

# Little Scioto River Clean-up

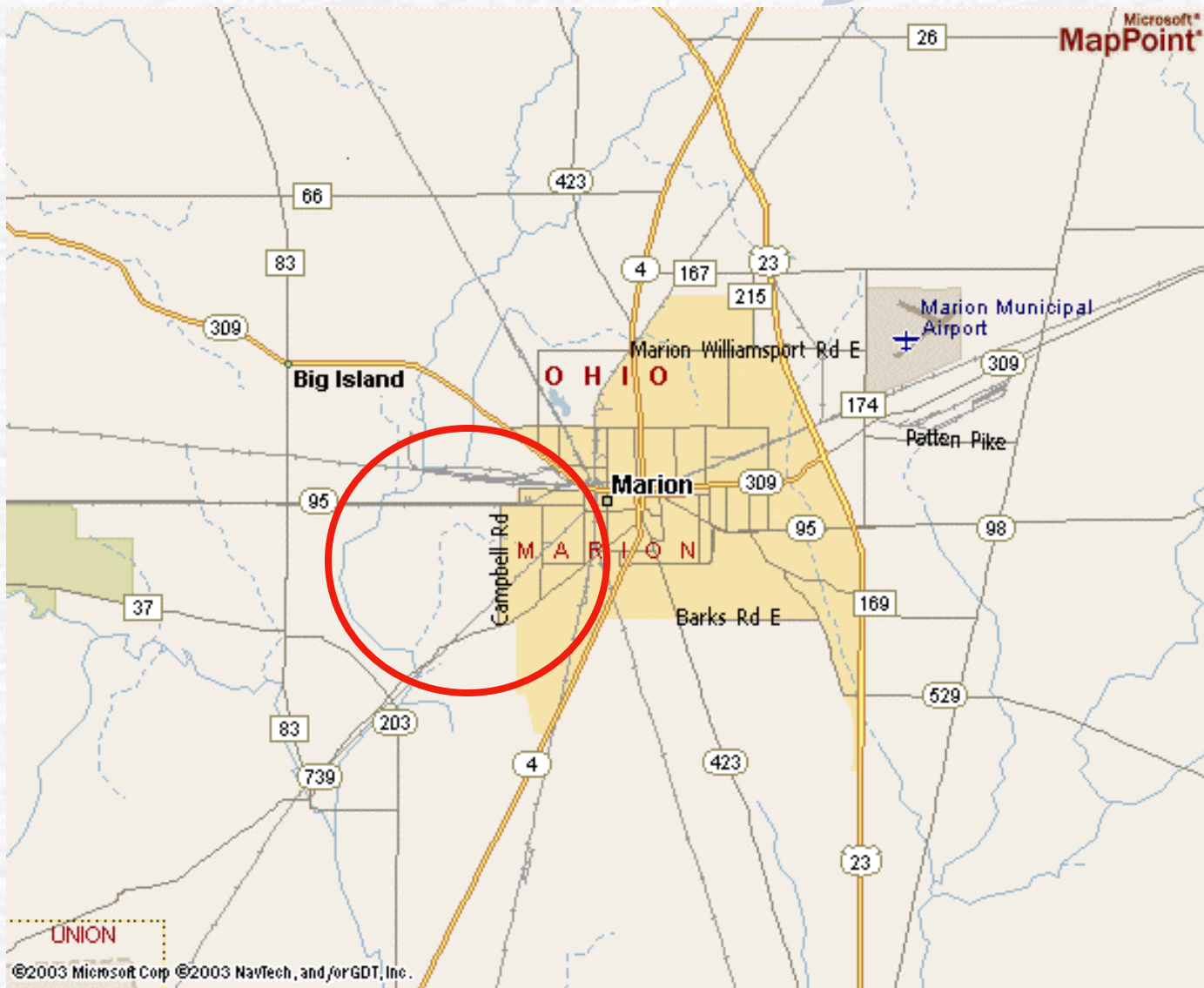
Presented To:  
Freshwater Spills Symposium  
April 6-8, 2004

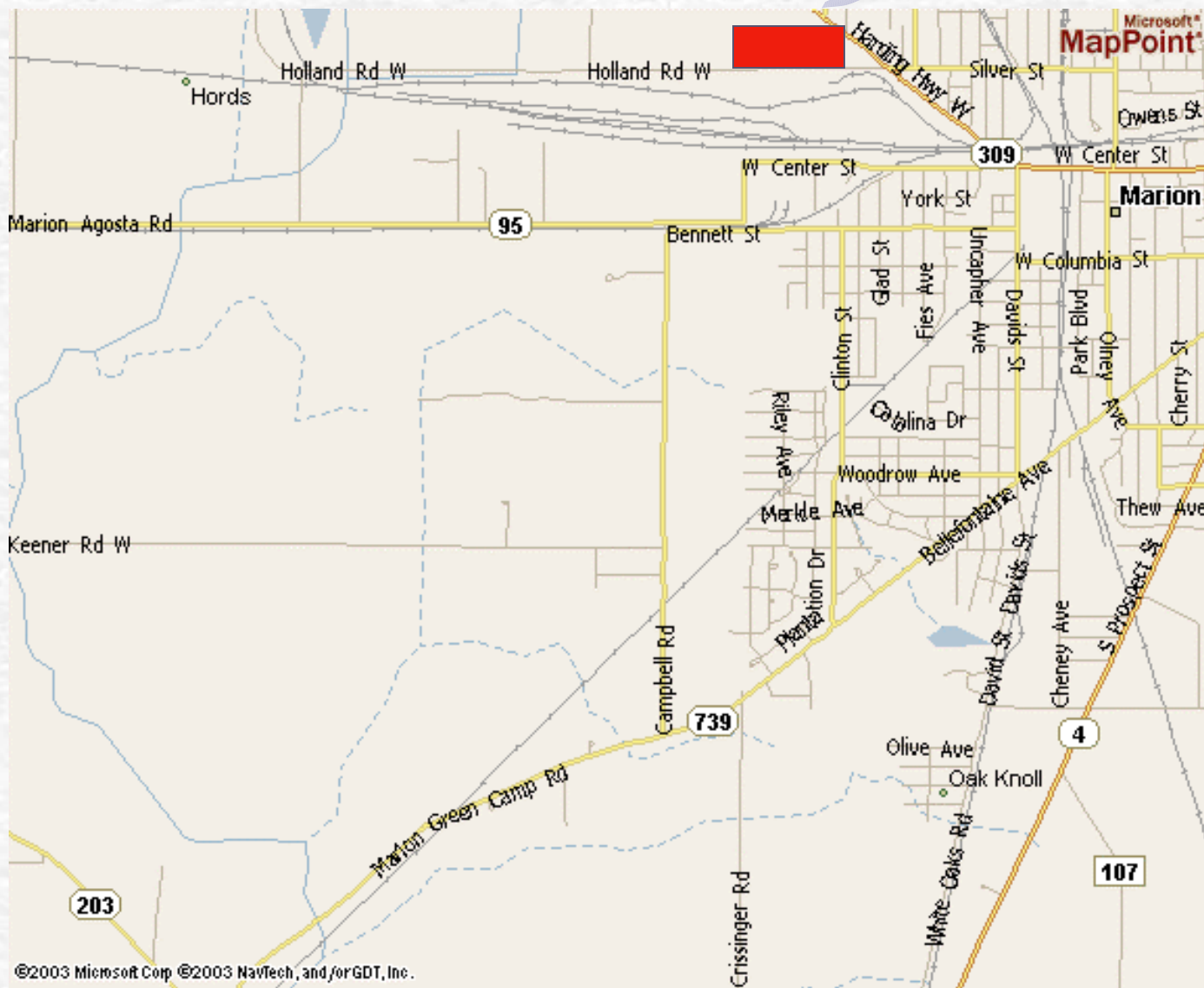
Mark Durno, EPA, Region 5



# Where are we ?







# Background

- 1998 Ohio EPA Integrated Assessment at Baker Wood Creosoting.
- 1999 U.S. EPA Removal Action.
- 2000 Little Scioto River Assessment.
- 2001 Community coordination team develops.



# Baker Wood Creosoting

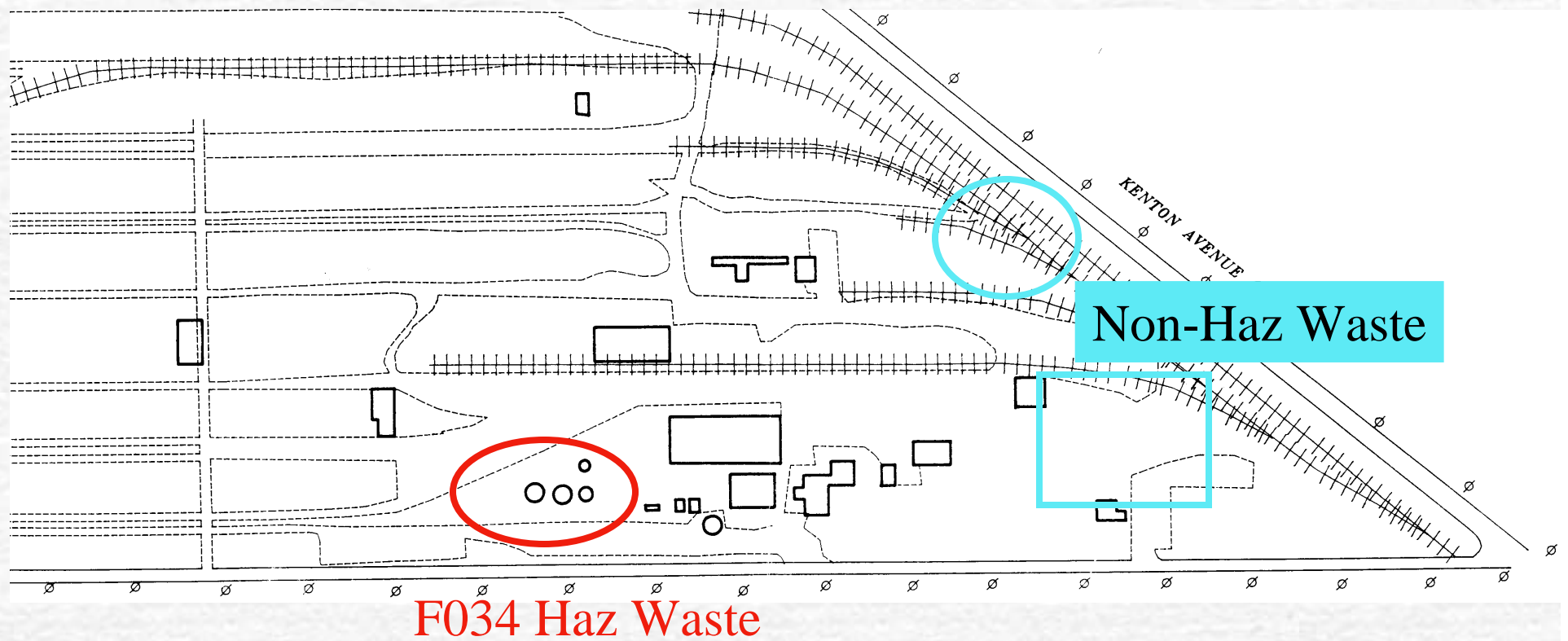
## Assessment – 1998 / 1999

- Sewer determined to be link to River.
- Geophysics experiment.

## CERCLA Removal – 1999

- Land Disposal Restriction.
- Haz-Landfill of Approx. 2,500 tons.
- Test Trench lead to further contamination.
- Bioremediation feasibility and treatment.
  - Approx 3,000 additional tons.
  - Disposed as non-haz waste.

# Baker Wood Creosoting



# Little Scioto River Assessment

- Vibro-coring of N.R. Ditch and L.S. River
  - Every 1,000 feet in Little Scioto
  - Three Point Approach
- Results
  - ½ mile of North Rockswale Ditch
  - 3 ½ miles of the Little Scioto River
  - 1 – 3 feet of sediment
  - 40,000 cubic yards

# LSR Funding Approach

- ☞ Oil Pollution Act vs. CERCLA.
  - Listed hazardous substance – as a process waste.
  - Listed hazardous waste – process.
  - Behaving like an oil – continuous sheen release.
- ☞ 1996 USCG decision document.
  - Coal-Tar Creosote listed as an oil.
- ☞ RCRA review.
  - Not a hazardous waste based on historical unknowns.
- ☞ Removal Project Plan: Approved for \$9M
  - May 2002

# 2002 Coordination Team

- ☞ Envisioning the 21<sup>st</sup> Century
- ☞ Ohio EPA
- ☞ Marion CanDo!
- ☞ City of Marion
  - Chamber of Commerce, Engineer, Mayor
- ☞ Marion County
  - Commissioners Office, Engineer
- ☞ U.S. EPA
- ☞ Metcalf and Eddy, Inc.
- ☞ Ohio DNR
- ☞ Senator Mumper



# Support

- ☞ Union Tank Car, Inc.
- ☞ Ohio-American Water Company
- ☞ Marion WWTP
- ☞ Marion County Park District
  - Prairie Parks and Nature Preserves
- ☞ DKMM Solid Waste District
- ☞ Mr. Richard Schaeffer
- ☞ Mr. Tom Kennedy





# U.S. EPA Removal – Phase 1

- ☛ Funding authorized in May 2002.
- ☛ Mobilization: 6/10/02.
- ☛ North Rockswale Ditch:
  - July 8 – August 22.
  - Approx. 7,500 cy removed.
  - Approximate removal cost: \$760,000\*.

\*Not including disposal.



# Install Sheet Piling



# Initial Observation in N.R. Ditch



# First Cell in N.R. Ditch



# Ditch after Excavation



# Backfill and Restoration



# Completed Riverbed



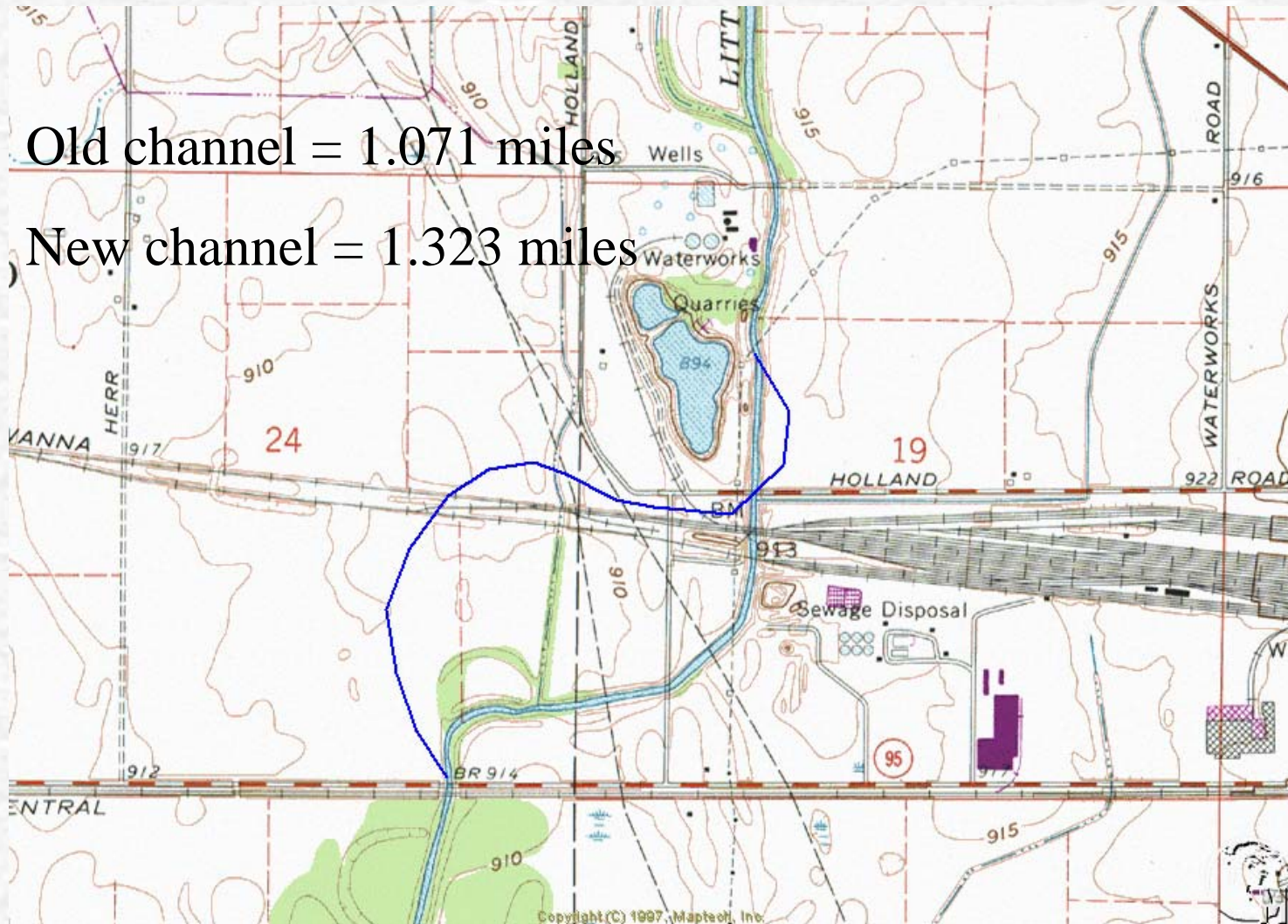
# River Re-Route Initiative: Ohio DNR, Ohio EPA



# River Re-Route Initiative

Old channel = 1.071 miles

New channel = 1.323 miles



## Removal – Phase 2

- ☞ Continue Clean-up in Little Scioto River.
  - 400' de-watered cells.
  - Excavation of contaminated sediment.
  - October – November, 2002.
    - Approx. 3,000 feet completed.
- ☞ Contingency planning.
- ☞ Engineered capping.
- ☞ Riverbed and riverbank restoration.
- ☞ Disposal.



# Install Sheet Piling



# Pump Around Cell



# De-Water Cell



# Stabilize and Remove Sediment



# Excavation Bottom



# Place Clay to Cap River Bottom

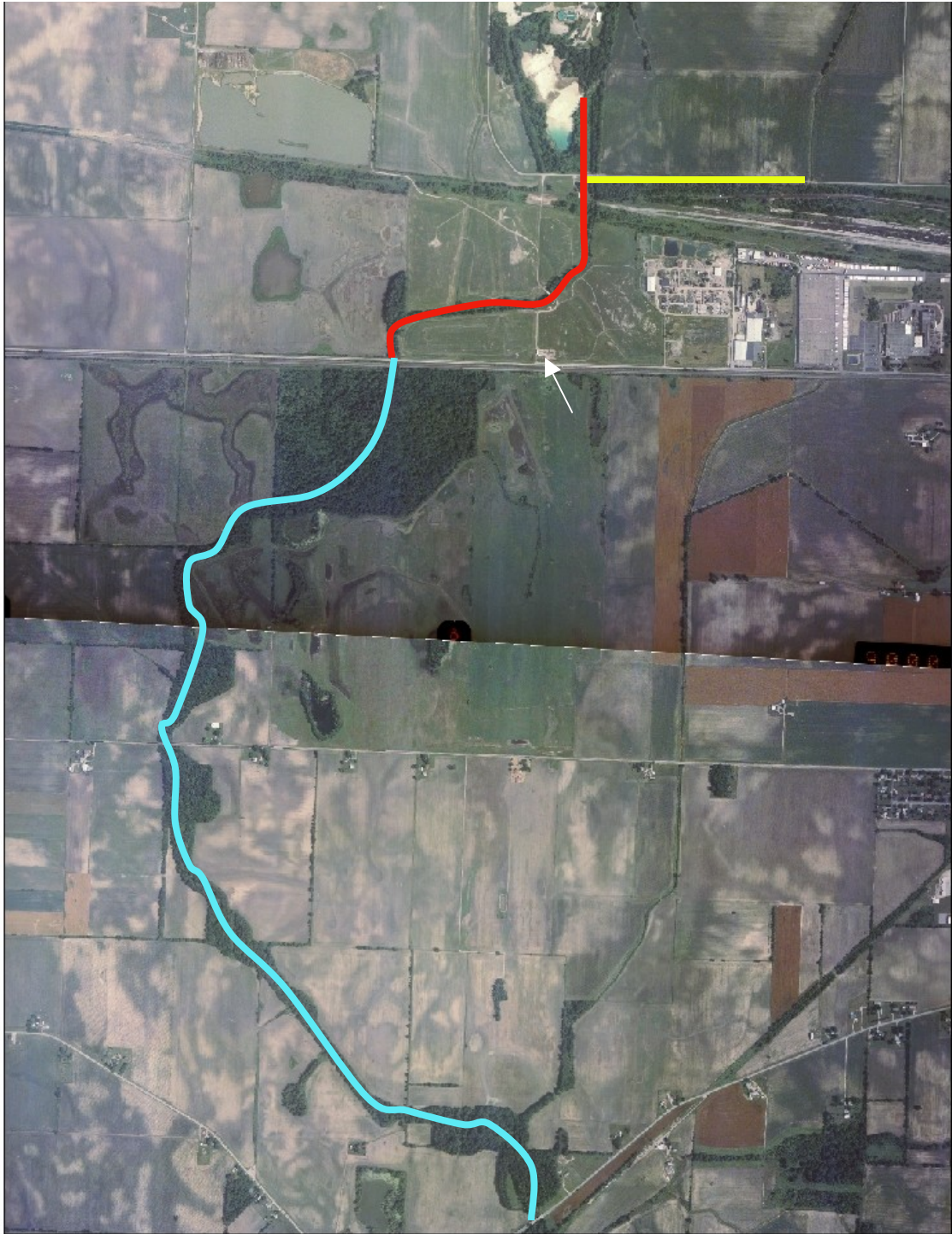


# Compact Clay River Bottom



# Completed River Bed







THEN.....

Things took a turn for the worse...

# Letting the Red Tape In

- ISSUE 1: Solid Waste Disposal Fees
- ISSUE 2: Weather Complications
- ISSUE 3: Non-Guaranteed Funds
- ISSUE 4: Pulling the Plug
- ISSUE 5: Disposal
- ISSUE 6: Interagency Coordination

# Issue 1:

## Solid Waste Disposal Fees

- ☞ Initial contacts made in July, '02.
  - DKMM Solid Waste District.
- ☞ September: Ohio EPA – DKMM – Ohio EPA.
- ☞ Extent of total waiver: \$1 Million
- ☞ October: U.S. EPA requests waiver from Ohio EPA.
- ☞ November: At the 11<sup>th</sup> hour, Ohio EPA denies waiver of local fees.
- ☞ U.S. EPA asks for local waiver of fees.
  - Denied - January 2003

## Issue 2: Weather Complications

- ☞ Rainy October / November.
- ☞ River level up.
  - Production slows down.
  - Unit costs increase.

## Issue 3:

# No Guaranteed Funding

### Oil Pollution Act Funding.

- \$50 million annual budget, nationally.
- \$25 million allocated to inland response.
  - EPA.
  - Divided among 10 EPA Regions.
  - \$3.8 million given to EPA Region V.
  - Under \$3.0 million available clean-up funds.
- \$3 million spent at LSR for FY03.
- EPA headquarters support

# Issue 4:

## Pulling the Plug

- ☛ SWD issue raises awareness at USCG.
  - Region V ORC / USCG council.
  - Similar coal-tar case being evaluated in Vermont by NPFC.
- ☛ November 27, 2002, USCG orders U.S. EPA to cease contractual expenditures.
  - Cite Baker Wood tie to LSR contamination.
  - U.S. EPA HQ requested to intervene.

# Issue 5: Disposal

- ☞ USCG refuses to pay local SWD fees.
  - Taxes vs. fees ?
- ☞ Local SWDs refuse to waive fees.
  - Offer compromise based on community pressure.
- ☞ 12/02: \$50,000 available for site maintenance.
- ☞ Late March, '03: USCG reverses opinion.
  - Compromise negotiated.
- ☞ Disposal completed in July, '03: 42,000 tons

# Issue 6:

## Interagency Coordination

- USCG Position
- U.S. EPA Response.
  - Headquarters.
  - Office of General Council.
- Department of Justice and NPFC.
- One year later: no progress made to date.

# The Future for the Little Scioto River Clean-up

- ☞ Resolve OPA issue between U.S. EPA and the U.S. Coast Guard.
  - Won't happen short term.
- ☞ If resolved, funds are not guaranteed.
- ☞ If not resolved, seek removal funding under CERCLA.
  - Limited funding.
- ☞ Revised cost estimate to complete:
  - Based on disposal tonnage: \$20M.



# Little Scioto Web Page

[www.epa.gov/region5/sites/bakerwood/lsrc](http://www.epa.gov/region5/sites/bakerwood/lsrc)