Understanding the City of Paducah **Flood Protection Project Commonly Referred To As** "The Floodwall"

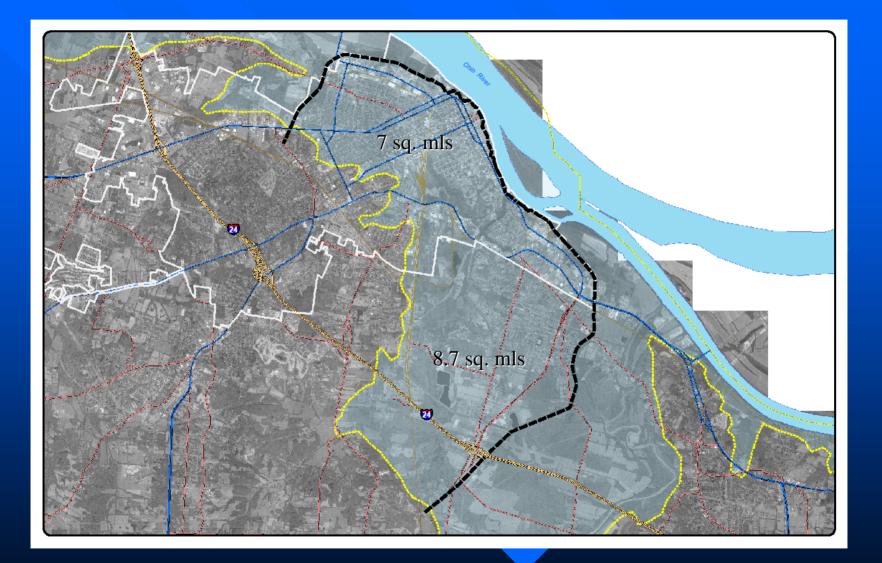


- Authority Flood Control Act of 22 January 1936
- Authorization Flood Control Act Approved 28 August 1937
- Assurance of Local Cooperation Adopted 2 May 1938
- Construction Period August 1939 Through July 1949

9.25 Miles – 48,700 Feet Earthen Levee

3.00 Miles – 15,870 Feet Concrete Wall





City of Paducah Became Local Interest and Local Project Sponsor July 1949 and Remains that Sponsor to Date.

• Simply Stated Paducah Assumed All Operation and Maintenance Expenses Effective July 1949.

• Past and present budgets have been:

FLOOD CONTROL PROJECT COSTS FROM 1994 - 2008

| FWPP #1 - Purchase of Electrical Equipment | Mar-94 | \$12,315.00 | | |
|--|--------|--------------|-------------------|--------------------|
| | | | 1994 | \$12,315.00 |
| FWPP#2 Engineering Design - Mechanical and Electrical Upgrades | Jun-95 | \$21,901.20 | | |
| FWPP#2 Purchase of Medium Voltage Starter Group | Oct-95 | \$49,925.00 | | |
| FWPP#2 Purchase of Variable Frequency Drive | Oct-95 | \$14,336.75 | | |
| FWPP#2 Purchase of Vertical Turbine Pump | Oct-95 | \$23,055.00 | | |
| • | | • • • | 1995 | \$109,217.95 |
| FWPP#2 Installation of a Stormwater Pump | Jul-96 | \$113,496.00 | | |
| | | | 1996 | \$113,496.00 |
| Engineering Design - Mechanical and Electrical Upgrades | Aug-97 | \$73,545.50 | | |
| FWPP#2 30" Force Main Repair | Oct-97 | \$14,548.00 | | |
| | | | 1997 | \$88,093.50 |
| FWPP#11 Purchase of a Lubrication System | Feb-98 | \$13,871.00 | | |
| FWPP#11 Purchase of a Vertical Turbine Pump | Feb-98 | \$80,088.00 | | |
| FWPP#11 Purchase of a Vibration Detection Systgem | Feb-98 | \$3,043.00 | | |
| FWPP#11 Purchase of a Programmable Logic Control System | Feb-98 | \$5,603.47 | | |
| FWPP#11 Purchase of a Motor Control Center | Feb-98 | \$22,761.40 | | |
| FWPP#11 Stormwater Pump Installation | Aug-98 | \$121,191.00 | | |
| | | | 19 9 8 | \$246,557.87 |
| FWPP#11 Main Beaker Replacement | Dec-99 | \$13,880.00 | | |
| | | | 1999 | \$13,880.00 |
| FWPP#5 & #6 Pump Upgrades | Jul-01 | \$192,509.00 | | |
| FWPP#5 & #6 Pump Upgrades | Aug-01 | \$2,494.56 | | |
| | | | 2001 | \$195,003.56 |
| FW 66" Corrugated Metal Pipe Emergency Repair | Mar-04 | \$68,146.90 | | |
| FWPP#2 30" Pipe Repair | Sep-04 | \$17,960.00 | | |
| FWPP#2 Pump Repair | Dec-04 | \$16,500.00 | | |
| | | | 2004 | \$102,606.90 |
| FWPP#4 Repair Electrical System Upgrade | Jun-06 | \$8,030.00 | | |
| FW Embankment work near Clarkline | Jul-06 | \$5,211.98 | | |
| | | | 2006 | <u>\$13,241.98</u> |
| TOTAL COSTS 1994 - 2008 | | | | \$894,412.76 |
| | | | | |















1944 (Midway - Floodwall Construction Project) to 2000 (Midway - Capital Investments)

The Project Has Been Exposed to the Elements for 56 Years

NOTE: DESIGN LIFE OF THE FLOODWALL IS 50 YEARS

1995 – USACE Louisville District Annual Inspection Report



First notification to City of Paducah regarding condition of Corrugated Metal Pipes (CMPs) and Drainage Structures. March 1, 1997 – A single rainfall event occurs in the Ohio Valley stretching from the Mississippi River to Pittsburgh, PA. The State of Kentucky including Paducah-McCracken County experiences its worst flooding since 1950. This rainfall event caused the 1997 flood.

By comparison:

- Flood of 1950 the river gage read 53.3 feet
- Flood of 1997 the river gage read 51.8 feet







March 1998 - Congressman Whitfield requested \$100,000 for USACE to conduct a Shoreline Study for the Paducah Flood Protection Project.



May 2000 - USACE completes Shoreline Study identifying ALL Floodwall elements in need of attention. They are as follows:

Restoration of Corrugated Metal Pipes
Replacement of Existing Motor Control Systems
Rebuild/Replace Existing Pump Motors
Rebuild/Replace Existing Pumps
Verify Structural Integrity of Levee and Floodwall

Total construction cost estimated in 2000 construction \$'s was \$5.2 Million.

2001 – Energy and Water Development Appropriations Bill contained (H.R. 4733, Report No. 106-963) that included \$400,000 to initiate PED Preconstruction Engineering & Design for our project.

USACE Headquarters Council indicated the language of the bill could not authorize the USACE to initiate the work without Congress changing the language contained in the Bill. Therefore, we engaged our Federal elected officials to assist us with correcting the language that would be more appropriate for the USACE to complete the Preconstruction, Engineering, and Design for our project.

Notably at this time USACE Headquarters Washington, D.C. Corporate Council entered into dialog regarding whether or not there was a Federal interest in the levee as they had given it to the Local Sponsor, City of Paducah, in 1949. May 12, 2005 - Paducah's Floodwall is given a <u>Minimally</u> <u>Acceptable Rating</u> by USACE Louisville District Operations.

August 29, 2005 – Hurricane Katrina Hits the Gulf Coast

Notable Events - "Post Katrina"

May 16, 2006 – Paducah's Floodwall is given a <u>Minimally</u> <u>Acceptable Rating</u> with a condition, "<u>Repair Your Drainage</u> <u>Structures Within 12 Months or be Removed from Benefits</u> <u>Provided Under Public Law 84-99"</u>.

Obviously, we were unable to meet this schedule.

Notable Events - "Post Katrina" (Cont.)

December 8, 2006 – Representatives from FEMA informed Paducah the Flood Insurance Rate Map (FIRM) are in need of updating.

In order for FEMA to recognize the Floodwall as a viable Flood Protection Project, it must receive an acceptable rating from USACE.

FEMA also has established Minimum Levee Guidelines for it to recognize them as viable "Flood Protection Projects."

FEMA intends to publish Preliminary FIRMs September of 2009. Paducah will have 2 years following that date to meet FEMA guidelines and requirements. September 24, 2007 – Paducah receives its Annual Inspection Report from USACE Louisville District rating the Paducah Flood Protection Project as "<u>Unacceptable</u>" and is no longer eligible for benefits under Public Law 84-99.

November 2007

Public Law 110-114 Water Resources Development Act (WRDA) was passed identifying Paducah, Kentucky's Project under Section 5077.

Wording of this section allows the Secretary of the Army to authorize a Feasibility Study for our project.

- Feasibility Studies conducted by USACE normally take 18-24 months once they have been initiated.
- Feasibility Studies are cost shared between the Federal Government and the Local Sponsor 50/50.
- \triangleright A study for a project such as ours could be as much as \$600,000.
- Feasibility studies require the execution of an agreement between the Federal Government and Local Sponsor.
- Completion of a Feasibility Study and the execution of a Partnership Agreement is required before a Local Sponsor "qualifies" for credit of the Local Sponsor's expenses.

February 2008 – August 2008

• The Paducah Board of Commissioners authorized the City of Paducah Engineering Department and Florence & Hutcheson to engage USACE Louisville District regarding the repair of CMPs.

Accomplishments

- USACE, Florence & Hutcheson, and your Engineering Staff have completed the following:
 - 1. Plans and Specifications to repair the CMPs having USACE approvals.
 - Received and opened bids for the project September 29, 2008.
 - *3. <u>We are prepared to award the project.</u> However, we are in a tentative position to award the project at this time.*

October 2008

We have our project ready to execute. However, if we do so we will forfeit our opportunity for receiving <u>ANY</u> Federal credit (In-Kind or Monetary) for our efforts. We will also forfeit credit opportunities <u>IF</u> we spend money in advance of these studies and/or without the execution of any required agreements.

FEMA's required schedule to upgrade the FIRMs has also created more complications for the City of Paducah to overcome as it attempts to satisfy all Federal requirements and schedules.

<u>Hence, "The Paducah Dilemma".</u>

September 10-11, 2008 Washington, D. C

- Met with Cory Hicks, Rep. Ed Whitfield's staff
- Mr. Hicks arranged meetings with Senator McConnell's staff and ASACW's (Assistant Secretary to Army Civil Works) staff.
- •Subsequent to those meetings USACE Division & District personnel were instructed to prepare documentation for ASACW's Office to <u>"Entertain/Consider</u>" a MOU for Paducah to receive Federal Credits for expenses it will incur should it proceed with its drainage structure repairs in advance of the necessary studies and/or agreements.
- •USACE Louisville District Colonel Landry has submitted significant documentation to USACE Division Commander General Peabody in response to ASACW's request.

• General Peabody of the Cincinnati Division is intimately aware of *"The Paducah Dilemma"* as we took advantage of an opportunity to discuss our situation with Colonel Landry and General Peabody on September 23, 2008.

• It is my anticipation General Peabody will support the Louisville District's Supporting Documentation with his own supporting comments and forward them to the ASACW's office for their ultimate decision.

What Should We Expect Immediately?

- Pending the ASACW's "*entertaining/considering*" an MOU for Paducah to receive credit for its work, we are delaying awarding our pending drainage structure project.
- In the event we do not hear something soon from the ASACW's we will have no other alternative than to award the project without an MOU allowing us to receive any credit associated with repairing the drainage structures.
- In the event we receive positive feedback from the ASACW's allowing an MOU affording Paducah to receive credit, it will be necessary to execute the MOU as soon as possible so as to initiate our drainage structure repair project.

Also as a result of making the drainage structure repairs I anticipate the City of Paducah's Flood Protection Project will be reinstated into the program and once again become eligible for benefits afforded to us under Public Law 84-99. This *assumption* is based on the fact that Paducah continues to further satisfy guidelines established by FEMA for Levee Certifications.