



*engineering • planning • environmental • construction*

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January 30, 2014

Honorable Mayor and City Council  
c/o, Joseph Kohlmann, City Administrator  
City of Tonka Bay  
339 Third Street  
Tonka Bay, MN 55331

Re: Proposal to Provide Professional Engineering Services for the  
Wellhead Protection Plan Part 2  
City of Tonka Bay, MN

Dear Mayor and Council:

WSB & Associates, Inc. (WSB) is pleased to present this proposal to the City of Tonka Bay to provide professional engineering services as they relate to the City's Wellhead Protection Plan (WHPP) Part 2. The preparation of the City's WHPP is a requirement of Minnesota Rules 4720.5100 to 4720.5590. WSB's overall goal is to help Tonka Bay compose a source water protection plan that is both useful to the City and meets the requirements of MN Rules as interpreted by MDH. Specific objectives include:

- Meet the required parameters as outlined in MDH Part 2 scoping letter, specifically to complete an inventory of the pertinent potential contaminant sources within the approved DWSMA and develop a management plan to address potential contaminant sources and associated reporting requirements.
- Develop Source Water Protection Plan that is useful to Tonka Bay, and not merely the completion of a mandated task

The goal of the Plan is to prevent human-caused contaminants from entering the water supply wells and to protect all who use the water supply from adverse health effects associated with groundwater contamination.

A meeting was held with the Minnesota Department of Health (MDH) for the development of Part 2 of the WHPP. At that meeting the MDH introduced the contact persons and discussed requirements to complete the WHPP. The City has until September 15, 2014 to complete Part 2 of the WHPP.

#### **Project Approach/Scope of Services**

Part 2 of a Wellhead Protection Plan describes how the results of the Part 1 can be applied to best protect a community's water supply. A successful Part 2 WHPP process is developed through integration and comprehensive analysis of a variety of different types of data.

There are four data elements that make up a WHPP – Physical Environment, Land Use, Water Quantity, and Water Quality. All of these can be explained in terms of air, earth, and water. In the perspective of a WHPP, air is climate which determines both water use and aquifer recharge. Earth is a combination of

rock, sediment, and soil. Each of these affects Tonka Bay's water supply, either by storing and transmitting the water as an aquifer or by inhibiting flow as a confining layer. Part 1 of the WHPP addressed this subject. Earth is important in a WHPP as it determines how much water is available, where it comes from and how vulnerable groundwater is to contamination from the surface. Finally, Water is the reason for this whole process. The WHPP addresses supply sustainability, mid-scale demand trends, potential quality issues, and comprehensive risk mitigation measures. Part 2 addresses water by combining the Air and Earth subjects (above) with land use, taking inventory of potential contamination sites, surface waters, and evaluating available water supplies in terms of quantity and quality.

Once the above data elements are collected and interpreted, impacts of changes in land and water use can be assessed. This will allow issues, problems, and opportunities to be identified and included in the WHPP. Among the Issues and problems is a Potential Contaminant Inventory (PCI), which is explicitly identified by the MDH. Another item that the MDH calls out as a separate item is identifying an alternate water supply as part of a Water Emergency and Conservation Plan. This is actually both an issue and opportunity that The Part 2 WHPP will address. Other issues and opportunities that may be included in this WHPP are changes in zoning or land use, well rehabilitation, possible cooperation/collaboration with other water producers, and conflicts with surface water management.

Since the Part 2 WHPP establishes action items, there must be a way to measure the effectiveness of these items. Each action item will include a description of how the item will be analyzed and the results fed back to keep the goal relevant. Doing this makes the plan dynamic and more valuable in the long run.

A report will be prepared to satisfy the MDH reporting requirements for Part 2 of the WHPP. The report and associated GIS files will be delivered in an electronic format on compact disks, per MDH scoping decision. Two CD copies of the draft report and two of the final report will be presented to the City.

The Wellhead Protection Rules require that the results of Part 2 of the WHPP to be presented to the public at a public hearing. This proposal includes presenting the results of this work at one public hearing.

### **Work Plan**

To Complete the Part 2 Wellhead Protection Plan, we propose to complete the following tasks:

#### **Task 1-A – Data Elements & Assessments -Data Collection**

During this phase, we will compile the data necessary to complete the Plan. This includes all of the required elements of the Plan as identified by the MDH in addition to reviewing the WHPP Part 1. Data tables and existing maps will be assembled to complete MDH requirements.

#### **Task 1-B – Data Elements & Assessments - Complete Maps required by MDH**

During this phase, utility, land use/zoning, and potential contaminant source maps will be completed.

The following elements need to be completed:

Physical environment  
Land Use  
Water Quantity  
Water Quality

**Task 2 – Impact of Changes to Public Water Supply Wells**

The purpose of this task is to determine whether new potential sources of contamination may be introduced in the future and to identify future actions for addressing these anticipated sources. Expected changes to the physical environment, land use, or ground waters will be described that may impact the aquifer serving the City's municipal wells.

**Task 3 – Identify Issues Problems & Opportunities**

The purpose of this task is to define the nature and magnitude of contaminant source management issues within the DWSMA. This task includes obtaining potential contaminant source inventory (PCSI) data from the State and County and compiling the data and conducting preliminary location verification. In addition, this task includes describing the water and land use issues and problems and opportunities related to the aquifer serving the water supply wells, the water well and the DWSMA.

**Task 4 – Develop Goals, Objectives, and a Plan of Action & Evaluation**

This task consists of establishing goals for present and future water and land use to provide a framework for determining plan objectives and related action items. In addition, observations will be made about vulnerability and mitigation within multiple contexts, such as City plans/budget and State requirements, to determine the source water protection measures best suited for Tonka Bay. These measures will then be reviewed and presented as an outline of action items which can be prioritized. Evaluation strategies will be devised to determine the effectiveness of the actions taken on each item.

**Task 5 – Meetings**

During the course of this project, informal meeting will be held between WSB, Tonka Bay and possibly the MDH to provide progress updates to City and MDH personnel. The meetings will be held at the City of Tonka Bay offices, with the option of conducting them via telephone.

**Task 6 – Complete Draft Plan**

The prioritized action items and evaluation strategies will then be incorporated into a draft WHP Part 2 along with the data required by the MDH. The report will include a thorough discussion of the data compiled and analyzed over the course of this process. The methods used, issues/opportunities identified, actions/goals and evaluation strategies will be described.

**Task 7 – Public Hearing and Review**

The draft report will be submitted to neighboring units of government for review. There is a mandatory 60-day comment period for this sub-task. All comments received in this period will be addressed. A public hearing will then be conducted to present the Plan.

**Task 8 – Submit Plan to MDH**

Copies (CDs) of the draft plan plus supporting documentation will be submitted to the MDH for review.

The draft report will be updated to respond to comments made during the review process and by City and MDH staff.

**Proposed Fee**

WSB proposes to complete the above scope of services on an hourly basis in accordance with our 2014 billing rate schedule for an estimated fee of \$7,500.

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**Schedule**

WSB can begin work immediately and can meet MDH's deadline. Completion of the final plan will require a 60 day review period followed by a public hearing before the plan can be submitted to MDH for their review and approval. MDH may accept a draft copy at the start of the 60 day review period, which accelerates the schedule and may provide draft comments so that the final plan that is submitted is quickly approved.

This letter represents our understanding of the project scope. If you have any questions concerning the work plan or fee as discussed herein, please feel free to contact me at 763-541-4800. We look forward to working with you and greatly appreciate the opportunity to assist you and your staff in the completion of this project.

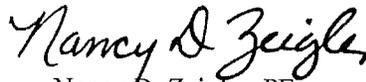
This represents our total understanding of the project and proposed scope of services. If you are in agreement with the scope of services, please have the City block of this letter signed and return a copy to WSB. Our receipt of an executed copy will be WSB's authorization to proceed. Should the City request additional services outside of the above scope of services, we will work with you to establish a revised scope and fee. Please contact me at your convenience 763-541-4800 if you have any questions or concerns relating to this proposal as presented. We appreciate the opportunity to assist you and your staff with completion of the Wellhead Protection Plan Part 2.

Sincerely,

*WSB & Associates, Inc.*



Justin Messner, PE  
City Engineer



Nancy D. Zeigler, PE  
Senior Project Manager

Enclosure

**ACCEPTED BY:**

**City of Tonka Bay**

Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_