

Lakes
Two inter-connected lakes within RD 1608, Lake Lincoln and North Lake, act as storm detention basins. The hydraulic pressure of the lakes has stabilized groundwater levels. Any seepage will likely appear first around the lakes.

Lake Lincoln's capacity is 183 million gallons (560 ac. ft.) at a depth of approximately 10 feet. North Lake's capacity is approximately 44 million gallons (120 ac. ft.) at a depth of approximately 8 feet. The topography of the region west of I-5 slopes naturally to both of these lakes. The lakes are routinely lowered each year prior to the flood season to provide additional storage capacity, but the lowering and emptying of these lakes during emergency conditions does not provide adequate capacity to protect the homes from flood sources.

During winter months, both lakes are lowered by the lake association maintenance crew. Lake Lincoln is dropped 12"-18" (18 MG-24 MG) between Oct. 1st and April 1st. North Lake is dropped 8"-10" (3.3 MG-4.1 MG).

City of Stockton Primary Pump Station at Fourteen Mile Slough
Both lakes drain by gravity to the COS Pump Station at Fort Donelson Dr. which discharges into 14-Mile Slough.

Two (2) electric 50-HP main duty pumps and one (1) electric 20-HP low flow pump operate to drain the lakes. The main duty pumps can pump 7000 gpm each and the low flow pump 2250 gpm. For redundancy, the period of time required to lower the lakes assumes that only one main pump is running at a time. Due to volume differential, when both lakes are being lowered, Lake Lincoln will overwhelm North Lake and pump out first.

This pump station is located at ground level. Precautions must be taken to protect the pump station from flood waters. Sandbag berms should be constructed if flooding is imminent.

SJC Flood Control Weir and Pump Station at Fourteen & Five Mile Sloughs
San Joaquin County Flood Control operates the pumping station and weir at the confluence of Five Mile and Fourteen Mile Sloughs. The pumps have an automatic trip valve that maintains the level of Five Mile Slough below the normal tide level, but can be operated manually as well. At full power, it would take approximately 12 hours to drain Five Mile Slough completely. According to the San Joaquin County Flood Control, Five Mile Slough has the capacity to retain Five Mile Slough's watershed runoff from a 100-year flood event, without the pumps running.

Fourteen Mile Slough Toe Drain
Located along the toe of the levee of Grupe Park, RD 1608 constructed a toe drain to route runoff water away from the toe of levee. The runoff is collected and drains by gravity to a sump pump located in the southeast corner of Grupe Park, adjacent to the levee. The sump pump is turned on and off by float valves that control the level of water. The pump discharges into Fourteen Mile Slough.

Topography
Southwest area of RD 1608 is at a lower elevation than the Northeast area. Water will run from the North toward the Southwest.

East of I-5, the topography runs south toward Fourteen mile Slough. A relief cut could not be made at Fourteen Mile Slough as the waterway is tidal and not controlled. Pumps should be placed at Fourteen Mile Slough to pump flood waters over the levee.

Levees
Will need to request private home owner gates to be opened in the southwest levee section.

North bank levee of Five Mile Slough between the confluence of Fourteen Mile Slough and the landings dry land levee was built up by RD 1608 in 1996 to protect RD 1608 from wave run-up in the event of a failure in RD 2115, Shima Tract.

The levee on the East side of the Lincoln Village West Marina is a fully engineered extra-wide levee section the original levee which now encompasses the marina on the West does not provide flood protection and are not marked as levees on this map. All other levees within RD 1608 were engineered over old existing levees.

Levee on the North bank of Five Mile Slough, from the I-5 is an overbuilt section and is not considered a levee.

RD 2119 Failure
Failure of RD 2119, Wright-Elmwood Tract would not pose an immediate problem to RD 1608's levees. However, wind driven waves could rapidly erode the Wright-Elmwood levee from the unprotected landscape, this would expose RD 1608's Fourteen mile Slough levee to potentially serious wave damage resulting from the large fetch length across Wright-Elmwood Tract.

Flood Fight History
RD 1608 was initially agricultural land subject to periodic, seasonal flooding. An old river bed runs east to west through the district, just north of Benjamin Holt Dr. and is currently identified by an unimproved green belt. This old river originally connected to 14-Mile Slough, just north of the Lincoln Village West Marina.

Lincoln Village West area has been completely regraded from original contours. The topography runs from Northeast toward the Southwest. RD 1608 has never flooded.

Ground elevations for most of RD 1608 range from 0' (NAVD88), rising to approximately 5.0' at Swenson Golf Course.

Levee Crown elevations average a little less than 13.5' (NAVD 88)

1997 - Heavy rains in late December and early January caused record floods. RD 1608 levees held with 2 - 3' freeboard.

1998 - El Niño year with water levels exceeding 1997 by approximately 10". RD 1608 levees held with 1.5 - 2' freeboard.

2006 - Heavy rains and storms bumped tide elevations to approximately 9.5' (USED) at Venice Island. RD 1608 levees held with 6 - 7' freeboard.

Evacuation Plan
Public Safety Agencies Evacuation Plans
Lincoln Village West Evacuation Map is available at www.sjmap.org/evacmaps/private (password protected).

Evacuation Maps for General Public
Evacuation maps for general public with Lincoln Village West are available at www.sjmap.org/evacmaps (Brookside/Lincoln Village West Evacuation Zone)

Primary routes of evacuation are Benjamin Holt Drive eastbound, Swain Road eastbound, and Morgan Place to Feather River Drive southbound.

Communications Plan
Field Command Posts
RD 1608-01 In Shape Health Club at the Lincoln Village West Marina. 121° 22' 5" W 38' 0" 5" N
RD 1608-02 Mable Barron Elementary School, 6638 Cumberland. Contact the Associate Superintendent, Business Services (LUSD) 209-953-8716 for access.
RD 1608-03 Village Oaks Elementary School, 38' 00' 00" W 121° 19' 58" N 1900 W Swain. Contact the Associate Superintendent, Business Services (LUSD) 209-953-8716 for access.

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 evacuation.

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

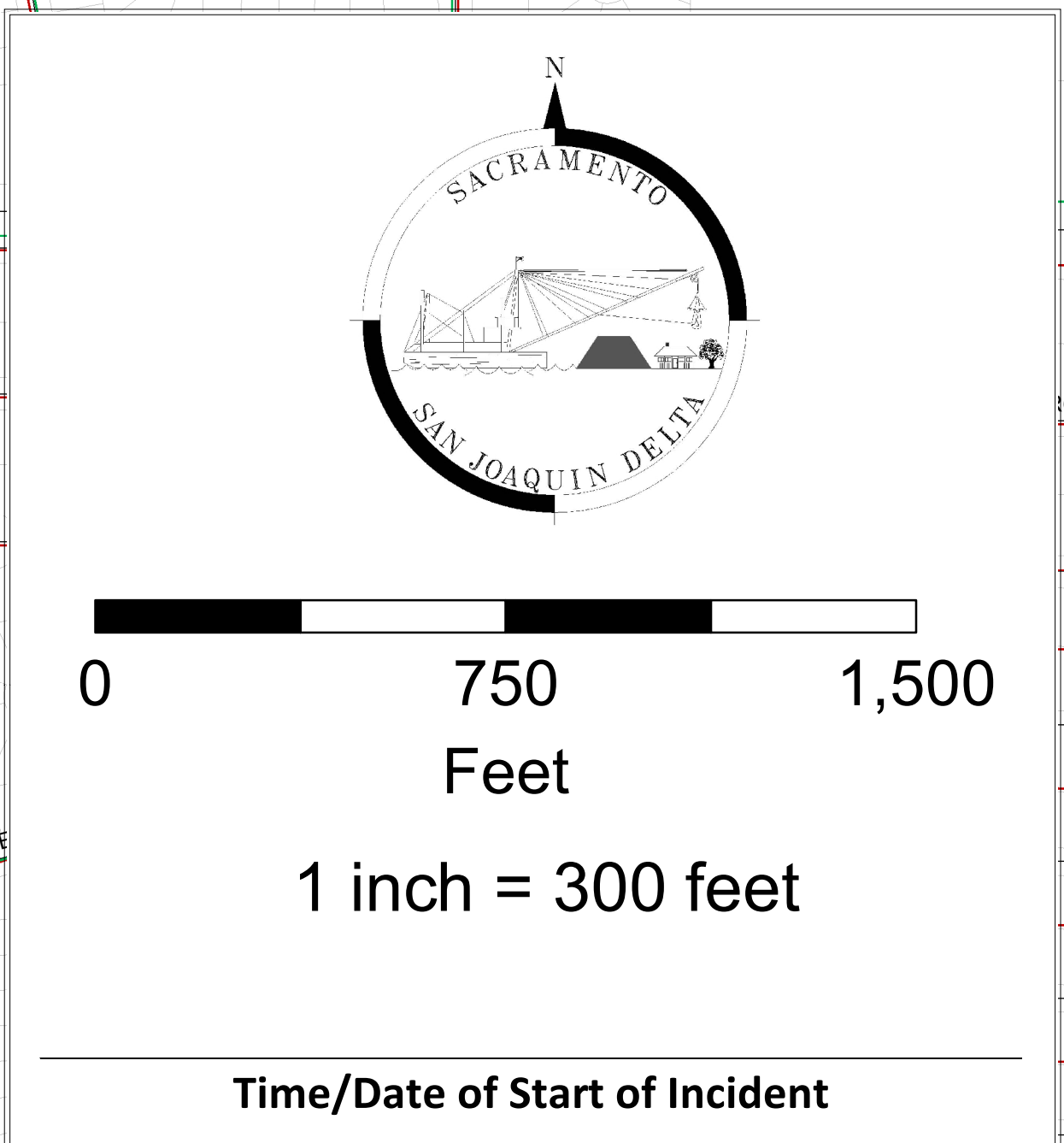
Survey Information
Basis of Elevations
• Elevations are based on the North American Vertical Datum of 1988 (NAVD88)
• 100-year Flood Elevation Source: FEMA's 2009 Firm
• Contours and Spot Elevations Source: 2007 DWR LIDAR

Benchmarks
BM 215 C.O.S. Elevation 14.3' North Levee of Five Mile Slough
BM 216 C.O.S. Elevation 0.27' Five Mile Drive and Cumberland Pl
BM 218 C.O.S. Elevation 0.28' Intersection of Cumberland Pl and Benjamin Holt Dr.
BM 221 C.O.S. Elevation 11.75' North Bank of 14-Mile Slough
BM 366 C.O.S. Elevation 4.47' Intersection of Plymouth Road and Kelly Drive

Levee Patrol Plan
District Incident Commander will organize patrols. Levee patrols are staffed first with experienced RD1608 personnel (Levee superintendent and KSN staff). If the levee or frequency of patrol is increased, or events escalate, additional patrol staff will be requested from the COS. Each COS staff personnel is paired with experienced RD 1608 personnel to continue patrols. RD 1608's requests for staff assistance will come from RD 1608 officials or staff. Primary contact for information is RD 1608 Superintendent Joe Bryson at 209-3307 (cell), or RD 1608 cell phone at 406-9142. Secondary contact is KSN, Inc. (Chris Neudeck), at (209) 481-0316 (cell).

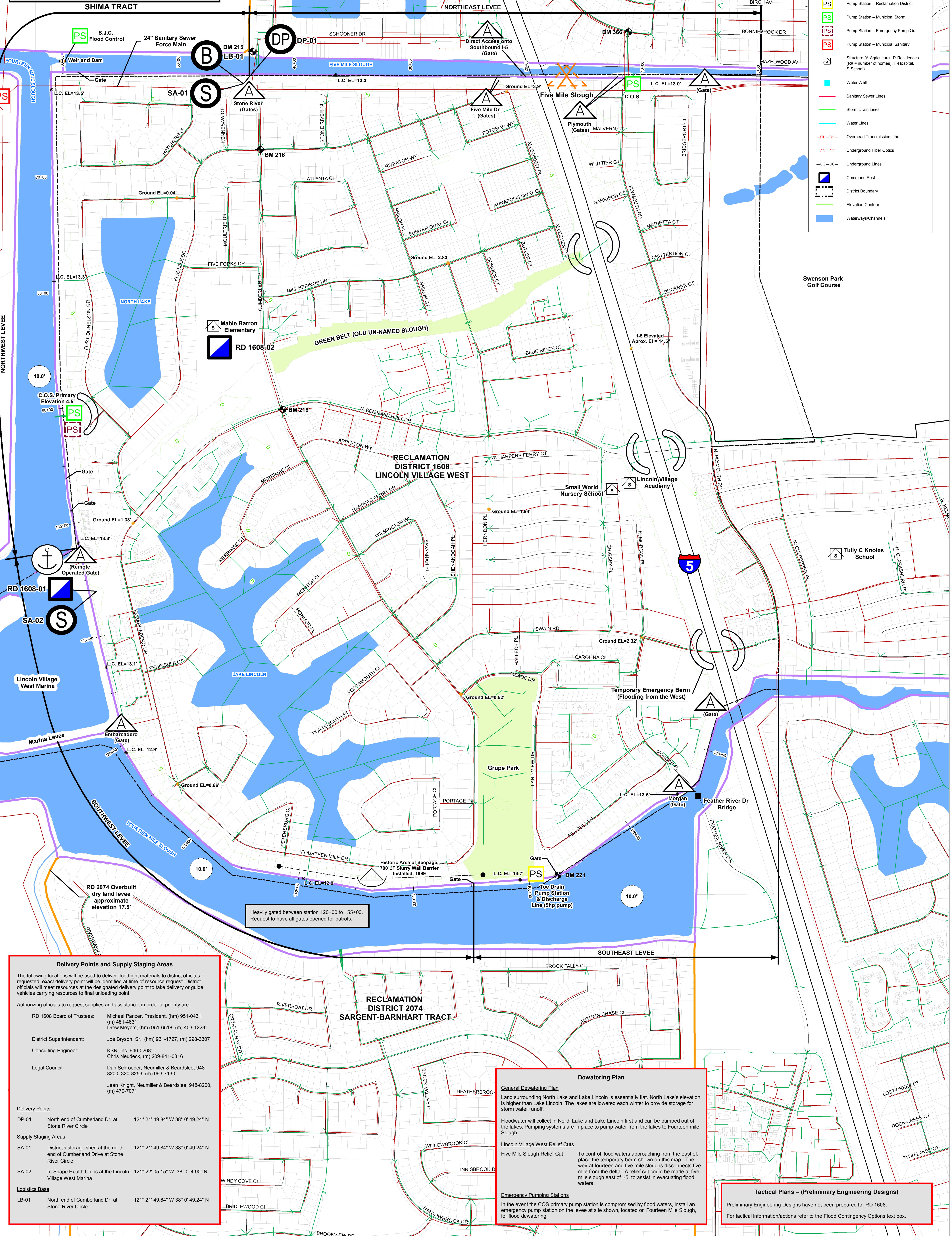
Venice Island gauge will be used to monitor tidal conditions. Initiate periodic levee inspections at EL+6.0'. Initiate 24 hour continuous levee patrols at EL+9.0'.

Lath Protocol
Red - Bolt/Seepage
Blue - Rock Slippage
White - Slope/Levee Distress



Legend

- 100 Year Flood Elevation
- Logistics Base
- Delivery Point
- Supply Staging Area
- Water Landing
- Helibase
- Hotspot
- Historic Seepage Area
- Relief Cut
- Historic Levee Breach
- Historic Erosion Area
- Historic Slope Stability
- Levee Access
- Emergency Berm
- Dryland Levee
- Dryland Levee Critical Section
- Levee
- Levee Crown Elevation
- Spot Elevation
- Levee Mile-River Mile Station
- Pump Station - Reclamation District
- Pump Station - Municipal Storm
- Pump Station - Emergency Pump Out
- Pump Station - Municipal Sanitary
- Structure (A-Agricultural, R-Residential (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 2119 WRIGHT-ELMWOOD TRACT

Flood Contingency Options

High Water Event
Patrol levees and update options as necessary.

Failure of Primary Levees
Flood fight strategy to prevent floodwaters from moving east of I-5 would be:
• Visqueen the interior levee slopes.
• Block the underpasses at I-5, Benjamin Holt Drive and Swain Road, and the green belt culvert.

Depending on the failure source, the weir at Fourteen and Five Mile Sloughs can be opened or closed.

Floodwaters will drain naturally toward the lakes where they can be pumped out with the existing pump system. North Lake is at a higher elevation than Lake Lincoln. The District drains naturally toward the southwest from the area of Five Mile Slough at Swenson Golf Course.

Failure of North Bank Levee of Five Mile Slough (Shima Tract)
Flood fight strategy in the event of a breach of the north bank of Five Mile Levee:
• Block the culverts at I-5 to prevent flooding through Swenson Golf Course.
• Visqueen above the riprap on the waterside slope of RD 1608's Five Mile Levee.

Floodwater Arriving from the East
Flood fight strategy in the event of floodwaters emanating from the east:
• Block the underpasses at I-5, Benjamin Holt Drive and Swain Road, and the green belt culvert.
• If necessary, Visqueen the interior slopes of the levees on the east side of I-5.
• Establish emergency pumping stations to move floodwaters to Five Mile Slough west of I-5.
• Open the Five Mile Slough weir if sufficient head exists to drain the floodwaters to the Delta.
• Consider making a relief cut in Five Mile Slough on the east side of I-5.
• Sandbag COS primary pump station along Fourteen Mile Slough.

Failure of Shima Tract (RD 2115)
Flood fight the north bank levee of Five Mile Slough.
In the event of a failure of the north bank levee of Five Mile Slough:
• Activate the pumps at the weir at Five Mile Slough.
• Block the culverts under I-5.
• Prepare to Visqueen the interior levee slopes if floodwaters continue up Five Mile Slough, through Swinson Golf Course and under I-5.

Failure of Wright-Elmwood (RD 2119)
Flood fight strategy in the event of a failure of the Wright-Elmwood levees:
• Lower North Lake and Lake Lincoln to control seepage and increase storm runoff storage capacity.
• Increase patrols on west levee (Northwest Levee Section).
• Pre-position supplies and equipment for fighting wave run-up.
• Sandbag COS primary pump station along Fourteen Mile Slough.

Delivery Points and Supply Staging Areas
The following locations will be used to deliver floodfight materials to district officials if requested, exact delivery point will be identified at time of resource request. District officials will meet resources at the designated delivery point to take delivery or guide vehicles carrying resources to final unloading point.

Authorizing officials to request supplies and assistance, in order of priority are:

RD 1608 Board of Trustees:	Michael Panzer, President, (hm) 951-0431, (m) 481-4631; Drew Meyers, (hm) 951-6518, (m) 403-1223;
District Superintendent:	Joe Bryson, Sr. (hm) 931-1727, (m) 298-3307
Consulting Engineer:	KSN, Inc. 846-8208, Chris Neudeck, (m) 209-841-0316
Legal Council:	Dan Schroeder, Neumiller & Beardslee, 948-8200, 320-8253, (m) 993-7130; Jean Knight, Neumiller & Beardslee, 948-8200, (m) 470-7071

Delivery Points

DP-01	North end of Cumberland Dr. at Stone River Circle	121° 21' 49.84" W 38' 0" 49.24" N
SA-01	District's storage shed at the north end of Cumberland Drive at Stone River Circle	121° 21' 49.84" W 38' 0" 49.24" N
SA-02	In-Shape Health Clubs at the Lincoln Village West Marina	121° 22' 05.15" W 38' 0" 49.24" N

Logistics Base

LB-01	North end of Cumberland Dr. at Stone River Circle	121° 21' 49.84" W 38' 0" 49.24" N
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Dewatering Plan

General Dewatering Plan
Land surrounding North Lake and Lake Lincoln is essentially flat. North Lake's elevation is higher than Lake Lincoln. The lakes are lowered each winter to provide storage for storm water runoff.

Floodwater will collect in North Lake and Lake Lincoln first and can be pumped out of the lakes. Pumping systems are in place to pump water from the lakes to Fourteen mile Slough.

Lincoln Village West Relief Cuts
To control flood waters approaching from the east, place the temporary berm shown on this map. The weir at fourteen and five mile sloughs disconnects five mile from the delta. A relief cut could be made at five mile slough east of I-5, to assist in evacuating flood waters.

Emergency Pumping Stations
In the event the COS primary pump station is compromised by flood waters, install an emergency pump station on the levee at site shown, located on Fourteen Mile Slough, for flood dewatering.

Tactical Plans - (Preliminary Engineering Designs)
Preliminary Engineering Designs have not been prepared for RD 1608.
For tactical information/actions refer to the Flood Contingency Options text box.

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Map Source: KSN, Inc.
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Vertical Datum: NAVD88