ENVIRONMENT MINNESOTA'S FRIGHTENING FACTS ABOUT MINNESOTA'S WATERS

1. HIGH NITRATE LEVELS, UNSAFE FOR DRINKING WATER, WERE FOUND IN 27 PERCENT OF MONITORED STREAMS AND RIVERS IN MINNESOTA IN 2013. HIGH NITRATE IN DRINKING WATER CAN CAUSE A POTENTIALLY FATAL CONDITION IN INFANTS KNOWN AS "BLUE BABY SYNDROME." IT IS ESTIMATED THAT THOUSANDS OF MN DRINKING WELLS ARE CONTAMINATED WITH TOO MUCH NITRATE. THE CITY OF ST. PETER SPENT $18.8 MILLION ON WATER TREATMENT TO DEAL WITH PROBLEMS IN ITS WATER WELLS.

2.OVER 70 PERCENT OF THE NITROGEN POLLUTION THAT GETS INTO MINNESOTA WATERWAYS COMES FROM CROPLAND, AS A BYPRODUCT OF FERTILIZER AND MANURE FROM THE AGRICULTURAL INDUSTRY. THESE CROPLAND SOURCES ARE EXEMPT FROM THE CLEAN WATER ACT.

3. MINNESOTA SENDS 211 TONS PER YEAR OF NITROGEN DOWNSTREAM, CONTRIBUTING TO THE MASSIVE DEAD ZONE IN THE GULF OF MEXICO, AN OXYGEN-DEPLETED AREA THAT FORMS EACH SUMMER WHERE THE MISSISSIPPI RIVER EMPTIES INTO THE GULF. THIS SUMMER THE DEAD ZONE WAS 5800 SQUARE MILES, THE SIZE OF CONNECTICUT.

4.AROUND HALF OF MINNESOTA'S WATERWAYS ARE CLASSIFIED "IMPAIRED" MEANING THEY DON'T MEET WATER QUALITY STANDARDS AND MAY BE UNSAFE FOR FISHING AND SWIMMING. IN THE MOST RECENT LIST UPDATE, 511 WATER BODIES OR RIVER SEGMENTS WERE ADDED TO THE IMPAIRED LIST AND ONLY 13 WERE REMOVED.

5.41% OF MINNESOTA'S WATER IMPAIRMENTS ARE FOR LEVELS OF E. COLI AND FECAL COLIFORM THAT MAKE THE WATER UNSAFE FOR SWIMMING.

6.52% OF MINNESOTA'S WATER IMPAIRMENTS ARE FROM PHOSPHORUS AND NITROGEN, WHICH CAN CAUSE ALGAL BLOOMS WHICH COVER LAKES AND ANYONE WHO USES THEM WITH GREEN SLIME. SOME TYPES OF ALGAE ARE TOXIC AND DANGEROUS, LIKE BLUE GREEN ALGAE THAT CAN CAUSE GASTROINTESTINAL AND RESPIRATORY ISSUES OR EVEN LIVER FAILURE.

(1, 2, 3) Nitrogen in Minnesota Surface Waters report http://www.pca.state.mn.us/index.php/water/water-types-and-programs/surface-water/nutrient-reduction/report-on-nitrogen-in-surface-water.html
(1) MPR: Fertilizer by-product an unhealthy, expensive risk to water quality http://minnesota.publicradio.org/display/web/2013/09/10/environment/alfalfa-fertilizer-water-quality
(1) MN Dept of Health http://www.health.state.mn.us/divs/eh/water/com/waterline/featurestories/saintpeter.html
(2) Clean Water Act § 502(14), 33 U.S.C. § 1362(14) (excluding agricultural stormwater from the definition of point sources subject to permit limits). (3) Gulf Restoration Network Louisiana Marine Consortium Press Release, July 28, 2013, http://www.gulfhypoxia.net/Research/Shelfwide%20Cruises/2013/PressRelease2013.pdf
(4) MPR: Minn adds 511 bodies of water to impaired list: http://minnesota.publicradio.org/display/web/2012/09/25/environment/minnesota-impaired-waters-list
(4, 5, 6) MCEA

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7. INDUSTRIAL FACILITIES DUMP OVER 1.4 MILLION POUNDS OF TOXIC CHEMICALS INTO MINNESOTA RIVERS AND STREAMS EVERY YEAR.

8. A RECENT U.S. GEOLOGICAL SURVEY USGS STUDY FOUND 73 PERCENT OF SMALLMOUTH BASS AT A SITE IN LAKE PEPIN SHOWED SIGNS OF MUTATED SEXUAL ORGANS.

9. 1,400 OF WATER BODIES TESTED SO FAR IN MINNESOTA HAVE DANGEROUSLY HIGH LEVELS OF MERCURY CONTAMINATION.

10. LAKE PEPIN IS FILLING IN AT 10 TIMES ITS NATURAL RATE. EACH YEAR, ONE MILLION METRIC TONS OF SEDIMENT FILLS IN THE RIVER FROM THE SOUTH END OF THE METRO AREA TO LAKE PEPIN. THAT'S LIKE THE VOLUME OF A DOWNTOWN CITY BLOCK FILLED OVER THE HEIGHT OF THE FOSHAY TOWER 454 FEET. AT THIS RATE IT WILL BE COMPLETELY FILLED IN WITH SEDIMENT IN 340 YEARS.

11. NON-NATIVE INVASIVE CARP SPECIES HAVE MADE THEIR WAY INTO MINNESOTA. INDIVIDUAL FISH HAVE NOW BEEN FOUND IN THE MISSISSIPPI AND ST. CROIX RIVERS. A CARCASS OF THE LEAPING SILVER CARP WAS FOUND, DEAD, THIS SUMMER ON A DAM JUST NORTH OF WINONA. ANOTHER ALIEN SPECIES TAKING OVER MINNESOTA LAKES IS THE ZEBRA MUSSEL, INFESTING SUCH POPULAR AND ICONIC WATERS AS LAKE MINNETONKA

12. SULFIDE MINING, NEVER BEFORE CONDUCTED IN MINNESOTA, IS NOW BEING PROPOSED IN NORTHEASTERN MINNESOTA. THE METALS MINING INDUSTRY IS THE TOP POLLUTING INDUSTRY IN THE COUNTRY, RELEASING 1.6 BILLION POUNDS OF TOXICS ACCORDING TO THE 2010 TOXICS RELEASE INVENTORY. THE ENVIRONMENTAL REVIEW FOR THE PROPOSED POLYMET MINE IN MINNESOTA PREDICTS 500 YEARS OF WATER POLLUTION.

13. SCIENTISTS ARE FINDING TINY PARTICLES OF PLASTIC, OR "MICROPLASTIC POLLUTION" IN THE GREAT LAKES, INCLUDING LAKE SUPERIOR. SOME OF THE TINY PLASTICS COME FROM PRODUCTS LIKE PERSONAL CARE PRODUCTS THAT CONTAIN "MICROBEADS." THE PLASTIC DOES NOT BIODEGRADE IN THE WATER AND CAN BE INGESTED BY FISH AND HUMANS.

(7) Wasting our Waterways report http://environmentminnesota.org/news/mne/over-14-million-ounds-toxic-chemicals-dumped-minnesota-waterways (8) Hinck, J.E., V.S. Blazer, C.J. Schmitt, C.M. Papoulias and D.E. Tillitt. 2009. Widespread occurrence of intersex in black basses (Micropterus spp.) from U.S. rivers, 1995-2004 Aquatic Toxicology 95(1): 60-70 (9) Minnesota Center for Environmental Advocacy summary of 2012 Minnesota Impaired Waters List, http://www.mncenter.org/issues/water/conditions-of-minnesotas-waters.aspx
(10) Minnesota River Basin Data Center http://mrbdc.mnsu.edu/minnesota-river-downtream-impacts
(11) DNR: http://news.dnr.state.mn.us/2013/08/22/carcass-of-leaping-asian-carp-found-on-mississippi-river-near-winona/
MPR: http://minnesota.publicradio.org/display/web/2013/07/30/environment/zebra-mussels
(12) http://www.earthworksaction.org/issues/detail/toxics_release_inventory_what_is_it#.UmNBiTV6mE
(12) Star Tribune: http://www.startribune.com/local/226548091.html
(13) http://www.huffingtonpost.com/2013/07/30/tiny-plastic-beads-great-lakes-pollution_n_3680970.html

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