

Partnerships for a Lead Safe Community



Missouri Mining

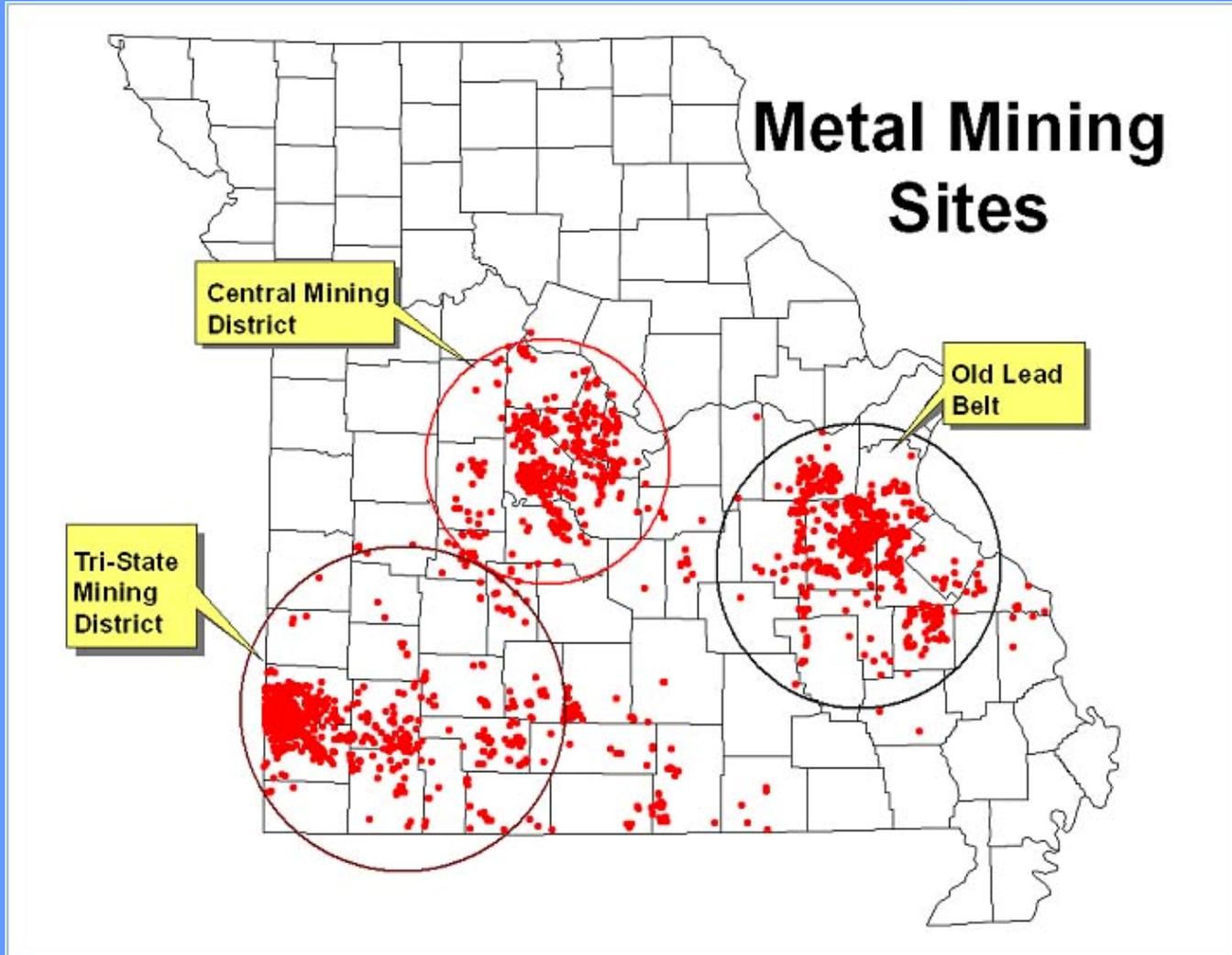
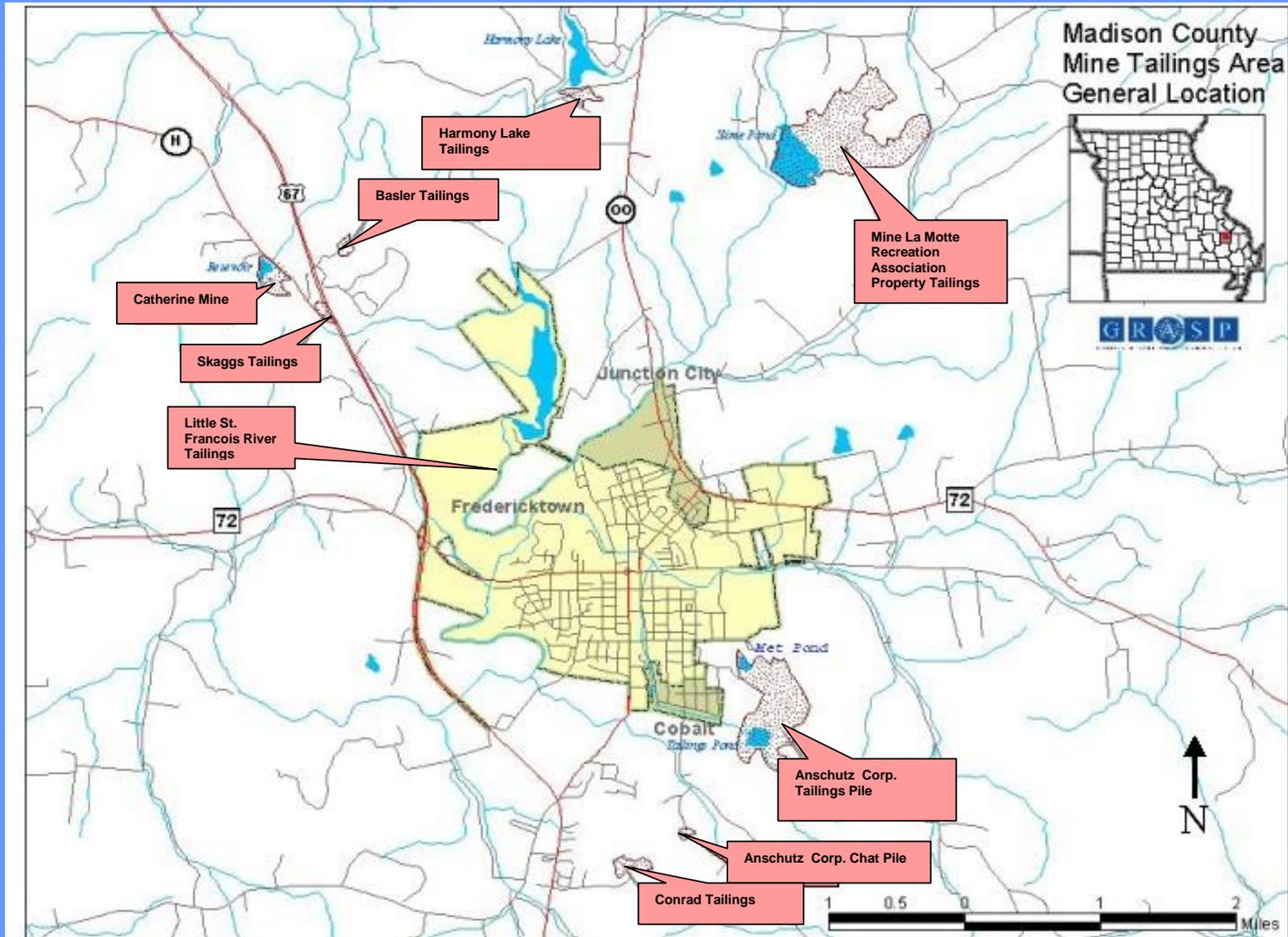


Figure 1

Madison County Mines Site Location Map

Note: Only the major tailings areas are shown on this map, other tailings areas may exist.



History of Madison County

- Rural/farming community
- Total population of 11,948 – 835 children less than six
- 24% of housing built before 1950
- In 2000, 10% of the children tested had a blood lead level of 10 or greater.
- 98.4% white
- Median household income was \$26,014



History of Community

- Lead mined from the 1700's to the mid 1900's
- 13 major tailings and chat deposits that cover 645 acres
 - Two major tailings areas that include vacation dwellings and recreational activities
 - Chat distributed in local residential areas
 - Listing on the NPL was finalized in Sept. of 2003



Environmental Sampling

Media	Range	Acceptable
Tailings Piles	257-10,200	260
Sediment	677-9,920	260
Residential Soils	166 - 19,100	260
Surface Water	ND – 206 ppb	15 ppb
Ground Water	ND – 26 ppb	15 ppb
Fish	4 – 62 ppb	200 ppb

Harmony Lake



Mine La Motte



Fredericktown



Partnerships

ATSDR

Department of Health and Human Services

Agency for Toxic Substances & Disease Registry



Madison County
Health Department



Missouri Department of
Natural Resources

Partnerships



Missouri Department of
Natural Resources

- Inventory of lead mining activity in Missouri
- Oversight of work and remediation plan
- Participation in Community Roundtables



Partnerships

Bureau of Environmental Epidemiology



- Health Assessment Team
 - Provide health assessment and community education
 - Monitoring of EPA/ATSDR funding to Local Health Agency.
- Childhood Lead Poisoning Prevention Program/Surveillance
 - Provide surveillance/testing data and education materials

Partnerships

Environmental Protection Agency



- Provide funding for project
- Sampling of soil and water
- Remediation activity
- Participated in Community Roundtables
- Initiated legal action to require the PRP to perform remediation

Partnerships

ATSDR

Department of Health and Human Services

Agency for Toxic Substances & Disease Registry

- Support for a public health assessment
- Participate in Community Roundtable



Partnerships

- Community outreach and education
- Blood lead testing
 - Environmental Risk Assessments
 - Provide cleaning materials to affected community members
 - Coordinate Community Roundtables



Results

In 2005, 2% of the children tested had a blood lead level of 10 or greater.



Results

Over 500 residential properties (including daycares and schools) have received soil remediation.



Results

Tailings have been
remediated at
Harmony Lake



Before



After

Continued Progress

- More private well sampling and remediation if needed
- Additional tailings stabilization and remediation
- Continue community education and blood lead testing
- Identify additional residential soil contamination
- Renewed support for the LPHA to provide community education/outreach

Long Term Outcomes

Elimination of lead hazards that contribute to lead poisoning in Madison County

