolution.

(3) The application to the Department shall contain the information described in Code section 32-616. The Department shall forward a copy of said application to the Board for its review.

(4) If the Board determines that (a) the application for the domestic water well is complete; (b) no water main is available to provide the required water; (c) the health and safety of the public and of the users of said water will not be jeopardized or placed at risk; and (d) the well will not be located within any institutional control area, then it shall issue a permit to the applicant authorizing the installation of the said well, and furnish a copy of said permit to the Department. The Board shall keep all well permits on file.

(5) Whenever the Board determines that the applicant's water requirements can be satisfied by connection to a water main, the Board shall notify the property owner of that fact and of the requirements of the following subsection.

(6) Upon receipt of that notice, the owner of the property shall file the application with the Board to connect to the city's water system as described in section 32-605 of this code. The property owner shall pay the proper out-of-district fee and proceed with connection.

(7) Any habitable structure described in subsection (1) above which has an approved private existing domestic water well which does not lie in an institutional control area shall be exempt from the requirement to connect to a public water supply main so long as the well is operable. At such time as replacement of such well is necessary, the property shall become subject to this section, and the property owner shall make the application to the Board as described above.

(8) The Department shall not issue a building permit for any new structure until it is satisfied that the water service to such structure will be connected to the public water supply or that a well permit has been issued.

SECTION 3. That Hastings City Code Section 32-611 be enacted to read as follows:

32-611. Contaminated groundwater; findings and intent.

(1) The Hastings City Council finds and determines that certain contaminants have, for many years, existed in certain areas of the groundwater in and near the City of Hastings, and that certain legislation is necessary and appropriate for the purpose of supplementing the various measures undertaken by the City of Hastings and others, aimed at reducing or eliminating the possibility that humans will come into contact with such contaminants.

(2) It is the intention of the City that existing water wells within the area where contaminated groundwater exists, which area shall be hereafter known as the Hastings Institutional Control Area, shall be allowed to remain in existence only if reasonable safeguards are implemented so that there is no reasonable likelihood of human contact with the contaminants in the groundwater.

(3) It is also the intention of the City that no new domestic water wells may be installed within the Hastings Institutional Control Area.

(4) It is not the intention of the City to prevent the installation of agricultural irrigation wells, or the installation of wells for non-contact use by businesses within the Institutional Control Area, so long as adequate safeguards are in place to prevent human consumption of the water from said wells.

SECTION 4. That Hastings City Code Section 32-612 be enacted to read as follows:

32-612. Declaration of Hastings Institutional Control Area.

The controls described in Code Sections 32-601 and 32-611 et seq., shall apply within the bounds of the Hastings Institutional Control Area, which boundaries are hereby defined as follows:

Beginning at the intersection of 12th Street and Crane Avenue in Hastings; thence East on 12th Street to Maxon Avenue; thence South on Maxon Avenue to J Street; thence West on J Street to Crane Avenue extended; thence North on Crane Avenue extended to the point of beginning.

SECTION 5. That Hastings City Code Section 32-613 be enacted to read as follows:

32-613. Registration of existing wells within Institutional Control Area.

Within sixty days after the effective date of this ordinance, all existing water wells within the Hastings Institutional Control Area, other than public water supply wells, shall be registered in the office of the Board or of the Department by the owner of the real estate upon which the well is located. There shall be no fee for registering an existing water well. The Department shall forward all registrations to the Board, where they shall be kept on file.

SECTION 6. That Hastings City Code Section 32-614 be enacted to read as follows:

32-614. Registration of existing water wells; information required.

The following information shall be furnished in connection with registering a water well in existence in the Institutional Control Area on the effective date of this ordinance:

- (1) The name and address of the person owning the real estate upon which the well is located.
- (2) The address and legal description of the property on which the well is located.
- (3) The address of all properties being served by groundwater pumped from the well.
- (4) A description of the uses of the water pumped from the well. The application shall state whether the groundwater is being, or will be, used for human consumption including, but not limited to, drinking, cooking, washing, or other household uses.
- (5) The location of the nearest public water main to the property served by the well.
- (6) The depth of the well.

(7) An accurate diagram showing the location of the well in respect to the boundaries of the property, the nearest street, road, or highway intersection, and any on site septic or waste disposal system.

SECTION 7. That Hastings City code Section 32-615 be enacted to read as follows:

32-615. Permitting of nonpotable water wells.

After the effective date of this ordinance, no person may drill or install a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area prior to applying for and obtaining a well permit in the manner described in this chapter. Any person filing an application for a new nonpotable water well shall pay an application fee in the amount established in the City Council Fee Resolution.

SECTION 8. That Hastings City Code Section 32-616 be enacted to read as follows:

32-616. Permitting of water wells; application for well permit.

The following information shall be submitted to the Department in connection with applying for a well permit for a domestic water well or a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area:

- (1) The name and address of the person owning the real estate on which the proposed well is to be located.
- (2) The address and legal description of the property on which the proposed well is to be located.
- (3) The address of all properties to be served by groundwater pumped from the proposed well.
- (4) A description of the uses to be made of water to be pumped from the proposed well. The application shall state whether the groundwater will be used for human consumption including, but not limited to, drinking, cooking, washing, or other household uses.
- (5) The location of the nearest public water main to the property served by the proposed well.
- (6) The depth of the proposed well.
- (7) An accurate diagram showing the location of the proposed well in respect to the boundaries of the property, the nearest street, road, or highway intersection, and any on site septic or waste disposal system.

The well for which a permit has been obtained must be installed within six (6) months after issuance of the permit, unless the Board, for good cause, grants an extension of the permit. The well permit shall expire unless the well is installed within such six month period, or any extension thereof.

SECTION 9. That Hastings City Code Section 32-617 be enacted to read as follows:

32-617. Standards for considering application for a nonpotable water well.

The Board shall approve the application for a nonpotable water well within the City of Hastings or its two mile extraterritorial jurisdictional area if it is satisfied that:

- (1) the required information contained in the application is complete;
- (2) the well is not a domestic water well;
- (3) the proposed use of the nonpotable water well will comply with the requirements of this Article.
- (4) the location of the well does not violate any well spacing or encroachment regulations or restrictions established by any federal, state, or local authority.

SECTION 10. That Hastings City Code Section 32-618 be enacted to read as follows:

32-618. Special exceptions for drinking water wells in the Institutional Control Area.

(1) Any drinking water well in existence within the Institutional Control Area on the effective date of this ordinance may remain in use so long as the water, either at the wellhead, or after point of use treatment, meets the drinking water standards established by Title 179, Nebraska Administrative Code, Chapter 2, Section 002. The determination of whether the water meets such standards shall be made by the Board.

(2) All point of use treatment devices shall be installed and maintained at the expense of the property owner; provided that nothing herein shall prevent the property owner from pursuing damages or other relief from any party responsible for contamination of groundwater available to the property owner.

(3) Any such existing domestic water well may be redrilled or replaced so long as the redrilled or replaced well meets one of the above exceptions; provided however, such right shall exist only if an existing water main is not available to the property served by such domestic water well. Any replacement well may be drilled or installed only within one hundred (100) feet of the original domestic water well, and the location must first be approved by the Department and the Board.

SECTION 11. That Hastings City Code Section 32-619 be enacted to read as follows:

32-619. Required warning signs in Institutional Control Area.

(1) Every owner of real estate located within the Hastings Institutional Control Area upon which a well is now or may hereafter be located, shall conspicuously post and maintain a warning sign on or near such well, and at all water service points where water may be obtained from said well for human consumption.

(2) The warning sign shall, at a minimum, bear the following wording: "WARNING. THIS WATER IS NOT FOR HUMAN CONSUMPTION." The signs will be uniform in appearance, and shall be designed and produced by the City Engineer. The cost of such signs shall be borne by the City.

The foregoing sign requirement shall not apply to a domestic water well or a service point which meets the special exception provisions of Section 32-618.

SECTION 12. That Hastings City Code Section 32-620 be enacted to read as follows:

32-620. Institutional Control Area; access; sampling and testing.

(1) Every owner of a well within the Hastings Institutional Control Area shall, upon reasonable notice, grant access to said well to any local, state or federal official who requests access for the purpose of inspecting, sampling, testing, or inventorying said well.

(2) All existing domestic water wells in the Hastings Institutional Control Area, remaining in use after the effective date of this ordinance, shall be inspected and tested for contamination by the Board. Testing shall be conducted in accordance with testing protocol designed by the Board establishing the contaminants of concern and the frequency of testing.

(3) The testing costs for wells within the Institutional Control Area shall be borne by the Board.

SECTION 13. That Hastings City Code Section 32-621 be enacted to read as follows:

32-621. Nuisance.

All wells which:

- (1) are not registered or permitted as required by this Article;
- (2) produce contaminated water which is made available in any way for human consumption; or
- (3) provide a conduit for contamination into the aquifer for any reason, such as being in a state of disrepair, or the manner in which the well was constructed, are hereby declared to be a

public nuisance, and shall be immediately brought into compliance with this Article, or capped and closed at the owner's expense in accordance with all local, state, and federal rules and regulations governing the closing and capping of wells.

SECTION 14. That Hastings City Code Section 32-622 be enacted to read as follows:

32-622. Prohibited acts.

(1) It shall be unlawful for any person to install a well within the City of Hastings or its two mile extraterritorial jurisdiction without obtaining a permit for said well from the Board.

(2) It shall be unlawful to fail to register any well as required by this Article.

(3) It shall be unlawful for a person to fail to erect or maintain any warning sign required by the terms of this Article.

(4) It shall be unlawful for a person to remove, deface, or cover any warning sign required by the terms of this Article.

SECTION 15. That Hastings City code Section 32-623 be enacted to read as follows:

32-623. Violation.

(1) Any person found to be in violation of this Article shall be fined in an amount not to exceed one hundred dollars. Each day that the violation continues shall be deemed to be a separate and distinct offense.

(2) In the event that the Board determines that any well is a nuisance within the meaning of Hastings City Code Section 32-621, it shall send a written notice to the owner by certified mail, return receipt requested, notifying the addressee of the violation. The written notice shall contain the following information:

(a) The street address and legal description sufficient for identification of the premises on which the well is located.

(b) A brief and concise description of the acts or circumstances constituting the nuisance.

(c) A brief and concise description of the corrective action required to be taken to eliminate the nuisance.

(d) A brief and concise statement advising the addressee that if the nuisance is not remedied within seven days (excluding weekends and holidays) after receipt of the certified letter, the Board may order electrical power to the well disconnected and will request the City Attorney to file an action to abate the public nuisance.

(3) If the addressee of the notice referred to above fails to abate said nuisance within the time specified, the City Attorney shall, upon written request of the Board, proceed to abate said public nuisance pursuant to the Hastings City Code, and take all steps to have the costs of said action assessed against the owner or the real estate upon which the well is located.

(4) In the event the use of the groundwater in violation of this Article might cause irreparable harm or pose a threat to public health, safety, or welfare, the written notice to abate as set forth above, shall not be required as a condition precedent to commencing a legal action to obtain abatement of the nuisance. The City of Hastings may, with the consent of the Mayor, immediately file an action requesting such temporary and permanent orders as are appropriate to expeditiously and permanently abate said public nuisance and protect the public health, safety and welfare.

SECTION 16. That Hastings City Code Section 38-117 be amended to read as follows:

38-117. Required improvements.

(1) Generally. Except as provided hereinbelow, the owner or developer of a tract to be subdivided shall install, at its own expense, satisfactory curb, gutter, and sidewalks on all property abutting streets or roadways; pavement on roadways; and all water and sanitary and storm sewer lines within the subdivision which are necessary to serve the subdivision. Installation of the above improvements shall be in accordance with the specifications of the city. Water and sewer lines installed will require the approval of an on-the-job inspector before acceptance by the city. The cost of providing this inspection will be the responsibility of the owner or developer of the tract to be subdivided. Sewer lines shall have flow elevations as directed by the city; provided, the requirement that the owner or developer install improvements at its own expense may be satisfied by compliance with any City Council or Board of Public Works policy pertaining to funding of improvements.

(a) In a subdivision of lots, as defined in Section 38-101, located within one (1) mile of the city limits, the requirements for public sewer and water installations, curb, gutter and sidewalk, plus concrete paved road may be waived only by the City Council after a recommendation by the Planning Commission. Individual water supply and waste disposal systems may be installed when no public water supply system or public sanitary sewer system are available to the property, but such individual systems must be installed in compliance with applicable city ordinances.

(b) In a subdivision of lots, as defined in Section 38-101, located more than one (1) mile from the city limits, the requirements for public sewer and water installations, curb, gutter and sidewalk, plus concrete paved road may be waived only by the City Council, after a recommendation by the Planning Commission, and the following be accomplished:

(i) Individual water supply and waste disposal systems may be installed when no public water supply system or public sanitary sewer system are available to the property, but such individual systems must be installed in compliance with applicable city ordinances.

(ii) Subdivision streets, other than county roads, shall be constructed and surfaced with asphaltic concrete, in accordance with specifications of the City Engineer. Curb, gutter and sidewalk may be omitted.

(2) Pavement. The minimum width of roadway service shall be thirty-six (36) feet from back of curb to back of curb including cul-de-sacs. The pavement width in a cul-de-sac shall be exclusive of the center island. (See Figure 1 Typical Street Section.) Portland cement concrete, or asphaltic concrete may be used for the roadway surface. Curb and gutter shall be of Portland cement concrete. All curb and gutter and roadway surface shall comply with the specifications of the city. Storm water run-off shall be adequately handled through inlets, catch basins or other drainage constructions in accordance with a drainage plan.

(3) Sidewalks. All sidewalks shall be constructed of Portland cement concrete on both sides of all streets shown on the final plat. Sidewalks shall comply with the specifications of the city.

(4) Inspection. The City Engineer shall make three (3) inspections of all pavement construction:

(a) First inspection to check compaction of subgrade before subbase is applied.

(b) Second inspection to check subbase for compaction, material, sizes, thickness, etc., before prime coat is applied.

(c) Final inspection after roadway is completed.

(d) Twenty-four hours' notice shall be given to the City Engineer regarding any requested inspection.

(5) Bond provisions. After a plat has been duly approved by the Planning Commission and Council, as required in these rules, and after said plat has been duly recorded with the Register of Deeds as required by law, construction may begin on buildings within the subdivision. No building permit shall be issued for a building within such subdivision until the owner or developer has extended all required improvements to and in front of such lot, provided for such improvements pursuant to any City Council or Board of Public Works policy pertaining to funding of improvements as permitted in subparagraph (1) above, or furnished a surety bond conditioned upon the completion of all required improvements in compliance with the specifications of the city. Such surety bond shall be in an amount to be calculated by the

City Engineer. Such calculation shall be reasonable and shall not be less than the estimated actual cost of the installation of the required improvements.

(a) The above surety bond shall guarantee the proper installation of the required improvements for the entire block upon which a lot for which a building permit is requested, fronts. Such installation shall be completed within two (2) years of the effective date of the bond unless the City Council, after recommendation of the Planning Commission, gives special permission to the developer to extend the period for a specific time. In case installation of required improvements is not completed as specified, the city may proceed to construct, reconstruct or install all or any portion of the required improvements using proceeds from the surety bond. Any excess money shall be refunded to the guarantor.

(b) Upon final inspection and approval by the city, such surety bond or unused portion thereof shall be released, provided the owner or developer shall first furnish or cause to be furnished a surety bond conditioned upon the endurance of the improvements, excluding normal wear and damage beyond the control of the owner. Said guarantee shall remain in effect for a period on one (1) year from the date of final approval. The amount of such maintenance bond shall not be less than twenty percent (20%) of the amount of the bond guaranteeing the installation. If, at the end of one (1) year, following the date of final approval, there has appeared to be no failure due to faulty or substandard construction of required improvements, then said maintenance bond shall be refunded in full.

SECTION 17. That existing Hastings City Code Sections 32-601, 32-606, and 38-117 and all other ordinances or provisions in conflict with this ordinance are hereby repealed.

SECTION 18. The provisions of this ordinance are separable, and the invalidity of any phrase, clause or part of this ordinance shall not affect the validity or effectiveness of the remainder of this ordinance.

SECTION 19. This ordinance shall take effect and be in full force from and after its passage, approval and publication or posting as required by law, in its entirety, or in pamphlet form, as the case may be, said effective date being January 1, 2001, and this ordinance shall thereafter be included in the Hastings City Code Book.

PASSED AND APPROVED this 13th day of November, 2000.


Mayor



Laine Hartman
City Clerk

APPROVED AS TO FORM:

Michael J. Newman
City Attorney

**For More Information
on the Proper Disposal
of Chemicals the
Following Agencies
May Be Contacted:**

**City of Hastings Solid Waste
Landfill**

Mr. Jack Newlun
Solid Waste Superintendent
Ph# 402-461-2308

Hastings Utilities

Mr. Marty Stange
Environmental Engineer
Ph# 402-463-1371 Ext. 251

**Local Emergency Planning
Committee (LEPC) &**

**Adams County Emergency
Management**

Ph# 402-461-2360

**For more information
on water quality issues,
the following agencies
may be contacted:**

Water Sampling Information

Mr. Marty Stange or
Mr. Jason Redding
Hastings Utilities
Ph# 402-463-1371 Ext. 251
Fax# 402-463-1705

Drinking Water and Public Health

Nebraska Dept. of Health & Human Services
Domestic Well Division
Lincoln, NE
Ph# 402-471-0598

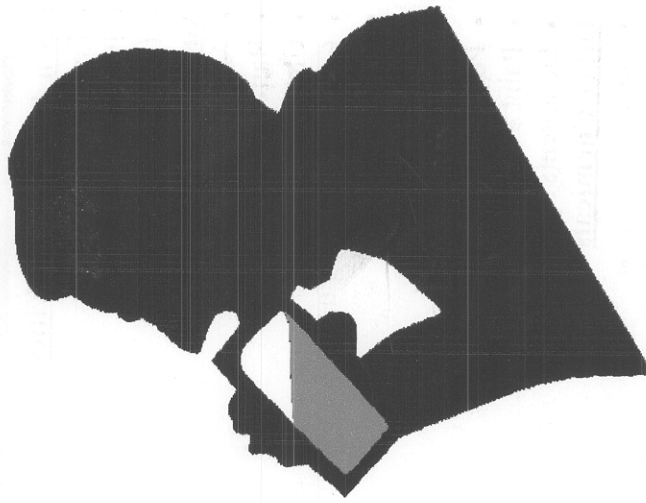
Water Resources

Little Blue Natural Resources District
Davenport, NE
Ph# 402-364-2145

Upper Big Blue Natural Resources District
York, NE
Ph# 402-362-6601

Hastings Utilities
1228 North Denver Avenue
Hastings, NE 68901
Phone: 402-463-1371 Fax: 402-463-1705
Email: mstange@hastingsutilities.com
www.hastingsutilities.com

**HASTINGS UTILITIES
WELLHEAD
PROTECTION
AREA**



**“Protecting Ground Water
Is Everyone’s Responsibility”**



Common Household Sources - Agricultural & Industrial Pollutants

Lawn & Garden Activities

- Fertilizer
- Pesticides
- Insecticides

Automotive

- Antifreeze
- Battery Acids
- Cleaners
- Gasoline & Other Fuels
- Motor Oil

Cleaning Supplies

- Solvents
- Pool Cleaning Chemicals
- Paint Thinners
- Detergents

Other Chemicals

- Paint
 - Glue
- ## Agricultural
- Fertilizer
 - Pesticides
 - Insecticides
 - Feed Lot Runoff
 - Fuels

Industrial

- Chemical Plating
- Solvents
- Cleaners
- Fuels

Wellhead Protection Areas (WHPA's)

Wellhead Protection Areas (WHPA's) are created to help minimize potentially polluting activities on the land surrounding public water supply wells. **Wellhead protection** involves federal, state, and local agencies working together in many different aspects to protect ground water. However, the real key to an effective program is community awareness and involvement.

Pollutants can take many different paths to reach ground water supplies. Unfortunately, the soil doesn't adequately filter most **pollutants** so even small quantities can cause large problems.

We all want clean water to drink. The easiest way to achieve this is prevention. An ounce of prevention is definitely worth a pound of cure concerning ground water. Costs of ground water clean up can range from \$100,000 to a million dollars or more per site. Replacing a drinking water well can cost as much as \$250,000. It can cost several million dollars to construct a drinking water treatment plant. To treat for nitrates and have proper flow out of the distribution system, it has been estimated that it would cost the City of Hastings approximately \$15 Million Dollars.

Hastings Wellhead Protection Plan

The **plan** is being developed in three phases. **Phase I:** Determine the extent of the wellhead protection area. This has been completed. A map and study can be provided by contacting Hastings Utilities.

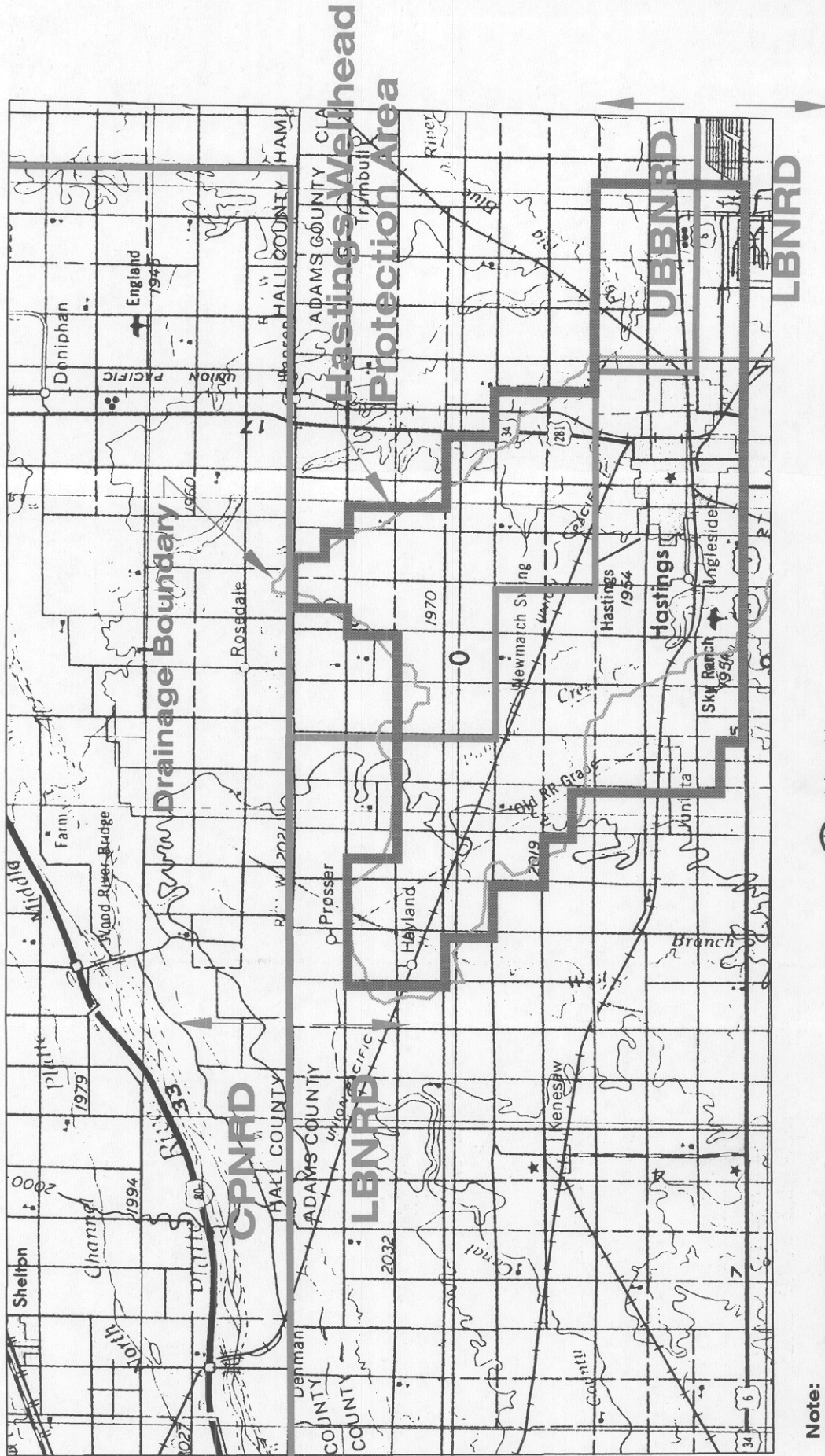
Phase II: Complete the inventory of all pollution sources in the WHPA. This plan is currently being completed.

Phase III: Develop a plan in connection with state & local agencies to reduce exposure to potential sources of pollution through education and public awareness.

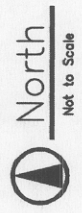
Guardian Well Program

Hastings Utilities has developed a guardian well program to help evaluate the types and amounts of pollutants found in the ground water located 5-10 years travel time from each of the municipal wells. These wells are tested every one to three years to help evaluate the future water quality changes.

Groundwater is one of our most important Resources. The City of Hastings, surrounding communities, & rural homeowners rely exclusively on groundwater for their drinking water.



Note:
 Total WHPA 68.25 sq. mi.
 WHPA within LBNRD 46.0 sq. mi.
 WHPA within UBBNRD 22.25 sq. mi.



Taking Action

When the inventory is completed, the community can decide how it wants to manage any contaminant sources that were found. Possible courses of action could include ordinances, zoning, education, and/or agreements with the county or NRD.

The program can also assist communities in developing emergency contingency plans for unexpected water shortages and in planning new wells to accommodate future growth.

What We Offer

The Lower Platte North NRD can assist you in planning and implementing a Wellhead Protection Area. We can provide:

- ◆ **Assistance** in collecting data to delineate a Wellhead Protection Area.
- ◆ **Help** with obtaining a Wellhead Protection Area map.
- ◆ **Preparation** of a Contaminant Source Inventory of the Wellhead Protection Area.
- ◆ **Help** with preparing a plan to manage potential contaminant sources and protect the community's wells.
- ◆ **Cooperation** with governing boards to establish a Wellhead Protection Area.
- ◆ **Education** of the public about wellhead protection.

More Information

For more information about Wellhead Protection, contact McKenzie Barry at the Lower Platte North NRD, (402) 443-4675, or e-mail mbarry@linux3.nrc.state.ne.us.

The Wellhead Protection Program is partially funded by a Section 319 Clean Water Grant from the Nebraska Department of Environmental Quality and the US Environmental Protection Agency.

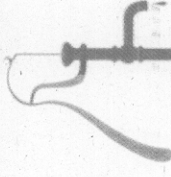


GROUND WATER MANAGEMENT AREA



Wellhead Protection

ENTERING



WELLHEAD PROTECTION AREA



LOWER PLATTE NORTH
NATURAL RESOURCES
DISTRICT

It's Your
Water...

KEEP IT WELL



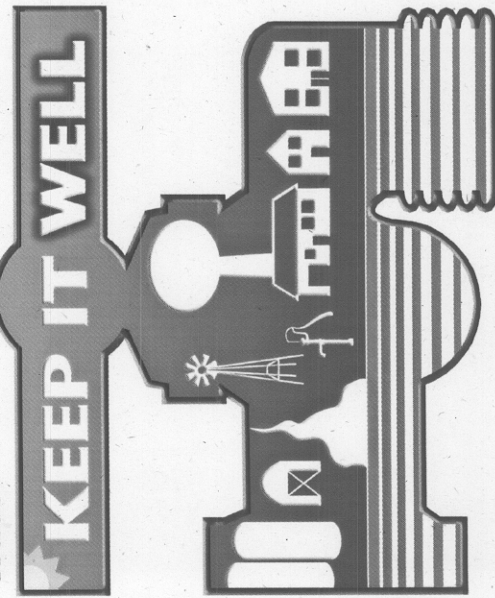
GROUNDWATER

we all use it
we all rely on it

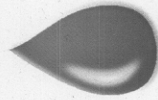
More than 85 percent of Nebraskans rely on groundwater as their source of drinking water. It's vital to protect this shared resource from contamination.

The Wellhead Protection Program can help. By participating in the program, communities can take a proactive approach to protecting their groundwater. The program is voluntary and emphasizes community involvement and leadership. Remember, it's *your* water -- help Keep It Well!

**It's Your
Water . . .**



Lower Platte North NRD
**WELLHEAD
PROTECTION**



Protecting the Source

The goal of the Wellhead Protection Program is to minimize potential polluting activities on the land surrounding a community's public water supply wells. That area of land is known as the "capture zone" -- it's where the wells draw their water from. Any pollutants within that zone could be drawn into the public wells, contaminating the community's drinking water. Therefore, the capture zone forms the boundaries for the community's Wellhead Protection Area.



Taking Inventory

Within the Wellhead Protection Area, a community can identify and manage potential threats to its public wells by conducting a Contaminant Source Inventory (CSI). Some possible contaminant sources the inventory might look for include:

- leaking aboveground & underground storage tanks
- chemical spills
- improperly-designed animal waste facilities
- improper use and/or storage of fertilizers & pesticides
- junk piles
- wastewater treatment
- waste oil tanks
- landfills
- abandoned wells

Main Steps of Wellhead Protection

1. **Delineate** a Wellhead Protection Area map for the public wells of a community. A computer program is used to develop this map, and takes into account pumping history, geologic logs from the wells, hydrogeology of the area, direction of groundwater flow, etc.
2. **Perform** a Contaminant Source Inventory. Within the Wellhead Protection Area, an inventory is conducted to identify potential contaminant sources that could pollute public wells.
3. **Manage** potential contaminant sources through ordinances, zoning, education, and/or agreements with the county or NRD.

4. **Prepare** for emergencies with contingency plans. What if the community's water supply falls short of demand due to mechanical problems or contaminated water. Is there a plan in place in case of emergency situations?

5. **Plan** for new wells. A well's lifetime is typically 20 years, and planning for new wells is necessary to address the demands of population growth.

6. **Keep** public educated and involved! Community participation is essential to make the Wellhead Protection process a success. Public participation allows residents to take pride in protecting their drinking water.

Program Goals

- Locate all sources of private water usage in the Hastings Institutional Control Area.
- Provide water testing of all water use in the Hastings ICA.
- Provide public education of water quality being used by persons in the Hastings ICA.
- Provide appropriate signage on all wells.

WATER TESTING PLAN

1. Contaminates of concern.

Nitrates, Coliforms, Volatile Organic Compounds, (VOC's), Solvents, Grain Fumigants, & Gasoline compounds.

All tests collected & provided by HU at no charge to the water user.

2. Testing Frequency as Provided by HU

No detection of Coliforms or VOC's & Nitrates less than 5 mg/l.
Test once every three years.

Detection of Coliforms or VOC's or Nitrates less than 5 mg/l & 7.5 mg/l.
Test once per year.

Detection of coliform of VOC's above one half of EPA Maximum.
Contaminate levels or nitrates above 7.5 mg/l..
Test twice each year.

For more information on permissible water quality standards and related health effects contact Hastings Utilities.

For More Information Contact:

General Program Information

Mr. Steve Cogley
Public Relations Coordinator
Hastings Utilities
Ph# 402-463-1371 Ext. 203
Fax# 402-463-1705

Water Sampling Information

Mr. Marty Stange
Environmental Engineer or
Mr. Jason Redding
Environmental Engineer Assistant
Hastings Utilities
Ph# 402-463-1371 Ext. 251
Fax# 402-463-1705

Drinking Water and Public Health

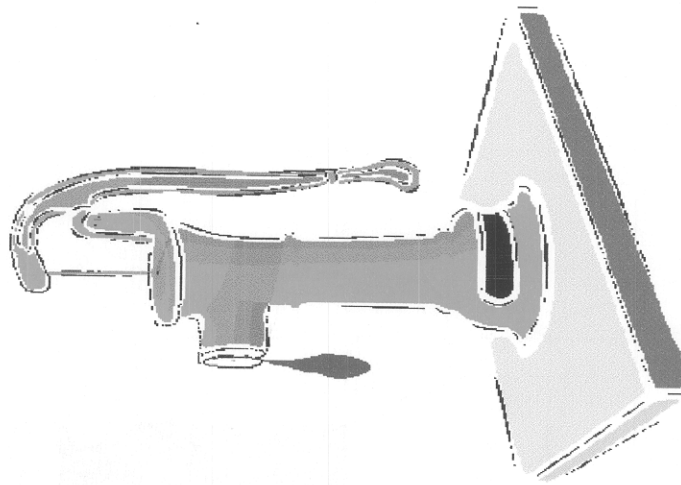
Nebraska Dept. of Health & Human Services
Domestic Well Division
Lincoln, NE
Ph# 402-471-0598

Water Resources

Little Blue Natural Resources District
Davenport, NE
Ph# 402-364-2145

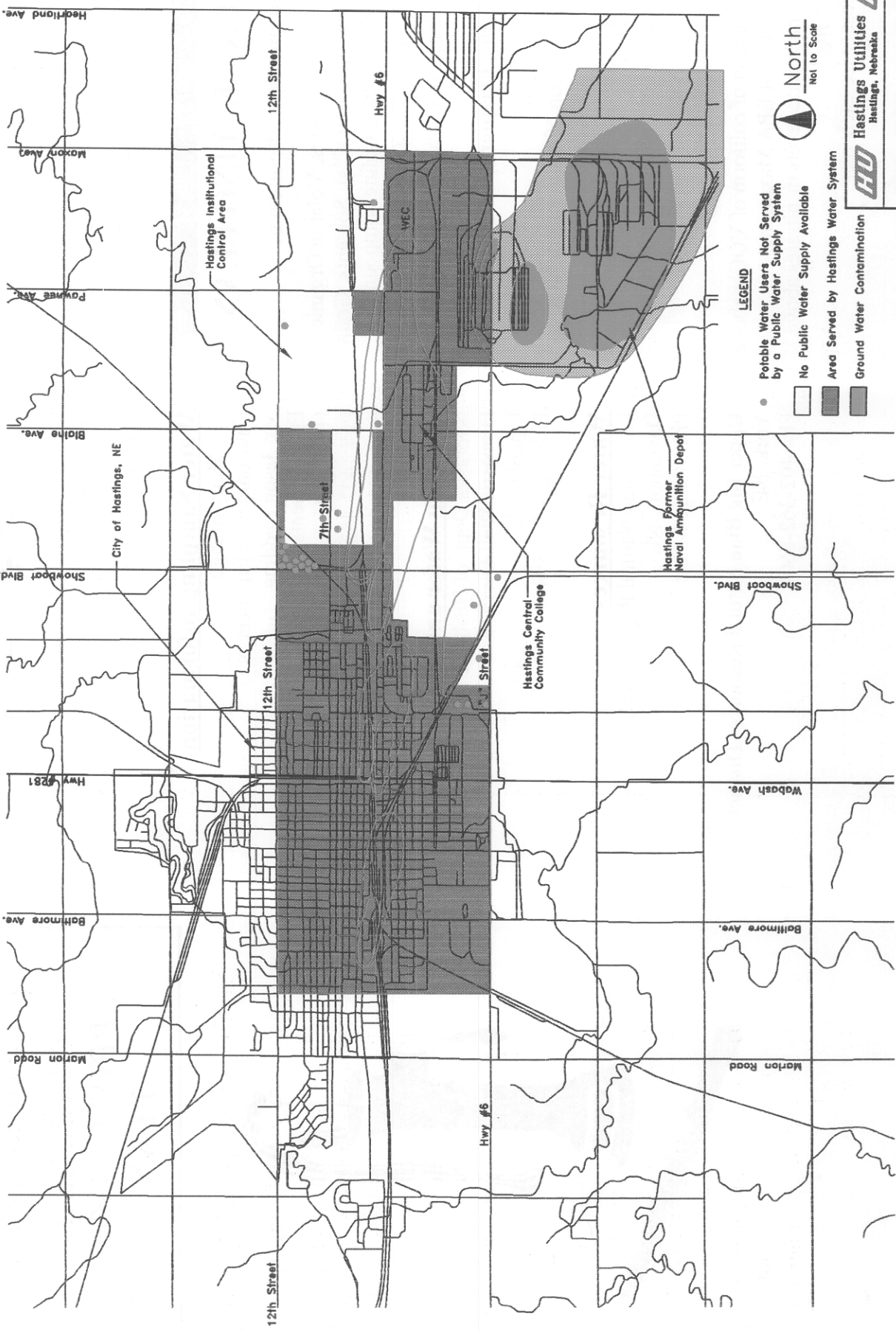
Upper Big Blue Natural Resources District
York, NE
Ph# 402-362-6601

HASTINGS INSTITUTIONAL CONTROL AREA - WELLHEAD PROTECTION PLAN



1228 North Denver Avenue
Hastings, NE 68901
Phone: 402-463-1371

Revised 3/2/01

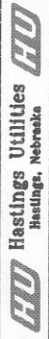


LEGEND

- Potable Water Users Not Served by a Public Water Supply System
- No Public Water Supply Available
- ▒ Area Served by Hastings Water System
- Ground Water Contamination



North
Not to Scale



Hastings Institutional Control Area
with Hastings Water Supply Service
Area and CMS Water Extension.

| Rev. | Revised By | Date | App. |
|------|-------------|----------|------|
| 1 | John Legend | 12/21/04 | |
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| | | | |

| Rev. | Date | App. |
|----------------|----------|------|
| Rev. S. Struss | 10/10/04 | |
| Rev. M. Stange | 04/04/04 | |
| Rev. M. | | |

Map 9-25-97