

SPECIFIC CONDUCTANCE RESOLUTION

Whereas, the United States Congress has enacted the Clean Water Act (CWA) to restore and maintain chemical, physical, and biological integrity of the Nations waters.

Whereas, the CWA assigns the United States Environmental Protection Agency (USEPA) to develop and enforce surface water protection regulations and programs to maintain and restore the Nation's waters' chemical, physical, and biological, integrity.

Whereas, the USEPA has recognized that as a result of numerous unique physical and ecological regional variations within the Nation, not all surface waters are similar in their chemical, physical, and biological characteristics.

Whereas, to protect the ecoregions' indigenous flora and fauna, the USEPA has divided the nation into Ecoregions that reflect locally identifiable native conditions.

Whereas, when water is clean, aquatic animals and plants can maintain an easy balance between the concentration of ions in their tissues and the concentration of ions in the surrounding water, through a process called osmosis.

Whereas, when water contains unnaturally high concentrations of ions, for example due to pollution, the aquatic plant and animal life must expend more energy to rid their tissue of excess ions. That expenditure of extra energy leaves the aquatic plants and animals with less energy to do the things they have to do to survive and reproduce.

Whereas, excessive levels of ions in a water body will badly impair, kill, or eliminate sensitive aquatic plants and animals from the polluted water body.

Whereas, loss of aquatic flora or fauna has a harmful effect on the rest of the food web, degrades the integrity of the water body, and can lead to the loss of other native organisms in the food web.

Whereas, the level of ions in a water body is measured in excessive ions in water that require the fauna or flora to use additional energy to discharge the excess ions are detectable by higher specific conductance;

Whereas, specific conductance is an accurate, low cost, easily completed measurement directly related to the combined effect of all ions in the water.

Whereas, EPA Final Guidance stated that when 5% of the native macroinvertebrate genera are extirpated, that conductivity level is "associated with significant biological degradation from loss of stream life," and may prevent compliance with regulations for Clean Water Act Section 404 permits. (EPA Final Guidance, 2011).

Whereas, Minnesota rules reflect a similar definition of toxicity for aquatic life, establishing that the absence of toxic effects means “the protection of no less than 95% of all the species in any aquatic community.” (Minn. Rule 7050.0217, Subp. 2A).

Whereas, the Minnesota Pollution Control Agency (MPCA) regulations fail to protect waters from the deleterious effects of excess ions.

Therefore, be it resolved that the Minnesota Division of the Izaak Walton League of America in Convention on April 27th, 2019 requests the MPCA develop specific conductance standards for each of Minnesota’s bioregions that are protective of no less than 95% of all the species in the aquatic communities, in compliance with current MPCA rules.

Therefore, be it resolved that enforceable specific conductance standards be included in all NPDES permits.

Therefore, be it resolved that all National Pollutant Discharge Elimination System (NPDES) permits that require a mixing zone for specific conductance discharges/s define such zones using, at a minimum, maps showing measurements in feet or meters from established discharge points, such that permit compliance can be verified with specific conductance sampling.

Submitted by Minnesota Valley Chapter