Santa Ana River Watershed 2014
Building Capacity & Resiliency by Working Together

Colonel Kim Colloton
Los Angeles District Commander
14 October 2014
Civil Works Value to the Nation

- Over $6 in flood damages prevented for every $1 spent on Flood Risk Management
  - Stewardship of 11.7 million acres of public lands
  - 12,700 miles of Levees and 400 miles of shoreline protection
    - 694 Dams and 926 Harbors
  - 13,000 miles of Commercial Inland Waterways
  - Environmental Restoration and Emergency Responses
    - Generate $18 B + 500 K jobs
    - 3% of Nation’s Electricity: $1.5 B plus in sales

  - 50% cost of Rail and 10% cost of Trucks

U.S. Ports and Waterways convey >2B Tons of Commerce

Foreign Trade creates >$160 B in Tax Revenues
National Water Resource Challenges

**USACE Mission:** Deliver vital engineering solutions, in collaboration with our partners, to secure our Nation, energize our economy, and reduce risk from disaster.
Design Flood:
1941 Inflow = 193,000 cfs
1941 7 day vol. = 275,200 ac-ft
1988 Inflow = 254,000 cfs
1988 4 day vol. = 415,800 ac-ft
Reach 9 Features

Reach 9 Phase 5A  Sheet pile
Estimated Start Dec 2016
Est Completion Nov 2017

Reach 9 Phase 5B  Soil Cement
Estimated Start Dec 2016
Est Completion Nov 2018

Reach 9 Phase 3 Soil Cement
Award Sep 2013
Est Completion Nov 2014

Reach 9 Phase 4
Scheduled Start Sep 2015
Est Completion Nov 2016

Reach 9 BNSF bridge piers
Estimated Start Sep 2015
Est Completion Oct 2017

Reach 9 Phase 2A
Award Sep 2011
Est Completion Dec 2014

Reach 9 Phase 2B
Award Sep 2009
Completion Jun 2014

Reach 9 BNSF bridge
The Prado Spillway will be raised 20’ to 563’ MSL. As a result, the sponsor must acquire an additional 2,300 acres (shown in green). Seven dikes are also being constructed to protect existing property around the Prado Basin.
Spillway Graffiti-Mural
Prado Basin, CA Study

Local Sponsor: Orange County Water District

A Dual Purpose Feasibility Study Investigating:

- Ecosystem Restoration
- Water Conservation
What Is Watershed Based Budgeting?

- Watershed Project’s TOTAL VALUE => Sum of Individual Projects
- ID projects with highest VALUE TO THE NATION
- Achievable goal due to performance SYNERGIES of STRATEGIC investments at watershed scale

INTEGRATED PROJECTS = Optimum Watershed Function

SEPARATE PROJECTS = Reduced Watershed Function
Inter-Dependencies Between Corps & Non-Corps Projects
Resilience Efforts

- **Sustainable Solutions**
  - O&M Budgets Decreasing = More Public – Private Partnering

- **Drought** – what are we doing to collaborate & minimize drought’s impact?
  - How we’re responding to the drought & communication

- **Watershed-informed Budgeting**
  - Leveraging resources

- **Prado Study**
  - Multi-purpose; Ecosystem Restoration/Water Conservation
  - Increased water supply = improved resilience
Building Strong – Together!