

# General Meeting for the Public, November 12

## Emerging Water Quantity and Quality Issues in Wisconsin

**What:** General Meeting on Water Quantity/Quality Issues. Questions addressed will include:

- What are emerging water quantity and quality issues in Wisconsin?
- Are current laws and regulations adequate to address these issues?
- What new laws and regulations are being proposed in the upcoming legislative session?

**When:** Saturday, November 12, 2016, 10:30 a.m. to 1:00 p.m.

**Where:** Shorewood Village Center/Library (ground level), 3920 North Murray Avenue, Shorewood

### Who will present:

#### Attorney Donald P. Gallo - Environmental Attorney and Partner at Husch Blackwell

Mr. Gallo will address water QUANTITY issues. His environmental practice includes more than 25 years of legal experience and 40 years of environmental engineering experience. He advises clients on environmental litigation and on the development of environmental legislation, regulations, and regulatory compliance.

Mr. Gallo will address issues related to permitting high capacity wells by the Wisconsin Department of Natural Resources (WDNR) and the recent approval of the City of Waukesha's proposal to divert an average of 10.1 million gallons of water per day from Lake Michigan to meet its water needs.

#### Michael Carvan - Shaw Professor, UW-Milwaukee School of Freshwater Sciences

Dr. Carvan will address water QUALITY issues. He has more than 20 years' experience in the fields of environmental toxicology and environmental genetics, is a pioneer in the use of laboratory fish as biomedical models, and has authored more than sixty scientific papers and book chapters.

Dr. Carvan will focus on non-point chemical pollutants: both legacy pollutants like PCBs, mercury, and chlorinated pesticides, as well as more recent ones such as non-chlorinated pesticides, pharmaceuticals, and antibiotics (including some not currently on the public radar).

### Background:

This topic was inspired by a program at the LWV-WI's annual meeting in June of 2016. Mr. Robert Atwell, an economist by training and Chairman and CEO of Nicolet National Bank, presented "The Economic Case for Improving Water Quality." He said that although Wisconsin is among the richest centers of fresh water on Earth, the state has problems with both the quality and quantity of surface and groundwater. For example, the bias toward large-scale, industrialized agriculture contributes to water pollution in Wisconsin.

Mr. Atwell related water quality to economics. He stated that non-point sources of pollution—golf courses, storm sewers and farms—contribute approximately 80 percent of the pollution that has created a dead zone in Lake Michigan's Green Bay. While these entities are not currently held financially responsible, point sources that contribute far less to the problem will pay \$1 billion, or \$2,000 per individual living in the Green Bay area. (<https://www.youtube.com/watch?v=aMsi9Rj5yUE&feature=youtu.be>.)

**In conclusion:** We will learn about some of the critical water quantity and quality issues we face today in Wisconsin. As we study these issues further, it is anticipated that we will better advocate for policy and legislation to promote wise economic growth and water resource management.

Join the Unit Discussions on Water Quantity and Quality Issues on November 16.

Additional information for these sessions is provided on page 7.

## LWV Information for the Wednesday, November 16, Unit Discussion Sessions:

### 1. *The foundation of water law in Wisconsin:*

The public trust doctrine (Article IX, Section 1 of the Wisconsin Constitution) states that Wisconsin's waters belong to everyone. This doctrine has been further defined by case law and statute.

[http://dnr.wi.gov/topic/Waterways/about\\_us/doctrine.htm](http://dnr.wi.gov/topic/Waterways/about_us/doctrine.htm) .

ARTICLE IX. **Jurisdiction on rivers and lakes; navigable waters.** Section 1. The state shall have concurrent jurisdiction on all rivers and lakes bordering on this state so far as such rivers or lakes shall form a common boundary to the state and any other state or territory now or hereafter to be formed, and bounded by the same; and the river Mississippi and the navigable waters leading into the Mississippi and St. Lawrence, and the carrying places between the same, shall be common highways and forever free, as well to the inhabitants of the state as to the citizens of the United States, without any tax, impost or duty therefore.

<http://docs.legis.wisconsin.gov/constitution/wi/000234/000002>.

### 2. *The LWV-WI position on water:*

<http://www.lvwwi.org/IssuesAdvocacy/NaturalResourcesWaterQuality.aspx>.

### 3. *Wisconsin Water Issues in the News:*

Milwaukee Journal Sentinel: **Low water levels on Portage County River cause concern**, August 2, 2014

(<http://tinyurl.com/low080214>)

Capital Times: **Human waste pollutes some Wisconsin drinking water**, May 2, 2016

(<http://tinyurl.com/human050216>)

Milwaukee Journal Sentinel: **Brad Schimel opinion narrows DNR powers on high-capacity wells**, May 11, 2016

(<http://tinyurl.com/brad051116>)

Wisconsin State Journal: **State audit finds DNR ignoring own rules on water pollution**, June 4, 2016

(<http://tinyurl.com/state060416>)

Milwaukee Journal Sentinel: **DNR plan for wells a major victory for business**, June 11, 2016

(<http://tinyurl.com/dnr61116>)

Cleveland Plain Dealer: **Waukesha water diversion - the right decision was made: James Zehringer (Opinion)**,

July 3, 2016 (<http://tinyurl.com/waukesha070316>)

Wisconsin Public Radio: **Great Lakes mayors look to divert Waukesha water diversion plan**, August 22, 2016

(<http://tinyurl.com/great082216>)

### 4. *Relevant Water Quality/Quantity Phenomena*

**Aquifer:** Saturated, underground, water-bearing rock (100X more water than all rivers and lakes!) that brings water to wells and springs. The top of the aquifer defines the **water table**.

(<http://tinyurl.com/100xmore>)

**Management Issues:** The level of the water table can be lowered if water extracted by wells or by other means is not replenished. (<http://tinyurl.com/aquifer12>) The quality of the aquifer can be affected by naturally occurring chemicals such as arsenic and radon; similarly, the aquifer can be polluted with pesticides, drugs, septic waste, and chemicals deposited from manmade activities.

(<http://tinyurl.com/chemicals12>; <http://tinyurl.com/pesticides12>)

**Algal Bloom:** explosive growth of **algae**, **photosynthetic bacteria** and **protists** that can deplete dissolved oxygen to such an extent that fish and other organisms die. This creates a **dead zone**.

**Management Issues:** Algal blooms can often be tied to an influx of nutrients like phosphorus and nitrates from **wastewater** and **non-point sources** such as CAFOs (Concentrated Animal Feeding Operations; <http://dnr.wi.gov/topic/AgBusiness/CAFO/>), chemical and manure fertilizers, and urban fertilizer run-off.

**Helpful Glossary:** <http://www.env.gov.bc.ca/wat/wq/reference/glossary.html>