



OWEA 2011 Government Affairs Specialty Workshop

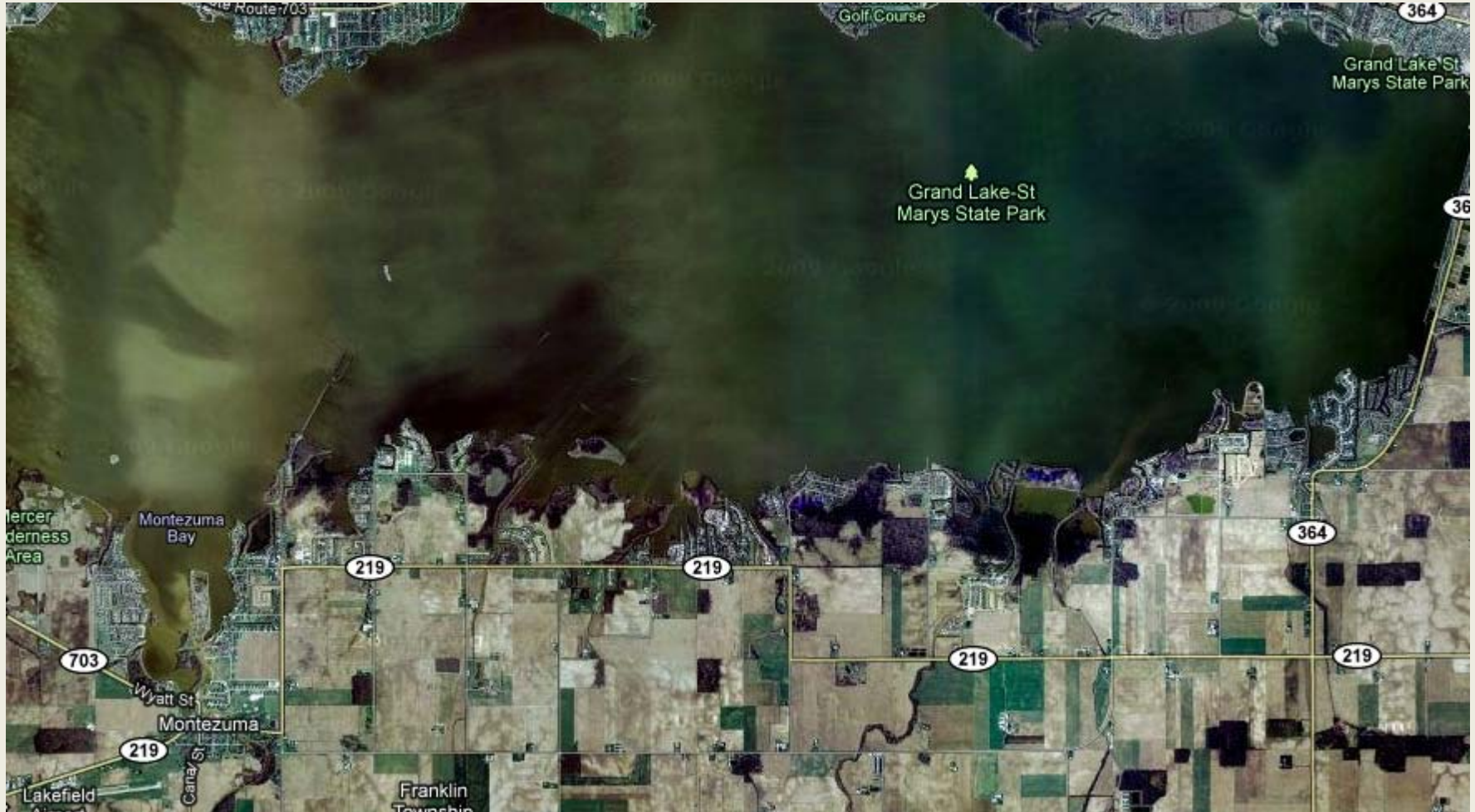
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Overview

- ▶ Grand Lake St. Marys Update
- ▶ Nutrient Criteria
- ▶ Lake Erie
- ▶ Total Dissolved Solids
- ▶ General Permits
- ▶ Program Updates
- ▶ Rulemaking Updates
- ▶ Legislative Bills
- ▶ Permits Backlog Status
- ▶ Washington Update



Grand Lake St. Marys Update



Grand Lake St. Marys Update

- ▶ Three alum demonstrations conducted in Sept. 2010. Results encouraging, but additional data needed to further refine dosing information for potential lake-wide treatment.
- ▶ ODNR declared Grand Lake a “watershed in distress” using rules passed in DEC 2010.
 - ▶ Requires all producers of manure over certain volume to do manure management plans;
 - ▶ Prohibits winter application of manure after 2012; and
 - ▶ Requires manure to be spread using NRCS 633 standards.

Grand Lake St. Marys Update

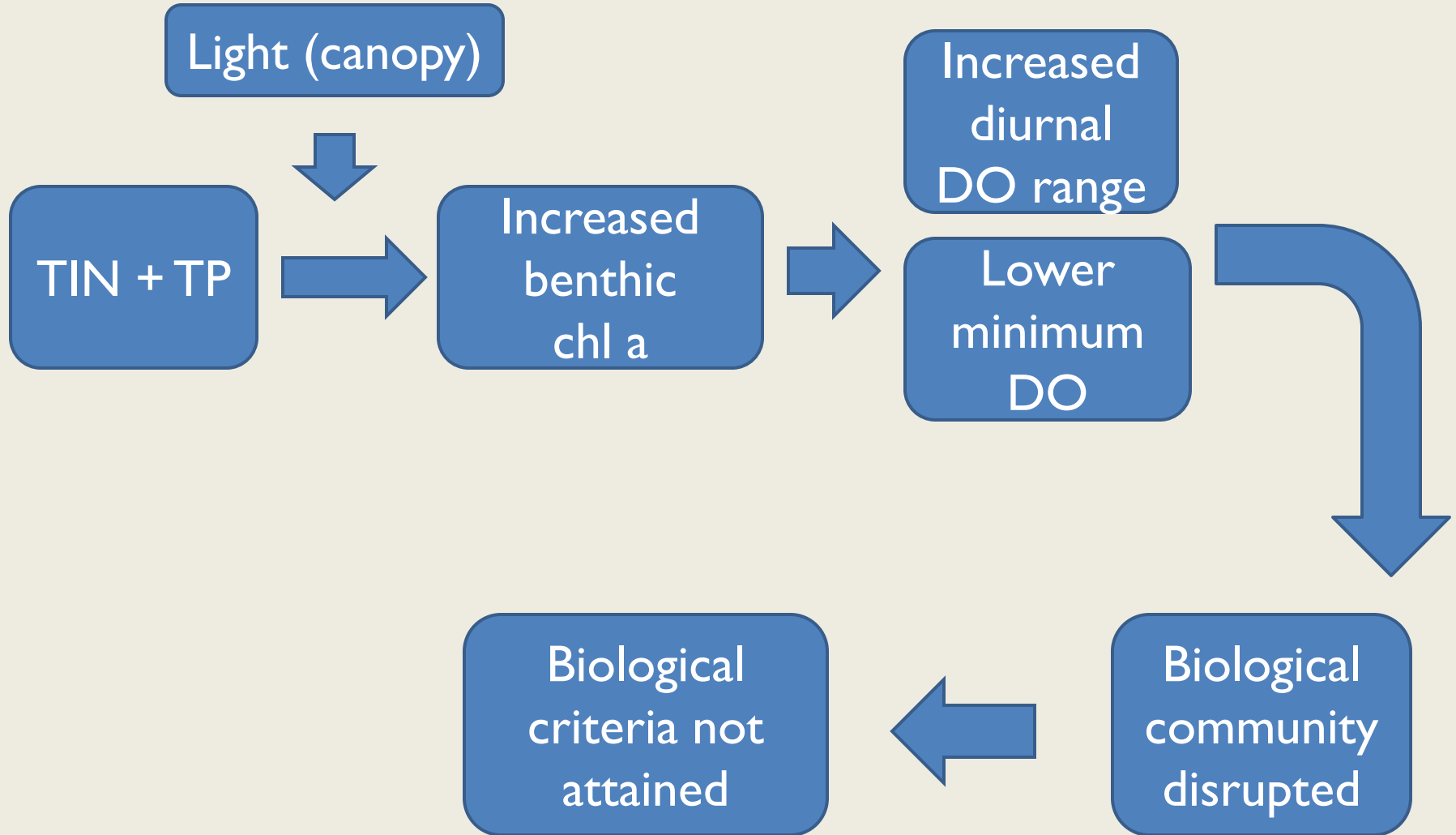
- ▶ Ohio EPA awarded second Section 319 grant to Ohio State Parks to conduct two additional alum demonstrations in spring 2011.
 - ▶ Evaluate effectiveness of granular alum in channel areas within the lake.
 - ▶ Pre-treat with hydrogen peroxide to oxidize phosphorus laden sediments, to release the bound phosphorus, followed by liquid alum treatment.
- ▶ Work progressing on projects in lake tributaries to reduce nutrient and sediment entering lake, including wetlands and sediment collectors. Monitoring of large aeration units performance in Grand Lake ongoing.

Grand Lake St. Marys Update

- ▶ ODNR applied to Ohio EPA's Water Pollution Control Loan Fund for \$5 million for large-scale alum treatment project. Still investigating funding for 2nd and 3rd year projects.
- ▶ Ohio EPA will again be completing tributary and in-lake monitoring and assessment this spring and summer. Monitoring is also expected to continue in event of any additional algal blooms this coming season.



How Nutrient Over Enrichment Impacts Aquatic Life Use Attainment



Nutrient Standards Update – Draft Criteria

- ▶ Draft water quality criteria for total phosphorus (TP) and dissolved inorganic nitrogen (DIN) for most streams with drainage areas up to 1,000 sq. miles
- ▶ Stressor-response approach was used to estimate relationship between nutrient concentrations and biological response

Aquatic Life Use and QHEI	TP (mg/L)	DIN (mg/L)
Exceptional warmwater habitat and all QHEI scores	0.060	3.0
Warmwater habitat and QHEI score = 12 to 64	0.16	3.0
All other aquatic life uses and QHEI scores	0.30	3.0

Nutrient Standards Update – Draft Implementation

- ▶ Working on implementation issues
 - ▶ At odds with U.S. EPA over best way to account for uncertainty and “reasonable potential”
- ▶ Proposed Compromise - Trophic Index Criterion

$$\text{TIC} = P_{\text{chl } a} + P_{\text{DO}} + B + N$$

- ▶ Scoring system, based on evaluation of algal biomass chlorophyll a, dissolved oxygen, biological health, and nutrient concentrations in stream, will determine impairment/non-impairment
- ▶ $P_{\text{chl } a}$ = metric score range 0-4 B = metric score range 0-6
- ▶ P_{DO} = metric score range 0-5 N = metric score range 0-4

TIC Criterion (the measurement of enrichment)

- ▶ Results of TIC will determine applicability of water quality criteria for TP and DIN

Status of Stream	TIC
Acceptable – nutrient enrichment is not likely	8 to 19
Threatened – nutrient enrichment is likely now or in the future	4 to 7
Impaired – nutrient enrichment is documented	0 to 3

- ▶ Caution –still subject to change

Uses for Criteria

- ▶ TIC drives the 303(d) listing process
 - ▶ TMDLS for threatened or impaired waters
- ▶ TIC determines reasonable potential
 - ▶ Apply TP criteria when TIC status is threatened or impaired;
 - ▶ Apply DIN criteria when TIC status is threatened or impaired and we determine stream is nitrogen limited
- ▶ TP & DIN criteria used to develop TMDLs & WLAs



Lake Erie Phosphorus Endpoints

- ▶ LaMP Management Committee set endpoints for Total Phosphorus concentrations

Habitat Type	Desired TP endpoint (ug/L)
Offshore	
Western Basin	15
Central Basin	10
Eastern Basin	10
Nearshore	20
Tributaries	32
Coastal Wetlands	One recording of <30 ug/L annually

- ▶ In process of being agreed to by jurisdictions – implementation details to come

Regulatory Issues Driving TDS Criteria Review

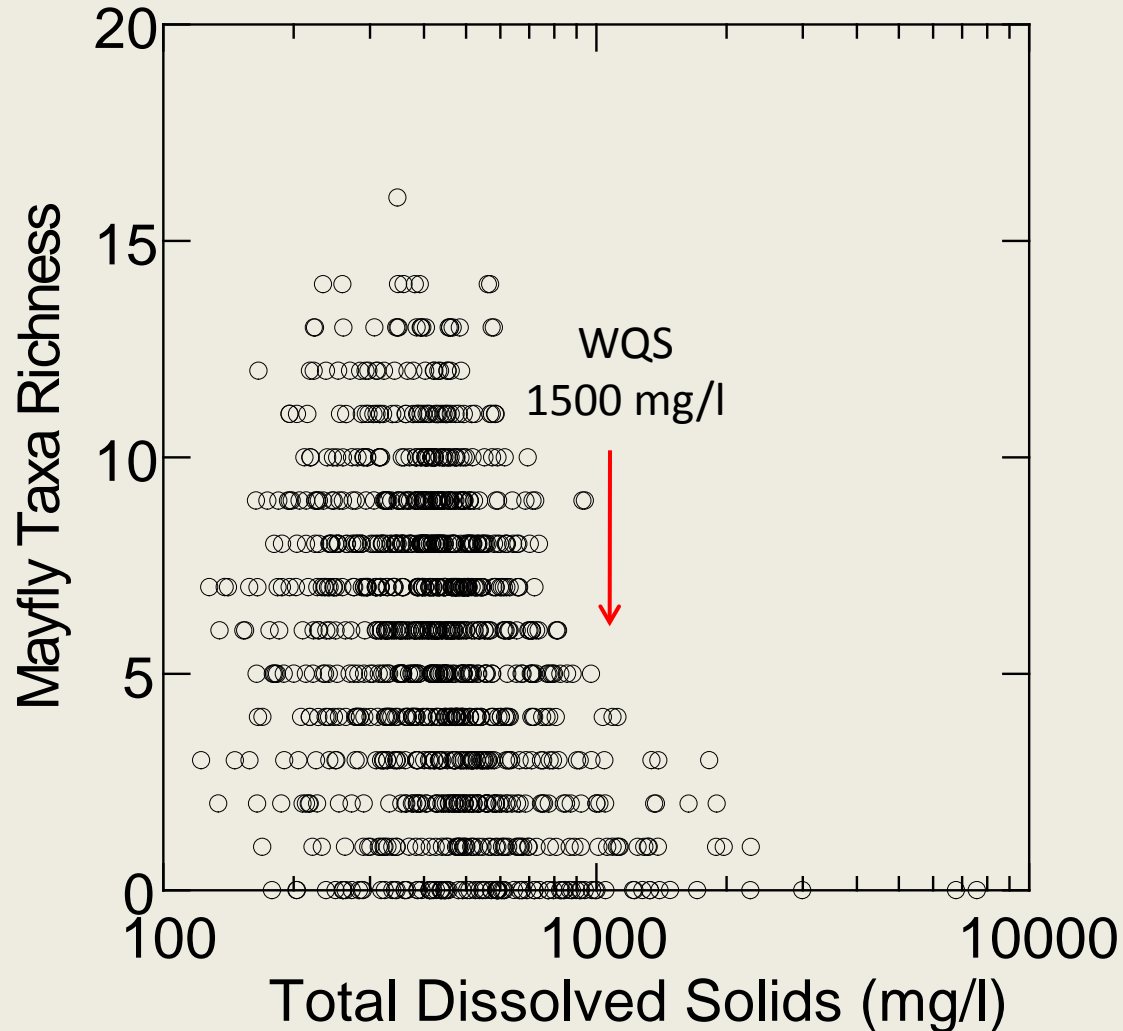
- ▶ Appalachian coal mining – recent U.S. EPA studies
- ▶ Discharge of water treatment plant effluent
- ▶ Marcellus Shale brine disposal
- ▶ Observed stream impairments



Current Water Quality Standard

- ▶ Existing standard for Total Dissolved Solids (1500 mg/l, equivalent conductivity = 2,400 uS/cm) not sufficiently protective
 - ▶ loss of sensitive macroinvertebrates (bugs)
 - ▶ See next slide
- ▶ TDS standard does not account for individual ion components
 - ▶ sulfate is concern in mining regions
 - ▶ chloride is concern in urban areas & Marcellus Shale drilling wastewater

Number of Mayfly Species in Relation to TDS and Current WQS



Surface Mining Coal General Permit

- ▶ U.S. EPA raised concerns existing general permit does not address TDS
 - ▶ Chloride and Sulfate main concern in TDS
- ▶ U.S. EPA reviewing all surface mine NOIs
 - ▶ Requiring individual permit in some instances
- ▶ Ohio pursuing adoption of Chloride and Sulfate criteria
- ▶ Ohio is sampling surface mine ponds
 - ▶ Sulfate and Chloride appear to be less than Sulfate and Chloride criteria

TDS & Drinking Water Treatment

- ▶ TDS is a big concern in waste streams from reverse osmosis and ion exchange drinking water treatment
- ▶ TDS needs to be considered in treatment technology selection
- ▶ Need dilution in receiving stream - TDS passes through WWTPs



Oil & Gas Well Drilling Wastewater

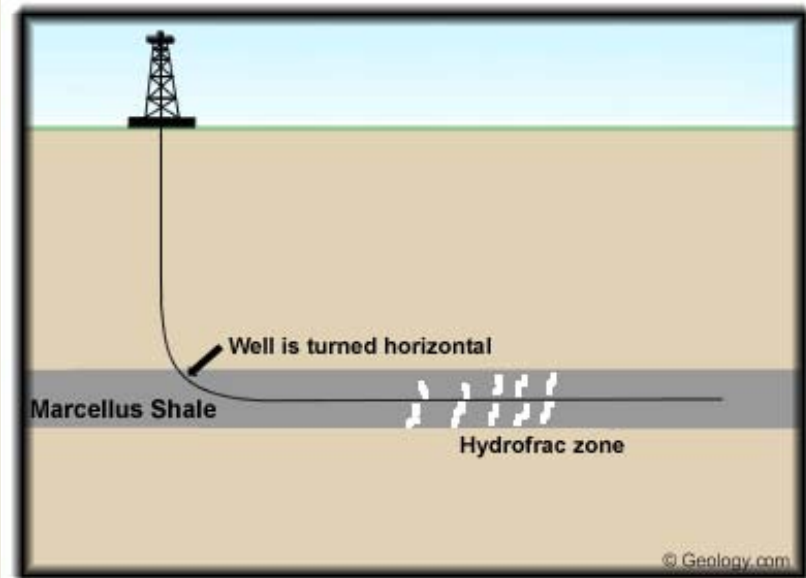
- ▶ Issued PTI and NPDES permit modification to Warren to accept low salinity wastewater from natural gas drilling in Marcellus Shale deposit
 - ▶ Receiving stream is Mahoning River
 - ▶ Set oil & gas wastewater accepted max at 100,000 gpd and TDS less than/equal to 50,000 mg/L
 - ▶ Permit mod includes TDS daily monitoring & toxicity testing quarterly
- ▶ We have received two more PTIs for
 - ▶ East Liverpool
 - ▶ Steubenville



401 General Permit for Oil & Gas Well Drilling

- ▶ Developing a General 401 Permit to cover stream and wetland impacts associated with the Marcellus Shale drilling:

- ▶ Drilling Pads
- ▶ Access Roads
- ▶ Water Supply Lines
- ▶ Gathering Lines



Anticipate GP being issued on June 1, 2011

Industrial Storm Water

- ▶ **Draft Multi-Sector General Permit**
 - ▶ Public noticed – November 1, 2010
 - ▶ Comment Period End – February 28, 2011
- ▶ **Mirrors the federal MSGP except does not allow coverage for:**
 - ▶ Petroleum bulk stations and terminals (have specific general permit)
 - ▶ Marinas (have specific general permit)
 - ▶ Coal surface mining (have specific general permit)
 - ▶ Active landfills (require individual NPDES permit)
 - ▶ Initial coverage for sand and gravel operations (renewals eligible for coverage)

Pesticide General Permit



- ▶ General permit based on federal example
- ▶ Draft general permit comment period ended 2/3/2011
 - ▶ Received 83 comments from 27 parties
 - ▶ Working to reduce bureaucracy and paperwork requirements especially for small business, small public agencies & resource management agencies
 - ▶ Working to streamline procedures with Ohio Dept of Agriculture
- ▶ Tight window for permit finalization – pesticide applications must have NPDES coverage by 4/9/2011

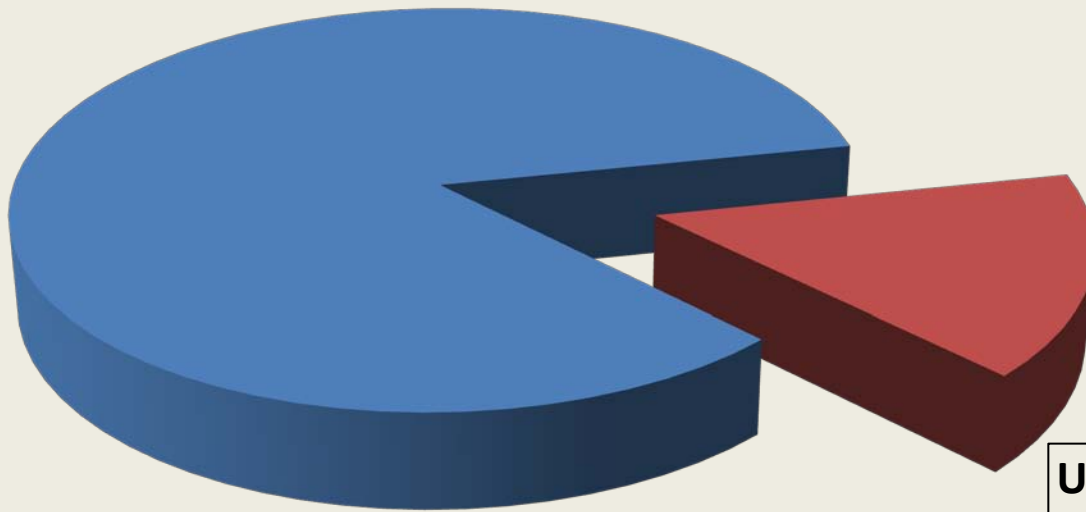
In-Lieu-Fee – 401 Program

- ▶ Working to add an In-Lieu-Fee program as additional mitigation option for applicants
- ▶ Implementing pilot program to test process on non-jurisdictional waters – Target date is June 1, 2011
- ▶ Scheduled meeting USACE to discuss possibility of developing federally approved In-Lieu-Fee program for all waters of the U.S.



Who is leading the review of Ohio's CSO cases?

Ohio EPA cases:
75



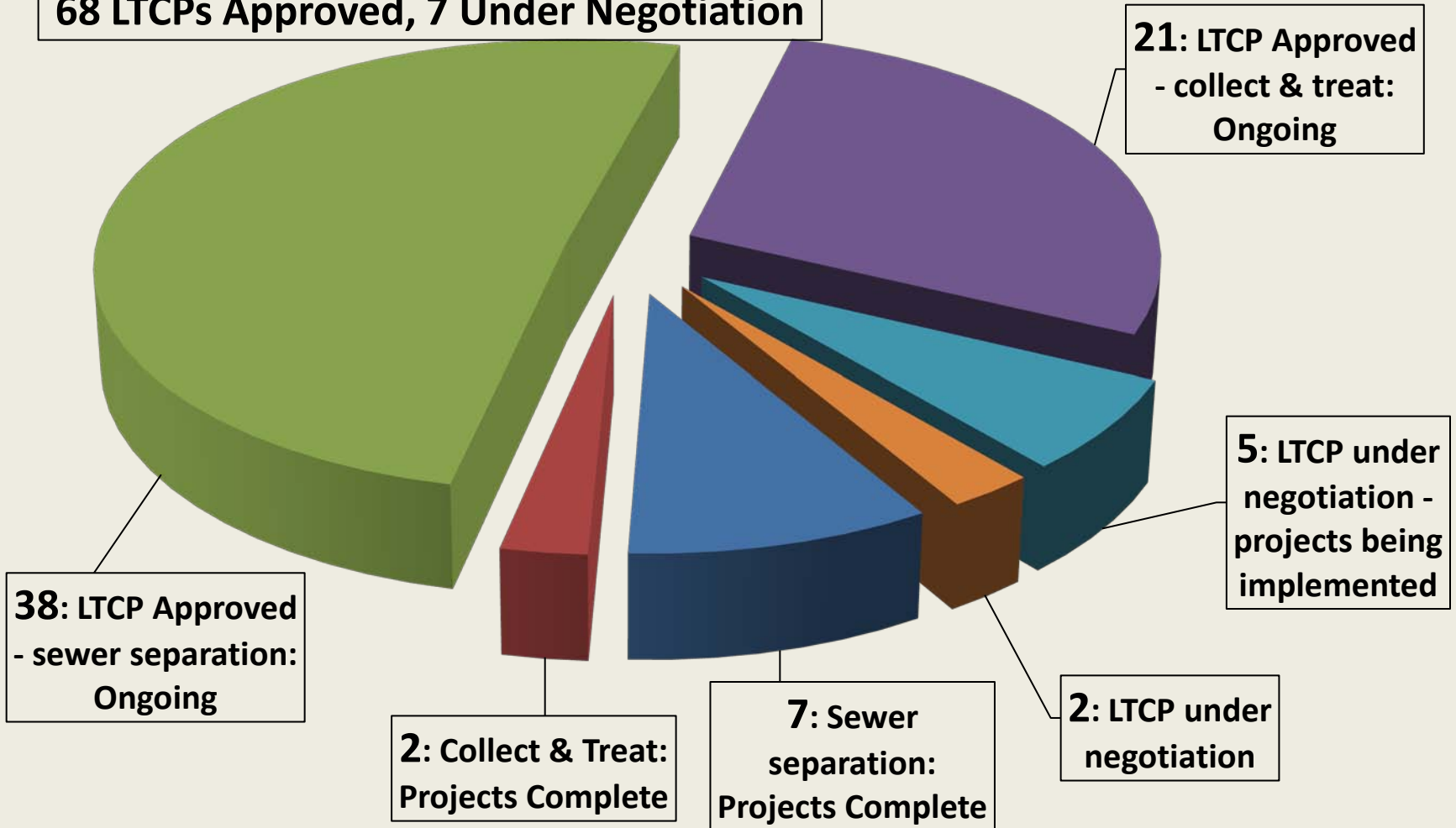
US EPA Region 5
cases: 14

Note: These numbers reflect the 3 cases that were returned to Ohio EPA lead (i.e., Girard, Springfield and Toronto).

Status of Ohio EPA CSO cases:

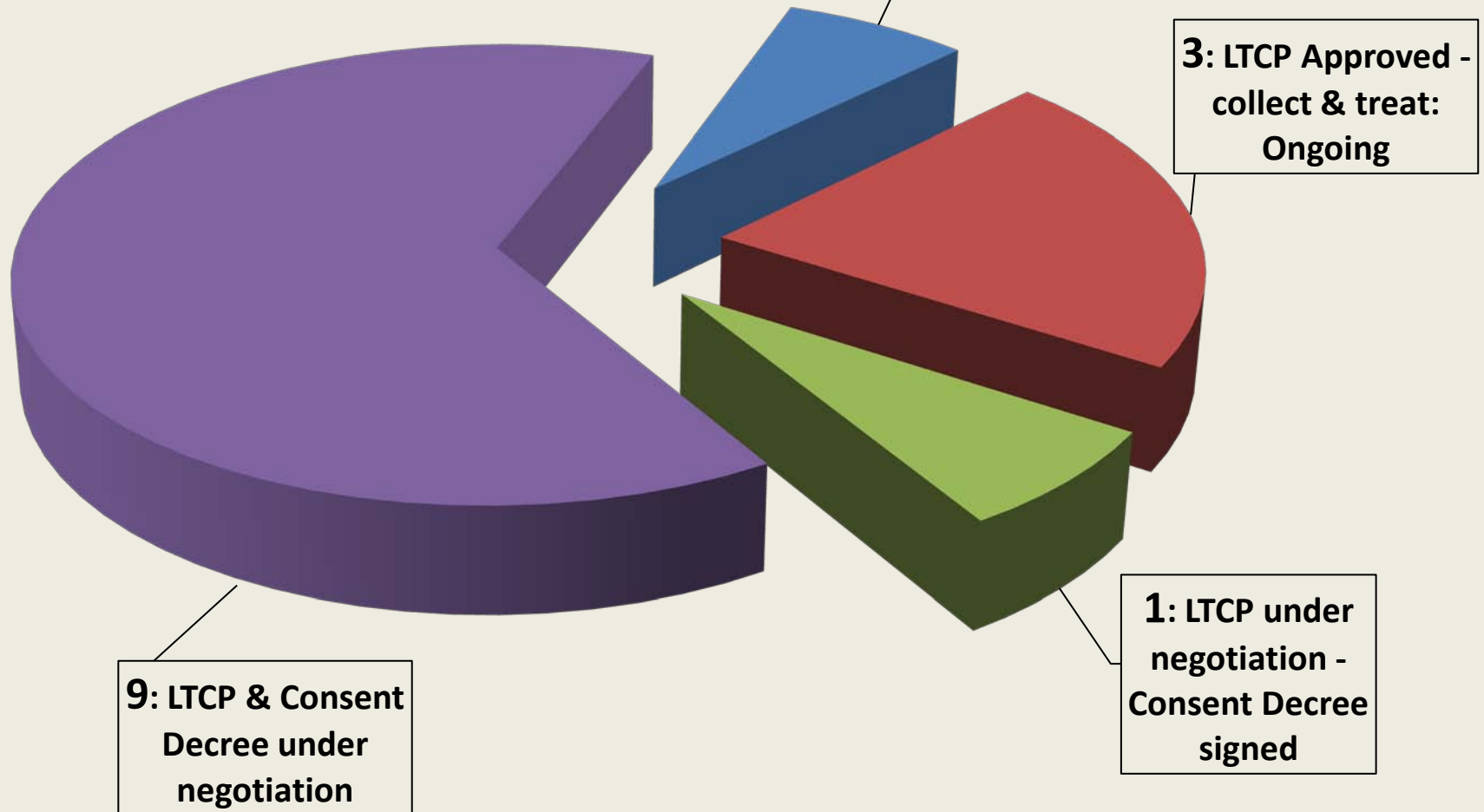
75 Total communities

68 LTCPs Approved, 7 Under Negotiation



Status of US EPA CSO cases:

14 Total communities
5 LTCPs Approved, 9 Under Negotiation



**Comment deadline extended
June 6, 2011**

Rulemaking Update

- ▶ **Water Quality Standards**
 - ▶ Includes 6 new beneficial use designations (general water based recreation, base aquatic life, primary headwater habitat, lake habitat, upland drainage and water conveyance, and navigation)
 - ▶ Update of human health and aquatic life criteria (including nutrient criteria for lakes)
- ▶ **Antidegradation**
 - ▶ Update of BADCT to include design criteria for nutrients – TP 2 mg/L, TN 10 mg/L
 - ▶ Update of special waters tables
- ▶ **401 Certification**
 - ▶ Establishes state water quality permit to cover “isolated streams”
 - ▶ Addresses historical procedural ambiguities
- ▶ **Stream Mitigation**
 - ▶ New rule which identifies when and how mitigation for stream impacts will be required

Upcoming Rulemakings

- ▶ To be released for interested party review soon:
 - ▶ Changes to an NPDES and a Pretreatment rule to clarify ability for permit renewal when facility is in violation of current permit within certain constraints
 - ▶ Changes to PTI applicability rule to exempt certain structures associated with oil and gas well drilling regulated by ODNR
- ▶ Five year reviews for:
 - ▶ Modeling and NPDES rules (OAC Chapters 3745-2 and 3745-33)
 - ▶ Pretreatment rules (OAC Chapters 3745-3 and 3745-36)
 - ▶ PTI Design Flow rule (OAC 3745-42-05)
 - ▶ Water Quality Trading rules (OAC Chapter 3745-5)



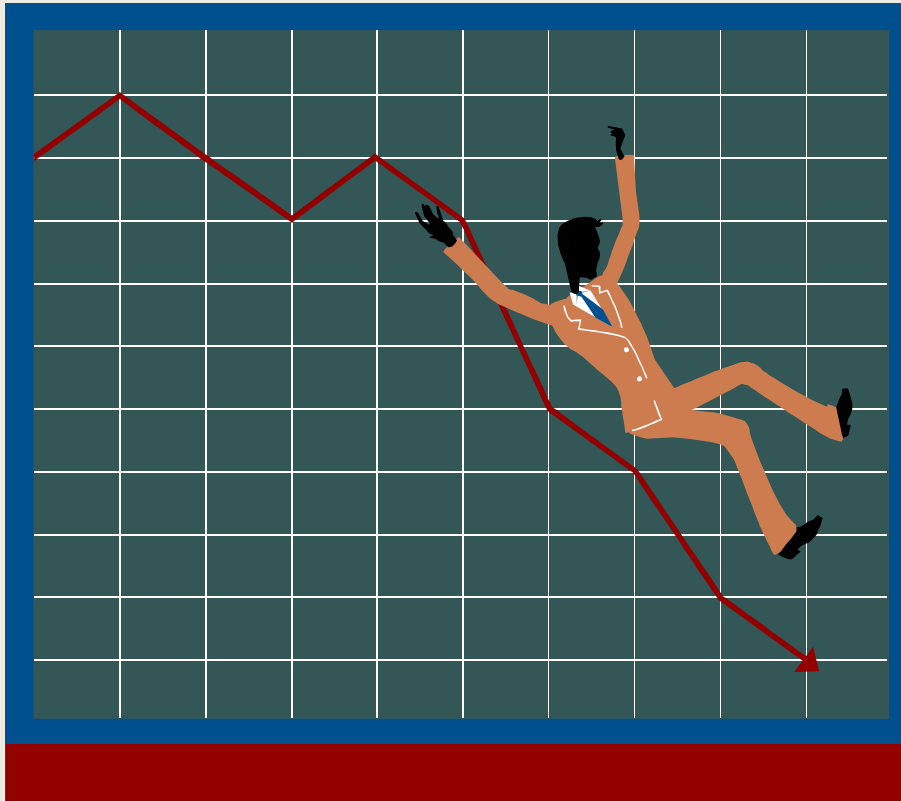
Legislative Update

HB 72/SB 22

- ▶ Enact ORC 6111.60 to require Ohio EPA to consider the following factors before issuing NPDES permits, approving LTCPs and enforcing of the CWA applicable to sewerage systems:
 - ▶ Ability of applicant to pay
 - ▶ Evaluation of effectiveness/cost/flexibility of LTCP
 - ▶ Reducing economic impacts on applicant, permittee, other state & local entities and residents of Ohio
 - ▶ Other requirements imposed on applicant/permittee to undertake capital improvements under CWA, Safe Drinking Water Act, and state statute and rules

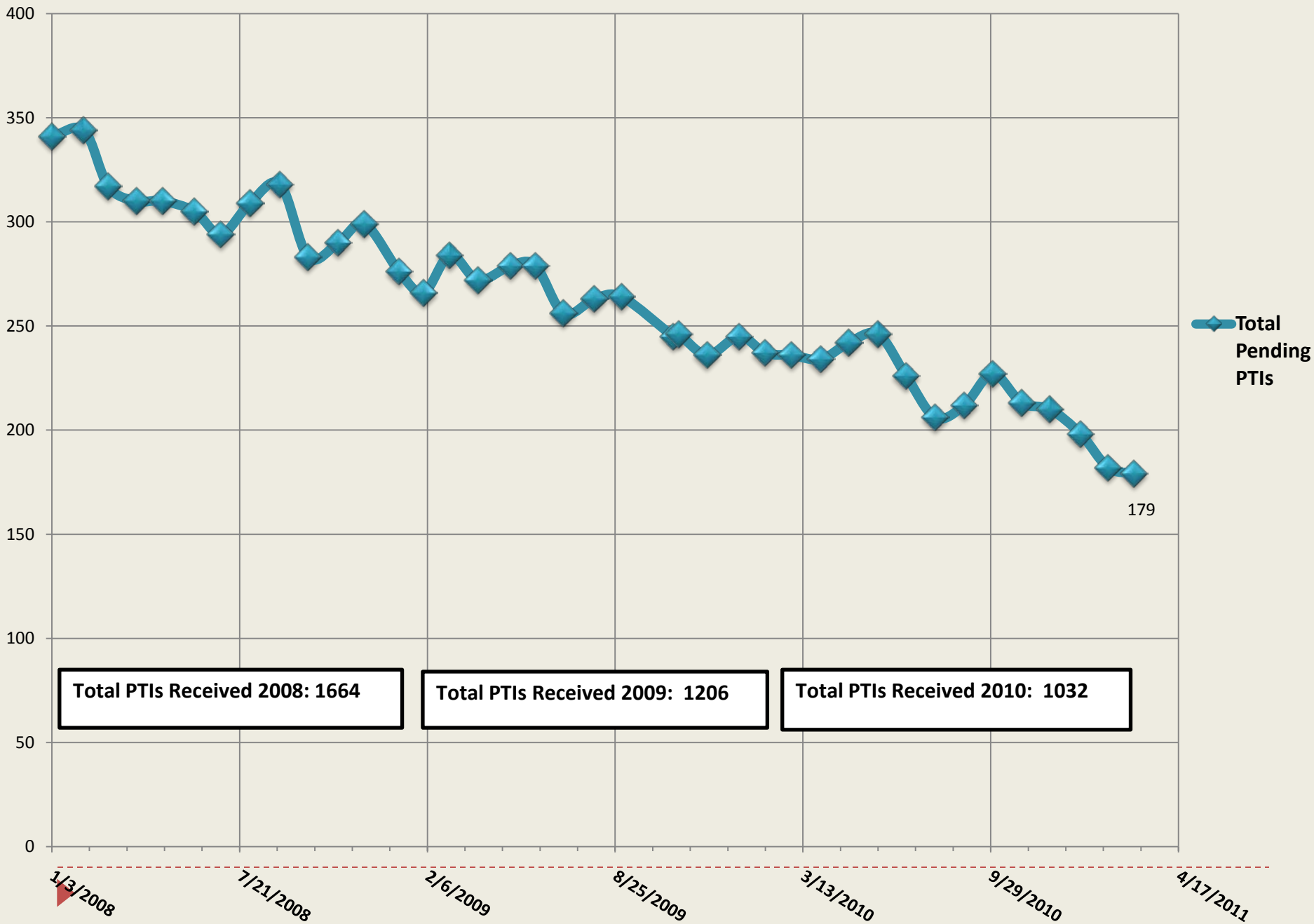
SB 2/ HB 94

- ▶ Amend and repeal various sections of ORC to adopt new small business rule review procedure.
- ▶ Establishes the Common Sense Initiative Office that will:
 - ▶ Create small business impact analysis instrument for use in agency rule development/review
 - ▶ Establish system to receive small businesses comments on adverse impact of proposed/existing rules
 - ▶ Establish state agency customer service performance standards
- ▶ Gives JCARR authority to invalidate rule if agency has not demonstrated regulatory intent of rulemaking outweighs adverse impact on small businesses

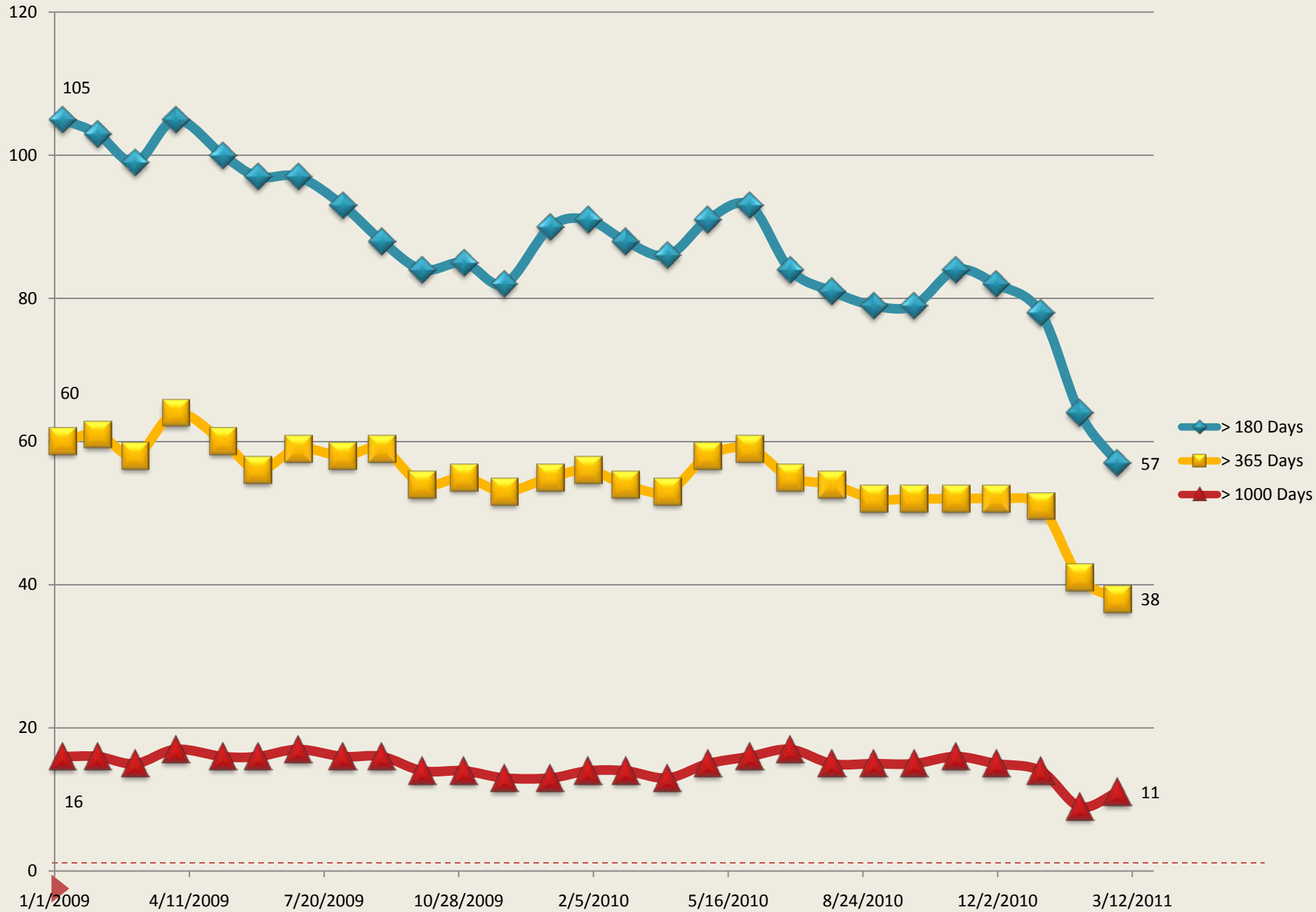


Permits Backlog Status

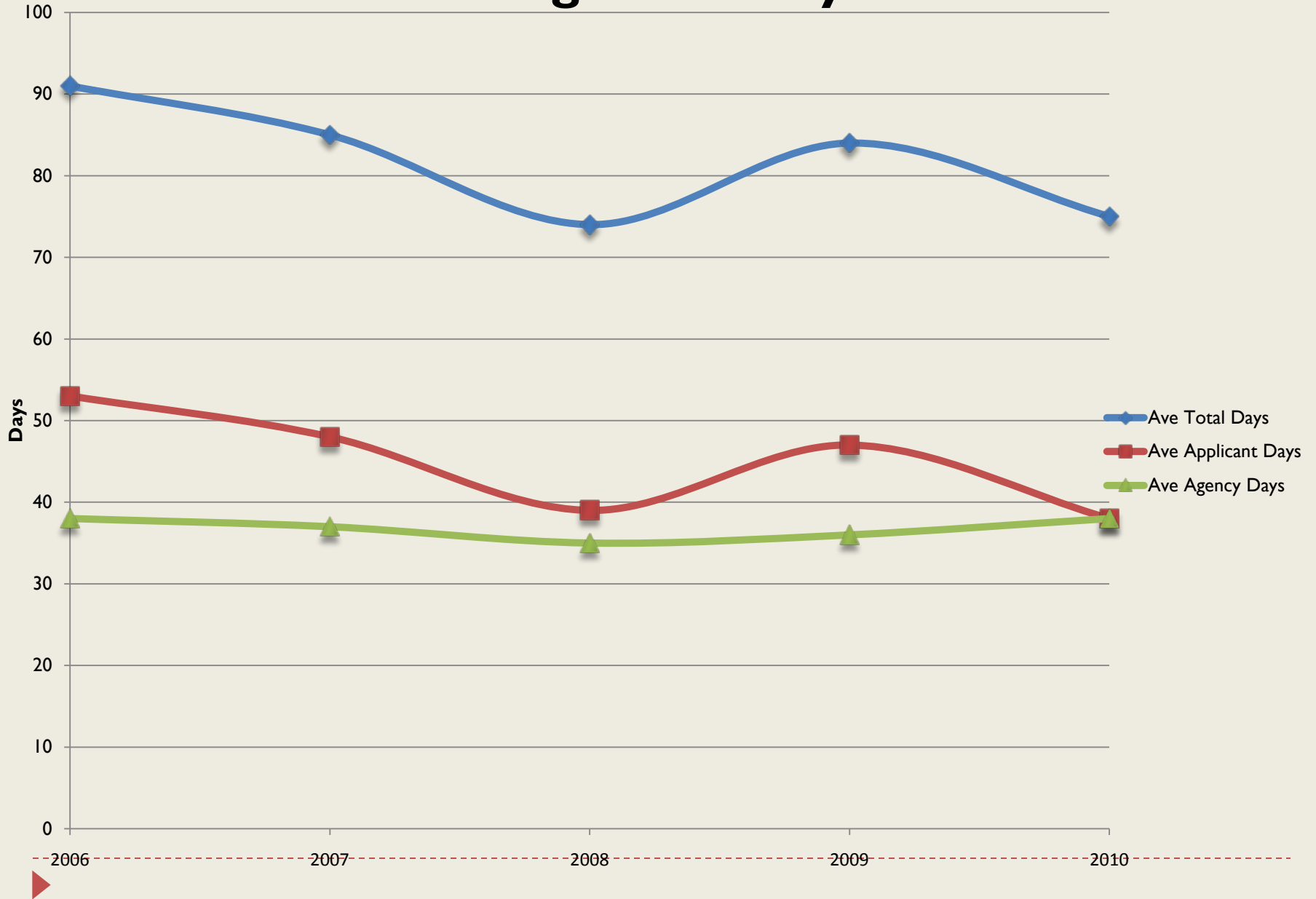
Ohio EPA Total PTI's Under Review



Total Pending DSW PTIs Beyond the Regulatory Deadline

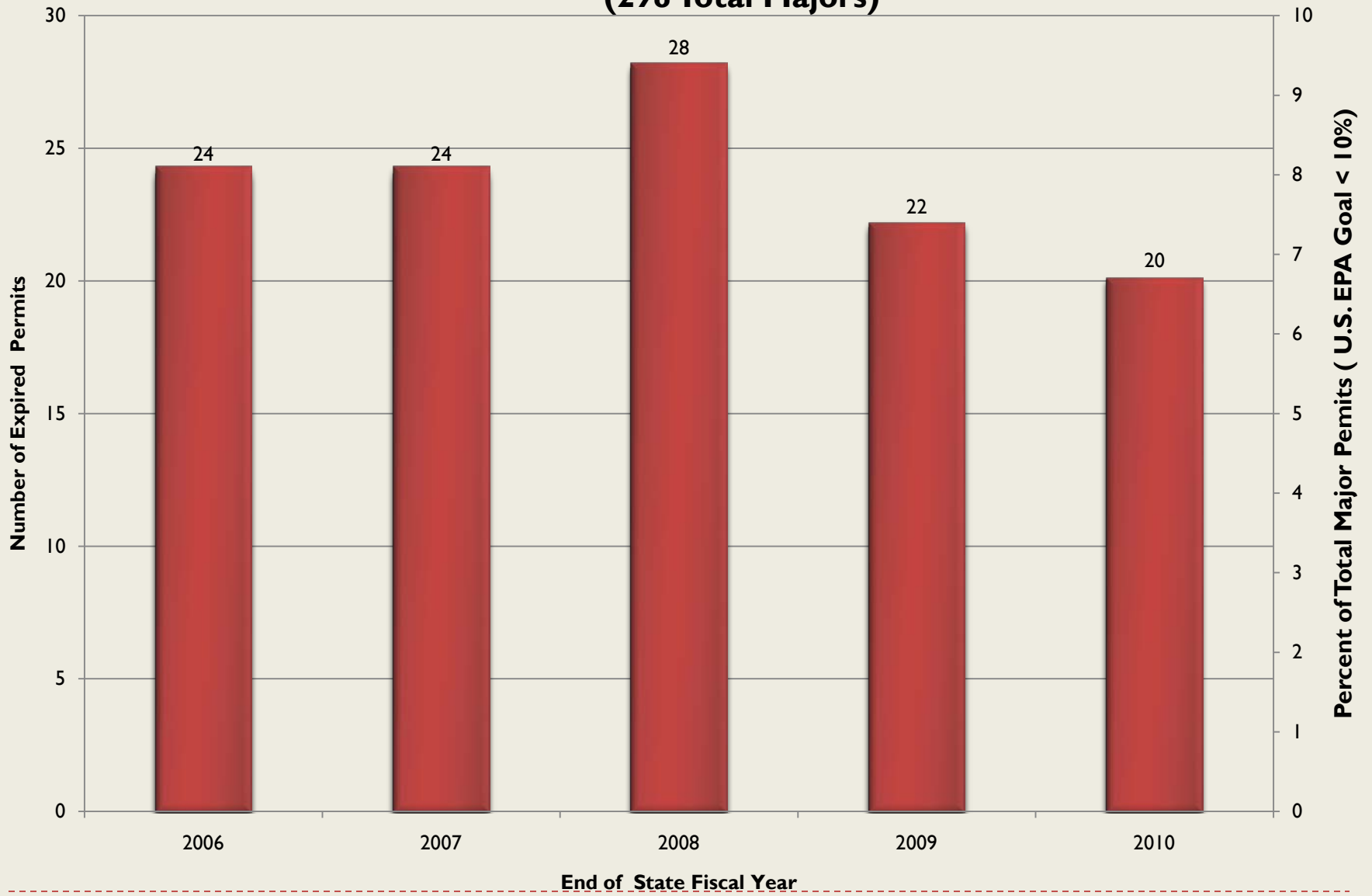


PTI Processing Summary 2006-2010



Major NPDES Permit Backlog

(298 Total Majors)



End of State Fiscal Year



Minor NPDES Permits Backlog

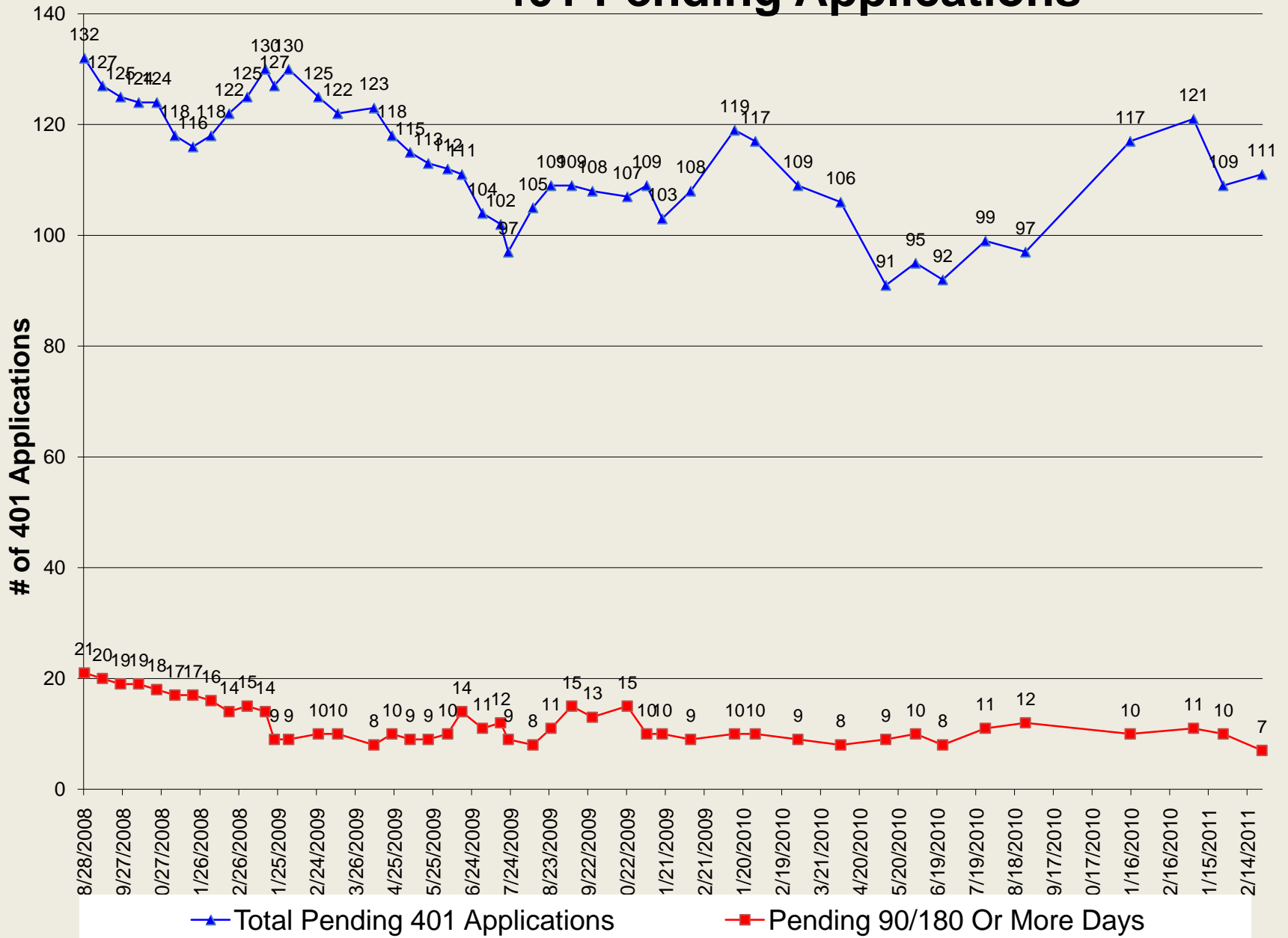
(3019 Total Minor Permits as of July 2010)



End of State Fiscal Year



401 Pending Applications



Great Lakes Restoration Initiative

- ▶ U.S. EPA released request for applications (RFA) for up to \$40 million in GLRI grant funding for ~150 projects in following categories:
 - ▶ Toxic substances and Areas of Concern
 - ▶ Invasive Species
 - ▶ Nearshore Health and Nonpoint Source Pollution
 - ▶ Accountability, Education, Monitoring, Evaluation, Communication and partnerships
- ▶ Deadline for application is April 11, 2011
- ▶ For more information, go to:
www.epa.gov/greatlakes/fund/2011rfa01/

Section 319 Grant Program

- ▶ FFY2012 Request for proposals deadline is May 13, 2011
- ▶ Nonpoint source projects may receive up to \$350,000
- ▶ Approximately \$2 million available total (depending on federal appropriations)
- ▶ Eligible projects:

Stream restoration	Dam removal/modification
Wetland restoration	Storm water demonstration
Inland lake management	Agricultural BMPs
Acid mine drainage abatement	Abandoned mine land reclamation
Riparian restoration	Riparian & wetland protection and conservation easements

Questions?



Contact Information

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