



# Remediation and Redevelopment Division



*Our cleanup and redevelopment  
program is vital to Michigan's future*



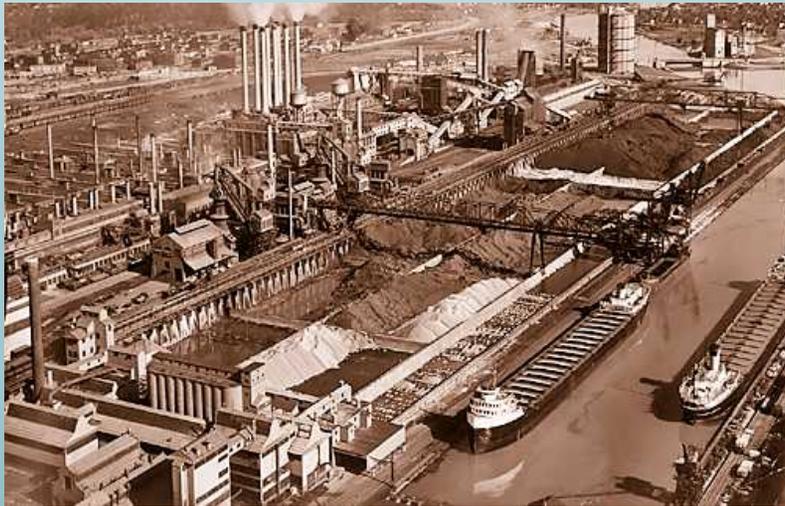
# Today's presentation will address...

- Who we are
- What we do
- Accomplishments
- Funding needs
- Consequences of funding shortfalls
- Plans for program redesign





# Why we're here



## Our Legacy . . .

- 100+ year industrial heritage
- Tens of thousands of contaminated sites
- Hundreds of new sites discovered each year



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Aggressive cleanup initiatives  
are vital to Michigan's  
continued economic and  
environmental health



# Who we are



260 RRD staff statewide;  
8 district and 5 field offices

- Geologists
- Toxicologists
- Engineers
- Chemists
- Legal experts
- Environmental analysts
- Equipment technicians





**Remediation:** Manage soil and groundwater cleanups



**Protect public health**



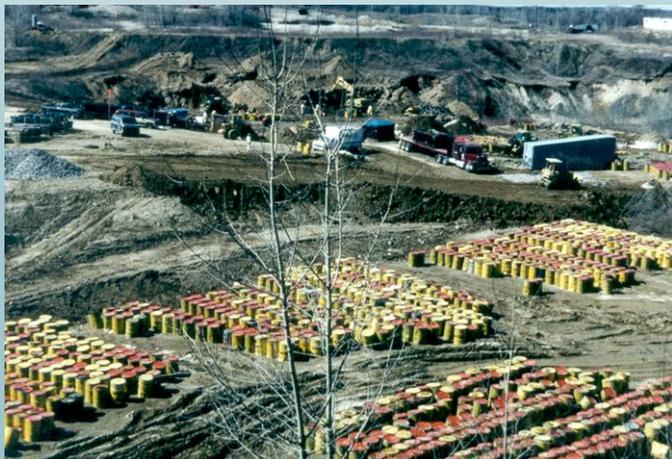
**Redevelopment:** Facilitate brownfield redevelopment and a strong economy



**Safeguard our natural resources**



# What we do



**Drum removals**



**Tank removals**



**Abating  
imminent  
fire, vapor,  
explosion  
hazards**



**Monitor well installation**



**Emergency spill response**



**Demolition**



**Safe water supplies**



**Investigations and assessments**



## Basic Areas of Activity

- Michigan Contaminated Site Cleanup
- Leaking Underground Storage Tank Cleanup
- Federal Superfund (NPL) in Michigan
- Brownfield Redevelopment/Financial Incentives
- State-Owned Sites Cleanup Program Administration



# Accomplishments

- **Oversight/assistance on more than 10,000 cleanup projects performed by liable parties**
- **\$927 M in state funds committed at nearly 1,800 orphan sites for cleanup/redevelopment activities**
  - 1,000+ sites with cleanup actions completed
  - 521 of the completed sites prepared for redevelopment
  - 10,000+ homes/businesses provided safe drinking water
  - 16 municipal water supply systems completed
  - 49 abandoned dumps/landfills contained/addressed
  - Hundreds of sites where fire, vapor and explosion risks mitigated, or where abandoned, hazardous buildings demolished



## Tank Program

12,000 leaking underground storage tank releases have been addressed (closed) -- both liable party and orphan

## Superfund Program

- \$853 M spent at 82 MI Superfund sites (incl. \$32 M in state funds)
  - 16 sites are completed (cleanups achieved)
  - 59 sites have final cleanup remedies underway





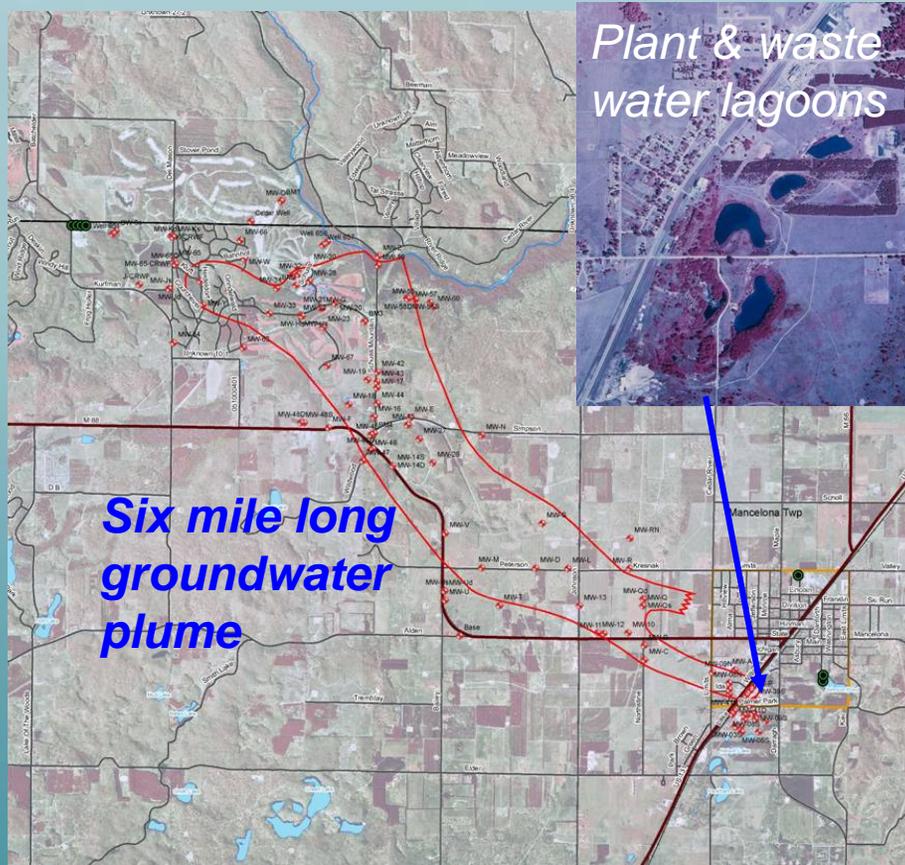
## Brownfield Grants and Loans Program

- \$95 M awarded to 228 grant/loan projects statewide
- \$3.1 B in private investment generated
- 18,000 jobs created

## Publicly Funded Sites

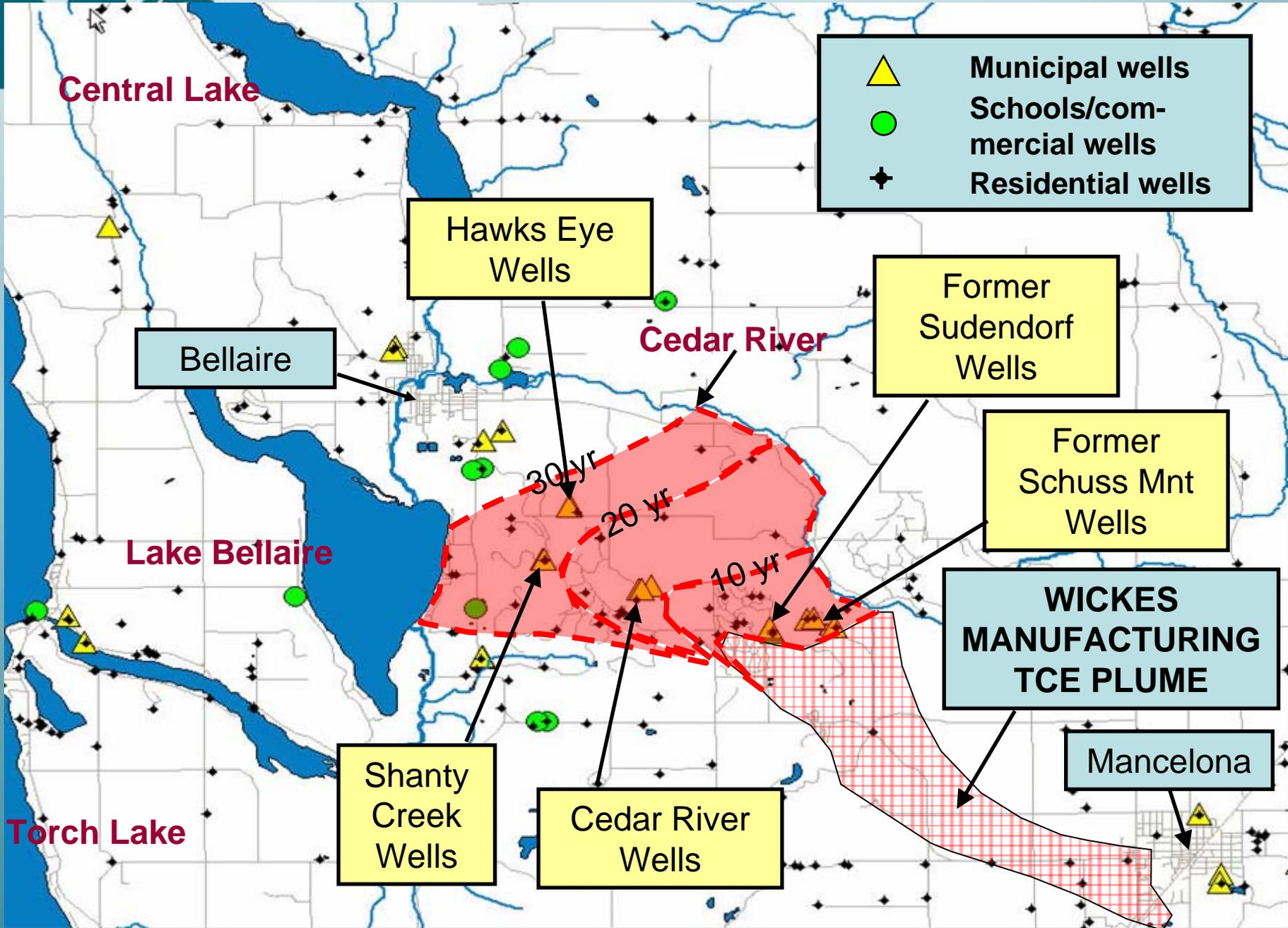
- **Goal is risk reduction, *not* complete cleanup**
- **Range of cleanup costs and timeframe varies per site:**
  - **Low:                   \$50,000; 1-3 years**
  - **Medium:               \$500,000; 3+ years**
  - **High:                   \$3.5 M - 100+ M; 10+ years**

## Wickes Manufacturing - Mancelona



### The Problem:

- One of Michigan's largest groundwater contamination plumes; 6 miles long, 1.25 miles wide, 450 feet deep; migrates up to 480'/year!
- Contamination greater than 200 times the drinking water criterion
- Drinking water wells contaminated from waste-water lagoons and wastes at former auto parts mfg. plant





# Why It Matters

## Wickes Manufacturing

### Actions To Date

**\$17.8M state \$ committed**

- Provide bottled water
- Investigate contamination
- Replace 225 private drinking water wells with municipal water
- Monitor plume; at risk wells and Cedar River

**Unmet Need: >\$24.5M - \$100M**

- Design/build groundwater treatment system



*27 miles of water main installed* →

## Detroit Riverfront Project

### *The Problem*





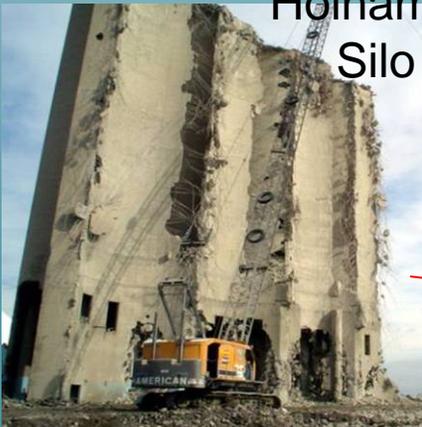
# Why It Matters

## Detroit Riverfront Project



Lafarge Silo

*Remediation*



Holnam Silo



Medusa Silo



After

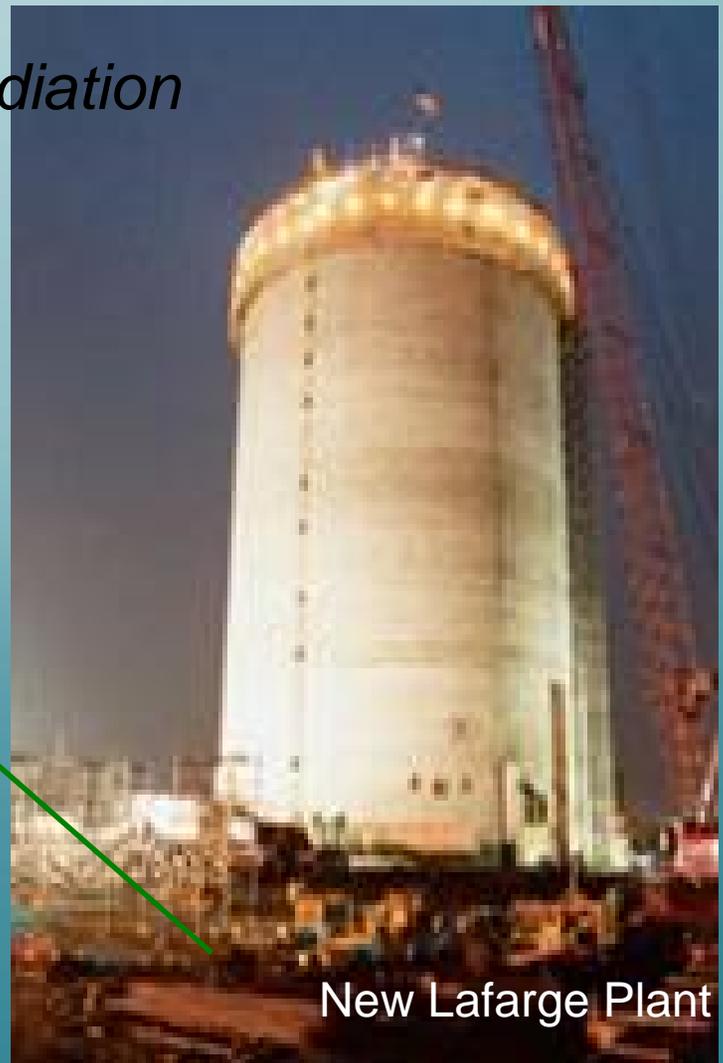


# Why It Matters

## Detroit Riverfront Project



*Remediation*





# Why It Matters

## Detroit Riverfront Project

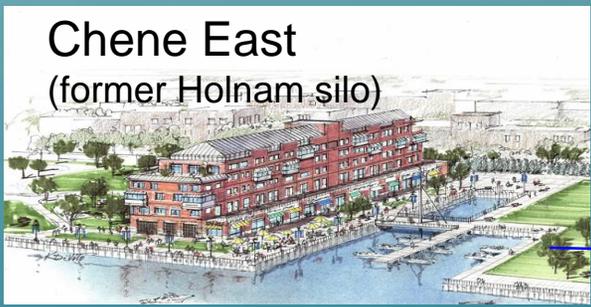
*Future*



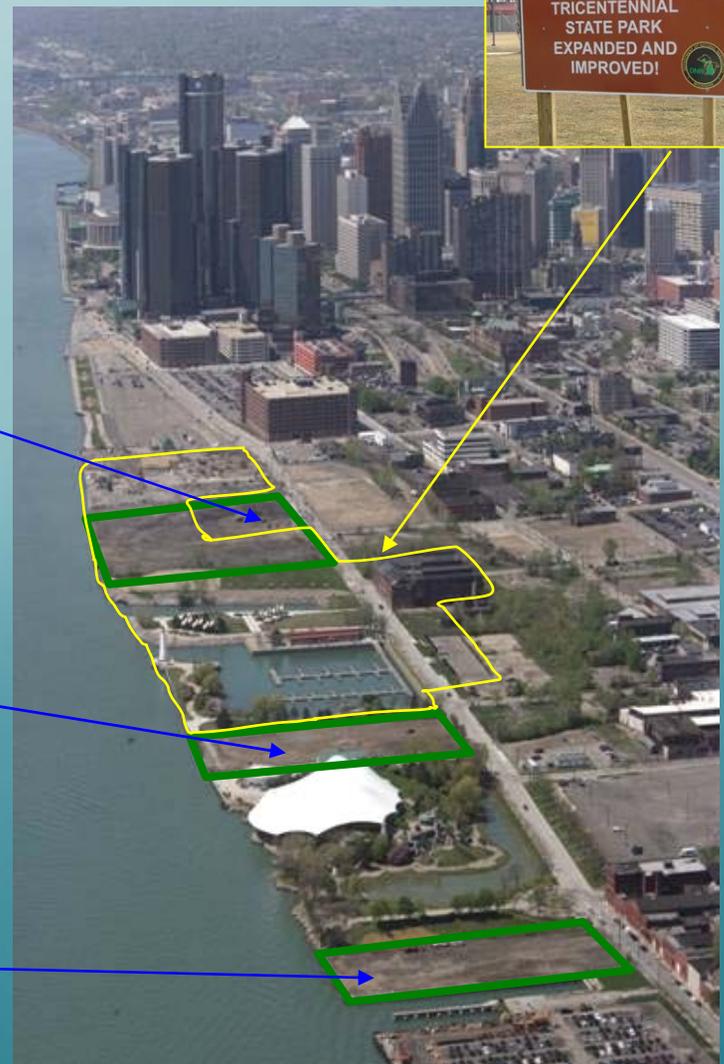
@Water Lofts  
(former Lafarge silo)



The Watermark  
(former Medusa silo)



Chene East  
(former Holnam silo)





# Detroit International Riverfront Project

## PROGRESS SO FAR



GM Plaza-Riverfront



State Park - Harbor



Promenade

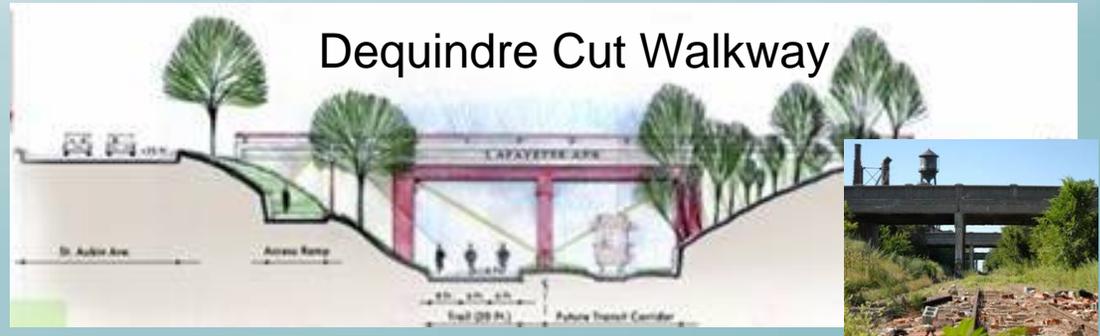


Rivard Plaza - Carousel



# Detroit International Riverfront Project

## THE FUTURE





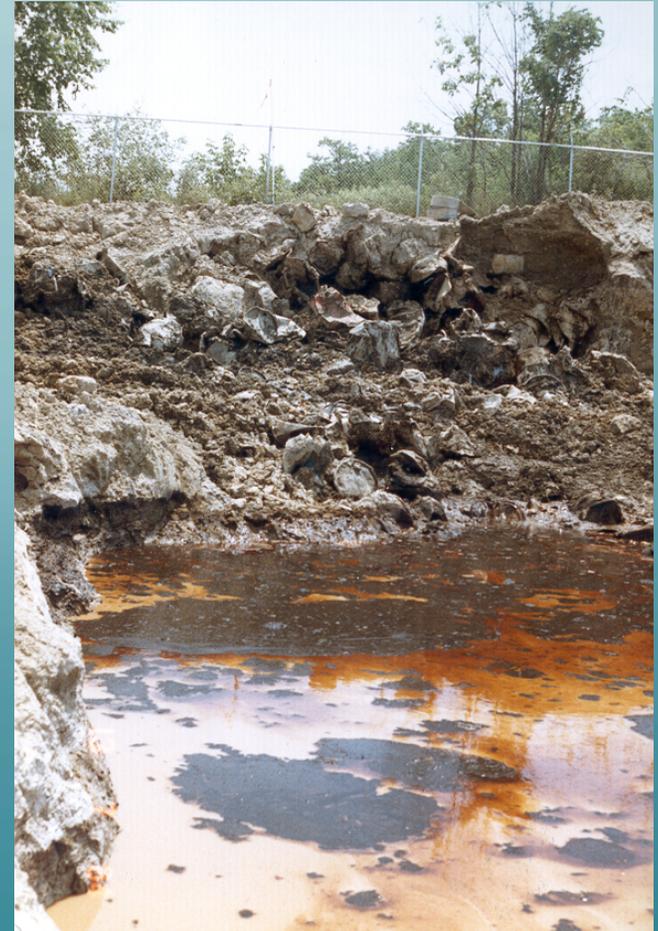
- **Thousands of sites we already know about need more work:**
  - More than 400 current projects need additional funding to complete, including long term operation and maintenance of treatment systems
  - At least 1,600 abandoned dumps/landfills require assessment/control to address potential methane and groundwater problems
  - A continuing need to provide safe drinking water
  - 4,500 orphan underground tank releases require action
  - Thousands of derelict ind/comm buildings pose public safety hazards and blighting influences especially in urban communities



- Cleanup program has been scaling back since 2005
  - More than 180 non-tank projects have been identified as high priority but not funded. Unmet need for these sites >\$185 Million.
- Further reductions and adjustments were made in July 2008
  - Only the most critical projects are proceeding.

- Total need can't be quantified
- Need will exist for foreseeable future
- Continuing reasonable level of effort will cost **\$95-100 million\*** per year for:
  - Liable party oversight
  - Publicly funded cleanups
  - Brownfield grants and loans
  - Brownfield technical assistance

\* *Excludes leaking underground storage tanks and state-owned sites*



- Even at this level of funding, it's just the proverbial 'finger in the dike'
- But, unacceptable situations have been addressed in a timely way
- Staffing levels and contracting requirements constrain rates of expenditure





# Funding Sources (Historical)

- **Unclaimed Bottle Deposits**
  - Cleanup & Redevelopment Fund (CRF)
- **Recovery of State Costs**
  - Environmental Response Fund (ERF)
- **General Obligation Bonds**
  - 1988 Quality of Life Bond
  - 1998 Clean Michigan Initiative Bond (CMI)
- **General Funds (prior to 2002)**
- **Refined Petroleum Fund (RPF) Fee**



# Funding Challenge

- **One-time funding sources depleted**
  - 1988 Quality of Life Bond
  - 1998 Clean Michigan Initiative Bond
- **Continuing revenue (ERF/CRF) is only ~\$14 million/year after September 2008**
- **CMI shift could provide \$21.6 m (one time)**
- **Brownfield grant funding depleted in 2009**
- **Based on \$95 million/year program, shortfall is \$81 million per year**



- Remaining resources have been reallocated among existing projects
- Virtually no new projects
- Existing projects have scaled back or set aside
  - Threats to public health, natural resources will be uncontrolled
  - Investment in cleanup systems may be lost
  - Redevelopment opportunities lost
- Work will be sacrificed at some sites so others can proceed.



# Future Needs (current level)

## **\$95 M/Year (Bond & Non-bond)**

- **\$60 M/year for project funding\***
  - Sites with critical public health/natural resource threat
  - Sites with significant redevelopment potential and environmental contamination issues
- **\$25 M/year staffing, project management & equipment costs**
  - Provide compliance and brownfield redevelopment assistance
- **\$10 M/year for Brownfield Grants & Loans**

*\*Excludes Leaking Underground Storage Tanks and State-Owned Sites*



## Funding Needs (Tank Program)

- More than 21,000 confirmed releases
- 12,000 closed; 9,000 unaddressed
- Almost half of these are “orphan” sites
- Expected costs to address orphan sites is > \$1.5 billion
- About 300 new releases confirmed/year
- Less than 300 releases “closed”/year



# Funding Needs (Tank Program)

- Michigan's backlog of releases is exceeded only by California and Florida
- Our three states account for about a third of all releases unaddressed in the country
- California and Florida each have fees that produce more than \$200 million/year





# Funding Needs (Tank Program)

## Refined Petroleum Fee

- 7/8 cent/gallon
- Raises \$53 M/year (and declining)
- \$22 M/yr for cleanups
- Only 7% of revenue collected in FY 05-07 made available for leaking tank program





# Funding Needs (Tank Program)

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**\$177 M / year\***

\$150 M newly reported releases

\$ 27 M critical needs at existing orphan sites

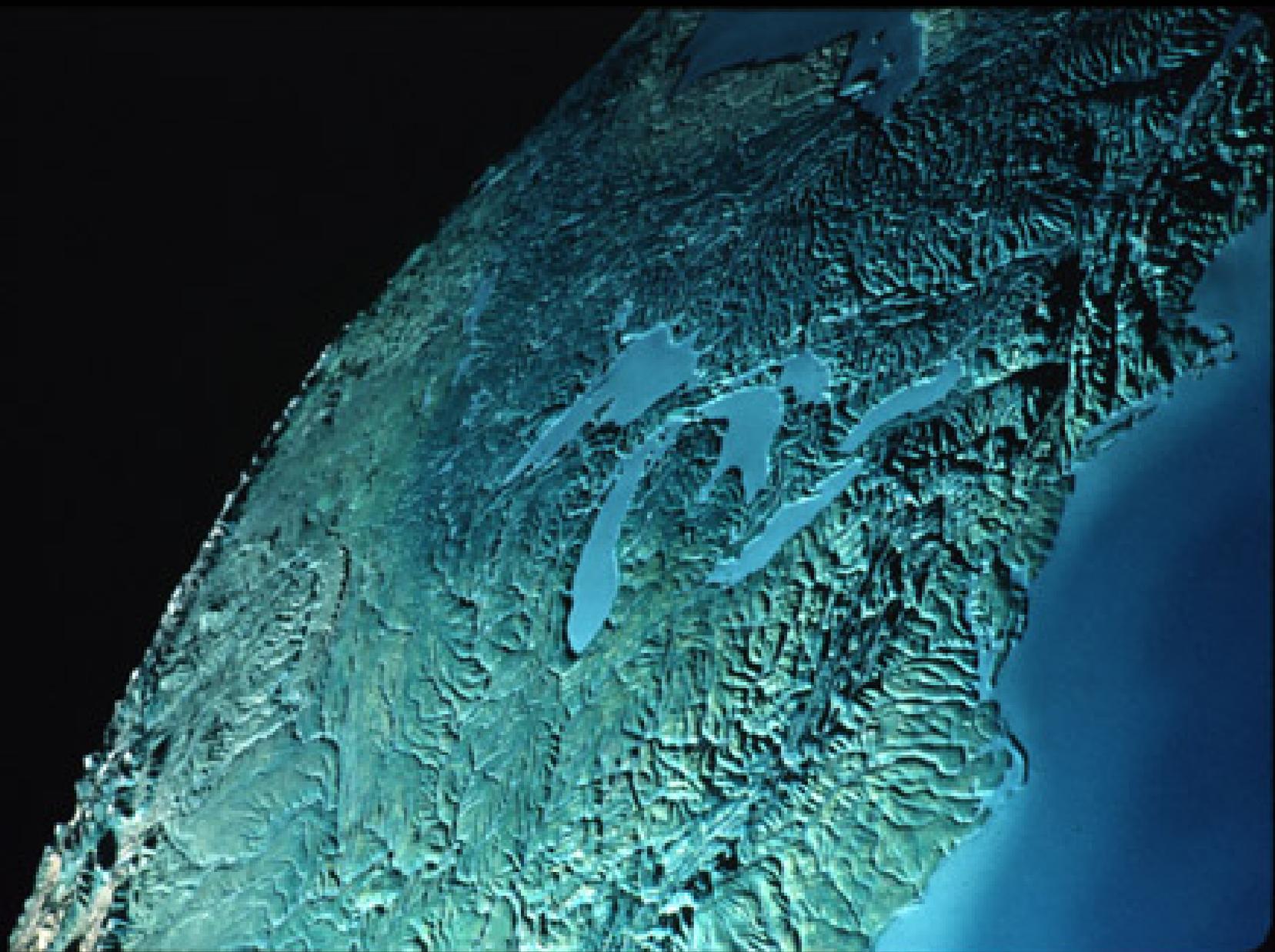
*\*Minimum funding level for tank program, depending on program design*



To Recap . . .

## TOTAL ANNUAL FUNDING NEEDS

Non-Tank Program	\$ 95 Million
Tank Program	<u>\$177 Million</u>
	\$272 Million



## Based on Part 201

## Discussion Group

- Convened by RRD in 2005
- 101 recommendations presented in 2007
  1. Liability
  2. Complexity
  3. Program Administration
  4. Brownfield Redevelopment
- >25% already implemented, most through 2007 amendments to Brownfield Redevelopment Financing Act (Act 381)





# Program Redesign

- RRD has developed proposal for program changes
  - Linking change to specific problems, lessons learned
  - Incorporating virtually all Discussion Group recommendations
  - Plus others based on increasing efficiency and ease of implementation while improving risk reduction
    - Combine Part 201 and Part 213



# Program Redesign

- Proposal will be shared in 3 sessions
  - November 7
    - Cleanup process, liable party obligations
  - December TBA
    - Due Care, liability protection, Act 381 changes
  - January TBA
    - Liability, compliance, enforcement
- Plus web-casts of each session
  - Info provided to DEQ RRD list serve subscribers



# Program Redesign

- Anticipate legislative action beginning mid-2009
- Comment via:  
[DEQ-RRD-Redesign@michigan.gov](mailto:DEQ-RRD-Redesign@michigan.gov)



We must not walk away...

