



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



C. HEIDI GREYER  
DIRECTOR

February 14, 2017

VIA E-MAIL

Ms. Arlene Anderson-Vincent  
Natural Resource Manager  
Nestlé Waters North America, Inc.  
19275 8 Mile Road  
Stanwood, Michigan 49346

Dear Ms. Anderson-Vincent:

**SUBJECT:** Request for Additional Information  
Permit Application, Under Section 17 of the Michigan Safe Drinking Water Act,  
1976, PA 399, As Amended  
White Pine Springs Well PW-101

Michigan Department of Environmental Quality (DEQ) staff have completed an initial review of information submitted in the above-referenced matter and have identified additional information that is needed to continue the review. Although this request comes through the Drinking Water and Municipal Assistance Division (DWMAD), the list is composed of staff contributions from across the Departments of Environmental Quality, Natural Resources, and Attorney General. Therefore, when responding, please reference the section and number so information can be routed to the appropriate technical review staff. Please provide the following:

Groundwater Model:

1. Electronic copies of all input and output data files used in the MODFLOW groundwater model (Groundwater Vistas format);
2. All supporting (electronic) data files, base map files, calibration data files, graphs, maps and tables, etc., used to construct the Groundwater Vistas model or the presentation of groundwater modeling results in S.S. Papadopoulos & Associates, Inc.'s July 2016 "Evaluation of Groundwater and Surface Water Conditions in the Vicinity of Well PW-101, Osceola County, Michigan."

Streamflow Data:

1. Any streamflow measurement data collected in Chippewa Creek and Twin Creek watersheds after October 2015;
2. All electronic Flow Tracker data files available for measurements collected in 2015 and 2016;
3. A site map, which includes all streamflow measurement locations in the Chippewa Creek and Twin Creek watersheds;
4. If Nestlé Waters North America, Inc. (Nestlé), implemented modifications to the streamflow measurement protocol since the last version received by the DEQ, update the March 2, 2015, Streamflow Measurement Protocol for the city of Ewart and White Pine Springs memo.

Fish, Macroinvertebrates, and Aquatic Habitat Data:

1. Individual sampling event data tables for fish, macroinvertebrates, stream dimensions, and water temperature for each sampling event for each creek;
2. Describe the methods used for habitat, fish collection, and macroinvertebrate collection;

3. Provide catch per unit effort for fish collection, including the length of stream, time sampled, fish length and weight;
4. Revise Figure 1-2 in S.S. Papadopoulos & Associates, Inc.'s 2016 report "White Pine Springs Evaluation of Fish, Macroinvertebrates, and Aquatic Habitat Resulting from an Increase in Groundwater Withdrawal" to show the location of Station SF8-1;
5. Table 2 in the same report has several errors regarding Orders and Families: Order Basommatophora, Family Physidae and Order Pulmonata, Family Physidae should be consolidated into one category; Order Ephemeroptera and Family Letohyphidae should be Family Tricorythidae; Order Plecoptera, Family Philopotamidae should be Order Trichoptera;
6. D-framed kick nets were used to survey mussels and the reference provided (Merritt, et al., 1996) is for aquatic insect sampling. Please confirm whether mussels were collected using D-framed kick nets. If not, please provide a reference for the method that was actually used. If D-framed kick nets were actually used, please note that this is not an appropriate method for mussel sampling and refer to the following links for methods that should be used in the future:

[Wildlife Ohio DNR](https://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses%20&%20permits/OH%20Mussel%20Survey%20Protocol.pdf)

(<https://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses%20&%20permits/OH%20Mussel%20Survey%20Protocol.pdf>)

[West Virginia Field Office](https://www.fws.gov/westvirginiafieldoffice/PDF/West_Virginia_Mussel_Survey_Protocols_March_2014.pdf)

([https://www.fws.gov/westvirginiafieldoffice/PDF/West\\_Virginia\\_Mussel\\_Survey\\_Protocols\\_March\\_2014.pdf](https://www.fws.gov/westvirginiafieldoffice/PDF/West_Virginia_Mussel_Survey_Protocols_March_2014.pdf))

7. Provide water temperature details for Stations SF9, SF8, and SG5, and how the proposed withdrawal increase could affect those stream temperatures;
8. Provide detailed information regarding changes in streamflow, depth, and temperature for each station and the impacts to macroinvertebrates;
9. Identify all road/stream crossings for Chippewa and Twin Creeks, provide photographs of these stream crossings, existing dimensions of culverts or bridges, stream widths, and stream depths. Project changes to stream widths and depths due to the proposed withdrawal increase;
10. Provide rating curves and temperature data for Chippewa and Twin Creeks and describe how the rating curves were developed;
11. Describe the inputs to the United States Geological Survey program Stream Segment Temperature Model Version 2.0 used by S.S. Papadopoulos & Associates, Inc., and how they were determined.

Wetlands

1. In the Environmental Consulting & Technology, Inc. (ECT) report, reference is made to water level measurements, soil samples and monitor wells. Please provide this data as well as any additional monitoring observations, plant identification, etc., conducted by ECT. Copies of soil boring logs identifying soil sample descriptions and depths, any sieve analyses, and water levels measured/used in the wetlands evaluations should be submitted. The data should be clearly presented in table or other appropriate format and a map of all data locations provided. The latitude/longitude in decimal degrees and North American Vertical Datum (NAVD) of each sample or measurement location should

be provided if known. Were multiple borings taken within each wetland to document consistent soil layers?

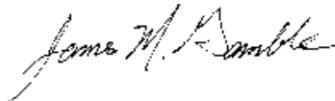
2. A copy of the wetland delineations and associated reports, data, and maps for the project area (including the Don Tilton report).
3. Any additional water level measurements available (e.g., prior to and after pumping, current levels, etc.), preferably data close to or in the wetlands.
4. Explanation of why wetlands underlain by silt, etc., should be considered perched.

Reasonable Use and Michigan Water Law

1. Section 5. D. of the application package, at pages 23-27, states that “[t]he proposed use is reasonable under common law principles of water law in Michigan,” as required by MCL 324.32723(6)(d). Please: (a) document, by reference to relevant sources of Michigan law (e.g., Michigan case law and authoritative secondary sources), the specific legal bases for Nestlé’s stated understanding of “common law principles of water law in Michigan,” and (b) explain in detail how the proposed use is “reasonable” under the documented “common law principles.”
2. Section 5. F of the application package, at pages 27-28, states that “the proposed withdrawal will not violate public or private rights and limitations imposed by Michigan water law or other Michigan common law duties,” as required by MCL 324.3723(6)(f). Please: (a) document, by reference to relevant Michigan sources of law (e.g., Michigan case law and authoritative secondary sources), the specific legal bases for Nestlé’s stated understanding of “public or private rights and limitations imposed by Michigan water law or other Michigan common law duties,” and (b) explain in detail why the proposed withdrawal will not violate the documented “public or private rights or limitations imposed by Michigan water law or other Michigan common law duties.”

Once you and your staff have had time to review the above, please let me know if you would like to schedule a conference call or meeting to discuss the request further. I can be reached at 517-897-1508; gamblej1@michigan.gov; or by mail at DEQ, DWMAD, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,



James (Matt) Gamble, Supervisor  
Source Water Unit  
Drinking Water and Municipal Assistance Division

cc: Mr. Robert Reichel, Department of Attorney General  
Ms. Tammy Newcomb, Department of Natural Resources  
Ms. Maggie Pallone, DEQ  
Mr. Bryce Feighner, DEQ  
Ms. Diana Klemans, DEQ  
Mr. James Goodheart, DEQ