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### IV. ISSUES/CONCERNS AND CORRECTIVE ACTIONS

Outlined below is an assessment of existing and potential water resource-related issues that are known at this time. These issues have been identified based on Commission input, member cities' input, and public input. While some of the items are documented issues/concerns, others have been identified as a perceived concern through the public input process. Additional study may be necessary to determine the extent of the perceived concerns.

The Commission's role in addressing the potential and existing issues/concerns outlined within this section shall be the following:

- The Commission defers to member cities the responsibility of addressing the water resource management needs, concerns, issues, and problems identified within this plan, provided the impact of the problem and source of the impact are wholly contained within a given community and the affected community is in conformance with the Commission's Watershed Management Plan. Problems, issues, or concerns recognized for capital improvements in this plan shall be recognized for capital improvements within the appropriate member cities' surface water management plan.
- In cases where impacts or the source of impacts transcend municipal boundaries, or the community is found to not be in compliance with this Plan, the Commission shall review such problems and coordinate with the appropriate local government(s) for resolution. It will be the responsibility of the member cities to implement a project that is acceptable to the Commission. In cases where the member city refuses to implement a project per the directives of the Commission, or requests the Commission to facilitate resolution of the problem, the Commission shall perform such a function in conformance with the terms of the Commission's Joint Powers Agreement. Funding for these projects shall be per the Joint Powers Agreement and/or through grants.

A description of any existing or potential concerns within each topic area has been listed below.

#### A. **LAKE, STREAM, AND WETLAND WATER QUALITY CONCERNS**

1. The water quality of Lake Independence located within the Cities of Independence and Medina was identified as a concern.
2. The water quality of Lake Rebecca located within the Cities of Greenfield and Independence and Three Rivers Park District was identified as a concern.
3. The water quality of Lake Sarah located in the Cities of Greenfield and Independence was identified as a concern.

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4. The water quality of Spurzem Lake located within the City of Medina and Three Rivers Park District was identified as a concern.
5. The water quality of Half Moon Lake located within the City of Medina and Three River Park District was identified as a concern.
6. The water quality of Whaletail Lake located within the City of Minnetrista was identified as a concern.
7. The water quality of Haughey Lake located within the City of Independence was identified as a concern.
8. The turbidity and low oxygen content of the Crow River was identified as a concern.
9. The water quality impacts of the Loretto Wastewater Treatment Facility were identified as a concern.
10. The continued protection of the water quality of Little Long Lake in Minnetrista was identified as important.
11. Water quality impacts associated with hobby farms, feedlots, and development have been identified as a concern.
12. Water quality impacts associated with residential pollution such as fertilizers were identified as a concern.
13. It has been recognized that there is concern regarding the general quality of lakes, streams, and wetlands on active and passive water based recreational opportunities.
14. Selected areas of the watershed have been exposed to degraded water quality as a result of an increase in impervious surface area due to development.
15. The future maintenance of the two stormwater detention ponds constructed in 2000/2001 on Loretto Creek to reduce phosphorus entering Lake Sarah has been identified as an issue.

### **Corrective Action**

- a. The Commission shall implement the water quality policies and standards outlined within the Plan through development plan review and review of the local stormwater management plans in an effort to address water quality concerns within the watershed.

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- b. The Commission shall consider completing a water quality study of the lakes as prioritized as part of the implementation of this plan.
- c. The Commission will support local cities' efforts to address and correct degradation problems within existing lakes and wetlands and strive to meet water quality goals set forth in this Plan.
- d. The Commission will require that water quality problems recognized within this plan be recognized within the appropriate member cities' surface water management plan.
- e. The Commission shall undertake water quality improvement projects for water quality impacts that transcend municipal boundaries as funding becomes available.
- f. The Commission supports the State's regulation on phosphorus fertilizer uses for residential use and encourages the reduction of phosphorus fertilizer use for other uses.
- g. The Commission shall develop and implement a non-degradation policy within the watershed for the surface waters outlined within **Appendix F** and DNR Public Waters and Wetlands.
- h. The Commission shall implement an educational program targeted at educating the public, City Staff, and elected officials about water quality.
- i. The Commission may work with local Lake Associations to address water quality issues to the greatest extent feasible and practical.
- j. Undertake the recommendations in the report "Physical and Ecological Classification of Pioneer and Sarah Creek and their Tributaries".
- k. The Commission shall facilitate the completion of a study regarding the water quality impacts from the Loretto Wastewater Treatment Facility.
- l. The Commission will continue to work with the local cities to address the impacts of land use on Pioneer-Sarah Creek watershed water resources.
- m. There are no easements around the two stormwater detention basins constructed upstream of Lake Sarah in 2000/2001. As such, the future maintenance of these basins will be addressed as the need arises with the landowners, Cities, Lake Association, and Commission.
- n. The Commission will consult with the Crow River Organization of Water (CROW) on issues related to the Crow River.

**B. FLOODING, STORMWATER RATE CONTROL, AND WATER QUANTITY CONCERNS WITHIN THE WATERSHED AND BETWEEN MEMBER COMMUNITIES**

1. High water elevations on the following water bodies have been identified as a concern:
  - Lake Independence in the Cities of Independence and Medina
  - Lake Sarah in the Cities of Greenfield and Independence
  - Peter Lake and its outlet, Spurzem Creek, in the City of Medina
  - Lake Haughey in the City of Independence
  
2. Flooding of a park area located in northwestern Loretto has been identified as a concern.
  
3. Concern has been identified regarding the flows from the Loretto Wastewater Treatment Facility during periods of significant rainfall or snowmelt impacting downstream areas.
  
4. Flooding within Tamarack Swamp in Medina has been identified as a concern.
  
5. Flooding of trails along County Road 50 near Lake Rebecca due to the Crow River has been identified as a concern.
  
6. Selected areas of the watershed have been exposed to increased rates and volumes of stormwater runoff as a result of an increase in impervious surface area due to development.
  
7. The maintenance of private drainageways (i.e. private ditches or draintile) was identified as a concern.
  
8. The City of Delano has identified rate and volume control concerns associated with the culverts north and south of the railroad at County Line Road between the Cities of Independence and Delano.

**Corrective Action**

- a. The Commission shall implement the water quantity policies and standards outlined within the Plan through development plan review and review of local stormwater management plans in an effort to address flooding and increased flow rate and volume concerns within the watershed.
  
- b. The Commission shall implement a water quantity-monitoring program to evaluate and track the water quantity of lakes and streams.

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- c. Undertake the recommendations in the report, "Physical and Ecological Classification of Pioneer and Sarah Creek and their Tributaries".
- d. The Commission shall facilitate the completion of a study regarding the flows from the Loretto Wastewater Treatment Facility.
- e. The Commission will continue to work with the local cities to address the impacts of land use on Pioneer-Sarah Creek watershed water resources.
- f. The local community will be responsible to address private drainage system maintenance provided the system is solely within that community. If private drainage systems transcend municipal boundaries, the Commission will coordinate with the member communities and landowner to address the issue. Funding to address this issue can be obtained through the mechanisms available to each City.
- g. The Commission will facilitate between the City of Independence and the City of Delano to study the rate and volume control issue associated with the railroad culverts at County Line Road. The City of Independence will be responsible to coordinate any project with the City of Delano, if necessary.

### **C. IMPACTS OF STORMWATER QUALITY ON FISH AND WILDLIFE RESOURCES**

- 1. Impacts to fish and wildlife resources have been identified, including decreased floristic diversity and impacted wildlife habitat, as a result of stormwater.
- 2. The protection of the existing wildlife resources at Little Long Lake has been identified as important.

#### **Corrective Action**

- a. The Commission shall implement the water quality standards outlined within the Plan through development plan review and review of local stormwater management plans in an effort to address water quality impacts of fish and wildlife resources.
- b. The Commission shall implement an education program targeted at educating the public, City Staff, and elected officials about water quality and quantity management practices.
- c. The Commission shall consider undertaking a wetland functions and values assessment in part of or the entire watershed if directed to do so by member communities. This information shall be used by the local communities to develop a wetland management plan.

**D. IMPACTS OF SOIL EROSION ON WATER QUALITY AND WATER QUANTITY**

1. Construction site erosion has been identified as a concern within the watershed. This type of erosion carries sediment to water bodies within the watershed and has reduced the depth of water within these water bodies and degrades the quality of water in the basin.
2. Erosion along the banks of Lake Independence was identified as a concern.
3. Erosion along the banks of Pioneer Creek was identified as a concern.
4. Erosion along the banks of Lake Sarah was identified as a concern.
5. Erosion caused by commercial, hobby farm, and agricultural/farming activities has been identified as a concern.
6. It is the position of the Commission that the existing programs are adequate to limit soil erosion and corresponding water quality degradation, provided that enforcement of these programs is expanded.

**Corrective Action**

- a. The Commission shall implement the standards outlined within the Plan through development plan review and review of local stormwater management plan to address erosion issues within the watershed.
- b. The Commission shall maintain a list of erosion problem areas and provide this information to the member communities.
- c. The Commission will seek grants and, as funds become available, implement erosion control measures within the watershed.
- d. The Commission shall implement an education program targeted at educating the public, City Staff, and elected officials about erosion control.
- e. Undertake the recommendations in the report, "Physical and Ecological Classification of Pioneer and Sarah Creek and their Tributaries".
- f. The Commission shall require member communities to develop erosion and sedimentation ordinances in conformance with this Watershed Management Plan's policies and standards.
- g. The Commission shall develop a model ordinance to address erosion caused by agricultural activities.

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- h. The member communities shall be responsible for enforcement of these ordinances. If member communities are not enforcing these ordinances or member communities are not in conformance with the Commission Watershed Management Plan, the Commission shall exercise authority in conformance with the Joint Powers Agreement.

### **E. THE ADEQUACY OF EXISTING REGULATORY CONTROLS TO MANAGE OR MITIGATE ADVERSE IMPACTS ON PUBLIC WATERS AND WETLANDS**

1. The Commission feels that the existing regulatory controls contained within this watershed plan are adequate to manage or mitigate adverse impacts on public waters and wetlands, but that education of the public and city officials can assist in making existing controls more effective.

#### **Corrective Action**

- a. The Commission shall implement an education program targeted at educating the public, City Staff, and city officials about wetlands and watershed management issues.
- b. Create developer's guidelines based on the goals, policies, and standards outlined within this Plan.

### **F. THE ADEQUACY OF PROGRAMS TO MAINTAIN THE TANGIBLE AND INTRINSIC VALUES OF NATURAL STORAGE AND RETENTION SYSTEMS**

1. The programs outlined within this Plan along with other state and federal programs are adequate to maintain the tangible and intrinsic values of natural storage and retention systems.

#### **Corrective Action**

- a. No corrective action is required.

### **G. THE ADEQUACY OF PROGRAMS TO MAINTAIN WATER LEVEL CONTROL STRUCTURES**

1. The programs outlined within this Plan are adequate to maintain water level control structures.

#### **Corrective Action**

- a. Implement the programs outlined in this Plan as funding becomes available.

**H. THE ADEQUACY OF CAPITAL IMPROVEMENT PROGRAMS TO CORRECT PROBLEMS RELATING TO WATER QUANTITY, WATER QUALITY MANAGEMENT, FISH AND WILDLIFE HABITAT, PUBLIC WATERS AND WETLAND MANAGEMENT, AND RECREATIONAL OPPORTUNITIES**

1. The capital improvement programs outlined within this Plan are adequate to correct problems related to these items.

**Corrective Action**

- a. Implement capital improvement programs in this Plan as funding becomes available.

**M. OTHER ISSUES**

1. This Watershed Management Plan is intended to address water resource impacts in the upcoming 5 to 10 years. Long-term impacts in the next 20 years are anticipated by the Commission and include an increased pressure to continue to improve the water quality of surface waters within the watershed and address the increase in stormwater rates and volumes associated with future development.
2. As per the requirements of Minnesota Rule 8410, a map of the existing stormwater system is required either in the Watershed Plan or the local plan. For many of the member cities, this information is not available. A hydrologic/hydraulic model is also not available for the majority of the watershed. There is also a lack of 2-foot contour data for the watershed, thus making the creation of a model time consuming and costly for either the Commission or the member communities.

**Corrective Action**

- a. Based on the lack of funding and the low priority of these items, no action is needed at this time. In the short-term (5 to 10 years), the Commission shall continue to implement this Plan through the development plan review process; education of the public, City Staff, and elected officials; implementation of the goals, policies, standards; and implementation of the capital improvements, studies, and programs outlined within the Plan.
- b. The Commission shall continue to work with the member communities to implement these items. The policies and standards outlined within the Plan are intended to address these issues for the next 5 to 10 years. At that time, the Plan is anticipated to be revised and address the long-term issues that are expected to arise.

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- c. This technical background information is not a priority for the Commission to obtain at this time. If funding becomes available in the future, either from grants or from member communities, this type of technical background information could be obtained.