## **News from Avon Township**

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"It's been a quiet week in Lake Wobegon."

This phrase may be familiar if you used to listen to Garrison Keillor's "Prairie Home Companion" radio broadcast. This is how he would begin his monologue about the events in this fictional town, which is presumably located just down the road from Avon Township.

I was reminded of this phrase when I recently read the supplemental report on the effects of the noise barrier constructed adjacent to I-94 in the vicinity of Upper Spunk Lake. This report was issued by the Office of Environmental Stewardship – Environmental Monitoring and Testing Unit in May 2019.

The purpose of this report was to determine the effect of the newly constructed barrier along the east (city) side of I-94 on noise levels on the west (Upper Spunk Lake) side of the road.

Noise measurements, called L10, were taken at two sites on both sides of I-94 before and after construction of the barrier. L10 is a measurement used to report fluctuating noise levels such as from traffic. Essentially it means that 10% of the time there will be an increase of the measured amount over a predetermined noise level.

The planners predicted that construction of the I-94 barrier would increase the L10 by about 1 decibel (dBA) on the Upper Spunk Lake side. As background, the report states any sound level change of 1 dBA or less is imperceptible to a human and that a change of about 3 dBA is "barely perceptible."

The results of the study showed that there was an increase of 3.3 dBA at one location and 3.6 dBA at another on the Upper Spunk Lake side of the road. The planners were surprised that the difference before and after barrier construction was greater than expected.

When they investigated why there was such a difference in sound level from what they had predicted, they concluded that the density of deciduous foliage and underbrush was responsible. When they factored in the effects of shielding by vegetation the L10 dropped to 1 dBA or less.

Unfortunately, the study doesn't provide the dates when samples were taken so it's not clear whether the shielding effect is the result of seasonal change (*i.e.*, no leaves in the winter) or vegetation removal by the residents on the lake side of the road.

Whatever the cause, two lessons from this study are that road noise will be more pronounced in winter and that plants can provide an effective barrier to noise. If you live along a busy thoroughfare, you may want to consider planting additional shrubs and trees, especially evergreens, to shield your home from traffic noise.

Looks like we should thank our botanical friends that can help make it a quiet week in Avon Township.

A copy of the report is available on our Town website (avontownship.org; click on Inside Avon Township and then Roads).