



WELLHEAD PROTECTION PLAN – PART II

**CITY OF EDEN PRAIRIE
PWSID 1270010**

**Prepared for:
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ACRONYMS

AST – Aboveground Storage Tank
CJ - Jordan
DWSMA – Drinking Water Supply Management Area
EMZ – Emergency Management Zone
LMRWD - Lower Minnesota River Watershed District
LUST – Leaking Underground Storage Tank
MCL – Maximum Contamination Level
MDH – Minnesota Department of Health
MGD – Million Gallons Per Day
MGY – Million Gallons Per Year
MPCA – Minnesota Pollution Control Agency
NMCWD - Nine Mile Creek Watershed District
OPC – Prairie du Chien
PCSI – Potential Contaminant Source Inventory
RPBCWD – Riley-Purgatory-Bluff Creek Watershed District
UST – Underground Storage Tank
VIC – Voluntary Investigation and Cleanup Program
WHP – Wellhead Protection
WHPA – Wellhead Protection Area
WHPP – Wellhead Protection Plan

1.0 INTRODUCTION

1.1 Background

This Part 2 Wellhead Protection Plan (Plan) was prepared, in accordance with Minnesota Rule Chapter 4720.5400, and the January 12, 2012 and November 27, 2013 Minnesota Department of Health (MDH) Scoping Decision Notice Nos. 1 and 2 (**Appendix A**). This follows the July 30, 2013 Part 1 “WHPP for the City of Eden Prairie”.

1.2 Description of the Public Water Supply System

The Eden Prairie Wellfield is located in Hennepin County, Minnesota in the southwestern portion of the Minneapolis-St. Paul Metropolitan area. The City occupies an area bounded on the south by the Minnesota River, by Bloomington and Edina on the east, by Minnetonka on the north, and by Chanhassen on the west (**Figure 1**). 2012 Census Data show a population of 62,258 residents.

The City currently utilizes fifteen wells (numbered 2 through 16) under Permit No. 1978-6175. Well Number 1 has been abandoned due to its location in the Highway 312 right-of-way. The annual permitted withdrawal is 3,450 million gallons of water at a maximum pumping rate of 22,650 gallons per minute. The water plant capacity is 28 million gallons per day. Available storage includes two ground reservoirs (2.0 and 3.5 million gallons) and two elevated tanks (1.0 and 1.75 million gallons). Total available system storage is 8.25 million gallons.

The City of Eden Prairie public water supply system currently uses and relies upon the Prairie du Chien (OPDC) and Jordan (CJDN) Aquifer. Municipal Wells Nos. 2 through 6 and 11 through 16 are completed in the Prairie du Chien/Jordan aquifer and range in depth from 381 to 420 feet deep. Geological records from these wells do not indicate the presence of substantial thicknesses of hydraulically confining material between the top of the aquifer and the ground surface. Water samples collected from city wells completed in this aquifer in 2001 (notably Well 13) contained detectable levels of tritium. The presence of tritium indicates that the water in this aquifer was likely recharged by infiltration from the ground surface since 1953.

Municipal Well Nos. 7, 8, 9 and 10 are completed in the Jordan Sandstone at depths between 383 and 405 feet. The Prairie du Chien uniformly covers the Jordan, according to the geological

records associated with each of the well construction logs. The presence of fine-grained material above the Prairie du Chien is documented in the geologic records from some of the wells, but is not believed to be laterally extensive. Water samples collected from three of these wells (Wells 7, 9 and 10) in 2001 also contained detectable levels of tritium. The Jordan Aquifer is likely recharged by leakage from the Prairie du Chien, which is subject to recharge by infiltration of local precipitation and snow melt and by leakage from overlying saturated materials.

1.3 Description Drinking Water Supply Management Area (DWSMA)

The Drinking Water Supply Management Area (DWSMA) was first delineated in the City's 2002 Wellhead Protection Plan (WHPP). Since that time two additional municipal water wells (Nos. 15 and 16) have been installed and brought on line. Additionally, a better understanding of the Prairie du Chien-Jordan Aquifer and the aquifer's vulnerability had been gained. A revised Wellhead Protection Area (WHPA) and associated Drinking Water Supply Management Area (DWSMA) were determined, incorporating this new information. The results were presented in the July 30, 2013 "WHPP for the City of Eden Prairie". The new groundwater model, based upon the "Twin Cities Metropolitan Area Groundwater Flow Model", resulted in a larger WHPA and DWSMA extending further beyond Eden Prairie's Municipal boundaries, not only into the City of Minnetonka (as before) but also into Chanhassen, Deephaven, Excelsior, Greenwood and Shorewood (**Figure 2**).

With regard to the vulnerability assessment, geologic maps of the Eden Prairie area indicated there is either a till unit, or the basal St. Peter, or both present over most of the DWSMA. Each of these units provides some degree of natural geologic protection. However, tritium concentrations suggest that either flow to the wells circumvents the areas of natural protection, or there are unknown areas in which the protective areas are absent. All of the city's wells, therefore, are considered vulnerable. In addition, the following criteria were used to determine the vulnerability of the City's DWSMA:

- 1) Areas of very low geologic sensitivity but tritium present should be of low vulnerability;
- 2) Areas of low geologic sensitivity but tritium present should be of moderate vulnerability; and
- 3) Areas of moderate geologic sensitivity but tritium present should be of high vulnerability.

The Emergency Management Zone (EMZ) is that area immediately surrounding the City's groundwater wells. The results of the vulnerability assessment classify the area of the EMZ as either low or moderately vulnerable. No areas in the EMZ have been classified as highly vulnerable.

Copies of the Inner Well Management Zone inventories completed by the MDH for each municipal well are included in **Appendix A**.

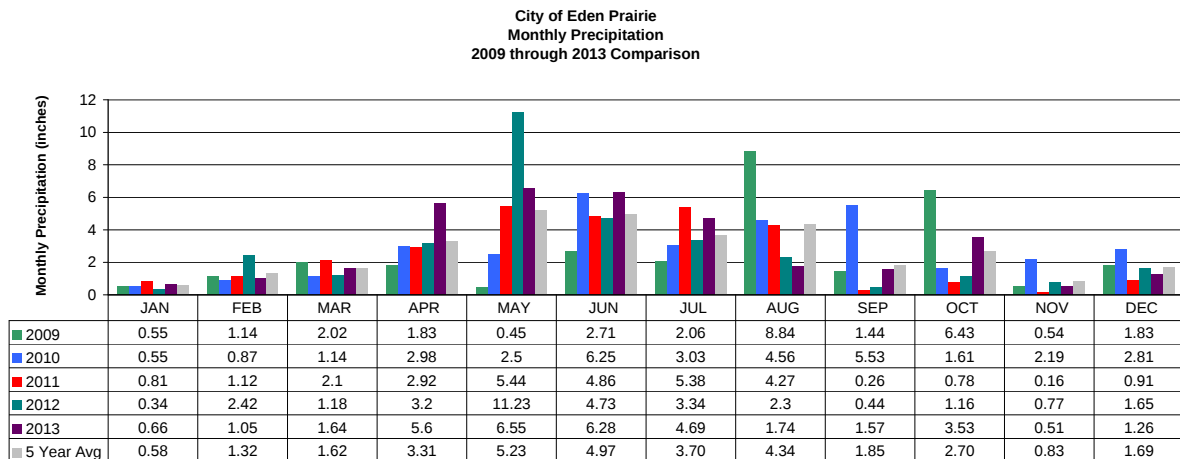
2.0 PHYSICAL ENVIRONMENT DATA ELEMENTS

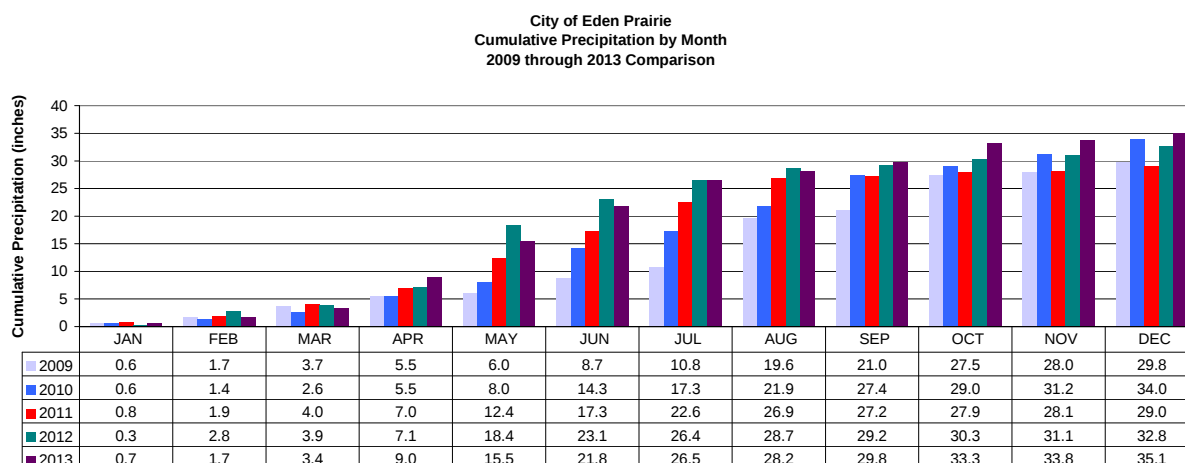
In accordance with Minnesota Rule Chapter 4720.5400, and the January 12, 2012 and November 27, 2013 Minnesota Department of Health (MDH) Scoping Decision Notice Nos. 1 and 2, the following section discusses the required data elements for this Plan. In summary, the required data elements included information relating to precipitation, geology, soils, water resources, land use, public utility services, surface water quantity/quality, and groundwater quantity/quality.

2.1 Precipitation

Monthly and annual precipitation data for the area around the Public Water Supplier during the five-year period from 2009-2013 was obtained from the Minnesota Climatology Working Group, which is a joint effort between the University of Minnesota and the Minnesota Department of Natural Resources (DNR). The gauging station that was used is identified as “Hennepin-Eden Prairie-Chanhassen” located at T116N R22W S18. The climate within the Minneapolis-St. Paul Metropolitan Area is described as humid continental climate with moderate precipitation, wide daily temperature variations, warm humid summers, and cold winters. The total average annual precipitation, over the past five years, is approximately 31.2 inches per year.

The following graphs and tables show monthly and annual precipitation amounts, in inches, for the preceding five years.





2.2 Geology

The geologic features have been summarized from the “Geologic Atlas of Hennepin County, Minnesota”, 1989; the “Water Resources of the Lower Minnesota River Watershed, South-Central Minnesota”, 1974; the “Bedrock Geology and Topographic Maps of the Seven-County Twin Cities Metropolitan Area”, Minnesota, 1986; and, the “Overview of the Twin Cities Metropolitan Area Groundwater Model” report. The geologic setting within and around the City of Eden Prairie consists of unconsolidated glacial deposits underlain by bedrock. Surficial deposits of the Eden Prairie area were deposited primarily by glacial ice, glacial meltwater, and the erosional effects of the Minnesota River Watershed. The majority of the glacial deposits are from the Des Moines Lobe and fluvial deposits from the Minnesota River. The glacial deposits consist of fine-grained till alternating with sand and gravel layers, ranging from 140 feet thick near Well 12 to approximately 173 feet thick near Well 3.

The Paleozoic rocks have an erosional surface that includes several valleys cutting through the rock units. Some of the valleys are completely filled with Quaternary glacial materials, and others, although filled with alluvium, continue to serve as valleys for present-day rivers. Some of the buried bedrock valleys occurring in the Twin Cities area contain more than 400 feet of glacial materials. Portions of these valleys are likely to be filled with coarse-grained sand and gravel glacial materials. Some of these highly transmissive layers may occur at the same elevation as the Jordan Sandstone, allowing transfer from the glacial sand and gravel deposits to the Jordan Sandstone, and vice versa. Groundwater flow within the glacial deposits is

considered to be complex and highly dependent upon local conditions, but is believed to provide a relatively uniform amount of recharge to underlying units.

2.3 Soils

2.3.1 Soil Types and Infiltration Characteristics

Soils information was obtained from the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database and is presented on **Figure 3**. Soils in Eden Prairie are generally sandy loam to loam, and mostly well drained. In much of central to northeastern Eden Prairie the soils are generally sandy loam to loam, over clayey loam to loam, and well drained. In the alluvial landscape unit in the Minnesota River Valley along the southern edge of the city, floodplain soils are generally loams or silt loams, and range from well to very poorly drained.

Throughout much of the DWSMA, soils are identified as having moderate to high infiltration rates, with some exception; particularly in the west/northwest part of the DWSMA, where soil characteristics result in high runoff.

The City believes that Eden Prairie's existing Land Use Regulations, Chapter 11 of the City Code, are sufficient to oversee development within Eden Prairie's portion of the DWSMA. The City will rely on land use regulations of the neighboring cities into which the DWSMA extends to address development measures in those portions of the DWSMA.

2.3.2 Erosion and Sedimentation

An ecological ranking tool, managed by the Board of Water and Soil Resources and developed in partnership with the University of Minnesota was used to identify areas that are at risk for soil erosion and at risk for contributing sediment to surface waters. The study based the potential for soil erosion on a number of factors, including soil type and slope. The Soil Erosion data, shown on **Figure 4** represents a general risk score for potential soil erosion on a zero to 100 point scale; 100 being the highest risk. The resulting data is viewed as a "worst-case" scenario, i.e. highest potential soil erosion of bare soil with no mitigating land use practices in place. As shown on the map some areas of high soil erosion risk occur in areas of high and moderate vulnerability. A review of the map generally shows erosion risk along pond and lake shorelines and within wetland areas.

The City has assumed Local Governmental Unit (LGU) and stormwater/erosion control permitting responsibilities in the Lower Minnesota River Watershed District (LMRWD) and Riley-Purgatory-Bluff Creek Watershed District (RPBCWD). These ordinances and policies have provided the City and the private development sector with the means to protect the City's natural resources through limiting filling of wetlands; use of setbacks; steep slope and shoreline buffers; and best management practices. The RPBCWD is further discussing proposed rules to land and water resource disturbing activities in part to aid in erosion and sediment control. Primary permitting responsibilities and stormwater management review in Nine Mile Creek Watershed District (NMCWD) rest with this watershed district.

The City believes that Eden Prairie's existing stormwater management program is sufficient to address stormwater within Eden Prairie's portion of the DWSMA. The City will rely on the surface water management programs of other cities/watersheds into which the DWSMA extends to address stormwater in those portions of the DWSMA. The City of Eden Prairie believes that the current level of regulation and oversight are adequate to address these issues.

2.4 Water Resources

2.4.1 Watershed Units

The location of Eden Prairie's DWSMA falls under the jurisdiction of the three watershed districts also noted previously:

- Lower Minnesota River Watershed District
- Nine Mile Creek Watershed District
- Riley-Purgatory-Bluff Creek Watershed District

Surface water in the DWSMA drains into wetlands, ponds and streams. Additionally, flow is into Riley Creek, Purgatory Creek, and a portion of the South fork of Nine Mile Creek, all of which flow from northwest to southeast in direction. The streams primarily traverse areas of low vulnerability. Purgatory Creek intersects two moderately vulnerable areas of the DWSMA, with measured straight-run distances of approximately 1,100 feet and 1,600 feet. The South Fork of Nine Mile Creek runs through approximately 3,000 feet of an additional moderately vulnerable area of the DWSMA.

2.4.2 Public Waters and Wetlands

Public waters are lakes, wetlands, and watercourses over which the DNR has regulatory jurisdiction. Public waters in Eden Prairie are defined in Section 11.50 of the City Code as any waters as defined in Minnesota Statutes, 103.G.005 Sub. 15 and Sub. 18. Section 11.51 of the City Code incorporates the Wetlands Conservation Act and acts to conserve and protect wetlands by requiring sound management practices.

Known water bodies have been identified and mapped as part of the City's ongoing water body inventory process established for the "Comprehensive Wetland Protection and Management Plan" in 1997. A list of public waters located within areas of moderate and high vulnerability is shown below.

<u>Name</u>	<u>Type</u>
Birch Island	Basin
Bryant	Basin
Galpin	Basin
Idlewild	Basin
Minnetonka	Basin
Mitchell	Basin
Round	Basin
Silver	Basin
Staring	Basin
William	Basin
14 Unnamed	Wetlands

Existing municipal and watershed management programs oversee and assess surface water quality, provide guidance for the wise development of shorelands, preserve and enhance the quality of surface waters, and thus act to reduce potential negative impacts from surface water infiltration.

2.4.3 Floodplain Area

Section 11.45 of the City Code provides jurisdiction over floodplains and flood fringe. The code provides protection to water resources by stipulating that the storage or processing of materials that are flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited in these areas. Also, new or replacement on-site sewage treatment systems must be designed

to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

The City believes that Eden Prairie's existing surface water management programs are adequate to address surface water within Eden Prairie's portion of the DWSMA. The City will rely on the management programs of the other cities/watersheds into which the DWSMA extends to address surface water in those portions of the DWSMA. The City of Eden Prairie believes that the current level of regulation and oversight are adequate to address this resource.

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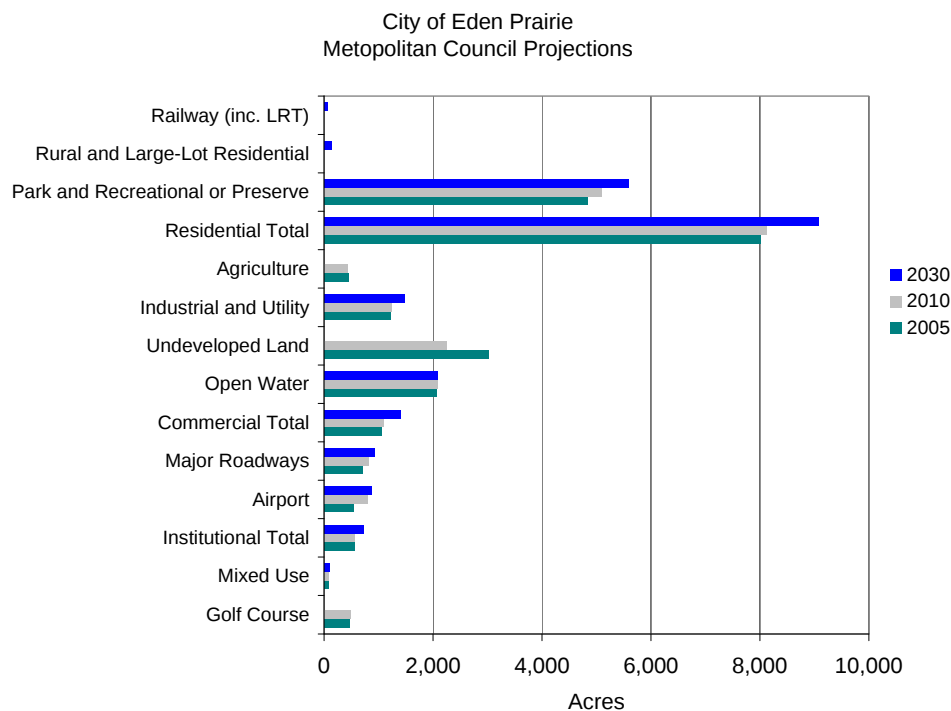
3.0 LAND USE DATA ELEMENTS

The following sections describe the land use data evaluated for this report.

3.1 Current Land Use

Parcel and comprehensive land-use maps for the City of Eden Prairie are included as **Figures 5 and 6**, respectively. A zoning map is included on **Figure 7**. There are numerous classes of land use depicted on the maps, including: residential, commercial, industrial and rural usage. Eden Prairie was primarily agricultural until the 1960s and 1970s, which were decades of measured growth. Currently, agricultural land is primarily located along the Minnesota River and in the southwestern portion of the city.

Population currently is approximately 62,000 residents and is expected to increase to approximately 80,200 residents by 2030 according to Metropolitan Council and City projections. Land use and development profile data obtained from the Metropolitan Council, shown on the following graph, compares 2005 and 2010 land use data to 2030 Regional Planned Use projections. The majority (approximately 52%) of Eden Prairie's land use is comprised of residential properties, parkland, recreational use or preserved lands. Projections for 2030 primarily show increases in these categories as well.



A Political Boundary Map is included as **Figure 8**. Portions of the following communities fall within the DWSMA: Chanhassen, Deephaven, Excelsior, Greenwood, Minnetonka and Shorewood. The Metropolitan Council land use and development profile data for each community was reviewed. Minnetonka, Shorewood and Chanhassen are expected to see a reduction in agricultural and undeveloped lands with increases in residential usage. Minnetonka is also expected to see approximately a three percent increase in commercial development. Excelsior, Greenwood and Deephaven are not expected to experience much change in overall development.

3.2 Potential Contaminant Source Inventory

A Potential Contaminant Source Inventory (PCSI) was initiated, during this phase of work, in order to identify present and historical land uses within the expanded DWSMA which have the potential to impact the public water supply source. Eden Prairie's PCSI has been maintained since 2003, when the original Part 2 WHPP was implemented. The original PCSI included the inventory and mapping of all identified potential sources of contamination and land uses for all levels of vulnerability throughout the DWSMA. Part of the work was completed with Source Water Protection Grant awards. Potential contaminant sources were identified from databases maintained by the Minnesota Pollution Control Agency (MPCA), and the Minnesota Geological Survey County Well Index (CWI). Data that was retrieved was compiled into shapefile format for use with ArcView GIS software and included the state identifier for each known potential contamination source, codes used by the MDH to describe a type of contamination, geographic coordinates for each potential contaminant source, and parcel identification numbers. Digital maps were provided to the MDH showing the locations of the inventoried sites, in compliance with the reporting requirements as specified under Minnesota Rules part 4720.5500, subpart 2.

Since Municipal Well Nos. 15 and 16 were installed and the extent of the DWSMA was redefined, the current PCSI was expanded to accommodate the additional area. Inventory maintenance and continued identification of new contaminant sources are part of the overall goal of Eden Prairie to protect the public water supply.

Consistent with MDH “Specifications for Documenting the Results of an Inventory of Potential Contamination Sources”, inventories in areas where aquifer vulnerability is classified as Low, include the following types of potential contaminant sources:

- 1) **Potential Class V Well Locations, and**
- 2) **Non-Municipal Well Locations**

The types of potential contaminant sources inventoried, in areas where aquifer vulnerability is classified as moderate, include:

- 1) Potential Class V Well Locations,
- 2) Non-Municipal Well Locations,
- 3) **Known Release Sites; and**
- 4) **Registered Storage Facilities**

Where the aquifer vulnerability is classified as high, the types of potential contaminant sources inventoried include:

- 1) Potential Class V Well Locations,
- 2) Non-Municipal Well Locations,
- 3) Known Release Sites,
- 4) Registered Storage Facilities
- 5) **Individual Sewage Treatment Systems; and**
- 6) **Registered Hazardous Waste Generators**

3.2.1 Potential Class V Well Inventory

MDH specifies that properties that potentially have Class V wells located within the DWSMA be inventoried. As part of the City's initial Part 2 efforts, business that may have utilized a Class V well were identified, a brochure was prepared and hand delivered to Potential Class V owners providing information on Eden Prairie's Wellhead and Source Water Protection Program. As part of the initial PCSI, potential Class V locations were identified by reviewing the listing of Hazardous Waste permitted facilities. Typical land uses associated with the presence of Class V wells include automobile service stations and repair shops. As defined by the U.S. Environmental Protection Agency, large-scale septic systems that serve more than 20 people also are included in the Class V well classification. Educational brochures were developed and were hand delivered to targeted facilities in May, 2007. As part of this PCSI, it has been determined that there may be approximately 100 potential Class V sites within the expanded DWSMA. Twenty-five of these locations are shown on **Figure 9** and summarized on **Table 1**. These locations were verified to the extent possible with available information during

development of this Plan. The MDH does not require that the City determine if Class V wells are actually present on any of these properties.

3.2.2 Non-Municipal Water Supply Wells

Privately owned wells have the potential to provide pathways for contaminants to reach source water aquifers if not properly constructed, maintained, or sealed. Implementation of the initial Phase 2 included direct communication with approximately 150 well owners through distribution of literature. The mailing described the potential threat posed by private wells and provided information about the costs and advantages of well abandonment.

Updated data was obtained from the CWI to identify the locations of low capacity wells, and from the DNR water use permit database to identify the locations of high capacity water wells (over 10,000 gallons per day). Twenty-five of these locations within high and moderate vulnerability areas in the expanded DWSMA are plotted on **Figure 10** and are listed on **Table 2**. During development of this Plan, these locations were verified to the extent possible with available information.

3.2.3 Known Release Sites

A review of the state leak site database identified approximately 40 known release sites within areas of the DWSMA classified as high and moderate vulnerability. The leak sites are shown on **Figure 11** and are listed on **Table 3**. These locations have been verified to the extent possible during development of this Plan. Of these properties, only one is an active release site. The remaining sites have attained closure from the MPCA, indicating that the regulatory agency has concluded that remaining contamination (if any) does not appear to pose a threat to public health or the environment.

3.2.4 Registered Storage Facilities

MDH “Specifications for Documenting the Results of an Inventory of Potential Contamination Sources” indicate that registered storage tanks located in areas where the aquifer vulnerability is classified as high and moderate must be inventoried. Specifically, the MDH is concerned about the impacts that contamination resulting from the storage and handling of liquid chemicals and liquid fuels may have on drinking water where the source water aquifer is geologically sensitive. Approximately 25 registered storage facilities were identified within the expanded

DWSMA through the database search, and their locations were verified. These facilities are plotted on **Figure 12** and are listed on **Table 4**.

3.2.5 Individual Sewage Treatment Systems

MDH “Specifications for Documenting the Results of an Inventory of Potential Contamination Sources” indicate that Individual Sewer Treatment Systems (ISTS) located in areas where the aquifer vulnerability is classified as high must be inventoried. Section 10.02 of the City Code addresses ISTS standards. As part of the City’s initial Part 2 efforts, a brochure was provided to ISTS owners summarizing information about Eden Prairie’s Wellhead and Source Water Protection Program, and proper maintenance of ISTS. During this phase of work ten ISTSs were identified where the aquifer vulnerability is classified as high (within the City of Eden Prairie). The locations are plotted on **Figure 13**. Cooperative efforts with Chanhassen, Deephaven, Excelsior, Greenwood, Minnetonka and Shorewood will need to be established in order to identify ISTS within their jurisdictions.

3.2.6 Registered Hazardous Waste Generators

Figure 14 shows the verified locations of properties identified as hazardous waste generators. There are a total of 7 properties listed for this activity within the highly vulnerable portion of the DWSMA. They are summarized on **Table 5**.

3.3 Public Utility Services

3.3.1 Transportation Routes

Ground transportation corridors (**Figure 15**) provide a potential source of contamination through accidental spills and discharges. The main transportation routes in the vicinity of the moderately and highly vulnerable areas are listed below. Of these, only Highway 7 interests a highly vulnerable area.

The north-south road corridors include:

- Interstate 494 (a portion of the east side of the DWSMA)

The east-west roads corridors include:

- State Highway 7
- State Highway 212
- State Highway 5
- State Highway 62 (a portion of the east side of the DWSMA)

The City will create awareness among involved parties about transportation corridor threats to the drinking water supply.

3.3.2 Stormwater Collection System

Eden Prairie's stormwater collection system and the location of stormwater ponds are shown on **Figure 16**. Storm sewer maps for the Cities of Chanhassen, Deephaven Excelsior, Greenwood, Minnetonka and Shorewood and are included in **Appendix B**. A review of the maps shows that stormwater is discharged into an area of high vulnerability at Galpin and Mud Lakes in Excelsior. As part of this Plan, the City will evaluate existing stormwater management within the highly vulnerable portion of the DWSMA.

3.3.3 Sanitary Sewer System

Figure 17 shows the sanitary sewer system for the City of Eden Prairie. Sanitary sewer maps for the Cities of Chanhassen, Deephaven, Greenwood, Minnetonka and Shorewood are included in **Appendix B**. Maps for the remaining cities located within the DWSMA were not publically available at the time of this report.

The sanitary sewer interceptor system, owned, operated and maintained by the Metropolitan Council Environmental Services (MCES) division, provides the link from community sewer systems to the wastewater treatment facilities in the seven county metropolitan area. A link near the intersection of Highway 7 and County Road 19 in Excelsior, is situated in a highly vulnerable area of the DWSMA. As part of the MCES's overall regional wastewater service plan for the Lake Minnetonka Area, it is constructing a second sanitary sewer force main in the cities of Excelsior, Greenwood and Shorewood. The second force main will provide improved reliability and operational flexibility and will allow MCES to inspect and perform maintenance on the original force main.

Eden Prairie believes that existing oversight for sanitary sewer operations and maintenance is sufficient throughout the DWSMA. No additional measures are proposed in this Plan.

3.3.4 Pipeline and Railroad Systems

The Pipeline and Hazardous Materials Safety Administration online mapping system shows a CenterPoint natural gas pipeline trending northeast/southwest through Deephaven, Greenwood

and Excelsior. Magellan Pipeline Company operates a hazardous liquid pipeline in the southern portion of the DWSMA. A review of **Figure 18** shows that each of the pipelines pass through areas of high vulnerability.

A railroad corridor runs southwest/northeast through the DWSMA, primarily through areas of low vulnerability. A portion of the rail corridor intersects an area of moderate vulnerability near the Wellfield and comes within approximately 1,200 feet of Well 10. The City will rely on State and Federal oversight and owner operation and maintenance of pipelines and railroads. In addition, the City will provide information to CenterPoint and Magellan regarding the location of the DWSMA and to emphasize the importance of spill clean-up and response actions.

3.3.5 Public Drainage Systems

Figure 19 depicts the public drainage systems within the DWSMA. These municipal separate storm sewer systems are a conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains) regulated through the use of National Pollutant Discharge Elimination System (NPDES) permits. The primary goal of the MS4 general permit is to improve water quality by reducing pollutants in stormwater discharges. Specifically, the program aims to ensure proper management of stormwater discharges into waters of the state.

3.3.6 Municipal Water System

Records of construction, maintenance, and use of public water supply wells can be found on file with the MDH and also in the Part 1 WHPP.

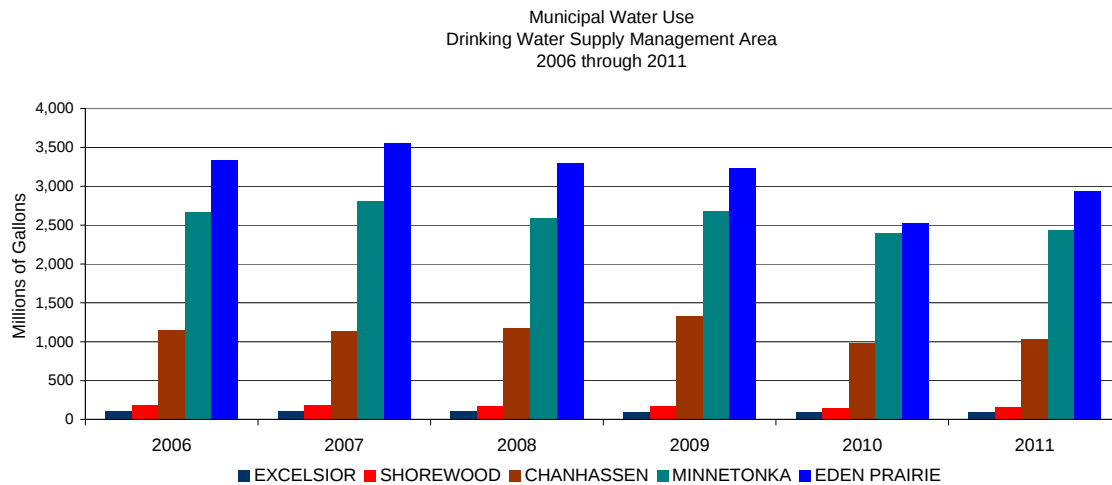
4.0 DATA ELEMENTS ABOUT QUANTITY

4.1 Surface Water Quantity

No permitted surface water withdrawals from lakes or streams were identified, within the DWSMA, in the Minnesota Department of Natural Resources (MDNR) database. The City believes that existing surface water management oversight is sufficient and no additional management strategies are warranted under this Plan.

4.2 Groundwater Quantity

Historic water use data, from the Minnesota Department of Natural Resources, for Eden Prairie and the additional municipalities within the DWSA is depicted on the following graph.



Water production trends, for Eden Prairie and Minnetonka, are similar with greatest production occurring in 2007. Water use is greatly influenced by lawn irrigation during periods of low rainfall. Although precipitation in 2007 was low, it was not the lowest during this time period, but the majority of rainfall occurred in late-summer and fall. The “Minnesota Drought Situation Report” dated July 26, 2007 indicated that the southern two thirds of Minnesota was dry for much of May, June, and July. The timing, historically the wettest time of the year, lead to a rapid intensification of drought conditions.

A projected 2015 water use volume of 3,760 million gallons per year was defined in the City of Eden Prairie Water Emergency and Conservation Plan (2007). This is approximately a 14 percent increase over the 2013 production of 3,307 million gallons. Population is expected to

increase to 77,100 by 2030, according to both the City's Comprehensive Guide Plan of 2009 and Metropolitan Council projections. This would approximate a 25 percent increase of the 2012 population of 62,000.

Eden Prairie encourages water conservation efforts. Furthermore, Subd.12 of the Municipal Code implements water use restrictions. It limits lawn watering to alternating days and to certain hours.

5.0 DATA ELEMENTS ABOUT WATER QUALITY

5.1 Surface Water Quality

The location of Eden Prairie's DWSMA falls under the jurisdiction of the three watershed districts noted previously whose goals and objectives are consistent with this Plan. Eden Prairie has ordinances, and zoning measures in place to protect surface water bodies and wetlands. Furthermore, public waters are protected under DNR regulatory jurisdiction. The City believes that the current level of regulation is sufficient to protect surface water quality.

5.2 Groundwater Quality

Water samples from the Eden Prairie public water supply are routinely collected and analyzed as required under the Public Water Supply Program and the federal Safe Drinking Water Act. The water samples are routinely taken by City staff and by MDH staff. A copy of the City of Eden Prairie's Drinking Water Consumer Confidence Report can be found on the City's website. The report indicates that no contaminants have been detected at levels that violated federal drinking water standards.

6.0 IMPACT OF CHANGES ON PUBLIC WATER SUPPLY

Minnesota Rules 4720.5220 indicate that a wellhead protection plan must identify and describe expected changes that may occur during the next ten years to the physical environment; land use; surface water; and groundwater. It must also assess the possible impacts on the aquifer serving the public water supply resulting from the expected changes, the influence of existing water and land government programs and regulations; and the administrative, technical, and financial considerations of the public water supplier and the property owners within the drinking water supply management area.

6.1 Physical Environment

No significant changes in the physical environment are anticipated in the next ten years.

6.2 Land Use

Modest increases in residential and/or commercial use are anticipated as undeveloped land is developed. The majority of the City's undeveloped land is outside of the DWSMA. Minnetonka, Shorewood and Chanhassen are expected to see a reduction in agricultural and undeveloped lands with increases in residential usage. Minnetonka is also expected to see approximately a three percent increase in commercial development. Excelsior, Greenwood and Deephaven are not expected to experience much change in overall development.

6.3 Surface Water

Existing municipal and watershed management programs oversee and assess surface water quality, provide guidance for the wise development of shorelands, preserve and enhance the quality of surface waters, and thus act to reduce potential negative impacts from surface water infiltration.

The City is not aware of any surface water modifications that may occur during the next ten years.

6.4 Groundwater

Hydrographs of select City wells and DNR observation well 27058 have been prepared and reviewed. The observation well, located on the north side of Staring Lake, is situated less than one-mile south-southeast of the southern boundary of the Wellfield. The well is completed at a total depth of 360 feet in the PDCJ Aquifer. The data show seasonal fluctuations between winter and summer conditions of approximately 100 feet. Generally, winter static water levels have declined approximately 10 feet in the Wellfield between 2002 and 2013. The observation well shows a decline of approximately three feet, and is indicative of downgradient conditions.

In 2013, the City installed two groundwater observation wells to enable measurement of water levels in the aquifer serving its municipal wells. The City will utilize observation well data to monitor aquifer fluctuations in response to pumping.

6.5 Expected Changes in Water Use

With anticipated redevelopment of land to residential usage and an increase in population, water usage is expected to increase as well. It is anticipated that two additional water supply wells may be necessary in the next few years to meet such demands. No changes in the water treatment plant capacity are anticipated in the future.

There is a strong seasonal variability in water production, with average daily summer production being two or three times greater than during the winter months. In the winter only about five wells are operated at a time, and for only portions of a day. In the summer, most or even all of the available wells are operated simultaneously, and for longer pumping periods. This seasonal variation is expected to continue and may increase should draught conditions occur.

6.6 Influence of Existing Water and Land Government Programs and Regulation

The City of Eden Prairie has regulatory jurisdiction over much of the DWSMA, through local and land use zoning ordinances. However, a portion of the DWSMA extends beyond the City of Eden Prairie's boundaries, into Chanhassen, Deeptown, Excelsior, Greenwood, Minnetonka and Shorewood. In those portions of the DWSMA the City must rely on other governmental units for regulations that address issues that may impact the source water aquifer.

Eden Prairie's "Local Water Management Plan" (LWMP) was developed to provide the City of Eden Prairie with information and direction regarding the administration and implementation of water resource management activities within the City.

Regulations for short term reduction in water demand are outlined in Eden Prairie's "Water Emergency and Conservation Plan", adopted in March 2008. The plan includes procedures to address gradual decreases in water supply as well as emergencies and the sudden loss of water due to line breaks, power failures, sabotage, etc. During periods of limited water supplies public water suppliers are required to allocate water based on the priorities established in Minnesota Statutes 103G.261. City Ordinance (Code Section 3.30) is in place which pertains to water emergencies and demand reduction measures. The ordinance allows the City Manager (or designee) to declare a water emergency and implement demand reduction measures.

Long-term water-use efficiency measures and educational programs are also outlined in the "Water Emergency and Conservation Plan". Additionally, the City of Eden Prairie offers rebates to promote water efficiency. The current program includes rebates for Energy Star washing machines, WaterSense toilets, faucets, showerheads and irrigation controls.

6.7 Administrative, Technical, and Financial Considerations

The City of Eden Prairie has been supportive of wellhead protection efforts. A wellhead committee consisting of city staff from Utilities, Environmental Services, and Engineering has been formed and has been actively involved in the planning process. A line-item budget has been established for implementation of priority strategies identified in this plan.

The WHP Manager will be responsible for implementation of this Plan. The committee will continue to meet periodically to review and discuss implementation programs.

Eden Prairie will work, to the extent practicable; with other local governmental units whose jurisdictions overlap Eden Prairie's DWSMA and conversely with communities whose DWSMAs extend into the City of Eden Prairie.

7.0 ISSUES, PROBLEMS, AND OPPORTUNITIES

Section 4720.5230 of the Minnesota Rule indicate that a wellhead protection plan must identify water use and land use issues, problems, and opportunities related to the aquifer serving the public water supply well; the well water; and the drinking water supply management area.

The City is not aware of water use and land use issues, problems, and opportunities disclosed at public meetings or in written comment.

7.1 Source Water

Aquifer vulnerability of the Eden Prairie DWSMA ranges from low to high. The aquifer vulnerability classification is low in approximately 90% of the area. There are two areas of high vulnerability; one situated near the downtown area of Chanhassen; and the other east/southeast of Lake Riley.

As previously discussed, a PCSI was conducted in order to identify present and historical land uses within the DWSMA which have the potential to impact the public water supply source. These potential contaminant sources include; potential class V well locations, non-municipal well locations, release sites, registered storage facilities, and registered hazardous waste generators. Many of the identified facilities are located outside the City of Eden Prairie and the City does not have jurisdictional control over them. The City will rely upon appropriate County and State programs, to the extent practicable, to regulate the potential contaminant sources that have been identified.

The City believes that Eden Prairie's existing surface water and land management programs are adequate to aid in source water protection under its jurisdiction. The City will rely upon the management programs of the other cities/watersheds into which the DWSMA extends to promote source water protection in those portions of the DWSMA.

With regard to source water availability, the City has no regulatory authority over water appropriations and must rely on the MNDNR. The City will monitor water use patterns and water level data to aid in the assessment of source water availability.

7.2 Well Water

Water samples from the Eden Prairie public water supply are routinely collected and analyzed as required under the Public Water Supply Program and the federal Safe Drinking Water Act. No contaminants have been detected at levels that have violated federal drinking water standards.

Eden Prairie softens its water using a lime bonding process which removes calcium, magnesium and dissolved iron. Another additive, ferric chloride, is dissolved into the water after softening to enhance the precipitation process. Chlorine is then introduced to ensure the water remains free of bacteria in the distribution system. Polyphosphate is also added to the water to ensure the liquid does not corrode the plumbing. Carbon Dioxide may be used at times to keep the water from being too alkaline. Fluoride is required to enhance the prevention of tooth decay.

7.3 Drinking Water Supply Management Area

Potential contaminant sources were identified earlier in this Plan within the DWSMA. Eden Prairie will rely on state agencies with regulatory control to oversee these types of facilities and aid in the protection groundwater resources.

A large portion of Eden Prairie's DWSMA is located outside of the limits of the City. Conversely, the DWSMAs of neighboring communities extend into Eden Prairie. As such, Eden Prairie will work collaboratively, to the extent possible, with other local government units in an effort to ensure protection of the source water aquifers.

7.4 Problems and Opportunities Disclosed at Public Meeting and in Written Comment

Per Minnesota Rule 4720.5350, the City submitted copies of the WHPP to: local units of government wholly or partly within the wellhead protection area, the regional development commission, watershed districts and watershed management organizations wholly or partly within the wellhead protection area. The City of Eden Prairie also held a public information meeting to receive comments on the Part 1 Wellhead Protection Plan from the general public. A public hearing was held on April 21, 2015. At the time of this submittal, no comments, problems or opportunities had been disclosed.

7.5 Data Elements

Data elements identified by the MDH in Scoping Decision Notice Nos. 1 and 2 have been addressed. In summary, the required data elements included information relating to precipitation, geology, soils, water resources, land use, public utility services, surface water quantity/quality, and groundwater quantity/quality. Available local and regional information was used in compiling and assessing the data elements. Ongoing efforts to update information from regulatory data sources will continue as it becomes available for the life of this Plan.

7.6 Status and Adequacy of Official Controls, Plans, and Other Local, State, and Federal Programs on Water and Land Use

The WHP committee believes that the portion of the DWSMA within Eden Prairie is adequately protected with existing ordinances and watershed plans; coupled with County, State and Federal oversight of contaminated properties, well construction, groundwater appropriation, hazardous waste permitting and storage tank permitting. The City will work with neighboring communities, to the extent practicable, to promote source water protection efforts.

Existing public education and the promotion of Best Management Practices (BMPs), is a continuing effort by the City.

8.0 WELL HEAD PROTECTION GOALS

In accordance with Minnesota Rules chapter 4720.5240, a wellhead protection plan must state goals for present and future water use and land use to provide a framework for determining plan objectives and related actions. Goals presented in this section were identified based upon the information presented and evaluated in this Plan.

The overall goals of the City of Eden Prairie Wellhead Protection Plan are to:

- Maintain or improve the City's current drinking water quality in order to meet or exceed state and federal drinking water standards, and continue to provide a safe water supply to its residents.
- Increase public awareness of the Wellhead and Source Water Protection Program and groundwater-related issues.
- Collaborate with surrounding communities on water resource management efforts.
- Provide ongoing collection of data to support current and future wellhead and source water protection efforts.

9.0 OBJECTIVES AND PLANS OF ACTION

Minnesota Rules indicate that a wellhead protection plan must have measurable objectives for the well and drinking water supply management area. A wellhead protection plan must state a plan of action. A plan of action must address the problems and opportunities identified in the wellhead protection plan; identify and prioritize the wellhead protection measures that will be used; and identify a time frame for the implementation of the action identified in the plan. The objectives and plan of action designed to meet the goals of the WHP are described as follows.

- Maintain an inventory of Potential Contaminant Sources to identify sites that have the potential to impact source water quality.
- Keep an inventory of private wells and high capacity wells to identify properties that have the potential to impact source water quality and quantity, respectively.
- Continue public education efforts such that Eden Prairie businesses and residents will become more aware of wellhead and source water protection issues and the actions that the City is taking to protect the municipal water.
- Stay current with interdepartmental activities (Planning, Zoning, and Surface Water Protection) which impact the area supplying groundwater to City wells to minimize the potential threat to groundwater.
- Work cooperatively and collaboratively with neighboring communities to promote source water protection efforts.

9.1 Potential Contaminant Source Inventory (PCSI) Database Verification

As mentioned previously in this Plan, Eden Prairie's PCSI has been expanded in extent to accommodate the DWSMA defined in the 2013 WHPP. The PCSI will be updated periodically to determine if new potential sources of contamination have been identified. The information will be retrieved from available government records such as the MPCA and the Minnesota County Well Index.

Verification of the locations of potential sources of contamination has been completed, with the exception of potential Class V well locations and private well locations. Within those two source categories, a minimum of twenty-five sources were verified within the newly-expanded DWSMA

(excluding the area covered by the previous DWSMA). Prioritization was given to potential sources within or near areas of moderate to high vulnerability. Remaining locations will be verified during implementation of the Plan. As new potential contaminant sources in the DWSMA are identified their locations will be verified on an annual basis.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant, Database Record Search: MPCA, Minnesota County Well Index

Time Frame: Ongoing

Estimated Cost: The costs to verify remaining locations is approximately \$25,000, annual costs are estimated at approximately \$10,000 annually.

Goal Achieved Consistent with the MDH “Specifications for Documenting the Results of an Inventory of Potential Contamination Sources”, locations of identified potential contaminant sources within the DWSMA will be verified to the extent possible.

9.2 Raise Well Owner Awareness about Well Maintenance

The City will provide literature, every five years, to private well owners (located within Eden Prairie within the DWSMA) to gain their assistance in preventing contamination of the source water aquifer. The City will mail a select portion of the MDH “Well Owner’s Handbook”, which describes well maintenance and proper sealing to Eden Prairie residents within the DWSMA. The full version of the handbook is available on the MDH website. During development of this Plan, 25 well locations were verified to the extent possible. The remaining locations will be verified during implementation of this plan.

Source of Action: WHP Manager

Cooperator(s): City Staff or Consultant

Time Frame: Ongoing

Estimated Cost: \$1,000 per year and \$2,500 per mailing, Staff or Consultant time, printing and postage

Goal Achieved: Through the MDH handbook, well owners will be educated concerning the proper operation and maintenance of wells, reducing the potential risk of these wells becoming pathways for contaminants to travel from the ground surface to the source water aquifer.

9.2 Promote the Sealing of Unused or Abandoned Wells

The City will provide literature, every five years, to private well owners (located within Eden Prairie within the DWSMA) about the County Well Sealing and Cost Share Grant Program. It offers partial grants to Hennepin County resident to cover some of the cost of sealing old wells that are no longer in use.

Source of Action: WHP Manager

Cooperator(s): City Staff or Consultant

Time Frame: Ongoing

Estimated Cost: See item above

Goal Achieved: Private well owners will become more likely to properly seal their unused wells, reducing the potential risk of these wells becoming pathways for contaminants to travel from the ground surface to the source water aquifer.

9.3 Monitor the Installation of High Capacity Wells

A water use (appropriation) permit from DNR Waters is required for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons per year. An inventory of these high capacity wells will be maintained. Information on the installation of new wells will be obtained from the Minnesota DNR at least once per year.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant and MDNR

Time Frame: Ongoing

Estimated Cost: \$1,000 per year

Goal Achieved: New high capacity well locations will be identified. This action will enable the City to identify increased groundwater withdrawals and determine if those withdrawals may affect the city's ability to provide an adequate and safe supply of drinking water.

9.4 Inventory and Management of Storage Tanks

As part of the City's ongoing educational program, a brochure will be prepared and mailed to owners of properties that have registered storage tanks where the aquifer vulnerability is

classified as high and moderate, within the City of Eden Prairie. This brochure will include information on Eden Prairie's Wellhead and Source Water Protection Program, and MPCA publications on proper operation and maintenance of storage tanks. A mailing list will be generated from the PCSI database and a mailing will occur every five years.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant, and Registered Tank Owners

Time Frame: Ongoing

Estimated Cost: \$1,000 per year and \$2,500 per mailing, Staff or Consultant time, printing and postage

Goal Achieved: This will provide current information regarding the locations of storage tanks in areas where the aquifer vulnerability is classified as high and moderate. It will also communicate concerns about the impacts on drinking water related to the release of liquid chemicals and liquid fuels from above-ground and buried storage tanks in wellhead protection areas.

9.5 Manage Individual Sewer Treatment Systems (ISTS)

MDH "Specifications for Documenting the Results of an Inventory of Potential Contamination Sources" indicate that Individual Sewer Treatment Systems (ISTS) located in areas where the aquifer vulnerability is classified as high must be inventoried. The PCSI database will be updated every year with the locations of newly identified ISTS in the highly vulnerable areas of the DWSMA. An updated brochure will be prepared and provided to Eden Prairie ISTS owners presenting information on Eden Prairie's Wellhead and Source Water Protection Program, and proper maintenance of ISTS. This will be mailed to owners of the identified properties every five years.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant, Neighboring Communities and ISTS owners

Time Frame: Ongoing

Estimated Cost: \$1,000 per year and \$2,500 per mailing, Staff or Consultant time, printing and postage

Goal Achieved: This will provide current information regarding the locations of ISTS in areas where the aquifer vulnerability is classified as high. It will also communicate

concerns about the potential impacts on drinking water related to ISTS in wellhead protection areas. This measure will also facilitate hook-up of non-conforming ISTS.

9.6 Manage Potential Class V Wells

MDH specifies that properties that potentially have Class V wells located within the DWSMA be inventoried. The U.S. Environmental Protection Agency (U.S. EPA) has characterized some types of wastewater disposal systems as Class V Injection Wells; they include large-capacity drainfields, large-capacity cesspools, and septic systems that dispose of motor vehicle wastes. The U.S. EPA is responsible for administering the federal underground injection control regulations that address Class V wells. As part of the City's initial Part 2 efforts, business that may have utilized a Class V well were identified, a brochure was prepared and hand delivered to Potential Class V owners providing information on Eden Prairie's Wellhead and Source Water Protection Program. The PCSI database has been updated with the locations of newly identified potential Class V wells in the expanded DWSMA. Twenty-five locations were verified to the extent possible. The remaining locations will be verified during implementation of this plan. An updated brochure will be mailed to owners of identified properties located in Eden Prairie, every five years.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant and Class V Well owners

Time Frame: Ongoing

Estimated Cost: \$1,000 per year and \$2,500 per mailing, Staff or Consultant time, printing and postage

Goal Achieved: This will provide current information regarding the locations of Class V wells located in Eden Prairie. It will also communicate concerns about the potential impacts on drinking water related to Class V Wells in wellhead protection areas. This measure may also facilitate proper abandonment of Class V Wells.

9.7 Inventory Known Leak and Spill Sites

An inventory of known leak site data within the moderately and highly vulnerable areas of the DWSMA, as required by the MDH, was completed as part of Eden Prairie's initial Part 2 WHP

efforts. The inventory has been updated to capture sites located within the modified DWSMA. The database will continue to be updated on an annual basis.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant and Regulatory Databases

Time Frame: Ongoing

Estimated Cost: \$1,000 per year, Staff and Consultant time

Goal Achieved: An assessment of the potential risk of known sources of contamination to the public water supply will be made.

9.8 Inventory Registered Hazardous Waste Generators

An inventory of hazardous waste generators within the highly vulnerable areas of the DWSMA, as required by the MDH, was completed as part of Eden Prairie's initial Part 2 WHP. Sites were identified and a brochure was prepared and mailed providing information on Eden Prairie's Wellhead and Source Water Protection Program and Best Management Practices. The PCSI database has been updated with the locations of newly identified generators in the expanded DWSMA. An updated brochure will be mailed to owners of the identified properties, within Eden Prairie, every five years.

Source of Action: WHP Manager

Cooperator(s): City Staff, Consultant and Regulatory Databases

Time Frame: Ongoing

Estimated Cost: \$1,000 per year and \$2,500 per mailing, Staff or Consultant time, printing and postage

Goal Achieved: This will provide current information regarding the locations of hazardous waste generators. It will also communicate concerns about the potential impacts on drinking water related to proper handling of hazardous materials.

9.9 Municipal Planning and Zoning

A copy of this Part 2 WHPP will be provided to the City Planner informing their department of the goals and objectives of the Plan. One objective is to protect the area supplying groundwater to City wells by cooperatively managing the area and minimizing the potential threat to groundwater. The Wellhead Protection Manager will discuss with the Community Development

Staff how best to incorporate wellhead and source water protection into the planning and review process.

Source of Action: WHP Manager

Cooperator(s): City Staff

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: The review and approval of development plans, involving potential point-sources of contamination, will take into account areas vulnerable to contamination.

9.10 Stormwater Pollution Protection

A copy of this Part 2 WHPP will be provided to the Environmental Coordinator informing their department of the goals and objectives of the Plan. The City of Eden Prairie's "Stormwater Pollution Prevention Plan" (SWPPP) was approved by the MPCA in March 2003 and was amended in 2006. Goals of the SWPPP are to reduce the potential deterioration of water quality due to pollutants transported through stormwater runoff to lakes, creeks and wetlands. The SWPPP provides a plan of action and a series of Best Management Practices which the City is following to assist in meeting protection goals.

Source of Action: WHP Manager

Cooperator(s): City Staff

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: Interdepartmental goals of protecting source water quality will continue to be shared.

9.11 Public Education and Information

Interaction with local schools on education programs that focus on water conservation, stormwater runoff, sustainability, waste reduction, and environmental awareness will continue through the City's Environmental Learning Center (ELC) facility as well as during city events and festivals. The ELC is an interactive activity center and laboratory for use by local school districts

for water conservation and stormwater pollution prevention education. Tours of the City's water treatment plant are often incorporated into the educational experience.

The City will continue to prepare the Drinking Water Report on an annual basis, which is made available on the City's website. It provides information regarding the City's public water supply system and its water quality.

Natural Resource Surveys have historically played a role in the City's outreach efforts and will continue to be utilized periodically as needed. The surveys provide direct, measurable feedback from city residents on pertinent topics. These results are used in evaluating resource needs and requirements for Plans such as this one.

Information is available on the City website and distributed through pamphlets, City mailings, utility bill inserts, local newspapers, cable television, council meetings, and other appropriate media and/or means of distribution.

Source of Action: WHP Manager

Cooperator(s): City Staff

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: Eden Prairie residents will become more aware of wellhead and source water protection issues and the actions that the City is taking to protect the municipal water supply. Education of the residents should lead to a better awareness of pollution prevention among the City's population.

9.12 Collaborative Source Water Protection

A large portion of Eden Prairie's DWSMA is located outside of the limits of the City. In turn, the DWSMAs of neighboring communities extend into Eden Prairie. As such, the City will work collaboratively, to the extent possible, with other local government units in an effort to promote source water protection.

Source of Action: WHP Manager

Cooperator(s): City Staff, Staff from Minnetonka, Chanhassen, Deephaven, Excelsior, Greenwood and Shorewood, Watershed District Representatives

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: Communication with other local governmental units with overlapping DWSMAs will be established.

9.13 Transportation Corridors, Pipelines and Railroads

The City will create awareness among city staff and cooperators about transportation corridors and pipeline issues that have the potential to affect the public water supply and the procedures in place to address spills and prevent released contaminants from entering the municipal water supply;

- Evaluate transportation corridor threats and incorporate drinking water supply protection into local spill response plans, planning, and potential clean-up efforts resulting from a spill that may impact the aquifer or city wells.
- Provide a map of the Eden Prairie DWSMA to the Eden Prairie Fire Department and other fire departments in the DWSMA including County Fire Departments, County Sheriff's Departments, and Emergency Managers. Describe wellhead protection and emphasize the importance of spill clean-up and response.
- Provide a map of the Eden Prairie DWSMA to the pipeline and rail companies. Describe wellhead protection and emphasize the importance of spill clean-up and response.

Source of Action: WHP Manager

Cooperator(s): City Staff, Centerpoint Energy, Magellan Pipeline, Twin Cities & Western Railroad, Canadian Pacific Railroad, Excelsior Fire District, Minnetonka Fire Department

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: The City will have provided information about transportation corridors and pipeline issues with respect to drinking water supply protection.

9.14 Storm Sewer and Vulnerability Awareness

The City will address Storm Sewers relative to wellhead protection.

- Evaluate existing stormwater management within the high vulnerable portion of the DWSMA.
- Identify BMPs and stormwater practices in these areas that reduce potential risk of contaminants entering groundwater resources based on MDH and MPCA stormwater guidance in wellhead protection areas.
- Identify the Eden Prairie DWSMA and vulnerable groundwater areas into the city's stormwater plan.

Source of Action: WHP Manager

Cooperator(s) City Staff, Excelsior Staff, Watershed District Representatives

Time Frame: Ongoing

Estimated Cost: Staff time

Goal Achieved: Practices may be identified that can reduce the potential risk of contamination of the drinking water supply.

10.0 PROGRAM EVALUATION

Per Minnesota Rule 4720.5270, the progress in implementing a WHPP must be evaluated routinely to determine the effectiveness of the WHPP in terms of accomplishing its goals. Eden Prairie's evaluation activities will include the following items:

- Document implementation of the tasks discussed in this Plan;
- Determine the effectiveness of management strategies regarding the protection of Eden Prairie's municipal water supply;
- Identify possible changes to strategies which may improve their effectiveness; and
- Discuss the adequacy of financial resources and staff availability to carry out the planned management strategies.

Eden Prairie's Wellhead Protection Manager will prepare an annual report summarizing the items noted above. The report may be completed using the MDH Wellhead Protection Program Evaluation form. It will be submitted to the City Council and the MDH Source Water Protection Unit.

11.0 ALTERNATIVE WATER SUPPLY / CONTINGENCY STRATEGY

Minnesota Rule 4720.5280 indicates that a wellhead protection plan must have a contingency strategy that addresses disruptions of the water supply caused by contamination or mechanical failures of the public water supply system. Eden Prairie's "Water Emergency and Conservation Plan" outlines procedures and information for the PWS, which may become vital in the event of a partial or total loss of public water supply services as a result of natural disaster, chemical contamination, civil disorder, or human-caused disruptions. As required, it was submitted to the MDNR Division of Waters – Appropriation Permit Program and the Metropolitan Council for review and approval. The "Water Emergency and Conservation Plan" was adopted by the City Council in March 2008 and the associated Certificate of Adoption was sent to the MDNR at that time.

12.0 ACKNOWLEDGEMENTS

12.1 Key Personnel Contacts

Following are key staff contacts for questions regarding the Wellhead Protection Plan (WHPP) or its components.

City of Eden Prairie

Rick Wahlen, Utility Operations Manager
14100 Technology Drive
Eden Prairie, MN 55344
Telephone: (952) 949-8530

Nine Mile Creek Watershed District / Riley-Purgatory-Bluff Creek Watershed District

Mr. Bob Obermeyer, Engineering Advisor
Barr Engineering
4700 W. 77th Street
Bloomington MN 55435-4803
Telephone: (952) 832-2600

Lower Minnesota River Watershed District

Linda Loomis, District Administrator
Naiad Consulting, LLC
6677 Olson Memorial Highway
Golden Valley, Minnesota 55427
Telephone: (763) 545-4659

12.2 Planning Committee

City Council

Nancy Tyra-Lukens, Mayor
Brad Aho
Ron Case
Sherry Butcher Wickstron
Kathy Nelson

City Staff

Rick Getschow, City Manager
Robert Ellis, Public Works Director
Rick Wahlen, Utility Operations Manager
Leslie Stovring, Environmental Coordinator
Julie Klima, City Planner
Rod Rue, City Engineer
Mary Krause, Project Engineer

Technical Advisory Panel

Board of Water and Soil Resources
Department of Natural Resources
Metropolitan Council
Pollution Control Agency
Hennepin Conservation District
Riley-Purgatory-Bluff Creek Watershed District
Nine Mile Creek Watershed District
Lower Minnesota River Watershed District

Consultants

St. Croix Environmental, Inc.

References

Bedrock Geology and Topographic Maps of the Seven-County Twin Cities Metropolitan Area, 1986
Comprehensive Wetland Protection and Management Plan, City of Eden Prairie 1997
Draft Rules, Riley-Purgatory-Bluff Creek Watershed District 2014
Eden Prairie Lakes Water Quality Improvement Project, Nine Mile Creek Watershed District, July 2006
Geologic Atlas of Hennepin County, Minnesota, 1989
Local Water Management Plan, City of Eden Prairie, December 2008
Minnesota Drought Situation Report, July 26, 2007
Overview of the Twin Cities Metropolitan Area Groundwater Model report
Stormwater Management Rule, Minnehaha Creek Watershed District 2011
Stormwater Pollution Prevention Plan, City of Eden Prairie 2006
Water Emergency and Conservation Plan, City of Eden Prairie March 2008
Water Management Plan, Nine Mile Creek Watershed District 2007
Water Resources Management Plan, Minnetonka 2009
Water Resources of the Lower Minnesota River Watershed, South-Central Minnesota, 1974
Watershed Management Plan, Lower Minnesota River Watershed District 2011
Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov>
Wellhead Protection Plan for the City of Eden Prairie, July 30, 2013

TABLES

Table 1	Potential Class V Well Locations
Table 2	Private Well Locations
Table 3	Known Release Sites
Table 4	Registered Storage Facilities
Table 5	Hazardous Waste Generators

Table 1
Potential Class V Wells Verified Locations
Part 2 Wellhead Protection Plan
City of Eden Prairie
March, 2015

Map ID	NAME	ADDRESS	CITY	PID	MPCA ID	Type Code
1	Mason Bill Chrysler Plymouth	440 Water St	Excelsior	3411723130090	MND022784250,	HWG, LAST, AST
5	Former EZ Stop Bulk Site	3rd St & Water St	Excelsior	3411723110087	MNR000003012,	HWG, LUST, UST
16	Gary's 1st Class Car Care	301 Water St	Excelsior	3411723140013	MND981790496,	HWG, LUST, RUST, UST
27	R/T Automotive	366 Highway 7	Excelsior	3411723140042	MND985749746,	HWG, LUST, RUST, UST
3	Excel Marina	141 Minnetonka Blvd	Excelsior	3511723220182	MND154447924,	HWG, LUST, RUST
30	Excelsior Amoco	481 2nd St	Excelsior	3411723110144	MND985718386,	HWG, LUST, RUST, UST, RAST
38	LaMettry's Collision Inc - Eden Prairie	11903 Valley View Rd	Eden Prairie	1111622310001	MNR000060384,	AP, HWG, AST
56	M & M Auto Body Rebuilders Inc	420 2nd St	Excelsior	3411723110127	MND047250410,	AP, HWG
113	Terrys Automotive	6520 Edenvale Blvd Ste 130	Eden Prairie	311622230031	MND985680610	HWG
133	Rainbow Auto Services	14558 Martin Dr	Eden Prairie	911622440037	MND981525975	HWG
60	Precision Tune - Deephaven	19300 Highway 7	Deephaven	2511723410001	MNR000063974	HWG
61	Youngstedt Inc Goodyear 8 Minnetonka	14950 Highway 7	Minnetonka	2111722430055	MND982618977	HWG
62	Scotts Automotive Repair	225 W 79th St	Chanhassen	252870030	MND981790058	HWG
63	Ivan's Sinclair	7910 Dakota Ave	Chanhassen	251800560	MND036231942,	HWG, LUST, RUST, UST
64	Chanhassen Goodyear	50 Lake Dr E	Chanhassen	251780010	MN0000876961	HWG
65	Browns Tire & Auto	275 W 79th St	Chanhassen	252870030	MND985685635	HWG
67	Valvoline Rapid Oil Change Inc	19465 Highway 7	Shorewood	2511723410010	MND985695204	HWG
68	Midas Muffler - Hwy 7 Deephaven	19300 Highway 7	Deephaven	2511723410001	MND982617508	HWG
70	Groveland Service Garage	3646 County Road 101 S	Wayzata	1811722440060	MND982631764	HWG
72	MAACO - Chanhassen	40 Lake Dr E	Chanhassen	251780020	MN0000341438	HWG
73	Victory Automotive Service-Glass	64 Lake Dr E	Chanhassen	251770010	MNS000167122	HWG
75	Tires Plus Chanhassen 8146	580 W 79th St	Chanhassen	252490010	MNR000023937,	AST, HWG
76	Carmichael Auto Parts	20755 Manor Rd	Excelsior	2511723330071	MNR000042481,	HWG, VIC, ISW
79	Auto Works	60 Lake Dr E	Chanhassen	251770010	MNR000112847	HWG
80	Midas Auto Service Experts - Deephaven	19340 Highway 7	Deephaven	2511723410044	MNR000064212	HWG
81	ABRA Auto Body & Glass - Chanhassen	60 Lake Dr E Ste B	Chanhassen	251770010	MNS000124750	HWG
82	Sullivans Services Inc	3660 County Road 101 S Ste A	Wayzata	1711722330014	MND006255194	HWG
83	Holiday Stationstore 199	441 W 79th St	Chanhassen	258900010	MNR000009761	HWG
84	Browns Standard Service	7905 Great Plains Blvd	Chanhassen	250132000	MND981948797,	HWG, RUST

Orange Shading indicates High Vulnerability

Yellow Shading indicates Moderate Vulnerability

No Shading indicates Low Vulnerability

Note: only Hazardous Waste Generator ID#s are listed

Table 2
Private Wells Verified Locations
Part 2 Wellhead Protection
City of Eden Prairie
March, 2015

MAP ID	UNIQUE NUMBER	WELL NAME	STATUS	WELL TYPE	PID	ADDRESS	CITY
234	205027	ALLEN MALLEY	A	DO	2811722130010	14816 CRESTVIEW LA	MINNETONKA
237	205673	GORDON SCHMIDT	A	DO	3411723410019	420 LINDEN DR	MINNETONKA
267	100195	WILLIAM KASTER	A	DO	2611723410015	5080 SUBURBAN DR	EXCELSIOR
280	204472	MURPHY	A	DO	2911722120024	4616 OXFORD PL	MINNETONKA
307	227323	DONALD SENSION	A	DO	2611723440053	5470 MAPLE HEIGHTS	GREEWOOD
311	151463	KELLOGG, TERRY	A	DO	3511723110023	21150 EXCELSIOR BL	GREEWOOD
460	242150	GALPINS LAKE PILOT NO.3	A	OB	3411723410004	LINDEN STREET	EXCELSIOR
518	164890	JOHN WIEMAN	A	DO	3511723310007	15000 HIGHLAND LA	SHOREWOOD
527	100128	J. VALENE	A	DO	241172310023	19685 CHIMO WEST	DEEPHAVEN
549	205682	YACHT DEALER	A	CO	3511723120015	21550 STATE HWY NO 7	GREEWOOD
578	122847	STACKEN, ROMAN	A	DO	2611723410013	5050 SUBURBAN DR	SHOREWOOD
645	205073	FERGASTAD	A	DO	2911722119003	16208 STATE HWY NO 7	MINNETONKA
651	100129	KEN DURR	A	DO	2411723410022	19659 CHIMO WEST	DEEPHAVEN
653	205125	PAUL HOST	A	DO	3111722320038	5826 SALISBURY AVE	MINNETONKA
679	204471	TOM BETZ	A	DO	2011722340018	4540 MARLBOROUGH CT	MINNETONKA
771	205041	AXEL JOHNSON	A	DO	2811722310035	15240 HIGHLAND PL	MINNETONKA
783	205930	ED PIERCE	A	DO	2011622340022	9275 CEDAR FOREST RD	EDEN PRAIRIE
787	204474	FRITZ OERTEL	A	DO	2011722440024	16151 HIGHWOOD DR	MINNETONKA
816	205898	RADIO STATION KRSI	A	CO	1111622410010	11320 VALLEY VIEW RD	EDEN PRAIRIE
821	224097	ROSEMOUNT ENGINEERING	A	CO	1411622210008	12001 78TH ST W	EDEN PRAIRIE
864	112232	DOUGLAS JACOBSON	A	DO	3511723110029	5530 MAPLE HEIGHTS RD	GREEWOOD
893	205671	EXCELSIOR THEATRE	A	CO	3411723110058	26 WATER STREET	EXCELSIOR
909	205955	HAROLD MILLER	A	DO	2011622340016	9381 CEDAR FOREST RD	EDEN PRAIRIE
915	426534	KRAEMER, JOHN	A	DO	2611723440048	21050 OAK LA	GREEWOOD
926	151451	THOMAS, LARRY	A	DO	3511723120008	21320 EXCELSIOR BL	GREEWOOD

Orange Shading indicates High Vulnerability

A: Active

DO: Domestic Use

CO: Commercial Use

OB: Observation Well

Table 3
Known Release Sites
Part 2 Wellhead Protection Plan
City of Eden Prairie
March 2015

Map ID	NAME	ADDRESS	CITY	Type Code	Facility Code	PID
1	Mason Bill Chrysler Plymouth	440 Water St	Excelsior	HWG, LAST, AST	MND022784250, 18715, 51858	3411723130090
5	Former EZ Stop Bulk Site	3rd St & Water St	Excelsior	HWG, LUST, RUST, UST	MND981790496, 13215, 5905	3411723110087
10	Excelsior Community Center	443 Oak St	Excelsior	Leaks Site	11596	3411723140032
11	Lyman Lumber Co	337 Water St	Excelsior	SAS, VIC, LUST, PB	SA129, VP26380, 6204, 4177	3411723140072
14	Former Pure Oil Company	352 3rd St	Excelsior	Leak Site, PB	13962, 4131	3411723120003
15	Apartment At 500 Linden St	551 Linden St	Excelsior	Leak Site	8794	3411723410004
16	Gary's 1st Class Car Care	301 Water St	Excelsior	HWG, LUST, RUST, UST	13215	3411723140013
17	Excelsior Ez Stop	300 Water St	Excelsior	Leak Site, UST	559, 13871, 3009	3411723110087
18	Excelsior Gas Mfg Site	152 Morse Ave	Excelsior	CERLIC SITE, VIC	MND982068215, VP0170	3411723140044
27	R/T Automotive	366 Highway 7	Excelsior	HWG, LUST, RUST, UST	10881, 3098	3411723140042
2	Food N Fuel	21380 Highway 7	Greenwood	LUST		3511723120017
3	Excel Marina	141 Minnetonka Blvd	Excelsior	HWG, LUST, RUST	MND154447924, 4890.2389	3511723220182
4	Former Minnesota Inboard Water Sports	340 Highway 7	Excelsior	LUST	19105	3511723230007
6	Tonk Away	820 3rd Ave	Excelsior	LUST, RUST	17103, 124764	3511723240042
7	Hance Building 200	204 206 Water St	Excelsior	Leak Site	16177	3411723110061
8	Northland Yachts	21450 Highway 7	Greenwood	Leak Site	9863	3511723120028
9	Greenwood Marina	21945 Minnetonka Blvd	Greenwood	Leak Site, AST	8515, 2395	2611723340013
12	Gander Mountain 489	12160 Technology Dr	Eden Prairie	VIC	VP5452	1111622340009
13	Mullen Residence	4948 Rustic Way	Shorewood	Leak Site	10580	2611723140033
19	City Of Excelsior-utility Project	N of Water St	Excelsior	Leak Site	4375	3411723110065
20	Tonka Building	355 2nd St	Excelsior	Leak Site, RUST	4304, 13633	3411723110055
21	Rosemount Inc - Eden Prairie Facility	12001 Technology Dr	Eden Prairie	LAST, AST	5385, 19163, 53403	1411622210008
22	Hennipen Technical College	13100 College View Dr	Eden Prairie	LUST, RUST, AST	8442, 3177, 2175	2211622440001
23	Cochrane's Marina	See location description	Excelsior	VIC	VP13580, VP13581, VP13582	3511723220032
24	Tonka Printing	287 Water St	Excelsior	VIC, PB	VP18000, 3465	3411723110034
25	Saint John Baptist Catholic School	636 Mill St (back of School)	Excelsior	LUST, UST	5422, 13317	3511723320021
26	Tullamore Glen	4500 Tonkawood Rd	Minnetonka	Leak Site, RUST	7371, 3025	2011722440047
28	Saint John The Baptist/church Bldg	680 Mill St	Excelsior	LUST, RUST, UST	5423, 13321	3511723320021
29	East Lake Enterprise	421 3rd St Ste A	Excelsior	AP, HWG, LAST, AST	15049, 55437	3411723110027
30	Excelsior Amoco	481 2nd St	Excelsior	LUST, UST	15028, 2930	3411723110144
31	Nodak Connection Inc	320 Morse Ave	Excelsior	Leak Site	2317	3411723140056
32	Excelsior Manor Apartments	838 3rd Ave	Excelsior	LUST	9385, 119733	3511723240015
34	Commercial Asphalt Co 912	6401 Industrial Dr	Eden Prairie	LUST, AST, HWG	2195	0311622220033
35	W Gordon Smith Co	7920 Wallace Rd	Eden Prairie	LUST	11395	1611622210029
36	Former VCR Repair Site	15714 W 78th St	Eden Prairie	LUST	12512	Not Verified
37	Us West	7825 Fuller Rd	Eden Prairie	LUST	5062	1611622220038

LAST - Leaking Aboveground Storage Tank

LUST - Leaking Underground Storage Tank

Orange Shading indicates High Vulnerability

Yellow Shading indicates Moderate Vulnerability

PB - Petroleum Brownfield Site

VIC - Voluntary Investigation & Cleanup

RUST - Removed Underground Storage Tank

Table 4
Registered Storage Facilities
Part 2 Wellhead Protection Plan
City of Eden Prairie
March, 2015

Map ID	NAME	ADDRESS	CITY	Type Code	Facility Code	PID
1	Mason Bill Chrysler Plymouth	440 Water St	Excelsior	HWG, LAST, AST	MND022784250, 18715, 51858	3411723130090
25	Saint John Baptist Catholic School	636 Mill St (back of School)	Excelsior	LUST, UST	5422, 13317	3511723320021
27	R/T Automotive	366 Highway 7	Excelsior	HWG, LUST, RUST, UST	10881, 3098	3411723140042
28	Saint John The Baptist/church Bldg	680 Mill St	Excelsior	LUST, RUST, UST	5423, 13321	3511723320021
47	Early Childhood Education Center	628 Mill St	Excelsior	UST	13320	3511723320021
48	Excelsior Elementary School	441 Oak St	Excelsior	RUST	1934	3411723140032
2	Food N Fuel	21380 Highway 7	Greenwood	HWG, LUST, UST		3511723120017
6	Tonk Away	820 3rd Ave	Excelsior	AP, HWG, VIC, LUST, RUST, UST, AST, ISW, WWD	17103, 124764	3511723240042
16	Gary's 1st Class Car Care	301 Water St	Excelsior	HWG, LUST, RUST, UST	13215	3411723140013
21	Rosemount Inc - Eden Prairie Facility	12001 Technology Dr	Eden Prairie	AP, HWG, LAST, AST, CSW, ISW, WWD	5385, 19163, 53403	1411622210008
22	Hennipen Technical College	13100 College View Dr	Eden Prairie	LUST, RUST, AST	8442, 3177, 2175	2211622440001
29	East Lake Enterprise	421 3rd St Ste A	Excelsior	AP, HWG, LAST, AST	15049, 55437	3411723110027
30	Excelsior Amoco	481 2nd St	Excelsior	HWG, LUST, RUST, UST, RAST	15028, 2930	3411723110144
34	Commercial Asphalt Co 912 - Eden Prairie	6401 Industrial Dr	Eden Prairie	LUST, AST, HWG	2195	0311622220033
38	LaMettry's Collision Inc - Eden Prairie	11903 Valley View Rd	Eden Prairie	AP, HWG, AST	122205	1111622310001
39	Costco Wholesale 783	12011 Technology Dr	Eden Prairie	AST, AP, HWG	123604	1411622220008
40	SuperValu Inc	11840 Valley View Rd	Eden Prairie	AP, HWG, UST	11126	1111622130003
42	Eden Prairie city of Park Maintenance-SW	15150 Technology Dr	Eden Prairie	AST, UST, ISW	55574	1611622130010
43	World Imports Inc	14590 Martin Dr	Eden Prairie	AST, HWG	119568	0911622440036
44	Minnetonka Middle School East Parking	17000 Lake St Extension	Minnetonka	UST, CSW	1940	2011722240015
45	Lyman Lumber Co	300 Morse Ave	Excelsior	RAST	52585	3411723140056
49	Minnetonka Schools Administration	261 School Ave	Excelsior	RUST	1878	3411723140051
50	Excelsior Co 14061	560 2nd St	Excelsior	AST	2844, 54269	3511723230039
51	Eaton Corp	15151 Highway 5	Eden Prairie	AST	2644	1611622120009
52	Glen Lake Golf Course Maint Facility	6210 Indian Chief Rd	Eden Prairie	AST	55343	0411622110007

Orange Shading indicates High Vulnerability

Yellow Shading indicates Moderate Vulnerability

AP - Air Permit

AST - Aboveground Storage Tank

CSW - Construction Stormwater Permit

HWG - Hazardous Waste Generator Permit

ISW - Industrial Stormwater Permit

RUST - Removed Underground Storage Tank

UST - Underground Storage Tank

VIC - Voluntary Investigation & Cleanup

WWD - Waste Water Discharger Permit

LUST - Leaking Underground Storage Tank

Table 5
Hazardous Waste Generators
Part 2 Wellhead Protection Plan
City of Eden Prairie
March, 2015

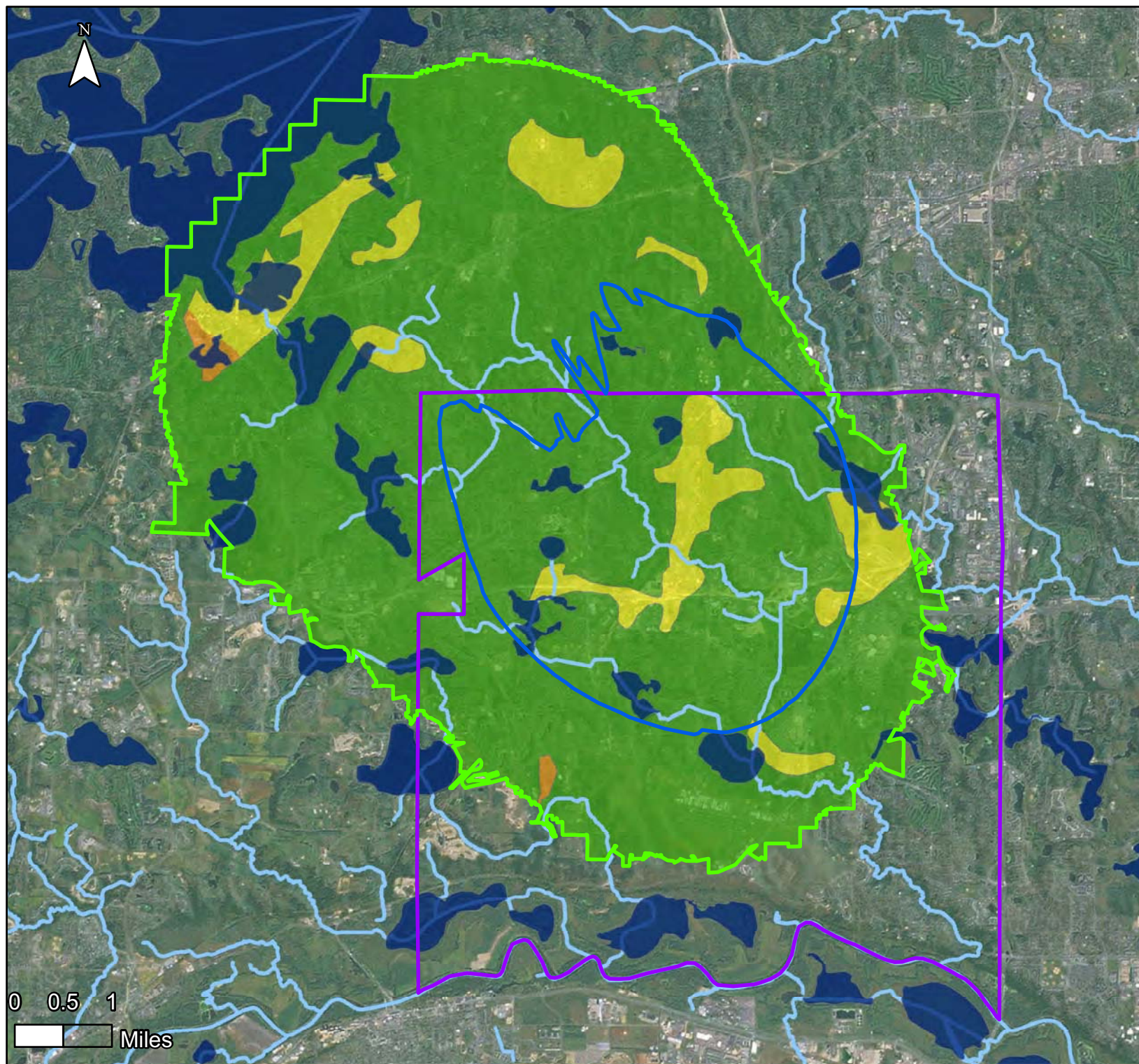
Map ID	NAME	ADDRESS	CITY	TYPE CODE	FACILITY CODE	PID
1	Mason Bill Chrysler Plymouth	440 Water St	Excelsior	HWG	MND022784250	3411723130090
16	Gary's 1st Class Car Care	301 Water St	Excelsior	HWG	MND981790496	3411723140013
17	Excelsior Ez Stop	300 Water St	Excelsior	HWG	MNR000003012	3411723110087
53	Eagle Medical - 490 Oak	490 Oak St	Excelsior	HWG	MNS000147959	3411723130036
41	St John The Baptist School	638 Mill St	Excelsior	HWG	MND98575767	3511723320021
27	R/T Automotive	366 Highway 7	Excelsior	HWG	MND985749746	3411723140042
55	Norwest Bank Excelsior Na	411 Water St	Excelsior	HWG	MN0000233130	3411723140028

Orange Shading indicates High Vulnerability

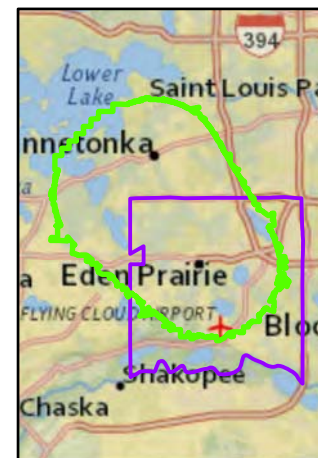
HWG - Hazardous Waste Generator

FIGURES

Figure 1	Wellfield Location Map
Figure 2	DWSMA Vulnerability
Figure 3	Soil Map
Figure 4	Soil Erosion Risk Map
Figure 5	Parcel Map
Figure 6	Land Use Map
Figure 7	Zoning Map
Figure 8	Political Boundary Map
Figure 9	Potential Class V Well Locations
Figure 10	Non-Municipal Well Locations
Figure 11	Known Release Sites
Figure 12	Registered Storage Facilities
Figure 13	Individual Sewage Treatment Systems
Figure 14	Registered Hazardous Waste Generators
Figure 15	Stormwater Collection System
Figure 16	Sanitary Sewer System
Figure 17	Public Drainage System Map



Eden Prairie
Part II Wellhead
Protection Plan
Figure 1
Wellhead Protection Area
March 2015



Legend

Wellhead Protection Area

DWSMA

EP Boundary

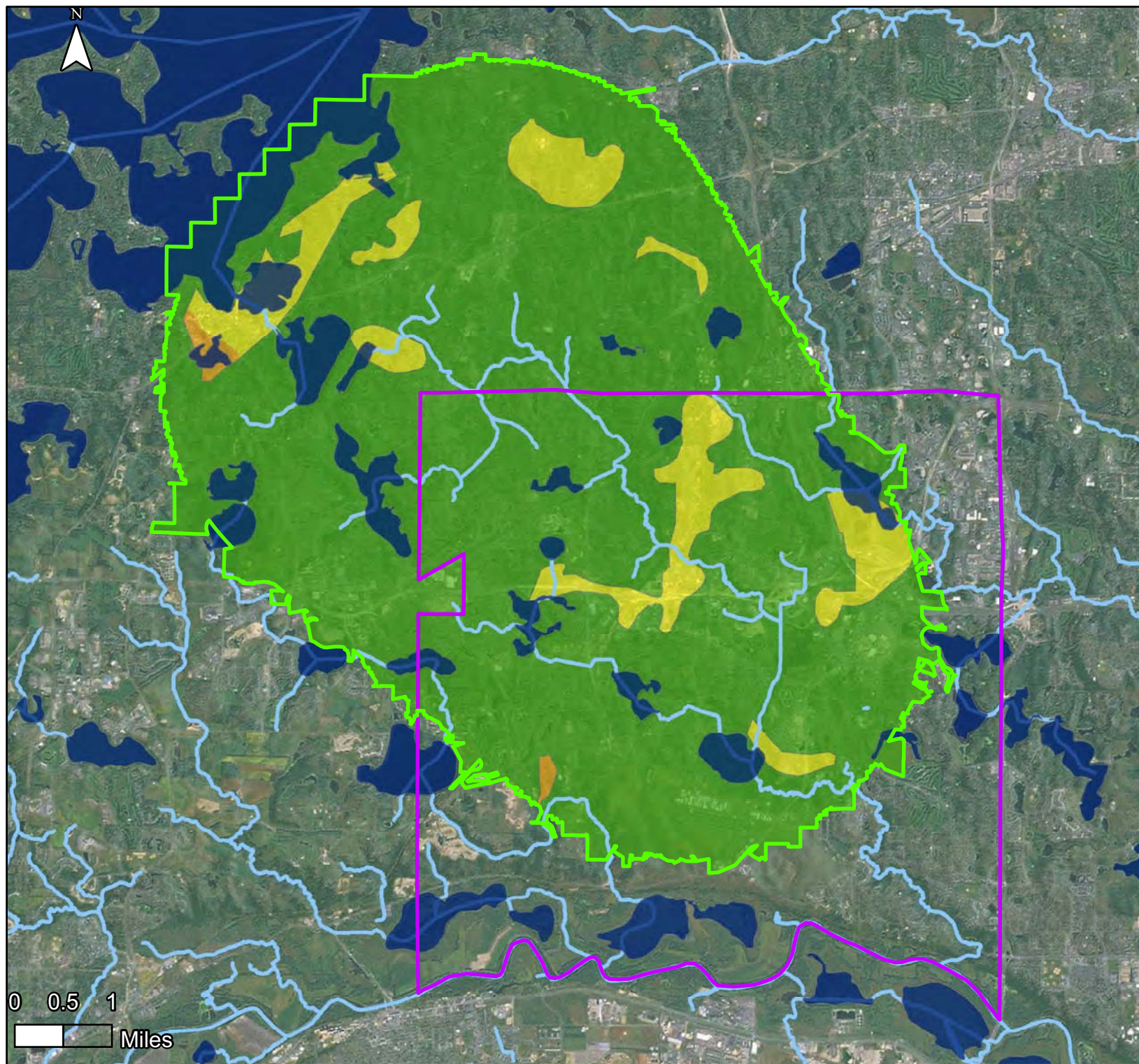
DWSMA

Vulnerability

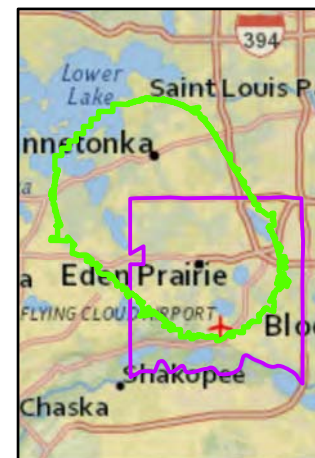
High

Moderate

Low



Eden Prairie
Part II Wellhead
Protection Plan
Figure 2
DWSMA Vulnerability
March 2015



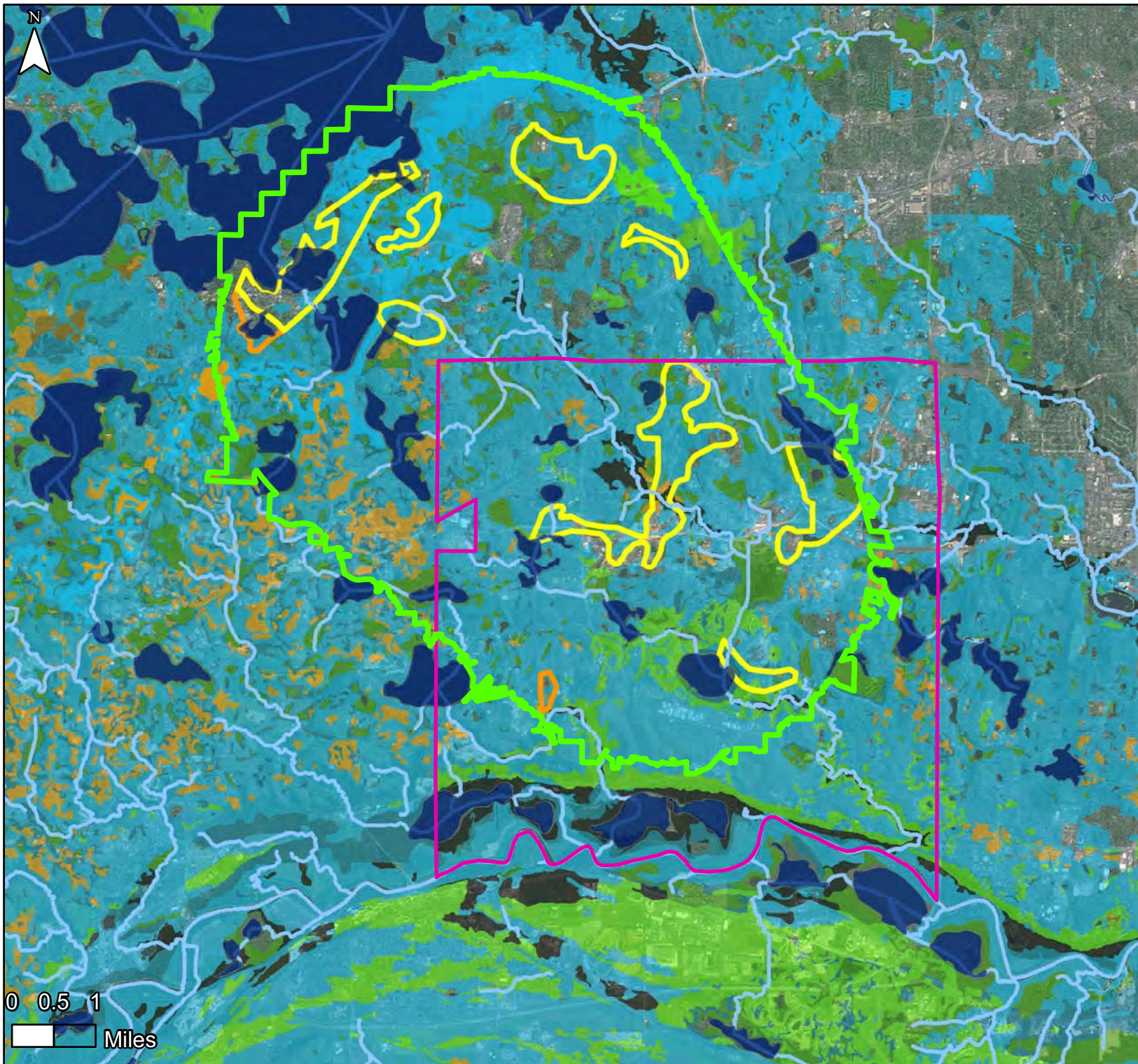
Legend

-  DWSMA
-  Eden Prairie Border

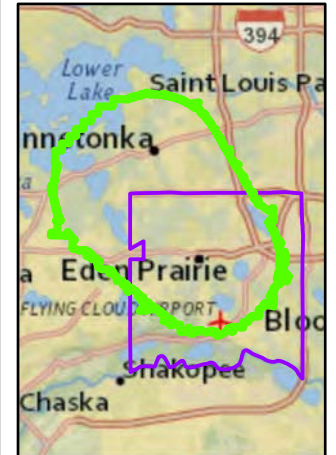
DWSMA

Vulnerability

-  High
-  Moderate
-  Low



Eden Prairie
Part II Wellhead
Protection Plan
Figure 3
Soil Map
May 2014

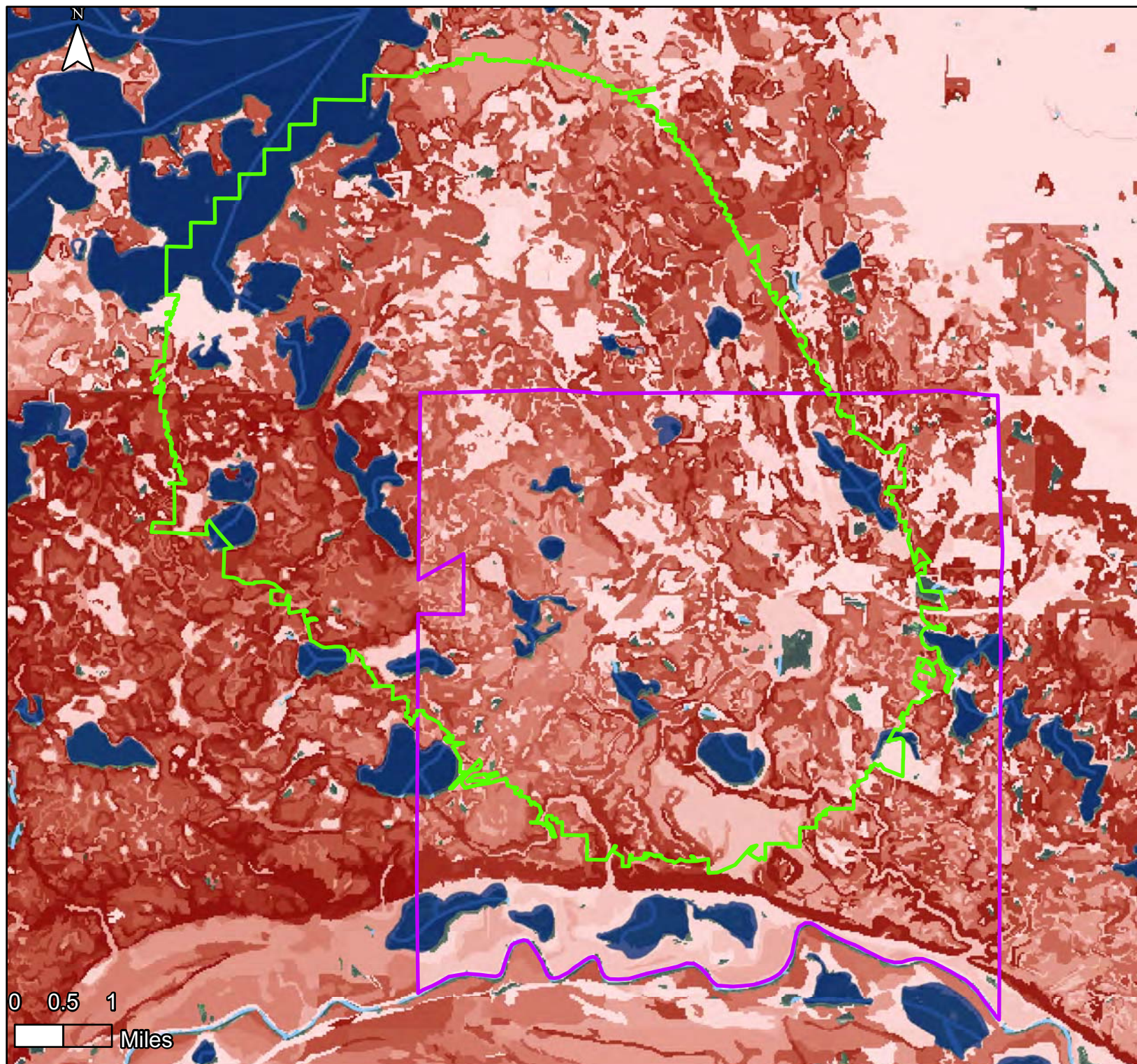


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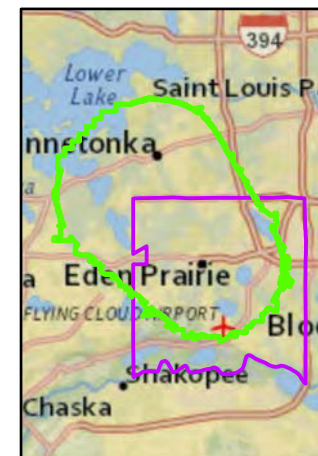
- DWSMA
- Eden Prairie Border

Soil Groupings

- High Infiltration Rate/Low Runoff
- High Infiltration Rate if Drained/Very Slow if Undrained
- Moderate Infiltration Rate/Moderate Runoff
- Moderate Infiltration Rate if Drained/Very Slow if Undrained
- Slow Infiltration Rate/High Runoff
- Slow Infiltration Rate if Drained/Very Slow if Undrained
- Very Slow Infiltration Rate/Very High Runoff



Eden Prairie
Part II Wellhead
Protection Plan
Figure 4
Soil Erosion Risk
March 2015

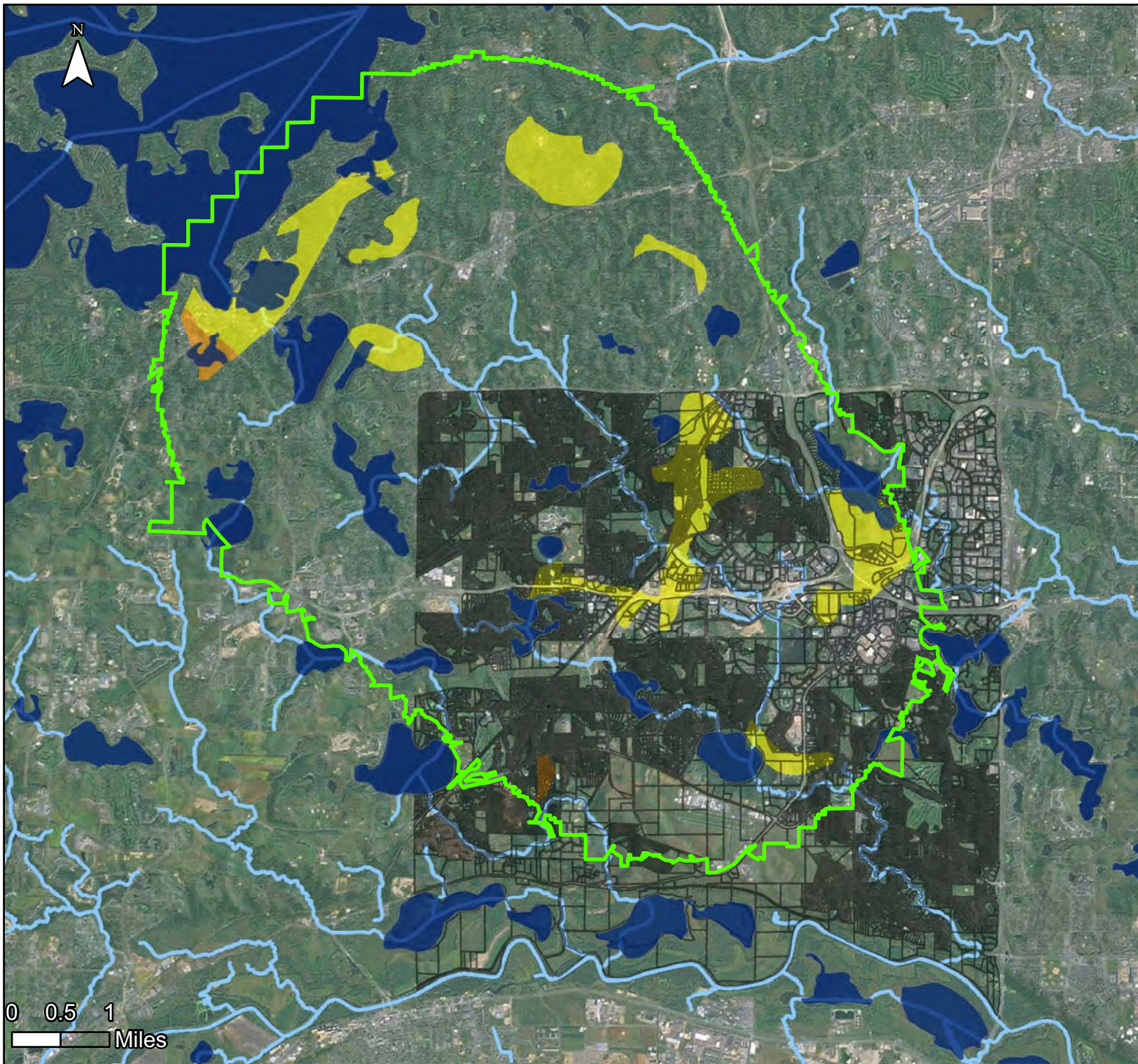


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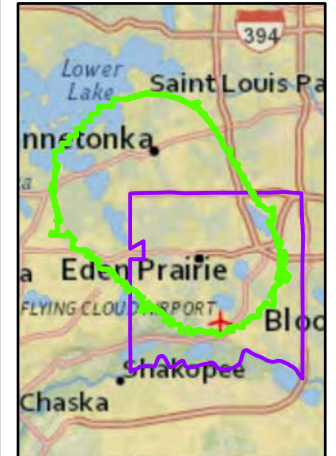
-  DWSMA
-  Eden Prairie Border

Soil Erosion Risk

-  High
-  Low



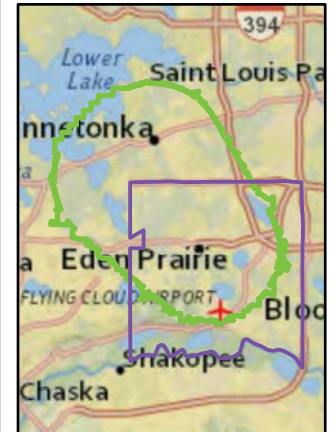
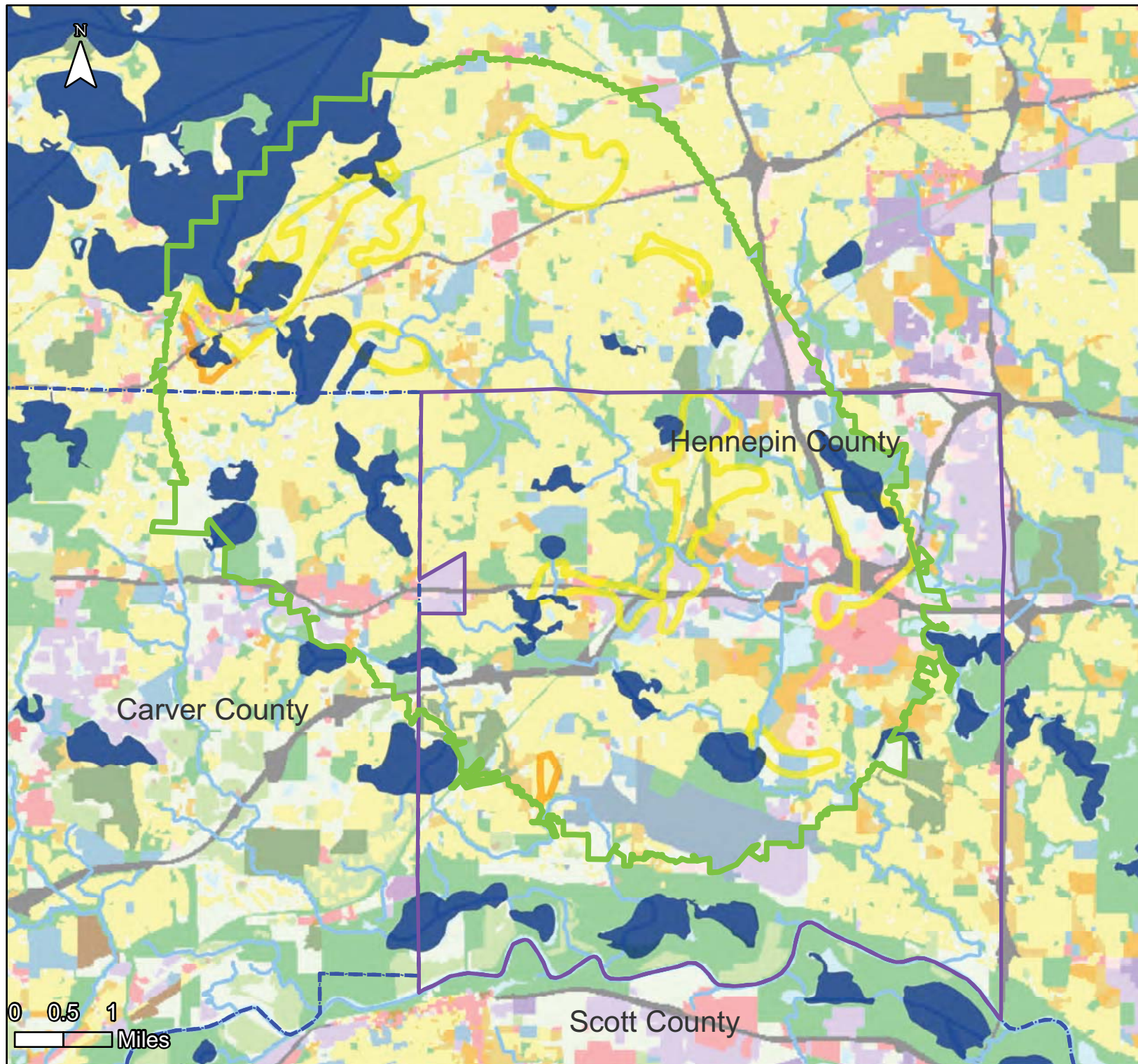
Eden Prairie
Part II Wellhead
Protection Plan
Figure 5
Parcel Map
May 2014



Legend

-  DWSMA
-  Eden Prairie Parcels
- DWSMA Vulnerability**
- Vulnerability**
-  High
-  Moderate

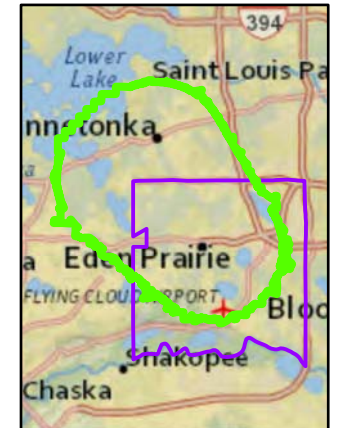
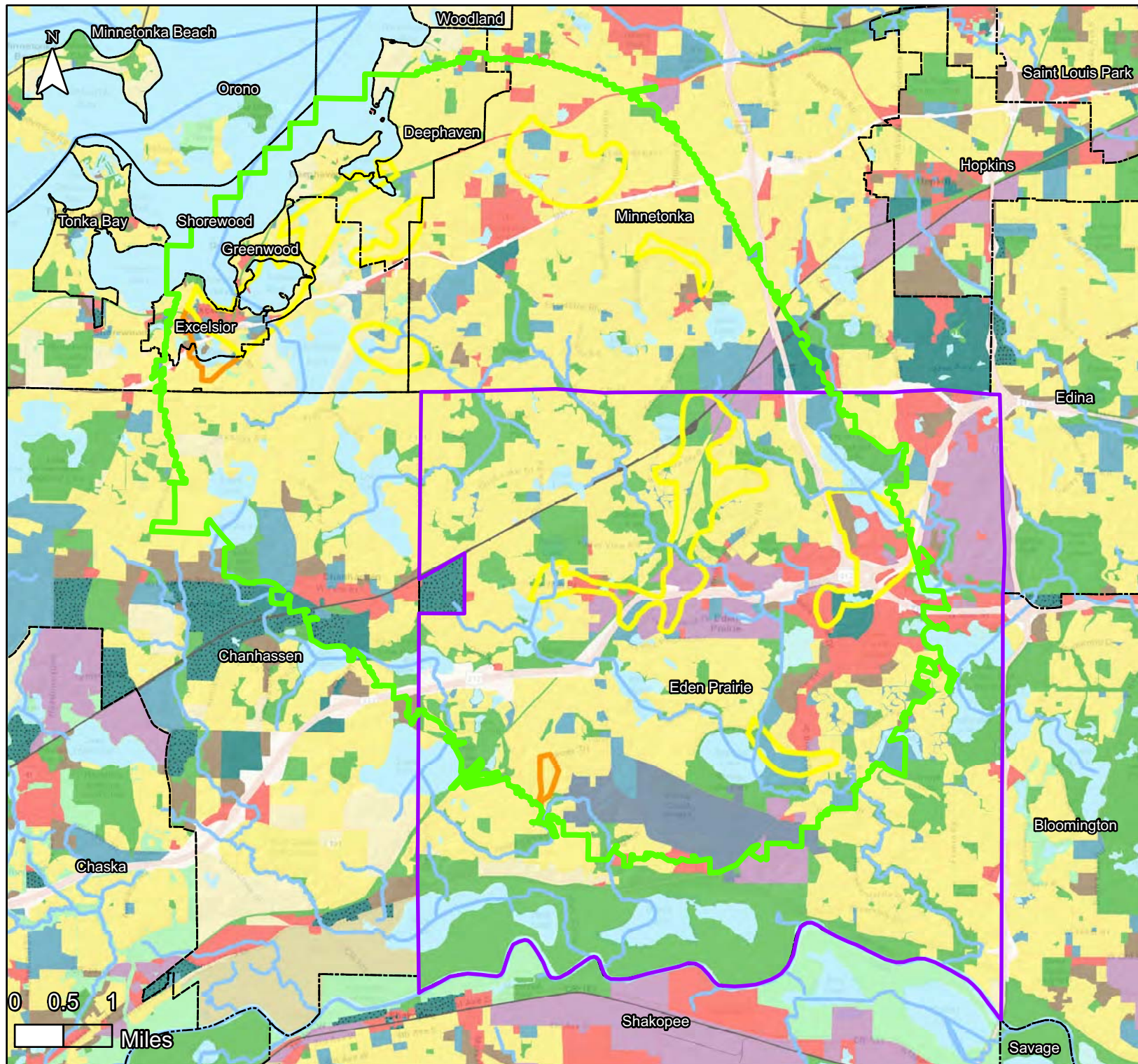
Eden Prairie
Part II Wellhead
Protection Plan
Figure 6
Land Use Map
May 2014



Legend

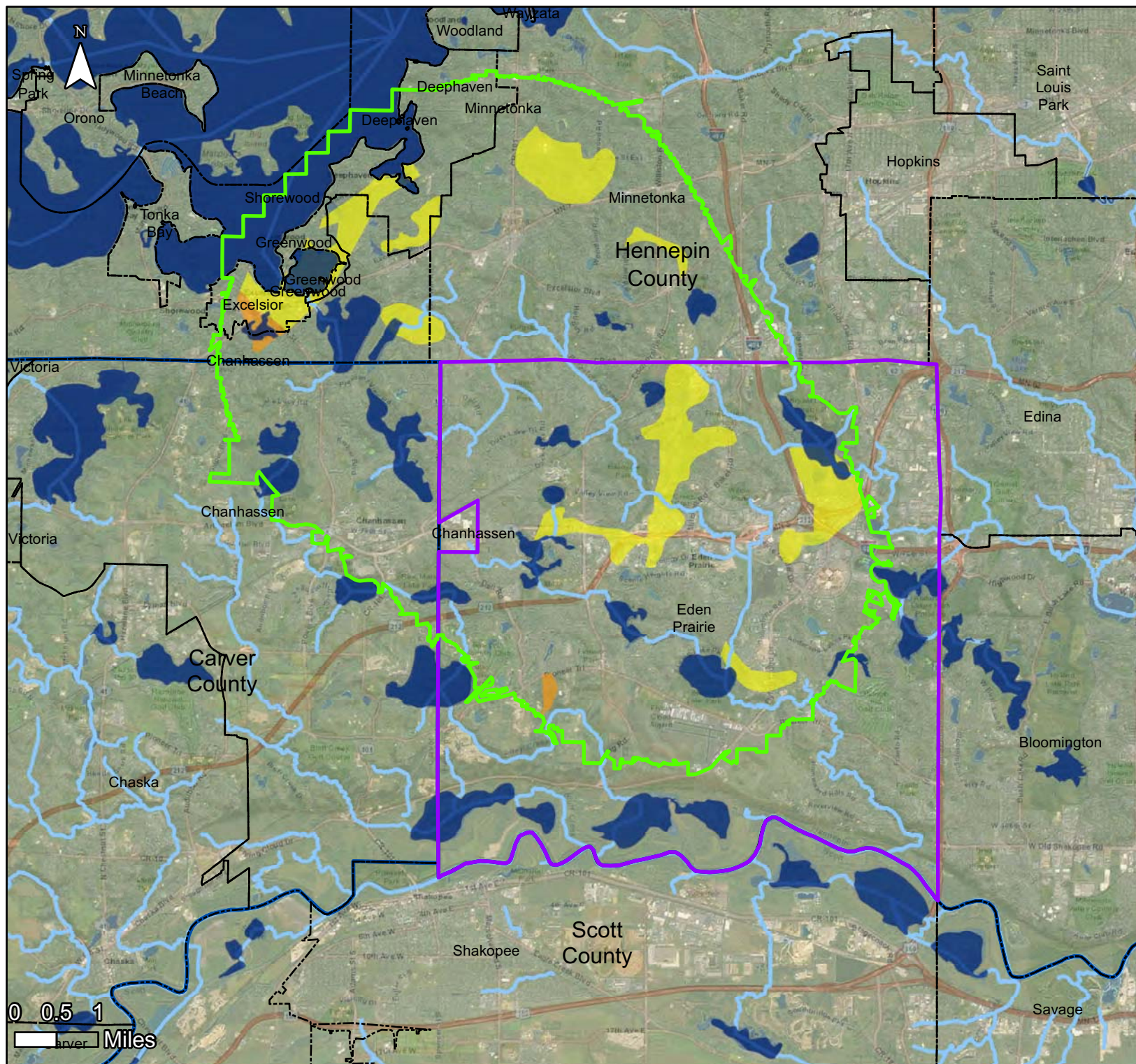
- DWSMA
- Eden Prairie Boundary
- County Border
- Farmstead
- Seasonal/Vacation
- Single Family Detached
- Manufactured Housing Park
- Single Family Attached
- Multifamily
- Retail and Other Commercial
- Office
- Mixed Use Residential
- Mixed Use Industrial
- Mixed Use Commercial and Other
- Industrial and Utility
- Extractive
- Institutional
- Park, Recreational or Preserve
- Golf Course
- Major Highway
- Railway
- Airport
- Agricultural
- Undeveloped
- Water

Eden Prairie
Part II Wellhead
Protection Plan
Figure 7
Zoning Map
May 2014

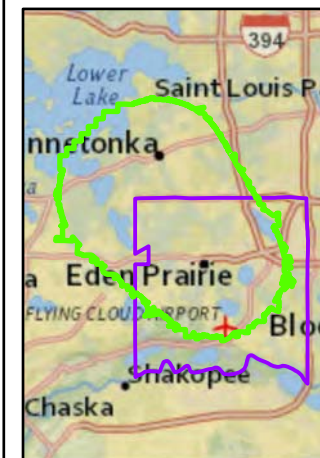


Legend

- DWSMA
- Eden Prairie Border
- City Border
- DWSMA**
- Vulnerability**
- High
- Moderate
- Zoning**
- Agricultural
- Rural or Large-Lot Residential
- Single Family Residential
- Multifamily Residential
- Commercial
- Industrial
- Institutional
- Mixed Use
- Multi-Optional Development
- Park and Recreation
- Open Space or Restrictive Use
- Rights-of-Way (i.e., Roads)
- Railway (inc. LRT)
- Airport
- Vacant or Unknown
- Open Water



Eden Prairie
Part II Wellhead
Protection Plan
Figure 8
Political Boundaries
May 2014

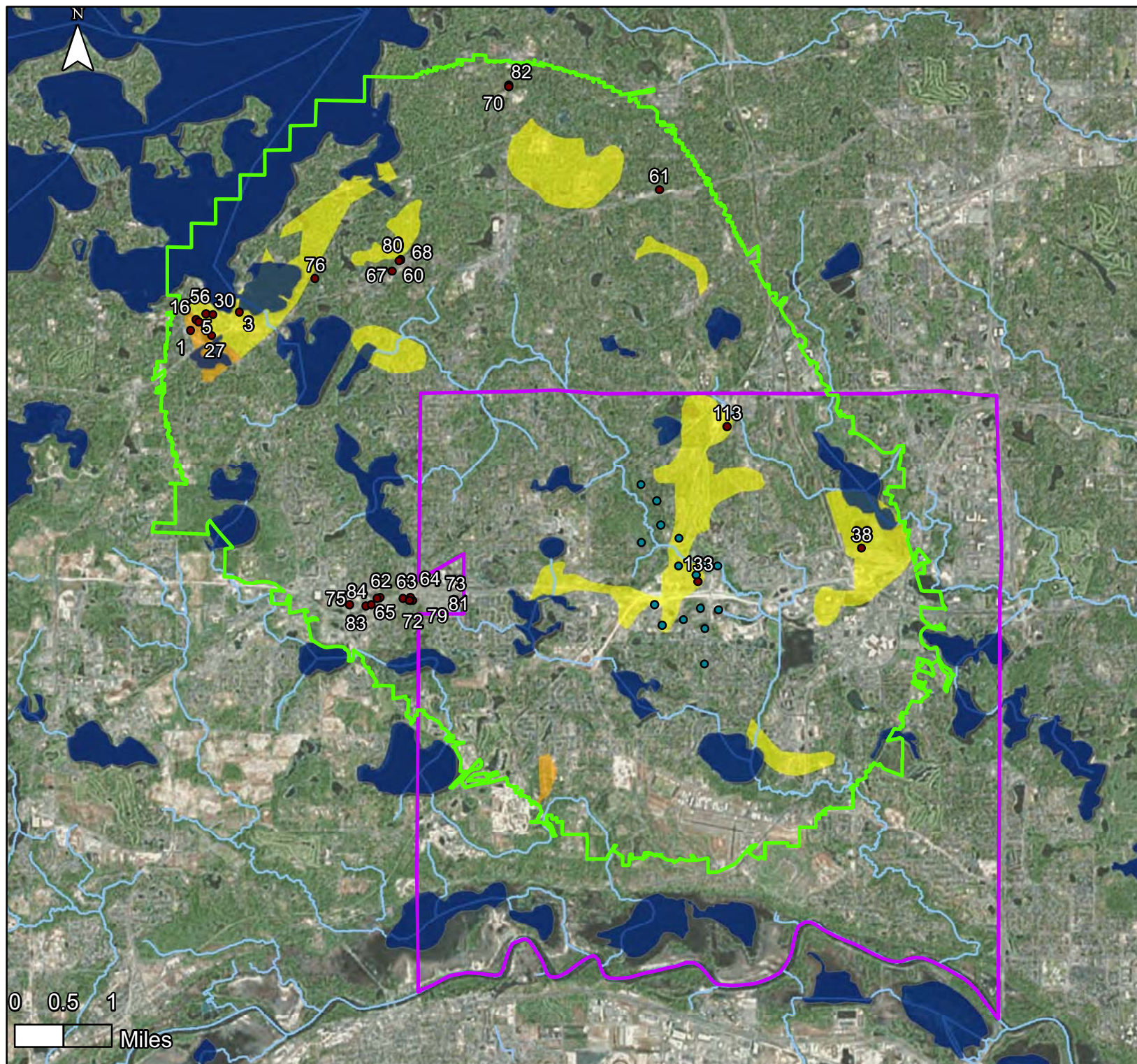


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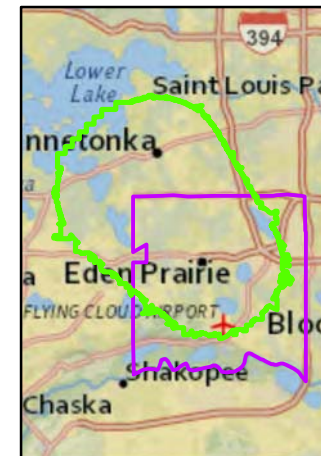
- DWSMA
- Eden Prairie Border
- City Border
- County Border
- High
- Moderate

Vulnerability

- High
- Moderate



Eden Prairie
Part II Wellhead
Protection Plan
Figure 9
Potential Class V Well Locations
May 2014



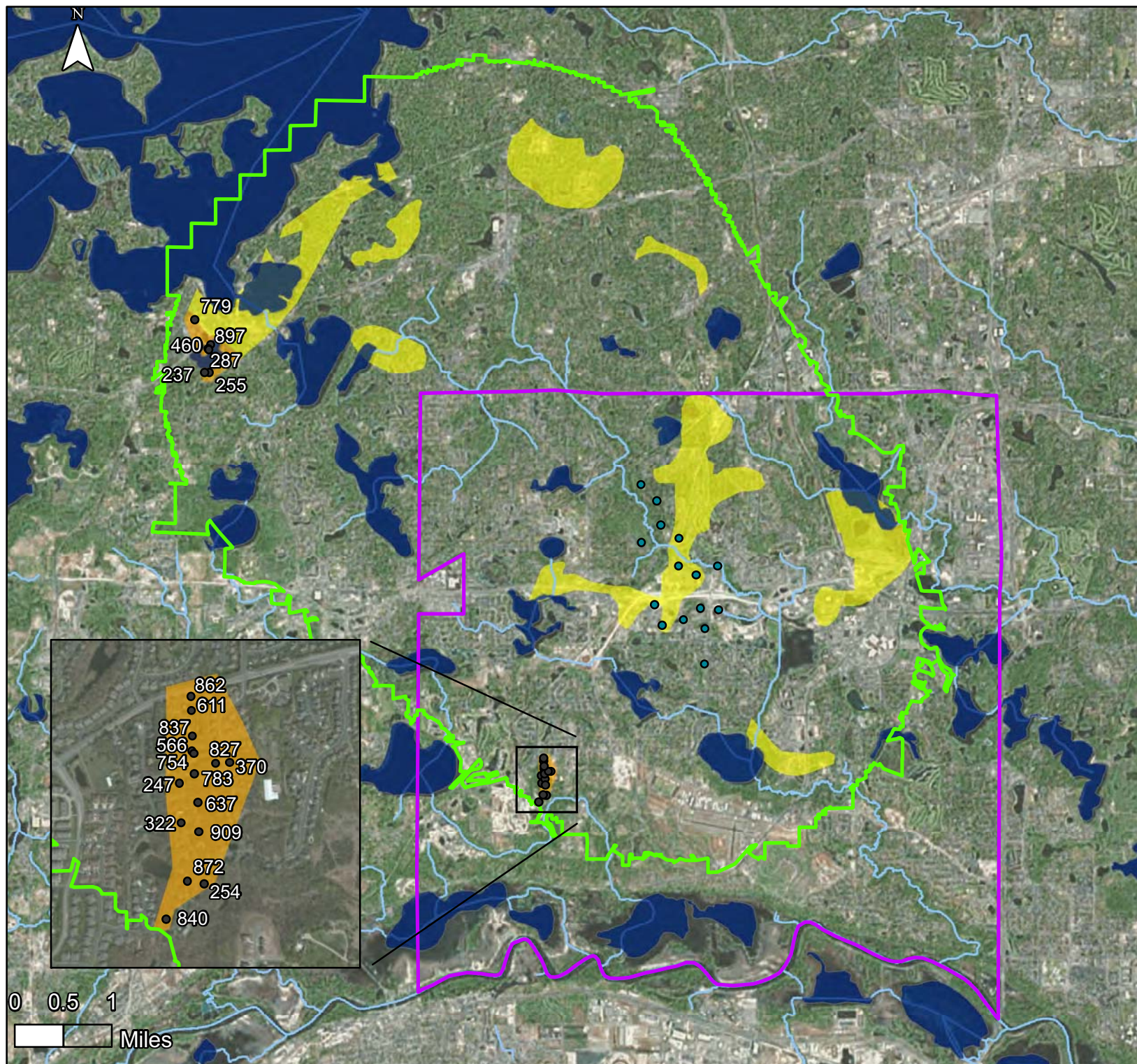
Legend

- Verified Locations
- Municipal Wells
- DWSMA
- Eden Prairie Border

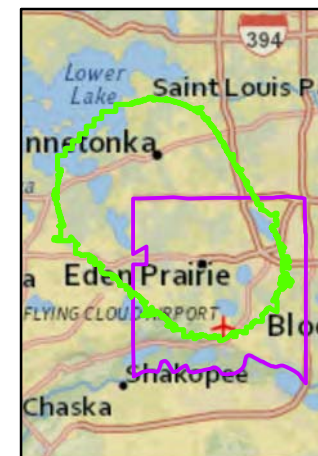
DWSMA

Vulnerability

- High
- Moderate



Eden Prairie
Part II Wellhead
Protection Plan
Figure 10
Non-Municipal Wells
May 2014



Legend

- Verified Location
- Municipal Wells
- DWSMA
- Eden Prairie Border

DWSMA

Vulnerability

- High
- Moderate

Eden Prairie
Part II Wellhead
Protection Plan
Figure 11
Known Release Sites
May 2014



Legend

ACTIVITY

- Leak Site
- VIC
- Leak and Other Activity

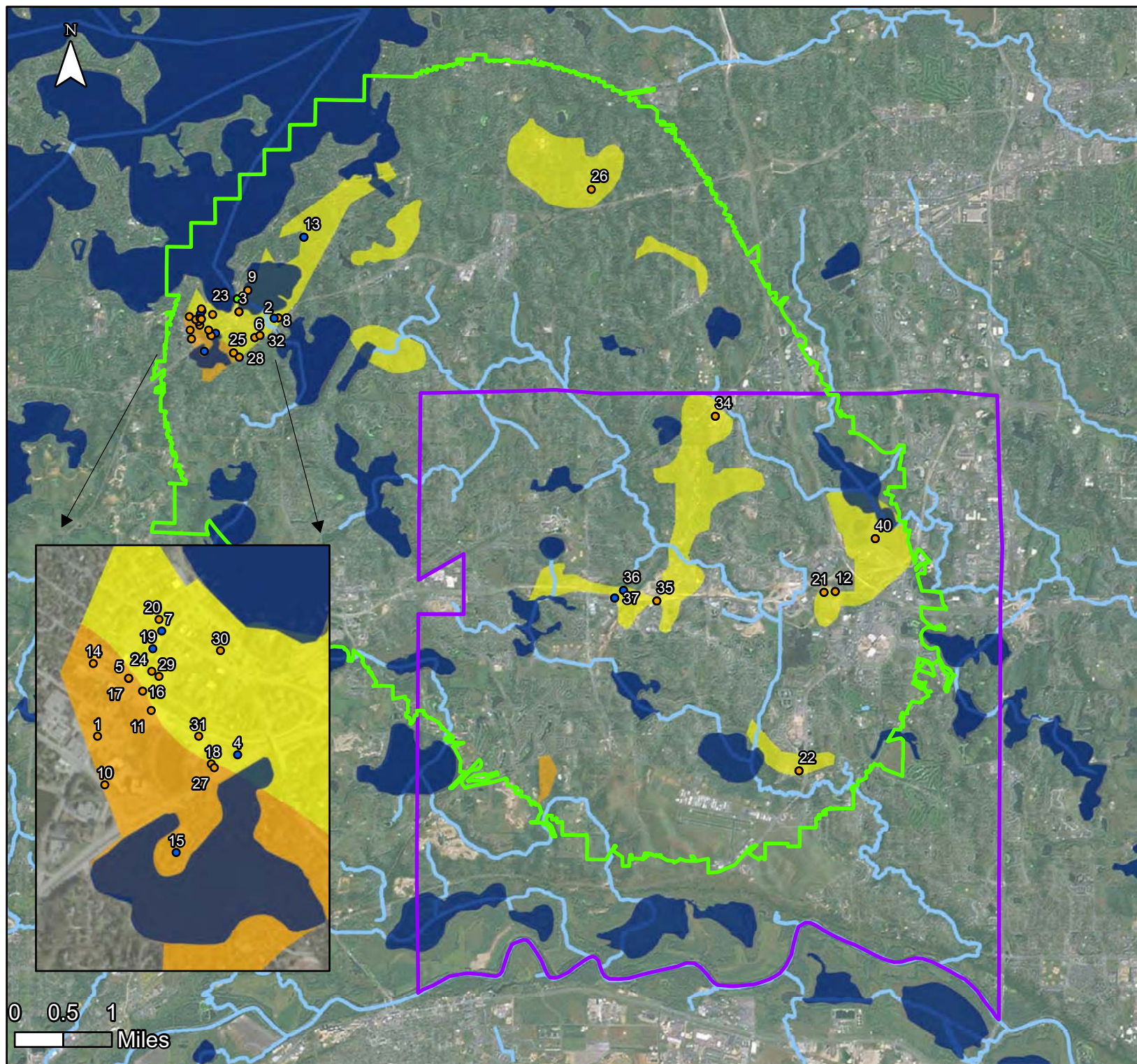
□ DWSMA

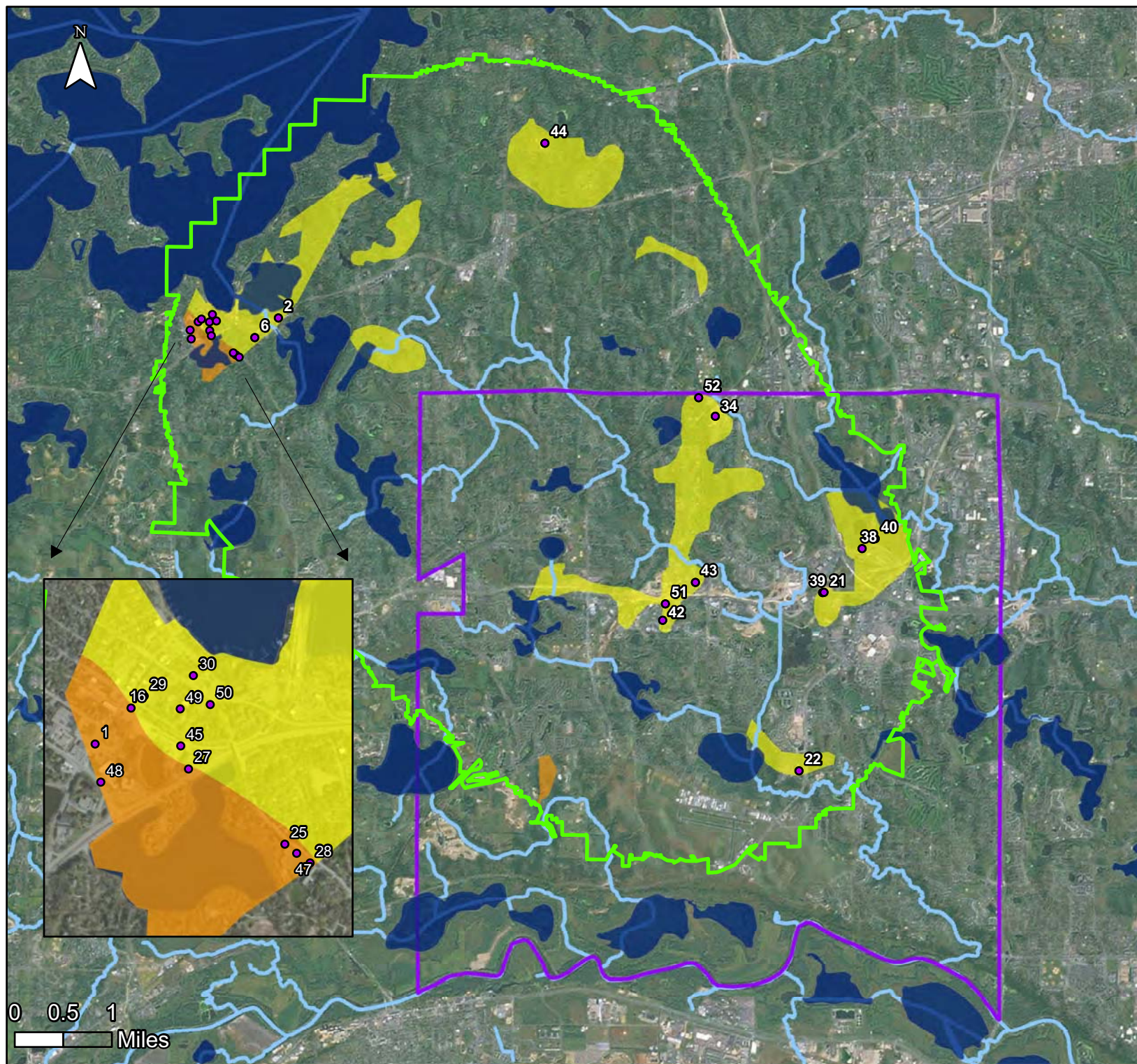
□ Eden Prairie Border

DWSMA

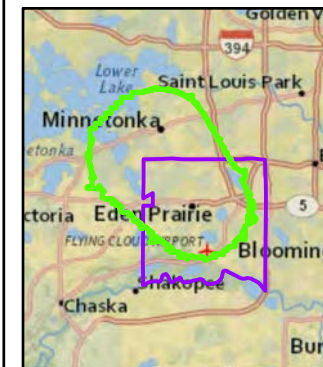
Vulnerability

- High
- Moderate





Eden Prairie
Part II Wellhead
Protection Plan
Figure 12
Registered Storage Facilities
May 2014



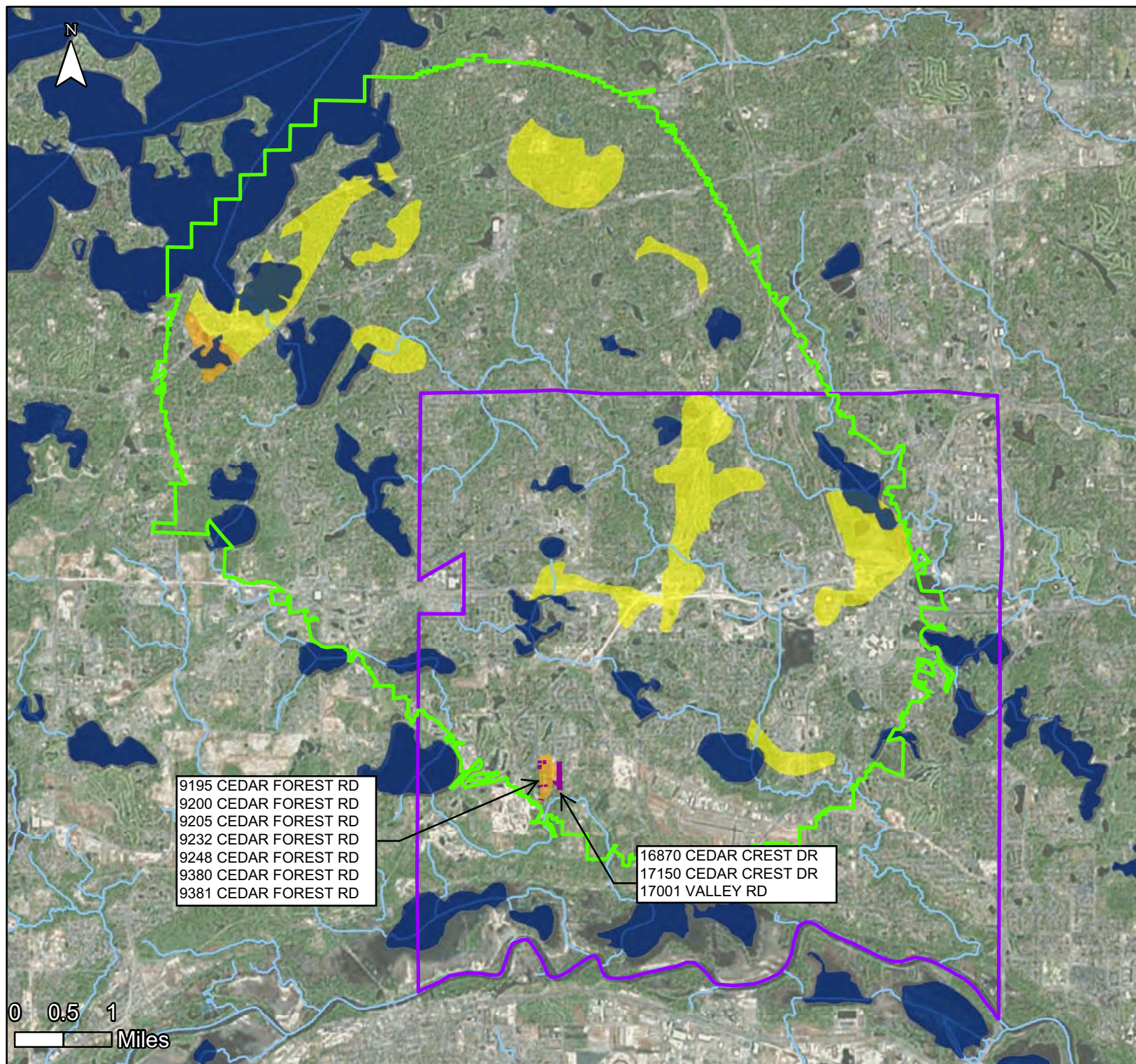
Legend

- Registered Storage Facilities
- DWSMA
- Eden Prairie Border

DWSMA

Vulnerability

- High
- Moderate



Eden Prairie
Part II Wellhead
Protection Plan
Figure 13
Individual Sewage Treatment
Systems
May 2014



Legend

Individual Sewage Systems

DWSMA

Eden Prairie Border

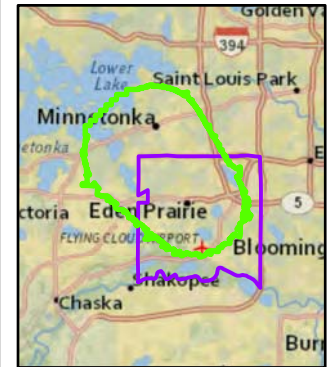
DWSMA

Vulnerability

High

Moderate

Eden Prairie
Part II Wellhead
Protection Plan
Figure 14
Hazardous Waste Generators
May 2014



Legend

● Hazardous Waste Generators

□ DWSMA

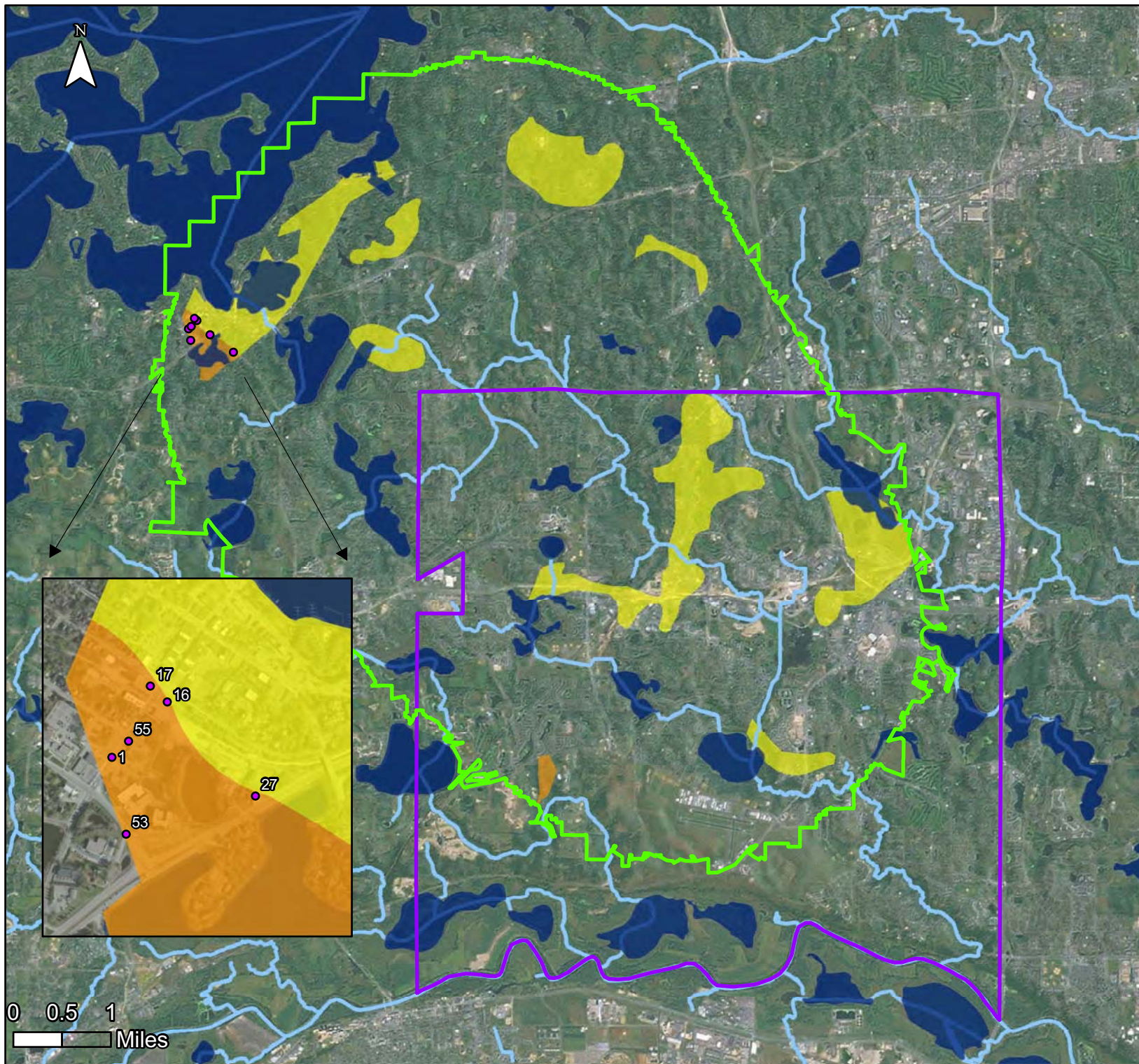
□ EPBoundary

DWSMA

Vulnerability

■ High

■ Moderate



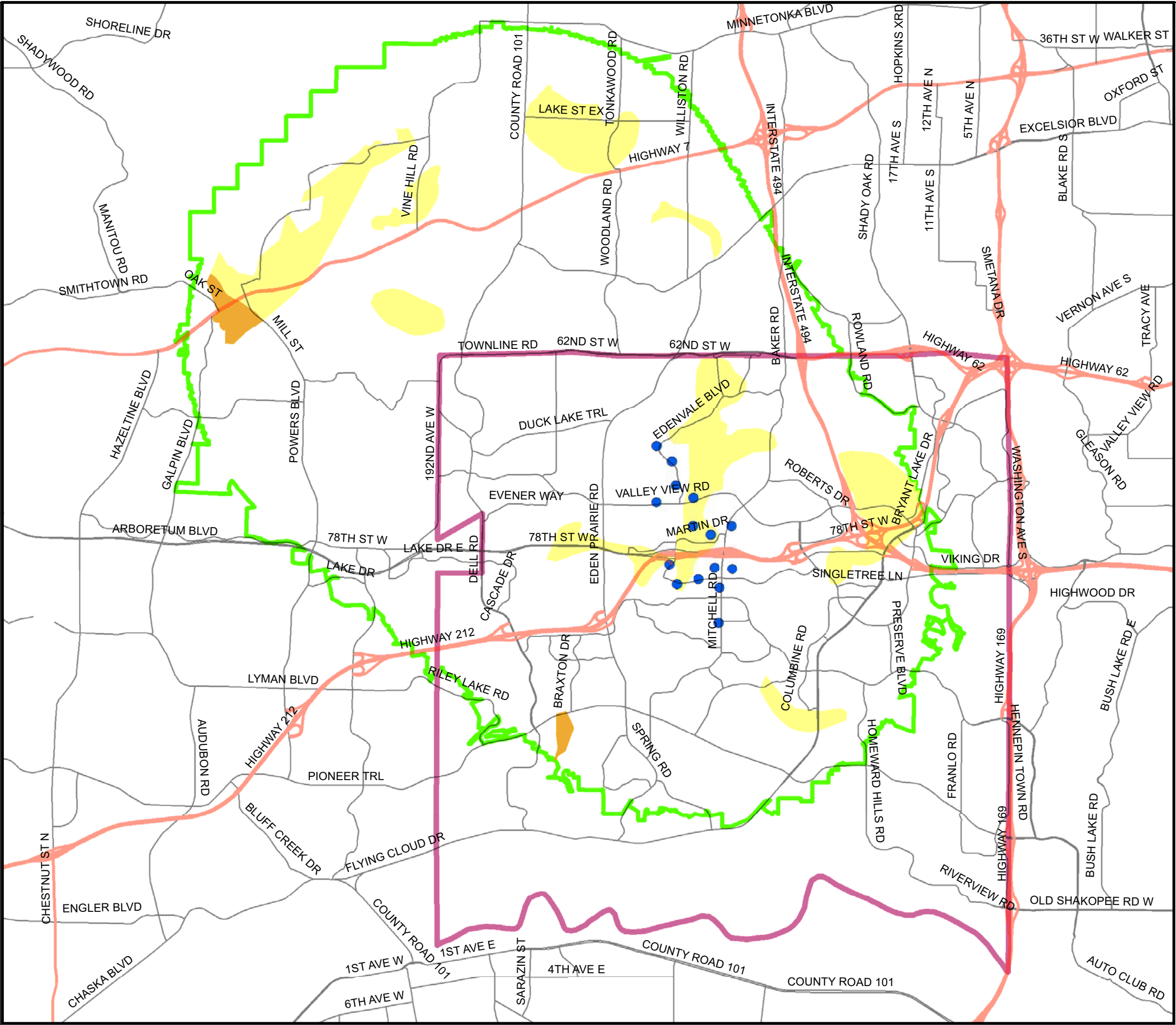
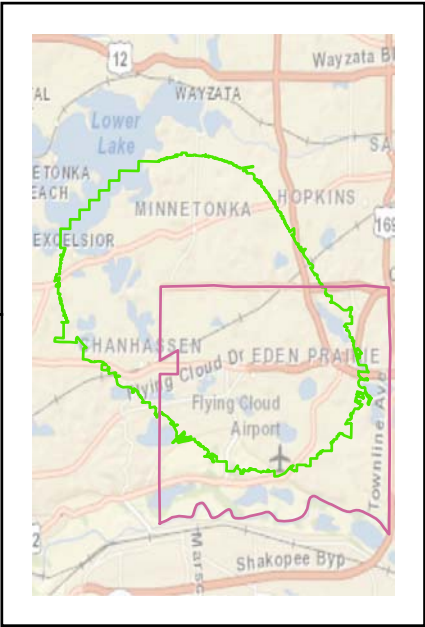


Figure 15
Eden Prairie
Part II Wellhead
Protection Plan
Transportation Corridors



- Legend
- Roads
 - Principal Arterial Highways
 - Eden Prairie Border
 - High Vulnerability
 - Moderate Vulnerability
 - Drinking Water Supply Management Area

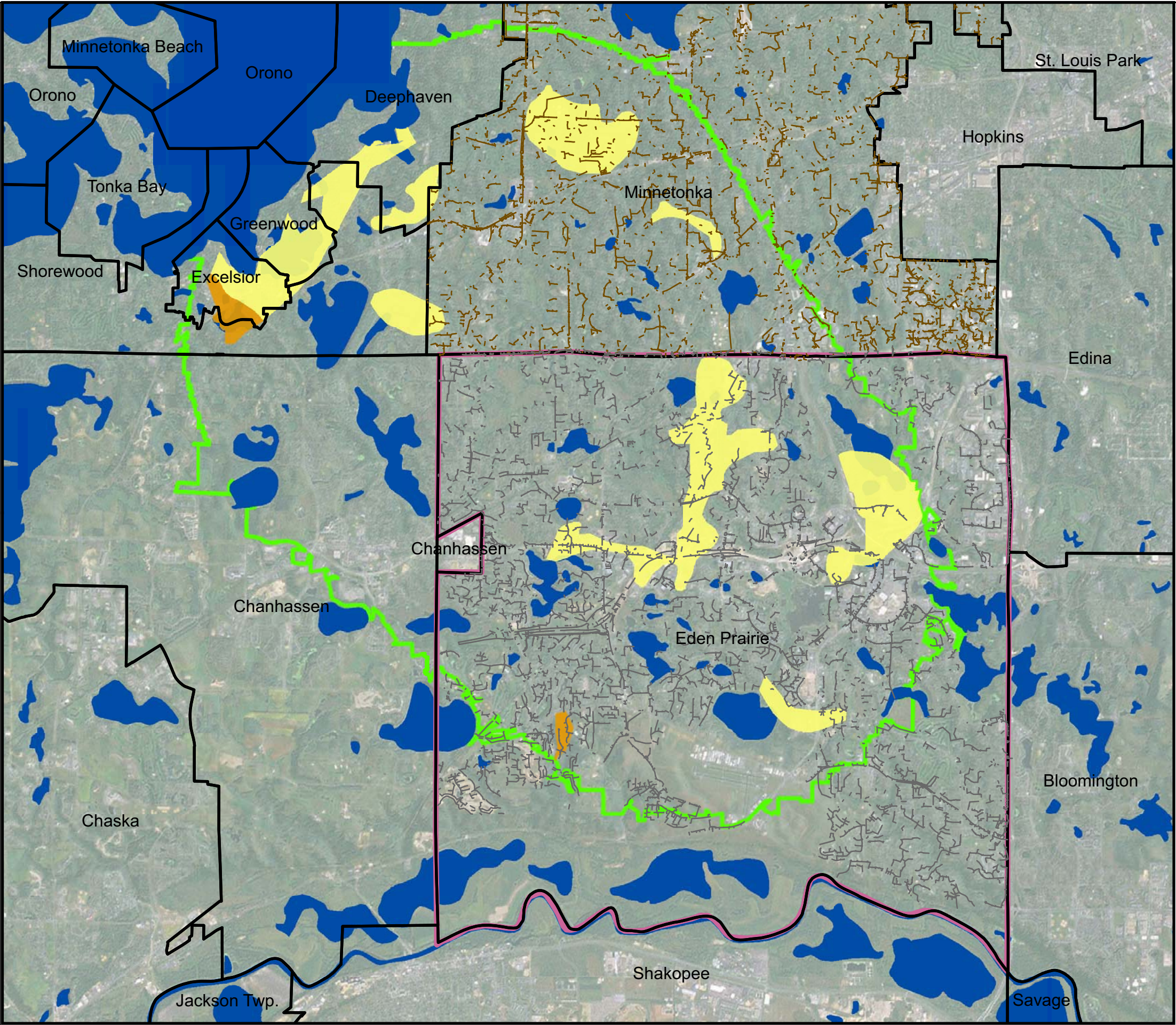
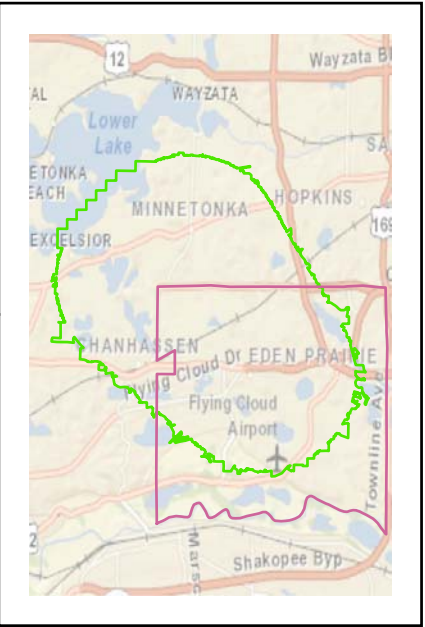
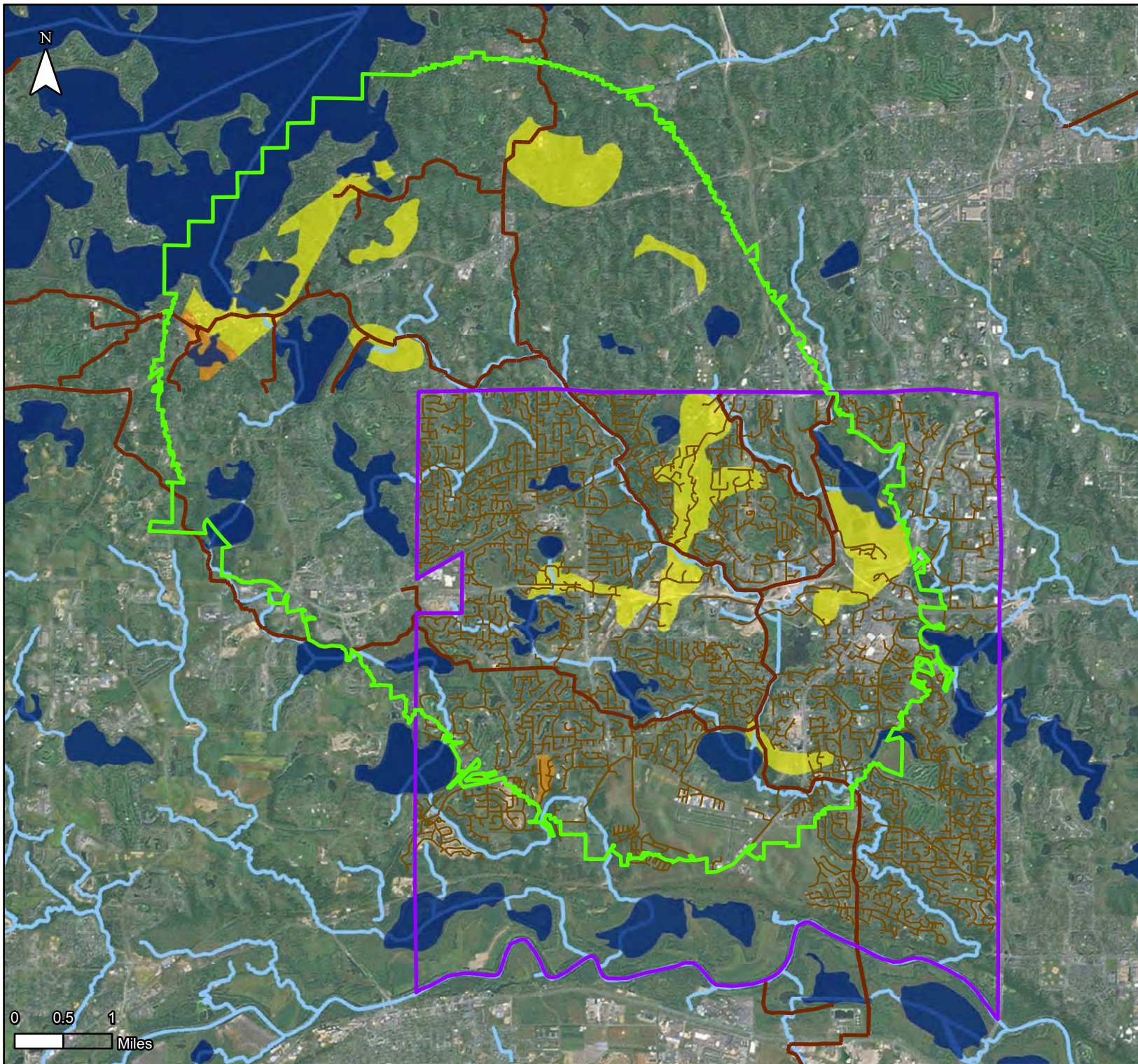


Figure 16
Eden Prairie
Part II Wellhead
Protection Plan
Stormwater Collection Systems

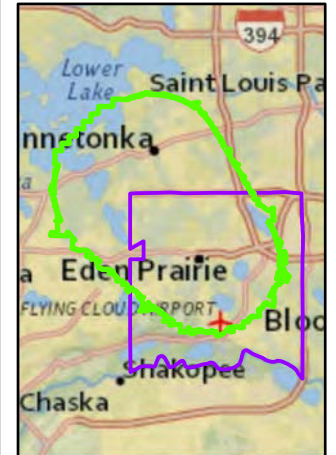


- Legend
- High Vulnerability
 - Moderate Vulnerability
 - Drinking Water Supply Management Area
 - Eden Prairie Storm Lines
 - Minnetonka Storm Line
- Additional Stormwater Maps
are provided in Appendix

0 0.25 0.5 1
Miles



Eden Prairie
Part II Wellhead
Protection Plan
Figure 17
Sanitary Sewer System
May 2014



Legend

- DWSMA
- Eden Prairie Border
- Metro-Interceptor
- Sanitary Sewer

DWSMA

Vulnerability

- High
- Moderate

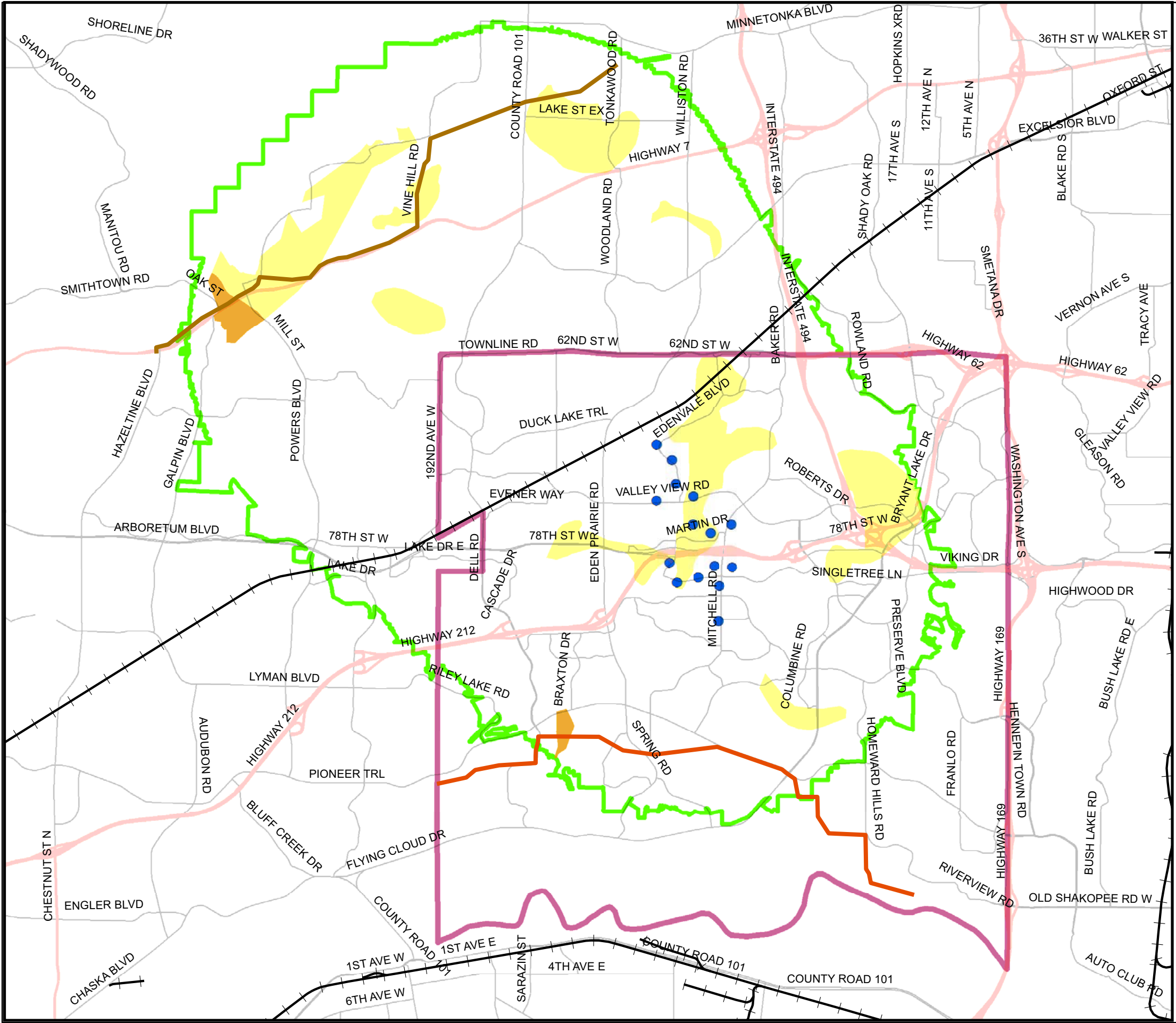
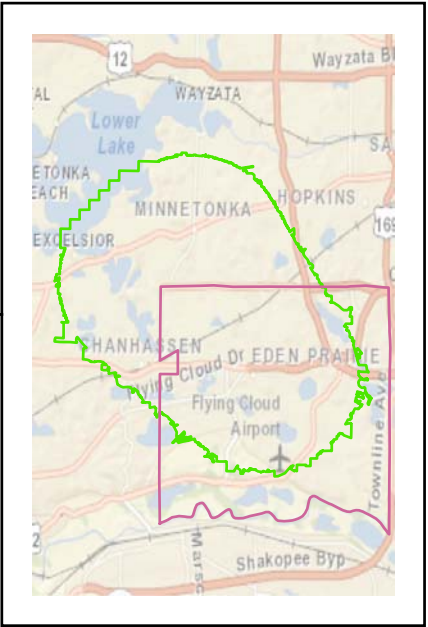


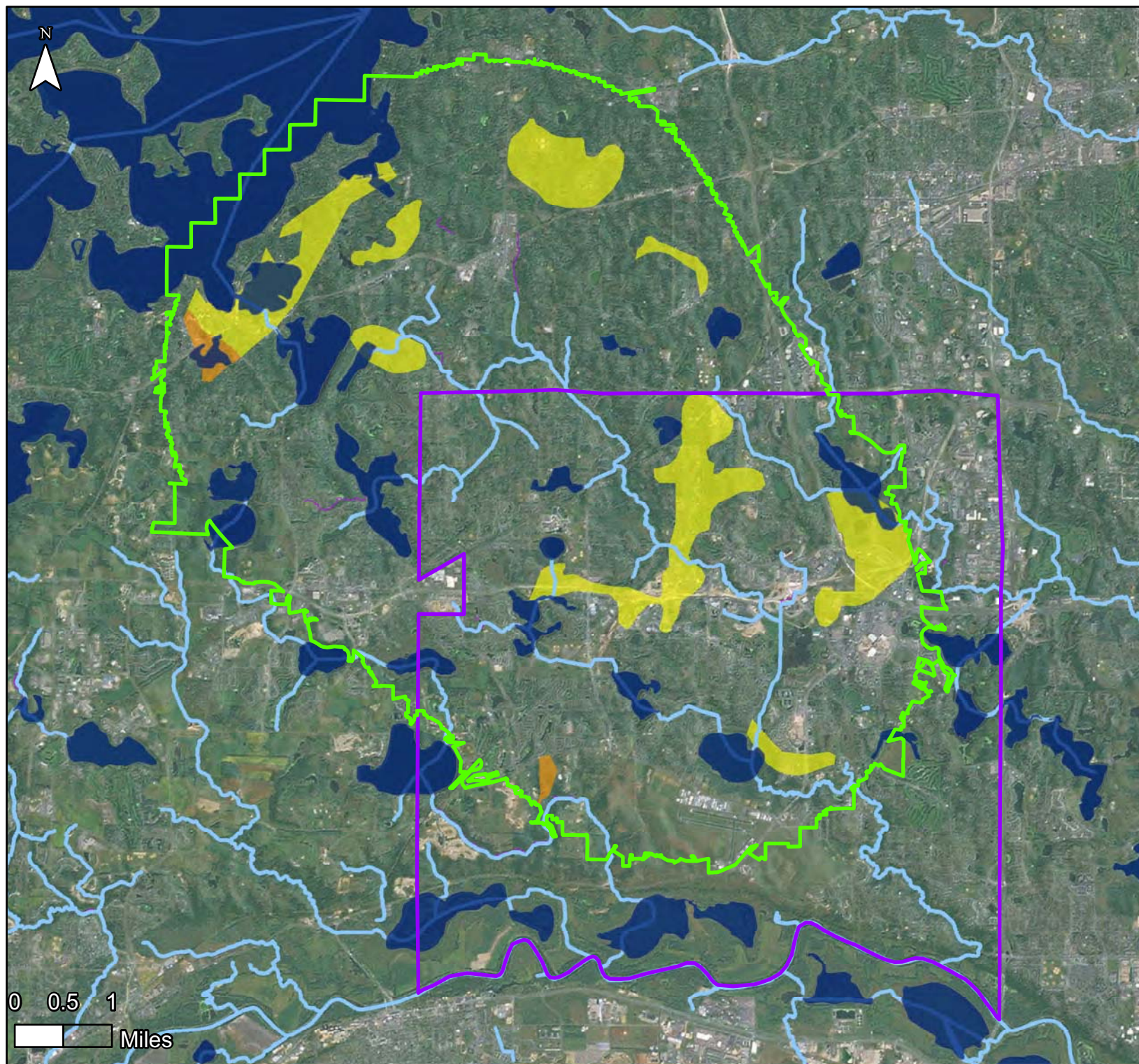
Figure 18
Eden Prairie
Part II Wellhead
Protection Plan
Pipeline and Railroad Systems



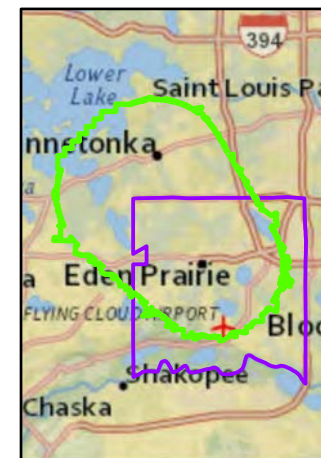
- Legend
- ✚ Railroad
 - Centerpoint Natural Gas
 - Magellan Pipeline
 - Roads
 - Principal Arterial Highways
 - ▭ Eden Prairie Border
 - High Vulnerability
 - Moderate Vulnerability
 - ▭ Drinking Water Supply Management Area

0 0.25 0.5 1
Miles





Eden Prairie
Part II Wellhead
Protection Plan
Figure 19
Drainage System
May 2014



Legend

-  DWSMA
-  Eden Prairie Border
-  Ditch/Stream

DWSMA

Vulnerability

-  High
-  Moderate

Appendix A

Correspondence with Minnesota Department of Health



November 27, 2013

Protecting, maintaining and improving the health of all Minnesotans

Mr. Rick Wahlen
Utility Operations Manager
City of Eden Prairie
14100 Technology Drive
Eden Prairie, Minnesota 55344

Dear Mr. Wahlen:

Subject: Second Scoping Decision Notice – City of Eden Prairie – PWSID 1270010

This letter provides notice of the results of the second scoping meeting held with you, Joe Dusek, city of Eden Prairie, Kevin Miller, St. Croix Environmental Inc., and me on October 24, 2013, at Eden Prairie Public Works Building regarding Part II of your wellhead protection (WHP) plan. During the meeting, we discussed data elements that must be included and used to prepare the part of the WHP plan related to the management of potential contaminants in the approved drinking water supply management area. The enclosed Scoping 2 Decision Notice lists the data elements that were discussed at the meeting.

The city of Eden Prairie has met the requirements to distribute copies of the first part of the WHP plan to local units of government and hold an informational meeting for the public. The city of Eden Prairie will have until December 16, 2014, to complete its WHP plan.

If a data element is marked on the enclosed notice as a data element that must be used and it does not exist, it is helpful if your plan notes this. St. Croix Environmental Inc. will be working with you to develop a draft of the remainder of the WHP plan. I will be contacting you to review the progress of the development of Part II of your plan. If you have any questions regarding the enclosed notice, contact me by email at john.freitag@state.mn.us or by phone at (651) 201-4669.

Sincerely,

A handwritten signature in black ink, appearing to read "John Freitag", is located below the "Sincerely," text.

John Freitag, Planner
Source Water Protection Unit
Environment Health Division
P.O. Box 64975
St. Paul, Minnesota 55164-0975

JF:ds-b

Enclosures

cc: Isaac Bradlich, MDH Engineer, Metro District Office
Rick Getschow, City Manager, City of Eden Prairie
Kevin Miller, St. Croix Environmental, Inc.
Ron Struss, Minnesota Department of Agriculture

SCOPING 2 DECISION NOTICE

Variable Vulnerable DWSMA

Remainder of the Wellhead Protection Plan

Name of Public Water Supply:		Date:
City of Eden Prairie (PWSID = 1270010)		November 27, 2013
Name of the Wellhead Protection Manager:		
Mr. Rick Wahlen, Utility Operations Manager		
Address:	City:	Zip:
14100 Technology Drive	Eden Prairie	55344
Unique Well Numbers:		Phone:
205905 (Well 2)	424924 (Well 7)	(952) 294-5908
112242 (Well 3)	424925 (Well 8)	
147454 (Well 4)	424926 (Well 9)	
147453 (Well 5)	424927 (Well 10)	
147452 (Well 6)	541542 (Well 11)	
541541 (Well 12)		
622703 (Well 13)		
603068 (Well 14)		
686256 (Well 15)		
763769 (Well 16)		

Instructions for Completing the Scoping 2 Form

N	R	S	N = Not required. If this box is checked, this data element is NOT necessary for your wellhead protection plan because it is not needed or it has been included in the first scoping decision notice. Please go to the next data element.
X			

N	R	S	R = Required for the remainder of the plan. If this box is checked, this data MUST be used for the "remainder of the plan."
	X		

N	R	S	S = Submit to MDH. If this box is checked, this data element MUST be included in your wellhead protection plan and submitted to MDH.
		X	
If there is NO check mark in the "S" box but there is an "X" in the "R" box, this data element MUST be included in your plan, but should NOT be submitted to MDH . This box will only be checked if MDH does not have access to this data element. This will help to reduce the cost by reducing the amount of paper and time to reproduce the data element.			

Note: Any data elements required in the first scoping decision notice must also be used to complete the remainder of the wellhead protection plan.

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

PRECIPITATION			
N	R	S	An existing map or list of local precipitation gauging stations.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing table showing the average monthly and annual precipitation in inches for the preceding five years.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
GEOLOGY			
N	R	S	An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	Existing borehole geophysical records from wells, borings, and exploration test holes.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the areas.			
N	R	S	Existing surface geophysical studies.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect the geology of the areas.			
SOILS			
N	R	S	Existing maps of the soils and a description of soil infiltration characteristics.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	A description or an existing map of known eroding lands that are causing sedimentation problems.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

WATER RESOURCES			
N	R	S	An existing map of the boundaries and flow directions of major watershed units and minor watershed units.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	The shoreland classifications of the public waters listed under subitem (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map showing those areas delineated as floodplain by existing local ordinances.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

DATA ELEMENTS ABOUT THE LAND USE

LAND USE			
N	R	S	An existing map of parcel boundaries.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of political boundaries.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of public land surveys including township, range, and section.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	R	S	A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.
	X	X	
Technical Assistance Comments: The inventory, mapping and management of land uses and potential sources of contamination for all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements, as follows: <u>Mixed Vulnerability</u> 1) All potential contaminant sources and facility designations as listed on the attachments, 2) a land use/land cover map and table, and 3) an inventory of the Inner Wellhead Management Zone (IWMZ). <u>Low Vulnerability</u> 1) All potential contaminant sources and facility designations as listed on the attachment [inventory bedrock wells <i>150 feet and deeper</i> and wells of undocumented or unknown depths for the potential contaminant source inventory]; 2) a land use/land cover map and table; and 3) an inventory of the Inner Wellhead Management Zone (IWMZ). As a starting point, MDH will provide a 2006 land cover map and table from federal data bases. This data set must be used unless an alternative electronic data set that is more current and detailed is available. Management strategies must be developed for all land uses and potential sources of contamination.			
N	R	S	An existing comprehensive land-use map.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	Existing zoning map.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
PUBLIC UTILITY SERVICES			
N	R	S	An existing map of transportation routes or corridors.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map of storm sewers, sanitary sewers, and public water supply systems.
	X	X	
Technical Assistance Comments: It is not necessary to include a map of your public water supply system in your plan if you feel it would pose a threat to the security of your system. An existing map of the storm sewers and sanitary sewers in the Drinking Water Supply Management Area(s) must be included in the wellhead protection plan and must also be submitted to the MDH as part of the approval.			

N	R	S	An existing map of the gas and oil pipelines used by gas and oil suppliers.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing map or list of public drainage systems.
	X	X	
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing record of construction, maintenance, and use of the public water supply well and other wells within the drinking water supply management area.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			

DATA ELEMENTS ABOUT WATER QUANTITY

SURFACE WATER QUANTITY			
N	R	S	An existing description of high, mean, and low flows on streams.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of lakes where the state has established ordinary high water marks.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of lakes and streams for which state protected levels or flows have been established.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing description of known water-use conflicts, including those caused by groundwater pumping.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

GROUNDWATER QUANTITY			
N	R	S	An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing description of known well interference problems and water-use conflicts.
	X	X	
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing list of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

DATA ELEMENTS ABOUT WATER QUALITY

SURFACE WATER QUALITY			
N	R	S	An existing map or list of the state water quality management classification for each stream and lake.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing summary of lake and stream water quality monitoring data, including: 1. bacteriological contamination indicators; 4. sedimentation; 2. inorganic chemicals; 5. dissolved oxygen; and 3. organic chemicals; 6. excessive growth or deficiency of aquatic plants.
	X		
Technical Assistance Comments: The management of the vulnerable parts of the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
GROUNDWATER QUALITY			
N	R	S	An existing summary of water quality data, including: 1. bacteriological contamination indicators; 2. inorganic chemicals; and 3. organic chemicals.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element. Be sure to include the Nitrate Probability Mapping Study and use it to guide the management of the Drinking Water Supply Management Area(s).			
N	R	S	An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing report of groundwater tracer studies.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

N	R	S	An existing site study and well water analysis of known areas of groundwater contamination.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about these data elements.			
N	R	S	An existing property audit identifying contamination.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			
N	R	S	An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.
	X		
Technical Assistance Comments: The management of all the Drinking Water Supply Management Area(s) must reflect what is known about this data element.			

Scoping 2 Decision Notice Attachment
Potential Contaminant Source Inventory Requirements

Non-Vulnerable DWSMA

The following current and historical potential contaminant sources and related codes, and facility designation and related codes must be included in the potential contaminant source inventory. Each potential contaminant source identified must be assigned a facility designation and related code.

<u>Potential Contaminant Sources (PCS)</u>	<u>PCS Codes</u>
Large Capacity Cesspool (potential Class V)	CVLCC
Large Capacity Waste Water Disposal Site (potential Class V)	CVWWD
Motor Vehicle Waste Disposal Well (potential Class V)	CVMVW
Wells	WEL

List of Designated Facilities and Codes

Residential

Residential Category Description: includes all establishments offering residence or accommodation, such as homes, apartments, housing for the elderly, hotels, and motels.

Facility Codes and Designations

1000: All Establishments Offering Residence

Commercial

Commercial Category Description: includes establishments typically associated with commercial land use. Examples include: general sales and service; retail sales and service; automobile sales and service; finance and insurance; business, professional, scientific and technical services; food services, and personal services.

Facility Codes and Designations

2000: General Sales and Service

Industrial

Industrial Category Description: includes manufacturing establishments located in plants, factories or mills and employs power-driven machines and materials handling equipment. Many manufacturing establishments process products of agriculture, forestry, fishing, mining or quarrying.

Facility Codes and Designations

3000: Manufacturing and Wholesale Trade

Transportation, Communication and Utilities

Transportation, Communication, and Utilities Category Description: a catch-all category that includes transportation, communication and utilities for essential facilities.

Facility Codes and Designations

4000: Transportation, Communication, Information, and Utilities

Arts, Entertainment and Recreation

Arts, Entertainment, and Recreation Category Description: includes establishments that provide services for cultural, entertainment, and recreational activities such as live performances, events, exhibits intended for public viewing and historical sites.

Facility Codes and Designations

5000: Arts, Entertainment, and Recreation

Education, Public Administration, Health Care, and other Institutions

Institutional Category Description: a catch-all category that includes education, public administration, health care, and other institutions. Examples include schools of all types, governmental buildings, military installations, public safety facilities, medical clinics and hospitals, other health and human services facilities, religious institutions, and death care services.

Facility Codes and Designations

6000: Education, Public Administration, Health Care, and Other Institutions

Construction

Construction Category Description: includes establishments that build structures or perform additions, alterations, reconstruction, installation and repairs. Examples include excavation contractors, carpentry, concrete contractors, painters, electricians, painters, highway and street construction, and sewer and well drilling.

Facility Codes and Designations

7000: Construction-Related Businesses

Mining and Extractive Uses

Mining and Extractive Uses Category Description: includes establishments that extract natural mineral solids, liquid materials, and gases.

Facility Codes and Designations

8000: Mining and Extraction Establishments

Agriculture and Forestry

Agricultural and Forestry Category Description: includes establishments that grow crops, raise animals, harvest timber and harvest fish and other animals from farms, ranches, or natural habitats.

Facility Codes and Designations

9000: Agriculture, Forestry, Fishing, and Hunting

Scoping 2 Decision Notice Attachment

Potential Contaminant Source Inventory Requirements

Moderately Vulnerable DWSMA

The following current and historical potential contaminant sources and related codes, materials and related codes, and facility designation and related codes are required to be included in the potential contaminant source inventory. Each potential contaminant source identified must be assigned a facility designation and related code. In cases where a materials identification is required a materials designation and code must be assigned.

Potential Contaminant Sources (PCS)

Material

PCS Codes

Material Codes

Above-Ground Storage Tank - Greater than 1100 gallons	AST
Chemicals	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances	C001
Solvents and coatings	S000
Waste	W000
Agricultural Drainage Well (potential Class V)	ADW
Disposal Well (potential Class V)	DISWLL
Industrial Drainage Well (potential Class V)	INDW
Large Capacity Cesspool (potential Class V)	CVLCC
Large Capacity Waste Water Disposal Site (potential Class V)	CVWWD
Leaking Underground Storage Tank	LUST
Misc. Injection Well (potential Class V)	INJWLL
Motor Vehicle Waste Disposal Well (potential Class V)	CVMVW
Pipeline Facility	PLFAC
Potential Contamination Site ¹	PCS
Recharge Well (potential Class V)	RWLL
Reinjection Well (potential Class V)	RIWLL
Solid Waste Management Site	SWMS
Special Drainage Well (potential Class V)	SPDW
Spills	SPL
Storage or Preparation Area	STOR
Chemicals (include RMP facilities here)	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances (include TRIS facilities here)	C001
Solvents and coatings	S000
Waste	W000
Stormwater Injection Well (potential Class V)	SWI

Potential Contaminant Sources (PCS)

<u>Material</u>	<u>PCS Codes</u>	<u>Material Codes</u>
Suspected Contaminant of Concern	SCC	
Chemical		C000
Food, agricultural, and consumer products		A000
Fuels, gases, and oils		F000
Materials and minerals		M000
Pathogens		P000
Solvents and coatings		S000
Waste		W000
Underground Storage Tank	UST	
Chemicals		C000
Fertilizers		A050
Fuels, gases, and oils		F000
Hazardous substances		C001
Solvents and coatings		S000
Waste		W000
Wells	WEL	

Footnotes:

¹Potential Contamination Sites (PCS) include the following:

Brownfields (BMS)

Delisted State Superfund Sites (DPLP)

Federal Superfund Sites (NPL)

Hazardous Waste Investigative/cleanup (HWIC)

No Further Remedial Action Planned (NFRAP)

State Superfund Sites (PLP)

Suspected Hazardous Waste Site (CERCL)

Voluntary Investigative Cleanup (VIC)

List of Facility Designations and Codes**Residential**

Residential Category Description: includes all establishments offering residence or accommodation, such as homes, apartments, housing for the elderly, hotels, and motels.

Facility Codes and Designations

- 1100:** Private Household (used unless one of the facility designations listed below apply)
 - 1100-01:** Residence
 - 1100-02:** Apartment or condominium
 - 1100-03:** Mobile home park
- 1200:** Housing Services for Special Needs
- 1300:** Hotels, Motels, or Other Accommodation Services

Commercial

Commercial Category Description: includes establishments typically associated with commercial land use. Examples include: general sales and service; retail sales and service; automobile sales and service; finance and insurance; business, professional, scientific and technical services; food services, and personal services.

Facility Codes and Designations

- 2000:** General Sales and Service (used unless one of the facility designations listed below apply)
 - 2100:** Retail sales or service
 - 2110:** Automobile sales or service establishment
 - 2110-01:** Automotive/vehicle repair
 - 2110-02:** Car wash
 - 2114:** Boat or marine craft dealer
 - 2114-01:** Boat services/repair/refinishing
 - 2116:** Gasoline services
 - 2120:** Heavy consumer goods, sales, or service establishments
 - 2120-01:** Furniture repair/refinishing
 - 2122:** Hardware stores and home centers
 - 2123:** Lawn and garden supply establishments
 - 2124:** Department stores, warehouse clubs or superstores
 - 2126:** Lumber yards and building materials
 - 2130:** Durable consumer goods, sales, or service

Industrial

Industrial Category Description: includes manufacturing establishments located in plants, factories or mills and employs power-driven machines and materials handling equipment. Many manufacturing establishments process products of agriculture, forestry, fishing, mining or quarrying.

Facility Codes and Designations

3000: Manufacturing and Wholesale Trade

Transportation, Communication and Utilities

Transportation, Communication, and Utilities Category Description: a catch-all category that includes transportation, communication, and utilities for essential facilities.

Facility Codes and Designations

4000: Transportation, Communication, Information, and Utilities

4345: Sanitary landfill (disposal)

4346: Waste treatment and disposal

4346-01: Salvage yard

4346-06: Dump

4346-07: State closed landfill

Arts, Entertainment and Recreation

Arts, Entertainment and Recreation Category Description: includes establishments that provide services for cultural, entertainment, and recreational activities such as live performances, events, exhibits intended for public viewing, and historical sites.

Facility Codes and Designations

5000: Arts, Entertainment and Recreation

Education, Public Administration, Health Care and other Institutions

Institutional Category Description: a catch-all category that includes education, public administration, health care, and other institutions. Examples include schools of all types, governmental buildings, military installations, public safety facilities, medical clinics and hospitals, other health and human services facilities, religious institutions, and death care services.

Facility Codes and Designations

6000: Education, Public Administration, Health Care, and Other Institutions

Construction

Construction Category Description: includes establishments that build structures or perform additions, alterations, reconstruction, installation and repairs. Examples include excavation contractors, carpentry, concrete contractors, painters, electricians, painters, highway and street construction, and sewer and well drilling.

Facility Codes and Designations

7000: Construction-Related Businesses

Mining and Extractive Uses

Mining and Extractive Uses Category Description: includes establishments that extract natural mineral solids, liquid materials, and gases.

Facility Codes and Designations

8000: Mining and Extraction Establishments

Agriculture and Forestry

Agricultural and Forestry Category description: includes establishments that grow crops, raise animals, harvest timber and harvest fish and other animals from farms, ranches, or natural habitats.

Facility Codes and Designations

9000: Agriculture, Forestry, Fishing, and Hunting

Scoping 2 Decision Notice Attachment
Potential Contaminant Source Inventory Requirements

Highly and Very Highly Vulnerable DWSMA

The following current and historical potential contaminant sources and related codes, materials and related codes, and facility designation and related codes are required to be included in the potential contaminant source inventory. Each potential contaminant source identified must be assigned a facility designation and related code. In cases where a materials identification is required, a materials designation and code must be assigned.

Potential Contaminant Sources (PCS)

Material

PCS Codes

Material Codes

Above-Ground Storage Tank	AST	
Chemicals		C000
Fertilizers		A050
Fuels, gases, and oils		F000
Hazardous substances		C001
Solvents and coatings		S000
Waste		W000
Agricultural Drainage Well (potential Class V)	ADW	
Animal Burial Site	ABS	
Animal Feedlot	AFL	
Ash Disposal Site	ASHD	
Disposal Well (potential Class V)	DISWLL	
Grave(s)	GRV	
Hazardous Waste Generator	HWG	
Hazardous Waste Handler	HWH	
Individual Sewage Treatment System	ISTS	
Industrial Drainage Well (potential Class V)	INDW	
Large Capacity Cesspool (potential Class V)	CVLCC	
Large Capacity Waste Water Disposal Site (potential Class V)	CVWWD	
Leaking Underground Storage Tank	LUST	
Misc. Injection Well (potential Class V)	INJWLL	
Motor Vehicle Waste Disposal Well (potential Class V)	CVMVW	
Nuclear Reactor	NR	
Pipeline Facility	PLFAC	
Pit (aggregate)	PIT	
Potential Contamination Site ¹	PCS	
Recharge Well (potential Class V)	RWLL	
Reinjection Well (potential Class V)	RIWLL	

Potential Contaminant Sources (PCS)**PCS Codes****Material****Material Codes**

Sludge Disposal Site	SLDG
Solid Waste Management Site	SWMS
Special Drainage Well (potential Class V)	SPDW
Spills	SPL
Storage or Preparation Area	STOR
Agricultural chemicals	C010
Chemicals (include RMP facilities here)	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances (include TRIS facilities here)	C001
Road salt	C020
Solvents and coatings	S000
Pressure-treated wood	C220
Waste (used unless one of the materials listed below apply)	W000
Solid waste	W100
Animal manure	W520
Waste oils	W700
Motor vehicle waste	W710
Tires	W120
Stormwater Basin	SWB
Stormwater Injection Well (potential Class V)	SWI
Stormwater Outlet	SROUT
Suspected Contaminant of Concern	SCC
Chemical	C000
Food, agricultural, and consumer products	A000
Fuels, gases, and oils	F000
Materials and minerals	M000
Pathogens	P000
Solvents and coatings	S000
Waste	W000
Underground Storage Tank	UST
Chemicals	C000
Fertilizers	A050
Fuels, gases, and oils	F000
Hazardous substances	C001
Solvents and coatings	S000
Waste	W000
Waste - Metro Area	IWS
Wastewater Disposal Site ²	WWDS
Wastewater Stabilization Pond	WSP
Wastewater Treatment Pond	WWTD
Wells	WEL

Footnotes:

¹Potential Contamination Sites (PCS) include the following:

Brownfields (BMS)
Delisted State Superfund Sites (DPLP)
Federal Superfund Sites (NPL)
Hazardous Waste Investigative/cleanup (HWIC)
No Further Remedial Action Planned (NFRAP)
State Superfund Sites (PLP)
Suspected Hazardous Waste Site (CERCL)
Voluntary Investigative Cleanup (VIC)
State Assessment Site (SAS)

²Wastewater Disposal Sites (WWDS) include the following:

National Pollutant Discharge Elimination System (NDPES)
State Disposal System Permit (SDS)

List of Facility Designations and Codes**Residential**

Residential Category Description: includes all establishments offering residence or accommodation, such as homes, apartments, housing for the elderly, hotels, and motels.

Facility Codes and Designations

- 1100:** Private Household (used unless one of the facility designations listed below apply)
- 1100-01:** Residence
- 1100-02:** Apartment or condominium
- 1100-03:** Mobile home park
- 1200:** Housing Services for Special Needs
- 1300:** Hotels, Motels, or Other Accommodation Services

Commercial

Commercial Category Description: includes establishments typically associated with commercial land use. Examples include: general sales and service; retail sales and service; automobile sales and service; finance and insurance; business, professional, scientific and technical services; food services, and personal services.

Facility Codes and Designations

2000: General Sales and Service (used unless one of the facility designations listed below apply)

2100: Retail sales or service

2110: Automobile sales or service establishment

2110-01: Automotive/vehicle repair

2110-02: Car wash

2114: Boat or marine craft dealer

2114-01: Boat services/repair/refinishing

2116: Gasoline services

2120: Heavy consumer goods, sales, or service establishments

2120-01: Furniture repair/refinishing

2122: Hardware stores and home centers

2123: Lawn and garden supply establishments

2124: Department stores, warehouse clubs or superstores

2126: Lumber yards and building materials

2130: Durable consumer goods, sales, or service

2130-01: Paint stores

2200: Financial and insurance establishments

2300: Rental, leasing, and storage establishments

2400: Professional, scientific and technical services and general business

2416: Research and development establishments (scientific, etc.)

2417: Advertising, media and photography services

2417-01: Photographic services

2451: Extermination and pest control establishments - non-agriculture

2452: Janitorial

2453: Landscaping

2454: Carpet and upholstery cleaning

2455: Packing and crating services

2500: Food Services

2600: Personal Services

2600-01 Dry cleaners

2600-02 Laundromat

2700: Pet and animal services (except veterinary)

Industrial

Industrial Category Description: includes manufacturing establishments located in plants, factories or mills and employs power-driven machines and materials handling equipment. Many manufacturing establishments process products of agriculture, forestry, fishing, mining or quarrying.

Facility Codes and Designations

- 3000:** Manufacturing and Wholesale Trade (used unless one of the facility designations listed below apply)
- 3110** Food and beverages
 - 3110-01:** Food processing plant
 - 3110-02:** Rendering plant
 - 3120:** Tobacco manufacturing establishment
 - 3130:** Textiles
 - 3140:** Leather and allied products
 - 3210:** Wood products establishment
 - 3210-01:** Wood preserving plant
 - 3210-02:** Sawmill
 - 3220:** Paper and printing materials
 - 3220-01:** Printing
 - 3220-02:** Paper mill
 - 3230:** Furniture manufacturing
 - 3310:** Petroleum and coal products
 - 3310-01:** Petroleum refining/processing
 - 3310-02:** Asphalt production
 - 3320:** Chemical manufacturing/processing plant
 - 3320-01:** Plastics/synthetics manufacturing
 - 3330:** Nonmetallic mineral products
 - 3330-01:** Cement/concrete plants
 - 3340:** Primary metal manufacturing
 - 3340-01:** Foundry/metal plating
 - 3340-02:** Electroplaters
 - 3350:** Machinery manufacturing
 - 3360:** Electrical/electronic products manufacturing
 - 3370:** Transportation, automobile manufacturing
 - 3410:** Jewelry and silverware manufacturing
 - 3420:** Dolls, toys, games and musical instruments manufacturing
 - 3440:** Sign manufacturing
 - 3600:** Warehouse

Transportation, Communication and Utilities

Transportation, Communication, and Utilities Category Description: a catch-all category that includes transportation, communication, and utilities for essential facilities.

Facility Codes and Designations

- 4000:** Transportation, Communication, Information, and Utilities (used unless one of the facility designations listed below apply)
 - 4110:** Air transportation establishments
 - 4120:** Rail transportation establishments
 - 4130:** Road, ground, passenger, and transit
 - 4140:** Fleet/trucking/bus terminals
 - 4150:** Marine and water transportation
 - 4160:** Courier and messenger services
 - 4170:** Postal service establishments
 - 4180:** Pipeline transportation
 - 4200:** Communications and information establishments
 - 4310:** Electric power plant
 - 4310-01:** Power substation
 - 4311:** Hydroelectric power plant
 - 4312:** Fossil power plant
 - 4313:** Nuclear power plant
 - 4314:** Alternative energy sources
 - 4320:** Natural gas, petroleum, fuels, etc. establishments
 - 4330:** Water, steam, air conditioning supply establishments
 - 4340:** Sewer, solid waste, and related services
 - 4340-01:** Wastewater treatment plant
 - 4341:** Hazardous waste collection facility
 - 4342:** Hazardous waste treatment and disposal
 - 4343:** Solid waste collection services
 - 4344:** Solid waste combustor or incinerator
 - 4345:** Sanitary landfill (disposal)
 - 4346:** Waste treatment and disposal
 - 4346-01:** Salvage yard
 - 4346-02:** Demolition debris landfill
 - 4346-03:** Composting site
 - 4346-04:** Recycling site
 - 4346-05:** Transfer station
 - 4346-06:** Dump
 - 4346-07:** State closed landfill
 - 4347:** Septic hauler

Arts, Entertainment and Recreation

Arts, Entertainment and Recreation Category Description: includes establishments that provide services for cultural, entertainment, and recreational activities such as live performances, events, exhibits intended for public viewing, and historical sites.

Facility Codes and Designations

5000: Arts, Entertainment and Recreation (used unless one of the codes listed below apply)

5100: Performing arts or supporting establishment

5130: Racetrack establishment

5140: Fairgrounds

5140-02: Stadium

5200: Museums and other special purpose recreational establishments

5230: Zoo

5231: Garden

5233: Arboretum

5300: Amusement, sports, or recreation establishment

5360: Marina or yachting club facility operators

5370: Golf courses

5400: Camp, camping, and related establishments

5500: Natural and other recreational parks

Education, Public Administration, Health Care and other Institutions

Institutional Category Description: a catch-all category that includes education, public administration, health care, and other institutions. Examples include schools of all types, governmental buildings, military installations, public safety facilities, medical clinics and hospitals, other health and human services facilities, religious institutions, and death care services.

Facility Codes and Designations

6000: Education, Public Administration, Health Care, and Other Institutions (used unless one of the facility designations listed below apply)

6100: Schools

6200: Public administration establishments

6310: Military installation and national security facilities

6320: Space research and technology services

6400: Public safety facilities

6500: Health and human services facilities

6511: Clinics

6530: Hospitals

6600: Religious institutions

6710: Funeral homes and services

6720: Cremation and other services

6720-01: Cemetery

Construction

Construction Category Description: includes establishments that build structures or perform additions, alterations, reconstruction, installation and repairs. Examples include excavation contractors, carpentry, concrete contractors, painters, electricians, painters, highway and street construction, and sewer and well drilling.

Facility Codes and Designations

7000: Construction-Related Businesses

Mining and Extractive Uses

Mining and Extractive Uses Category Description: includes establishments that extract natural mineral solids, liquid materials, and gases.

Facility Codes and Designations

8000: Mining and Extraction Establishments

Agriculture and Forestry

Agricultural and Forestry Category description: includes establishments that grow crops, raise animals, harvest timber and harvest fish and other animals from farms, ranches, or natural habitats.

Facility Codes and Designations

9000: Agriculture, Forestry, Fishing, and Hunting (used unless one of the facility designations listed below apply)

9000-01: Farm

9000-02: Crop production

9130-01: Orchard

9130-02: Vineyard

9140: Greenhouse, nursery, and floriculture

9154: Hay

9220: Spraying, dusting, and other related services

9300: Animal production, including slaughter

9360: Fish hatcheries, fisheries, and aquaculture

9400: Forestry and logging

323415

AGENGA
FIRST SCOPING MEETING (Plan Amendment)
Wellhead Protection Planning

PWS: City of Eden Prairie (PWSID# 1270010)

Date 12/16/2011

Attending:

Amal Djerrari, Hydrologist, MDH
John Freitag, Planner, MDH

14:00 Program Overview

- A. Background
- B. Part I and Part II activities

14:15 Part I Contents

- A. WHPA Delineation
 - 1. Five criteria required by rule
(travel-time, daily volume of water pumped, groundwater flow field, flow boundaries, and transmissivity)
 - 2. Uncertainty evaluation
 - 3. Pre-delineation meeting
 - 3. Changes: Fracture Flow Delineation and possibly Conjunctive Delineation
- B. DWSMA Delineation
- C. Vulnerability Assessment
 - 1. Wells
 - 2. DWSMA

14:45 Reporting and Deliverables

- A. Part I WHP Plan (templates available)
- B. Electronic vs. hard copy submittals
 - 1. Projection and datum registration

15:00 Data Element Checklist

- A. Review checklist
- B. Note 30 day requirement

15:15 Administrative and Procedural Steps

WHP Plan completion + December 16, 2014
Designating WHP Manager
Local Unit of Government Notification (Notice and Workplan)
WHP Team
Budget
Council/Board presentation/Informational meeting
Grants (Implementation Grants/Competitive Grants)



Protecting, maintaining and improving the health of all Minnesotans

January 12, 2012

Mr. Rick Wahlen
Manager of Utility Operations - City of Eden Prairie
14100 Technology Drive
Eden Prairie, Minnesota 55344

Dear Mr. Wahlen:

Subject: Scoping Decision Notice No. 1 for the City of Eden Prairie, PWSID 1270010, for Amending the Wellhead Protection Plan

This letter provides notice of the results of the Scoping 1 meeting that John Freitag and I (Minnesota Department of Health) held with you, Leslie Stovring and Robert Ellis (city of Eden Prairie), and Kevin Miller (St. Croix Environmental, Inc.) on December 19, 2011, to amend your wellhead protection plan because you have added a new well to the public water supply (part 4720.5570, item A). During the meeting, we discussed the preparation of Part I of a Wellhead Protection Plan that will document the 1) delineation of a wellhead protection area, 2) delineation of a drinking water supply management area, and 3) assessments of well and aquifer vulnerability related to these areas for the primary water supply wells used by Eden Prairie. As you may remember, the wellhead protection area is the surface and subsurface area surrounding your public water supply wells through which contaminants are likely to move and affect your drinking water supply. The drinking water supply management area is the area delineated using identifiable landmarks that reflect the wellhead protection area boundaries as closely as possible.

According to the state wellhead protection rule, the city will have until December 16, 2014, to complete the amendment of its entire Wellhead Protection Plan, Part I and Part II. As we discussed, the rule describes the criteria used for determining the time period for completion of the Wellhead Protection Plan (Minnesota Rules, part 4720.5130). The Minnesota Department of Health (MDH) highly recommends that half of the time allotted be dedicated to completing Part II of the plan.

It is our understanding that you will be contracting a consultant to prepare the delineations and vulnerability assessments for the city for amending its Wellhead Protection Plan. MDH has a draft Request for Proposal (RFP) that can be used to help select a competent consultant that has experience in wellhead protection planning and, in particular, with preparing a Part I report. Please contact me at the phone number below if you want to discuss using the draft RFP.

At our meeting, we discussed rule requirements and the types of information needed to amend the Part I report. The Wellhead Protection Plan must be prepared in accordance with Minnesota Rules, parts 4720.5100 to 4720.5590. General wellhead protection requirements and criteria for delineating the wellhead protection area and data reporting are presented in Minnesota Rules, parts 4720.5500 to 4720.5510.

The enclosed Scoping Decision Notice No. 1 formally identifies the information the city must provide to MDH to meet rule requirements for amending and preparing Part I of the Wellhead Protection Plan. The wellhead rule refers to the existing information required for wellhead planning as data elements. Much of this information is available in the public domain, as described in the Scoping Decision Notice No. 1 form. You only need to provide the information that is not in the public domain and, therefore, not available to MDH. The Scoping Decision Notice No. 1 form also 1) lists the Minnesota unique well number and well construction for each well that will be included in the Wellhead Protection Plan [Table 1], 2) lists the pumping volumes for each well [Table 2], 3) lists high-capacity wells [Table 3], and 4) includes a map of the well locations. A summary of the information that the city needs to provide is included at the end of the Scoping Decision Notice No. 1 form.

After we have had an opportunity to review the information listed in the Scoping Decision Notice No. 1 that you will be providing to MDH, we would appreciate the opportunity to again meet with you and select the appropriate method for delineating your wellhead protection area. We also will discuss how you can become involved in the preparation of amending the Part I report.

After your consultant has had an opportunity to develop a conceptual model of the local hydrogeologic setting, we would like to meet with your consultant to discuss the proposed delineation approach. This pre-delineation meeting may be accomplished by a conference call if 1) MDH approves, and 2) the consultant provides figures for the discussion beforehand. The porous media delineation for the Prairie du Chien-Jordan (or Jordan wells) could be performed using either the model used in 2001 or the new Metro Model that Barr Engineering developed for the Metro Council. In both cases, local detail and/or new information should be added as required and recalibration should be performed to reflect the hydrogeological conditions in Hennepin County.

A fracture flow delineation is necessary for Well 2 (205905), Well 3 (112242), Well 4 (147454), Well 5 (147453), Well 6 (147452), Well 11 (541542), Well 12 (541541), Well 13 (622703), Well 14 (603068), Well 15 (686256), and Well 16 (763769), which are open to both the Prairie du Chien dolomite and Jordan sandstone. The need for a fracture flow delineation for Jordan Aquifer Well 7 (424924), Well 8 (424925), Well 9 (424926), and Well 10 (424927) can be re-assessed at the pre-delineation meeting, once your consultant has incorporated the local detail in the refined model.

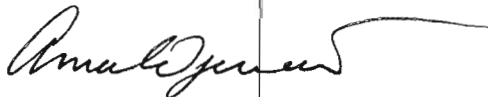
Prior to finalizing the wellhead protection area boundaries, we highly recommend that we informally review preliminary model results and assess whether any changes are needed to meet rule requirements. Model input and solution files should be submitted in electronic form. The same applies to geographical data, such as the wellhead protection area and drinking water supply management area. When geographic data are submitted electronically, ArcInfo export or ArcView shapefile formats are preferred. It will greatly accelerate our review if these geographic data use the 1983 North American Datum (NAD83), Universal Transverse Mercator, Zone 15 North (UTM, Z15N) projection, with meter distance units. Other datum and projection systems are acceptable as long as they are documented. Specific questions regarding electronic geographic data can be directed to Michael Baker, Source Water Protection Unit, at 651/201-4651.

Mr. Rick Wahlen
Page 3
January 12, 2012

Finally, it is our understanding that you will serve officially as the wellhead protection manager on behalf of the city. You are responsible for providing written notice to local units of government of the city's intent to amend the Wellhead Protection Plan, as required by the wellhead protection rule (part 4720.5300, subpart 3). A copy of this notice should be forwarded to MDH and must include a list of the city wells, their unique well numbers, and contact information for you as wellhead protection manager. If you do not have a copy of your original notice from your previous WHP Plan, your Source Water Protection Unit Planner (John Freitag) can provide you with some examples of the notification of intent that other communities have used. Please contact him at 651/201-4669.

In closing, we look forward to working with you on amending your Wellhead Protection Plan. If you have any questions regarding our comments, please contact me at 651/201-4577 or at amal.djerrari@state.mn.us.

Sincerely,



Amal Djerrari, Hydrologist
Source Water Protection Unit
Environmental Health Division
P.O. Box 64975
St. Paul, Minnesota 55164-0975

AMD:kmc

Enclosures: Scoping Decision Notice No. 1, Summaries of Data Requested, Table 1 - Water Supply Well Information, Table 2 - Annual Volume of Water Pumped From PWS Wells, Table 3 - Permitted High-Capacity Wells Within 2 Miles, Map of Well Locations

cc: John Freitag, Planner, Source Water Protection Unit, Metro District Office

Kevin Miller, St. Croix Environmental, Inc.

SCOPING DECISION NOTICE No. 1 (Vulnerable Setting)

The purpose for the first Scoping Meeting, as required by Minnesota Rules, part 4720.5310, is to discuss the information necessary for preparing the Part I Report of a Wellhead Protection Plan. The Part I Report identifies the area that provides the source of drinking water for the public water supply (PWS) so that the PWS can develop land use or management practices to protect their groundwater resource from contamination. Specifically, the Part I Report documents the delineation of the wellhead protection area (WHPA), the delineation of the drinking water supply management area (DWSMA), and assesses the vulnerability of the PWS wells and DWSMA.

The wellhead rule (Minnesota Rules, part 4720.5310) refers to the information required for wellhead planning as data elements. This form lists the data elements that are stated in Minnesota Rules, part 4750.5400. The Minnesota Department of Health (MDH) uses this form to designate which data elements are needed to prepare the Part I Report, based on the hydrogeological setting, vulnerability of the wells, and aquifer information known at the time of the Scoping 1 Meeting.

Name of Public Water Supply		Date	
City of Eden Prairie (PWSID = 1270010)		January 12, 2012	
Name of the Wellhead Protection Manager			
Mr. Rick Wahlen, Manager of Utility Operations			
Address	City	Zip	
14100 Technology Drive	Eden Prairie	55344	
Unique Well Numbers		Phone	
205905 (Well 2)	424924 (Well 7)	541541 (Well 12)	
112242 (Well 3)	424925 (Well 8)	622703 (Well 13)	
147454 (Well 4)	424926 (Well 9)	603068 (Well 14)	
147453 (Well 5)	424927 (Well 10)	686256 (Well 15)	
147452 (Well 6)	541542 (Well 11)	763769 (Well 16)	

Instructions for Completing the Scoping No. 1 Form

N	D	V	S	N = If this box is checked with an "X," this data element is NOT necessary for the Part I Report of your Wellhead Protection Plan. This data element may be identified later at the Scoping 2 Meeting and used for the Part 2 Report. Please go to the next data element.
X				

N	D	V	S	D = If this box is checked with an "X," the preparer of the Part I Report is required to use this information for the DELINEATION of the WHPA or the DWSMA. If there is no check in the "S" box, this information is available in the public domain or is on-file at MDH.
	X			

N	D	V	S	V = If this box is checked with an "X," the preparer of the Part I Report is required to use this information for the VULNERABILITY assessment of the PWS well(s) or the DWSMA. If there is no check in the "S" box, this information is available in the public domain or is on-file at MDH.
		X		

N	D	V	S	S = If this box is checked with an "X," the PWS must SUBMIT the information to the MDH.
			X	

DATA ELEMENTS ABOUT THE PHYSICAL ENVIRONMENT

A. PRECIPITATION				
N	D	V	S	A.1: An existing map or list of local precipitation gauging stations.
	X			
Technical Assistance Comments: Precipitation values can be used to determine the local recharge in the groundwater model. The map can be used to determine the closest gauging station. The locations of the gauging stations are available in the public domain.				
N	D	V	S	A.2: An existing table showing the average monthly and annual precipitation, in inches, for the preceding five years.
	X		X	
Technical Assistance Comments: This information may be used for determining local recharge for the groundwater model. This information may be available in the public domain if there is a local gauging station, or may be obtained from the local wastewater treatment plant.				
B. GEOLOGY				
N	D	V	S	B.1: An existing geologic map and a description of the geology, including aquifers, confining layers, recharge areas, discharge areas, sensitive areas as defined in Minnesota Statutes, section 103H.005, subdivision 13, and groundwater flow characteristics.
	X	X	X	
Technical Assistance Comments: Information of this type is required to characterize the geologic and hydrogeologic setting of the PWS well field(s). This information is used to define aquifer geometry, location and magnitude of the recharge and discharge areas, and groundwater flow information. Aquifer tests or alternatives listed in MN Rules, part 4720.5510, subpart 6, can be used to help characterize flow in the aquifer. Reference all information used to develop the conceptual model of the geologic setting and submit to MDH only the information that is not available in the public domain.				
N	D	V	S	B.2: Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department.
	X	X	X	
Technical Assistance Comments: Information of this type may be useful to refine the understanding of the geologic and hydrogeologic setting on a local basis. Submit only if the PWS or city has information of test drilling or site investigations conducted by the city that is not available in the public domain.				
N	D	V	S	B.3: Existing borehole geophysical records from wells, borings, and exploration test holes.
	X	X	X	
Technical Assistance Comments: Information from geophysical records may provide additional information about aquifer thickness, well construction, and water level information at a local scale. Submit only if the information is not available in the public domain.				
N	D	V	S	B.4: Existing surface geophysical studies.
	X	X	X	
Technical Assistance Comments: Information from geophysical studies may be useful to refine the understanding of the geology on a local basis. Submit only if the information is not available in the public domain.				
C. SOILS				
N	D	V	S	C.1: Existing maps of the soils and a description of soil infiltration characteristics.
	X	X		
Technical Assistance Comments: This information is in the public domain and can be used to delineate the WHPA and assess the vulnerability of the DWSMA because it indicates the underlying geology.				
N	D	V	S	C.2: A description or an existing map of known eroding lands that are causing sedimentation problems.
X				
Technical Assistance Comments:				

D. WATER RESOURCES				
N	D	V	S	D.1: An existing map of the boundaries and flow directions of major watershed units and minor watershed units.
	X			
Technical Assistance Comments: This information is in the public domain and may be used to delineate the surface water contribution area of the WHPA.				
N	D	V	S	D.2: An existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches.
	X	X		
Technical Assistance Comments: This information is in the public domain and may be used to delineate the surface water contribution area of the WHPA and determine the vulnerability of the DWSMA.				
N	D	V	S	D.3: The shoreland classifications of the public waters listed under sub-item (2), pursuant to part 6120.3000 and Minnesota Statutes, sections 103F.201 to 103F.221.
X				
Technical Assistance Comments:				
N	D	V	S	D.4: An existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, section 103G.221 to 103G.2373.
X				
Technical Assistance Comments:				
N	D	V	S	D.5: An existing map showing those areas delineated as floodplain by existing local ordinances.
X				
Technical Assistance Comments:				

DATA ELEMENTS ABOUT THE LAND USE

E. LAND USE				
N	D	V	S	E.1: An existing map of parcel boundaries.
	X		X	
Technical Assistance Comments: This information may be helpful in delineating the DWSMA, if available. If this information is provided, identification numbers must be provided for each parcel. An electronic format for the map is preferable.				
N	D	V	S	E.2: An existing map of political boundaries.
	X		X	
Technical Assistance Comments: Please provide this information if the boundaries have been updated/changed. This information may be helpful in delineating the DWSMA. An electronic format for the map is preferable.				
N	D	V	S	E.3: An existing map of public land surveys, including township, range, and section.
	X			
Technical Assistance Comments: This information is available in the public domain and may be helpful in delineating the DWSMA.				
N	D	V	S	E.4: A map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources.
X				
Technical Assistance Comments:				

N	D	V	S	E.5:	An existing, comprehensive land-use map.
X					
Technical Assistance Comments:					
N	D	V	S	E.6:	Existing zoning map.
X					
Technical Assistance Comments:					
F. PUBLIC UTILITY SERVICES					
N	D	V	S	F.1:	An existing map of transportation routes or corridors.
	X				
Technical Assistance Comments: This information is available in the public domain and may be helpful in delineating the DWSMA.					
N	D	V	S	F.2:	An existing map of storm sewers, sanitary sewers, and the public water supply systems.
	X		X		
Technical Assistance Comments: Do not submit a map of the storm sewers and sanitary sewers. Describe the difference in how much water is pumped and how much is sold. The difference is the leakage that may be used as recharge in the groundwater model.					
N	D	V	S	F.3:	An existing map of gas and oil pipelines used by gas and oil suppliers.
X					
Technical Assistance Comments:					
N	D	V	S	F.4:	An existing map or list of public drainage systems.
	X	X			
Technical Assistance Comments: This information is available in the public domain and may be helpful in delineating the DWSMA.					
N	D	V	S	F.5:	An existing record of construction, maintenance, and use of the public water supply well(s) and other wells within the DWSMA.
	X	X	X		
Technical Assistance Comments: If the information is different than that on-file with MDH, please provide 1) the pumping rates for the current and previous years, and the projected annual pumping rates for the next five years for each well in the PWS; and 2) well record(s) for the PWS well(s). Information about the PWS well(s) may affect the vulnerability assessment due to rehabilitation/reconstruction of a well or changes in pumping rates.					

DATA ELEMENTS ABOUT WATER QUANTITY

G. SURFACE WATER QUANTITY

N	D	V	S	G.1: An existing description of high, mean, and low flows on streams.
	X	X		
Technical Assistance Comments: This information is available in the public domain and may be used to determine hydraulic connections between surface water bodies and the aquifer(s) of concern.				
N	D	V	S	G.2: An existing list of lakes where the state has established ordinary high water marks.
	X			
Technical Assistance Comments: This information is available in the public domain. The information may be used to determine the WHPA.				
N	D	V	S	G.3: An existing list of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn.
	X	X	X	
Technical Assistance Comments: Only required if different from the DNR database. Surface water bodies may be in direct hydraulic connection with the aquifer(s) of concern and withdrawals may affect water levels in both the surface water and adjacent groundwater systems.				
N	D	V	S	G.4: An existing list of lakes and streams for which state protected levels or flows have been established.
	X			
Technical Assistance Comments: This information is available in the public domain and may be used to determine hydraulic connections between surface water bodies and the aquifer(s) of concern.				
N	D	V	S	G.5: An existing description of known water-use conflicts, including those caused by groundwater pumping.
	X	X	X	
Technical Assistance Comments: Please notify MDH of surface water/well interference problems of which the PWS is aware. Conflicts between use of groundwater resources and surface water bodies would indicate a hydrologic boundary that would need to be considered in delineating the WHPA.				
H. GROUNDWATER QUANTITY				
N	D	V	S	H.1: An existing list of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source.
	X	X	X	
Technical Assistance Comments: Please submit this information for wells that are not permitted by the DNR because this information may be useful in identifying the hydrologic boundary conditions that could affect the size and shape of the WHPA boundaries.				
N	D	V	S	H.2: An existing description of known well interference problems and water-use conflicts.
	X	X	X	
Technical Assistance Comments: Please notify MDH of well interference problems of which the PWS is aware. Interference problems with other wells, if present, likely indicate a hydrologic boundary that would need to be considered in making the WHPA delineation.				
N	D	V	S	H.3: An existing list of state environmental boreholes, including unique well number, aquifer measured, years of record, and average monthly levels.
	X	X	X	
Technical Assistance Comments: Only submit monthly water level measurements (with unique well numbers and dates) that are not in the public domain.				

DATA ELEMENTS ABOUT WATER QUALITY

I. SURFACE WATER QUALITY				
N	D	V	S	I.1: An existing map or list of the state water quality management classification for each stream and lake.
X				
Technical Assistance Comments:				
N	D	V	S	I.2: An existing summary of lake and stream water quality monitoring data, including:
		X	X	1. bacteriological contamination indicators; 4. sedimentation;
				2. inorganic chemicals; 5. dissolved oxygen; and
				3. organic chemicals; 6. excessive growth or deficiency of aquatic plants.
Technical Assistance Comments: This information can be used to evaluate surface water/groundwater interactions and aquifer water quality. Submit if the PWS has information that is not available in the public domain.				
J. GROUNDWATER QUALITY				
N	D	V	S	J.1: An existing summary of water quality data, including: 1) bacteriological contamination indicators;
	X	X	X	2) inorganic chemicals; and 3) organic chemicals.
Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain because the information may help explain groundwater flow paths.				
N	D	V	S	J.2: An existing list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points.
	X	X	X	
Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain because the information may help explain groundwater flow paths.				
N	D	V	S	J.3: An existing report of groundwater tracer studies.
	X	X	X	
Technical Assistance Comments: Submit if the PWS has information that is not available in the public domain because the information may help explain groundwater flow paths.				
N	D	V	S	J.4: An existing site study and well water analysis of known areas of groundwater contamination.
		X	X	
Technical Assistance Comments: Submit if the PWS has information on contaminant sources not available in the public domain because these reports may contain additional geologic or hydrogeologic information.				
N	D	V	S	J.5: An existing property audit identifying contamination.
X				
Technical Assistance Comments:				
N	D	V	S	J.6: An existing report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.
	X	X		
Technical Assistance Comments: Notify MDH of reports on spills or contaminant releases that are on-file with the PWS or city but are not in the public domain. These reports do not need to be submitted but MDH staff would like to review reports.				

Summary of Data Request

Specific Data to be Provided to MDH by PWS

As discussed during the first Scoping Meeting on December 19, 2011, the public water supply (PWS) will supply the following information for Part I of their Wellhead Protection Plan to the Minnesota Department of Health. The number of the data element that refers to the information needed to prepare the Part I Report is listed in the parenthesis at the end of each request.

- 1) PWS well information: Use Tables 1 and 2, the well records for the PWS wells, and a map showing the locations of all the PWS wells, to review the accuracy of 1) all PWS well construction, 2) well locations, and 3) pumping information. (F.5)

Table 1 lists well use and construction for each of the PWS wells. Have you reconstructed any wells? Are there well records for reconstructed wells?

The enclosed map shows the locations of the primary public water supply wells. Please let us know if you feel the wells are not correctly located. These locations must be used to delineate your wellhead protection areas.

Table 2 shows the available pumping information and indicates what information the PWS needs to provide for the delineation of the capture zone. Please provide 1) the pumping data for 2010 that was sent to the Minnesota Department of Natural Resources, 2) whether this rate was measured or estimated, and 3) the projected annual pumping amounts for the next five years.

- 2) Please provide a copy of any aquifer test or specific capacity information for the PWS wells that was obtained during well construction, maintenance, or repair. (B.1)
- 3) Is there an existing map of parcel and/or political boundaries that could be used for defining the Drinking Water Supply Management Area (DWSMA)? If you wish to use parcel lines, please provide the parcel identification number for each parcel boundary along with the map. Have the city boundaries changed? If the city boundaries have changed, please provide the new boundaries. The boundaries of the DWSMA may be larger if political boundaries are used instead of the parcel boundaries. (E.1 and E.2)
- 4) If there are private well records, soil boring reports, geophysical studies, or water level measurements in your files that MDH staff did not identify at the scoping meeting and that would be available for MDH staff to review and copy, please notify MDH. (B.2, B.3, B.4, and H.3)
- 5) Please identify reports that you have on-file relating to leaks/contamination sites that may be a concern to your drinking water supply that MDH may review and copy. (J.4)
- 6) If your files contain water chemistry data, such as bacteria, virus, inorganic, organic, or isotopic results from wells or other groundwater sampling points, that are not currently available to MDH that MDH may review and copy, please notify MDH. (J.1 and J.2)
- 7) Please identify reports that you have in your files relating to groundwater tracer studies that have been conducted. (J.3)

Summary of Data Request

Page 2

- 8) Please provide information about other high-capacity wells in your area that may not be permitted and are not listed on the attached Table 3. (H.1)
- 9) Please describe any conflicts over water use that the PWS has been involved with, such as 1) private wells that went dry (or well interference) or 2) springs or wetlands that were affected. Was the Department of Natural Resources involved in resolving the conflict? (G.5 and H.2)
- 10) Please describe the annual amount of water that is lost due to leaks in the distribution system. Can you identify specific parts of the distribution system where this loss occurs? (F.2)
- 11) If local precipitation information is not available in the public domain within a couple of miles and in the same geomorphic setting, please provide average monthly precipitation values from the wastewater treatment facility during the preceding five years. (A.2)
- 12) Please identify any other reports about surface water withdrawals or surface water monitoring data from lakes, streams, or wetlands that are not in the public domain that MDH staff could review and copy. (G.3 and I.2)

Table 1
Water Supply Well Information
City of Eden Prairie

Local Well Name	Unique Number	Type	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Date Constructed/Reconstructed	Well Vulnerability	Aquifer
Well 2	205905	Primary	30x24	210	394	1971	Vulnerable	Prairie du Chien-Jordan
Well 3	112242	Primary	30x24	207	392	1978	Vulnerable	Prairie du Chien-Jordan
Well 4	147454	Primary	30x24	207	381	1982	Vulnerable	Prairie du Chien-Jordan
Well 5	147453	Primary	30x24	219	393	1981	Vulnerable	Prairie du Chien-Jordan
Well 6	147452	Primary	30x24	230	388	1981	Vulnerable	Prairie du Chien-Jordan
Well 7	424924	Primary	36x30	306	383	1987	Vulnerable	Jordan
Well 8	424925	Primary	36x30	316	391	1987	Vulnerable	Jordan
Well 9	424926	Primary	36x30	319	405	1987	Vulnerable	Jordan
Well 10	424927	Primary	36x30	308	401	1987	Vulnerable	Jordan
Well 11	541542	Primary	36x30x24	232	408	1994	Vulnerable	Prairie du Chien-Jordan
Well 12	541541	Primary	30x24	215	385	1994	Vulnerable	Prairie du Chien-Jordan
Well 13	622703	Primary	30x24	210	410	1998	Vulnerable	Prairie du Chien-Jordan
Well 14	603068	Primary	36x30x24	241	418	2000	Vulnerable	Prairie du Chien-Jordan
Well 15	686256	Primary	36x30x24	243	420	2005	Vulnerable	Prairie du Chien-Jordan
Well 16	763769	Primary	30x24	278	405	2008	Vulnerable	Prairie du Chien-Jordan

Table 2
Annual Volume of Water Pumped from Wells
City of Eden Prairie

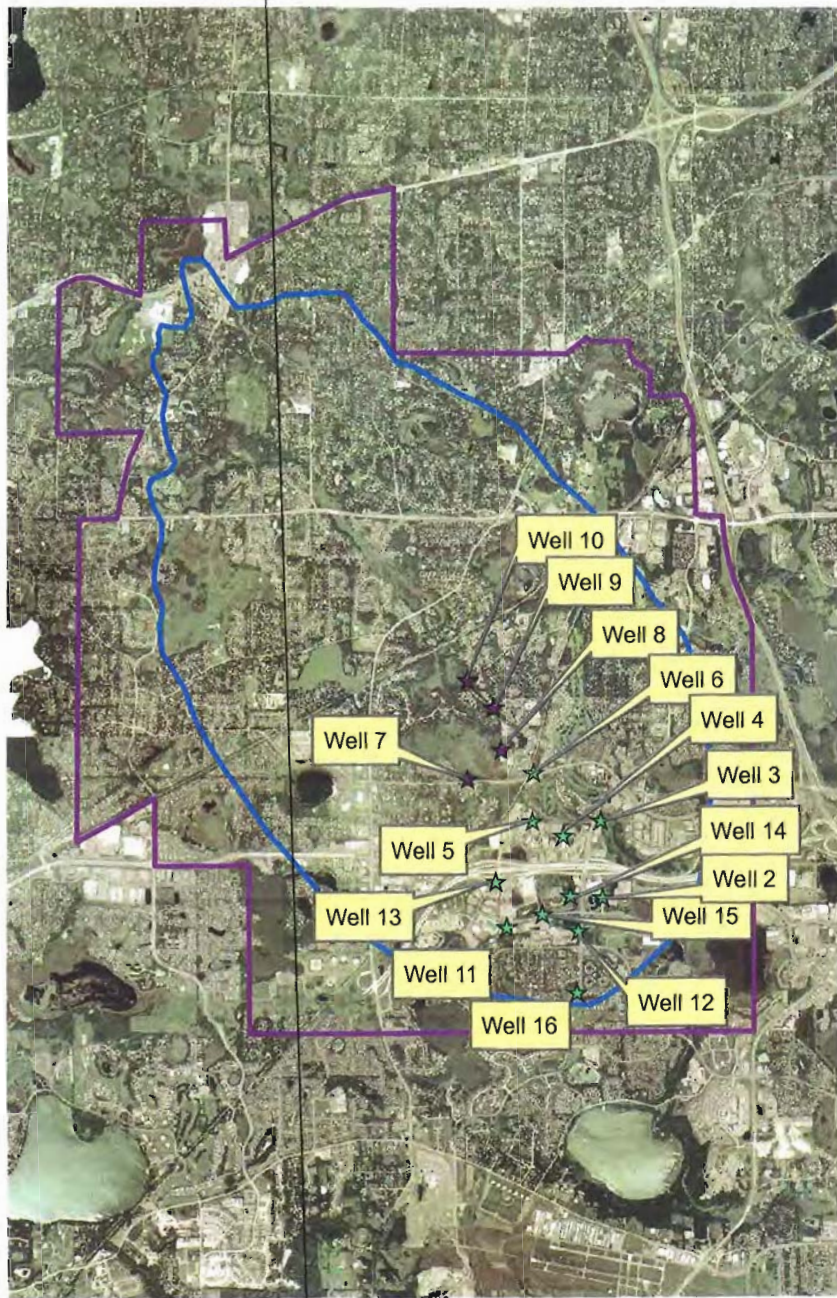
Well Name	Unique Number	Total Annual Withdrawal (gallons/year)				Maximum Withdrawal 2006-2009 (gal/yr)	Projected* 2015 Withdrawal (gal/yr)	Maximum 2006-2009 Pumping Rate (gpm)
		2006	2007	2008	2009	2010*		
2	205905	230,608,000	211,344,000	152,763,000	74,580,000			438.5
3	112242	214,176,000	239,802,000	174,723,000	271,406,000			516.0
4	147454	139,383,000	168,085,000	156,444,000	168,582,000			320.5
5	147453	241,883,000	281,085,000	345,207,000	269,238,000			656.3
6	147452	188,406,000	254,205,000	293,068,000	208,649,000			557.2
7	424924	183,990,000	245,827,000	321,328,000	230,177,000			610.9
8	424925	163,988,000	141,938,000	177,785,000	319,459,000			607.4
9	424926	193,591,000	207,655,000	147,044,000	156,502,000			394.8
10	424927	251,698,000	210,436,000	395,448,000	403,511,000			767.2
11	541542	290,780,000	251,456,000	174,557,000	237,946,000			552.9
12	541541	232,314,000	151,631,000	195,381,000	365,643,000			695.2
13	622703	285,035,000	278,449,000	172,024,000	298,179,000			566.9
14	603068	304,827,000	269,311,000	323,219,000	274,332,000			614.5
15	686256	0	0	307,831,000	277,672,000			585.3
16	763769							
Totals		2,920,679,000	2,911,224,000	3,336,822,000	3,555,876,000	4,146,476,000		7,883.6

Source: DNR State Water Use Database System Permit Number 1978-6175.

* Data to be provided by the city.

Table 3
Permitted High-Capacity Wells Within 2.0 Miles
DNR State Water Use Database System
City of Eden Prairie

Unique Number	Well Name	Permittee	DNR Permit Number	Aquifer	Use	2000-2009 Average Withdrawal (gallons/year)
205907	1	EATON MDH COMPANY INC	1964-0702	CJDN	Metal processing	40,340,000
224097	2	ROSEMOUNT INC	1969-0167	OPDC	Once-through heating or A/C	56,940,000
224097	2	ROSEMOUNT INC	1969-0167	OPDC	Industrial process cooling once-through	230,000
224097	2	ROSEMOUNT INC	1969-0167	OPDC	Landscaping	440,000
205941	1	HENNEPIN TECHNICAL COLLEGE-BP	1971-0452	OPDC	Non-crop irrigation	900,000
203171	1	IND. SCHOOL DISTRICT 272	1981-6148	CJDN	Landscaping	300,000
147889	1	BENT CREEK GOLF CLUB	1986-6070	QWTA	Golf course	15,500,000
147888	2	BENT CREEK GOLF CLUB	1986-6070	OPDC	Golf course	15,200,000
449084	1	IND. SCHOOL DISTRICT 272	1989-6253	OPDC	Landscaping	1,970,000
405654	1	IND. SCHOOL DISTRICT 272	1993-6076	OPDC	Landscaping	5,880,000
236143	1	HENNEPIN COUNTY PARKS	1996-6172	OSTPCIGL	Golf course	2,010,000
559413	1	IND SCHOOL DISTRICT 272	1997-6019	OPDC	Landscaping	2,930,000
509079	1	IND. SCHOOL DISTRICT 272	1997-6194	OPDC	Landscaping	820,000

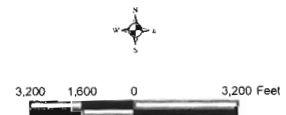


City Wells

Aquifer

- ★ Jordan
- ★ Prairie du Chien/Jordan

- Current WHPA
- Current DWSMA



Enlarged Area



Figure 1
Well Locations
(City of Eden Prairie, MN)

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #2	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S02	
UNIQUE WELL NO.	205905	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S02	UNIQUE WELL NO.	205905
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N		

PWS ID / FACILITY ID	1270010 S02	UNIQUE WELL NO.	205905
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		Y	50	N
SM1	Storm water pond greater than 5000 gal.	50	35		Y	140	N
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		

PWS ID / FACILITY ID

1270010 S02

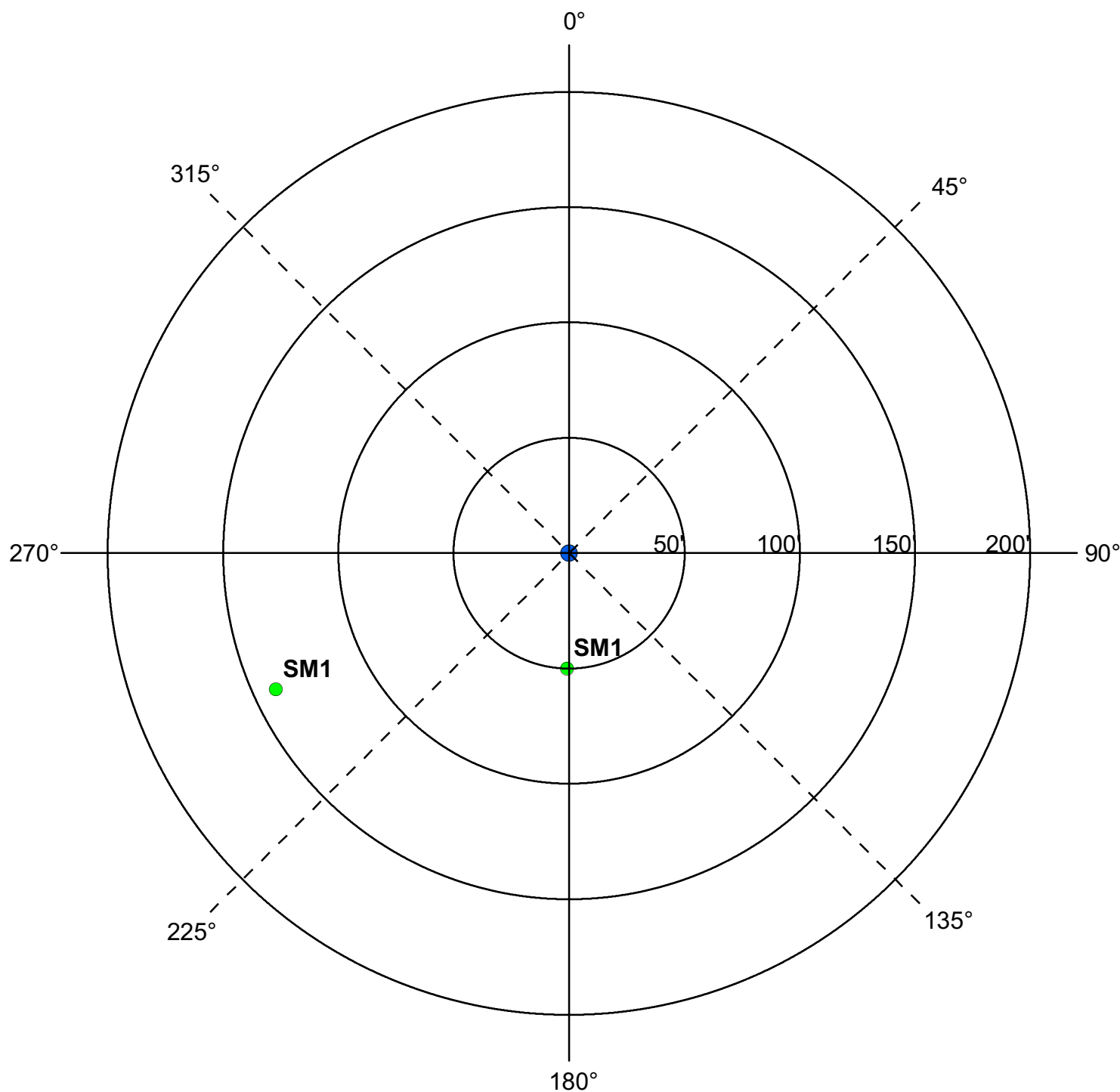
UNIQUE WELL NO.

205905

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
		X

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S02	UNIQUE WELL NO.	205905
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS
There is a gravel pocket at an unkown distance and direction.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #3	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S03	
UNIQUE WELL NO.	112242	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S03	UNIQUE WELL NO.	112242
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N		

PWS ID / FACILITY ID	1270010 S03	UNIQUE WELL NO.	112242
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	170	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	170	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	130	N
SWI	Storm water drainage well ² (Class V well - illegal ³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		Y	62	
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well) ²	illegal ³	illegal ³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		Y	85	N
*PP1	Petroleum buried piping	50	50		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
WAT	Stream, river, pond, lake, wetland	50	50		Y	40	N

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

5 A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270010 S03

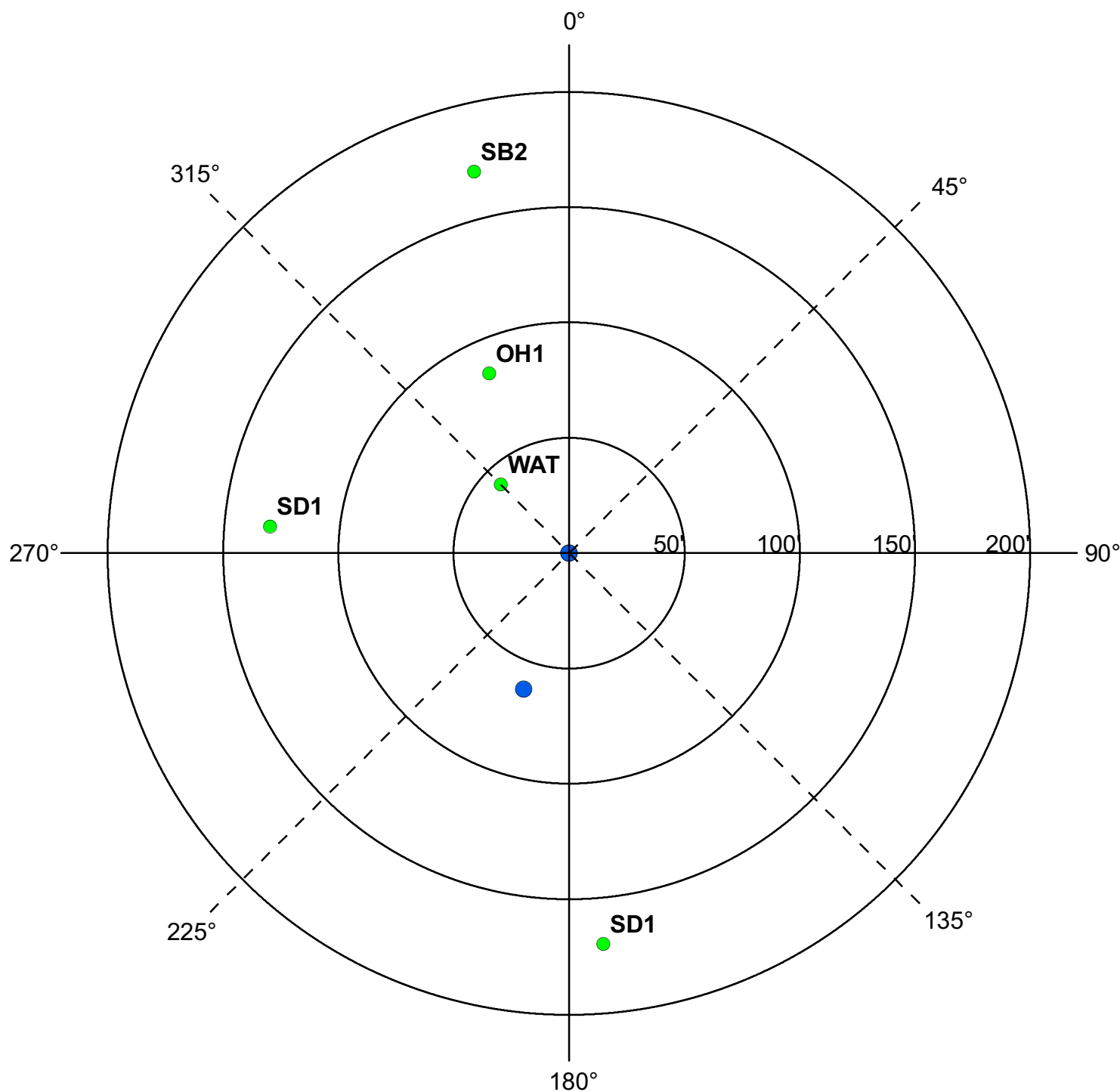
UNIQUE WELL NO.

112242

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
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Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S03	UNIQUE WELL NO.	112242
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS
There is a gravel pocket at an unkown distance and direction.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #4	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S04	
UNIQUE WELL NO.	147454	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S04	UNIQUE WELL NO.	147454
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S04	UNIQUE WELL NO.	147454
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	60	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.						
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⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

3

PWS ID / FACILITY ID

1270010 S04

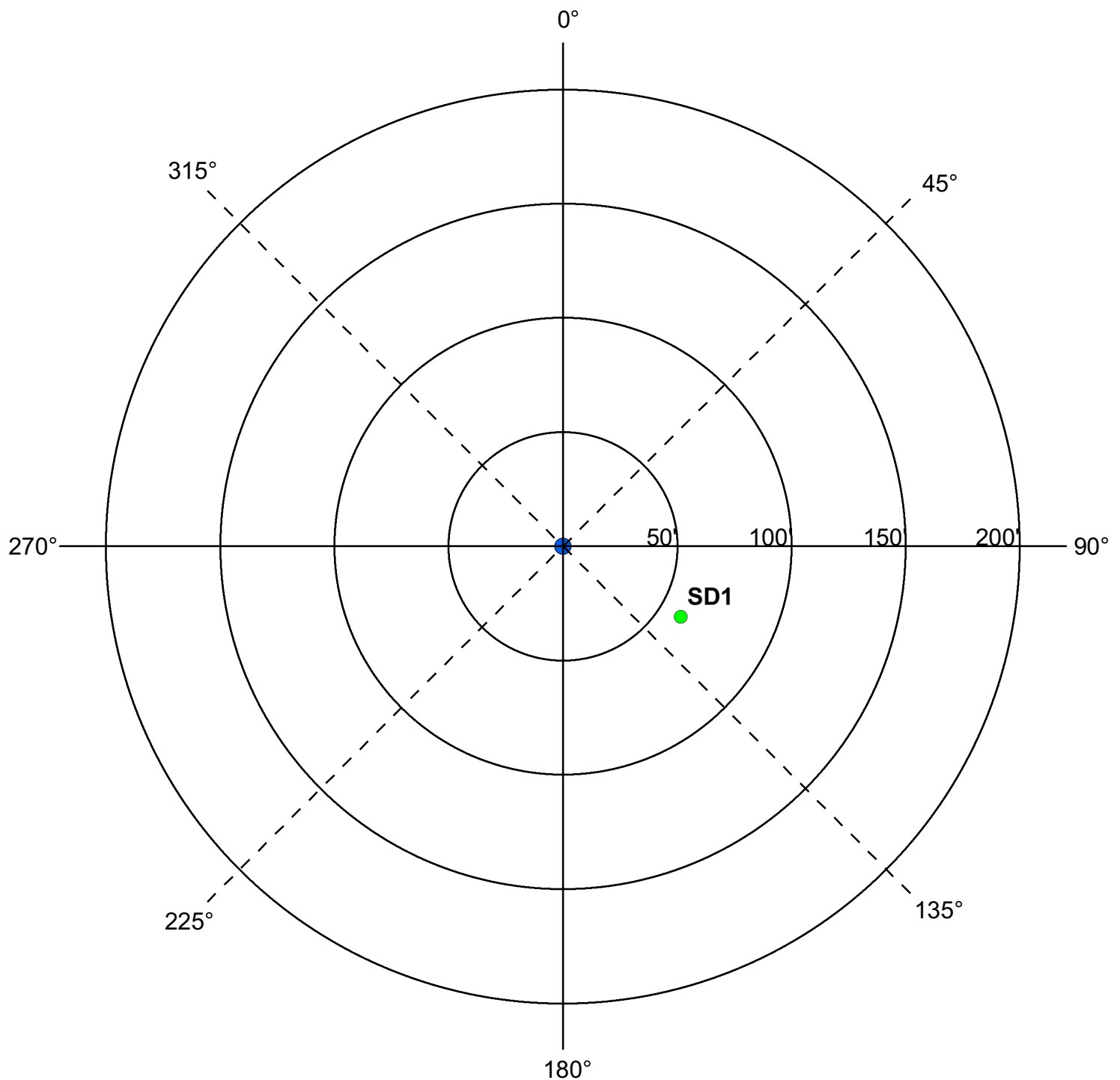
UNIQUE WELL NO.

147454

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
X		
		X

Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S04	UNIQUE WELL NO.	147454
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #5	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S05	
UNIQUE WELL NO.	147453	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S05	UNIQUE WELL NO.	147453
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S05	UNIQUE WELL NO.	147453
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	55	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.						
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⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

3

PWS ID / FACILITY ID

1270010 S05

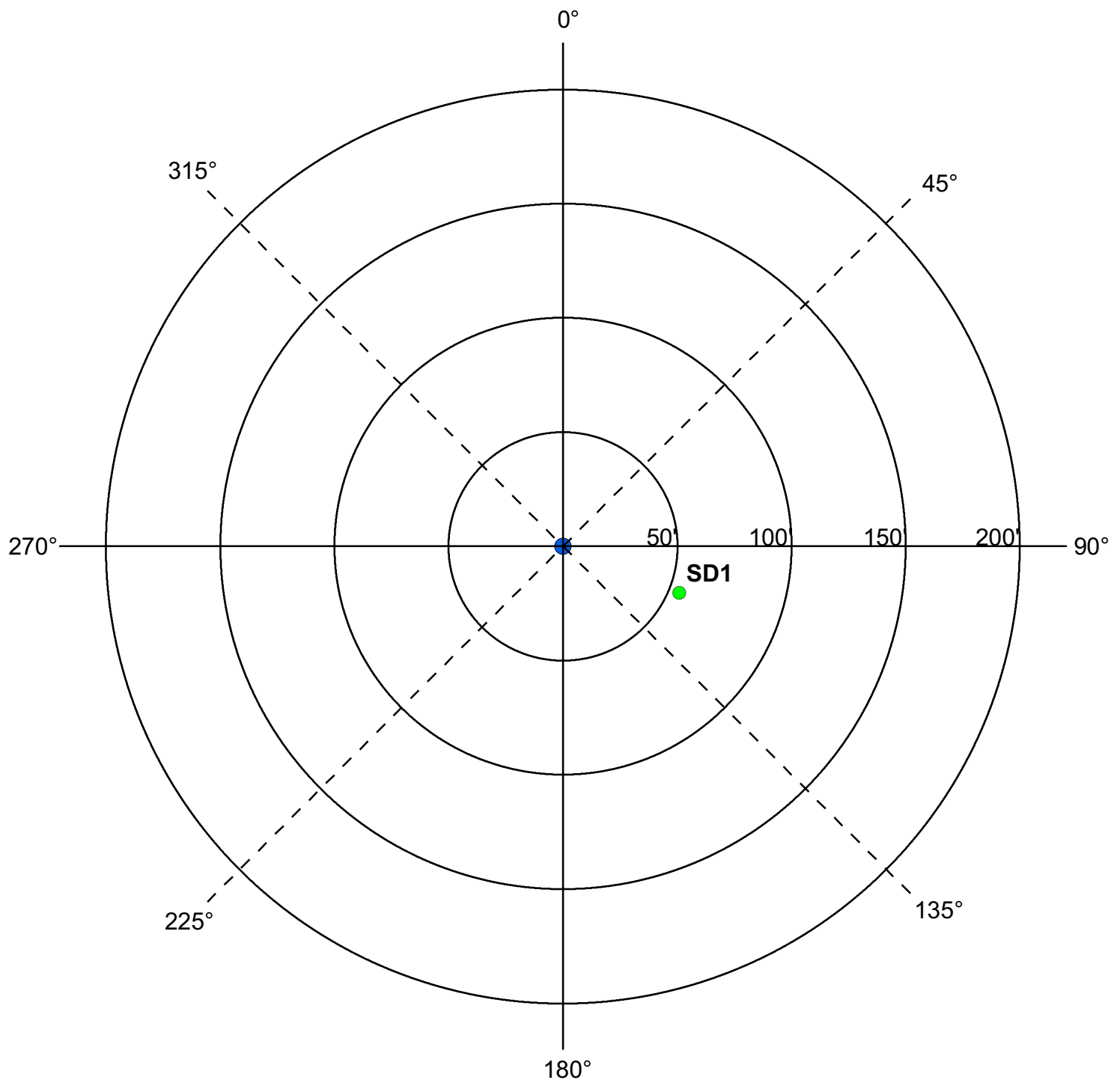
UNIQUE WELL NO.

147453

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
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Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S05	UNIQUE WELL NO.	147453
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
 POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #6	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S06	
UNIQUE WELL NO.	147452	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S06	UNIQUE WELL NO.	147452
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N		

PWS ID / FACILITY ID	1270010 S06	UNIQUE WELL NO.	147452
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	30	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PWS ID / FACILITY ID

1270010 S06

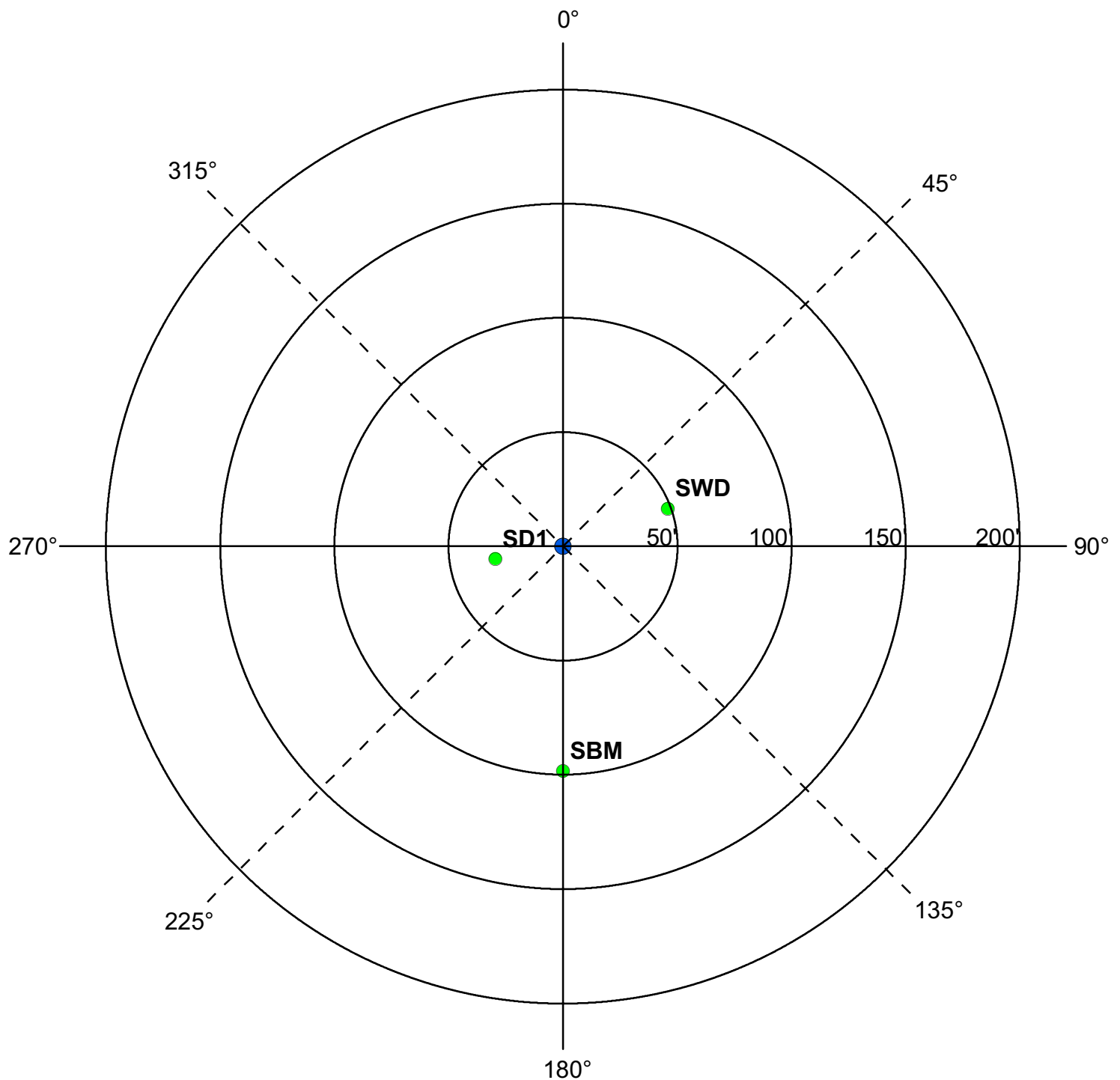
UNIQUE WELL NO.

147452

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
X		

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S06	UNIQUE WELL NO.	147452
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #7	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?
FACILITY ID	S07	☐ YES (Please attach a copy)
UNIQUE WELL NO.	424924	☐ NO ☐ UNDETERMINED
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S07	UNIQUE WELL NO.	424924
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S07	UNIQUE WELL NO.	424924
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	60	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	180	N
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	140	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal¹³	illegal¹³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ⁵	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.						
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⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

3

PWS ID / FACILITY ID

1270010 S07

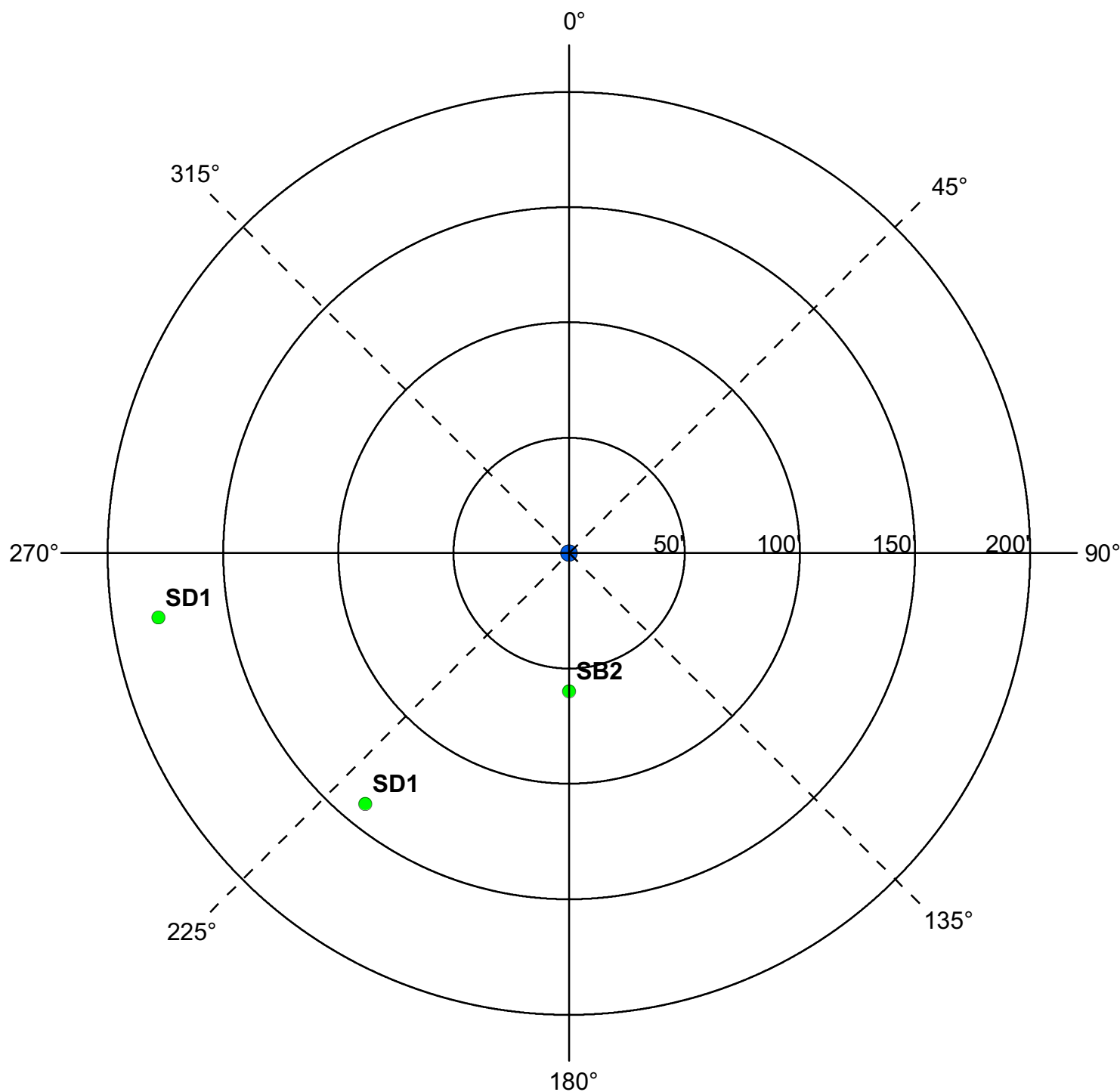
UNIQUE WELL NO.

424924

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
		X

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S07	UNIQUE WELL NO.	424924
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #8	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S08	
UNIQUE WELL NO.	424925	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S08	UNIQUE WELL NO.	424925
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S08	UNIQUE WELL NO.	424925
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		Y	35	N
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	65	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PWS ID / FACILITY ID

1270010 S08

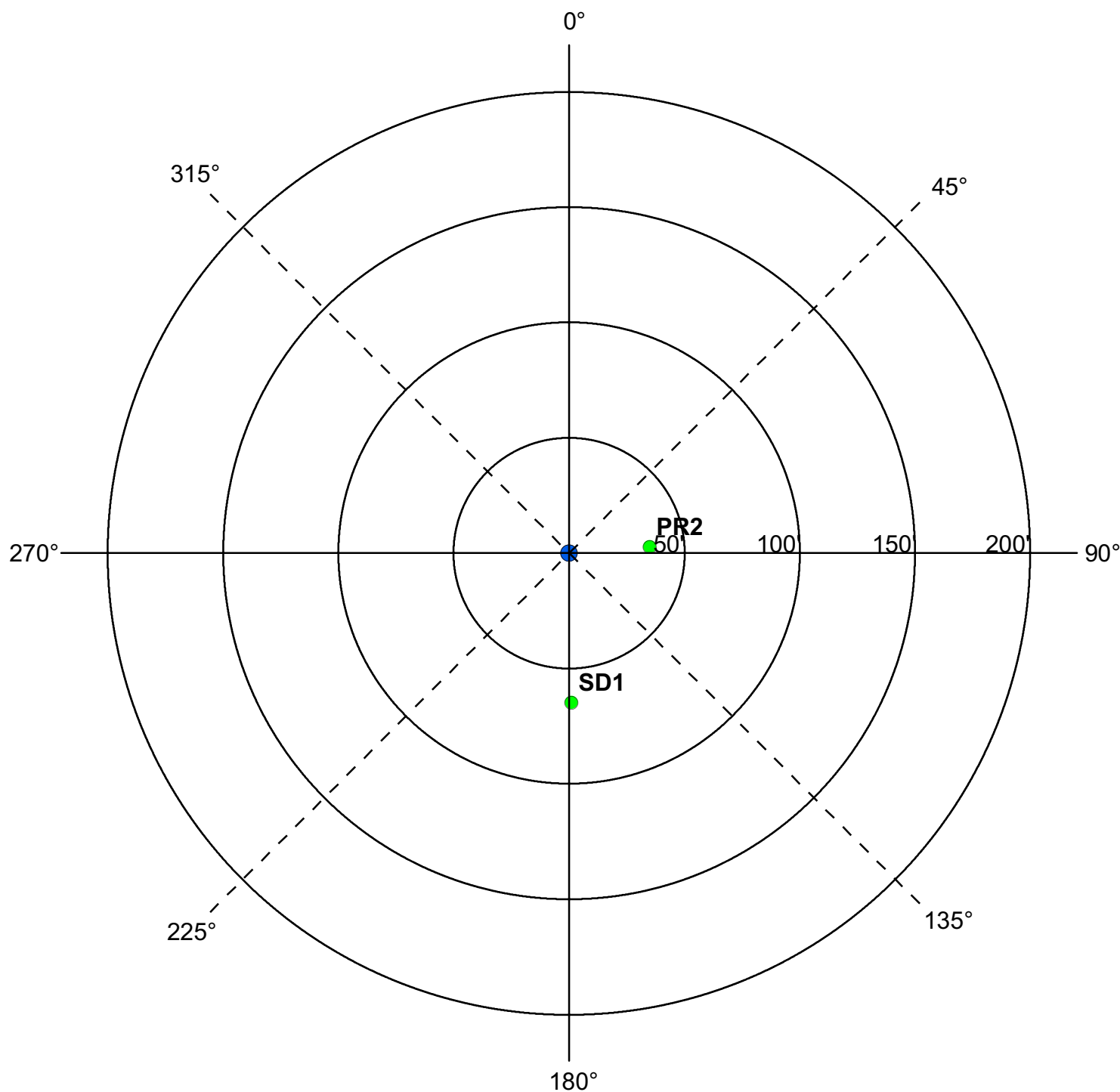
UNIQUE WELL NO.

424925

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
X		

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S08	UNIQUE WELL NO.	424925
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #9	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE?
FACILITY ID	S09	☐ YES (Please attach a copy)
UNIQUE WELL NO.	424926	☐ NO ☐ UNDETERMINED
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S09	UNIQUE WELL NO.	424926
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S09	UNIQUE WELL NO.	424926
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	130	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.						
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PWS ID / FACILITY ID

1270010 S09

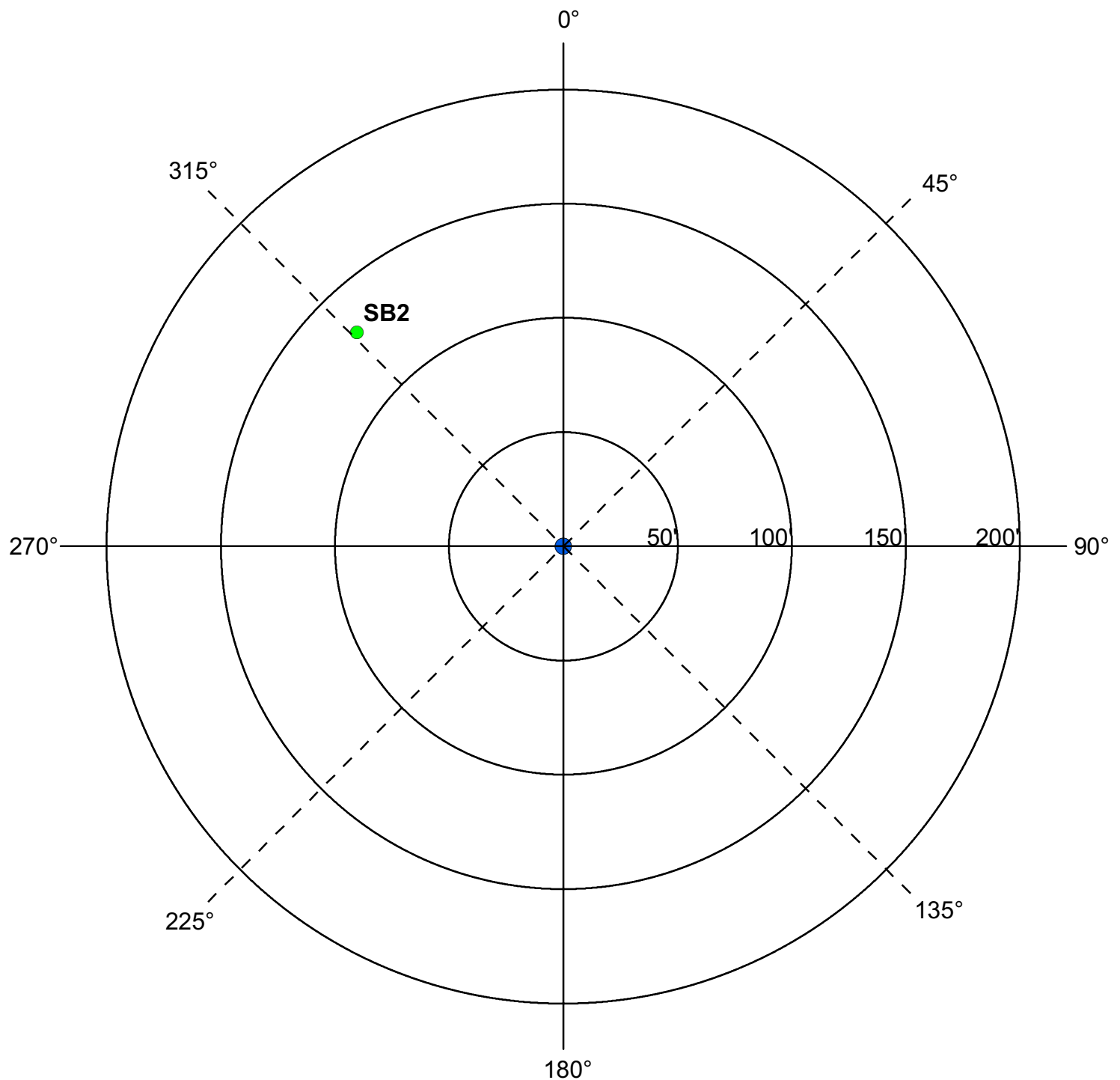
UNIQUE WELL NO.

424926

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
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Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S09	UNIQUE WELL NO.	424926
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS
Gravel pocket at unkown distance and direction.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #10	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S10	
UNIQUE WELL NO.	424927	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S10	UNIQUE WELL NO.	424927
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S10	UNIQUE WELL NO.	424927
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		Y	100	N
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

[illegible]

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270010 S10

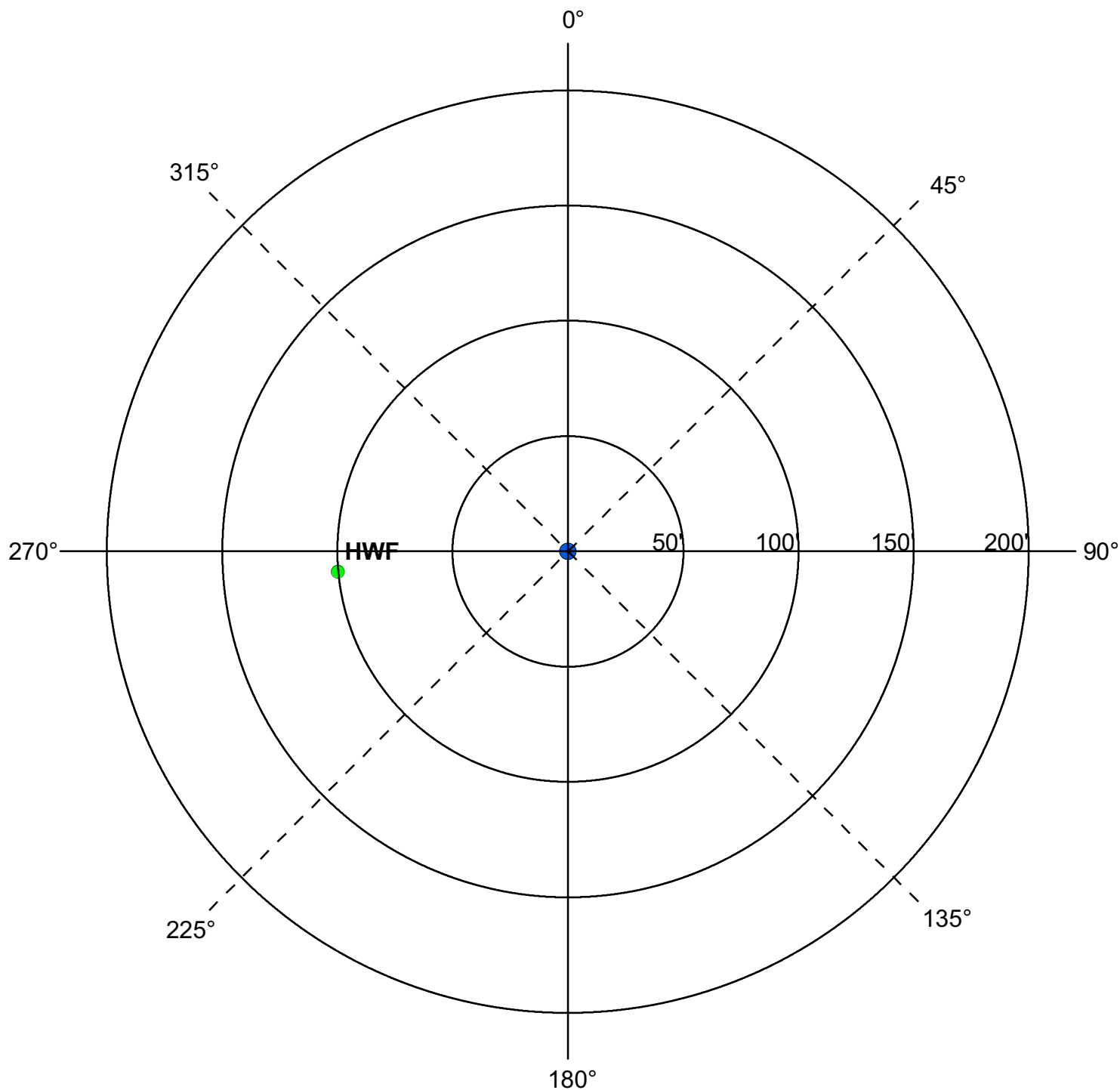
UNIQUE WELL NO.

424927

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
X		
		X

Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S10	UNIQUE WELL NO.	424927
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) - POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #11	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S11	
UNIQUE WELL NO.	541542	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S11	UNIQUE WELL NO.	541542
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N		

PWS ID / FACILITY ID	1270010 S11	UNIQUE WELL NO.	541542
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	150	N
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	75	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	190	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		

PWS ID / FACILITY ID

1270010 S11

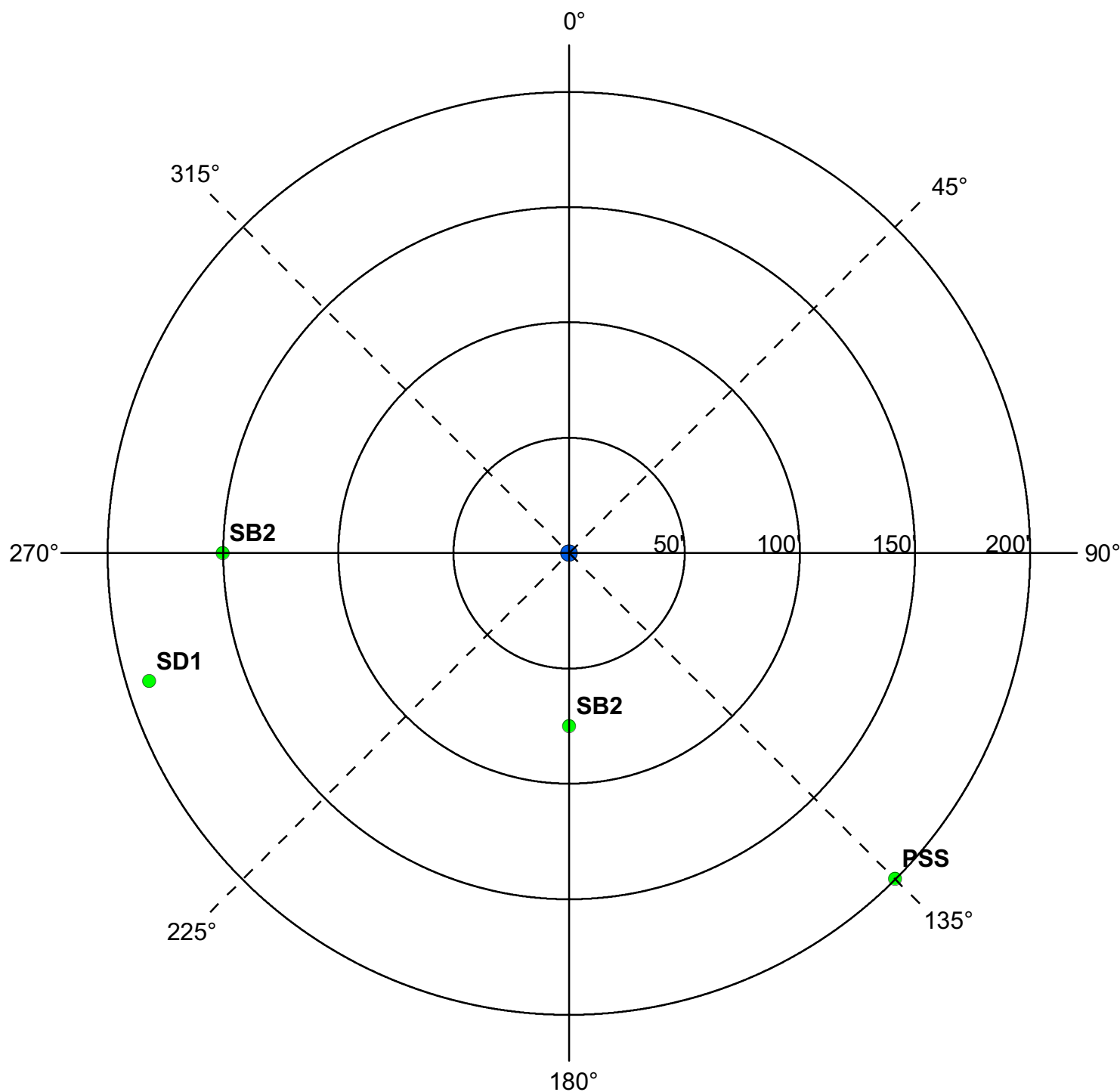
UNIQUE WELL NO.

541542

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
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Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S11	UNIQUE WELL NO.	541542
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #12	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S12	
UNIQUE WELL NO.	541541	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S12	UNIQUE WELL NO.	541541
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S12	UNIQUE WELL NO.	541541
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	90	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		Y	180	N
HWF	Highest water or flood level	50	N/A		Y	135	N
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		

PWS ID / FACILITY ID

1270010 S12

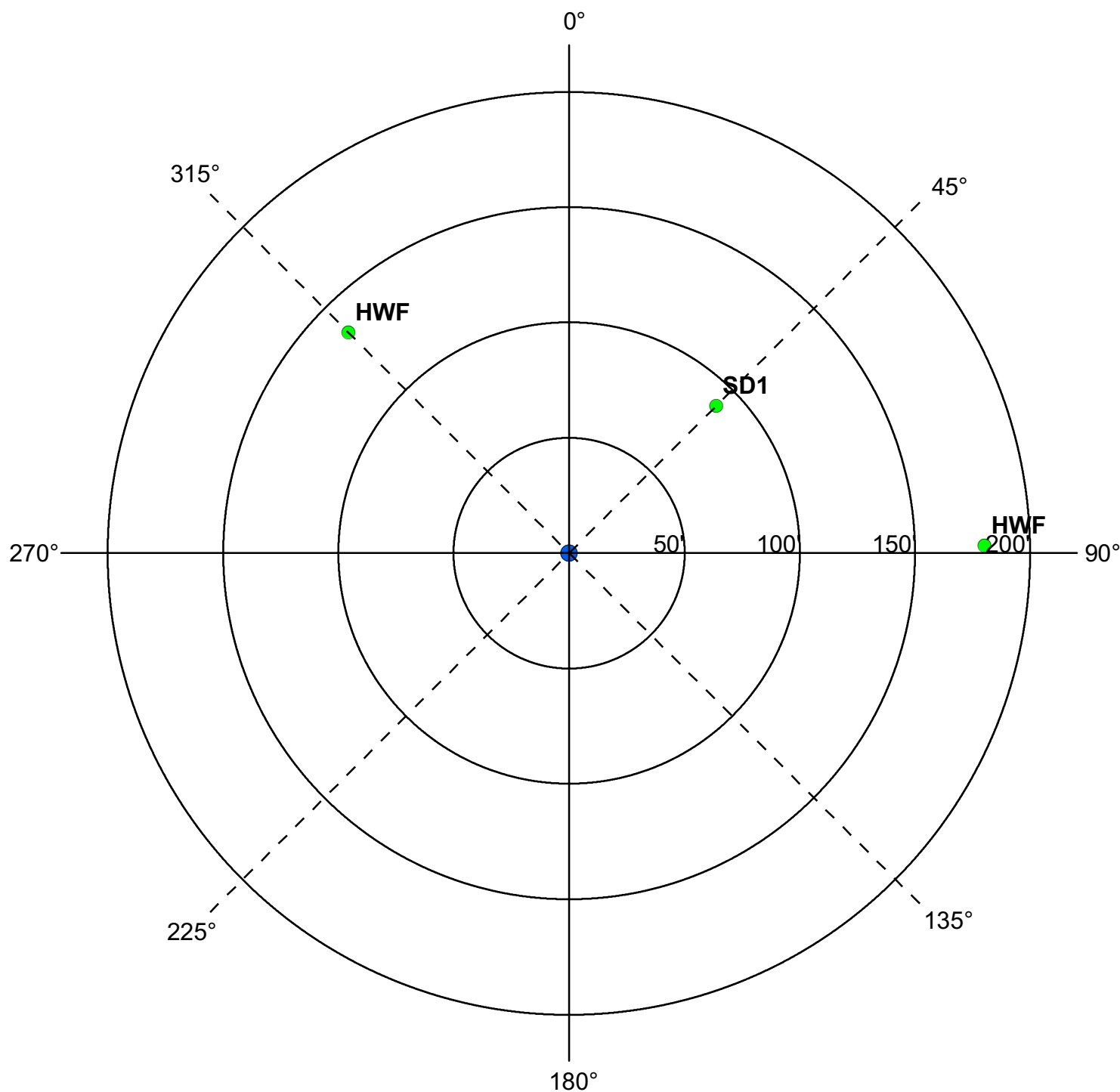
UNIQUE WELL NO.

541541

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
X		
		X

Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S12	UNIQUE WELL NO.	541541
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS
Gravel pocket at unkown distance and direction.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #13	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S13	
UNIQUE WELL NO.	622703	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S13	UNIQUE WELL NO.	622703
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N		
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N		
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N		
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N		
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N		
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N		
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N		
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N		
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N		
ABS	Animal burial area, more than 1.0 animal unit	50	50		N		
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N		
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N		
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N		
AMA	Animal manure application	use discretion	use discretion		N		
REN	Animal rendering plant	50	50		N		
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N		
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N		
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N		
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N		
OSC	Open storage for crops	use discretion	use discretion		N		

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N		
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N		
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N		
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N		
CSP	Cesspool	75	75	150	N		
AGG	Dry well, leaching pit, seepage pit	75	75	150	N		
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N		
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N		
*GW1	Gray-water dispersal area	50	50	100	N		
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N		
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N		

PWS ID / FACILITY ID	1270010 S13	UNIQUE WELL NO.	622703
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	95	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	80	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		Y	190	N
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non- community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.								
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⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

3

PWS ID / FACILITY ID

1270010 S13

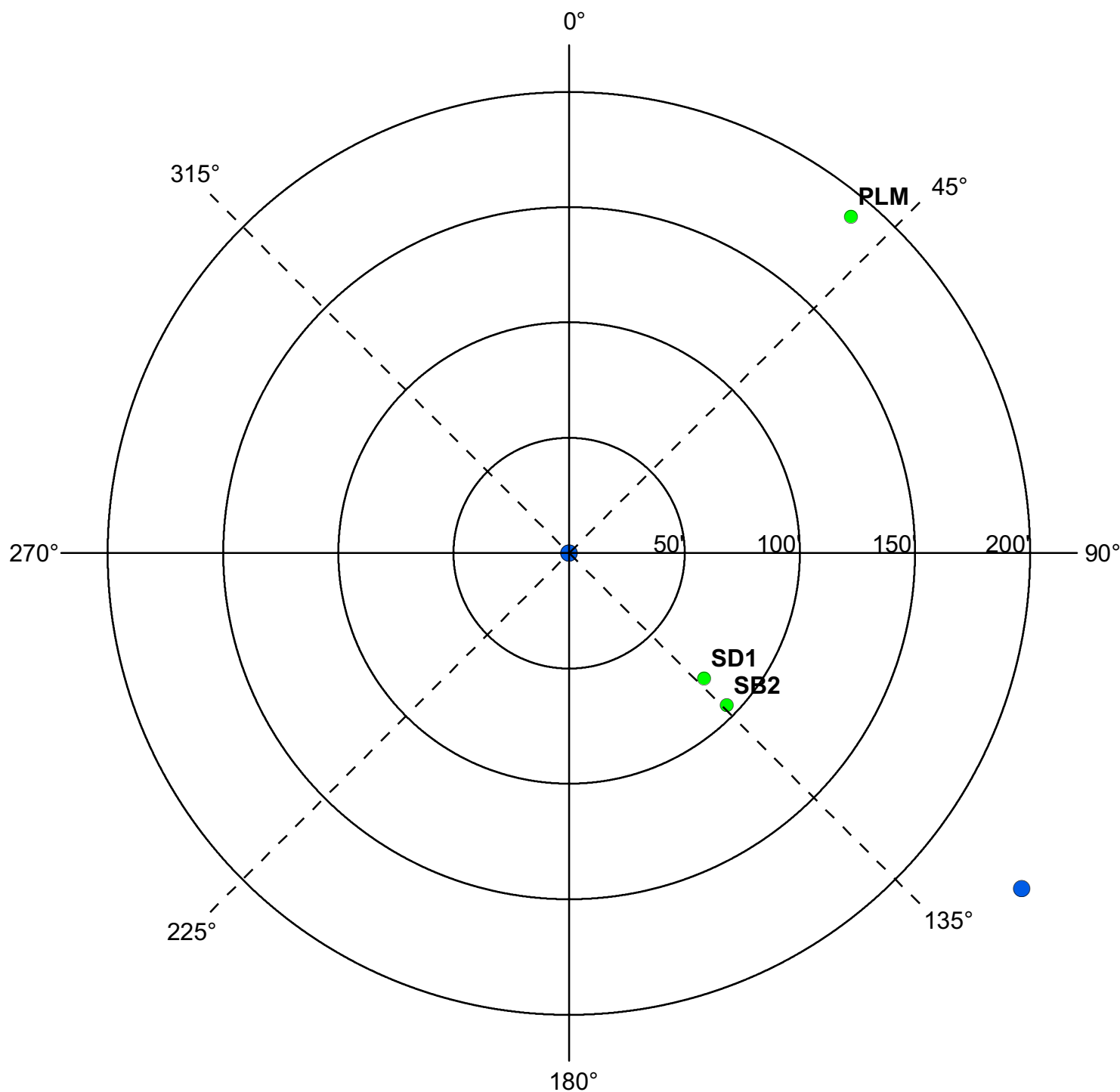
UNIQUE WELL NO.

622703

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
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Were the isolation distances maintained for the new sources of contamination?

X

Is the system monitoring existing nonconforming sources of contamination?

X

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S13	UNIQUE WELL NO.	622703
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS
Gravel pocket at unknown distance and direction.

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #14	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S15	
UNIQUE WELL NO.	603068	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S15	UNIQUE WELL NO.	603068
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S15	UNIQUE WELL NO.	603068
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	190	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		N		
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		Y	180	N
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		Y	200	N
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well'	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		
Additional Sources (If there is more than one source listed above, please indicate here).							
Potential Contamination Sources and Codes Based on Previous Versions of this Form							
	none found within 200' of this well.						

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270010 S15

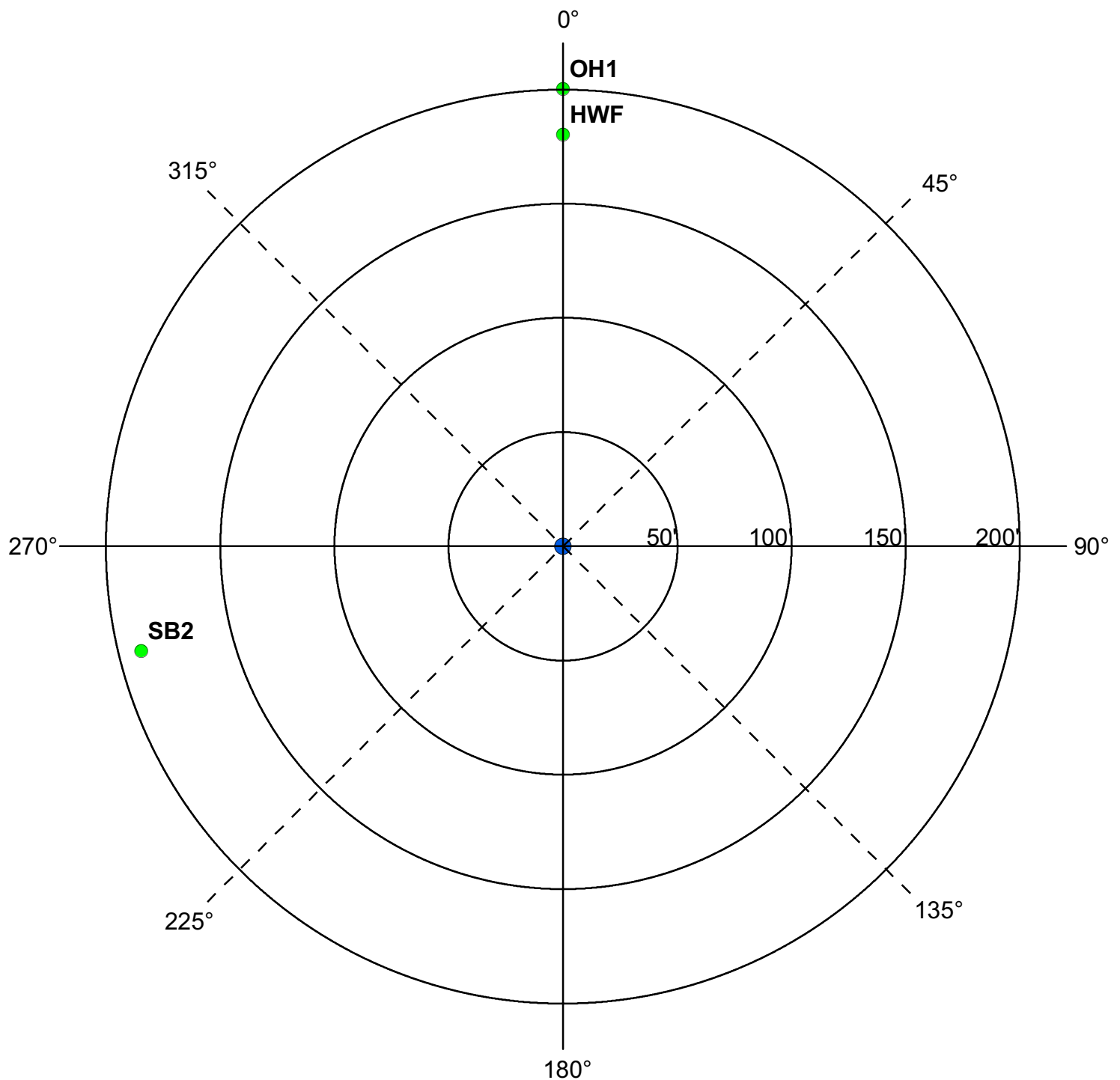
UNIQUE WELL NO.

603068

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
		X

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S15	UNIQUE WELL NO.	603068
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #15	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S16	
UNIQUE WELL NO.	686256	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S16	UNIQUE WELL NO.	686256
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well ¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well ² (Class V well - illegal ³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well) ²	50/300/150 ⁴	50/300/150 ⁴	100/600/300 ⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal) ²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal) ²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S16	UNIQUE WELL NO.	686256
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		N		
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	135	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		N		
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PT1	Petroleum tank or container, 1100 gal. or more, without safeguards	150	150		N		
PT2	Petroleum tank or container, 1100 gal. or more, with safeguards	100	100		N		
PT3	Petroleum tank or container, buried, between 56 and 1100 gal.	50	50		N		
PT4	Petroleum tank or container, not buried, between 56 and 1100 gal.	50 ^s	20		N		
PU1	Pit or unfilled space more than four feet in depth	20	20		N		
PC1	Pollutant or contaminant that may drain into the soil	50	50	100	N		
SP1	Swimming pool, in-ground	20	20		N		
*VH1	Vertical heat exchanger, horizontal piping conforming to rule	50	10		N		
*VH2	Vertical heat exchanger (vertical) piping, conforming to rule	50	35		N		
*WR1	Wastewater rapid infiltration basin, municipal or industrial	300	300	600	N		
*WA1	Wastewater spray irrigation area, municipal or industrial	150	150	300	N		
*WS1	Wastewater stabilization pond, industrial	150	150	300	N		
*WS2	Wastewater stabilization pond, municipal, 500 or more gal./acre/day of leakage	300	300	600	N		
*WS3	Wastewater stabilization pond, municipal, less than 500 gal./acre/day of leakage	150	150	300	N		
*WT1	Wastewater treatment unit tanks, vessels and components (Package plant)	100	100		N		
*WT2	Water treatment backwash disposal area	50	50	100	N		

[illegible]

	none found within 200' of this well.									
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⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

3

PWS ID / FACILITY ID

1270010 S16

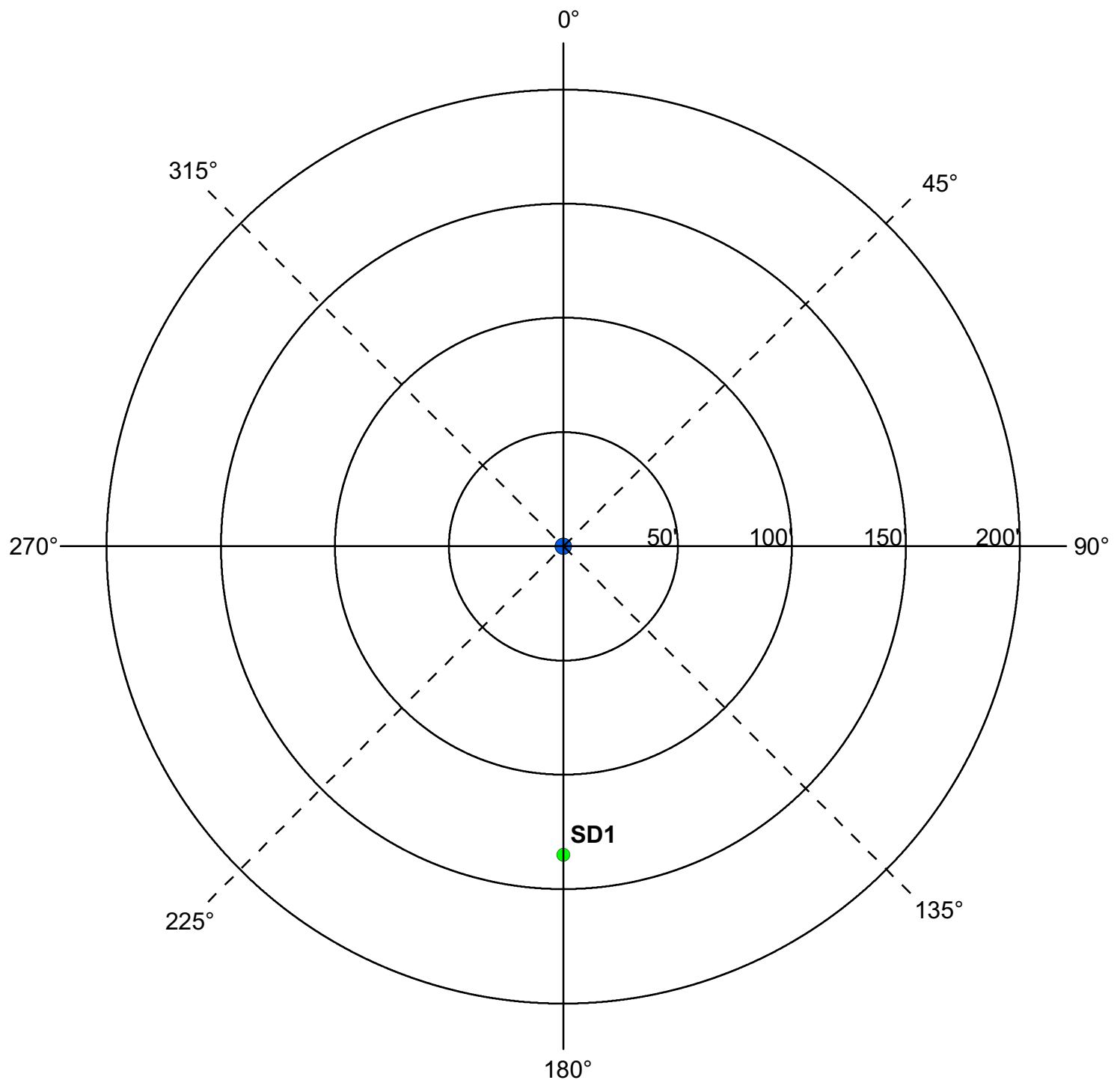
UNIQUE WELL NO.

686256

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
		X

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S16	UNIQUE WELL NO.	686256
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
Drinking Water Protection Section
Source Water Protection Unit
P.O. Box 64975
St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000

**INNER WELLHEAD MANAGEMENT ZONE (IWMZ) -
POTENTIAL CONTAMINANT SOURCE INVENTORY (PCSI) REPORT**

PUBLIC WATER SYSTEM INFORMATION

PWS ID	1270010	COMMUNITY
NAME	Eden Prairie	
ADDRESS	Eden Prairie Water Superintendent, 14100 Technology Drive, Eden Prairie, MN 553442260	

FACILITY (WELL) INFORMATION

NAME	Well #16	IS THERE A WELL LOG OR ADDITIONAL CONSTRUCTION INFORMATION AVAILABLE? ☐ YES (Please attach a copy) ☐ NO ☐ UNDETERMINED
FACILITY ID	S17	
UNIQUE WELL NO.	763769	
COUNTY	Hennepin	

PWS ID / FACILITY ID	1270010 S17	UNIQUE WELL NO.	763769
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)			LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well
		Community	Non- community			

Agricultural Related

*AC1	Agricultural chemical buried piping	50	50		N	
*AC2	Agricultural chemical multiple tanks or containers for residential retail sale or use, no single tank or container exceeding, but aggregate volume exceeding 56 gal. or 100 lbs. dry weight	50	50		N	
ACP	Agricultural chemical tank or container with 25 gal. or more or 100 lbs. or more dry weight, or equipment filling or cleaning area without safeguards	150	150		N	
ACS	Agricultural chemical storage or equipment filling or cleaning area with safeguards	100	100		N	
ACR	Agricultural chemical storage or equipment filling or cleaning area with safeguards and roofed	50	50		N	
ADW	Agricultural drainage well² (Class V well - illegal³)	50	50		N	
AAT	Anhydrous ammonia tank (stationary tank)	50	50		N	
AB1	Animal building, feedlot, confinement area, or kennel, 0.1 to 1.0 animal unit (stockyard)	50	20	100/40	N	
AB2	Animal building or poultry building, including a horse riding area, more than 1.0 animal unit	50	50	100	N	
ABS	Animal burial area, more than 1.0 animal unit	50	50		N	
FWP	Animal feeding or watering area within a pasture, more than 1.0 animal unit	50	50	100	N	
AF1	Animal feedlot, unroofed, 300 or more animal units (stockyard)	100	100	200	N	
AF2	Animal feedlot, more than 1.0, but less than 300 animal units (stockyard)	50	50	100	N	
AMA	Animal manure application	use discretion	use discretion		N	
REN	Animal rendering plant	50	50		N	
MS1	Manure (liquid) storage basin or lagoon, unpermitted or noncertified	300	300	600	N	
MS2	Manure (liquid) storage basin or lagoon, approved earthen liner	150	150	300	N	
MS3	Manure (liquid) storage basin or lagoon, approved concrete or composite liner	100	100	200	N	
MS4	Manure (solid) storage area, not covered with a roof	100	100	200	N	
OSC	Open storage for crops	use discretion	use discretion		N	

SSTS Related

AA1	Absorption area of a soil dispersal system, average flow greater than 10,000 gal./day	300	300	600	N	
AA2	Absorption area of a soil dispersal system serving a facility handling infectious or pathological wastes, average flow 10,000 gal./day or less	150	150	300	N	
AA3	Absorption area of a soil dispersal system, average flow 10,000 gal./day or less	50	50	100	N	
AA4	Absorption area of a soil dispersal system serving multiple family residences or a non-residential facility and has the capacity to serve 20 or more persons per day (Class V well)²	50/300/150⁴	50/300/150⁴	100/600/300⁴	N	
CSP	Cesspool	75	75	150	N	
AGG	Dry well, leaching pit, seepage pit	75	75	150	N	
*FD1	Floor drain, grate, or trough connected to a buried sewer	50	50		N	
*FD2	Floor drain, grate, or trough if buried sewer is air-tested, approved materials, serving one building, or two or less single-family residences	50	20		N	
*GW1	Gray-water dispersal area	50	50	100	N	
LC1	Large capacity cesspools (Class V well - illegal)²	75	75	150	N	
MVW	Motor vehicle waste disposal (Class V well - illegal)²	illegal	illegal		N	

PWS ID / FACILITY ID	1270010 S17	UNIQUE WELL NO.	763769
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PCSI CODE	ACTUAL OR POTENTIAL CONTAMINATION SOURCE	ISOLATION DISTANCES (FEET)				LOCATION	
		Minimum Distances		Sensitive Well¹	Within 200 Ft. Y / N / U	Dist. from Well	Est. (?)
		Community	Non-community				
PR1	Privy, nonportable	50	50	100	N		
PR2	Portable (privy) or toilet	50	20		N		
*SF1	Watertight sand filter; peat filter; or constructed wetland	50	50		N		
SET	Septic tank	50	50		N		
HTK	Sewage holding tank, watertight	50	50		N		
SS1	Sewage sump capacity 100 gal. or more	50	50		N		
SS2	Sewage sump capacity less than 100 gal., tested, conforming to rule	50	20		N		
*ST1	Sewage treatment device, watertight	50	50		N		
SB1	Sewer, buried, approved materials, tested, serving one building, or two or less single-family residences	50	20		N		
SB2	Sewer, buried, collector, municipal, serving a facility handling infectious or pathological wastes, open-jointed or unapproved materials	50	50		Y	110	N
*WB1	Water treatment backwash holding basin, reclaim basin, or surge tank with a direct sewer connection	50	50		N		
*WB2	Water treatment backwash holding basin, reclaim basin, or surge tank with a backflow protected sewer connection	20	20		N		
Land Application							
SPT	Land spreading area for sewage, septage, or sludge	50	50	100	N		
Solid Waste Related							
COS	Commercial compost site	50	50		N		
CD1	Construction or demolition debris disposal area	50	50	100	N		
*HW1	Household solid waste disposal area, single residence	50	50	100	N		
LF1	Landfill, permitted demolition debris, dump, or mixed municipal solid waste from multiple persons	300	300	600	N		
SVY	Scrap yard	50	50		N		
SWT	Solid waste transfer station	50	50		N		
Storm Water Related							
SD1	Storm water drain pipe, 8 inches or greater in diameter	50	20		Y	70	N
SWI	Storm water drainage well² (Class V well - illegal³)	50	50		N		
SM1	Storm water pond greater than 5000 gal.	50	35		N		
Wells and Borings							
*EB1	Elevator boring, not conforming to rule	50	50		N		
*EB2	Elevator boring, conforming to rule	20	20		N		
MON	Monitoring well	record dist.	record dist.		N		
WEL	Operating well	record dist.	record dist.		N		
UUW	Unused, unsealed well or boring	50	50		N		
General							
*CR1	Cistern or reservoir, buried, nonpressurized water supply	20	20		N		
PLM	Contaminant plume	50	50		N		
*CW1	Cooling water pond, industrial	50	50	100	N		
DC1	Deicing chemicals, bulk road	50	50	100	N		
*ET1	Electrical transformer storage area, oil-filled	50	50		N		
GRV	Grave or mausoleum	50	50		N		
GP1	Gravel pocket or French drain for clear water drainage only	20	20		N		
*HS1	Hazardous substance buried piping	50	50		N		
HS2	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight, without safeguards	150	150		N		
HS3	Hazardous substance tank or container, above ground or underground, 56 gal. or more, or 100 lbs. or more dry weight with safeguards	100	100		N		
HS4	Hazardous substance multiple storage tanks or containers for residential retail sale or use, no single tank or container exceeding 56 gal. or 100 lbs., but aggregate volume exceeding	50	50		N		
HWF	Highest water or flood level	50	N/A		Y	70	N
*HG1	Horizontal ground source closed loop heat exchanger buried piping	50	50		N		
*HG2	Horizontal ground source closed loop heat exchanger buried piping and horizontal piping, approved materials and heat transfer fluid	50	10		N		
IWD	Industrial waste disposal well (Class V well)²	illegal³	illegal³		N		
IWS	Interceptor, including a flammable waste or sediment	50	50		N		
OH1	Ordinary high water level of a stream, river, pond, lake, reservoir, or drainage ditch (holds water six months or more)	50	35		N		
*PP1	Petroleum buried piping	50	50		N		
*PP2	Petroleum or crude oil pipeline to a refinery or distribution center	100	100		N		

[illegible]

* New potential contaminant source.

¹ A sensitive well has less than 50 feet of watertight casing, and which is not cased below a confining layer or confining materials of at least 10' in thickness.

² These sources, known as Class V underground injection wells, are regulated by the federal U.S. Environmental Protection Agency.

³ These sources are classified as illegal by Minnesota Rules, Chapter 4725.

⁴ Isolation distance is determined by average flow per day or if a facility handles infectious or pathological wastes.

⁵ A community public water-supply well must be a minimum of 50 feet from a petroleum tank or container, unless the tank or container is used for emergency pumping and is located in a room or building separate from the community well; and is of double-wall construction with leak detection between walls; or is protected with secondary containment.

This form is based on the new isolation distances in Minnesota Rules, Chapter 4725, related to wells and borings adopted August 4, 2008, and Minnesota Rules, Chapter 4720, related to wellhead protection.

PWS ID / FACILITY ID

1270010 S17

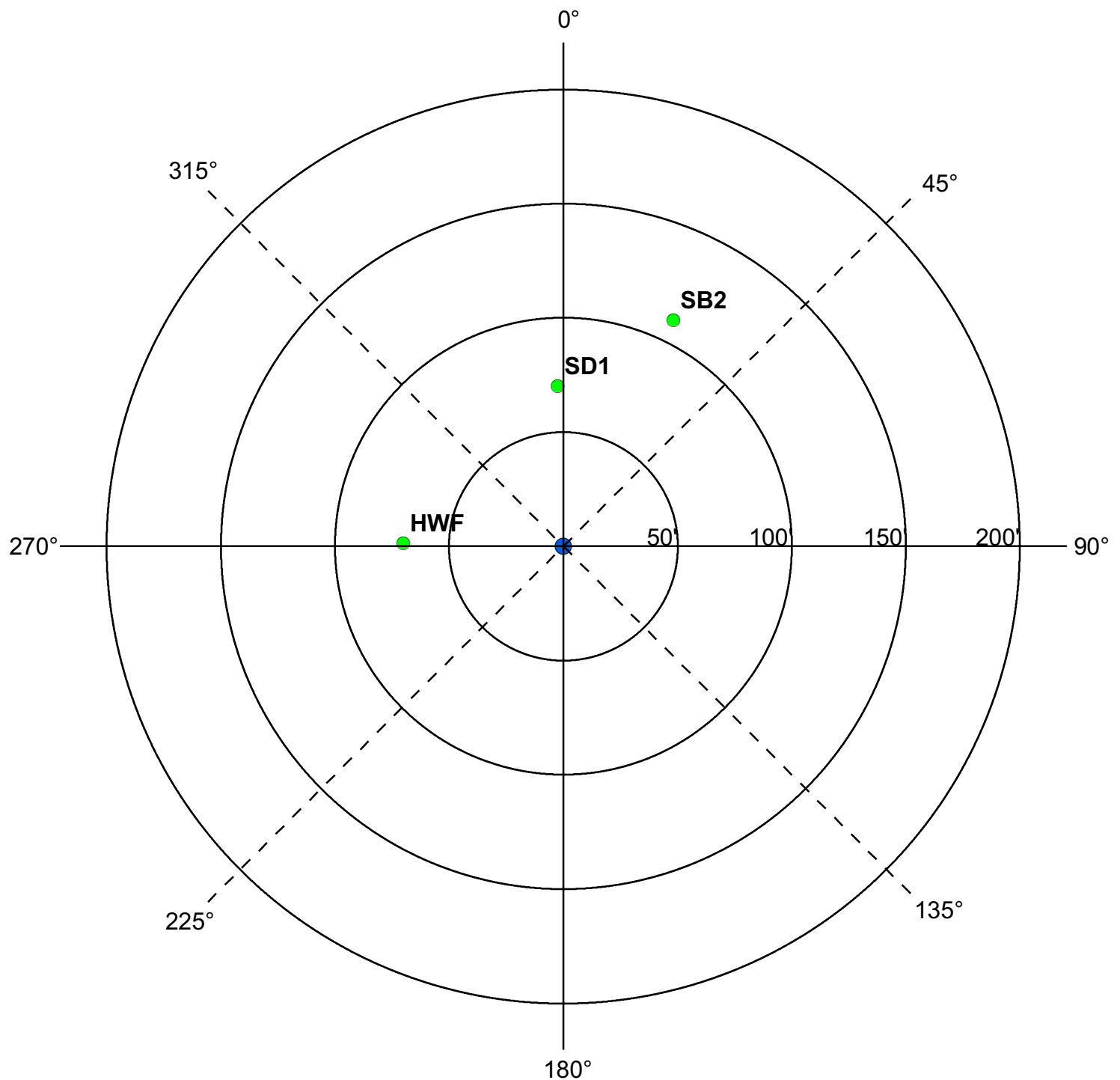
UNIQUE WELL NO.

763769

SETBACK DISTANCES

All potential contaminant sources must be noted on sketch.

Record the distance and approximate compass bearing of each potential contaminant source from the well, and identify the source using the "Source Code". Unlabeled points on the map are unsealed wells.



Y	N	N/A
		X
		X

Were the isolation distances maintained for the new sources of contamination?

Is the system monitoring existing nonconforming sources of contamination?

Reminder Question: Were the wellhead protection measure(s) implemented?

INSPECTOR

Freitag, John

DATE

7 - 31 - 2012

PWS ID / FACILITY ID	1270010 S17	UNIQUE WELL NO.	763769
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RECOMMENDED WELLHEAD PROTECTION (WHP) MEASURES	WHP MEASURE IMPLEMENTED? Y or N	DATE VERIFIED

COMMENTS

For further information, please contact:

Minnesota Department of Health
 Drinking Water Protection Section
 Source Water Protection Unit
 P.O. Box 64975
 St. Paul, Minnesota 55164-0975

Section Receptionist: 651-201-4700
 Division TDD: 651-201-5797 or MN Relay Service @ 1-800-627-3529 and ask for 651-201-5000