



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-5171



April 12, 2002

LOWER BARTLETT WATER PRECINCT
THOMAS M CAUGHEY
PO BOX 315
INTERVALE NH 03845 0315

RE: Drinking Water Source Assessment Report for Lower Bartlett Water Precinct

Dear Thomas M Caughey:

Enclosed you will find a Source Assessment Report for your system. This is part of an effort in which NH Department of Environmental Services (DES) is assessing the vulnerability to contamination of each of the state's approximately 3,000 sources of public water supply (wells, springs, and surface water intakes). (Please see the enclosed fact sheet, *Drinking Water Source Assessment Program*). The assessments take into account all readily identifiable land uses within the area that contributes water to sources and are intended to serve as a starting point for you to develop a source protection program if you so desire.

The Source Assessment Report consists of several parts. Parts 1 and 2 identify the system and owner and summarize the assessment for each source. Part 3 provides a more detailed summary of the information used in each assessment. Part 4 provides general information about how the assessments were prepared and what they mean. Included, as attachments, are: a map of each source assessment area, a list of potential and known contamination sources within that area, a key explaining each type of site included in the list, and a summary of protection options that you might pursue.

The enclosed Assessment Report is also being sent to the Planning Board of each municipality in which your source(s) is (are) located. DES encourages you to work with municipal officials, residents, and business owners in your source protection area(s) to develop and implement a source protection program. To help you with this, DES's Drinking Water Source Protection Program provides technical assistance and grants, including grants for land acquisition. Information about our assistance programs, as well as a summary of all completed assessment reports, can be found on our web site at www.des.state.nh.us/dwspp.

Please remember that your next Consumer Confidence Report must let consumers know about the availability of the Assessment Report and how they may obtain it, and you must provide a brief summary of the Assessment Report. Following is an example of the language that you might use, substituting the appropriate numbers in **bold typeface** from the table in Part 2 of the Assessment Report:

Lower Bartlett Water Precinct
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“NH Department of Environmental Services has prepared a Source Assessment Report for the source(s) serving this public water system. The results of the assessments are as follows. For (source name and/or description), (number) of susceptibility factors were rated high, (number) were rated medium, and (number) were rated low. The complete Assessment Report is available for inspection at (water system office or other location). For more information, call (water system contact) or visit NH DES’s Drinking Water Source Assessment Program web site at www.des.state.nh.us/dwspp.”

If your system has more than one source, you would repeat the second sentence, including information for each source.

Please contact me if you have any questions about the assessments, if you note any inaccuracies in the map(s), inventory(ies), or any other part of the report, or if you would like information about the assistance our program may offer. You can reach me at 271-7017 or jmckenna@des.state.nh.us.

Sincerely,

A handwritten signature in black ink, reading "Johnna McKenna" with a long horizontal flourish extending to the right.

Johnna McKenna
Drinking Water Source Protection Program

Enclosures: Source Assessment Report
Fact Sheet: *Drinking Water Source Assessment Program*



New Hampshire Department of Environmental Services

Public Water Source Assessment Report

This assessment is a relative ranking of the susceptibility of the source(s) supplying this public water system. The assessment focuses on vulnerability to the potential and actual contamination within the source protection area. A susceptibility assessment is intended for use as a tool to evaluate appropriate protection measures for this source. It was prepared by the Department of Environmental Services (DES) in accordance with the New Hampshire Drinking Water Source Assessment Program. If you have any questions regarding this assessment, please call 271-3139.

Part 1. System Information

System Name:	LOWER BARTLETT WATER PRECINCT	EPA ID 0161020
System Owner:	THOMAS M CAUGHEY LOWER BARTLETT WATER PRECINCT	

Part 2. Source Information and Summary of Assessment Results

Source Information		Summary of Susceptibility Factors			Comments
		Low	Med	High	
Source Name/Description:	GPW 1, INTERVALE LANE (EAST)	10	1	1	Wells 200 feet apart.
Source ID:	0161020 - 001				
Date of Assessment:	5/14/02				
Date of Sanitary Survey:	3/17/98				
Date of Field Work:	6/11/01				
Source Name/Description:	GPW 2, INTERVALE LANE II (WEST)	9	1	2	Acetone detected in 1/01 sample. This source, only.
Source ID:	0161020 - 003				
Date of Assessment:	5/14/02				
Date of Sanitary Survey:	3/17/98				
Date of Field Work:	6/11/01				

This chart summarizes the source water protection area land use and source water quality information described in detail in Part 3. It indicates the number of low, medium and high susceptibility factors identified for each source. It should be noted that this summary does not account for any measures that may be in place to minimize the risk associated with any susceptibility factor. Part 4 provides information important to interpreting and using this susceptibility assessment. Source water protection area land use information is also provided in Attachment A which contains a map, map key, and a map report. A list of protection options is also provided as Attachment B. Acronyms are defined in Attachment A.

This assessment was prepared in accordance with the NHDES Drinking Water Source Assessment Program Plan. A copy of this plan is available on the Drinking Water Source Protection Program web site (www.des.state.nh.us/dwspp/) or by calling the NHDES Public Information and Permitting Office at 271-2975.

Part 3

Wellhead Protection Area Characteristics

This part of the assessment describes the susceptibility of this source with respect to a number of factors evaluated by DES.

System Name: LOWER BARTLETT WATER PRECINCT

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Source: GPW 1, INTERVALE LANE (EAST)

Source ID#: 0161020 - 001

Susceptibility Factor	Susceptibility			Comments
	LOW	MEDIUM	HIGH	
1. Confirmed contaminant detects of concern in source water.	No current detects from anthropogenic sources (e.g. VOC, SOC, or metals) ☒	No medium criterion - source will rank either low or high for this concern.	Current detects from anthropogenic sources (e.g. VOC, SOC, or metals) ☐	Does not include naturally occurring substances.
2. Well integrity.	No unresolved problems noted during sanitary survey. ☒	No medium criterion - source will rank either low or high for this concern.	Problems noted and remain since last sanitary survey. ☐	Problems would include insufficient sanitary seal, drainage problems, or violations of the sanitary radius.
3. Sanitary radius (75' to 400' from well).	Free from development except that associated with the well. ☒	Development other than that associated with the well but no sewer line, septic system, or regulated substance storage. ☐	Sewer line(s), septic system(s), or regulated substance storage other than that associated with the well. ☐	Development within the sanitary radius can contaminate sources. Potential contamination sources close to the well allow little time to react to a release.
4. Known sources of anthropogenic contamination (not covered below) within the wellhead protection area (WHPA).	None present in the WHPA. ☒	One or more within the WHPA but not within 1000' of the well. ☐	One or more within the WHPA and within 1000' of the well. ☐	Proximity of contamination to supply source is critical. Distance based on experience and consensus of advisory group.*
5. Potential sources of anthropogenic contamination (not covered below) within the WHPA.	None present within the portion of the WHPA that is within 1000' of the well. ☒	10 or fewer within the portion of the WHPA that is within 1000' of the well. ☐	More than 10 within the portion of the WHPA that is within 1000' of the well. ☐	Proximity of contamination to supply source is critical. Distance based on experience and consensus of advisory group.*
6. Numbered state highways or active railroads in WHPA.	None present in WHPA. ☐	One or more within the WHPA but not within 1000' of the well. ☒	One or more within the WHPA and within 1000' of the well. ☐	Roadways/railways increase the risk of accidental releases reaching the source. Roadways are also a significant non-point source of pollution. Distance based on experience and consensus of advisory group.*

Susceptibility Factor	Susceptibility			Comments
	LOW	MEDIUM	HIGH	
7. Routine pesticide application in WHPA.	No application sites in WHPA. ☒	Application sites in WHPA but not within 500 feet of the well. ☐	Application sites in WHPA within 500 feet of the well. ☐	Distance based on experience and consensus of advisory group.* Impact of sites can be mitigated by working with farmer. Few detects of pesticides in NH. Application not allowed in sanitary radius.
8. Septic systems or sewer lines located in the	No septic systems or sewer lines located within 500 feet of well. Low density of septic systems (fewer than 30) in remainder of WHPA. ☐	Fewer than 10 septic systems and no sewer line located within 500 feet of well and fewer than 30 septic systems in remainder of WHPA. ☐	10 or more septic systems or any sewer line located within 500 feet of well and/or high density of septic systems (more than 30) in remainder of WHPA. ☒	Septic systems within the sanitary radius or 500' represent an increased risk to a well from pathogens and other contaminants.
9. Urban land cover.	Less than 10% of WHPA has urban land cover and less than 10% of WHPA within 1000' of well has urban land cover. ☒	Less than 10% of WHPA has urban land cover but 10% or more of WHPA within 1000' of well has urban land cover. ☐	10% or more of WHPA has urban land cover. ☐	Water quality impacts, as well as loss of recharge, are associated with imperviousness levels of 10% or more.
10. Agricultural land cover.	No agricultural land cover in WHPA. ☒	Less than 10% agricultural land cover in WHPA. ☐	10% or more agricultural land cover in WHPA. ☐	Nitrates are a common problem in extensive agricultural areas.
11. Farms with 10 or more outdoor animal units.	None present in WHPA. ☒	One or more within the WHPA but none within 1000' of the well. ☐	One or more within the WHPA and within 1000' of the well. ☐	Nitrates and pathogens such as viruses travel well in groundwater and are associated with livestock concentrations.
12. Wastewater treatment, spray irrigation, lagoons.	None within the WHPA. ☒	One or more within the WHPA but none within 1000' of the well. ☐	One or more within the WHPA and within 1000' of the well. ☐	Unplanned upsets are possible; lagoons may leach nitrates and pathogens into groundwater.
13. Dry weather sewage discharge.	None detected within the WHPA. ☐	One or more within the WHPA but none within 1000' of the well. ☐	One or more within the WHPA and within 1000' of the well. ☐	Dry weather discharges are likely to contain untreated sewage.

Number of criteria for which this source rated Low susceptibility: 10

Number of criteria for which this source rated Medium susceptibility: 1

Number of criteria for which this source rated High susceptibility: 1

Part 3

Wellhead Protection Area Characteristics

This part of the assessment describes the susceptibility of this source with respect to a number of factors evaluated by DES.

System Name: LOWER BARTLETT WATER PRECINCT				Part 3 - Page 1
Source: GPW 2, INTERVALE LANE II (WEST)			Source ID#: 0161020 - 003	
Susceptibility Factor	Susceptibility			Comments
	LOW	MEDIUM	HIGH	
1. Confirmed contaminant detects of concern in source water.	No current detects from anthropogenic sources (e.g. VOC, SOC, or metals) ☐	No medium criterion - source will rank either low or high for this concern.	Current detects from anthropogenic sources (e.g. VOC, SOC, or metals) ☒	Does not include naturally occurring substances.
2. Well integrity.	No unresolved problems noted during sanitary survey. ☒	No medium criterion - source will rank either low or high for this concern.	Problems noted and remain since last sanitary survey. ☐	Problems would include insufficient sanitary seal, drainage problems, or violations of the sanitary radius.
3. Sanitary radius (75' to 400' from well).	Free from development except that associated with the well. ☒	Development other than that associated with the well but no sewer line, septic system, or regulated substance storage. ☐	Sewer line(s), septic system(s), or regulated substance storage other than that associated with the well. ☐	Development within the sanitary radius can contaminate sources. Potential contamination sources close to the well allow little time to react to a release.
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6. Numbered state highways or active railroads in WHPA.	None present in WHPA. ☐	One or more within the WHPA but not within 1000' of the well. ☒	One or more within the WHPA and within 1000' of the well. ☐	Roadways/railways increase the risk of accidental releases reaching the source. Roadways are also a significant non-point source of pollution. Distance based on experience and consensus of advisory group.*

Notes:

If susceptibility ranking is not indicated for a specific criterion, it means this criterion was not evaluated for this source.

See Part 4 to understand what this assessment chart means and how to use this information.

*To help develop the Drinking Water Source Assessment Program, which produced this assessment report, DES convened an advisory group of state and federal officials, water suppliers, citizens and environmental groups, water supply consultants, and business interests.