

## Johnson, Bill H (DNR)

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**From:** Tina Pint <[REDACTED]>  
**Sent:** Wednesday, November 28, 2012 7:14 AM  
**To:** David Blaha; 'Al Trippel'; Carlson, Erik (MPCA); Clark, Richard (MPCA); Johnson, Bill H (DNR); Colvin, Steve E (DNR)  
**Cc:** Jim Scott ([REDACTED]) ([REDACTED]) Peter J. Hinck; Cory D. Anderson  
**Subject:** NorthMet No Action Alternative

Folks,

As requested, below are the key assumptions/activities that are included in the No Action water quality models that have been developed for the NorthMet Project.

At the Mine Site, the No Action model represents existing conditions. The only water reaching the Partridge River is runoff from the watershed, groundwater discharge, and Northshore's discharge from the Peter Mitchell Pit. The Northshore discharge is assumed to be a constant 1 cfs with a deterministic water quality.

At the Plant Site, the No Action model represents pre-consent decree conditions. There is no collection of seepage water from the LTVSMC Tailings Basin, which is currently occurring as part of the temporary mitigation measures associated with the consent decree. Because these actions are considered temporary, they were not included in the No Action model. There is no change from existing conditions relative to outflow from Area 5NW into the Embarrass River watershed. This flow is uncertain and variable, with a summer time mean flow of 2.127 cfs, a wintertime mean flow of 1.177 cfs, and a snowmelt mean flow of 4.0225 cfs. The water quality is of the Area 5NW outflow is deterministic. In addition, there is assumed to be a constant discharge of 0.33 cfs into the Embarrass River from the Babbitt WWTP.

Please let me know if you need any additional detail on the No Action models.

Tina Pint, PG

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