Flood Fight History

1872	First levees constructed around Union Island, which originally included Victoria and Woodward Islands
1876	Reclamation District 282 is created, comprised of what is now Union Island, Victoria Island, Woodward Island, and Fabian Tract. More substantial levees constructed with Von Schmidt dredges.
1878	North Victoria Canal created, separating Victoria Island from Woodward Island. Canal separating Woodward Island from Bacon Island was created at an early period in reclamation history.
1890	Reclamation District 282 dissolved after ownership changes.
1894	Victoria Canal created separating Victoria Island from Union Island. Victoria Island deeded to dredge company in compensation for also raising Union Island levees. This began the separate history of the development of Victoria Island.
1902	After history of inadequate levees, Victoria Island reclaimed more reliably with improved levees.
1904	James Hollenbeck played major and ongoing role until 1908 in improving Victoria levees with Dredge "Hollenbeck".
1907	Major flood event triggered by storm event which affected the Pacific Coast for several days beginning on March 15th. Peak flows of more than 500,000 cfs into Valley north of Sacramento. San Joaquin River fully occupied its floodplain above Delta. High tides played role in subsequent failures of Delta levees. On March 25th, Victoria Island levee breached on north side, exact location is uncertain. On March 28th, Woodward Island levee breached. Woodward Island breach was closed in April. Victoria Island breach closed and pumping began in September.
1919	Current Reclamation District 2040, Victoria Island, established.
1998	Very high tide came close to 100 year elevations (9.2' vs. 10.2'). No major problems reported on Victoria Island.
2004	Flooding of adjacent Jones Tract caused increased and ongoing seepage in Victoria Island and Woodward Island levees along Middle River. Emergency work completed to control seepage flows. Problem areas shown on map.
2006	Sustained high water in San Joaquin River from wet March followed by intense rain event in early April. High sustained water elevations in Old River caused seepage on west side of Victoria and Woodward Islands.

Communications Plan

Field Command Posts

RD 2040	Victoria Island Farms Office 16021 W. Hwy 4, Stockton	121°30'45.93"W	37°53'27.29"N

Communications Equipment

The District does not own communications equipment.

Internal Communications

Means of internal communications among district staff and levee patrols will be personal cellular telephones. Telephone numbers will be assigned for response functions at the time of activation.

Communications with outside Jurisdictions

Primary means of communications with outside jurisdictions will be personal cellular telephones. Secondary means of communications will be attendance at Central Delta Unified Flood Fight Command meetings.

Special Considerations

Trafficability

Victoria Island lightly populated. Recommend helicopter evacuation of work crews and population if flood event is accompanied with sustained rainfall.

District Pump Vulnerabilities

Pumps at the three Victoria Island pumping stations are all located below 100 year flood elevations. Critical evacuation step to remove pump motors in the event of levee failure. District will contact Delta Pump in Stockton for assistance at 209-466-9625.

Victoria Island Access

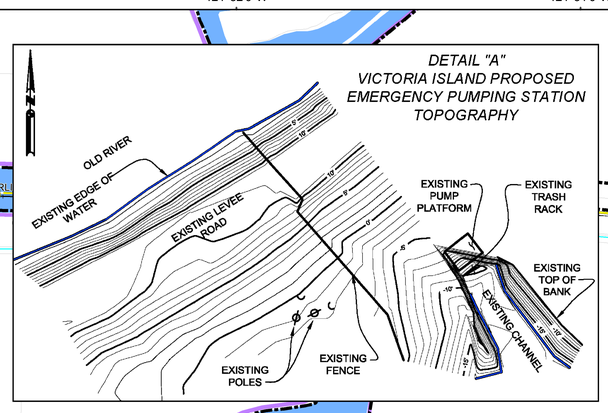
In the event of flooding, access to Victoria Island levees from East will involve delay of minimun 6 hours for removal of guardrail on Highway 4 ramp from bridge over Middle River and construction of a ramp to levee. Access from West side from Highway 4 bridge over Old River would be less delay for removal of guard rail and construction of ramp. Currently no turn around on levee.

Evacuation Issues

Notification of Agricultural Chemical Suppliers and Fuel Providers to assist with the removal of fuel and chemicals at Victoria Island Farms office. At the time this map was created some of the providers of fuel and agricultural chemicals are: C.L. Bryant Fuel - 209-467-7600, Del Don Chemicals - 209-894-6404.

Contra Costa Water District

Contra Costa Water District (CCWD) building water intake facility with associated water and power lines as shown on map. Primary levee is set back as shown to provide room for pumping facility. Flooding of island would cause limited to major damage to infrastructure. Pumping would stop until dewatering of district. Alternate pumping station on Byron Tract could take over pumping function in that event.



N

SACRAMENTO SAN JOAQUIN DELTA

0 2,500 5,000

Feet

1 inch = 1,000 feet

Time/Date of Start of Incident

Map Version

Legend

- 100 Year Flood Elevation
- Logistics Base
- Delivery Point
- Supply Staging Area
- Water Landing
- Helibase
- Helispot
- Historic Seepage Area
- Historic Levee Breach
- Relief Cut
- Historic Erosion Area
- Historic Slope Stability
- Levee Access
- Emergency Berm
- Dryland Levee
- Dryland Levee Critical Section
- Levee
- Levee Crown Elevation (L.C. EL+25.7')
- Spot Elevation (Ground EL+18.1')
- Levee Mile-River Mile-Station (L.M.1+1.0 R.M.1+1.0 100+00)
- Pump Station – Reclamation District (PS)
- Pump Station – Municipal Storm (PS)
- Pump Station – Emergency Pump Out (PS)
- Pump Station – Municipal Sanitary (PS)
- Structure (A-Agricultural, R-Residences (R# = number of homes), H-Hospital, S-School)
- Water Well
- Sanitary Sewer Lines
- Storm Drain Lines
- Water Lines
- Overhead Transmission Line
- Underground Fiber Optics
- Underground Lines
- Command Post
- District Boundary
- Elevation Contour
- Waterways/Channels

RECLAMATION DISTRICT 2072 WOODWARD ISLAND (1926)

RECLAMATION DISTRICT 2039 UPPER JONES TRACT

RECLAMATION DISTRICT 2040 VICTORIA ISLAND (1919)

RECLAMATION DISTRICT 800 BYRON TRACT

RECLAMATION DISTRICT 2 UNION ISLAND WEST

RECLAMATION DISTRICT 2117 CONEY ISLAND

Contra Costa County

San Joaquin County

North Patrol Sector

South Patrol Sector

PS Two Pumps

PS Four Pumps

PS Two Pumps

PS Planned Emergency Pump Station See Detail "A"

DP DP-01

DP DP-02

DP DP-03

S SA-01

RD 2040

Hay Barns

Seasonal labor Camp #5

Seasonal labor Camp #4

Seasonal labor Camp #2

Seasonal labor Camp #3

Labor Camp

Unoccupied Labor Camp #1

CCWD Pumping Plant

Gate

Island Access from Hwy 4 (North & South)

Above Ground Diesel Fuel Packing Shed

Fertilizer/ Chemical

Victoria Island Farms Office

Tidal Gauge Continuous Salinity Recording

South of Hwy 4 (Locked Gate)

Middle River Bridge (East to Stockton)

Old River Bridge (West to Discovery Bay)

Contra Costa County Water Intake to Los Vaqueros Reservoir

CCWD 72" Underground Water Pipeline

Underground sprint fiber optic cable south side of State Route No. 4

Approximate Levee Road Centerline Elevation 14'-14.2'

Approximate Levee Road Centerline Elevation 14'-14'

Approximate Levee Road Centerline Elevation 14'-15.5'

Approximate Levee Road Centerline Elevation 15.5'-15.5'

Approximate Levee Road Centerline Elevation 14'-15.4'

Approximate Levee Road Centerline Elevation 13.76'-14.9'

Approximate Levee Road Centerline Elevation 13.1'-14.1'

Approximate Levee Road Centerline Elevation 13.1'-15.8'

Approximate Levee Road Centerline Elevation 13.1'-15.6'

Approximate Levee Road Centerline Elevation 12.7'-14.3'

Approximate Levee Road Centerline Elevation 14.5' to 15.0'

Approximate Levee Road Centerline Elevation 14.5'-16'

Approximate Levee Road Centerline Elevation 14.5'-14.5'

Approximate Levee Road Centerline Eleveation 14'-14.5'

Approximate Levee Road Centerline Eleveation 12.7'-17.3'

Approximate Levee Road Centerline Eleveation 13.10'-15.10'

Approximate Levee Road Centerline Eleveation 12.6'-13.7'

Approximate Levee Road Centerline Eleveation 13.1'-14.35'

Approximate Levee Road Centerline Elevation 15'-15.5'

Approximate Levee Road Centerline Elevation 9.7'-12.5'

Approximate Levee Road Centerline Elevation 13.4'-16.3'

Approximate Levee Road Centerline Elevation 15.1'-15.5'

Approximate Levee Road Centerline Eleveation 13.10'-15.10'

Approximate Levee Road Centerline Eleveation 15.1'-15.1'

Approximate Interior Road Centerline Elevation -5.8' thru -6.8'

Approximate Interior Road Centerline Elevation -4.6' thru -5.9'

Approximate Interior Road Centerline Elevation -6.6' thru -8.5'

Approximate Interior Road Centerline Elevation -6.6' thru -7.8'

Approximate Interior Road Centerline Elevation -6.6' thru -7.3'

Approximate Interior Road Centerline Elevation -4.3' thru -5.3'

Approximate Interior Road Centerline Elevation -2.1' thru -3.0'

L.C.= 13.4

L.C.= 12.1'

L.C.= 13.8'

L.C.= 14'6"

10.2'

10.4'

10.3'

2004

2004 on slope

2006

CANAL

NORTH VICTORIA CANAL

WOODWARD CANAL

OLD RIVER

MIDDLE RIVER

VICTORIA CANAL

NORTH CANAL

TRAPPER SLOUGH

S.W.E.N.D.

CLIFTON COURT FOREBAY

OH Overhead Transmission Lines

High Voltage Transmission Lines

Western Area Power Administration (WAPA) High VoltageTransmision Lines

UG Underground Lines

FO Underground Fiber Optics

S. CALPACK RD

S. BONETTI RD

W. CLIFTON COURT RD

CALIFORNIA 4

Levee Patrol Plan

District superintendent will organize patrols. Patrols will meet and be briefed and debriefed at Victoria Island Farms Office shown on map. District has four foremen available for patrol duties. Running two shifts with two one-person patrol sectors, north and south sectors, using two vehicles. Communications will be with personal cellular telephones.

Venice Island gauge will be used to monitor tidal conditions. Initiate periodic levee inspections at EL=8.0'. Initiate 24 hour continuous levee patrols at EL=9.0'.

Lath Protocol

Red – Boil/Seepage
Blue – Rock Slippage
White – Slope/Levee Distress

Tactical Plans – (Preliminary Engineering Designs)

Preliminary Engineering Designs have not been prepared for RD 2040.

For tactical information/actions refer to the Flood Contingency Options text box.

Survey Information

Basis of Elevations

Bearings and Distances shown are based on the North American Datum of 1983 (NAD 83) converted to the California Coordinate System of 1983, Zone 3 (CCS83-III) as referenced by available NGS published control monuments. All distances are grid distances. Elevations shown are based on the National Geodetic Vertical Datum of 1929 (NGVD29) as referenced by published benchmarks and have been converted to NAVD88 by adding +2.7' to NGVD29 elevations. Units shown are based on the U.S. Survey Foot.

Survey Data

The survey points provided for the RD 2040 (Victoria Island) Interior Road elevations and Emergency Pump Station Topography were surveyed in June, 2008. The survey points provided for RD 2040 (Victoria Island) Profile were surveyed June 6, 2001 by KSN. Horizontal and vertical positions were recorded by GPS RTK, from established site control points. Victoria Island is based on the NGVD 29 elevation of a Brass Survey Disk set in concrete stamped Old RM 3 1951. NGVD 29 Elevation 12.12 Sft.

Vertical Datum

- Vertical datum elevations are based on the North American Vertical Datum of 1988 (NAVD88)
- 100-Year Flood Elevations Source: 1992 USACE Sacramento-San Joaquin Delta Hydrology Special Study (converted to NAVD88)
- Contours Source: 2007 DWR LiDAR
- Levee Crown Elevations Source: 2015 KSN Levee Road Design

Flood Contingency Options

Highwater Event

The general floodfight strategy will be to floodfight primary levees and ensure that emergency response actions for a failure can be implemented promptly.

Actions

Coordinate and monitor patrol of primary levees.
Attend meetings of Central Delta Floodfight Unified Command at Holt Command Post.
Ensure placement of stockpiles of sandbags and related supplies to respond to problems.

Failure of Primary Levees on Reclamation District 2040 (Victoria Island)

This scenario regardless of break location will lead to flooding of district and Highway 4 between Middle River and Old River. General floodfight strategy will be to protect levee interiors and install emergency pumping stations while levee breach is sealed.

Actions

Notify authorities to close Highway 4 at Middle River Bridge and Old River Bridge and evacuate traffic in between.
Evacuate workcrews and other persons on island.
Place visquine and sand bags on levee interiors to protect from wavewash on limited exposure areas. Place rock riprap on areas of high wind exposure. Prioritize work based on current wind direction and velocity forecasts.
Place emergency pumps at emergency pump location indicated on map.
Armor ends of break to stabilize levee and seal when flow equalizes.
Pump impounded flood waters out once break is closed.

Delivery Points and Supply Staging Areas

Pre-planned Delivery Points

DP-01	Victoria Island Farms Office accessed from Highway 4 just past Middle River Bridge.	121°30'45.24"W	37°53'28.82"N
DP-02	Open ground at Union Point accessed from Highway 4 1/8 mile East of Middle River Bridge. (Delivery Point #2 is contingent upon the status of Victoria Island's Primary Delivery Point #1)	121°29'14.22"W	37°53'31.53"N
DP-03	Open ground just north of Highway 4 just before Old River Bridge. (Delivery Point #3 is contingent upon the status of Victoria Island's Primary Delivery Point #1)	121°34'03.41"W	37°53'25.91"N

Supply Staging Areas

SA-01	Victoria Island Farms Office accessed from Highway 4 just past Middle River Bridge.	121°30'45.24"W	37°53'28.82"N

Dewatering Plan

Upon closure of breach, place emergency pumping station on levee at site shown for flood dewatering. See detail "A" Proposed Emergency Pumping Station.

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Civil Engineers and Land Surveyors
711 N. Pershing Avenue
Stockton, CA 95203
209-946-0268
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West Sacramento, CA 95691
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Map Source: KSN, Inc.
Map Date: 12-04-2015
Vertical Datum: NAVD88

SAN JOAQUIN COUNTY
OFFICE OF EMERGENCY SERVICES

RECLAMATION DISTRICT 2040 FLOOD SAFETY PLAN

Annex A - Victoria Island Flood Contingency Map

FIGURE A1