



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

**KENTUCKY DIVISION OF WATER
WELLHEAD PROTECTION PLAN
5-YEAR UPDATE FORM**

Update Requirements:

This form should be used for the 5-year update submittal requirements of the Kentucky Wellhead Protection Program (WHPP) in compliance with 401 KAR 4:220 and SDWA Section 1428. Once the form is complete, please sign and send to:

Kentucky Division of Water
Watershed Management Branch
Attention: Allan Shingleton
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601 or allan.shingleton@ky.gov

For assistance contact Allan Shingleton at (502) 782-6907 or allan.shingleton@ky.gov

System Information:

PWS Name: **Calvert City**

PWS ID Number: 00790056

AI Number: Click here to enter text.

Contact Person/Title: **Silas Traylor**

Mailing Address: **861 E 5th Ave Calvert City, KY 42029**

Telephone: **270-395-7138** Email: straylor@calvertcity.com

System Type*: **Community**

*Community; Non-Transient/Non-Community; Transient/Non-Community

Source*: **Wells** *Well(s) or Spring(s) and total number of each

County: **Marshall** ADD: **Purchase**

WWD Permit #: **0275** Permitted Amount (mgd): **1.72**

Population Served: **3360**

Overall Susceptibility Rating*: **Medium** *High, Medium or Low

WHPP Changes Summary: **New wells; redelineated WHPAs; CSI updates**

Update Form Instructions:

Please complete each section that applies to any system or WHPP updates and submit the supporting documentation. Please indicate if a section is not applicable to this update. **Sections 4, and 6 through 11 are required for every 5-year update.**

Please sign certification on the last page upon completion.

Section Updates:**Section 1: Treatment Plant**

If the treatment plant location has changed then provide a new location map below. This can be a county road map or a GIS-produced map. Please use the area below to provide relevant details, or to indicate that no change has occurred.

The location of the treatment plant has not changed since the previous submittal. A county map with the plant location has been attached.

Section 2: Water Withdrawal and Water Quality

If there have been changes in water withdrawal rates or water quality since the last submittal, provide a discussion of the relevant details in the space below (include new Water Withdrawal Permit Number if applicable). Include supporting documentation as an attachment.

There has been no modification to the water withdrawal rate or water quality for Calvert City since the previous submittal.

Section 3: Change or Modification to Groundwater Source

If the system has changed or modified the wells or springs being used, provide the following: 1) a description of changes/modifications; 2) copies of the relevant form(s) (Kentucky Water Well Record, Well Maintenance & Plugging Record, Well Inspection Form or Spring Inventory Record); and 3) any other information relating to well construction (i.e., installation logs, driller's logs, lithologic or geophysical logs), below.

Calvert City has taken well #5 out of service and added a new well #6 (AKGWA #0007-1903) as a supply well. Well # 5 is currently capped off.

Section 4 (REQUIRED): Planning Team

Effective water supply protection requires community involvement and public awareness. Identify the planning team consisting of a leader and at least two team members, with their respective titles, below.

Leader:

Silas Traylor – General manager

Team Members:

Dan Sills – Water board chairman

Tim McGuins – Water Plant Operator

Matt Glass - KRWA

Section 5: WHPA Delineation

If the system is revising a Wellhead Protection Area (WHPA) delineation, or if a new groundwater source has been added since the last submittal, provide a site-specific description of the local geology and aquifer. Include references for published literature. Provide a summary of any aquifer tests (i.e. pumping tests, slug tests, tracer tests), including data gathering and evaluation methods. Show calculations and supporting data for each WHPA delineated or revised. Include the detailed hydrogeologic report as an attachment.

Calvert City has a new WHPA delineation that was completed by the KY division of water based on the new water supply well.

Section 6 (REQUIRED): WHPA Map

Provide a WHPA map that shows each groundwater source labeled with the appropriate AKGWA #, all protection zones identified and the Contaminant Source Inventory (CSI) point locations. If no changes have occurred since the last submittal, then a copy of the most recent WHPA/CSI map can be resubmitted. Please contact program staff for assistance.

The new WHPA Map is attached.

Section 7 (REQUIRED): Contaminant Source Inventory

Provide an updated CSI in table format. This can be created using the spreadsheet template provided, and copied into the space below. If no changes occurred since the last update, the table can be pulled from previous WHPP documents. Each contaminant source listed should have a Contaminant Source ID # that corresponds to the WHPA map in Section 6. The CSI table must

show the susceptibility determination ranking for each contaminant source. Include a brief discussion of the overall system susceptibility. Please contact program staff for assistance.

The updated CSI Map and table are attached.

Section 8 (REQUIRED): Management Strategies

Provide a discussion of the previous and newly proposed management strategies. This discussion must include the previous management strategies that were implemented as well as the goals that were met. Next, include any NEWLY proposed management strategies, associated goals, implementation plans and the party responsible for implementation.

Previous Management Strategy Update:

WHPA road signs are located along major transportation routes providing a form of public education. Calvert City continues to use the annual Consumer Confidence Report as a means of public education as well. Calvert City will comply with Groundwater Protection Plan regulations. Businesses with potential contaminant sources within the WHPA will be notified of the GPP requirement.

Newly Proposed Management Strategies:

Additional management strategies proposed for implementation include regulatory and non-regulatory measures. The Calvert City planning and zoning commission has adopted new regulatory measures that will enhance wellhead protection measures. All new developments located within the WHPA zone will be required to obtain a conditional use permit. Calvert City will also use social media outlets as a way of providing education and outreach to the public related to wellhead protection. Calvert City has recently acquired additional property within the WHPA in order to have direct control over land use.

Section 9 (REQUIRED): Contingency and WHP Planning

Provide a description of Contingency and WHP Planning. Complete the Emergency Response Phone List, Procedures for Public Notification, identification of Potential Future Problems and the procedures to establish Alternative Water Supplies. This section must also address how often the WHPP will be reviewed and updated.

Emergency Response Phone List

Fill in all Blanks and Phone Numbers with appropriate information.

Local	Phone Number
Plant Operator	(270)703-4321
Calvert City Fire Dept.	911
Calvert City Police Dept.	911
Marshall County DES	(270)527-4739
Marshall County Dispatch	(270)527-1333

State and Federal Assistance	Phone Number
Kentucky DOW (Frankfort)	(502)564-3410
Kentucky DOW Associated Field Office Paducah	(270)898-8468
Kentucky Environmental Response Team 24 hour response line	(502) 564-2380 (800) 928-2380
Kentucky State Fire Marshall	(502) 573-0382

Any Other Pertinent Contacts	Any Other Pertinent Numbers
Kentucky Rural Water Assoc.	(270)843-2291
Click here to enter text.	PHONE NUMBER
Click here to enter text.	

Procedures for Public Notification:

In the event of a water system emergency that would threaten the health or life of the public, use the following procedure. Prepare and broadcast an advisory, including directions for the public. Describe the public notification process and provide contacts for those media outlets. If the system uses methods other than traditional media please list them.

In the event of an emergency Calvert City has a one call system and code red emergency communication for the affected area..

Newspaper, Television, and Radio Stations	Phone Numbers
WCBL Radio Benton	(270)527-3102
WPSDTV Paducah	(270)443-4021

Potential Future Problems:

Describe the *most likely* scenarios that could threaten the water supply.

At this time there are no known contamination problems within the wellhead protection area. Continued efforts will be made to implement protection measures throughout the WHPA. If Calvert City becomes aware of problems that potentially pose a long term threat to the system then an action plan will be developed to address them.

Alternative Water Supply (Short and Long Term):

Describe the short term and long term water supply alternatives that address each of the potential future problems identified above. List all current interconnections with other water systems. Discuss the capacity of each potential alternative water supply to sustain normal operations.

Calvert City has interconnections with North Marshall Water District and Paducah Water System. Calvert City also has a permanent back-up generator at the well field to ensure service if power were to fail.

Schedule for Update and Review:

The Wellhead Protection Plan will be reviewed regularly and updated every five years as required by regulation.

Section 10 (REQUIRED): Copies of Public Notices and Education Materials

Provide copies of wellhead protection public notices and education materials distributed.

[Click here to enter text.](#)

Section 11 (REQUIRED): Public Meeting Documentation***

Provide the record of WHPP public meeting attendance, minutes and comments.

[Click here to enter text.](#)

*****Non-Community Water Systems are not required to have public meetings for 5 year updates, but must post a public notice in a conspicuous place. A public notice template is provided as a separate document. However, public input and associated documentation are encouraged. Please contact program staff if you have any questions.**

Certification Signature (TO BE COMPLETED BY PLANNING REPRESENTATIVE):

"I certify that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete."

Signature: Silas Traylor Date: Click here to enter text.
11-24-21

Printed Name/Title: Silas Traylor/General Manager

Assistance:

For any assistance please contact Wellhead Protection Staff:

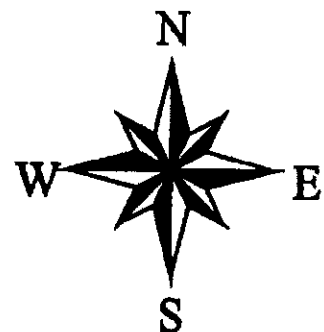
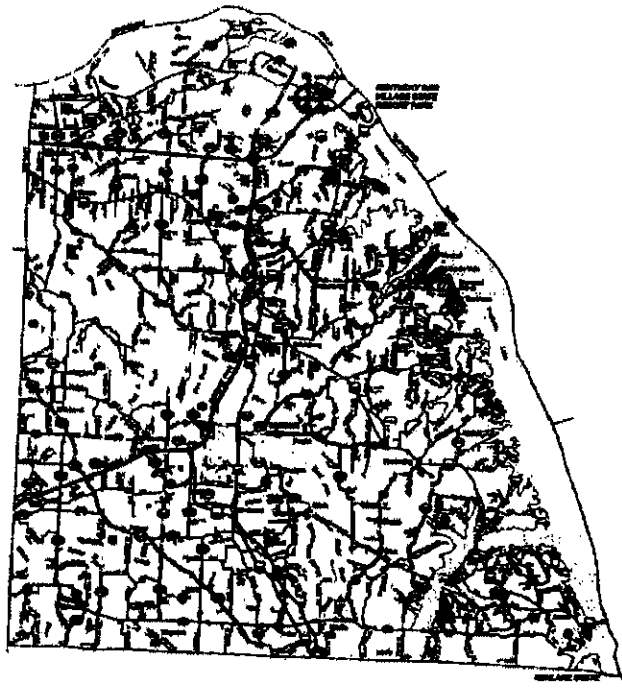
Rob Blair
(502) 782-6893
Robert.Blair@ky.gov

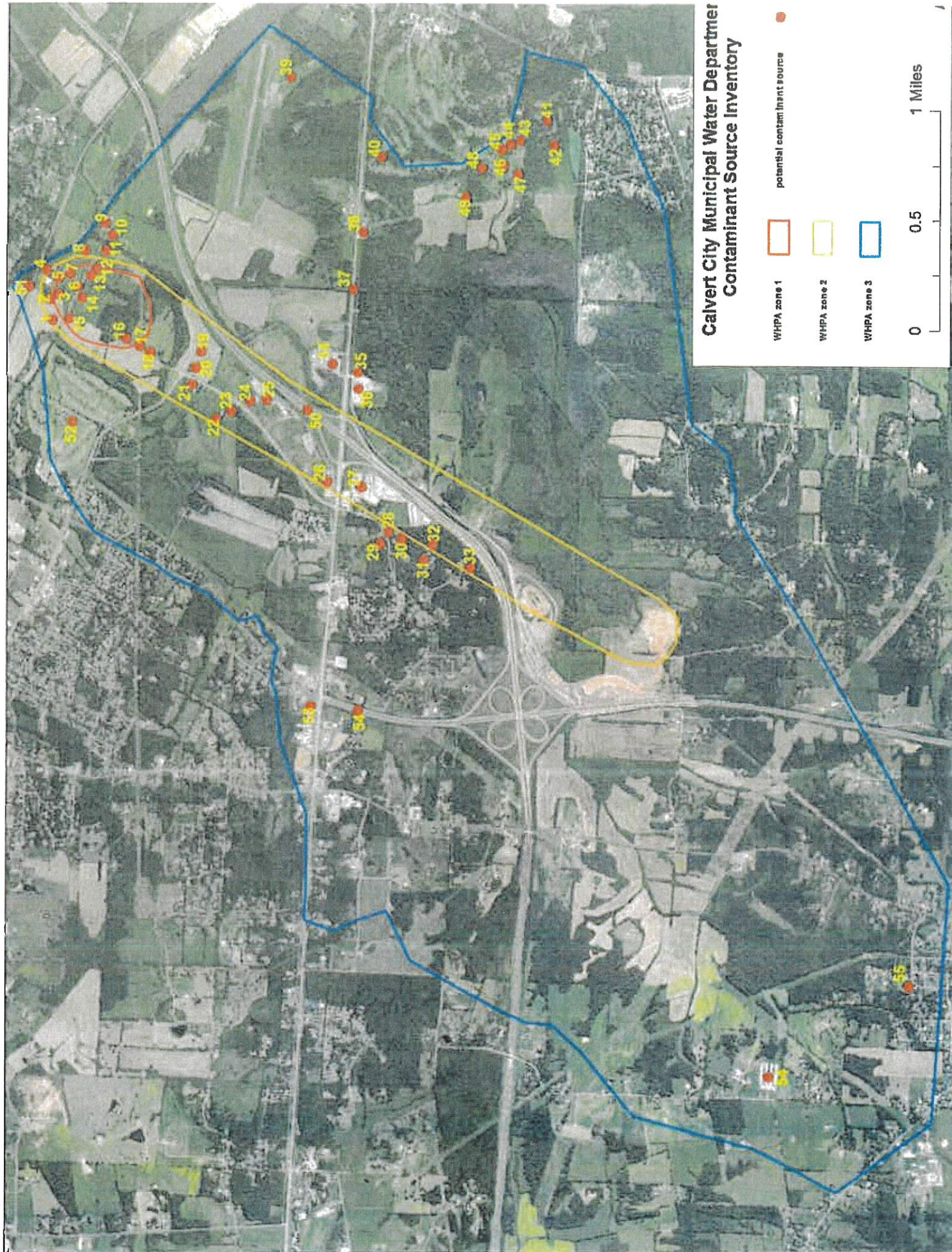
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Calvert City Municipal Water System





**Calvert City Municipal Water Department
Contaminant Source Inventory**

- WHPA zone 1
- WHPA zone 2
- WHPA zone 3
- potential contaminant source

0 0.5 1 Miles

Contaminant Source Inventory and Susceptibility Analysis for Calvert City Municipal Water

Contaminant Source ID #	Contaminant Source/Land Use	Address	Quantity	WHPA	Proximity Ranking	Contaminant Value	Hydrologic Sensitivity	Numeric Rating	Susceptibility Ranking
1	Septic system	2664 Needmore Road, Calvert City, KY 42029	1	2	2	2	2	12	Medium
2	UST	P.O. Box 36, Calvert City, KY 42029	1	2	2	3	2	15	Medium
3	Septic system	P.O. Box 433, Calvert City, KY 42029	1	1	2	2	2	12	Medium
4	Septic system	265 Jacey Blake Drive, Calvert City, KY 42029	1	3	1	2	2	10	Medium
5	Septic system	99 Jacey Blake Drive, Calvert City, KY 42029	1	2	2	2	2	12	Medium
6	Septic system	1000 Lone Valley Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
7	Septic system	673 Jacey Blake Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
8	Septic system	770 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
9	Septic system	729 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
10	Septic system	741 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
11	Septic system	779 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
12	Septic system	883 Lone Valley Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
13	Septic system	941 Lone Valley Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
14	Septic system	1043 Lone Valley Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
15	Agriculture	P.O. Box 322, Calvert City, KY 42029	1	1	3	2	2	15	Medium
16	Septic system	1407 Lone Valley Road, Calvert City, KY 42029	1	1	3	2	2	14	Medium
17	Salvage Yard	P.O. Box 686, Calvert City, KY 42029	1	2	2	3	2	15	Medium
18	Septic system	P.O. Box 467, Benton, KY 42025	2	2	2	2	2	12	Medium
19	Cultivated crops	49 Chickasaw Bluff Road, Benton, KY 42025	1	2	2	2	2	12	Medium
20	Septic system	P.O. Box 672, Calvert City, KY 42029	1	2	2	2	2	12	Medium
21	Septic system	1776 Lone Valley Road, Calvert City, KY 42029	1	2	2	2	2	12	Medium
22	Septic system	P.O. Box 944, Calvert City, KY 42029	2	2	2	2	2	12	Medium
23	Feed lot	P.O. Box 944, Calvert City, KY 42029	1	2	2	2	2	12	Medium
24	Septic system	808 Oak Park Boulevard, Calvert City, KY 42029	1	2	2	2	2	12	Medium
25	Bulk chemicals	161 Kennedy Avenue, Calvert City, KY 42029	1	2	2	3	2	15	Medium
26	UST gasoline	P.O. Box 568, Hopkinsville, KY 42241	1	2	2	3	2	15	Medium
27	Bulk chemicals	1630 E Brooks Road, Memphis, TN 38116	1	2	2	2	2	12	Medium
28	Septic system	2881 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
29	Septic system	40 E 2nd Street, Calvert City, KY 42029	1	3	1	2	2	10	Medium
30	Septic system	2979 Lone Valley Road, Calvert City, KY 42029	1	3	1	2	2	10	Medium
31	Septic system	167 Atlanta Lane, Calvert City, KY 42029	1	3	1	2	2	10	Medium
32	Septic system	178 Atlanta Lane, Calvert City, KY 42029	1	2	2	2	2	12	Medium
33	Septic system	144 Lewis Road, Marion, KY 42064	1	2	2	2	2	12	Medium
34	Lowe's Truck Stop UST	3926 E 2nd Street, Tulsa, OK 74135	1	3	1	3	2	13	Medium
35	UST gasoline	P.O. Box 568, Hopkinsville, KY 42241	1	3	1	3	2	13	Medium
36	UST gasoline	65 Truck Plaza Lane, Calvert City, KY 42029	1	3	1	2	2	10	Medium

Use the table above to list and rank potential contaminants identified during the contaminant source inventory, include addresses when possible. Multiple, similar sources that are clustered can be listed once with the Quantity identified (e.g., 50 Domestic Septic Systems in one neighborhood). Enter the WHPA in which the contaminant occurs. The Proximity Ranking is based on the WHPA in which the contaminant is located (WHPA 1-3; WHPA 2-2; WHPA 3-1), which the contaminant occurs. The Contaminant Risk Values Guide on Sheet 2. Contaminant Value is on a 1-3 scale, based upon its potential threat; consult the Contaminant Risk Values Guide on Sheet 2. Hydrologic Sensitivity is on a 1-5 scale, determined by local geology (Sheet 2). The spreadsheet will use the values entered to calculate the Numeric Rating for each contaminant source. This will determine the Susceptibility Ranking: Numeric Rating less than 10 = Low; 10-15 = Medium; greater than 15 = High. Please contact SWP/WHPE staff if you have any questions.

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