

SOURCE WATER ASSESSMENT SUMMARY BROCHURE

CITY OF HERMISTON PWS # 4100372

WHAT IS A SOURCE WATER ASSESSMENT?

The Source Water Assessment was recently completed by the Department of Environmental Quality (DEQ) and the Oregon Department of Human Services (DHS) to identify the surface areas (and/or subsurface areas) that supply water to City of Hermiston's public water system intake and to inventory the potential contaminant sources that may impact the water supply.

WHY WAS IT COMPLETED?

The Source Water Assessment was completed to provide information so that City of Hermiston's public water system staff/operator, consumers, and community citizens can begin developing strategies to protect the source of their drinking water, and to minimize future public expenditures for drinking water treatment. The assessment was prepared under the requirements and guidelines of the Federal Safe Drinking Water Act (SDWA).

WHAT AREAS ARE INCLUDED IN HERMISTON'S DRINKING WATER PROTECTION AREA?

The drinking water for the City of Hermiston is supplied by several groundwater wells and a surface water intake on the Columbia River. This Assessment addresses the surface water component of Hermiston's drinking water supply for the watershed area upstream of the intake to the state border. The City of Hermiston public water system serves approximately 12,400 citizens.

The Oregon portion of the geographic area providing water to Hermiston's intake (the drinking water protection area) includes approximately 691 stream miles extending upstream in an easterly direction and encompasses a total area of 599 square miles. The boundaries of the Drinking Water Protection Area are illustrated on the figure attached to this summary. The protection area includes portions of the Middle Columbia-Lake

Walulla Subbasin and all of the Walla Walla Subbasin in the Middle Columbia Basin. Included in this area are a number of tributaries to the Columbia River main stem including Juniper Canyon and the Walla Walla River and its numerous tributaries. The protection area within an 8-hour travel time from the intake extends approximately 24.8 miles upstream of the Hermiston intake. It is recommended that the water systems and community consider increased protection within an 8-hour travel time from the intake since eight hours should provide adequate response time to protect the integrity of the public water system intake should a spill or release occur at any crossing or discharge point to the stream.

WHAT ARE THE POTENTIAL SOURCES OF CONTAMINATION TO HERMISTON'S PUBLIC DRINKING WATER SUPPLY?

The primary intent of this inventory was to identify and locate significant potential sources of contaminants of concern. The delineated drinking water protection area for the surface water sources is primarily dominated by agricultural and rural residential land uses. The potential contaminant sources identified in the watershed include the Umatilla Pump Station, a railroad, two lumber mills, a manufacturing company, a trucking facility, a food processing operation, a golf course, a driving range, high density housing, a business with aboveground storage tanks, apartments, a fire station, an underground storage tank with unknown status, a park, Hwy 730, aboveground storage tank, two auto repair shops, a school, an RV Park, a business with chemical storage, grazing animals, a rodeo grounds, an irrigation canal, irrigated crops, power lines, a correctional institution, Hat Rock State Park, rural homes, a construction area, a DEQ Cleanup program site, a large capacity septic system, a permitted discharger, the City of Milton-Freewater, and the City of Weston. This provides a quick look at the existing potential sources of contamination that could, if improperly managed or released, impact the water quality in the watershed. This provides a quick look at the existing potential sources of contamination that could, if improperly managed or released, impact the water quality in the watershed.

WHAT ARE THE RISKS FOR OUR SYSTEM?

A total of 36 potential contaminant sources were identified in City of Hermiston's drinking water protection area. All of these are located in the sensitive areas and 32 are high- to moderate-risk sources within "sensitive areas". The sensitive areas within the City of Hermiston drinking water protection area include areas with high soil permeability, high soil erosion potential, high runoff potential and areas within 1000' from the river/streams. The sensitive areas are those where the potential contamination sources, if present, have a greater potential to impact the water supply. The information in this assessment provides a basis for prioritizing areas in and around our community that are most vulnerable to potential impacts and can be used by the City of Hermiston community to develop a voluntary Drinking Water Protection Plan.




NEED MORE INFORMATION?

City of Hermiston's Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available for review at:

Contact the City of Hermiston staff if you would like additional information on these Source Water Assessment results.

**Source Water
Assessment Results
City of Hermiston's
Drinking Water Protection
Area with Sensitive Areas
Potential Contamination
Sources**

PWS 4100372

-  Drinking Water Protection Area
-  Drinking Water Intake - Surface Water
-  Sensitive Areas
-  Area Feature (see Note 2)
-  Point Feature (see Note 2)

Notes on Potential Contaminant Sources

Note 1: Sites and areas noted in this Figure are potential sources of contamination to the drinking water protection identified by Oregon drinking water protection staff. Environmental contamination is not likely to occur when contaminants are used and managed properly.

Note 2: Feature identification markers correspond to the potential contaminant source numbers in the SWA Report. The area features represent the approximate area where the land use or activity occurs and is marked at the point closest to the intake. The point features represent the approximate point where the land use or activity occurs.

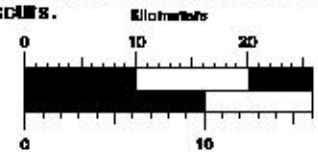
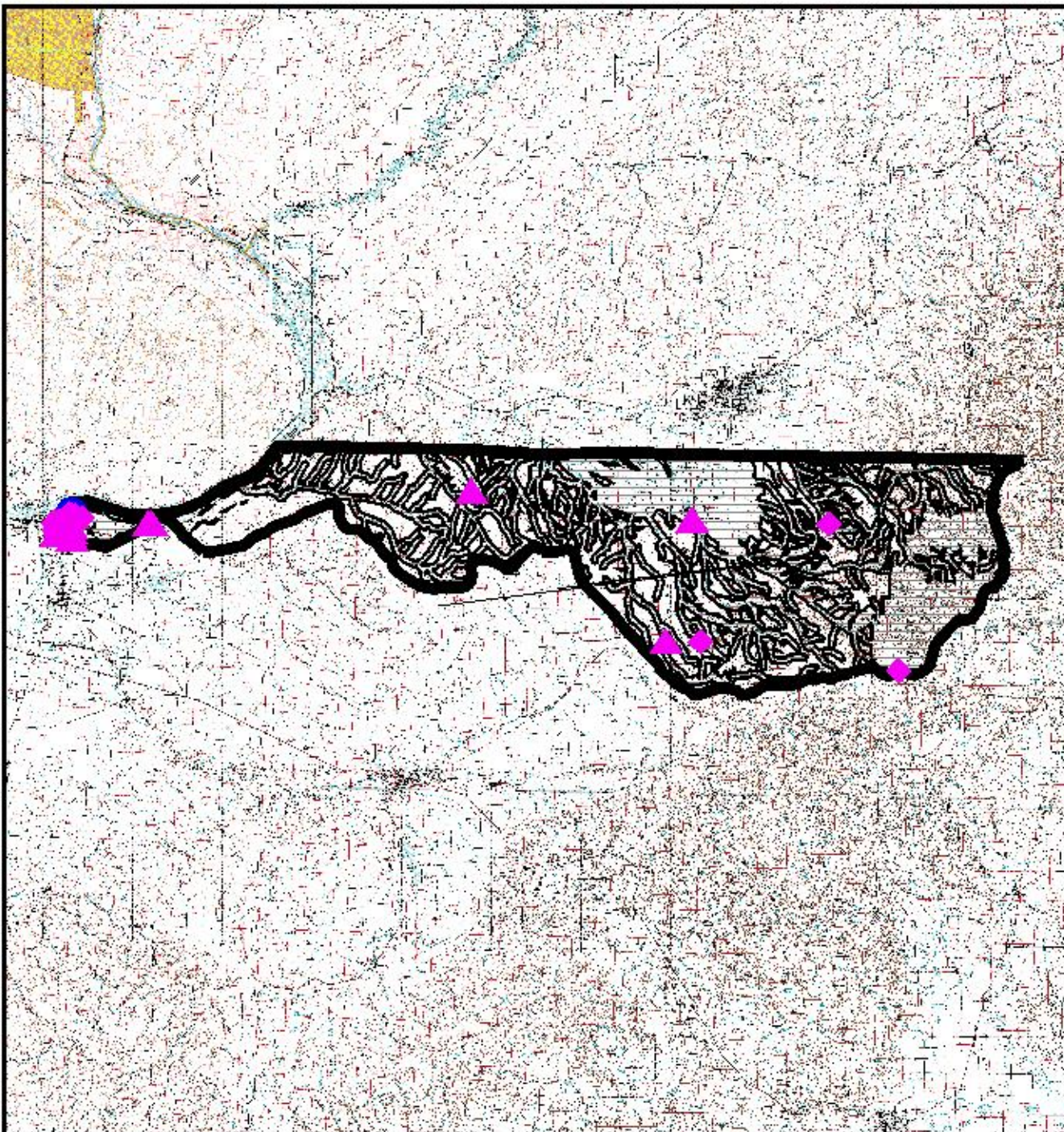


TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
1	UST - Status Unknown	Umatilla Pump Station	Bud Draper Rd	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	City of Umatilla.
2	Transportation - Railroads	Railroad	Runs E-W Through DWPA	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Rail transport elevates the risk for leaks/spills of fuel & other haz. materials. Installation/maintenance of tracks may increase erosion & slope failure causing turbidity. Over-application/improper handling of pesticides may impact the water supply.	
3	Wood/Pulp/Paper Processing and Mills	Boise Paper Solutions	Corner of Bud Draper and Roxbury	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Spills, leaks, or improper handling of wood preservatives and other chemicals during transportation, use, storage and disposal may impact the drinking water supply.	
4	Metal Plating/Finishing/Fabrication	J-M Manufacturing Co. Inc.	Roxbury Rd.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Spills, leaks, or improper handling of solvents, metals, and other chemicals during transportation, use, storage and disposal may impact the drinking water supply.	
5	Fleet/Trucking/Bus Terminals	Hagerman, Inc	Bud Draper Rd.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of fuels, grease, solvents, and other materials from vehicle service, fueling, and parking areas may impact the drinking water supply.	Also has a equipment repair shop.
	Above Ground Storage Tanks - Excluding Water						Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	Also has a equipment repair shop.

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
6	Food Processing	Gilroy Foods	Bud Draper Rd.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage and disposal may impact the drinking water supply.	
	Moderate						Spills, leaks, or improper handling of stored materials may impact the drinking water supply.		
7	Wood/Pulp/Paper Processing and Mills	Lumber Products	Roxbury Rd.	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Spills, leaks, or improper handling of wood preservatives and other chemicals during transportation, use, storage and disposal may impact the drinking water supply.	
8	Golf Courses	Two Over Par	Roxbury Rd.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Over-application or improper handling of pesticides or fertilizers may impact drinking water. Excessive irrigation may cause transport of contaminants to groundwater or surface water through runoff.	
	Moderate						Spills, leaks, or improper handling of stored materials may impact the drinking water supply.		
9	Housing - High Density (> 1 House/0.5 acres)		City of McNary	McNary	McNary Observation	Field-sensitive area. for COLUMBIA RIVER	Within	Moderate Improper use, storage, and disposal of household chemicals may impact the drinking water supply. Stormwater run-off or infiltration may carry contaminants to drinking water supply.	
	Moderate						If not properly designed, installed, and maintained, sewer lines can impact drinking water, especially adjacent to a waterbody or within the 2-year time-of-travel zone for drinking water wells.		
	Sewer Lines - Close Proximity to PWS								

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
10	Above Ground Storage Tanks - Excluding Water	CRIS	Willamette St.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	Includes a fueling area.
	UST - Upgraded/Registered - Active						Lower	Spills or improper handling during tank filling or product distribution may impact the drinking water supply.	Includes a fueling area.
11	Apartments and Condominiums	Apartments	McNary	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Lower	Improper use, storage, and disposal of household and facility maintenance chemicals may impact the drinking water supply. Stormwater run-off or infiltration may carry contaminants to water supply.	
12	Fire Station	Umatilla Rural Fire District	Walla Walla and Umatilla St.	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Lower	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage and disposal may impact the drinking water supply.	
13	UST - Status Unknown	McNary Grocery	Willamette St.	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	
14	Parks	Park	Lewis St.	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Excessive irrigation may cause transport of contaminants through runoff. Heavy use along edge of waterbody may contribute to erosion, causing turbidity.	

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
15	Transportation - Freeways/State Highways/Other Heavy Use Roads	Hwy 730	Runs Through DWPA	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Vehicle use increases the risk for leaks or spills of fuel & other haz. materials. Road building, maintenance & use can increase erosion/slope failure causing turbidity. Over-application or improper handling of pesticides/fertilizers may impact water.	
16	Above Ground Storage Tanks - Excluding Water	Aboveground Storage Tank	Hwy 730	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of stored materials may impact the drinking water supply.	
17	Golf Courses	Eagle View Driving Range	Hwy 730	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Over-application or improper handling of pesticides or fertilizers may impact drinking water. Excessive irrigation may cause transport of contaminants to groundwater or surface water through runoff.	
18	Automobiles - Repair Shops	Duke's Auto Plus	Hwy 730 and Margaret Ave	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of automotive fluids, solvents, and repair materials during transportation, use, storage and disposal may impact the drinking water supply.	
19	Schools	McNary Elementary	Chenowith Ave	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Lower	Over-application or improper handling of cleaning products, pesticides or fertilizers used on the school grounds may impact drinking water. Vehicle maintenance wastes may contribute contaminants.	
20	Campgrounds/RV Parks	Wildwood RV Park	Hwy 703 and Margaret Ave	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Leaks or spills of automotive fluids or improperly managed septic systems and wastewater disposal may impact drinking water supply. Heavy usage along edge of waterbody may contribute to erosion, causing turbidity.	

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
21	Chemical/Petroleum Processing/Storage	Buck's Consumer Supply	Jct Hwy 395 and 730	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Spills, leaks, or improper handling of chemicals and other materials during transportation, use, storage and disposal may impact the drinking water supply.	Appears closed.
22	Automobiles - Repair Shops	T and M Auto Repair	Hwy 395 and Bowden	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	Spills, leaks, or improper handling of automotive fluids, solvents, and repair materials during transportation, use, storage and disposal may impact the drinking water supply.	
23	Grazing Animals (> 5 large animals or equivalent/acre)	Grazing Animals	Hwy 395 and Bowden	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Improper storage and management of animal wastes may impact drinking water supply. Concentrated livestock may contribute to erosion and sedimentation of surface water bodies.	
24	Other - Rodeo Grounds		Rodeo Grounds	Hwy 395 and Union St.	Observation	Mcnary sensitive area. for COLUMBIA RIVER	Field-	Higher The impacts of this potential contaminant source will be addressed during the enhanced inventory.	
25	Other - Irrigation Canals	Irrigation Canal	South of Hwy 730	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	Location from topographic map.
26	Crops - Irrigated (inc. orchards, vineyards, nurseries, greenhouses)	Irrigated Crops	Throughout DWPA	Mcnary		Within sensitive area. for COLUMBIA RIVER	Higher	Over-application or improper handling of pesticides/fertilizers may impact drinking water. Excessive irrigation may transport contaminants or sediments to groundwater/surface water through runoff. Drip-irrigated crops are considered to be a low risk.	Location and type of use based on WRD database - needs verification.

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
27	Transmission Lines - Right-of-Ways	Power lines	Throughout DWPA	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Construction and corridor maintenance may contribute to increased erosion and turbidity in drinking water supply. Over-application or improper handling of pesticides or fertilizers may impact drinking water supply.	
28	Parking Lots/Malls (> 50 Spaces)	Two Rivers Correctional Institute	Beach Access Rd.	Mcnary	Field-Observation	Within sensitive area. for COLUMBIA RIVER	Higher	Spills and leaks of automotive fluids in parking lots may impact the drinking water supply.	
	Other - Prisons						Moderate	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	
29	Large Capacity Septic Systems (serves > 20 people) - Class V UICs	Hat Rock State Park	Hwy 730	Mcnary	Database (2) Field-Observation	Within sensitive area. for COLUMBIA RIVER	Moderate	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water.	
	Campgrounds/RV Parks						Moderate	Leaks or spills of automotive fluids or improperly managed septic systems and wastewater disposal may impact drinking water supply. Heavy usage along edge of waterbody may contribute to erosion, causing turbidity.	
	Parking Lots/Malls (> 50 Spaces)						Higher	Spills and leaks of automotive fluids in parking lots may impact the drinking water supply.	
30	Homesteads - Rural - Septic Systems (< 1/acre)	Rural Homes	Throughout DWPA		Interview	Within sensitive area. for COLUMBIA RIVER	Lower	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water. Use of drain cleaners and dumping household hazardous wastes can result in groundwater contamination.	

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
31	Construction/Demolition Areas	Stateline Wind Project	Butler Grade to Hatch Grade Rd.	Milton-Freewater	Database (2)	Within sensitive area. for COLUMBIA RIVER	Higher	Construction/demolition activities may contribute to erosion and increased turbidity in surface water drinking water supplies. Equipment usage increases the risks of leaks or spills of fuels and other chemicals.	
32	Other - DEQ Cleanup Program Site	Wilbur Ellis Aqua Ammonia Spill	Hwy 11. 5.1 Miles East of Milton-Freewater	Milton-Freewater	Database (2)	Within sensitive area. for COLUMBIA RIVER	Higher	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	PCS location based on regulatory database search - needs verification.
33	Large Capacity Septic Systems (serves > 20 people) - Class V UICs	Institute for Rehabilitation, Research	Meadow wood Rd.	Weston	Database (2)	Within sensitive area. for COLUMBIA RIVER	Moderate	If not properly sited, designed, installed, and maintained, septic systems can impact drinking water.	On-site system location unknown - presence is based on SIS database.
34	Other - Permitted Dischargers	Langdon Lake Association	Hwy 204 MP 19.5	Weston	Database (2)	Within sensitive area. for COLUMBIA RIVER	Moderate	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	PCS location based on regulatory database search - needs verification.
35	Other - City	Milton Freewater	Milton-Freewater	Milton-Freewater	Database (2)	Within sensitive area. for COLUMBIA RIVER	Higher	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	A limited inventory was completed due to size of delineation. "Enhancing" or refining the inventory through a windshield survey, further research, & local input is recommended. Milton-Freewater contains a variety of industrial and commercial facilities

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).

TABLE 2. INVENTORY RESULTS - LIST OF POTENTIAL CONTAMINANT

PWS# 4100372 HERMISTON, CITY OF

Reference No. (See Figure)	Potential Contaminant Source Type	Name	Approximate Location	City	Method for Listing	Proximity to Sensitive Areas	Relative Risk Level (1)	Potential Impacts	Comments
36	Other - City	Weston	Weston	Weston	Database (2)	Within sensitive area. for COLUMBIA RIVER	Higher	The impacts of this potential contaminant source will be addressed during the enhanced inventory.	A limited inventory was completed due to size of delineation. "Enhancing" or refining the inventory through a windshield survey, further research, & local input is recommended. Weston contains a variety of industrial and commercial facilities.

Note: Sites and areas identified in this Table are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

(1) Where multiple potential contaminant sources exist at a site, the highest level of risk is used.

(2) See Table 3 for database listings (if necessary).