

West Sacramento Levee Improvements Program Purpose & the Southport Sacramento River Early Implementation Project

In 2007 the West Sacramento Area Flood Control Agency (WSAFCA) initiated the West Sacramento Levee Improvements Program (WSLIP) to reduce the risk of a catastrophic flood event in West Sacramento. The City of West Sacramento, as part of WSAFCA, and in collaboration with the California Department of Water Resources, embarked on a comprehensive evaluation of the levees protecting West Sacramento to determine deficiencies and develop treatment measures. As the agency with authority over alterations to Federal levees, the U.S. Army Corps of Engineers (USACE) will act as the lead agency as it relates to the Federal environmental review process. Based on findings of the levee evaluation, the objectives of the WSLIP are to:

- achieve a minimum of “200-year” level of flood protection for the City of West Sacramento in line with Federal and state flood protection criteria;
- construct levee improvements as soon as possible to reduce flood risk;
- construct levee improvements that are politically, socially, and environmentally acceptable; and
- provide recreational and open space elements for the city that are compatible with flood improvement measures.

Since 2007, three Early Implementation Projects (EIP) have been initiated within the WSLIP boundary. An EIP is a project that is implemented in advance of the overall WSLIP construction in order to address critical areas where the levee’s deficiency is well-defined and where appropriate measures to treat the levee are known. The three EIP sites initiated to-date are the I Street Bridge site (construction completed in 2008), the Rivers site (under construction) and the CHP Academy site (under construction).

Now, WSAFCA is proposing a fourth EIP called the Southport Sacramento River EIP. Implementation of measures at this site will improve the levee that runs along the west bank of the Sacramento River (referred to as the Sacramento River South Levee) to enhance flood protection for the community of Southport. The EIP would improve approximately 6.4 miles of levee and would bring the levee up to Federal and state flood protection standards.

West Sacramento Area Flood Control Agency (WSAFCA) is a Joint Powers Authority created in 1994 to coordinate planning and construction of flood protection facilities within its boundaries and to finance the local share of flood control projects. Member agencies of WSAFCA are the City of West Sacramento, Reclamation District 900, and Reclamation District 537.

The U.S. Army Corps of Engineers (USACE) provides engineering services to the nation by planning, designing, building and operating water resources projects, including flood control projects on the Sacramento River. USACE is charged with oversight of alterations to Federal levees.



West Sacramento Area Levee Projects

During the past 10 years, several key flood protection projects have been initiated or constructed by various government agencies or agency partnerships in the city of West Sacramento. Below is a list of projects that have been proposed, are in the planning stage, are under construction, or that have been constructed.

- **I Street Bridge Site.** Construction of this EIP was completed in November 2008. The project consisted of a 475 foot-long slurry wall that is approximately 37 feet in depth. The slurry wall will protect from seepage, tree removals, and the reshaping of the levee. The project also involved removing vegetation according to the USACE standards, and relocating a major communications utility. The City's Riverwalk extension project commenced soon after construction was completed.

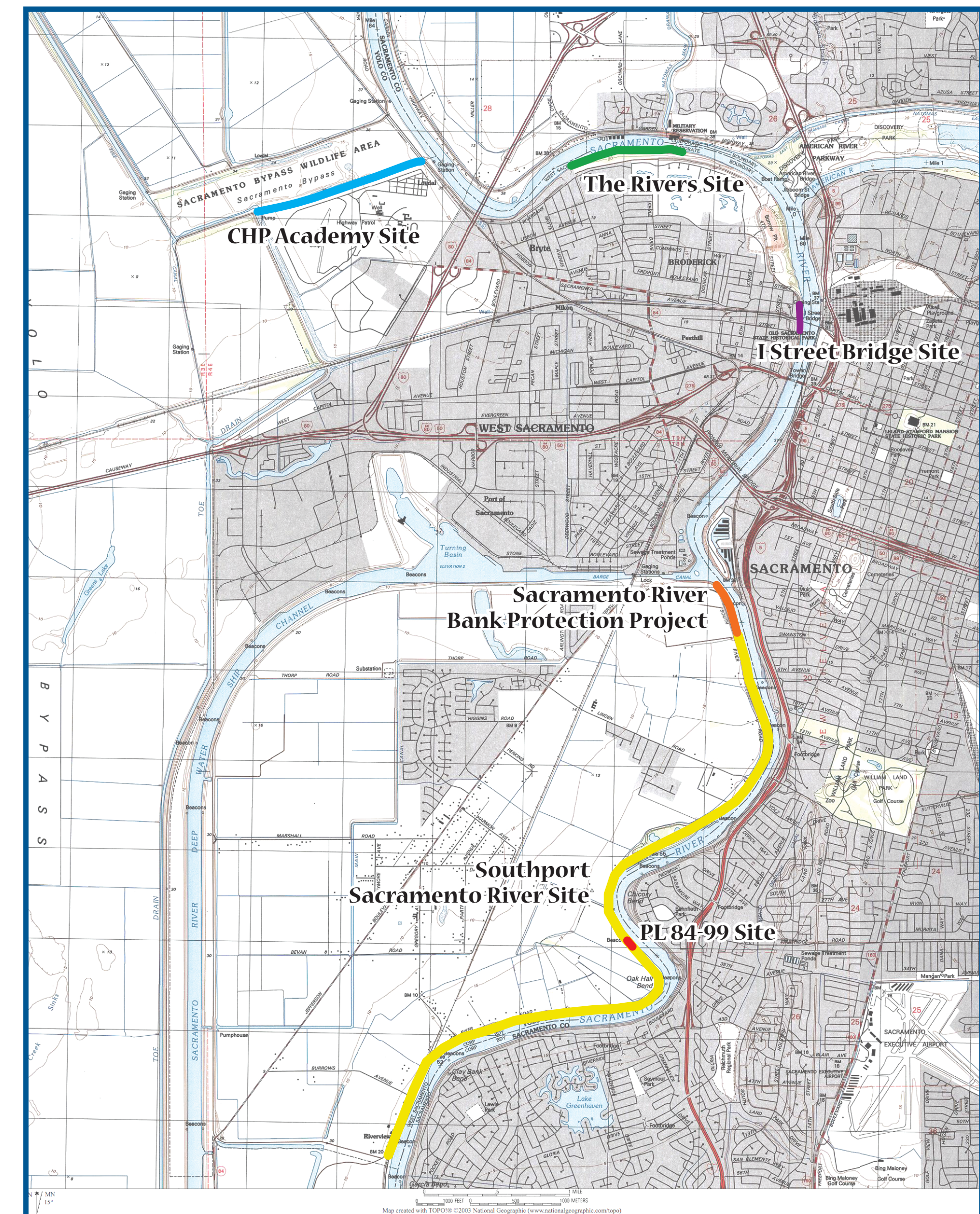
- **CHP Academy Site.** Environmental approval for construction of this project was gained in mid-2011. This site is approximately 6,500 feet in length and is the levee that runs along the Sacramento Bypass. Deficiencies at this site concern through-seepage and levee geometry, along with areas of under-seepage and instability.

- **The Rivers Site.** Environmental approval for construction of this project was gained in mid-2011. The Rivers EIP area is approximately 3,000 feet long and is located on the Sacramento River North Levee, just north of the confluence of the Sacramento and American rivers. Levee deficiencies at this site relate to geometry, stability, and under-seepage.

- **Sacramento River Bank Protection Project.** Construction began in December 2010 on a setback levee project along the west bank of the Sacramento River in the Southport area, just south of the Stone Locks. This is a separate effort led not by WSAFCA, but by the USACE under the Sacramento River Bank Protection Project. The project is scheduled for completion in 2012.

- **Southport Sacramento River Site.** This proposed site would be implemented to reduce the risk of flooding to the Southport community. Measures would be implemented along 6.4 miles of the levee along the west bank of the Sacramento River. This would bring the levee up to current Federal and state standards.

- **Public Law 84-99.** USACE constructed a seepage berm at Davis Road in 2007 under PL 84-99. PL 84-99 establishes a fund for emergency response preparations for natural disasters. The seepage berm was constructed to fight boils caused by under-seepage.



How Did We Get Here?

Over the past decades, there have been several flood protection evaluations and improvements in the City of West Sacramento.

- 1986-1987:** Significant rainfall event occurs in Sacramento region; USACE recommends significant improvements for West Sacramento flood protection.
- 1987-1990:** City obtains Federal funding and authorization for two levee improvements.
- 1990-1993:** Sacramento Urban Levee Reconstruction Project completes building of stability berm along the Sacramento River in Southport. Costs were \$9 million; local share was \$800,000.
- 1994:** WSAFCA is created to coordinate, fund and construct major flood protection improvements.
- 1997:** Significant rainfall event occurs in Sacramento region and levees sustain damage.
- 1999-2002:** USACE's West Sacramento Project strengthened five miles of levees adjacent to the Sacramento and Yolo bypasses. Costs were approximately \$32.1 million; local share was \$3.6 million.
- 2005:** USACE issues new levee design standards.
- 2006:** State performs critical erosion repairs on three sites in West Sacramento.
- 2006:** WSAFCA, in collaboration with California Department of Water Resources, embark on comprehensive evaluation of levees.
- 2007:** WSAFCA proposes the WSLIP. This is a comprehensive program to bring the city's levees up to standard.
- 2007:** USACE constructs a seepage berm at Davis Road and South River Road under Public Law 84-99.
- 2008:** The I Street Bridge EIP is constructed under WSLIP after USACE approved Section 408 permission requested by WSAFCA. The Rivers and CHP Academy EIPs are proposed.
- 2009/2010:** Joint USACE & WSAFCA environmental public scoping meeting is held for the WSLIP, including The Rivers and CHP Academy EIPs. The WSLIP draft EIS/EIR is released.
- Winter 2010:** USACE begins construction on a setback levee project along the west bank of the Sacramento River south of the Stone Locks as part of the Sacramento River Bank Protection Project. Anticipated completion is fall 2012.
- Summer 2010:** WSAFCA and USACE begin planning the Southport Sacramento EIP.
- Mid-2011:** The Rivers and CHP Academy EIPs complete environmental review and are approved for construction. Construction on the two sites begins. The environmental review process starts for Southport Sacramento River EIP in August.

An "Inside Look" at a Levee

