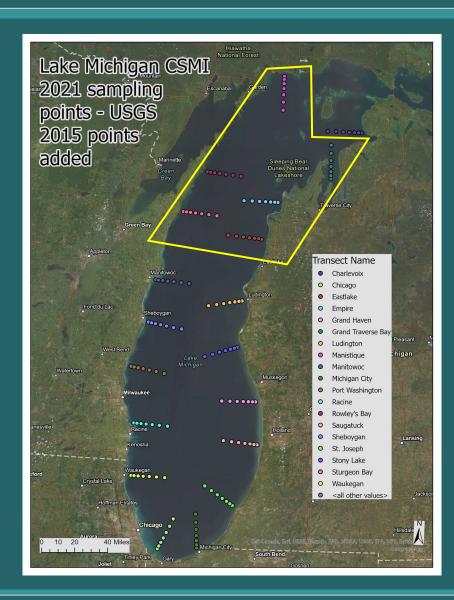


## **EPA ORD GLTED 2021 Lake Michigan CSMI Sampling**



## **R/V Lake Explorer II Transect Locations**

- EAS (Eastlake)
- EMP (Empire)
- GTB (Grand Traverse Bay)
- MNQ (Manistique)
- ROW (Rowley's Bay)
- STU (Sturgeon Bay)



## **Chemical Data (Available Spring/Summer 2022)**

In	issolve organ utrien	ic	Total Nutrients		Cation (metals)			s)	Anions		Chl	TSS/VSS	DOC
NH3	SRP	NOx	Р	Ν	Na	K	Ca	Mg	Cl-	SO4=	Chl A	TSS/VSS	DOC*

#### R/V Sturgeon (USGS)\*\*

Dates: 7/4/21-7/26/21

**Depths:** Surface

**Sites:** (63) 5, 8, 12, 17, 23,

30, 38 km STJ, MIC,

WAU, RAC, GH, PW,

SHB, MAN, LUD

\*processed by Univ Miami

\*\*NH3, SRP, NOx only

#### R/V LEII (GLTED)

Dates: 7/12/21-7/23/21

Depths: 5m, DCL

**Sites:** (18) 5,17,38 km

EAS, EMP, GTB, MNQ, ROW, STU

#### R/V LG (GLNPO)

Dates: 7/13/21-7/22/21

Depths: 5m, DCL

**Sites:** (27) 8, 17, 30 km STJ, MIC, WAU, RAC, PWA, STO,

SHB, MAN, LVD

Contact: Anne Cotter Cotter.Anne@epa.gov



# Physical Data (Available January 2022)

#### **Seabird CTD**

Temperature [deg C]

Fluorescence [mg/m^3]

Oxygen [mg/l]

Conductivity [uS/cm]

Specific Conductance [uS/cm]

Beam Attenuation [1/m]

Beam Transmission [%]

**SPAR** 

PAR/Irradiance

PAR/Corrected Irradiance [%]

Density [kg/m^3]

Pressure, Digiquartz [db]

рН

#### **BBE Fluoroprobe**

Green Algae [µg/l]

Bluegreen [µg/l]

Diatoms [µg/l]

Cryptophyta [µg/l]

Yellow substances [r.u]

Total conc. [µg/l]

Transmission [%]

#### **BIC UV profiles**

1% UV depth

K<sub>uv</sub> (data reprocessed by

Univ Miami)

#### **Sequoia LISST-200X**

Mean Size [µm]

Total Volume Conc. [PPM]

**Total Silt** 

Total Fine

**Total Med Sand** 

**Total Coarse Sand** 

**Ship:** R/V LEII (EPA GLTED)

**Dates:** 7/12/21-7/23/21

**Depths:** full profiles binned at 1m

Sites: (42) EAS, EMP, GTB, MNQ,

ROW, STU

at 5, 8, 12, 17, 23, 30, 38 km

Contact: James Gerads Gerads.James@epa.gov



## **Biological Data**

#### **Larval Fish\***

- Tucker
- Neuston

**Ship:** R/V LEII (EPA GLTED)

Dates: 7/12/21-7/23/21

Sites: (42) EAS, EMP, GTB, MNQ,

ROW, STU at 5, 8, 12, 17,

23, 30, 38 km

\*Samples sent to USGS

\*\*Samples sent to GLTED

#### **Zooplankton**

- Taxonomy
- Isotopes

**Ship:** R/V LEII (EPA GLTED)

Dates: 7/12/21-7/23/21

Sites: (42) EAS, EMP, GTB, MNQ, ROW,

STU at 5, 8, 12, 17, 23, 30, 38 km

Ship: R/V Sturgeon (USGS)\*\*

Dates: 7/4/21-7/26/21

**Sites:** (63) 5, 8, 12, 17, 23, 30, 38 km STJ,

MIC, WAU, RAC, GH, PW, SHB, MAN,

LUD