

ORIGINS OF

**“THE ST. CLAIR – DETROIT
DRINKING WATER MONITORING
PROJECT”**

- AKA -

**“THE HURON-TO-ERIE
REAL-TIME DRINKING WATER
PROTECTION NETWORK”**

THE DRINKING WATER PROTECTION NETWORK IS ... (part 1)

A NETWORK

OPERATING IN REAL-TIME

OF WATER MONITORING EQUIPMENT

AND DATA COMMUNICATIONS EQUIPMENT

IN DRINKING WATER TREATMENT PLANTS

FROM LAKE HURON TO LAKE ERIE...

THE DRINKING WATER PROTECTION NETWORK IS ... (part 2)

**...SO THAT TREATMENT PLANT OPERATORS
WILL KNOW IMMEDIATELY**

**AND REGULATORS AND OTHER AUTHORITIES
WILL KNOW IMMEDIATELY**

**WHEN POLLUTANTS AND CONTAMINANTS
THREATEN THE WATER SUPPLY**

**AND ALL INTERESTED MEMBERS OF THE
PUBLIC WILL KNOW PROMPTLY**

**WHAT SUBSTANCES, IN WHAT AMOUNTS, ARE
IN THE SOURCE WATER**

CONVERGING CONSTITUENCIES 1

PUBLIC HEALTH

THE ENVIRONMENTAL MOVEMENT

NATIONAL DEFENSE

THE TECHNOLOGY COMMUNITY

CITIZEN ADVOCATES

CONVERGING CONSTITUENCIES 2

PUBLIC HEALTH

A HISTORIC CONCERN
FOR WATER QUALITY



Devilish thick!
Yes, here I stick
It makes me Sick!

What torrents of filth, come from
that Walbrook sewer!!

Sewer! why there are 130 such!

Oh! never mind, any nastiness goes down
here in the Borough

What do they drink that!

Prodigious!

"Tell it not in Gath"

Give us Clean water!

Give us pure water!

We shall all have the Cholera.

Give us clean water!

Give us clean water!

**SOURCE
OF THE
SOUTHWARK
WATER WORKS**

*Hail, long-expected days
That Thames's glory to the stars shall raise, &c.*

CONVERGING CONSTITUENCIES 3

THE ENVIRONMENTAL MOVEMENT

THE ENVIRONMENT SHOULD BE
PROTECTED FOR ITS OWN SAKE.

CONVERGING CONSTITUENCIES 4

NATIONAL DEFENSE

HEIGHTENED FOCUS ON
ENVIRONMENTAL
TERRORISM.

CONVERGING CONSTITUENCIES 5

THE TECHNOLOGY COMMUNITY

THE MICROCHIP
THE INTERNET
WIRELESS TECHNOLOGY

CONVERGING CONSTITUENCIES 6

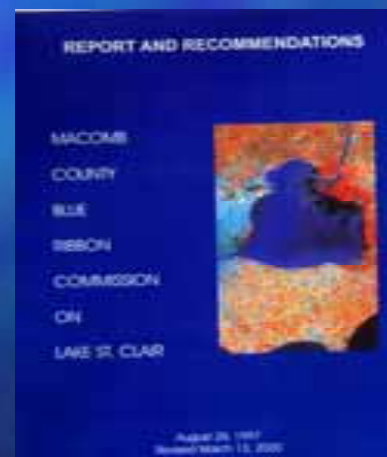
CITIZEN ADVOCACY

GOVERNMENT BUSINESS IS THE
PEOPLE'S BUSINESS.

GETTING DOWN TO BRASS TACKS 1

*FORMATION OF THE BLUE RIBBON
COMMISSION ON LAKE ST. CLAIR.*

*REPORT OF THE BLUE RIBBON
COMMISSION ON LAKE ST. CLAIR.*



GETTING DOWN TO BRASS TACKS 2

THE BRC REPORT SAID:

“ ... LOCAL WATER SUPPLIERS
[SHOULD] ADOPT CONTINUOUS REAL
TIME BIOMONITORING OF THE WATER
TAKEN INTO DRINKING WATER
TREATMENT PLANTS....”

GETTING DOWN TO BRASS TACKS 3

GOVERNMENTAL ACTIVITY

1999-2000

Macomb and St. Clair counties see need for coordinated watershed planning.

- SEMCOG assists the counties to form the Macomb/St. Clair Inter-County Watershed Management Advisory Group.
- Inter-County Advisory Group pursues Anchor Bay funding, advocates monitoring gap evaluation of Lake St. Clair watershed.

GETTING DOWN TO BRASS TACKS 4

CITIZEN ADVOCACY

2000-2001

Macomb County Water Quality Board becomes more aware of releases and spills; sees need for urgent action.

Summer, 2000

WQB learns of more sewage releases - and more untreated sewage – than previously understood (SE Michigan and statewide).

February, 2001

WQB learns from Walpole Island First Nation of over 700 spills of toxic chemicals into the St. Clair River from upstream chemical plants in Sarnia over past two decades.

GETTING DOWN TO BRASS TACKS 5

GOVERNMENT ACTIVITY

2003

Lake St. Clair, its tributaries and watersheds, get a physical.

August, 2003

Macomb County Health Department receives a three-year, \$2.5 million grant from MDEQ.

GETTING DOWN TO BRASS TACKS 6

CITIZEN ADVOCACY

2003-2004

Rebalancing of concerns for biological v. chemical threats.

August, 2003

WQB learns of Royal Polymer vinyl chloride spill.

February 2004

WQB learns of Imperial Oil methyl ethyl ketone spill.

GETTING DOWN TO BRASS TACKS 7

9/11/2001

A New Federal Focus on Water!

- Slowness of E. coli determination becomes unacceptable to the Federal Government.
- Department of Homeland Security is created, realizes vulnerability of the water supply to terrorism.
- New funding streams begin to come on line.

GETTING DOWN TO BRASS TACKS 8

Approaches to the Federal Government

2003-2004

Late 2003/Early 2004

Researchers working with the WQB produce White Paper titled "An Alternative Approach to Effective Spill Response and Water Quality Monitoring". Presented to WQB on 2/20/04.

March, 2004

Inter-County Advisory Group writes Congresswoman Candice Miller supporting the White Paper project as their "highest priority".

GETTING DOWN TO BRASS TACKS 9

Approaches to the Federal Government

LATE 2004

July, 2004

Macomb County writes Congresswoman Miller also supporting the White Paper Project. Annual cost estimated at \$1.5 – 1.8 million per year; estimated 4-year total of \$6 million.

October, 2004

Inter-County Advisory Group establishes a Real-Time Monitoring Subcommittee anticipating receipt of Federal Funds.

GETTING DOWN TO BRASS TACKS 10

Federal Funds

Received by MDEQ; Requested by Macomb County

2005

July, 2005

MDEQ receives \$760,000 from Department of Homeland Security to protect WTP intakes in Detroit and Wayne County. DEQ and Inter-County Advisory Group agree to use same equipment, protocols.

July, 2005

Macomb County submits proposal to EPA to protect nine WTP intakes on St. Clair River and Lake St. Clair.

GETTING DOWN TO BRASS TACKS 11

State Funds Arrive

2006

November, 2006

Macomb County receives \$250,000 from MDEQ, championed by Representative Dan Acciavatti, supported by Governor Granholm.

Purpose: Begin process of assuring public access to real-time data stream from Drinking Water Protection Network, thus leveraging knowledge gained in building LSCRMP website and database.

GETTING DOWN TO BRASS TACKS 12

Federal Funds Arrive; Match Secured

2006

April, 2006

Macomb County receives \$962,200 from EPA, championed by Congresswoman Candice Miller. State funds from LSCRMP leveraged as project match.

Summer/Fall, 2006

Macomb and St. Clair Counties, nine local communities, provide local match. Environmental Consulting and Technology, Inc. (ECT) chosen via competitive bid process as Project Manager. Equipment purchase and installation begin.

GETTING DOWN TO BRASS TACKS 13

Further State Support

2007

July, 2007

Macomb County receives a second \$250,000 from MDEQ, again championed by Rep. Acciavatti and supported by the Governor.

Purpose: Complete public-access website and data base; currently holds > 1.5 million records. See:

WWW.RWQIMS.COM

Additional purposes: Ongoing partial financial support to the Drinking Water Protection Network until a permanent funding stream and local governance structure are agreed upon.