

# Cold Spring Targeted Nutrient Reduction Program

— An innovative approach to accelerate conservation adoption



**Project Description:** The City of Cold Spring is a community of approximately 4,000 people. It supplies water to two large water consuming industries: Cold Spring Brewing Co. and Pilgrim's Pride (chicken processing facility). To meet the needs of both the residents and industries, Cold Spring owns 6 municipal wells, of which only 4 wells are available for public use because of high nitrates. Once a public water supply well reaches the maximum contaminant limit (MCL) of 10.4 mg/L nitrate-nitrogen it is taken permanently off-line unless further treatment can be provided. The Brewery currently leases one of the high nitrate wells and treats with reverse osmosis to remove the excess nitrogen. Of the four primary wells used by the city, three are plagued with high nitrates ranging from 4 to 10 mg/L nitrate. For a large financial commitment, the city can invest in further treatment of their wells, which is simply putting a band-aid on the problem, or they can take a holistic approach and reduce the amount of nitrogen applied within their Drinking Water Supply Management Area (DWSMA) at a fraction of the cost. The city has been working cooperatively with the farmers in their DWSMA since 2010 offering incentives for nitrogen reduction best management practices. For farmers to be eligible for financial assistance, they must demonstrate that they are following the U of M guidelines for nitrogen application on coarse textured soils. As part of the city's amended WHP plan, they will be developing a nutrient management plan to further evaluate and address the ongoing nitrogen challenges. This plan will be updated every 2 years and will be a cooperative effort between local and state agencies.

## Pollution Reduction Estimates:

Nitrogen                      4,076 Lbs./Yr.

The program targeted 15 priority parcels, approximately 500 acres planted to corn. After the first year, three producers enrolled 277 acres.

## Funding:

State Funds*	\$ 20,000
Other Funds**	\$ 5,000

\* MDH Source Water Protection Competitive Grant (50% match by the city for a total of \$20,000 project funds/grant) The city has been awarded 2 competitive grants for nutrient reduction.

\*\* Annual city investment beyond grant funding

## Eligible Practices:

- Cover Crops
- Nitrogen Inhibitors
- Split Application of Nitrogen
- Low-input Crops
- Crediting Nitrogen in Irrigation Water
- BMP Challenge (program expired)

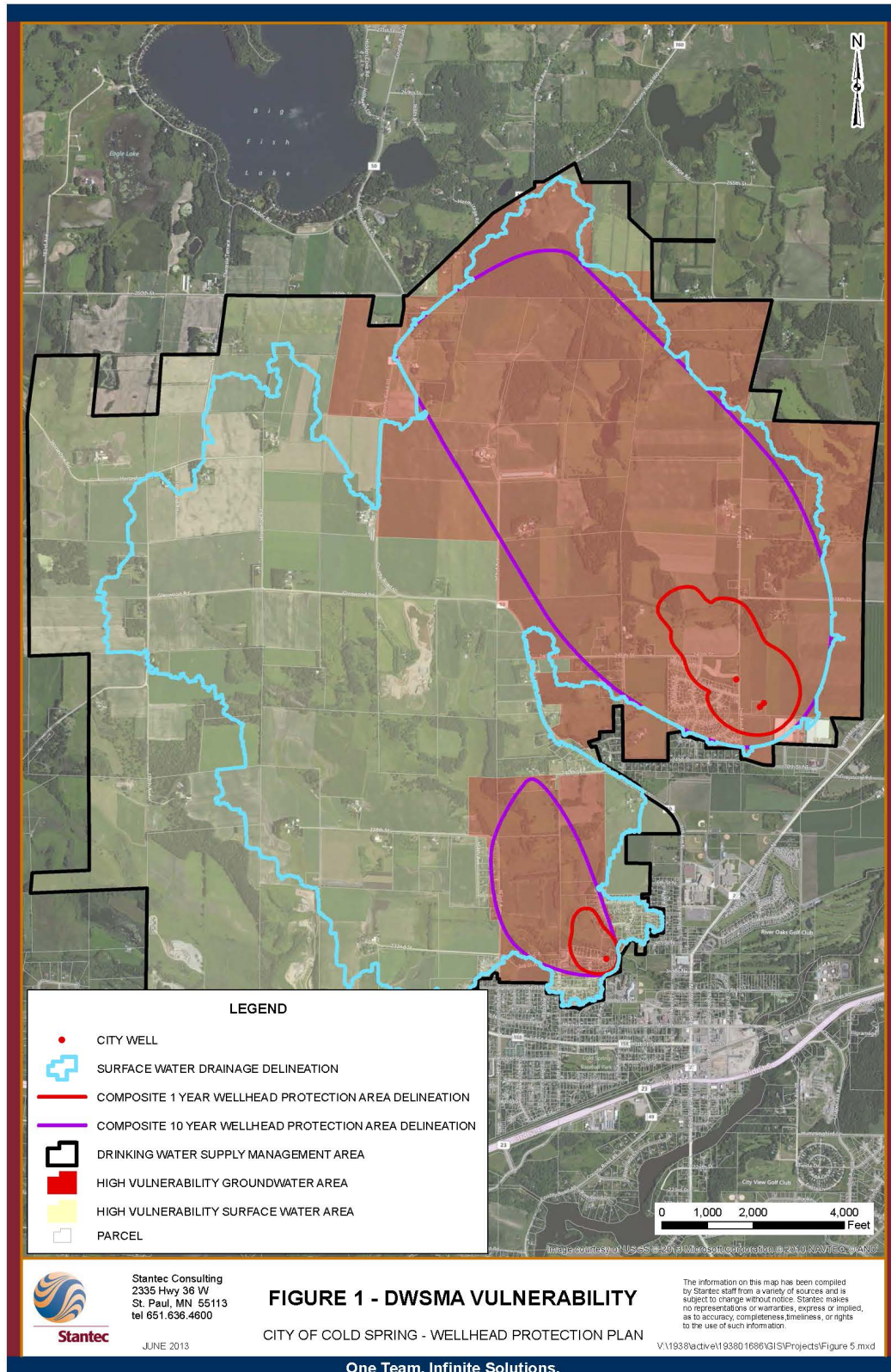
## Target Waters:

- Cold Spring DWSMA

## Partners:

- City of Cold Spring
- Landowners
- Area Co-ops
- Crop Consultants
- American Farmland Trust
- MN Rural Water Association (MRWA)
- MN Dept. of Ag
- MN Dept. of Health
- Conservation Marketplace Midwest (CMM)
- Stearns Co. SWCD

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## Program Facts:

Before developing the program, SWCD staff met with each individual farmer and their crop consultant. These meetings provided:

- A sense of their current farm management
- Identified BMPs the farmers would be willing to adopt
- Built confidence in the program

## Challenges:

- Farmers in the project area are independent and historically have not participated in USDA programs.
- Longstanding issues between the city and the farmers. Former city council members claimed farmers were responsible for the elevated nitrates in their water supply.

## Other Efforts:

- North Point Neighborhood
- Turf Study (MDA)
- Fertilizer & Irrigation

Cold Spring's Drinking Water Supply Management Area (DWSMA) was updated in 2013 as part of their Wellhead Protection Plan Amendment.