

## Comparison of Repairs of Major Levee Breaks in Delta

### Brannan-Andrus Levee Maintenance District, Levee Break: June 21, 1972

- National Disaster declared June 27, and Breach closed July 26.
- Estimated total damages 1981 dollars: \$91 million
- US Army Corps repaired break,
- 35% of City of Isleton was inundated

### Webb Tract, RD 2026, Levee Break: Jan.18, 1980

- 850 feet wide, 60 feet deep
- US Army Corps repaired break Approximately \$12 million
- 4 month delay in breach repair
- Corps first repaired Holland Tract due to availability of equipment, materials
- Sustained extensive landside erosion damage; Corps rocked inside

### Holland Tract-RD 2025, Levee Break: Jan. 18, 1980 (about 1 hour after Webb)

- 250 feet wide, 40 feet deep
- US Army Corps repaired break Approximately \$8 million

### Lower Jones Tract-RD 2038, Levee Break Sept. 26, 1980

- 275 feet wide, 55 feet deep
- Reclamation District managed Levee Break contract, paid with warrants
- Breach repaired prior to AT & SF railroad embankment failure
- Fearing flood surge Trapper Slough was raised by US Army Corp
- Total estimated costs to RD, SJ County, EBMUD and DWR: \$5.6 million
- Corps costs estimated \$700,000

### McDonald Island- RD 2030, Levee Break August 23, 1982, Governor's Disaster August 25,1982

- 600 feet wide, 40-85 feet in depth
- Approximately \$13 million in total levee damages
- RD instigated repairs immediately, Contract with Dutra, paid with warrants
- FEMA Disaster declared on Sept. 24, 1982
- Breach 90 % complete in last week of September

### Venice Island-RD 2023, Levee Break Nov. 30, 1982, during highest tide since 1955

- 500 feet wide, 40 feet deep
- Approximately \$ 9 million in total levee damages
- DWR sent inspectors on Dec. 1, 1982, State Disaster Assistance was initiated
- Corps performed limited PL-84-99
- District signed emergency repair contract with Dutra on December 8,
- District paid for repairs using warrants
- FEMA disaster declared Feb. 22, 1983 and was backdated to Nov 1982.
- As of Dec. 30 the break repair was 90% complete

### Mildred Island, RD 2021, Levee Break Jan 27,1983, 1000 Acres Not Reclaimed

- Corps of Engineers under PL-84-99 rocked inside levee to protect adjoining islands
- FEMA approved request to help repair after approximately one month
- District let island stay flooded; chose not come up estimated \$250,000 share of costs

### Bradford Island-RD 2059, Levee Break: December 3,1983

- 600 feet wide, 40-50 feet deep
- State Disaster declared December 9, 1983, NO federal disaster declaration
- District paid repairs with warrants
- Approximately 84% of rock placed in break by Feb 29, 1984

New Hope Tract, February 20 1986

- 170 feet wide levee break, repaired at approximately \$900,000
- Finished placing rock in break on March 20, 1986
- RD paid for levee work with warrants, FEMA Disaster declared Feb 21, 1986

Tyler Island- RD 563, 1986 Levee Break, February 19 1986, Two levee breaks in same general area

- RD paid for levee work with warrants, FEMA Disaster declared Feb 21, 1986
- 2 levee breaks approximately, each about 300 feet in length; began repairs immediately
- Approximate cost to repair both breaks: \$3 million

RD 2107 and RD 2095, 1996-97 Flood

- Projects levees on San Joaquin River System
- Corps of Engineers repaired under Public Law 84-99