

DEQ Update

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Update 2019

New Administration

Director Liesl Clark

Priorities

MS4

PFAS - IPP and Direct Discharges

CMOM/WRRF

Retirements and Staffing

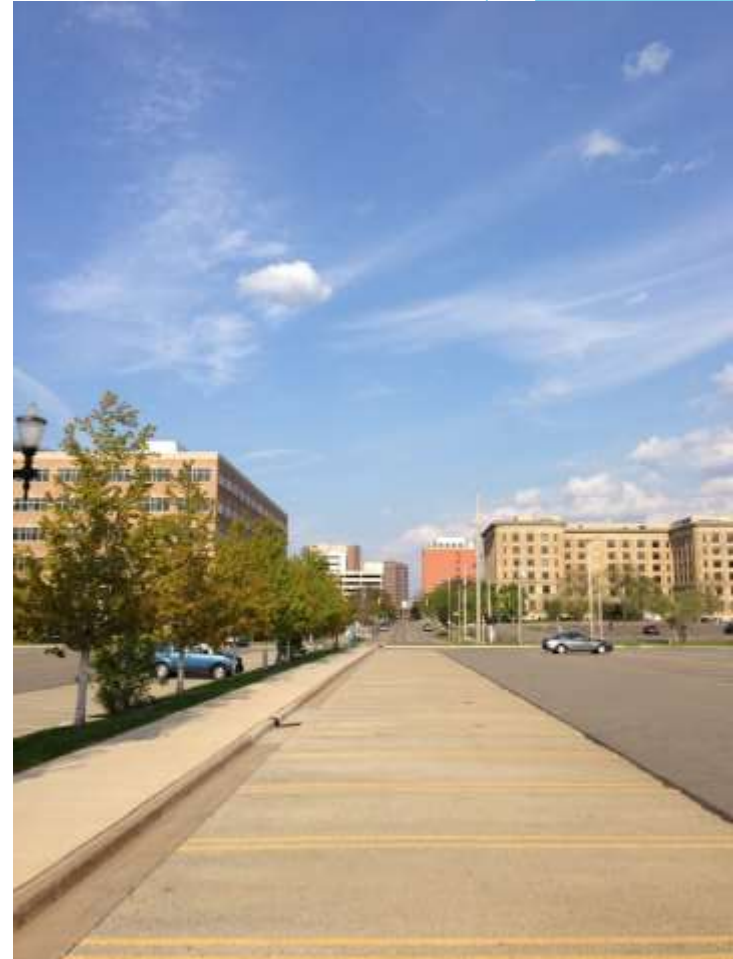
New Year, New Administration

- ▶ New Governor
- ▶ New Director
- ▶ New Structure?

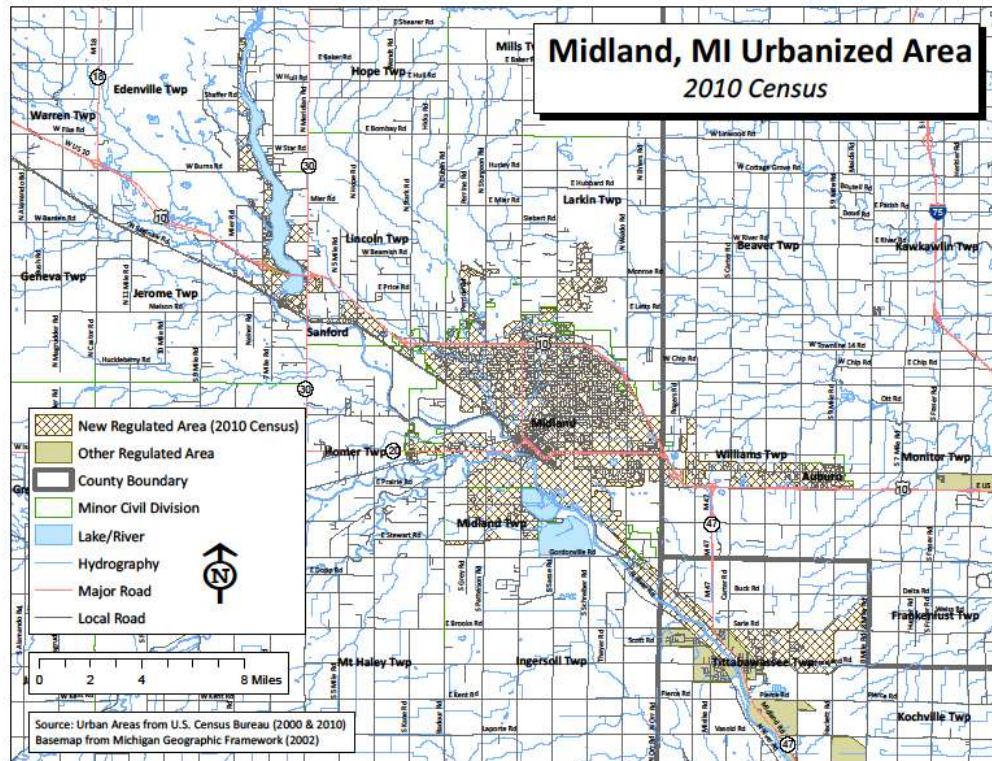


MS4 Permit Issuance

- ▶ 47 individual permits issued
- ▶ Plan to reissue permits by September 2019
- ▶ Continue to meet with regional groups and share approved alternatives across the state



Expanded Regulated Area



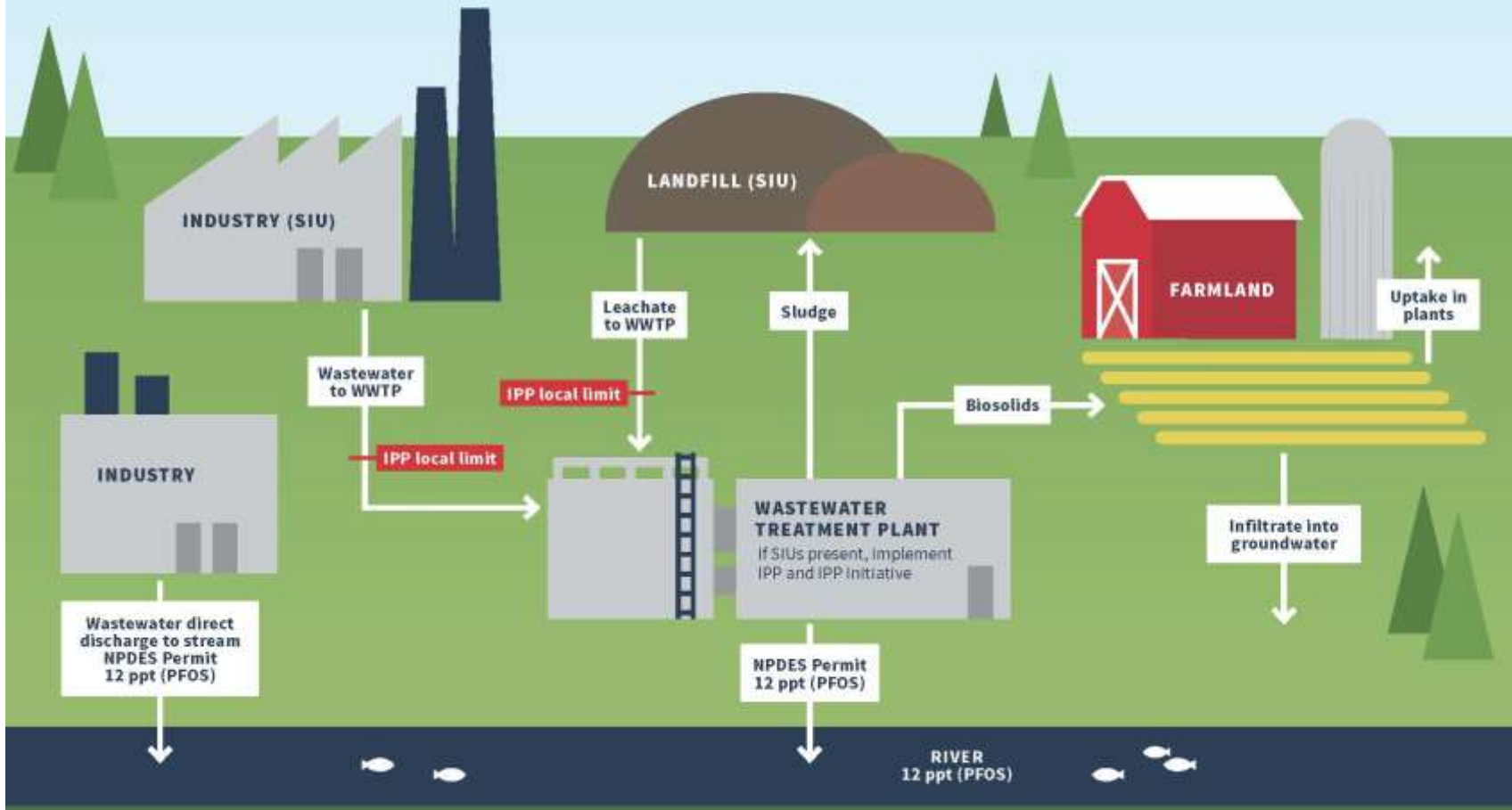
**New Urbanized Area
Midland**

New MS4 Permittees Statewide

- 2 New Counties
- 8 New Cities
- 106 Potential Townships (DEQ to evaluate these townships first to determine if regulated as an MS4)

PFAS Water Cycle

IPP = Industrial Pretreatment Program
SIU = Significant Industrial User
NPDES = National Pollutant Discharge Elimination System
PPT = Parts Per Trillion
WWTP = Wastewater Treatment Plant



PFAS in Wastewater

- ▶ PFOS is contaminant of concern. No exceedances of WQS from PFOA in wastewater identified to date.
- ▶ Potentially found in wastewater from:
 - ▶ Platers: Chemical fume suppressants, demisters, defoamers, wetting agents, surfactants
 - ▶ Leather and fabric treaters, tanneries
 - ▶ Paper and packaging manufacturers
 - ▶ Manufacturers of parts with PTFE coatings (bearings, wire, etc.)
 - ▶ Landfills (leachate)
 - ▶ Centralized Waste Treaters
 - ▶ AFFF fire fighting foam
 - ▶ Groundwater cleanup sites (cleaners, former plating and automotive manufacturing, etc.)



Industrial Pretreatment Program (IPP) PFAS Initiative

- Conventional wastewater treatment processes are not effective in the removal of PFAS
 - Pass thru to waters of the state
 - Concentrate in sludge/biosolids?
- Goal of IPP PFAS Initiative
 - Identify Industrial Users (IUs) that use/have used PFOS/PFOA and are discharging elevated levels to POTW
 - Identify POTW effluents >WQS
 - Reduce/eliminate/control PFOS/PFOA discharges from IUs and ultimately to waters of the state



Industrial Pretreatment Program(IPP) PFAS Initiative

- ▶ February 2018 - Required PFAS screening at 95 Publicly Owned Treatment Works (POTW) with IPPs
 - ▶ Survey Industrial Users with potential sources of PFAS
 - ▶ Follow-up sampling of probable sources
 - ▶ Sample POTW effluent if sources above screening criteria (12 ppt PFOS)
 - ▶ Interim Reports were due June 29, 2018, unless extension requested
 - ▶ 35 extension requests
 - ▶ Summary Reports were due October 26, 2018, unless extension



Additional information on IPP PFAS Initiative:

<https://www.michigan.gov/pfasresponse/0,9038,7-365-86510---,00.html>

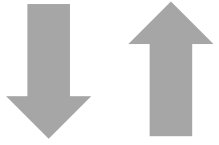
IPP PFAS Initiative Status

Update 1-17-2019

95 POTWs with IPPs:

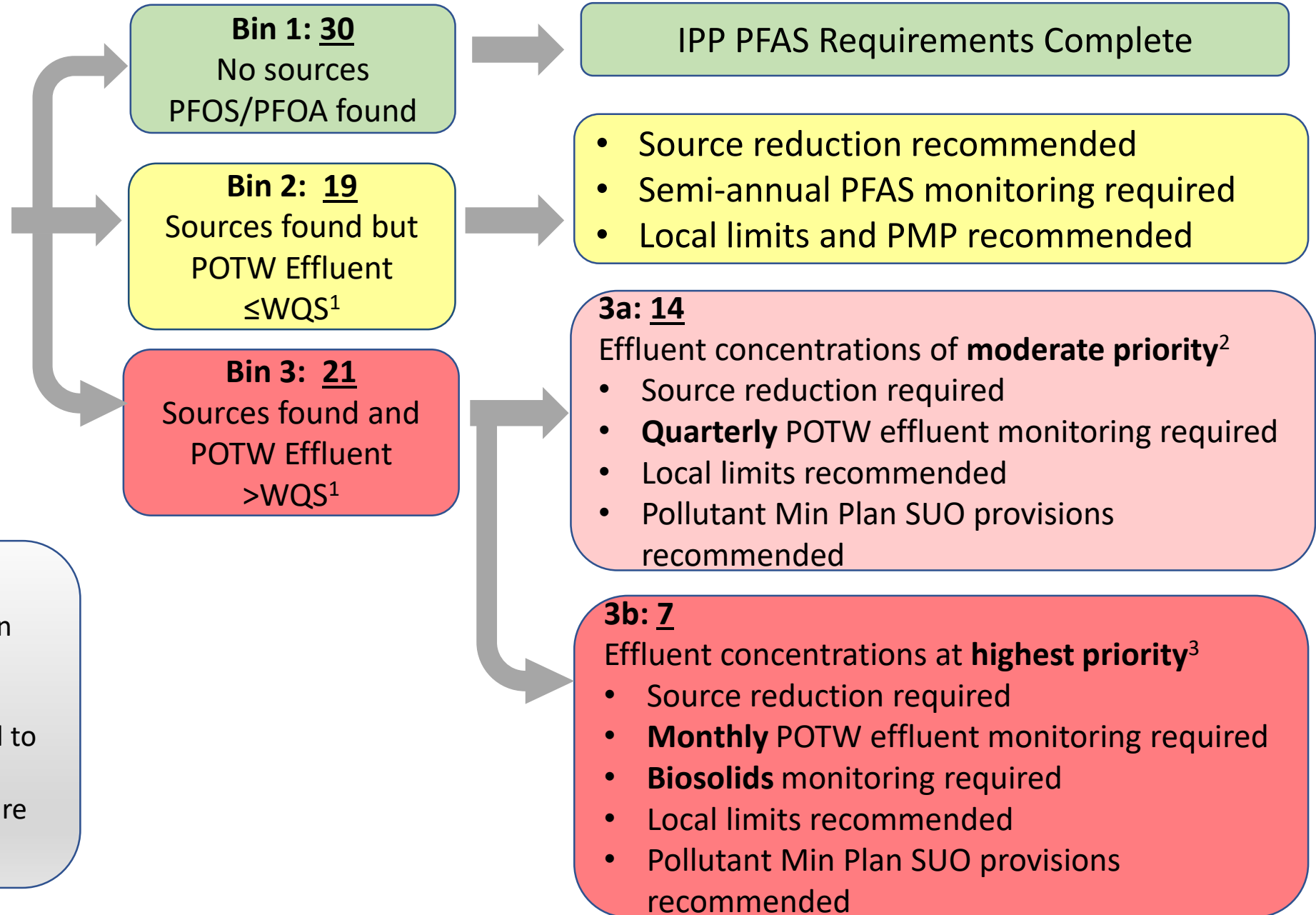
- **93** IRs* Submitted
- **1** IRs not yet due
- **1** IR Overdue

*IR = Interim Report



Bin TBD: **23**

Interim Report submitted but a bin determination cannot be made as staff have not yet reviewed the report, the report was determined to be incomplete, or sample results (from IUs and/or POTW effluent) are still pending



The General Permit for Collection Systems - CMOM

- ▶ Internal/External stakeholder group started in June 2017
- ▶ First draft of the permit should be sent out soon
- ▶ MWEA members have been important members and have developed portions of the draft permit

Why We Need the General Permit (GP)

- ▶ The GP will contain important CMOM requirements (capacity issues, management, operations and maintenance, rehabilitation)
- ▶ ~500 collection systems not covered by NPDES permits
- ▶ Currently address collection systems under Part 41, reactive instead of proactive, SSOs in ACOs
- ▶ High wet weather flows at some regional WWTPs, flows have not been adequately reduced over time
- ▶ Collections systems must be maintained and many haven't been

Requirements in Collection System GP

- ▶ Proper Operations
- ▶ 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
- ▶ Incentives to participate

Benefits of Coverage

- ▶ Address SSOs under an NPDES permit and not an order (ACO)
- ▶ Address high flows at some regional WWTPs by reducing flows at contributing collection systems
- ▶ Ensure important asset management programs, elimination of capacity restrictions, flexible programs to set inspection frequencies, fiscal sustainability
- ▶ Provide for some incentives (still need to be reviewed by the DAG)

Water Resource Recovery Facilities

WWTP

- Treat water to protect public health and the environment



WRRF

- Treat water to protect public health and the environment
- Recover nutrients
- Optimize energy efficiency
- Produce energy
- Recover heat
- Water reuse
- Green infrastructure

MDEQ-WRD/MWEA Collaboration

- MDEQ-WRD and MWEA work group formed
 - MWEA proposal
 - ▶ Establish metrics & baselines
 - ▶ Literature review
 - ▶ Michigan WRRF Recycling Summit
 - ▶ Recognition Program
 - ▶ Outreach Program
 - MDEQ-WRD grant awarded with a 2nd grant soon
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MDEQ WRRF Initiative Updates

- First grant to facilitate nitrogen and phosphorus harvesting, biosolids reuse, and energy reduction
 - WRD will now discuss how to help educate permittee's on the WRRF process on DEQ Web site and at conferences
 - WRD will now participate in Leaders Innovation Forum Technology (LIFT)
 - WRD will help innovation through Part 41
 - Second grant to MWEA (with UM) will set up on-line courses for consultants and municipal officials
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Retirements and Staffing

- ▶ 300 employees
- ▶ 45% eligible for retirement within the next 2 years
- ▶ 50% with <5 years of experience
- ▶ Onboarding and retention
- ▶ Institutional knowledge retention



Thank You
and
Questions