

**Subject:** Data Practices Request - Upper Partridge River Base Flow

**Date:** Friday, January 31, 2014 4:48:23 PM CT

**From:** Paula Maccabee

**To:** Johnson, Bill H (DNR)

Bill Johnson (MDNR)

Dear Bill:

Below, please find a Data Practices Act request from WaterLegacy.

In the attached Minnesota DNR fact sheet, the statement is made that modeling for the PolyMet SDEIS included an input value of 1.5 cfs for the Upper Partridge River base flow. The quote is "The current water-quality model used an input value of 1.5 cubic feet per second (cfs) as base flow for the upper Partridge River. That number included the 0.5 cfs predicted by the surface-water model and based on a downstream gage, but also included an additional 1.0 cfs to account for some groundwater discharge from the nearby Northshore mine."

WaterLegacy and our citizen experts have reviewed the PolyMet NorthMet Mine Site Water Modeling Data Package (reference PolyMet 2013i) and the PolyMet NorthMet SDEIS. We have been unable to find any reference to the use of 1.5 cfs in modeling Upper Partridge River base flow.

The PolyMet SDEIS states at page 5-27 (pdf page 934):

Revisions to the XP-SWMM model since the DEIS resulted in different surface water baseflow estimates for the Partridge River. Using the revised XP-SWMM baseflow estimates, the Site MODFLOW model was calibrated using target baseflow values of 0.41, 0.51, and 0.92 cfs at SW-002, SW-003, and SW-004, respectively.

This information on base flow is also contained in the PolyMet NorthMet Mine Site Water Modeling Data Package, reference PolyMet 2013i, at pdf page 692.

In the Water Modeling Data Package, we found a reference to calibration related to the Peter Mitchell discharge. However this reference (on narrative page 133, pdf page 140) appears to pertain to calibration for surface water quality, not to mine site base flows. The cited Table 1-13 refers to "Existing Surface Water Concentrations" and the explanation is as follows:

Surface water quality observed at location PM-1/SW001 was used as a surrogate for the discharge quality for the Peter Mitchell Pit. The data were used to estimate constituent concentrations associated with this discharge (Table 1-13 of Attachment B). The discharge rate was considered in calibration of the No Action Model and left fixed at 1 cfs. In modeling the Project impacts, the average discharge from the Peter Mitchell Pit remains fixed at 1 cfs.

We did not find any mine site water modeling referencing the use of a 1.5 cfs input value for Upper Partridge River base flow. We would appreciate your help with the following Data Practices Request:

- Please provide us with any document and page reference that demonstrates the use of a value of 1.5 cfs for predicting Upper Partridge River base flow.
- Please confirm whether the input numbers used for Upper Partridge River base flow were deterministic or probabilistic.
- We would also greatly appreciate clarification, if you identify any portion of any document where a 1.5 cfs input value is used for Upper Partridge River base flow: a) whether that input number refers to a single specific location at a specific point in time (and, if so, at what location and time); and/or b) if that input value is part of probabilistic analysis, what the other values were constituting the range of probabilities

considered.

Thank you very much for your help in locating and understanding the data pertaining to this important issue.

Sincerely yours,

Paula Maccabee, Esq.  
JUST CHANGE LAW OFFICES  
1961 Selby Ave.  
St. Paul MN 55104  
phone: 651-646-8890  
fax: 651-646-5754  
Cell: 651-775-7128  
e-mail: [pmaccabee@justchangelaw.com](mailto:pmaccabee@justchangelaw.com)  
<http://www.justchangelaw.com>

Counsel/Advocacy Director for WaterLegacy

**NorthMet SDEIS Clarifications  
WaterLegacy Inquiry of 1/31/14  
RGU-DNR Responses**

**Request 1:**

Please provide us with any document and page reference that demonstrates the use of a value of 1.5 cfs for predicting Upper Partridge River base flow.

**Response 1:**

The GoldSim model utilized a value of 0.5 cfs as baseflow for the Partridge River.

**Request 2:**

Please confirm whether the input numbers used for Upper Partridge River base flow were deterministic or probabilistic.

**Response 2:**

Deterministic. See CD for reference document.

**Request 3:**

We would also greatly appreciate clarification, if you identify any portion of any document where a 1.5 cfs input value is used for Upper Partridge River base flow: a) whether that input number refers to a single specific location at a specific point in time (and, if so, at what location and time); and/or b) if that input value is part of probabilistic analysis, what the other values were constituting the range of probabilities considered.

**Response 3:**

See Response 1.