FOR IMMEDIATE RELEASE
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Inspiration development improves local water quality in the St. Croix River valley

What's this? A large residential development that actually *improves* the water quality of its local and regional surroundings?

That's what the scientists affirm; and for us regular folk, it makes sense.

What?

Inspiration, a 245-acre residential development - a conservation development - on the outskirts but within the small town of Bayport, was designed by an ecological firm that specializes in the priorities of clean water and wildlife habitat.

Prior to its development, these acres were farmed for decades. Farming, as we know, typically requires that the soil remain weed-free, barren except for its crop, and thus directly exposed to rainfall. It also requires fertilizers and herbicides, which run off the land in a rain storm, to the lowest point of land. In this case, that's eventually the St. Croix River, the *only federally designated Wild & Scenic River in the state of Minnesota*.

So, for decades, the St. Croix River has received the run off of fertilizers and herbicides from the farmed property of what is now Inspiration. In a typical rainstorm, it has taken only hours for these pollutants to reach the river.

Note to: fish, mollusks, aquatic insects and birds (like bald eagles, peregrine falcons and kingfishers who depend on them…and us) – ecosystems all - that's over now.

You're welcome.

Today, Inspiration is protecting the ecosystems of the St. Croix Valley by improving the water quality of the river and the wildlife habitat of the acres on which it is located.

How?

Well, the land plan for Inspiration was designed by ecologists, rather than civil engineers, so the priorities of how the land was to be developed were a bit different. Instead of pushing stormwater runoff into the street – off rooftops, driveways and lawns – rain that fall on Inspiration flows into backyard swales and from there, into prairies, which absorb the water.

Instead of funneling untreated water into stormwater sewer pipes, Inspiration's landscape directs water into the prairie soils where it is taken up by the huge root systems of prairie grasses and native wildflowers. Here, if the plants don't absorb it, the cleansed water filters into the groundwater which reaches either the underground aquifers or flows to the St. Croix River.

Filtered and clean, in either case.

At Inspiration, in 245 acres, a nationally renowned Ph.D. hydrological engineer identified 13 separate mini-watersheds into which the stormwater runoff is directed. This is called a "Stormwater Treatment Train" by Applied Ecological Services – the designer of Inspiration.

Within these mini-watersheds, the stormwater is absorbed, cleansed, held and infiltrated into the soil which is planted with native prairies that are restored within 170 acres of the site – a full 70 percent of the land. At a cost of $1.7 million to the developer. Whew!

Does this resemble your neighborhood? (We hope so, in the near future – whether at Inspiration or elsewhere. We have become a national model for residential development.)

But Wait…

Groundwater pollution has been an issue that has been raised in the Lake Elmo – Bayport area in the past few years.

Apparently, 40 to 70 years ago, a manufacturing plant in Lake Elmo contaminated the ground with a chemical - trichloroethylene (TCE) - that has since been tested to be carcinogenic, and over the years TCE has slowly leached its way down into the deep groundwater aquifer in the region.

In 2002, the USEPA concluded that *extremely* high exposure to TCE has been linked to cancer. At that time, the USEPA allowable limit of TCE in drinking water was reduced from 30 parts per billion to 5 parts per billion.

Carcinogenic risk limits are set, according to the Minnesota Department of Health, based on an assumption that someone is drinking water with TCE in excess of 5 parts per billion in an amount of 2 liters per day for 70 years.

The risk, then, to Bayport residents? Miniscule, according to the scientists, especially if mitigation procedures are followed, which is the case. Let's follow the science…

MPCA Findings

In late 2006, the level of trichloroethene (TCE) in the groundwater aquifer of the Lake Elmo/Bayport area reached 5 parts per billion in Bayport - only within well #2, one of three wells operated by the City of Bayport.

The Minnesota Pollution Control Agency (MPCA) was tracking TCE levels for several years, of course. This situation is not *new* news to the MPCA scientists, nor to the administrators of Bayport city services, regardless of recent newspaper reports.

Anticipating the contaminant level of Bayport well #2 would exceed 5 parts per billion eventually, MPCA and the City of Bayport planned a mitigation strategy to alleviate the risk, even as small as it was.

(It should be noted that prior to well #2 reaching this USEPA limit, water from well #2 was (and is) blended with water from the other two uncontaminated wells operated by the City. Thus the blended tap water received by residents is and has always been well within USEPA water safety standards.)

Bottom Line

To reduce TCE in Bayport well #2 below the USEPA standard of 5 parts per billion, the City of Bayport enlisted the engineering support and direction of the MPCA to construct an "air stripping" plant that transfers TCE from the water supply to the ambient air environment where it harmlessly dissipates.

This plant, operational in March, 2007, reduces TCE levels below the levels prescribed by the USEPA from Bayport well #2, and far below levels received by Bayport residents from their tap water sources, once well #2 water is blended with other Bayport city wells.

Bottom line: water supplied by the City of Bayport is safe. Well within USEPA limits for TCE and every other contaminant. Waste not your money on bottled water. Drink up.

Oh, One Other Thing

One certain individual in the area has been crusading against the Inspiration conservation neighborhood on the discredited notion that our creation of homes for new residents was somehow involved or responsible for this groundwater contamination problem. This notion has been discredited as entirely false by the scientists and officials of the MPCA and the Minnesota Department of Health.

For confirmation of the factual information provided above, please contact the MPCA Office of Public Information, 651-296-7706, the Minnesota Dept. of Health at 651-643-2103 or the City of Bayport, 651-275-4404.