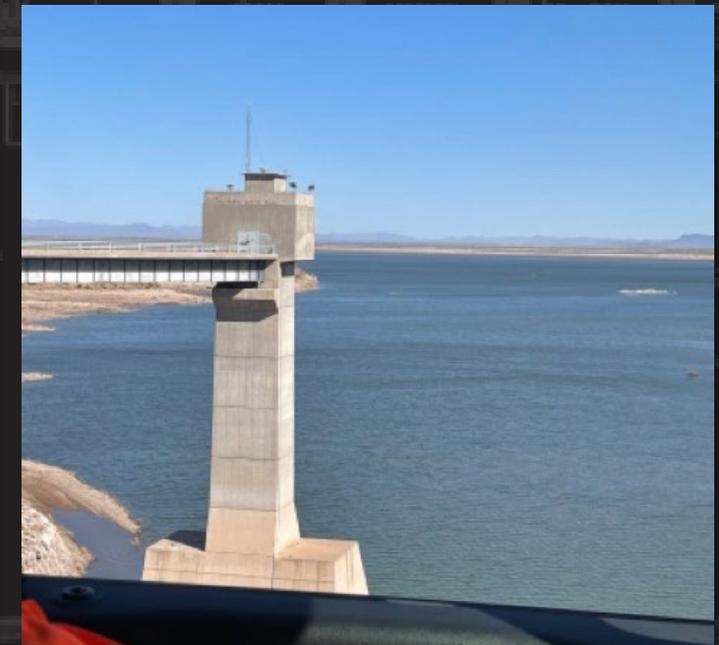


# USACE LOS ANGELES DISTRICT POST STORM / INLAND SEDIMENT ISSUES

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26 OCT 2023



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# WHAT DOES SPL'S OPERATIONS DIVISION DO?



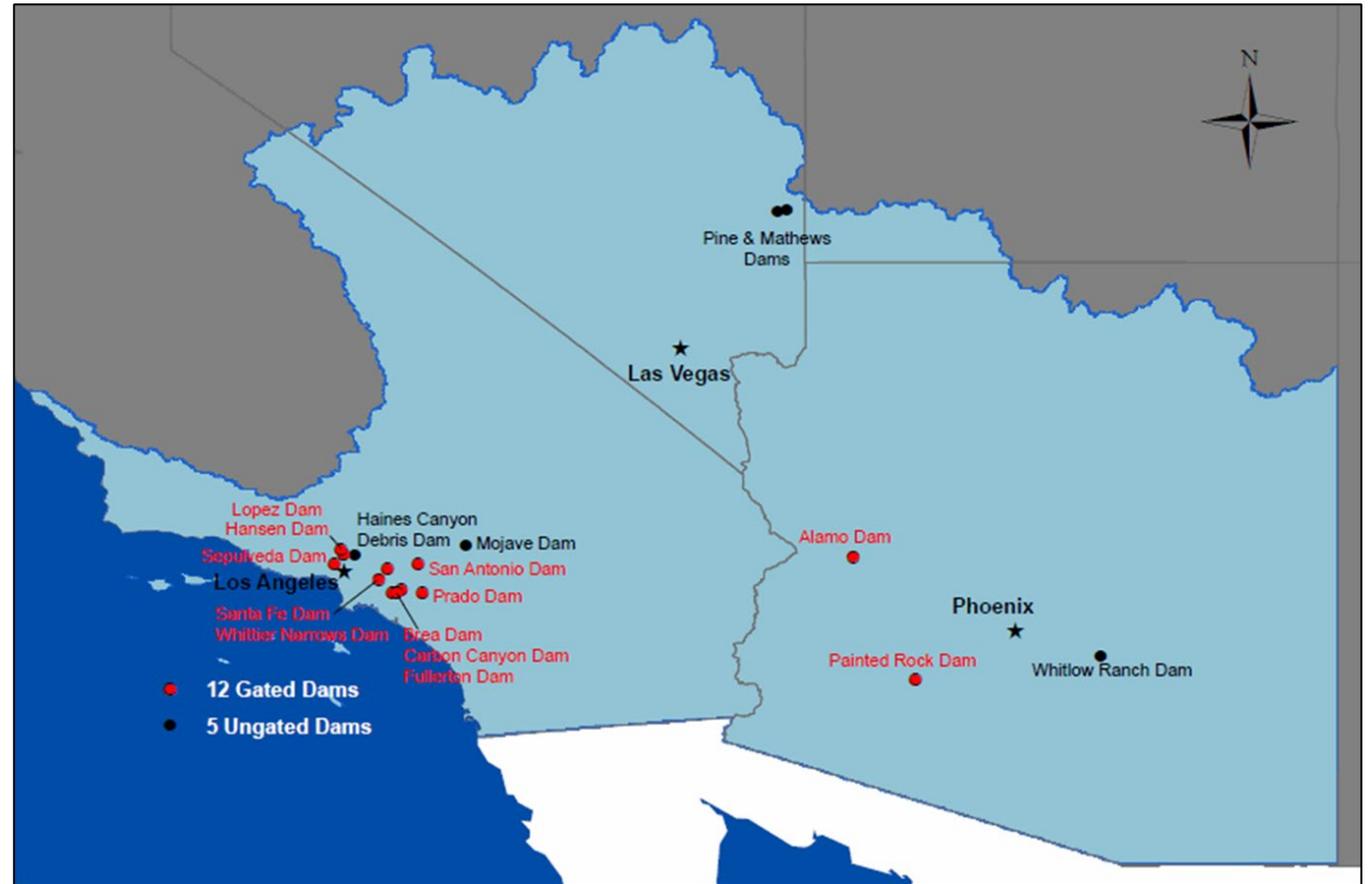
The Los Angeles District (SPL)  
Operates and Maintains 16-Dams, 61-  
Miles of Channels & Levees and 1-  
debris basin

## Southern California

- 11 Dams
- 1 Debris Basins
- 61 Miles of Channels and Levees

Arizona - 3 Dams

Nevada - 2 Dams





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# 2023 STORM CHALLENGES

- Heavy Rains Marked by Multiple Successive Events
- In SPL, Projects “Activated,” including Channel Watch Teams to Monitor Storms
- SPL Projects Performed as Expected and Protected Life and Property Across our AOR
- However, Normally Dry Basins Held More Water and for Longer Periods than We’ve Seen in a Generation or more
- SPL Requested and Received Emergency Funds to Remove Excess Sediment Deposits and Fix Channel Wall Collapse





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# WHAT IS THE STORAGE CAPACITY OF OUR DAMS?



- 2023 Storms Contributed to Ongoing Conversation Regarding Sediment Management within SPL Basins
- In Sum Sediment in Our Dams are within Expected Lifetime Allowance, but Specific Dams Need More Immediate Attention – Prado, Painted Rock, and Alamo

| Facilities          | Original Storage Capacity (ac-ft) | Sediment Allowance (50-yr) | Sediment That Needs to be Removed (ac-ft) |
|---------------------|-----------------------------------|----------------------------|---|
| Sepulveda Dam       | 16,720                            | 0                          | (1,400)                                   |
| Lopez               | 322                               | 322                        | 154                                       |
| Hansen Dam          | 35,800                            | 3,300                      | 3,900                                     |
| Haines Debris Basin | 0                                 | 0                          | (50)                                      |
| Santa Fe Dam        | 34,280                            | 1,500                      | 2,880                                     |
| Whitter Narrows     | 36,160                            | 0                          | (1,331)                                   |
| Brea Dam            | 4,100                             | 1,200                      | 210                                       |
| Fullerton Dam       | 743                               | 230                        | (21)                                      |
| San Antonio Dam     | 9,284                             | 2,000                      | (599)                                     |
| Carbon Canyon       | 6,615                             | 1,500                      | 345                                       |
| Prado Dam           | 222,840                           | 12,000                     | 50,080                                    |
| Mojave River Dam    | 89,669                            | 11,000                     | 1,297                                     |
| Painted Rock        | 2,491,700                         | 200,000                    | 156,896                                   |
| Alamo Dam           | 1,045,300                         | 200,000                    | 52,450                                    |
| Whitlow Ranch Dam   | 35,890                            | 7,000                      | 1,735                                     |
| Mathews Canyon Dam  | 6,000                             | 1,000                      | 6,000                                     |
| Pine Canon Dam      | 7,747                             | 1,400                      | 7,747                                     |
| Total (ac-ft)       | 4,043,170                         | 442,452                    | 280,293                                   |





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# ROUTINE SEDIMENT REMOVAL



- Limited Sediment Removal is Part of Regular O&M Activities in SPL
- Performed Seasonally as Needed in Advance of Rainy Season
- Focus is on Inlet/Out Cleaning of Sediment and the Removal of Debris that Could Inhibit Flood Operations



Carbon Canyon Dam



Lopez Dam



Mojave Dam



Santa Fe Dam



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# WE DO NON-ROUTINE SEDIMENT REMOVAL BUT THERE ARE ISSUES



- Updating Data / Determining Disposal Needs
- Identifying Disposal Location(s)
- Disposal Cost
- Seeking Funding
- Level of Effort: Determining Internal or External Work Effort





# EXAMPLES OF NON-ROUTINE SEDIMENT REMOVAL



| PROJECT           | YEAR | REMOVAL AMOUNT        | ISSUES                                      |
|-------------------|------|-----------------------|---|
| LOS ANGELES RIVER | 2018 | 48,000 Cubic Yards    | Contracted for Removal                      |
| SANTA FE DAM      | 2021 | 2,000,000 Cubic Yards | Issued License to Company for Removal       |
| LOPEZ DAM         | 2023 | 40,000 Cubic Yards    | Issued License to Company for Removal       |
| LOS ANGELES RIVER | 2024 | 100,400 Cubic Yards   | Will Restore Channel to As-Built Conditions |



# SPL DISPOSAL OPTIONS

## INTERNAL OR EXTERNAL



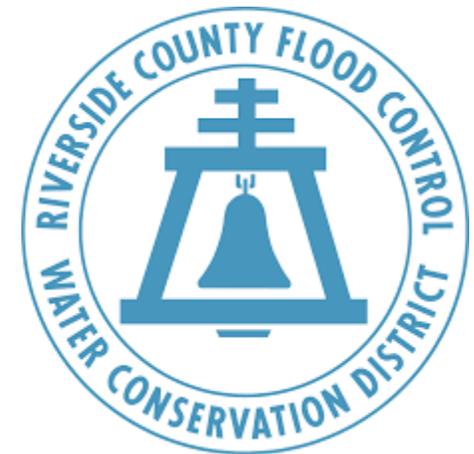
**INTERNAL** - CORPS O&M TEAM DOES THE WORK. MUST TEST, SORT, & DISPOSE OURSELVES. STAFF INTENSIVE EFFORT DEPENDING ON SIZE

**LICENSEE** – REAL ESTATE AGREEMENT. COMPANY SELLS SEDIMENT OVER LIFE OF AGREEMENT. MUST TEST AND SORT. NO COST TO THE GOVERNMENT. DEPENDS ON USEFULNESS OF SEDIMENT AND MARKET NEED

OR

**CONTRACT** – USE OF VARIOUS TOOLS TO OUTSOURCE WORK AT EXPENSE TO FEDERAL GOVERNMENT

- Develop Comprehensive, Forward-Leaning Plans for Sediment Removal.
- Assess How Changing Weather Patterns Will Impact Future Sediment Accumulation
- Better Understand Contractor Capabilities of Removal Methods (e.g. Efficiencies)
- Leverage Partnerships (e.g. Understand Sediment Needs of Local to Projects, Coordinate with Other Agencies with Similar Needs)
- Assess and Plan for Resource-Related Issues (e.g. NEPA, ESA, Cultural Resources)





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# QUESTIONS

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