

#### A Strategy to Restore & Protect the Great Lakes August 26, 2005









#### **The Great Lakes Regional Collaboration**

In May, 2004 President Bush issued Executive Order 13340 which recognized the Great Lakes as a "national treasure" and directed the U.S. EPA Administrator to convene a "regional collaboration of national significance for the Great Lakes" to develop, by consensus, the national restoration and protection action plan for the Great Lakes.







#### **GLRC Executive Committee**

Creates the Final Strategy





#### Schedule

- December 2004
- January 2005
- July 2005
- July/August 2005
- September 9, 2005
- December 12, 2005

Collaboration kick-off

Strategy Teams begin work

Draft Strategy released to public

Six public meetings

Public comment period ends

Final Action Plan released



#### **Issue Area Strategy Teams**

- Great Lakes Governors' Priorities used as a starting point.
- Eight Strategy Teams include:
- --Aquatic Invasive Species
- --Habitat/Species
- --Coastal Health
- --Areas of Concern

- --Nonpoint Source
- --Toxic Pollutants
- --Indicators and Information
- --Sustainable Development



#### **Toxic Pollutants**

- Virtually eliminate discharge of mercury, PCBs, dioxins, pesticides and other toxic substances to the Great Lakes;
- Prevent introduction of new toxic substances;
- Improve research, surveillance and forecasting capability;



- Improve fish consumption advisories and enlist the public to reduce toxic substances
- Address International Sources



#### **Recommendation #1:**

Virtually Eliminate the Discharge of Mercury, PCBs, Dioxins, Pesticides and Other Toxic Substances to the Great Lakes



## Rationale

• Principal sources of priority pollutants continue to threaten the health of the Great Lakes and drive fish consumption advisories, and should therefore be systematically reduced and virtually eliminated:



# Specific Recommendations

- Reduce coal fired utility emissions
- Basin-wide mercury product stewardship strategy
- Decommission PCB containing electrical equipment, consistent with Stockholm Convention
- Address household garbage burning
- Implement robust ongoing pesticide collection programs



#### Milestones

- By 2008, collect 1MM lbs waste pesticides/year.
- By 2010, 50 percent reduction in Basin-wide household garbage burning;
- By 2010, commence significant reductions in mercury emissions from coal-fired power plants;
- By 2015, full phase-outs of intentionally added mercury bearing products, as possible;
- By 2025, full phase-out of all PCB equipment in the basin; and
- By 2025, significantly reduce PTS inputs from international sources.



#### Implementation and Costs

- Implementation: *The Great Lakes Binational Strategy in a coordinating role*, LaMP chemical committees, EPA, State environment and agriculture agencies; municipalities, and industry.
- Cost: \$10M/yr Burn Barrel Initiatives (all new), \$3.4M/yr - Clean Sweeps (\$2.0M/yr new).



#### **Recommendation #2:**

#### **Prevent introduction of new toxic substances into the Great Lakes Basin**



## Rationale

• Preventing new toxic substances from entering into the Great Lakes is as important to protecting ecosystem health as addressing current priority pollutants.



## **Specific Recommendations**

- States should "bundle" technical assistance services, such as compliance assistance, pollution prevention (p2) audits, and energy efficiency (E2) audits, in "one-stopshop" programs.
- Tax incentives and low interest loans should be utilized to promote investments in energy efficiency upgrades and pollution prevention projects;
- Federal and state agencies should ensure that traditional regulatory programs, including enforcement, provide incentives to conduct pollution prevention and energy efficiency projects.



#### Milestones

- By 2008, include pollution prevention and energy efficiency (P2/E2) measures in federal and state rule making.
- By 2010, implement 200 P2/E2 projects for small to medium sized businesses in the Great Lakes States.



#### Implementation and Costs

- Implementation: U.S. EPA, State technical assistance providers, Manufacturing Extension Partnerships, City environmental departments.
- Cost: \$16M/yr (\$15.12M/yr new), \$50M tax incentives/fund capitalization (all new).



#### **Recommendation #3:**

# **Improve research, surveillance and forecasting capability**



### Rationale

Great Lakes lawmakers, program managers, and stakeholders need accurate information. This requires a coordinated system which monitors PTS sources and environmental conditions, tracks reduction actions, projects future trends in exposure and effects, and uses this information for decision-making.



## Specific Recommendations

- Screening/long term monitoring of PTS sources and concentrations in environmental media, including humans and wildlife. Current monitoring programs should be enhanced and coordinated per the recommendations of recent program and peer reviews of existing networks;
- Research on chemical properties, exposure, and long term effects;



## Specific Recommendations

- Modeling, including evaluation and enhancement of current models, to better predict environmental impacts of reduction actions at various geographic scales, and to examine exposure scenarios; and
- Information management, an easily-accessible, central Great Lakes PTS database for monitoring data, emissions and releases information, and research results, including a clearinghouse for toxicity data used to develop GLI criteria.



## Milestones

- By 2008, initiate a central Great Lakes PTS database.
- By 2010, a basin-wide surveillance program of chemicals of emerging concern at wastewater treatment plants will be established. At least 50 percent of the large in-basin WWTPs will participate in the program.
- By 2010, implement a Great Lakes human PTS biomonitoring program.



#### Implementation and Costs

- Implementation: *The Great Lakes Binational Toxics Strategy*, federal agencies, States, academia.
- Cost: \$5-10M/yr (\$300K/yr current/balance new).



#### **Recommendation #4:**

#### Improve fish consumption advisories and enlist the public to reduce toxic substances



## Rationale

A consistent set of messages from federal, state, tribal and local health and environment agencies is needed to protect the public from health effects of PTS exposure, and to provide the pubic with information about lifestyle choices which will help reduce PTS uses and releases to the Great Lakes.



### Specific Recommendations

• With regard to PTS exposure, the Great Lakes Sport Fish Advisory Task Force should create consistent advice on fish and wildlife consumption to citizens in the Great Lakes Basin, especially to sensitive populations, and to health care professionals, in multiple languages. Current state advisory programs should be fully funded and implemented to adequately protect the entire basin



## Specific Recommendations

To help the public do its part to reduce the use and release of PTS, a basin-wide public education and outreach campaign that focuses on habits of individuals, households, the workplace, and schools, should be developed in coordination with existing messages and stakeholder groups. Take back programs and household hazardous waste collection programs should be promoted as well



## Milestones

- By 2007, commence basin-wide PTS public information campaign; and
- By 2009, adopt consistent Great Lakes basin fish consumption advisories.



#### Implementation and Costs

- Implementation: Great Lakes Sport Fish Advisory Task Force, National Sea Grant Program, state and tribal departments of public health, environment and natural resources, the GL Human Health Network, U.S. EPA, and FDA.
- Cost: \$15.9M/yr (\$11.7M/yr new).



#### **Recommendation #5:**

#### **Address International Sources**



## Rationale

Significant amounts of PTS come to the Great Lakes through air deposition from sources well beyond the U.S. border. International toxics reduction and monitoring programs are therefore essential to the protection of the Great Lakes.



## Specific Recommendations

- Ratify the Stockholm Convention Organic Pollutants.
- Support international PTS management and monitoring programs, in coordination with the Commission for Environmental Cooperation (CEC) and the United Nations Environment Programme (UNEP), and support capacity building and technology transfer programs, such as those administered by EPA's Office of International Activities.
- Support international efforts to reduce sources of mercury, including funding and technical support for UNEP's mercury efforts.



#### Implementation and Costs

- Implementers: Congress, Federal Agencies, the *Great Lakes Binational Strategy in a coordinating role*.
- Cost: \$7.725M/yr (\$6M/yr new).



# Total Toxics Request

- Current Funding:
- Supplemental Request:

\$8.6M/yr \$70-75M/yr



