John Paasch, P.E., M.Eng.
Chief, Flood Operations Branch
CA DWR - Division of Flood Management
Emergency Response Structure January

DWR Executive/OES/Governor’s Office

Flood Operations Center

OES → Locals → Flood Operations Center

NOAA/NWS
USACE
USBR
Emergency Response Structure
California Flood Preparedness Week

• October 21-28, 2017
• Kickoff call on 9/13 at 9:30 am.

Floodprepareca.com
#CAFloodPrepWeek

• For more information, contact
  Maria T. Lorenzo-Lee, P.E., CFM
  CA Dept. of Water Resources
  916-574-0625 office
Speakers’ Extra Slides
MELANIE
Lessons Learned:

- Technical data misunderstood and/or discounted by others
- District and city need to be better partners on reducing flood risks
- Joint emergency action plans with cities with high risk of flooding must be improved
- The District’s EOC procedures and training, including communications, must improve
Next Steps:

- **Short Term**
  - Coyote Creek Joint Emergency Action Plan
  - Short-term flood protection options – prior to winter 2018

- **Intermediate/Long Term**
  - Develop options
  - Seek state and federal funding
SHAYAN BACK UP SLIDES
POINT PLEASANT - SOURCES OF FLOODING

Source of Flooding:
- Morrison Creek
- Snodgrass Slough

Source of Flooding:
- Cosumnes River
POINT PLEASANT – FLOOD AREA 1
RAILROAD BRIDGE

FEB 2017
NO FLOOD FIGHT
PEAK FLOW = 620 CFS
TOTAL VOLUME = 4,600 AC-FT

WITH FLOOD FIGHT
PEAK FLOW = 620 CFS
TOTAL VOLUME = 4,600 AC-FT
FEB 2017 (MORRISON CREEK)
PEAK FLOW = 2,950 CFS
TOTAL VOLUME = 18,400 AC-FT

FEB 2017 (LAMBERT ROAD)
NO FLOOD FIGHT
PEAK FLOW = 4,800 CFS
TOTAL VOLUME = 11,560 AC-FT
WITH FLOOD FIGHT
PEAK FLOW = 50 CFS TOTAL VOLUME = 23 AC-FT
POINT PLEASANT – FLOODPLAIN COMPARISON
POINT PLEASANT – FEBRUARY 2017
FLOODED STRUCTURE IMPACT ANALYSIS

No Flood Fight - February 2017

- TOTAL GARAGES = 7
- TOTAL HOUSES = 3

With Flood Fight February 2017

- TOTAL GARAGES = 5
- TOTAL HOUSES = 2

Garage Flooding
Garage and House Flooding
Example

Existing WSEL = 20.0
Proposed WSEL = 20.8
Diff. WSEL = 0.8
Proposed Projects

1. Flood Fight Lambert Road Br.
2. Weir and Levee Cut Project
PROJECT 1 – LAMBERT ROAD BRIDGE
FLOOD FIGHT AT SNODGRASS SLOUGH
• 100-Year Storm
  – No Flood Fight, No MWT Levee Improvements
  – With Flood Fight, No MWT Levee Improvements
  – No Flood Fight, With MWT Levee Improvements
  – With Flood Fight and Levee Improvements
100-YEAR
FLOOD FIGHT EVALUATION
100-YEAR FLOOD FIGHT - FLOOD AREA 1
RAILROAD BRIDGE

100-YEAR
NO FLOOD FIGHT
PEAK FLOW = 780 CFS
TOTAL VOLUME = 6,800 AC-FT
WITH FLOOD FIGHT
PEAK FLOW = 780 CFS
TOTAL VOLUME = 6,800 AC-FT
100-YEAR FLOOD FIGHT - FLOOD AREA 2
LAMBERT ROAD & MORRISON CREEK

100-YEAR (MORRISON CREEK)
PEAK FLOW = 10,700 CFS
TOTAL VOLUME = 32,300 AC-FT

100-YEAR (LAMBERT ROAD)
NO FLOOD FIGHT
PEAK FLOW = 6,300 CFS
TOTAL VOLUME = 12,300 AC-FT
WITH FLOOD FIGHT
PEAK FLOW = 965 CFS
TOTAL VOLUME = 1,440 AC-FT
100-YEAR FLOOD FIGHT –FLOODPLAIN COMPARISON

100-Year

100-Year with Flood Fight
POINT PLEASANT – 100-YEAR FLOODED STRUCTURE IMPACT ANALYSIS

100-Year
16 – Flooded Structures

100-Year with Flood Fight
12 – Flooded Structures
100-YEAR FLOOD FIGHT - OFFSITE IMPACTS

Example
Existing WSEL = 20.0
Proposed WSEL = 20.8
Diff. WSEL = 0.8
100-YEAR
MCCORMACK WILLIAMSON TRACT LEVEE REPAIR EVALUATION
100-YEAR MWT REPAIRS - FLOOD AREA 1

RAILROAD BRIDGE

100-YEAR NO FLOOD FIGHT
PEAK FLOW = 780 CFS
TOTAL VOLUME = 6,800 AC-FT

WITH MWT REPAIRS
PEAK FLOW = 750 CFS
TOTAL VOLUME = 6,400 AC-FT
100-YEAR MWT REPAIRS - FLOOD AREA 2
LAMBERT ROAD & MORRISON CREEK

100-YEAR (MORRISON CREEK)
PEAK FLOW = 10,700 CFS
TOTAL VOLUME = 32,300 AC-FT

100-YEAR (LAMBERT ROAD)
NO FLOOD FIGHT
PEAK FLOW = 6,300 CFS
TOTAL VOLUME = 12,300 AC-FT
NO FLOOD FIGHT
PEAK FLOW = 6,400 CFS
TOTAL VOLUME = 13,100 AC-FT
100-YEAR MWT REPAIRS – FLOODPLAIN COMPARISON
POINT PLEASANT – 100-YEAR FLOODED STRUCTURE IMPACT ANALYSIS

100-Year

16 – Flooded Structures

100-Year with MWT Repair

16 - Flooded Structures
Example

Existing WSEL = 20.0
Proposed WSEL = 20.8
Diff. WSEL = 0.8
100-YEAR FLOOD FIGHT AND MWT REPAIR EVALUATION
100-YEAR BOTH PROJECTS - FLOOD AREA
1 RAILROAD BRIDGE

100-YEAR
NO FLOOD FIGHT
PEAK FLOW = 780 CFS
TOTAL VOLUME = 6,800 AC-FT
WITH FLOOD FIGHT AND MWT REPAIRS
PEAK FLOW = 750 CFS
TOTAL VOLUME = 6,450 AC-FT
100-YEAR FLOOD FIGHT - FLOOD AREA 2
LAMBERT ROAD & MORRISON CREEK

100-YEAR (MORRISON CREEK)
PEAK FLOW = 10,700 CFS TOTAL VOLUME = 32,300 AC-FT

100-YEAR (LAMBERT ROAD)
NO FLOOD FIGHT
PEAK FLOW = 6,300 CFS TOTAL VOLUME = 12,300 AC-FT
WITH FLOOD FIGHT
PEAK FLOW = 1,500 CFS TOTAL VOLUME = 2,300 AC-FT
100-YEAR BOTH PROJECTS – FLOODPLAIN COMPARISON

- 100-Year
- 100-Year with Both Projects
POINT PLEASANT – 100-YEAR FLOODED STRUCTURE IMPACT ANALYSIS

100-Year

16 – Flooded Structures

100-Year with Both Projects

12 – Flooded Structures
100-YEAR BOTH PROJECTS - OFFSITE IMPACTS

Example
Existing WSEL = 20.0
Proposed WSEL = 20.8
Diff. WSEL = 0.8
## 100-YEAR PROJECT SUMMARY

<table>
<thead>
<tr>
<th>Locations</th>
<th>No FF, No MWT</th>
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</thead>
<tbody>
<tr>
<td>Lambert Rd.</td>
<td>16.2</td>
</tr>
<tr>
<td>Pierson District</td>
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FF – Flood Fight  
MWT – McCormack Williamson Tract Levee Repair
## 100-YEAR PROJECT SUMMARY

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FF – Flood Fight
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FF – Flood Fight
MWT – McCormack Williamson Tract Levee Repair
# 100-Year Project Summary

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<th>Locations</th>
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**FF** – Flood Fight  
**MWT** – McCormack Williamson Tract Levee Repair
# 100-Year Project Summary

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Franklin Pond Decrease Water Surface</th>
<th>Point Pleasant Decrease Flooded Structures</th>
<th>North Delta Flood Surge Mitigation</th>
<th>North Delta Increase Water Surface</th>
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<tr>
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