



The Herculaneum VPPPA Future Land Use Process

Land Use Committee Meeting #1
February 20, 2006

Project Background

Project Sponsor & Assistance:

City of Herculaneum
EPA Region 7

Project Purpose:

Provide opportunity for the community to learn about the VPPPA and discuss community preferences for the area's potential future uses and inform the City's future planning efforts

Provide community's guidance to EPA and MoDNR to inform the agencies' future regulatory plans

Project Structure:

Five-month, advisory community planning process

Managed by 17-member, community-based Land Use Committee

Group Introductions

Land Use Committee Members

Project Resource Members

EPA Region 7

Kerry Herndon, Superfund Revitalization Project Manager

Missouri Department of Natural Resources (MoDNR)

Leanne Tippett Mosby, Deputy Director, Div. of Environmental Quality

Dennis Stinson, Project Manager

Agency for Toxic Substances and Disease Registry (ATSDR)

Denise Jordan-Izaguirre, Regional Director

Missouri Department of Health & Senior Services

Cherri Baysinger / Gale Carson

Project Consultants

E² Inc. Mike Hancox, Matt Robbie, and James Wilkinson

Committee Membership Criteria

Attendance at project meetings (three Committee meetings, held monthly, and one public meeting)

Willingness to represent interests of the City as a whole

Willingness to entertain a wide range of potential uses for the VPPPA

Committee Roles

Listening to the local community throughout the process and incorporating their perspectives into the Committee's discussions

Learning – about fellow Committee members' interests, the VPPPA's characteristics, and future land use opportunities and challenges within the VPPPA

Identifying and evaluating future land use options for the VPPPA and providing City of Herculaneum, EPA, and MoDNR with future land use recommendation(s)

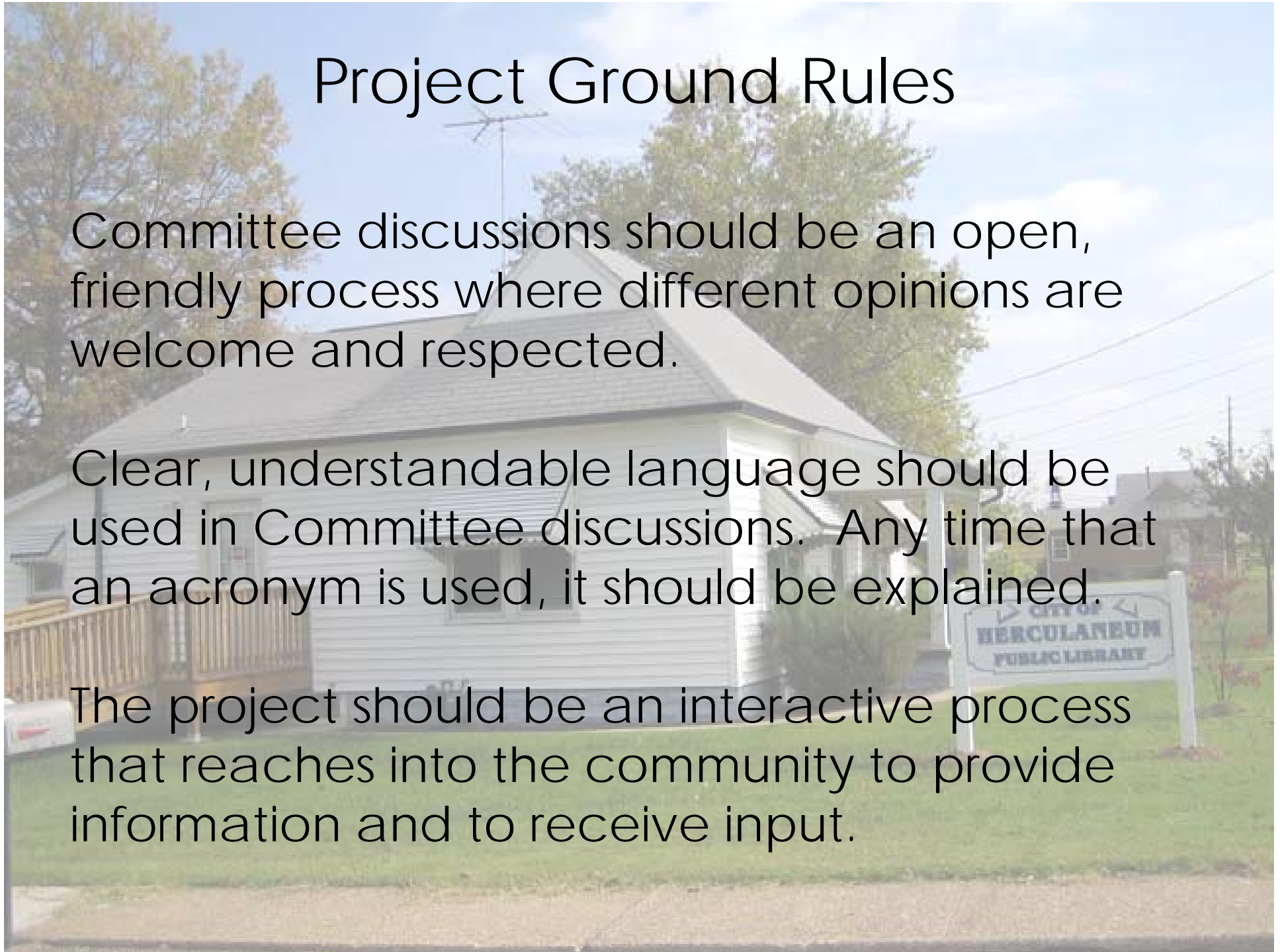
Serving as local ambassadors and information resources for the community

Project Ground Rules

Committee discussions should be an open, friendly process where different opinions are welcome and respected.

Clear, understandable language should be used in Committee discussions. Any time that an acronym is used, it should be explained.

The project should be an interactive process that reaches into the community to provide information and to receive input.

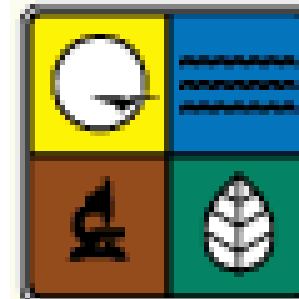


Project Decision-Making

Project designed as a consensus decision-making process.

If full Committee agreement is not possible, an accurate description of group preferences, along with the pros and cons of various options and areas of agreement and disagreement, will be reported to the City, EPA, and MoDNR.

VPPPA Update from EPA and MoDNR



Prepared for Herculaneum Land Use Committee
February 20, 2006



EPA's Role in Herculaneum

- Conduct oversight of soil replacement in residential yards
- Collect and analyze samples to monitor environmental conditions
- Share responsibility with MoDNR for protection of human health & environment
- Report environmental information
- Serve as project resource members for community's effort to identify appropriate future uses in VPPPA

MoDNR's Role in Herculaneum



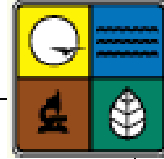
- Oversee the Voluntary Property Purchase and other Settlement Agreement provisions
- Conduct air sampling and analyses to determine compliance with lead standards for air
- Share responsibility with EPA for protection of human health & environment
- Report environmental information
- Serve as project resource members for community's effort to identify appropriate future uses in VPPPA



VPPPA History

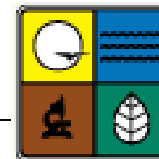


- August 2001 - lead discovered in environmental samples at levels requiring response actions; elevated blood lead levels confirmed in children
- September 2001 - MoDNR issued Order to Abate and Cease and Desist Violations
- April 2002 - MoDNR & Doe Run negotiated a Settlement Agreement for the VPPPA & other requirements
- VPPPA milestone dates:
 - 12/31/04 - deadline for requesting appraisals
 - 12/31/05 - deadline for closing accepted offers



Key VPP Provisions

- Settlement Agreement included provisions for the buy-out and management of the VPPPA
- Residents were asked to initiate the process if interested; were not required to participate or accept offers
- Doe Run required to leave homes vacant until they were demolished or until re-deposition studies were complete and MoDNR, DHSS, City, and Doe Run agreed that re-occupancy not a risk to human health
- Requirement that Doe Run cease renting homes
- A few exceptions to residency prohibitions granted



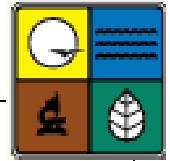
Voluntary Property Purchase

- 149 purchase offers, 142 accepted, 133 closed
- 32 VPPPA residences remain occupied
- Doe Run not required to make offers on vacant or non-residential properties
- MoDNR sent letters 12/05 to Doe Run & the City indicating that the VPPPA could not be used for residential purposes in the future
- Doe Run currently demolishing homes in VPPPA buffer zone nearest the plant site



How Lead Contamination Occurred in the VPPPA

- Truck transportation - releases of lead concentrate along haul routes
- Stack releases - emissions from smelting operations
- Fugitive emissions - dust blown from plant site (from processing areas, buildings, slag piles)
- Runoff - lead particles carried by water
- Tracking - vehicles & feet
- Use of slag as fill material & for road traction



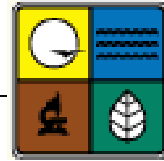
Doe Run's Current Lead Reduction Practices

- Street Sweeping
- Truck Wash Station on the plant site
- Stack emissions controls
- Facility improvements made to reduce fugitives
- Company has Plan to cover slag piles
- Company has Plan to implement new transportation & materials handling procedures



Air Quality

- Five air monitors; only Broad St. monitor failed lead NAAQS three consecutive quarters last year
- EPA now requiring Doe Run and MoDNR to develop plans to further reduce emissions
- Doe Run will have one year after plan approved to complete installation of new controls
- Regulatory standards for air quality will impact future land use options



Cleanup Progress

- Doe Run will resume replacement of contaminated yard soils and interior cleaning in Spring 2006
 - 71 yards remaining over 400 ppm lead
 - 407 yards completed
 - 113 home interiors cleaned



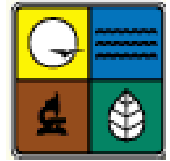
Soil Recontamination Monitoring

- EPA collecting soil samples bi-annually
- Statistical analyses suggest soil lead concentrations are increasing within 0.8 mile of smelter
- Additional reductions in lead emissions/spills needed to prevent recontamination
- Data & statistics available on EPA's website at:
 - www.epa.gov/region7/cleanup/superfund/major_superfund_site_reports.htm
- MoDNR report of statistical analysis of EPA's data also available



EPA / MoDNR Websites

- EPA's website:
 - www.epa.gov/region7/cleanup/superfund/major_superfund_site_reports.htm
- MoDNR's website:
 - www.dnr.mo.gov/env/herc/herc.htm



Future Land Use Process and EPA and MoDNR needs

- Identify land use options that meet community needs & are compatible with current & future health risk considerations
- Identify viable land uses so that agencies can set appropriate institutional controls and regulatory framework for the area
- Select options that enhance and protect the environment for current & future citizens



The Voluntary Property Purchase Plan Area

Existing Conditions

&

Future Land Use
Considerations

Herculaneum Context Map

Key

Herculaneum City Boundary



Herculaneum Voluntary Property Purchase Plan Area



Local Roads



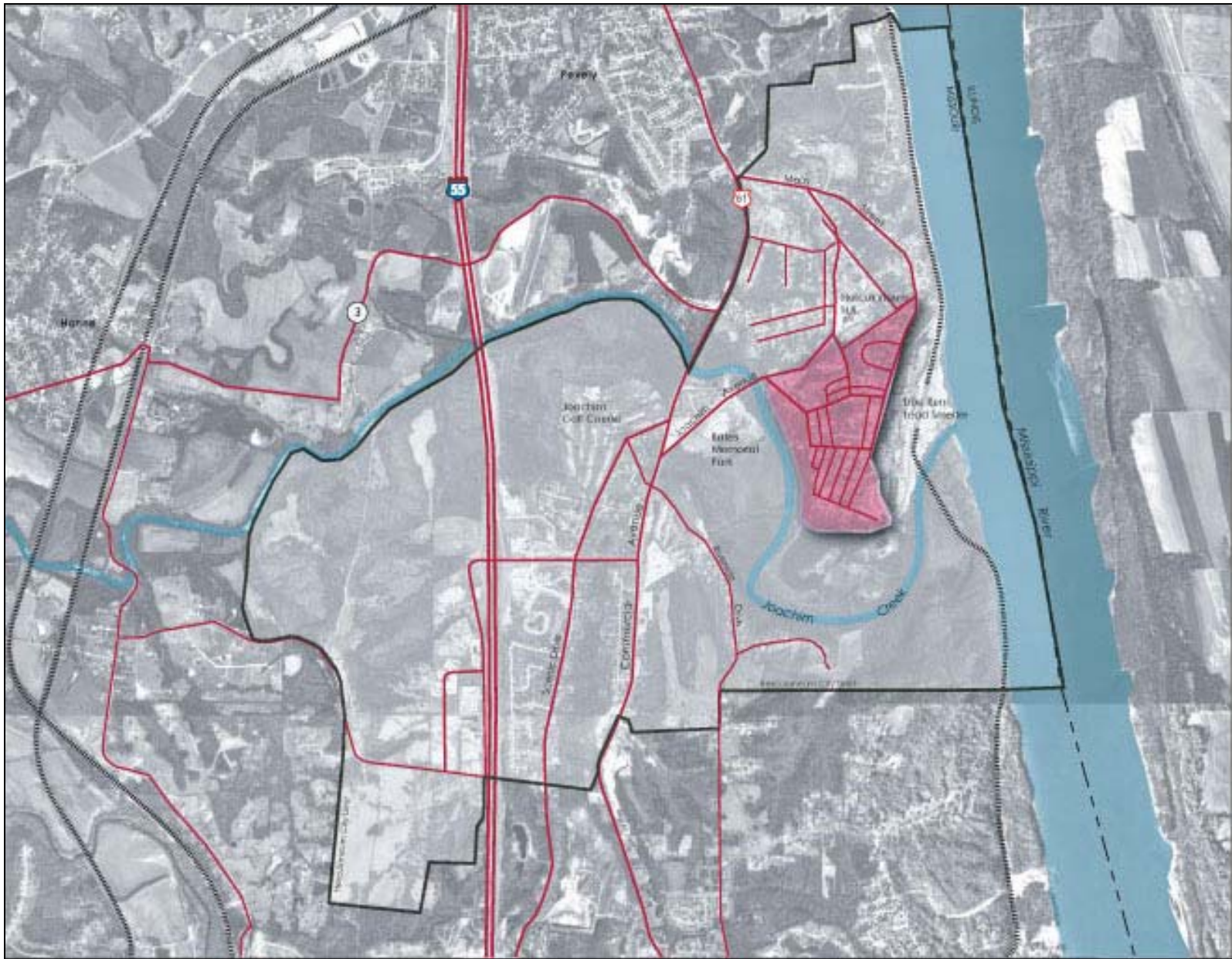
Interstate Highway



Joachim Creek



State Boundary



Voluntary Property Purchase Plan Area

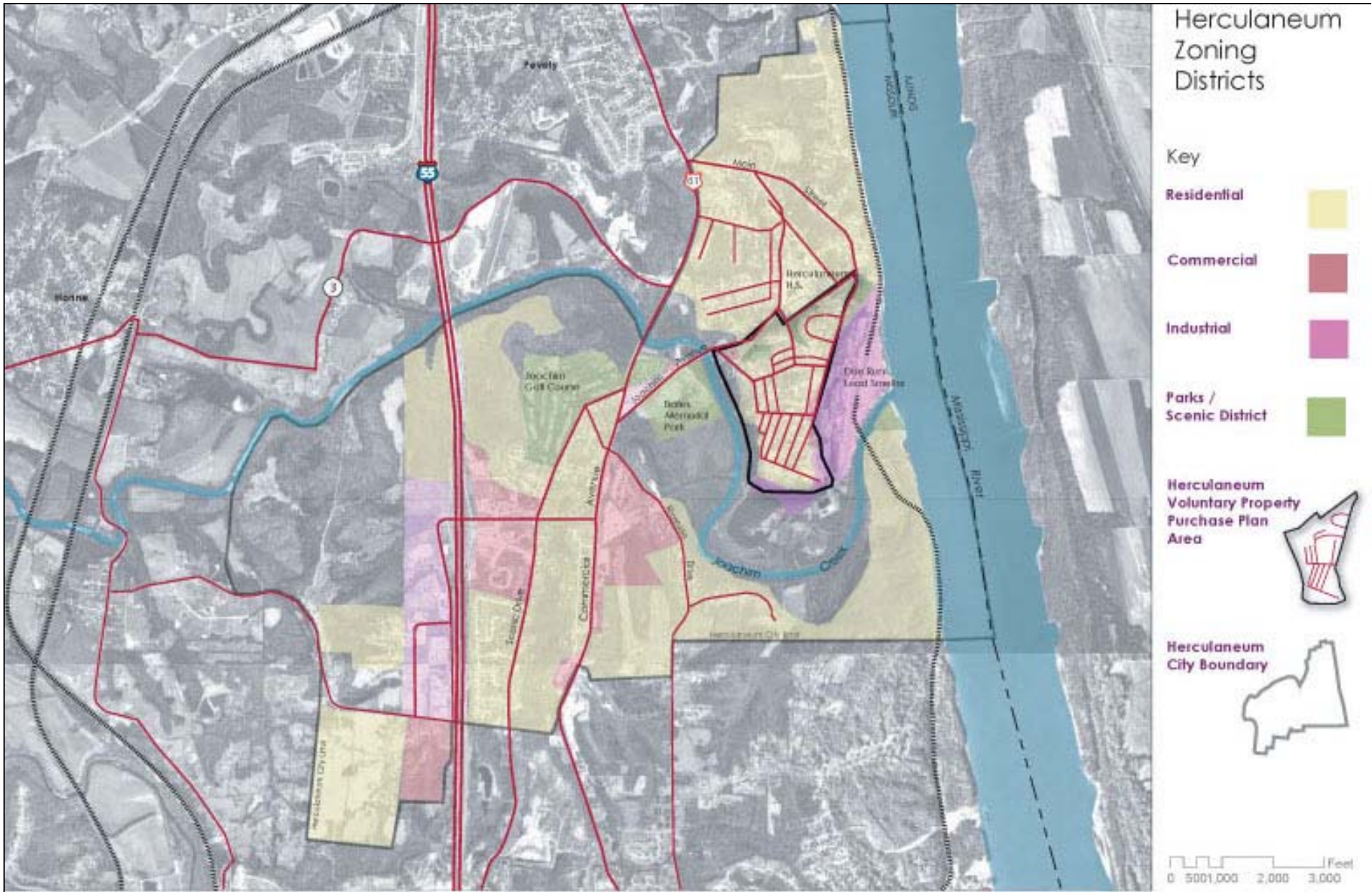
- VPPPA established in 2002 settlement with MoDNR
- Approx. 135 acres
- 169 properties
- Doe Run purchased 133 homes as of Dec. 2005
- 31 occupied households remain in VPPPA



View looking west along Curved Street



Vacant home near the intersection of Dale and School Streets in the VPPPA



Herculaneum Zoning Districts

Key

- Residential**
- Commercial**
- Industrial**
- Parks / Scenic District**

Herculaneum Voluntary Property Purchase Plan Area



Herculaneum City Boundary



Current Zoning Districts

- Herculaneum’s zoning districts regulate land uses within the City’s corporate limits, including the VPPPA.
- The future land use process will help to inform the City’s zoning district designations and future land use opportunities in the VPPPA.

<i>Zoning Districts</i>	<i>City of Herculaneum</i>	<i>VPPPA</i>
Residential	1,100 acres	117 acres
Industrial	200 acres	10 acres
Commercial	360 acres	9 acres
Parks	115 acres	4 acres
Flood Plain	370 acres	4 acres



Buchheit’s store and adjacent commercial businesses on Riverview Drive in Herculaneum



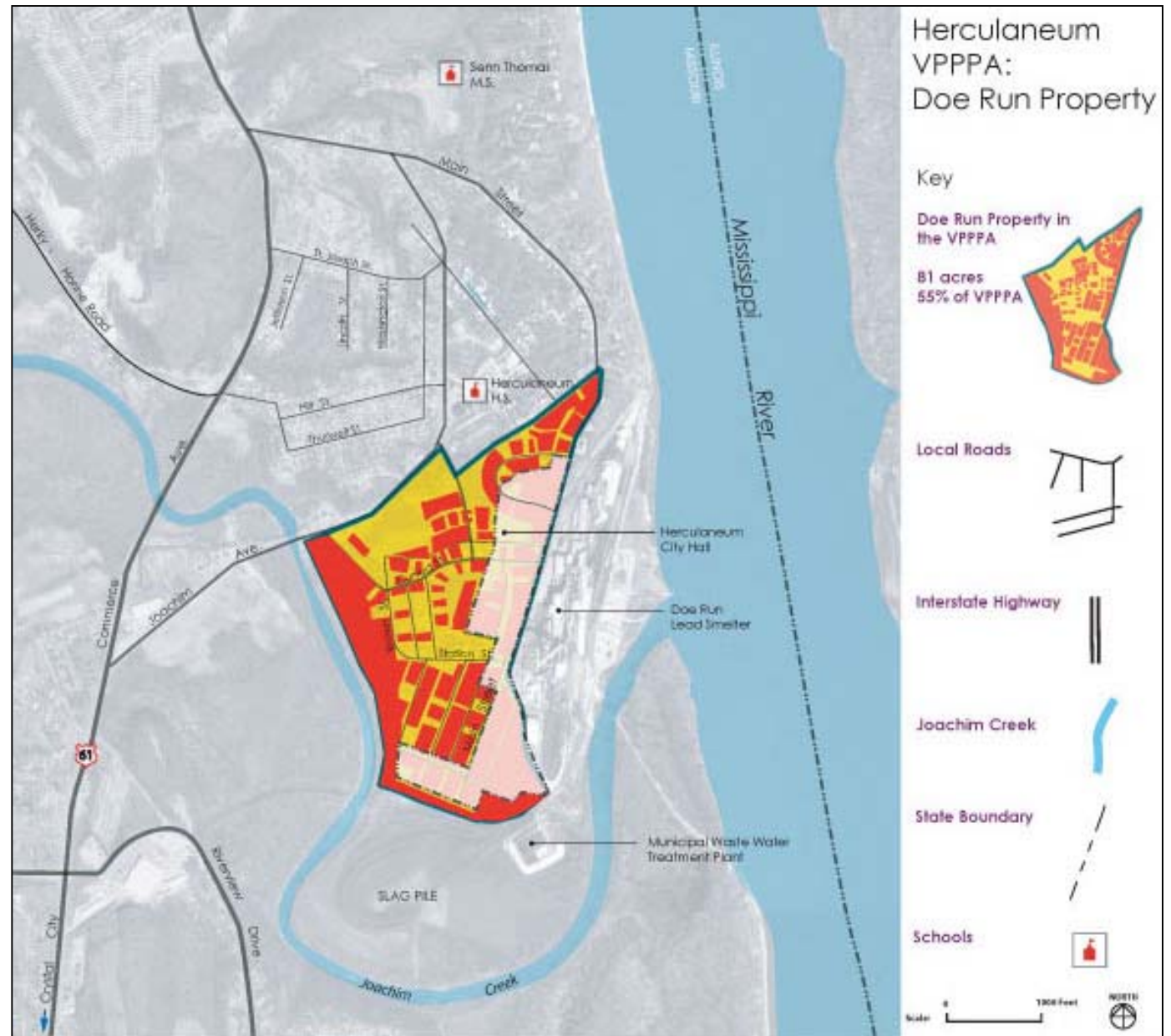
Residential properties on Cross Street in Herculaneum

Doe Run Property

- 133 properties acquired in VPPPA
- Approx. 80 acres
- Buffer zone
- 42 Doe Run owned homes demolished
- Five occupied households remain in the buffer zone

Future land use considerations:

- Doe Run Company's plans for VPPPA & buffer zone
- Needs of residents in the VPPPA and buffer zone

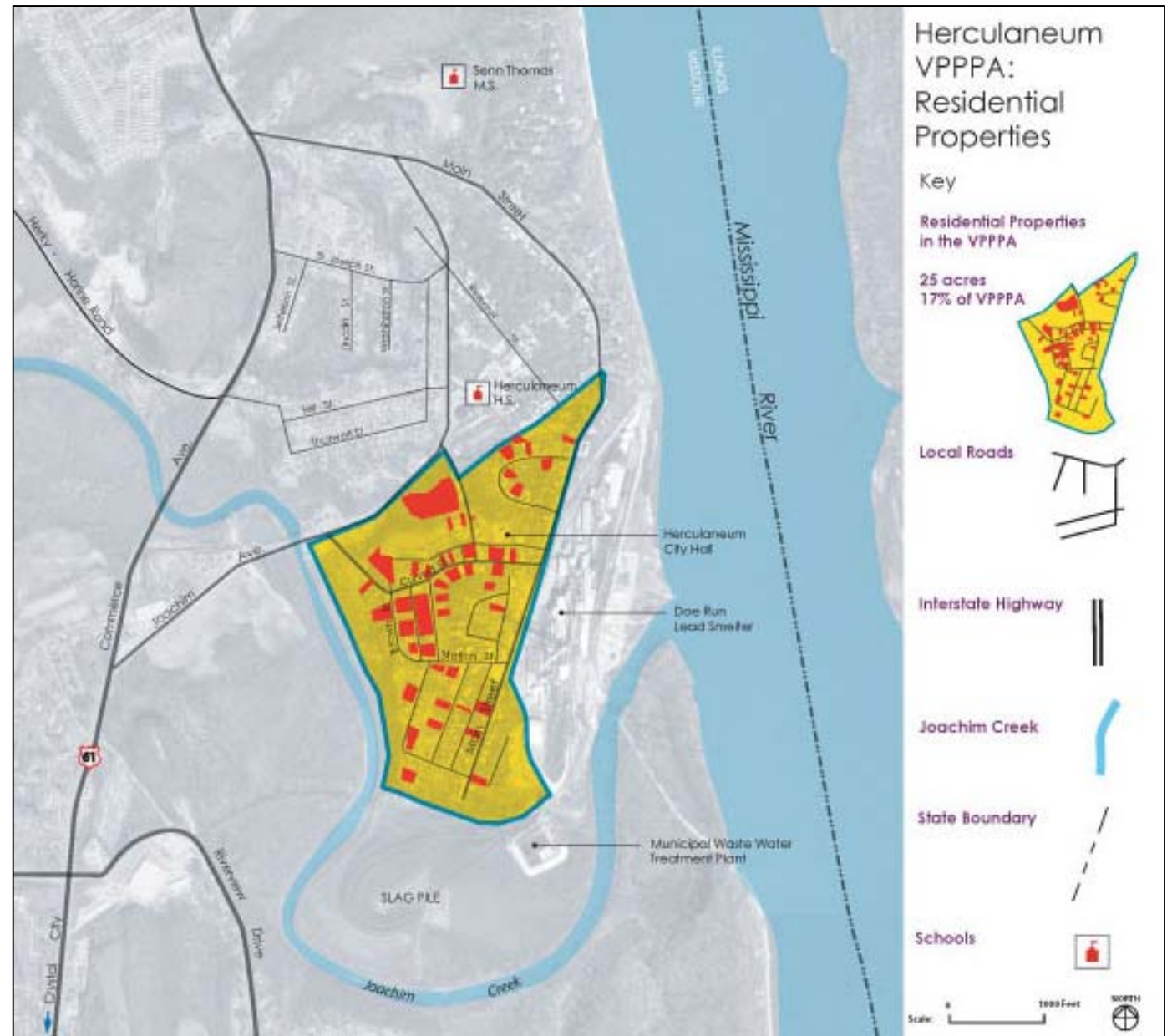


Residential Properties

- 25 acres of private residential property including vacant lots and occupied homes
- 29 owner occupied and 3 renter occupied residential households remain in VPPPA

Future land use considerations:

- Needs and priorities of current residents
- EPA and MoDNR's remedial plans
- Doe Run Company's future priorities for VPPPA properties



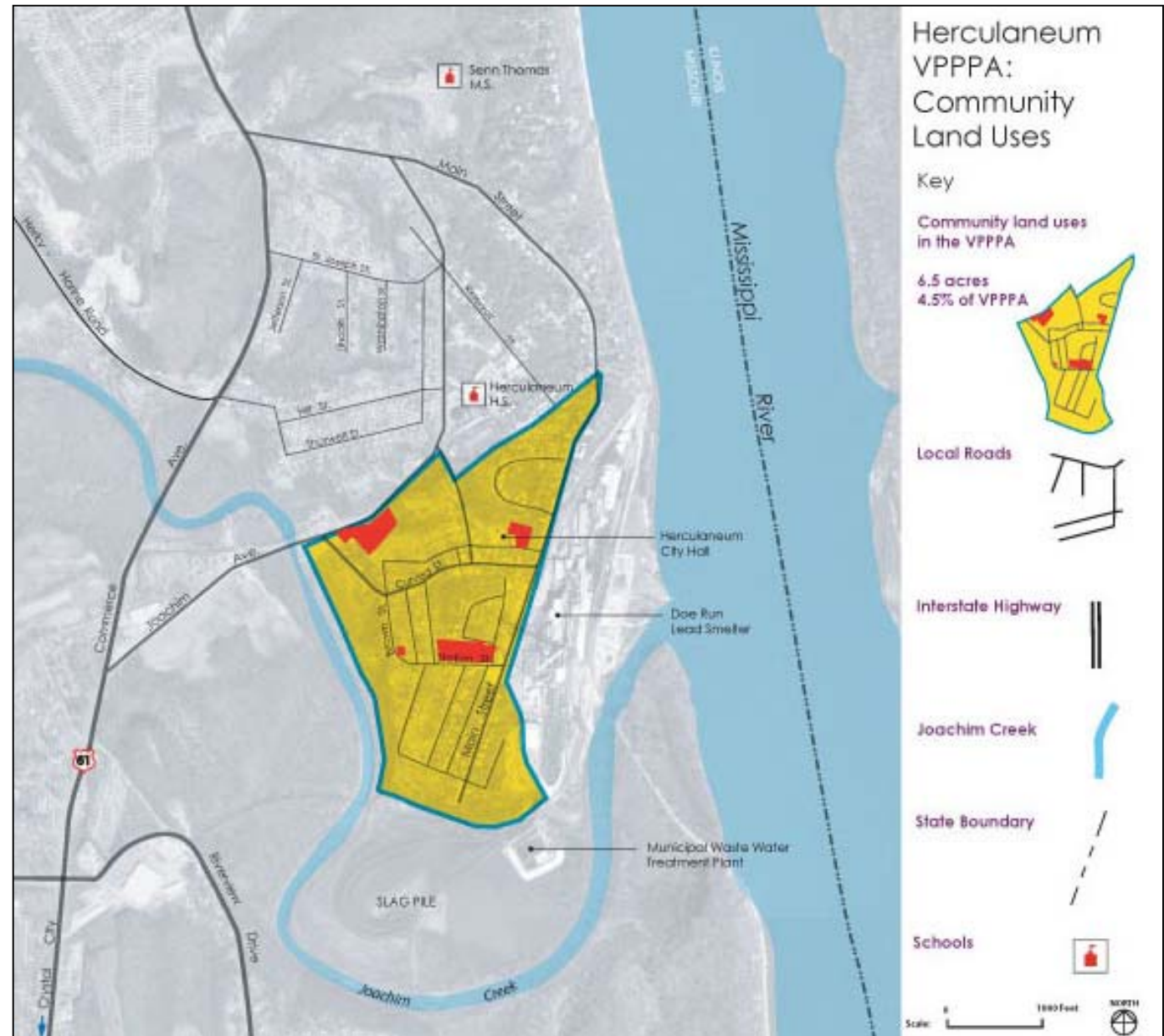
Community Land Uses

Non-profit and community land uses remain in the VPPPA

- Churches & organizations
- Fire Department
- Library

Future land use considerations:

- Integrating community uses in VPPPA and surrounding areas
- Doe Run Company needs and priorities
- Accessibility of community land uses
- Screening or fencing to enhance community activities



Accessibility

- Access routes via Joachim Avenue and Main Street
- Joachim Ave. bridge, now closed–renovations to begin in 2007
- City is raising funds for new bridge–approx. cost \$5 million

Future land use considerations:

- Coordinate new land uses with transportation improvements
- Connections to rail lines and the Miss. River barge channel
- Shifting haul routes from residential streets

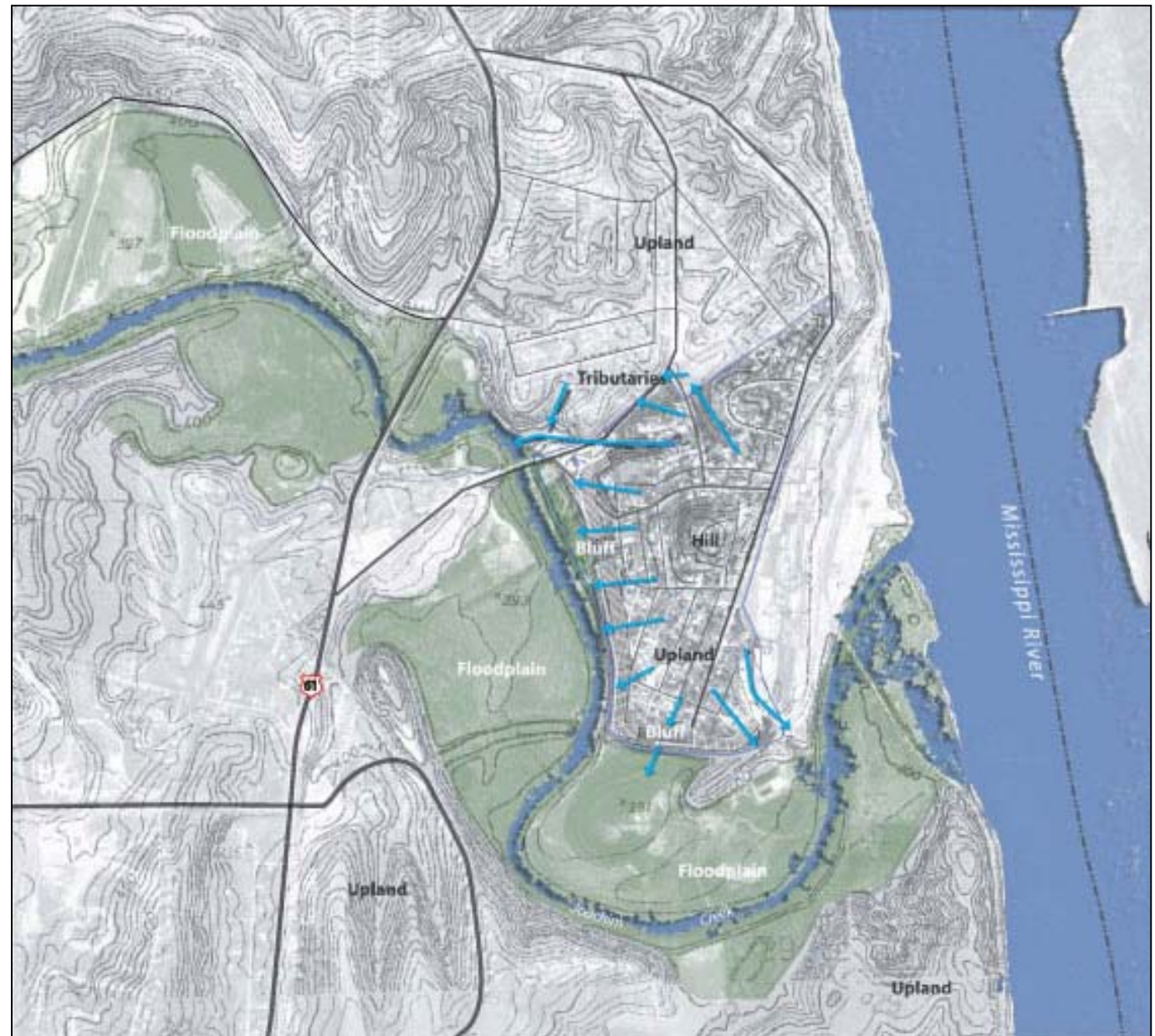


Natural Systems

- 370 acres of flood plains along Joachim Creek
- Smaller tributaries drain the upland areas of the VPPPA
- Bluffs above Joachim Creek constrain VPPPA to the west and south

Future land use considerations:

- VPPPA's varied topography
- Existing and potential future contamination in Herculaneum
- Potential stormwater runoff issues



Committee Discussion



Committee Discussion:

Future Land Use Opportunities and Considerations in the VPPPA

What types of land uses would you like to see in Herculaneum in the future?

- Parks and recreation facilities
- Community land uses
- Municipal land uses
- Commercial land uses
- Industrial land uses
- Other land uses?

Are any of these land uses particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow these land uses to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support these new land uses in the VPPPA?

Parks and Recreation Facilities



Would parks and recreation facilities be particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow a park or recreation facility to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support a park or recreation facility in the VPPPA?

Community Land Uses



Would community land uses be particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow community land uses to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support a community land uses in the VPPPA?

Future Land Use Opportunities and Considerations in the VPPPA

Municipal Land Uses



Would municipal land uses be particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow new municipal land uses to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support new municipal land uses in the VPPPA?

Commercial Land Uses



Would commercial land uses be particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow commercial land uses to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support commercial land uses in the VPPPA?

Industrial Land Uses



Would industrial land uses be particularly well-suited to the VPPPA?

What challenges would need to be addressed to allow industrial land uses to be located in the VPPPA?

What infrastructure or access improvements would need to be in place to support industrial land uses in the VPPPA?

Doe Run Buffer Zone



What are some potential future use considerations for the buffer zone?

What are some short term considerations for occupied households in the buffer zone?

What are some short term considerations for municipal property in the buffer zone?

Project Next Steps

- Second Committee meeting:
Late March 2006
- Project research follow ups
- Project contact information
- Other next steps

