EGLE –WRD Update

Phil Argiroff
Assistant Division Director
argiroffp@michigan.gov

Water Resources Division

Protect and Monitor

- 4 Great Lakes and Lake St. Clair
- 11,000 inland lakes
- 76,000 river and stream miles
- 6.5 million acres of wetlands
- 74,000 acres of coastal dunes
- Groundwater
- Drinking Water



Relation to Mi Healthy Climate Plan

Based on several objectives:

- Use less energy
- Protection of Environment
- > Helps protect health of residents



Increased Storm Intensity

- Areas of Michigan have already experienced the costly impacts from climate change in the form of flooding, damaged infrastructure, property loss, basement backups and degraded water quality.
- The Great Lakes Integrated Sciences and Assessments (GLISA) climate models project the Great Lakes region will experience a greater increase in total precipitation in the future than most other regions of North America.
- The increased frequency and intensity of extreme events is expected to continue.



Step 1: Rainfall Data

Precipitation Frequency Estimate Data Sources



Climate Change Plan:

- Consistent use of NOAA Atlas 14 across all WRD wet weather programs for the design storms
- NOAA Atlas 14 represents a greater period of recorded precipitation and denser data networks
- Support NOAA updating atlases every 10 years
- NOAA atlas 15 expected in 2027



Resiliency Factor Consistency

Incremental progress to address the impacts and potential risks associated with climate change

CSO: 10% increase in storage volume for Retention Treatment Basins

SSO: 10% increase in storage volume for design values using the Remedial Design Standard

MS4: 10% increase in stormwater runoff volume above the Channel Protection Performance Standard



CAFOs and Biosolids

For CAFOs

➤ Use Atlas 14. Current discusses with NRCS to increase storage volume

For Biosolids

- Support beneficial re-use
- > Less production of inorganic fertilizers

For WWTPs

- Lower energy costs for WWTP
- Utility of the Future



Water Resources Division: PFAS Strategies

Industrial Pretreatment Program PFAS Initiative:

Required all IPP WWTPs to conduct PFAS source investigation.

Public and Private
Municipal Groundwater
Discharges Compliance
Strategy:

Outlines how EGLE will prioritize, evaluate, and address PFAS from municipal groundwater discharges.

EGLE's approach to protect public health and the environment, mitigate risks, and identify and control PFAS sources in wastewater

Land Application of Biosolids Containing PFAS Interim Strategy:

Requires all WWTPs to sample for PFAS prior to land application.

Industrial Stormwater and Industrial Direct Discharge Strategy:

Requires PFAS characterization and mitigation of discharges to surface water and groundwater.

Municipal NPDES Permitting Strategy:

Includes PFAS monitoring and compliance requirements in municipal NPDES permits.

PFAS Criteria in Michigan

Surface Water – Part 31

PFAS	HNV (drinking)	HNV (nondrinking)
PFOS	11 ppt	12 ppt
PFOA	66 ppt	170 ppt
PFBS	8,300 ppt	670,000 ppt

HNV = **Human Noncancer Value**

Groundwater – Part 201

PFAS	Groundwater Protection Criteria
PFOA	8 ppt
PFOS	16 ppt
PFNA	6 ppt
PFHxA	400,000 ppt
PFHxS	51 ppt
PFBS	420 ppt
HFPO-DA (GenX)	370 ppt



Wastewater/Stormwater Infrastructure

- PA 53, use of ARPA grants, BIL grants and loans
- FY23 and FY 24 use \$400 million of ARPA grants in addition to well over a billion dollars in loans
- Included updated scoring criteria focusing on public health protection, green infrastructure
- Will issue a new collection system general permit.



Why do we need the GP?

Collection systems must be inspected and maintained, and some haven't been

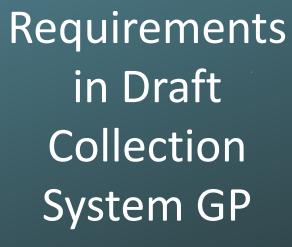
Collection systems have capacity restrictions

~500 collection systems not covered by NPDES permits

Currently address collection systems reactively instead of proactively; SSOs in ACOs

High wet weather flows at some Regional WWTPs; flows have not been adequately reduced over time





- Proper operations. Note that separate sanitary collection systems are a POTW
- Asset management (AM)
- Outlet and internal capacity restrictions (CMOM), address flows to meet excessive I/I definition or another acceptable regional criteria
- Inspection program
- SSO prohibition
- Fiscal sustainability
- Operator certification in future.
 Note that Part 41 rule revisions are currently moving towards implementation



Questions?

Michigan Department of Environment, Great Lakes, and Energy

800-662-9278 Michigan.gov/EGLE



