

SCOPING 2 – City of St. Cloud
July 14, 2005

LIST OF DATA ELEMENTS/APPLICABILITY:

- X** = data elements from **Part 1 SWP** that need to be considered for **Part 2 SWP**
- #** = data elements determined by MDH as required for **Part 2 SWP**
- T** = data elements to be determined on completion of the USGS gains and losses study

Physical Environment

Precipitation

- X** - Existing map or list of local precipitation gauging stations; and
- X** - Existing table showing the average monthly and annual precipitation in inches for the preceding five years.

Geology

- X** - 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;
- T** - Existing records of the geologic materials penetrated by wells, borings, exploration test holes, or excavations, including those submitted to the department;
- T** - Existing borehole geophysical records from wells, borings, and exploration test holes; and
- X** - Existing surface geophysical studies.

Soil

- X** - Existing maps of the soils and a description of soil infiltration characteristics; and
- X** - Existing description or an existing map of known eroding lands that are causing sedimentation problems.

Water Resources

- X** - Existing map of the boundaries and flow directions of major watershed units and minor watershed units;
- X** - Existing map and a list of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 15, and public drainage ditches;
- X** - Existing 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** - Existing map of wetlands regulated under Chapter 8420 and Minnesota Statutes, sections 103G.221 to 103G.2373; and
- X** - Existing map showing those areas delineated as floodplain by existing local ordinances.

Land Use

Land Use

- X** - Existing map of parcel boundaries;
- X** - Existing map of political boundaries;
- X** - Existing map of public land surveys including township, range, and section;
- #** - Map and an inventory of the current and historical agricultural, residential, commercial, industrial, recreational, and institutional land uses and potential contaminant sources (see attached PCSI worksheet for more detail);
- #** - Existing comprehensive land-use map; and
- #** - Existing zoning map.

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Public Utility Services

- X** - Existing map of transportation routes or corridors;
- X** - Existing map of storm sewers, sanitary sewers, and public water supply systems;
- X** - Existing map of the gas and oil pipelines used by gas and oil suppliers;
- X** - Existing map or list of public drainage systems.

Water Quantity

Surface Water

- X** - Description of high, mean, and low flows on streams;
- X** - List of lakes where the state has established ordinary high water marks;
- X** - List of permitted withdrawals from lakes and streams, including source, use, and amounts withdrawn;
- X** - List of lakes and streams for which state protected levels or flows have been established; and
- #** - Description of known water-use conflicts, including those caused by groundwater pumping.

Groundwater

- T**- List of wells covered by state appropriation permits, including amounts of water appropriated, type of use, and aquifer source;
- T**- Description of known well interference problems and water-use conflicts; and
- T**- List of state environmental bore holes, including unique well number, aquifer measured, years of record, and average monthly levels.

Water Quality

Surface Water

- X** - Map or list of the state water quality management classification for each stream and lake; and
- X** - Summary of lake and stream water quality monitoring data, including:
 - bacteriological contamination indicators;
 - inorganic chemicals;
 - organic chemicals;
 - sedimentation;
 - dissolved oxygen; and
 - excessive growth or deficiency of aquatic plants.

Groundwater

- T**- Summary of water quality data, including:
 - bacteriological contamination indicators;
 - inorganic chemicals; and
 - organic chemicals;
- T**- List of water chemistry and isotopic data from wells, springs, or other groundwater sampling points;
- T**- Report of groundwater tracer studies;
- T**- Site study and well water analysis of known areas of groundwater contamination;
- T**- Property audit identifying contamination; and
- T**- Report to the Minnesota Department of Agriculture and the Minnesota Pollution Control Agency of contaminant spills and releases.