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## 3. GOALS AND POLICIES

### 3.1 PURPOSE

A goal of this Comprehensive Surface Water Management Plan is to provide clear guidance on how the City of Cold Spring intends to manage the quantity and quality of its runoff. Significant changes in water management requirements, strategies, and expectations have taken place in the past 15 years that place new emphasis on the management of stormwater. Among these are:



*Increased awareness will help protect the City's water resources*

- Adoption of regulations—particularly those associated with the 1991 Wetland Conservation Act and subsequent amendments by the Minnesota legislature—that provide increased protection to wetlands.
- Increased emphasis on treatment of stormwater to protect the water quality of downstream lakes, wetlands, rivers, and streams.
- An increase in flooding around the region.
- Increased public awareness and education.

This CSWMP provides the blueprint for how the City intends to be responsive to these and other important stormwater management priorities. Equally important, the CSWMP is intended to meet and support the requirements of the Sauk River Watershed District that has water management jurisdiction over the entire study area.

### 3.2 BACKGROUND

The City has a community-wide Comprehensive Plan that is revised and updated regularly and provides a foundation for the specific goals and policies of this CSWMP. The CSWMP builds upon the Comprehensive Plan through technical analysis and the establishment of land use goals and policies.

The principle environmental protection goals that guide the CSWMP are:

1. To establish and enforce strict standards and criteria, in order to preserve the natural and manmade environment of Cold Spring.
2. To protect and improve water quality with pollution prevention as the primary focus.



3. To protect and improve sensitive or unique natural systems within the City.

### 3.3 COLD SPRING CSWMP GOALS AND POLICIES

This section of the CSWMP outlines goals and policies related specifically to surface water management in the City of Cold Spring. These goals and policies are a reflection of the City Council's desire to reach and sustain a high quality of life for the City's residents.

#### ***Goal 1: Flood Protection***

To provide flood protection for all residents and structures as well as protect the integrity of conveyance channels and stormwater detention areas.

##### Policy 1.1 – Flood analysis design storms and critical conditions

In general, a 10-year rainfall event is used for storm sewer design, and the 100-year, 24-hour Type II rainfall event for ponding areas.

##### Policy 1.2 – Peak flow rate limits

Peak flow rates after development shall not exceed peak flow rates for the 100-year recurrence interval rainfall event for all discharges from a ponding or sediment basin as presented in Appendix C. Peak flow rates shall also not exceed predevelopment peak flows for the 1-yr, 2-yr and 100-year recurrence interval rainfall events if overland flows are directly tributary to an existing overland drainage swale, creek, river or lake. These standards are intended to preserve the integrity of downstream natural and manmade conveyance facilities and detention areas.



### Policy 1.3 – Freeboard requirements

All new structures (buildings) are required to be constructed so that the low opening elevation of the building is at least 2 feet above the high water level for the 100-year recurrence interval rainfall event and at least 1 foot above the surveyed overflow elevation of any immediately adjacent surface waterbody, wetland, stormwater basin or emergency overflow level from minor depressions including roadway low points. The overflow is to allow excess runoff to be conveyed overland to another ponding area without entering buildings.

### Policy 1.4 – Freeboard requirements for land-locked areas

A land locked basin in one which has no reasonable natural overflow elevation. It is acknowledged that this definition is somewhat subjective as all basins will overflow given enough runoff to fill them up. Where structures are proposed below the overflow elevation for a landlocked basin, the low-floor elevation is to be kept at a minimum of 2 feet above the high water elevation as determined from back-to-back 100-year, 24-hour rainfalls.

### Policy 1.5 – Regional vs. on-site detention basins

Regional detention basins are used to manage peak flow rates and meet water quality objectives where possible. On-site detention basins are used when regional basins are not in place or are not feasible.

### Policy 1.6 – Preservation of flood storage

The City maintains a policy of “no net loss of storage capacity” in designated stormwater basin ponding areas. Therefore, no loss of natural or manmade storage volume due to filling will be allowed without storage being mitigated 1:1 within the same ponding area.

### Policy 1.7 – Design standard for conveyance facilities

The 10-year rainfall event is used as the minimum criterion for all stormwater conveyance facility designs.



Policy 1.8 – Vulnerable area emergency response plan

Areas where 100-year flood protection is not provided will be identified and emergency response plans will be developed for those areas. These will generally occur in existing developed areas. Identifying these areas will help provide a rapid response to these areas during large runoff events.

Policy 1.9 – Developer responsibility for addressing existing stormwater problems

For development and redevelopment projects affecting stormwater problem areas identified in this CSWMP, the City requires the developer to incorporate such practices as are necessary to resolve a proportionate share of the problem.

Policy 1.10 – Infiltration

The City will encourage the use of infiltration strategies for the replenishment of the area aquifers as an enhancement to the policies herein. The City will use infiltration practices as a first course of action whenever practical within the Brewery Creek watershed to minimize thermal impacts to the creek due to runoff. Infiltration is sensitive groundwater recharge areas needs to be managed carefully to avoid the potential for groundwater pollution. Infiltration is intended for smaller runoff events only and should be used in concert with traditional storage to provide the level of protection required by this plan.

Policy 1.11 – Impervious surface reduction/minimization

The City encourages reduction of, or minimizing increases in, the amount of impervious surface created as a result of land development or redevelopment activities.

- Single Family – 35% impervious maximum
- Commercial/Industrial – 75% impervious maximum

**Goal 2: Pollution Prevention and Treatment**

To promote the reduction of phosphorus, total suspended solids, and other pollutants to waterbodies by regulation, municipal management activities, and public education.

Policy 2.1 – Stormwater treatment application and performance standards



The City requires stormwater treatment in development and redevelopment areas. Water quality treatment facilities are designed to meet the following performance criteria: at least 60% removal of total phosphorus and 90% removal of total suspended solids (TSS) on an average annual basis. Accepted technical methodologies—such as the PondNET model for phosphorus and the P-8 model for TSS—and/or scientifically valid field studies are used to evaluate the effectiveness of these practices.

#### Policy 2.2 – Detention basin design

Detention basins are designed based on “Protecting Water Quality in Urban Areas” (March 2000) developed by the Minnesota Pollution Control Agency. Ponds have outlet control structures that prevent trash and floating debris from entering the downstream conveyance system.

#### Policy 2.3 – Street sweeping

The City sweeps all urban street sections at least twice each year. Spring sweeping of snow and ice control aggregate begins usually late March or early April, after the risk of late snowfall has passed. Fall sweeping commences mid-August and is usually completed by Labor Day weekend. Stormwater quality areas are swept on a priority basis throughout the year. Sweeping operations over and above these levels are conducted on an as-needed basis as determined by the City. Sweeping after the trees have pollinated is also a good time for a third sweeping as this “debris” is high in phosphorous.

#### Policy 2.4 – Snow Storage

Snow storage areas contain high levels of salt, general debris and sediment due to the concentration of these pollutants being brought in from other areas. It is important to make sure these sites are not immediately adjacent to existing water bodies. They should be located in areas that encourage infiltration instead of allowing the runoff to leave the site. The storage areas should have the debris cleaned up and hauled to a landfill when the melt has finished.



### ***Goal 3: Hazardous Materials***

To prevent hazardous waste/material from entering the stormwater drainage system.

#### **Policy 3.1 – Illegal dumping in storm sewer system**

The City will modify its ordinances to prohibit the dumping of foreign material into the stormwater management system, including oil, gasoline, antifreeze, paint, solvents, herbicides/pesticides, grass clippings/leaves, pet wastes, and any ecologically harmful chemicals.

#### **Policy 3.2 – Spill response capability**

The City has a spill response capability in place through the Fire Department. The response program focuses on containing, neutralizing, and properly disposing of spilled material. This will be extended to include preventing the discharge of spilled toxic or hazardous materials into the storm drainage system (e.g. gasoline, oils, fertilizers, etc.).

The Fire Department and the Public Works Department has or will strive to have a readily available supply of response materials, including containment booms and absorbent pads. Stearns County Haz Mat team is another source for assistance to the City.

#### **Policy 3.3 – Catch Basin Castings**

The City will require all new and replaced catch basin castings to have stamping that says “Do not dump” as a minimum on the top of the curb box.



#### ***Goal 4: Education***

To involve the general public, City staff, and the business community in water quality management efforts.

##### **Policy 4.1 – Public Education**

The City will continue to develop and implement public education programs in cooperation with other agencies and regulatory authorities (e.g., SRWD, Stearns County, MnDNR, etc.). The programs have in the past been directed primarily at the City’s residents. The objectives are to reduce phosphorus, total suspended solids, and pesticide/herbicide loadings to waterbodies as well as to encourage ecologically sound shoreland management practices.

##### **Policy 4.2 – City staff involvement**

City staff members are informed about the City’s stormwater management efforts. The City will continue to present information to all City staff, especially those in the Public Works and Parks Departments, regarding the City’s stormwater management initiatives/efforts and how they can help the City implement the policies outlined in this CSWMP.

##### **Policy 4.3 – City setting an example regarding housekeeping practices on City-owned land.**

The City follows best management practices in managing and maintaining City-owned land. These practices include soil fertility testing for maintained areas; following fertilizer application recommendations based on those test results; fall application of fertilizers containing phosphorus (if needed); preservation of natural unmaintained buffers between watercourses and turf areas; and preventing discharge of grass clippings from mowing operations onto paved areas.



#### Policy 4.4 – City cooperation in providing information on state fertilizer regulations

The City shall continue to consider adoption of an ordinance that supports and is consistent with the new MN Statute on fertilizing regulations for cities. This law went into effect January 1, 2004. The ordinance shall include licensing requirements, random sampling, and compliance with the state law regarding the use of fertilizer. The ordinance should also limit the use of phosphate and consider provisions for a “no fertilizer” buffer zone around wetlands and other water resources.

The state bans application of lawn fertilizers containing phosphate with some exceptions, such as where a recent soil test has shown the lawn soil is deficient in phosphorus. The City will continue to promote awareness of this law among residents and business owners.

#### ***Goal 5: Improve Function and Value***

To identify and protect wetland resources in order to maintain or improve their function and value.

#### Policy 5.1 – Wetland Conservation Act administration

The City has deferred the local government unit (LGU) for administration of the Wetland Conservation Act of 1991 and all subsequent amendments in all portions of the City to Stearns County. Replacement of wetlands shall be undertaken in the following order: 1) in the City, 2) within the regional sub-watershed, and 3) within the watershed.

#### ***Goal 6: Aesthetic Characteristics of Ponding Areas***

To provide for ponding areas that are harmonious with their surrounding and/or enhance the aesthetic appeal of their surrounding environment.

#### Policy 6-1 Ponding Aesthetics

The City shall require that all ponds be developed as amenities for aesthetic value and encourage wildlife habitat.



## 3.4 WATERSHED DISTRICT REQUIREMENTS

The City of Cold Spring falls under the jurisdiction of the Sauk River Watershed District (SRWD). A general overview of the SRWD requirements are presented below, but readers are encouraged to contact the Watershed directly to obtain the most up-to-date information on their goals, policies, and programs.

### 3.4.1 Sauk River Watershed District

The Sauk River Watershed District covers an area of approximately 1,000 square miles in Douglas, Todd, Pope, Meeker and Stearns Counties, the majority of which are within Stearns County. The Sauk River is the major surface water feature within the watershed, but there are also numerous lakes and reservoirs within the jurisdictional boundaries of the SRWD.

The SRWD is currently amending its management rules related to water quantity and quality. That process is expected to be completed within the next 3-6 months at which point the amended rules should be incorporated into this plan. The City should provide comments to the Watershed as they undertake this process in order to proactively work as partners on the final rules.

The SRWD currently has very few regulatory controls in place to deal with stormwater management. The SRWD issues permits for excavation activities to ensure proper erosion control measures are used to protect downstream resources. They also have a “catch all” rule that allows them to be more actively involved in stormwater issues if they deem downstream impacts will occur as a result of an alteration.

## 3.5 STATE AND FEDERAL AGENCY REQUIREMENTS

This section of the CSWMP presents a synopsis of the current agency requirements while acknowledging the existence of other requirements that may be applicable. The City is committed to the preservation and enhancement of its wetlands and water resources through full compliance with local, state, and federal wetland regulations.



### 3.5.1 Minnesota Department of Natural Resources (MnDNR)

At the state level, Types 3, 4, and 5 wetlands are protected by statute. These are areas typically recognized as wetlands and are generally characterized by open water and emergent vegetation through most of the year. The state has jurisdiction over only those wetlands appearing on the state's inventory of protected waters. Wetlands in the inventory are generally those in excess of 10 acres in rural areas, or in excess of 2.5 acres in municipalities and incorporated areas.

If an area meets the jurisdictional criteria but is not on the state's inventory, it is not regulated. If it does not meet the statutory criteria but is listed on the inventory, it still is subject to MnDNR regulation. There is no mechanism for adding or deleting wetlands. The inventory was begun in the late 1970s, and all state inventories were completed during the early 1980s.

The MnDNR rules specify that permits may not be issued for any project except those that provide for public health, safety, and welfare. Any private development projects are effectively excluded from permit consideration by this requirement.

### 3.5.2 U.S. Army Corps of Engineers (USACE)

Under Section 404 of the Clean Water Act, including subsequent modifications, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) regulate the placement of fill into all U.S. wetlands. In 1993, there was a modification of the definition of "discharge of dredged material" to include incidental discharges associated with excavation. This modification of the "discharge of dredged material" definition meant that any excavation done within a wetland required the applicant to go through Section 404 permitting procedures. In 1998, however, this decision was modified so that excavation in wetlands is now regulated by the USACE only when it is associated with a fill action.



### 3.5.3 Board of Water and Soil Resources (BWSR)

The local and regional wetland rules are governed by the Wetland Conservation Act (WCA). The WCA, passed in 1991, extends protection to all wetlands unless they fall under one of the exemptions of the WCA. The WCA follows a “no net loss” policy. The wetlands covered under the WCA must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland of at least equal public value under an approved replacement plan. Replacement ratio is typically 2:1 (2 acres created for every 1 acre filled) for wetland impacts.



*Type 1 regulated wetland*

A designated Local Government Unit (LGU) is responsible for making exemption and no-loss determinations and approving replacement plans. Currently, Stearns County acts on the City’s behalf in this capacity for WCA administration within the study area.

### 3.5.4 Minnesota Pollution Control Agency (MPCA)

The USACE implements provisions of Section 404 of the Clean Water Act with guidance from the EPA through a permitting process. The Section 404 permit also requires a Section 401 water quality certification before it is valid. The EPA has given Section 401 certification authority to the MPCA.

### 3.5.5 State and Federal Jurisdictional Boundaries for Public Wetlands and Waters

Wetlands are delineated in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987). Wetlands must have a predominance of hydric soils. Hydric soils, by definition, are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, under normal circumstances, a prevalence of hydrophytic (water tolerant) vegetation typically adapted for life in saturated soil conditions. The USACE and the BWSR regulate wetlands as defined by a jurisdictional delineation.

For wetlands that fall under MnDNR jurisdiction, the Ordinary High Water Level (OHW) determines the boundary of MnDNR jurisdiction. The OHW is established by the MnDNR.

