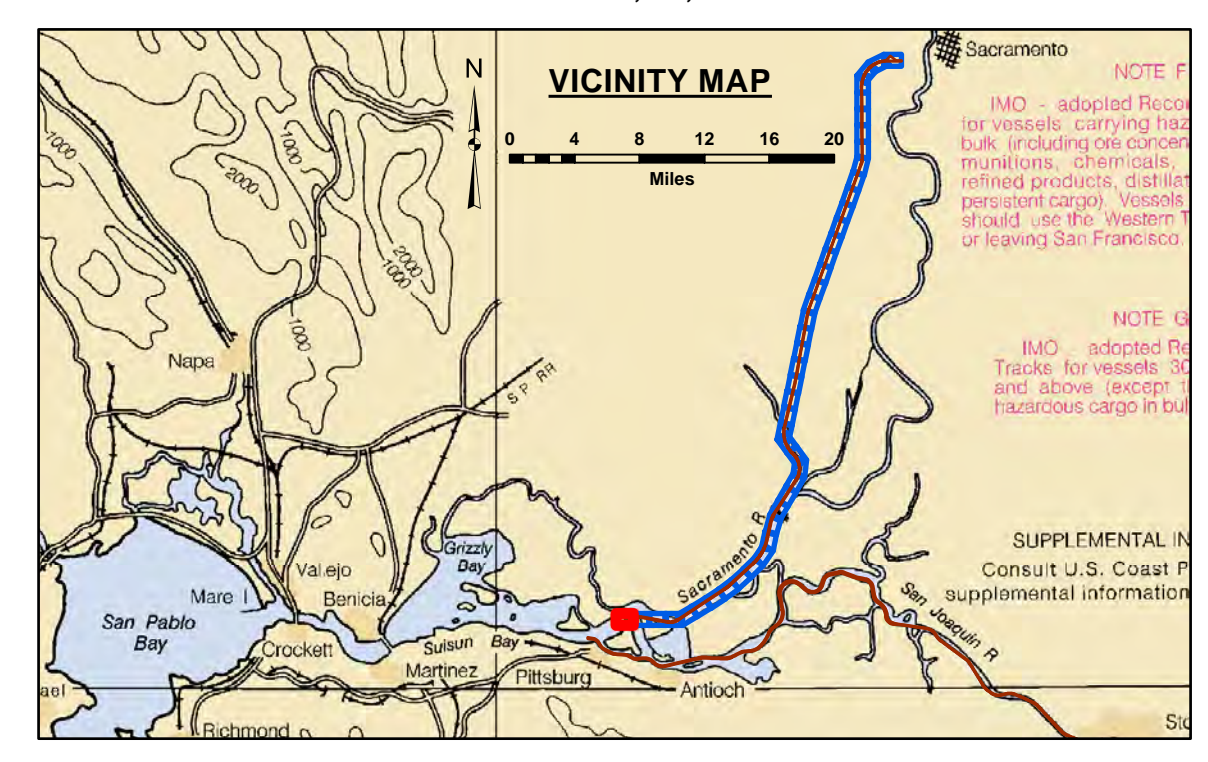


US Army Corps of Engineers District: CESPCK

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Chart Date:	May 30, 2018
Designed by:	
Drawn by:	PDT
Surveyed By:	
Plotted By:	PDT
Checked By:	PDT
Approved:	
Chief, Construction Branch	

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



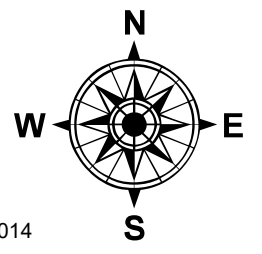
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▭ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✈ Wrecks-Submerged	— -26	
		● Shoalest Sounding**	
		⊥ Beacon, General	
		◆ Red Navigation Buoy	
		◆ Green Navigation Buoy	

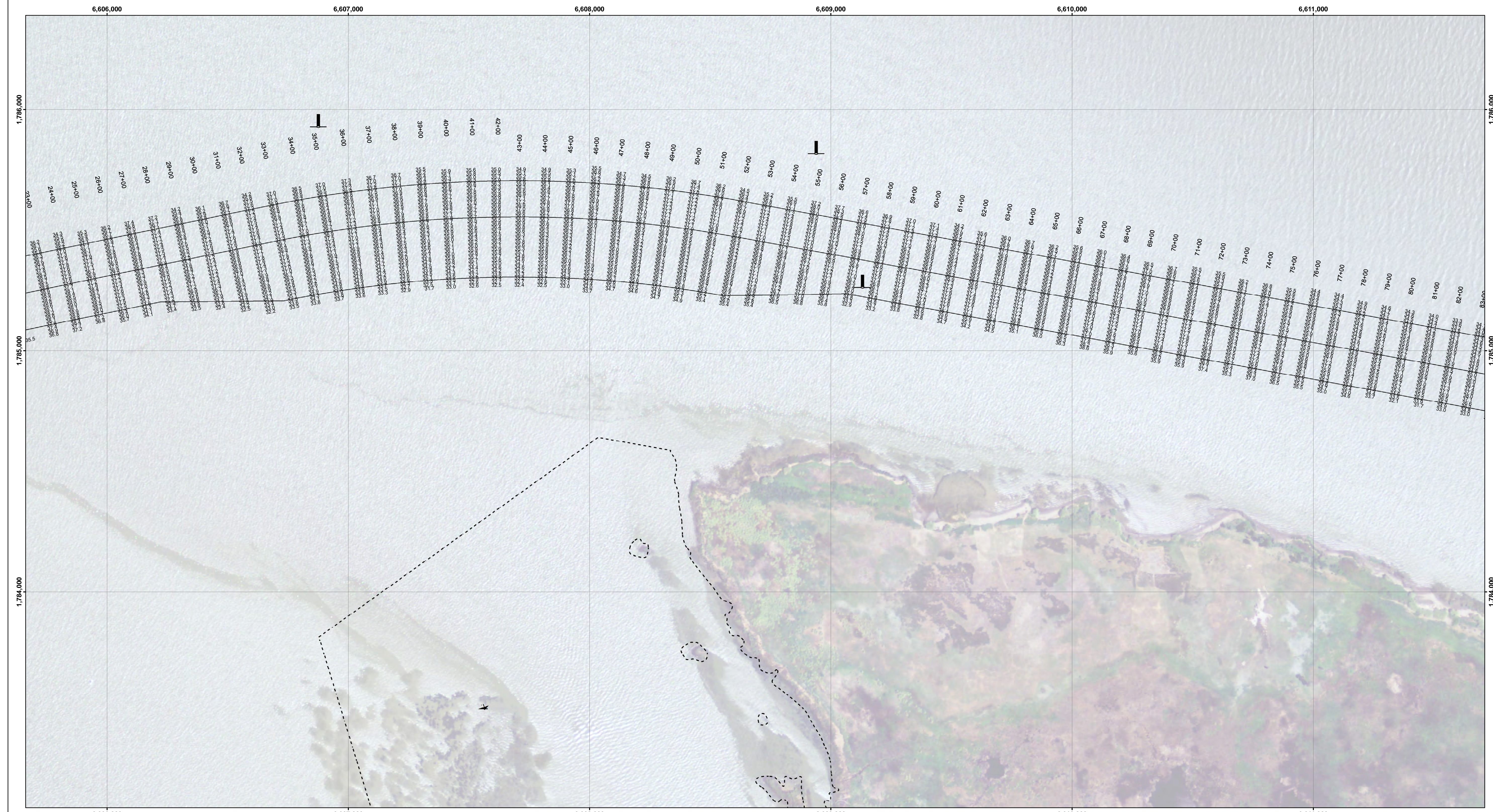
NOTES:
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.
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 SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
 NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CA ZONE II (0402). DISTANCE UNITS IN U.S. SURVEY FEET.
 PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE II CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
 THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

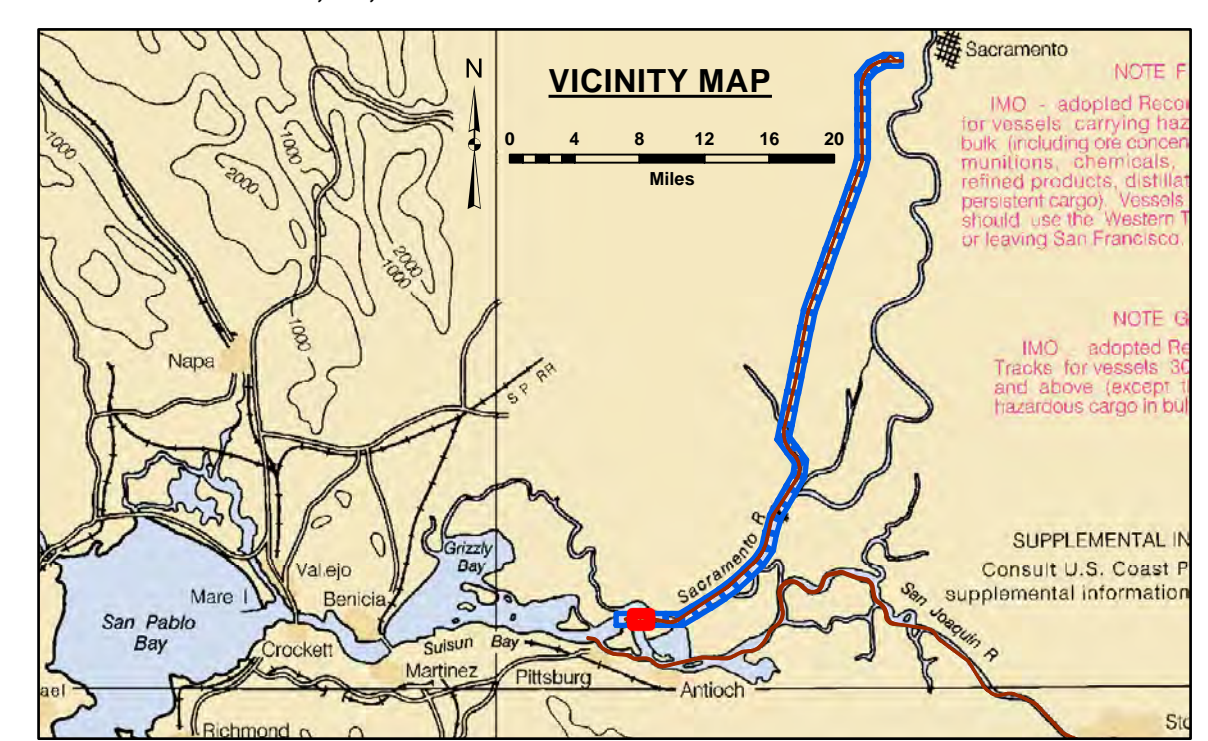




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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Stippled: Hydro Survey Team Leader	Plotted By:	May 30, 2018
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	Drawn By:	PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
 Sheet Reference Number
2 of 45



0 400 800 1,200 Feet

LEGEND

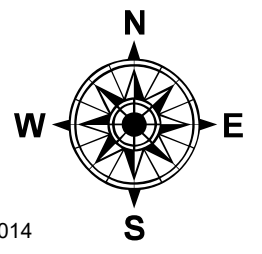
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	⊠ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy	— -27
			— -26

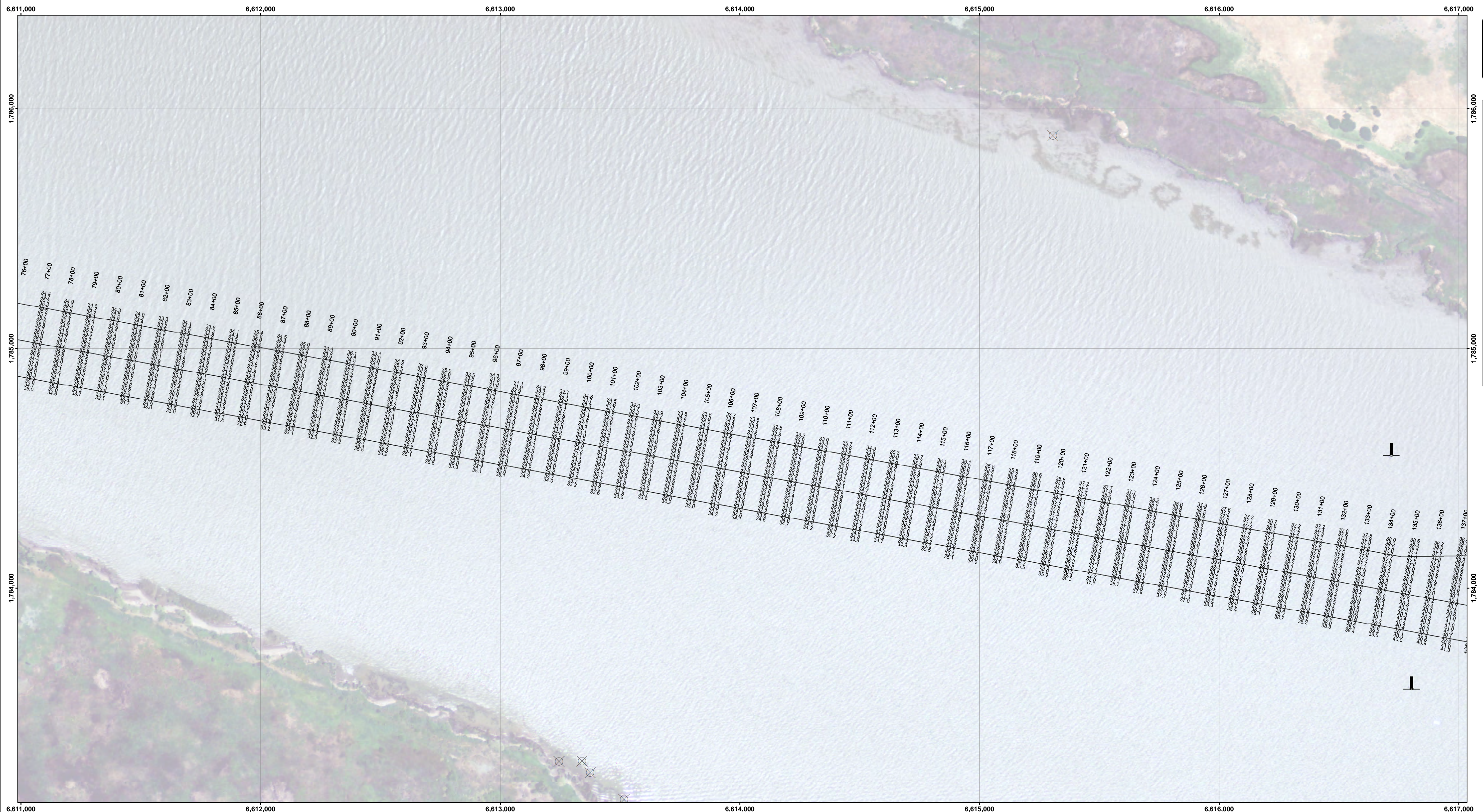
NOTES:
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 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

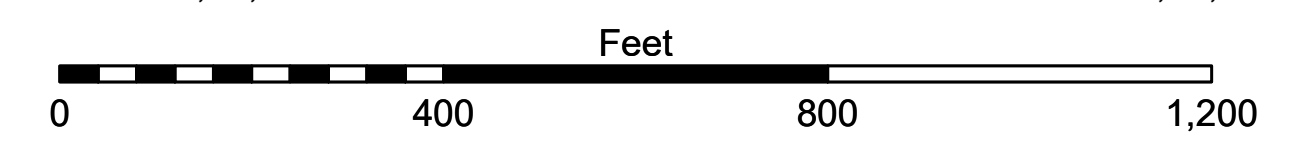
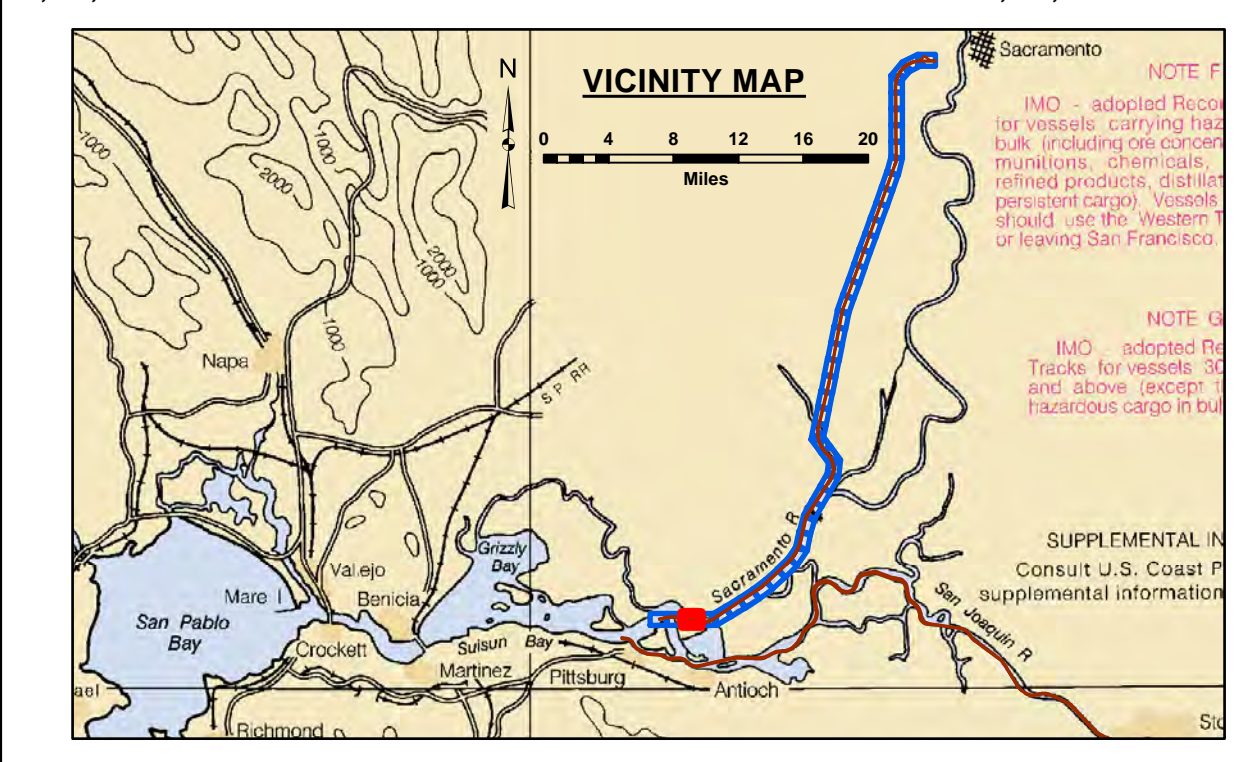
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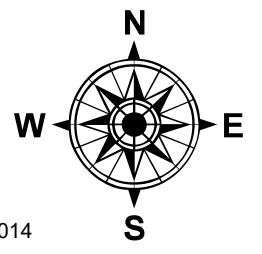
Prepared Under the Direction of TRAVIS J. RAYFIELD LT Colonel, C.E., District Engineer	Surveyed By:	Chart Date:
Stippled: Hydro Survey Team Leader	Plotted By:	May 30, 2018
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	Drawn By:	PDT



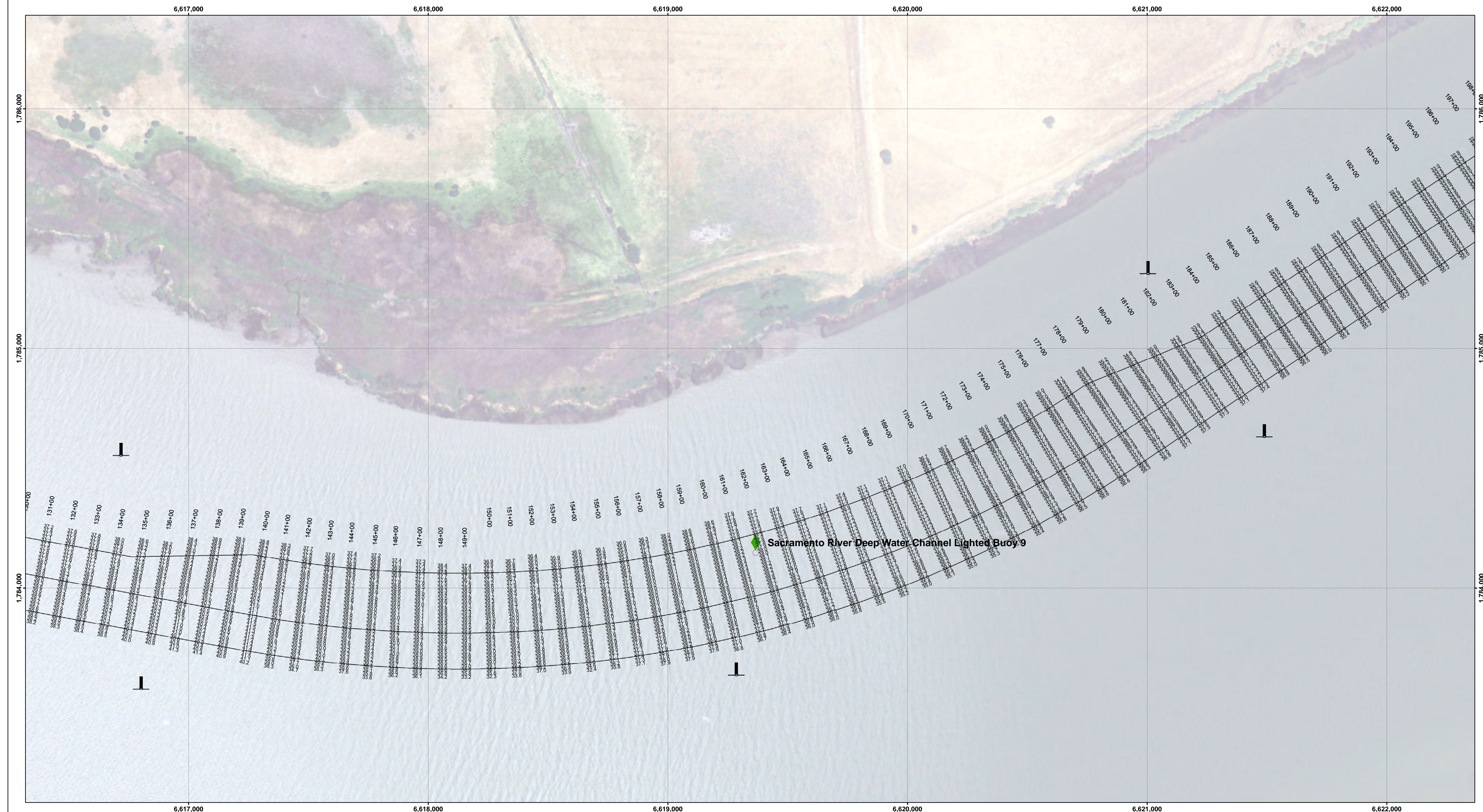
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▭ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✶ Wrecks-Submerged	— -26	
			● Shoalest Sounding**
			⊥ Beacon, General
			♦ Red Navigation Buoy
			◆ Green Navigation Buoy

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 LOCATION: RIO VISTA
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 LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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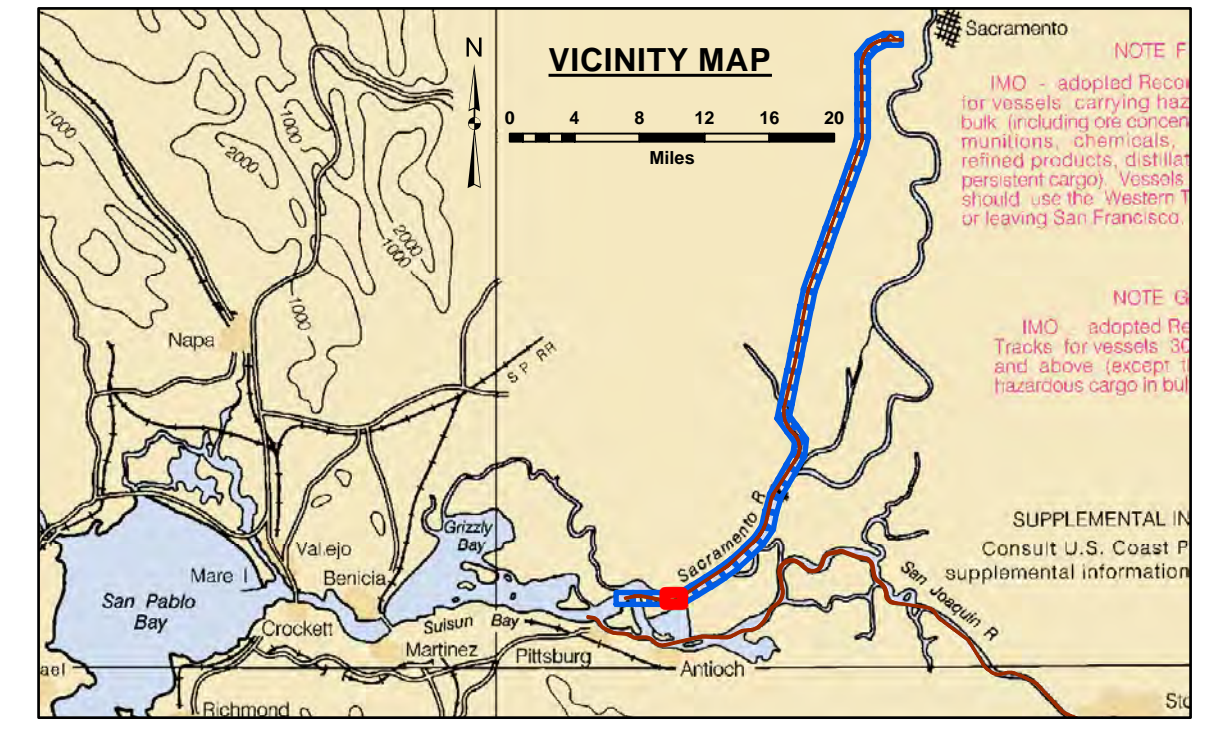


CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
 Sheet Reference Number
3 of 45



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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: May 30, 2018
Stung: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

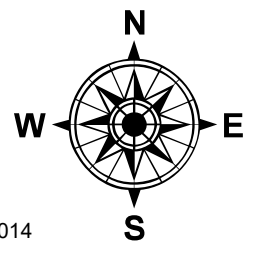


LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	⊞ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy

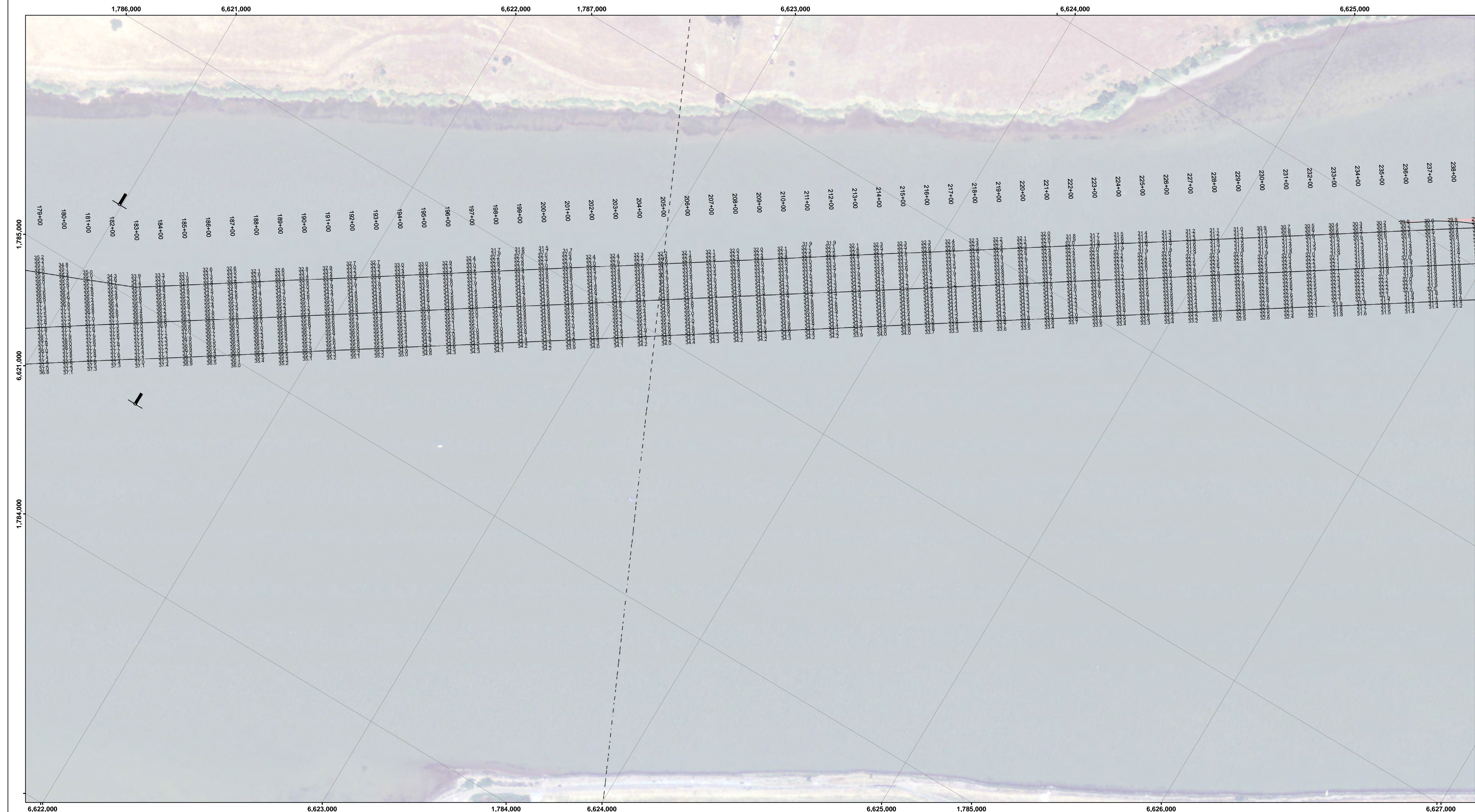
Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

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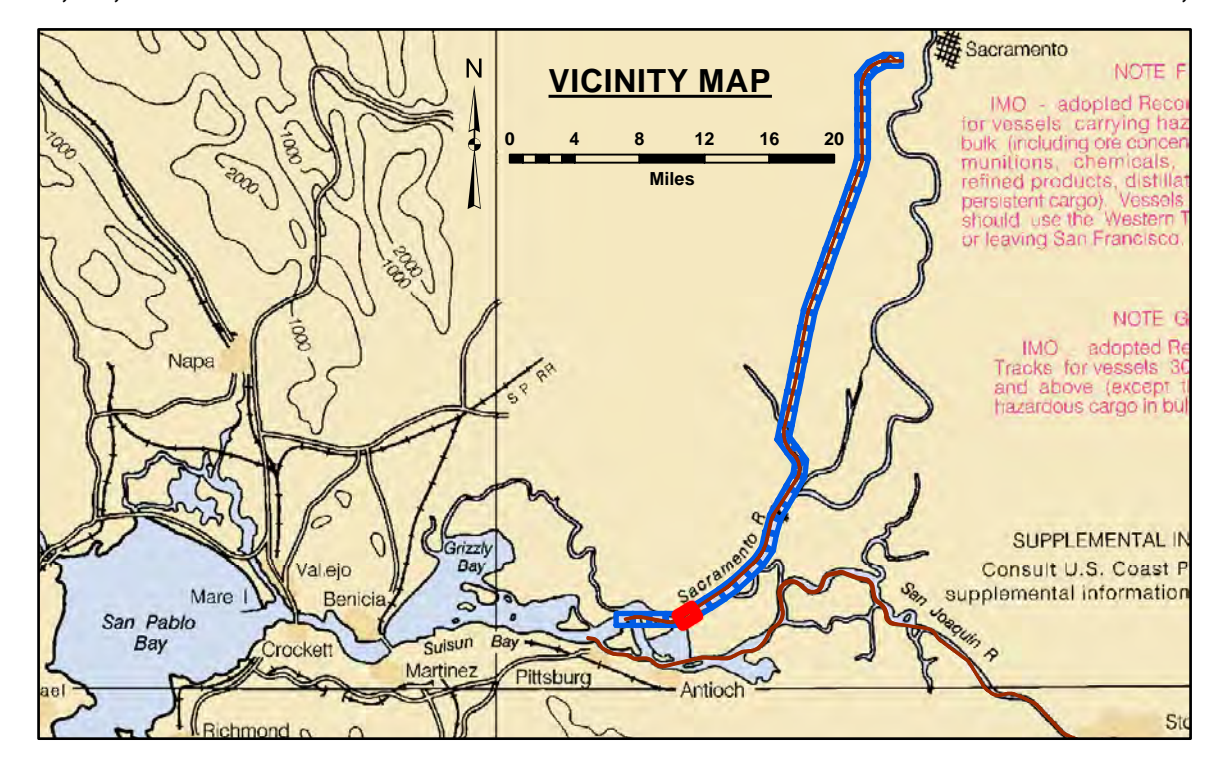
CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
 Sheet Reference Number
4 of 45



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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER TRAVIS J. RAYFIELD
Plotted By:	Hydro Survey Team Leader
Checked By:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	— -29
— Federal Navigation Center Line	□ Placement Area	— -28	— -27
..... Cable Submarine	- - - Anchorage Area	— -26	
- - - Cable Overhead	⊗ Obstruction Point		
— Contour Line	✦ Wrecks-Submerged		
	● Shoaling Area		
	● Shoalest Sounding**		
	⊥ Beacon, General		
	◆ Red Navigation Buoy		
	◆ Green Navigation Buoy		

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CONTROLS:
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 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.

Sheet Reference Number
5 of 45



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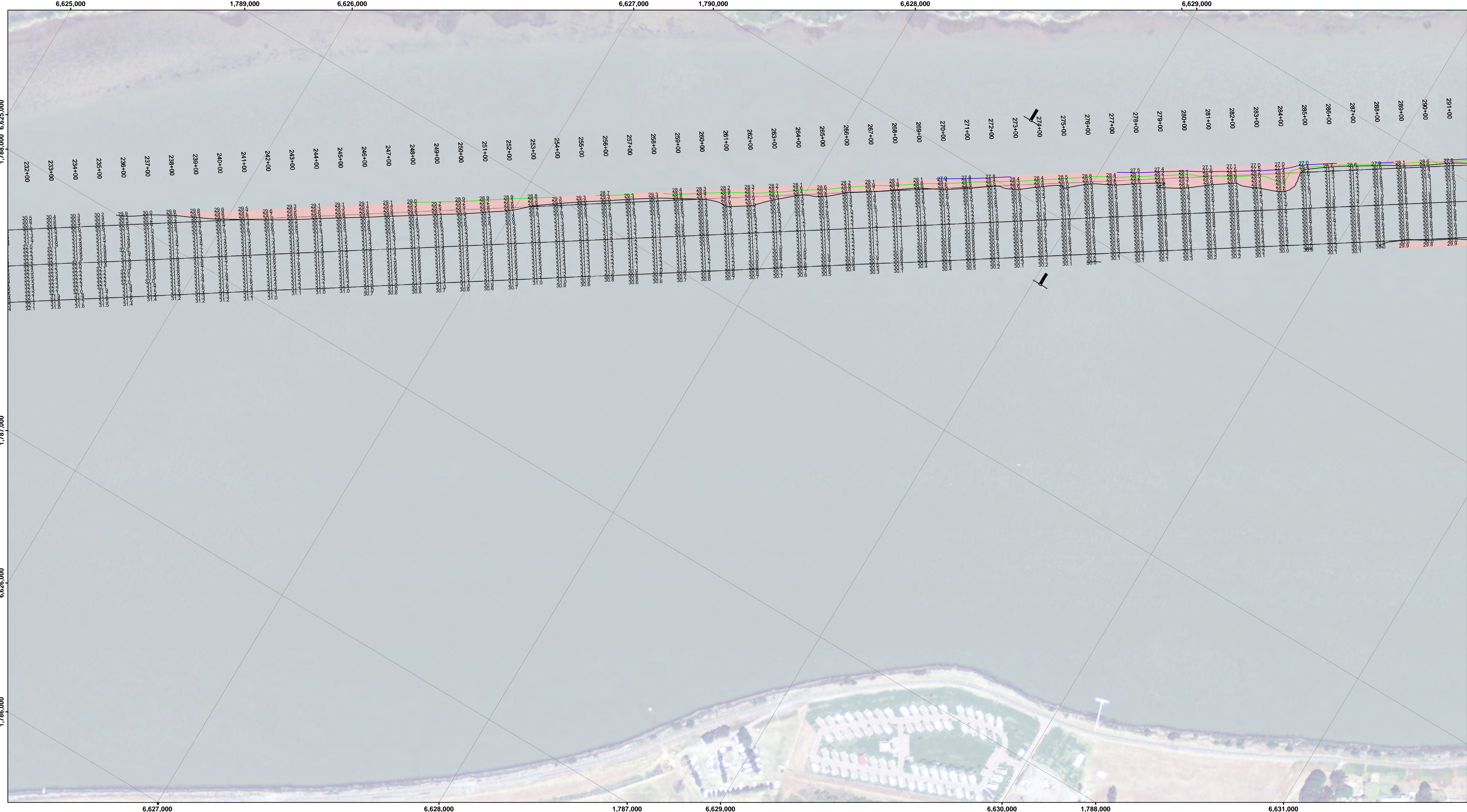
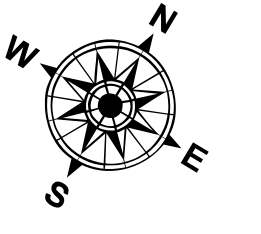
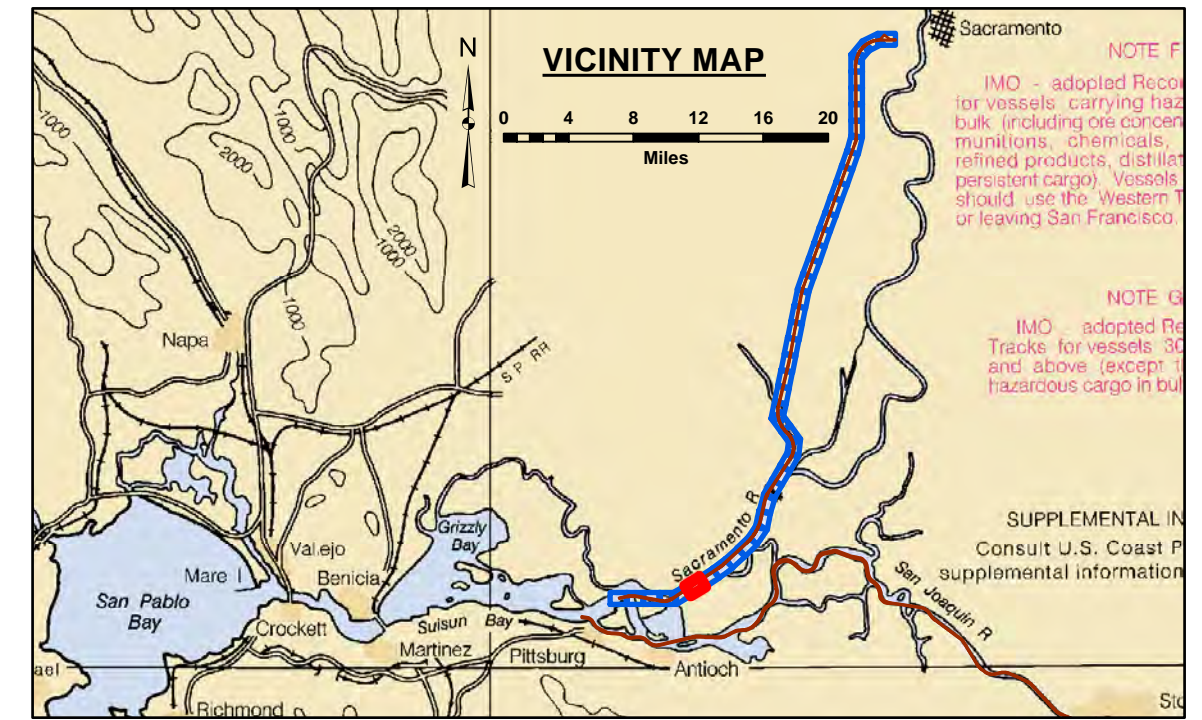


Table with columns: Prepared Under the Direction of, Surveyed By, Plotted By, Checked By, Chart Date, Designed By, Drawn By. Includes names like Travis J. Rayfield and dates like May 30, 2018.

CALIFORNIA SACRAMENTO RIVER CONDITION SURVEY 17-21 MAY 2018 SAN JOAQUIN COUNTY



LEGEND section containing symbols and descriptions for Federal Navigation Channel, Cable Area, Shoaling Area, Contours, Cable Submarine, Anchorage Area, Beacon, General, Cable Overhead, Obstruction Point, Red Navigation Buoy, Contour Line, Wrecks-Submerged, and Green Navigation Buoy.

NOTES: DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY... CONTROLS: LOCATION: RIO VISTA NOOA STATION: 9415316 BENCHMARK: 5316 B 1996 (NO PID) TIDE GAUGE: NAIL @ 8.2 FT MLLW METADATA: NAIL SET BY USACE 31 MARCH, 2014



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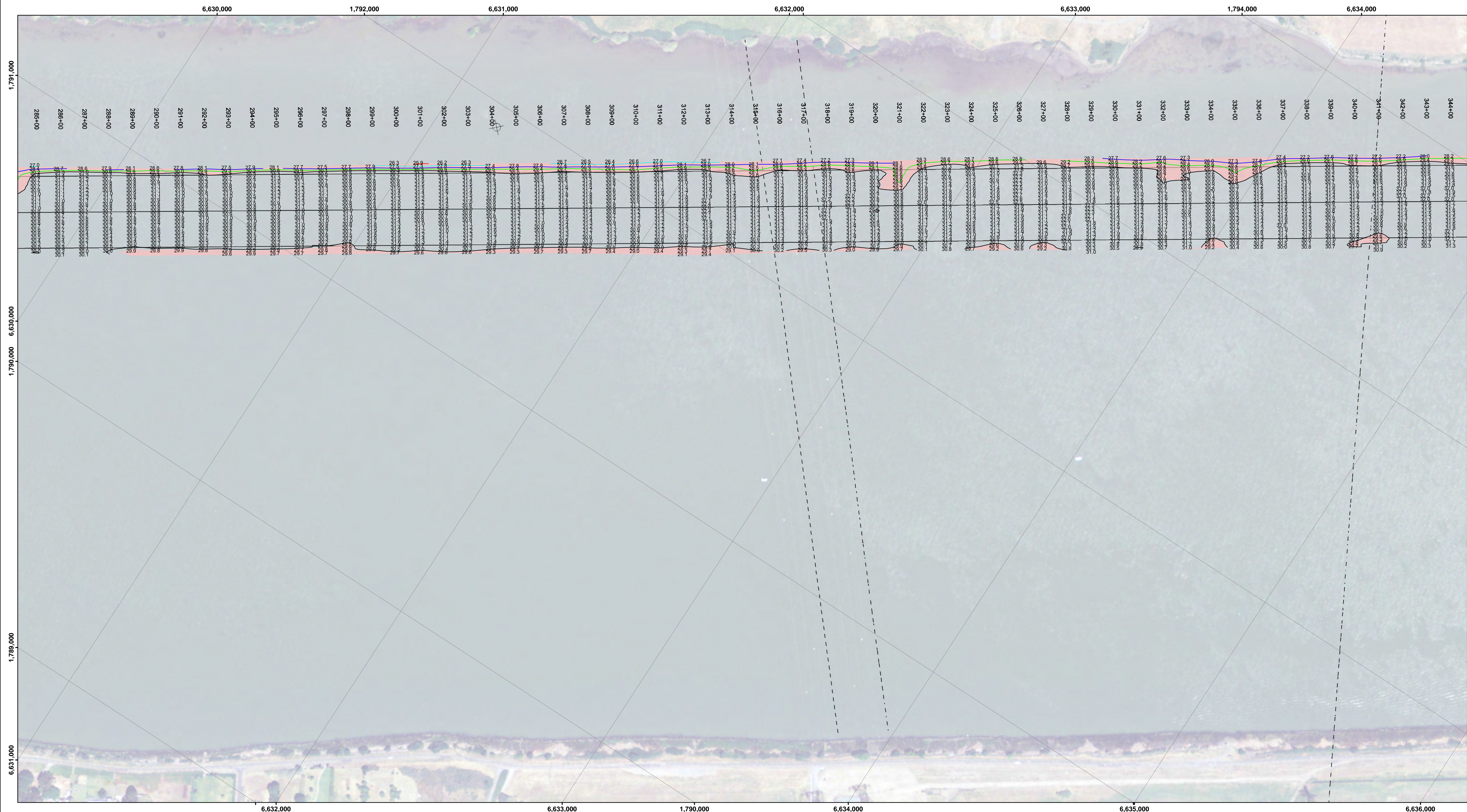
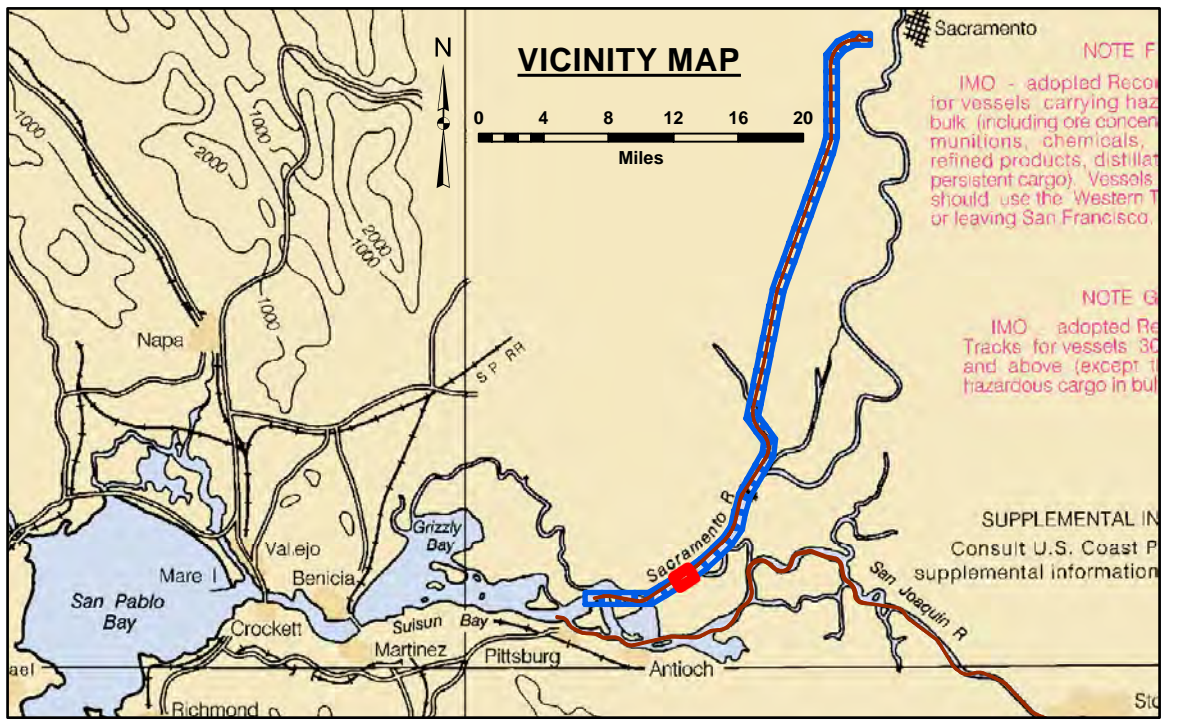


Table with columns: Surveyed By, Chart Date, Plotted By, Checked By, Drawn By. Includes names and dates for the survey project.

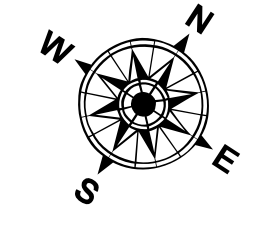
SACRAMENTO RIVER CONDITION SURVEY 17-21 MAY 2018. SAN JOAQUIN COUNTY CALIFORNIA

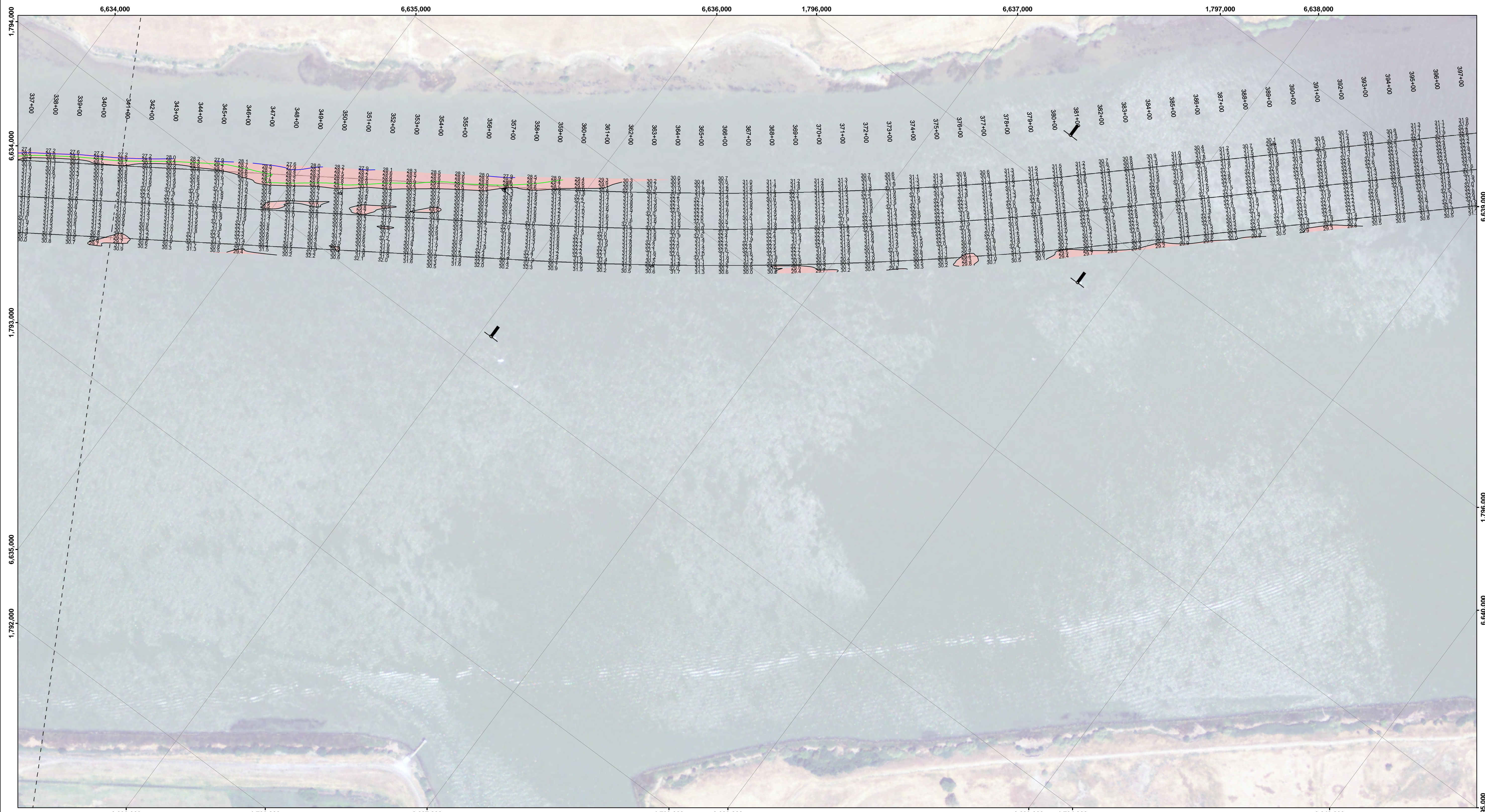


LEGEND section defining symbols for Federal Navigation Channel, Cable Area, Shoaling Area, Contours, and other features.

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CONTROLS: LOCATION: RIO VISTA. NOOA STATION: 9415316. BENCHMARK: 5316 B 1996 (NO PID). TIDE GAUGE: NAIL @ 8.2 FT MLLW.

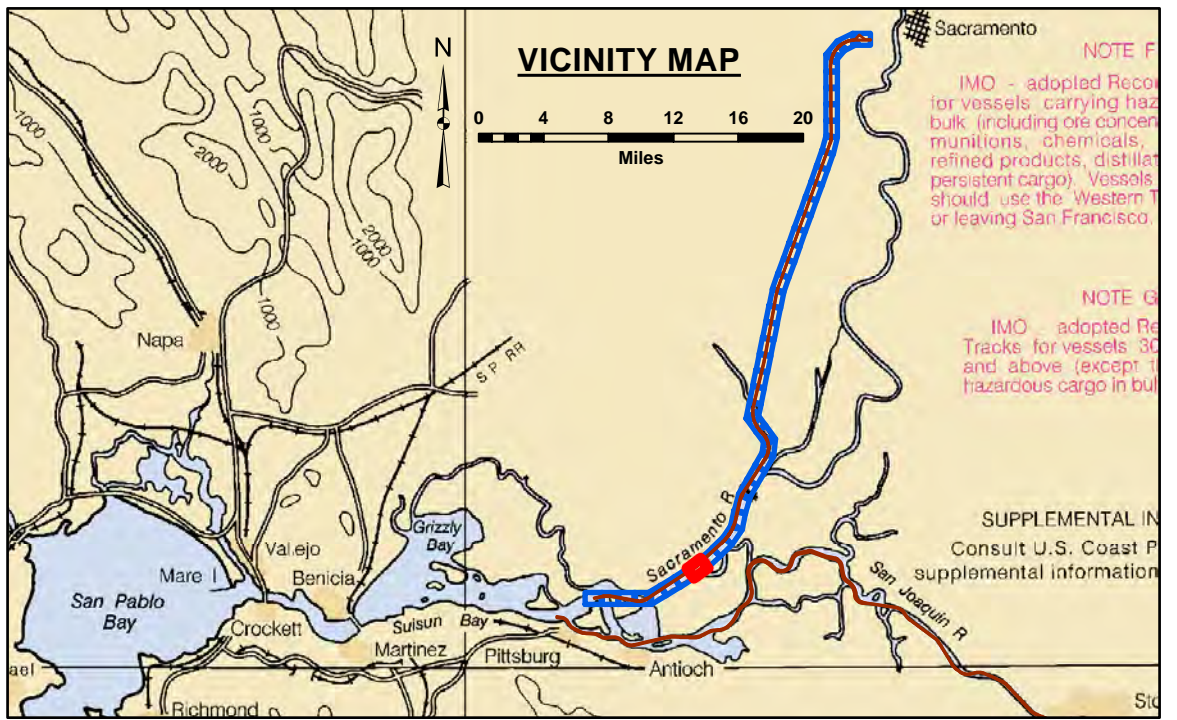




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Chart Date:	May 30, 2018
Designed By:	PDT
Drawn By:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

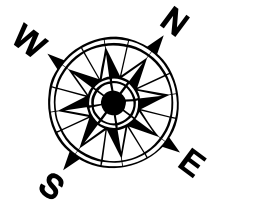


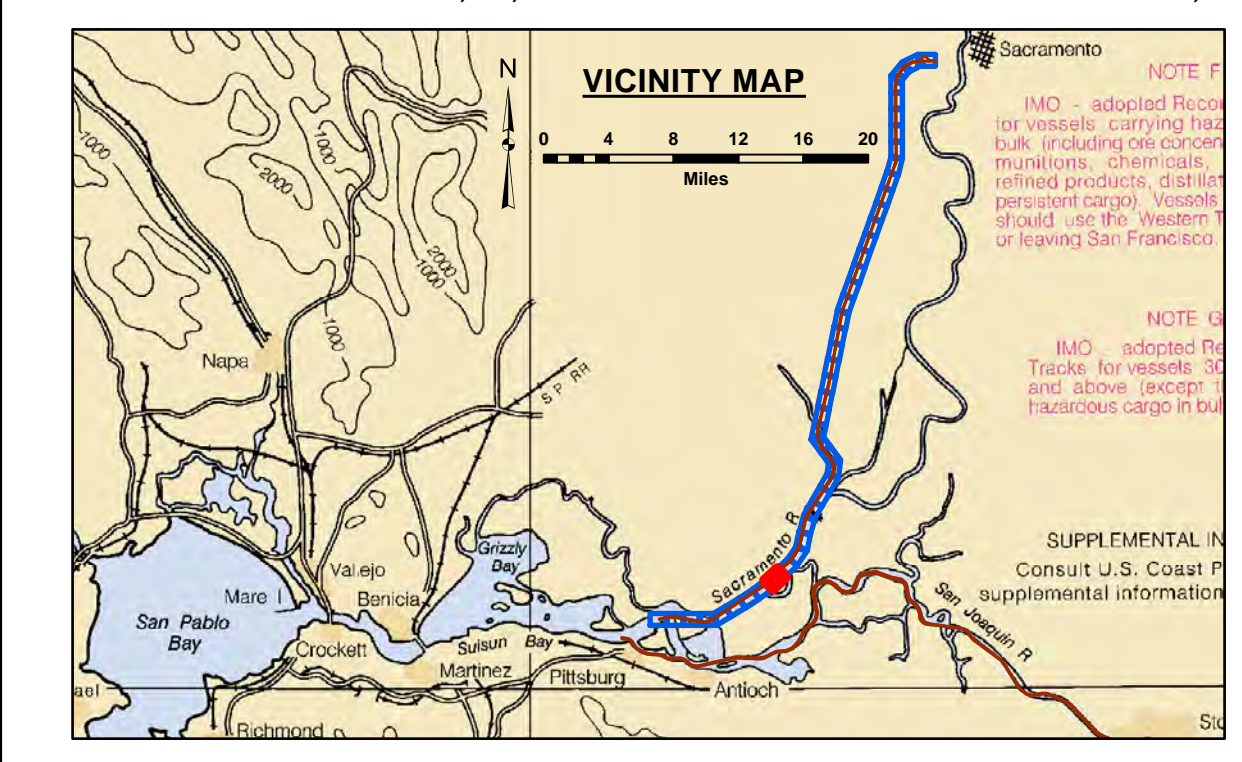
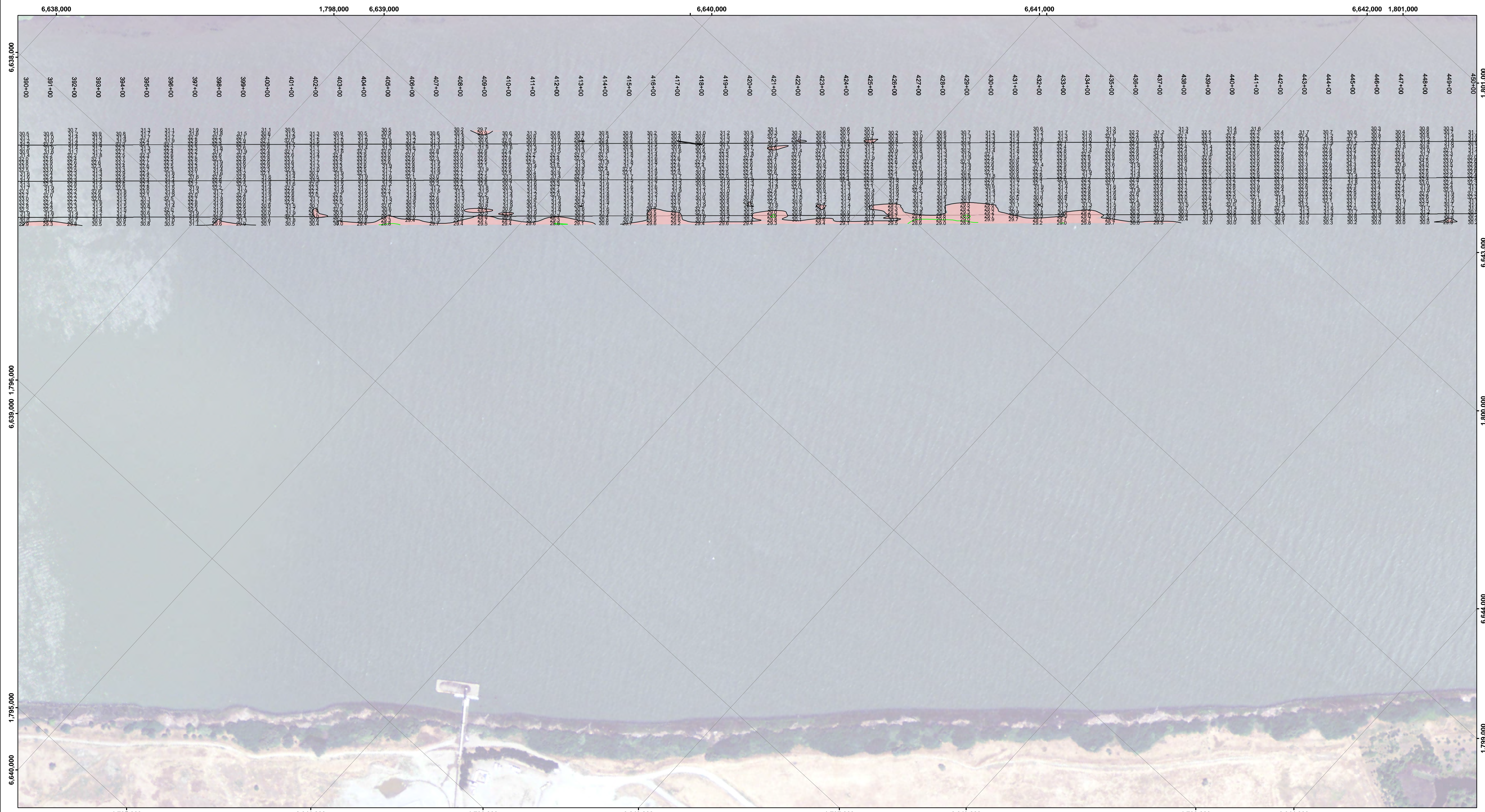
LEGEND		
--- Federal Navigation Channel	Cable Area	Shoaling Area
— Federal Navigation Center Line	Placement Area	Shoalest Sounding**
..... Cable Submarine	Anchorage Area	Beacon, General
- - - Cable Overhead	Obstruction Point	Red Navigation Buoy
— Contour Line	Wrecks-Submerged	Green Navigation Buoy

Contours	
	-30
	-29
	-28
	-27
	-26

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Feet
0 400 800 1,200

LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
⋯ Cable Submarine	⊠ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
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SOUNDINGS ARE BASED ON THE DATUM OF MEAN LOWER LOW WATER AT THE LOCALITY.
NORTH AMERICAN DATUM OF 1983 (NAD83), PROJECTED TO THE STATE PLANE COORDINATE SYSTEM (SPCS), CA ZONE II (0402). DISTANCE UNITS IN U.S. SURVEY FEET.
PLANE GRID AND COORDINATES ARE BASED ON LAMBERT PROJECTION, NAD 83, ZONE II CALIFORNIA AS DESCRIBED IN SPECIAL PUBLICATION NO. 235, PUBLISHED BY THE NATIONAL OCEAN SURVEY.
PROJECT DEPTH: -30'
VERTICAL DATUM: MLLW
THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 5415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014
LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 5416131
BENCHMARK: POWS1 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
METADATA: NAIL SET BY USACE 8 APRIL, 2014
ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.



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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	TRAVIS J. RAYFIELD
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

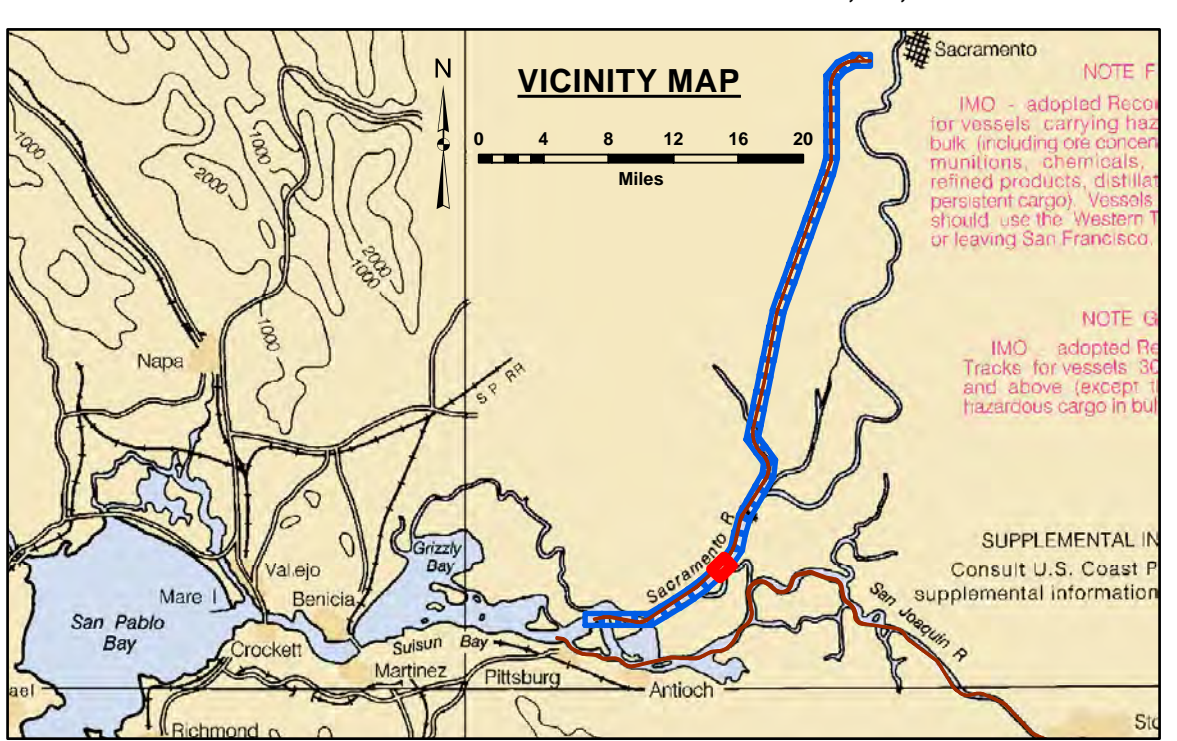
Sheet Reference Number
9 of 45



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Drawn by:	PDT
Surveyed By:	Travis J. Rayfield
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



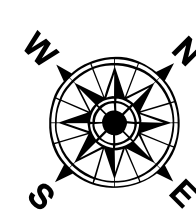
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--- Federal Navigation Channel	▨ Cable Area	— -30	— -29
— Federal Navigation Center Line	□ Placement Area	— -28	— -27
..... Cable Submarine	▭ Anchorage Area	— -26	
- - - Cable Overhead	⊗ Obstruction Point		
— Contour Line	✈ Wrecks-Submerged		
	● Shoalest Sounding**		
	⬇ Beacon, General		
	♦ Red Navigation Buoy		
	◆ Green Navigation Buoy		

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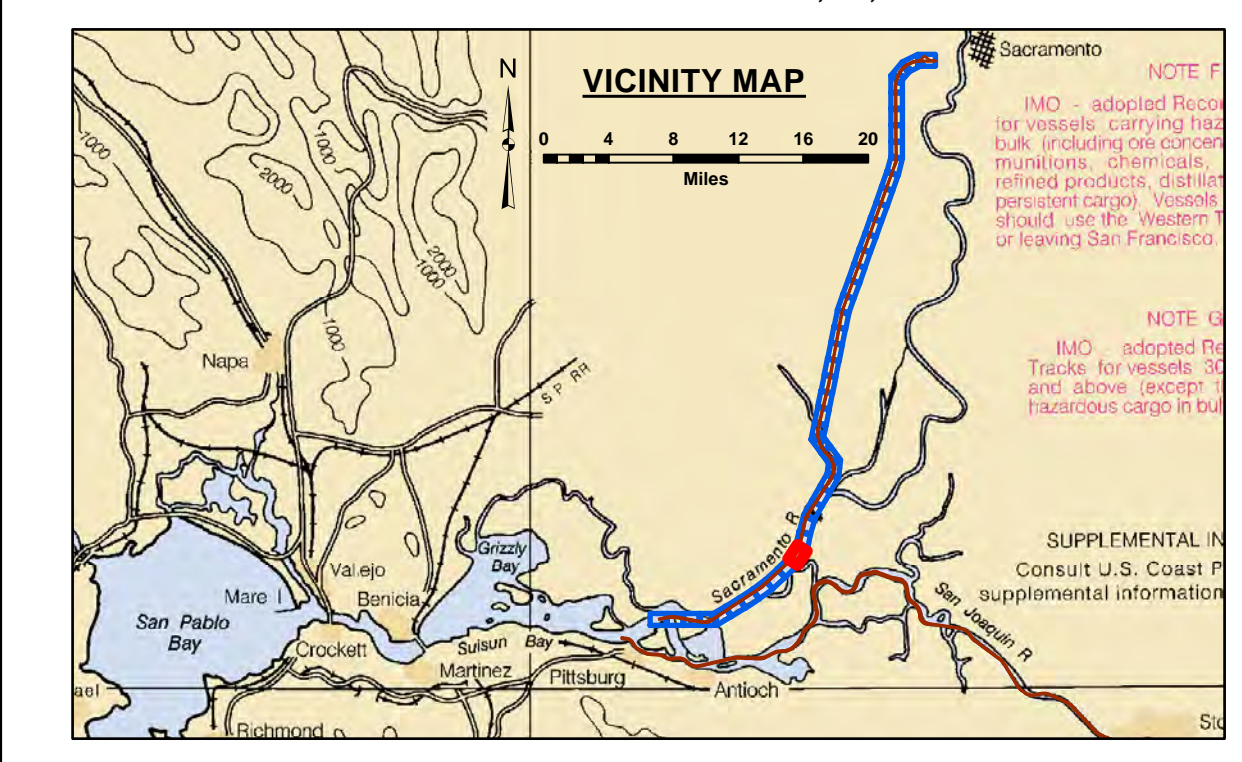
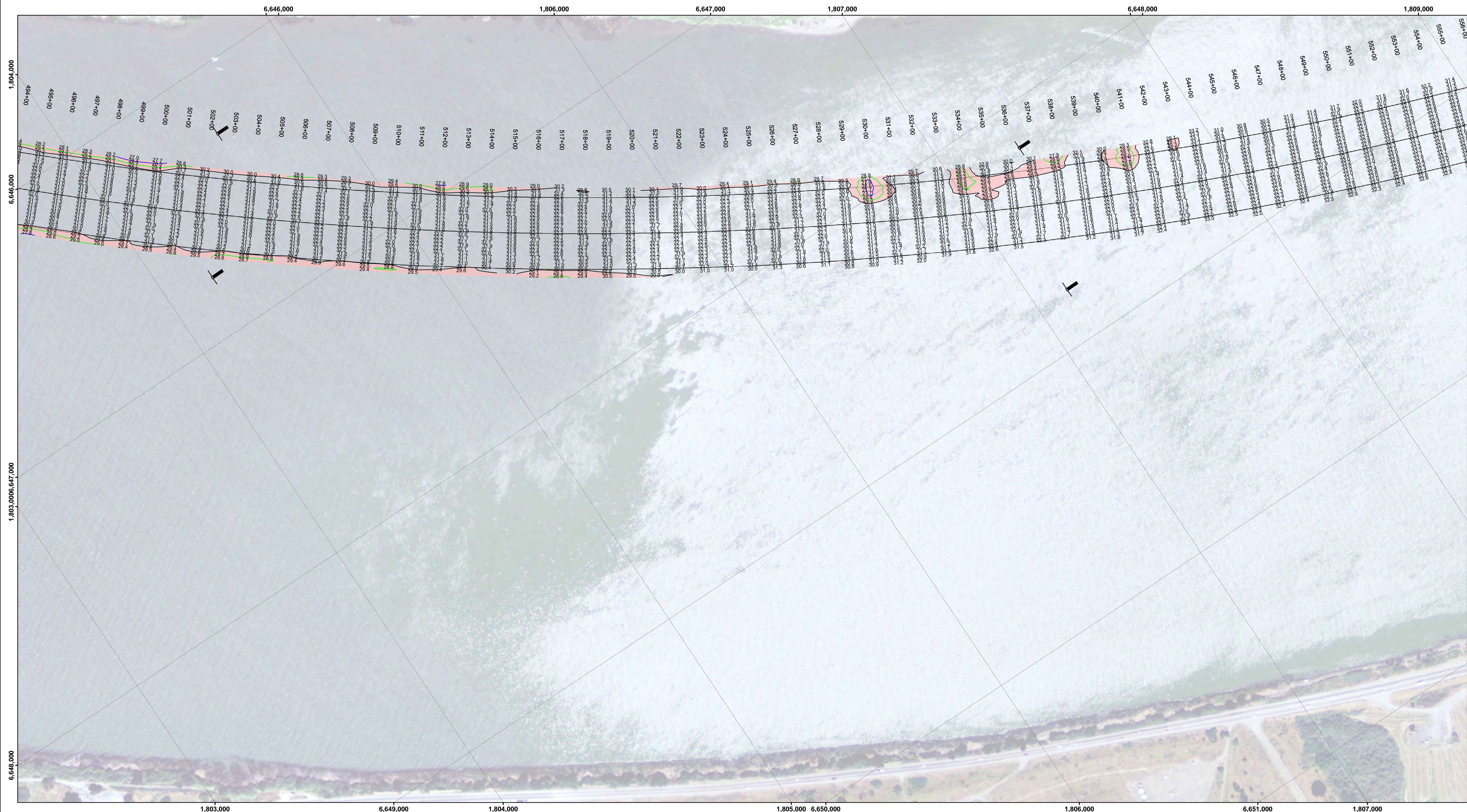
LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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Feet
0 400 800 1,200

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy	— -27
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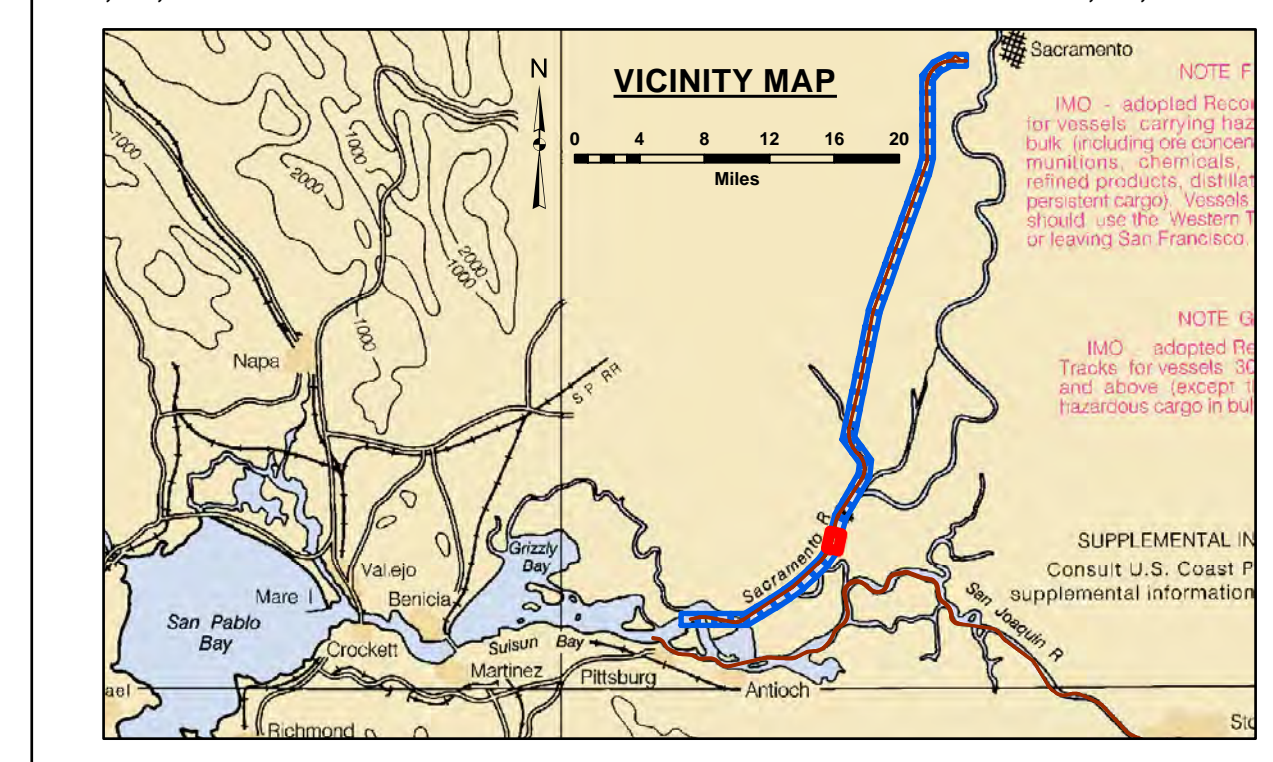
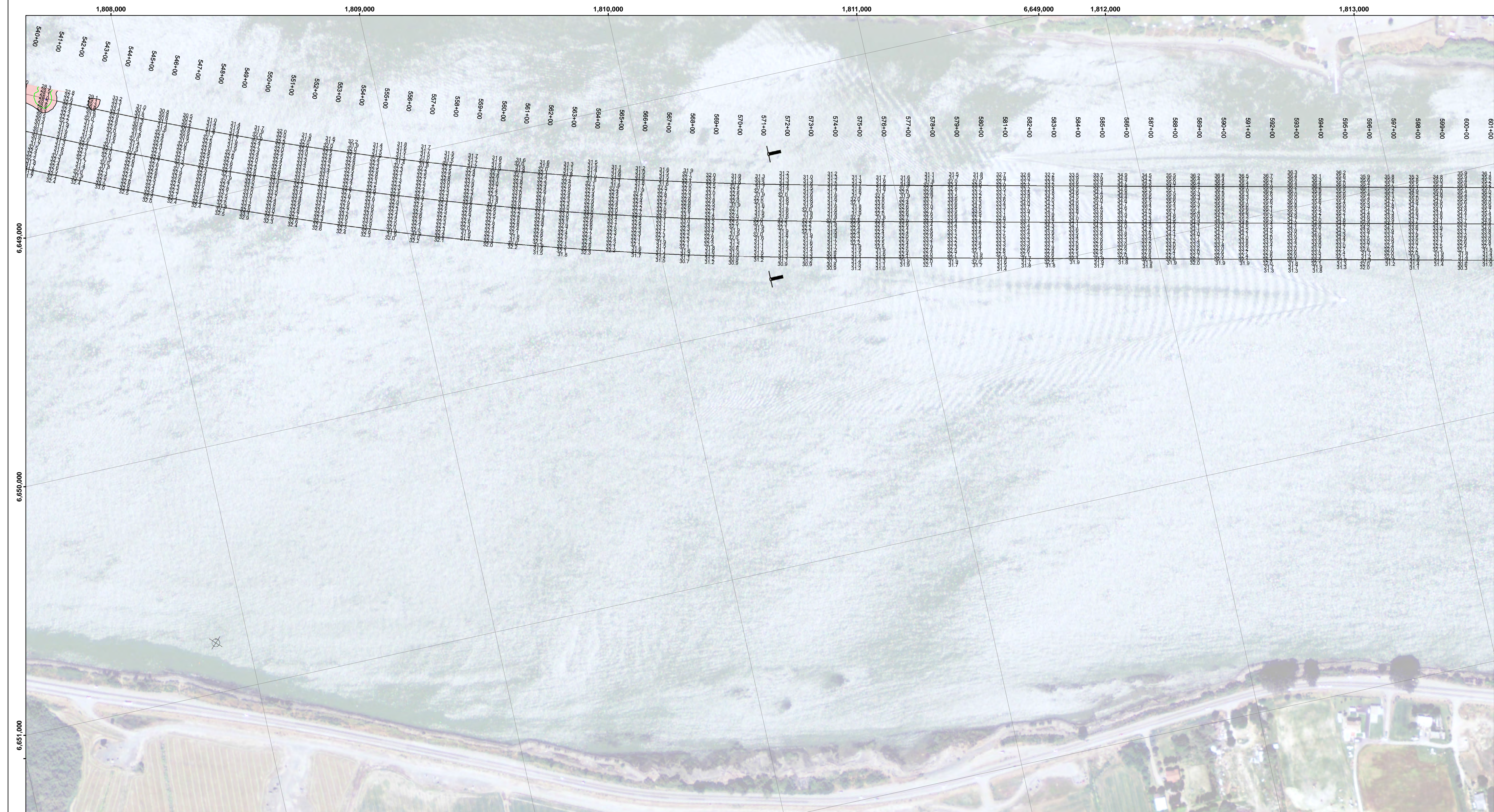
LOCATION: PORT OF WEST SACRAMENTO
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 BENCHMARK: POWS1 (NO PID)
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 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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PREPARED UNDER THE DIRECTION OF TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: _____	Chart Date: May 30, 2018
Stippled: Hydro Survey Team Leader	Plotted By: PDT	Designed by: _____
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: _____
Approved: Chief, Construction Branch		PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

Sheet Reference Number
11 of 45



0 400 800 1,200
Feet

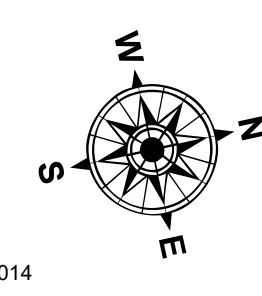
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▭ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✈ Wrecks-Submerged	— -26	
	● Shoalest Sounding**		
	⊥ Beacon, General		
	◆ Red Navigation Buoy		
	◆ Green Navigation Buoy		

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PROJECT DEPTH: -30'
VERTICAL DATUM: MLLW
THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 8415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 8416131
BENCHMARK: POWS1 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
METADATA: NAIL SET BY USACE 8 APRIL, 2014

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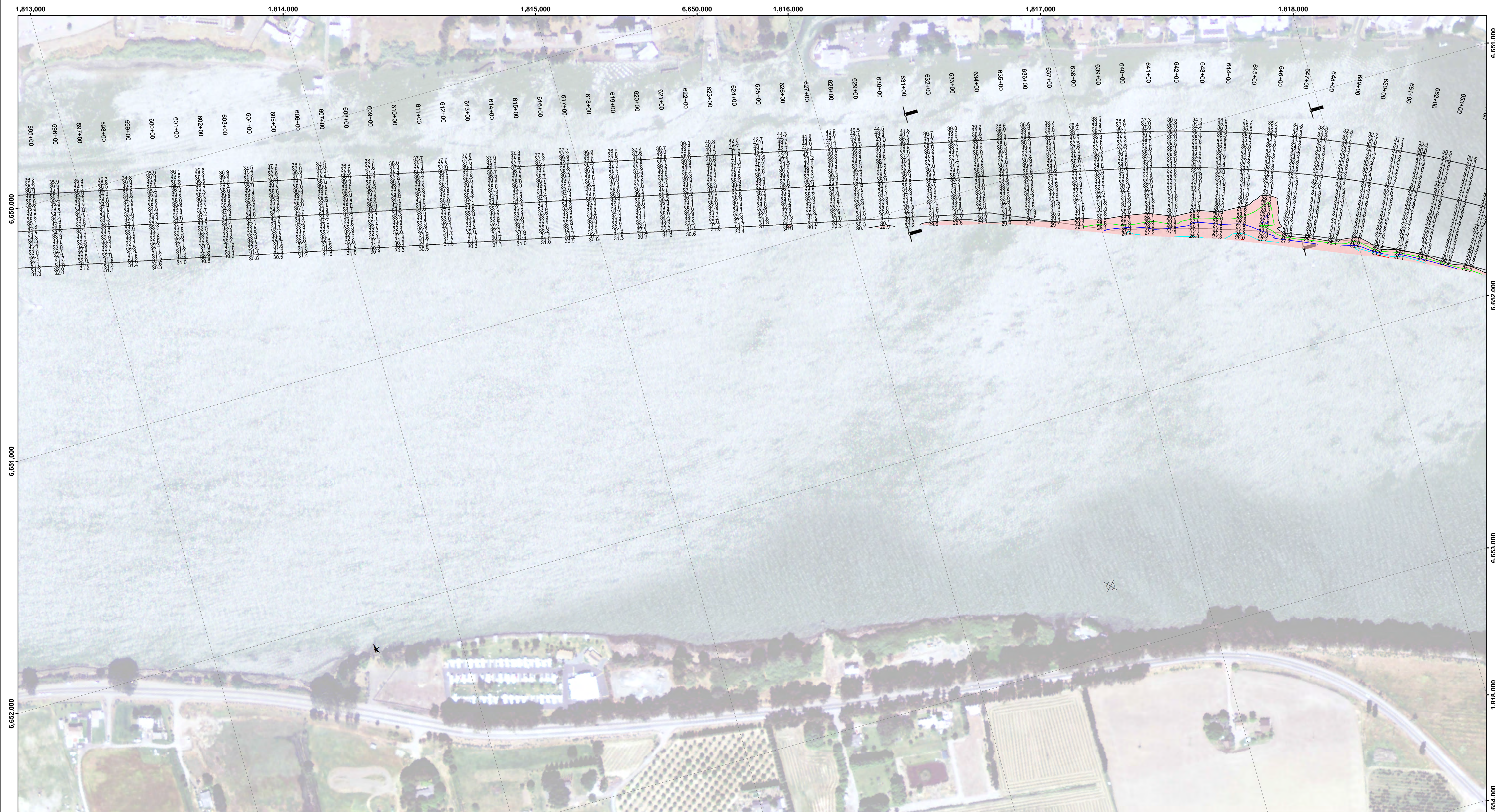
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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Survised By: Hydro Survey Team Leader	Designed By: PDT
Plotted By: PDT	Drawn By: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT
Approved: Chief, Construction Branch	

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

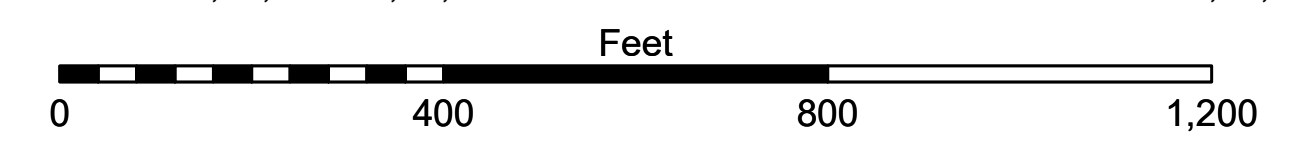
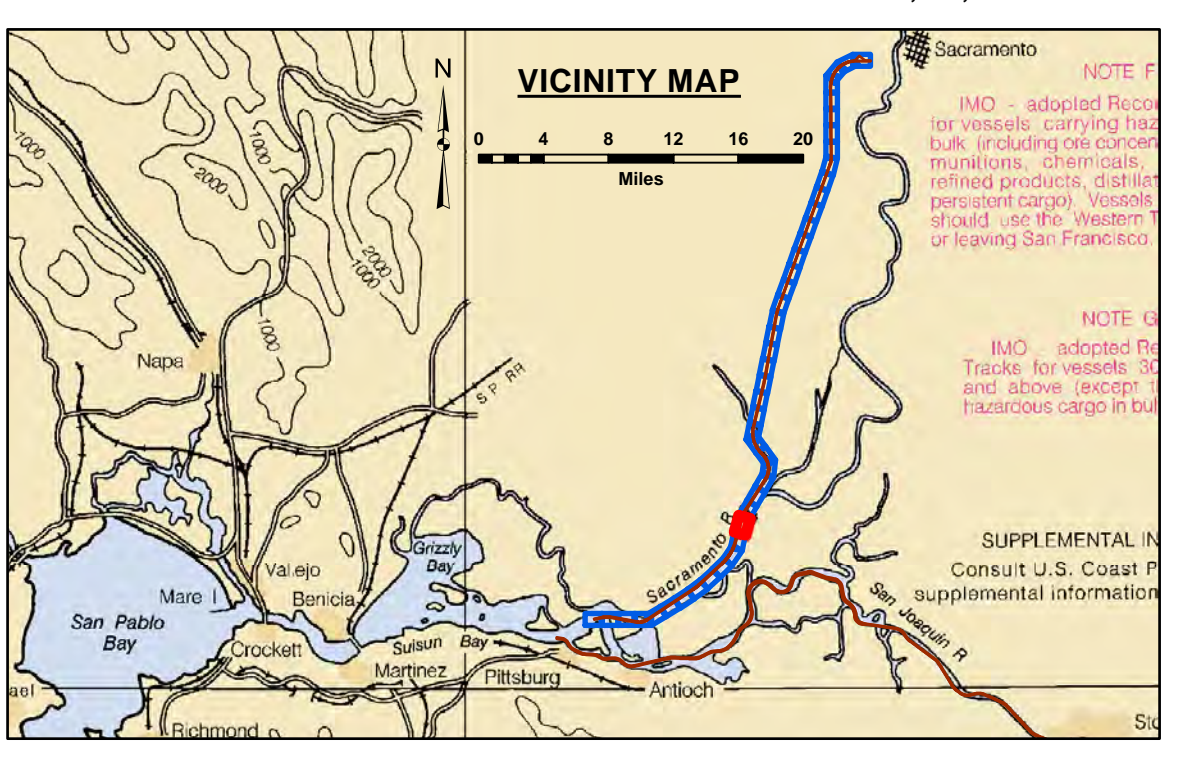
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12 of 45



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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: May 30, 2018
Stippled: Hydro Survey Team Leader	Plotted By: PDT	Designed by:
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
 SAN JOAQUIN COUNTY



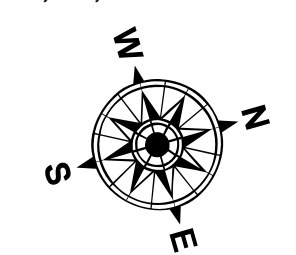
LEGEND			Contours	
--- Federal Navigation Channel	▨ Cable Area	▨ Shoaling Area	— -30	
— Federal Navigation Center Line	▭ Placement Area	● Shoalest Sounding**	— -29	
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -28	
- - - Cable Overhead	⊗ Obstruction Point	♦ Red Navigation Buoy	— -27	
— Contour Line	✦ Wrecks-Submerged	♦ Green Navigation Buoy	— -26	

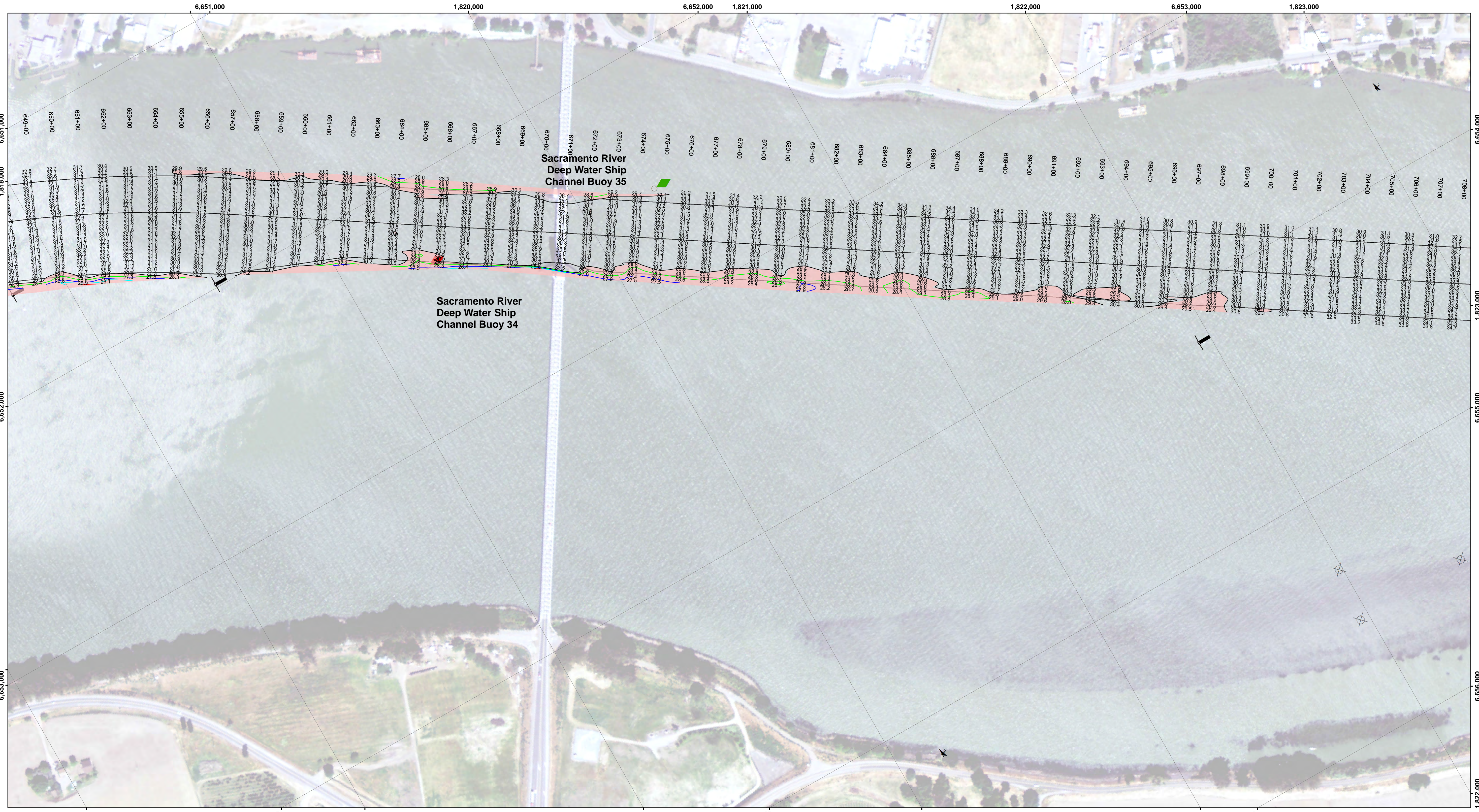
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 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
 THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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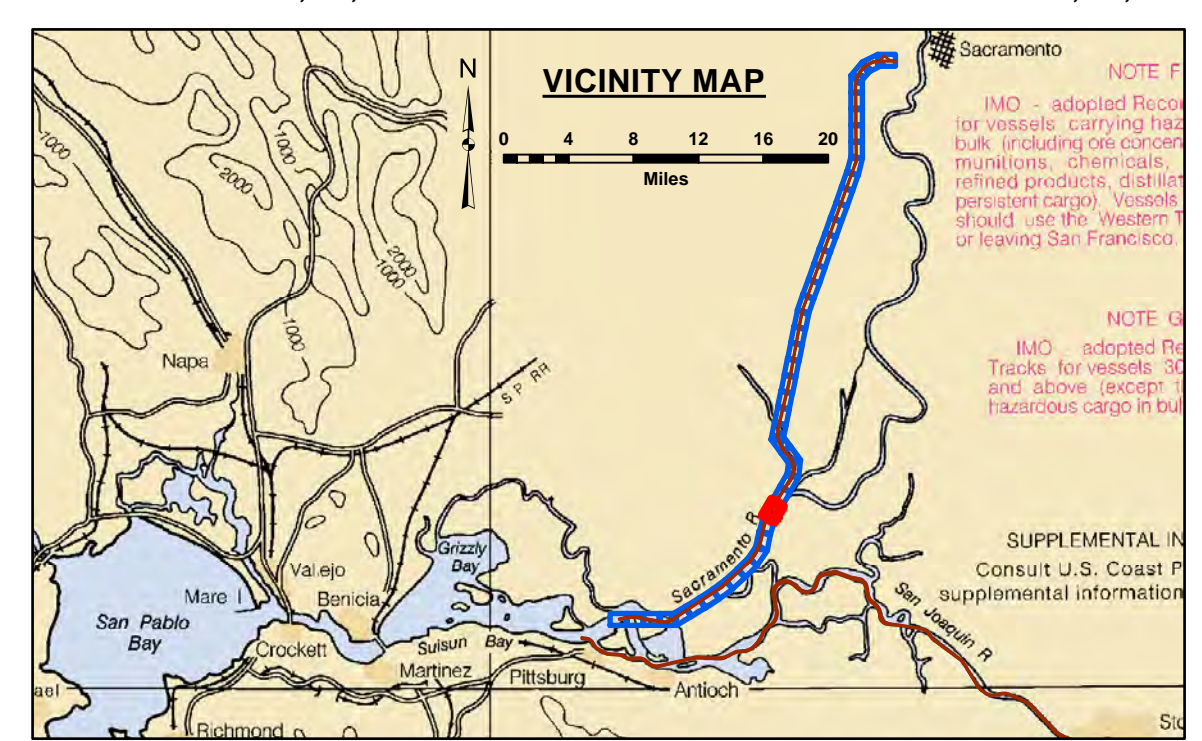




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PREPARED UNDER THE DIRECTION OF TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Survised By: _____	Designed by: _____
Plotted By: PDT	Drawn by: PDT
Recommended: _____	Checked by: PDT
Approved: Chief, Hydro Survey Section	Drawn by: PDT
Chief, Construction Branch	

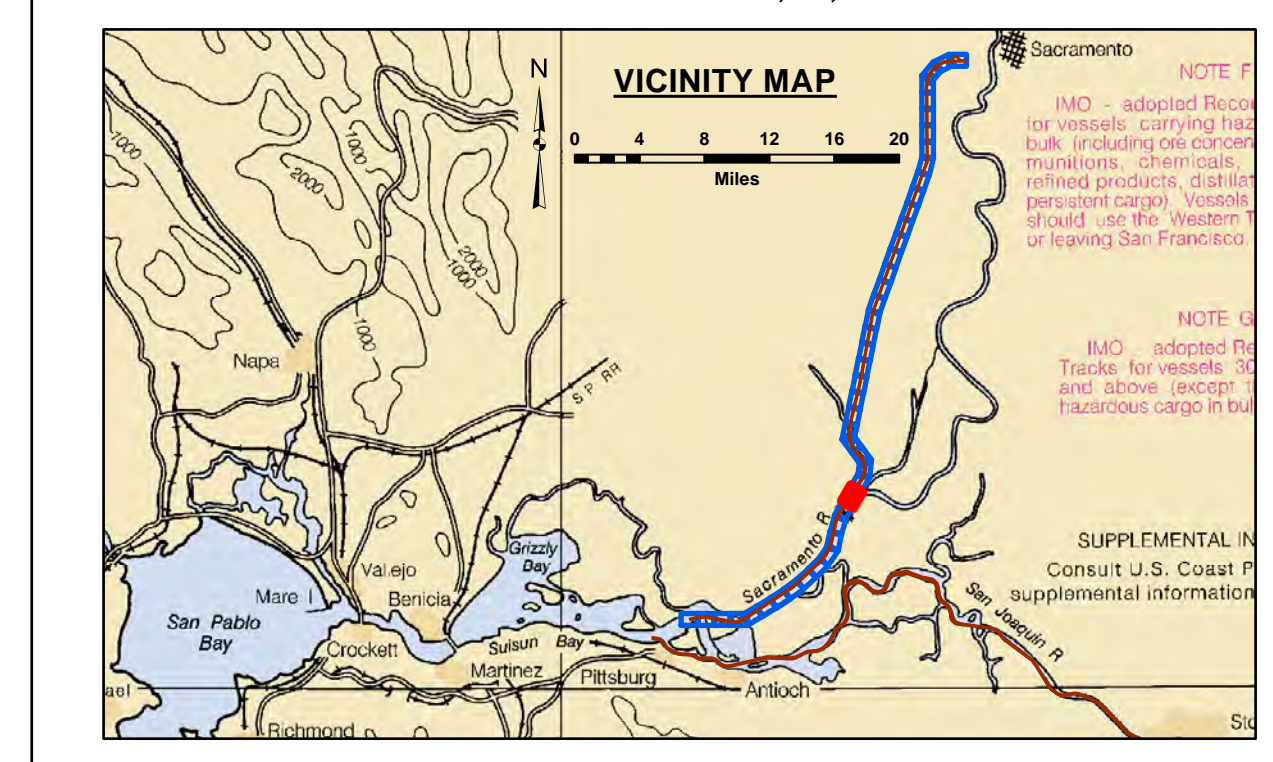
CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018



LEGEND		Contours	
--- Federal Navigation Channel	[Hatched Box] Cable Area	[Pink Box] Shoaling Area	— -30
— Federal Navigation Center Line	[White Box] Placement Area	[Yellow Dot] Shoalest Sounding**	— -29
..... Cable Submarine	[Dashed Box] Anchorage Area	[T Flag] Beacon, General	— -28
--- Cable Overhead	[Crossed Box] Obstruction Point	[Red Diamond] Red Navigation Buoy	— -27
— Contour Line	[Star] Wrecks-Submerged	[Green Diamond] Green Navigation Buoy	— -26

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Feet
0 400 800 1,200

LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▭ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
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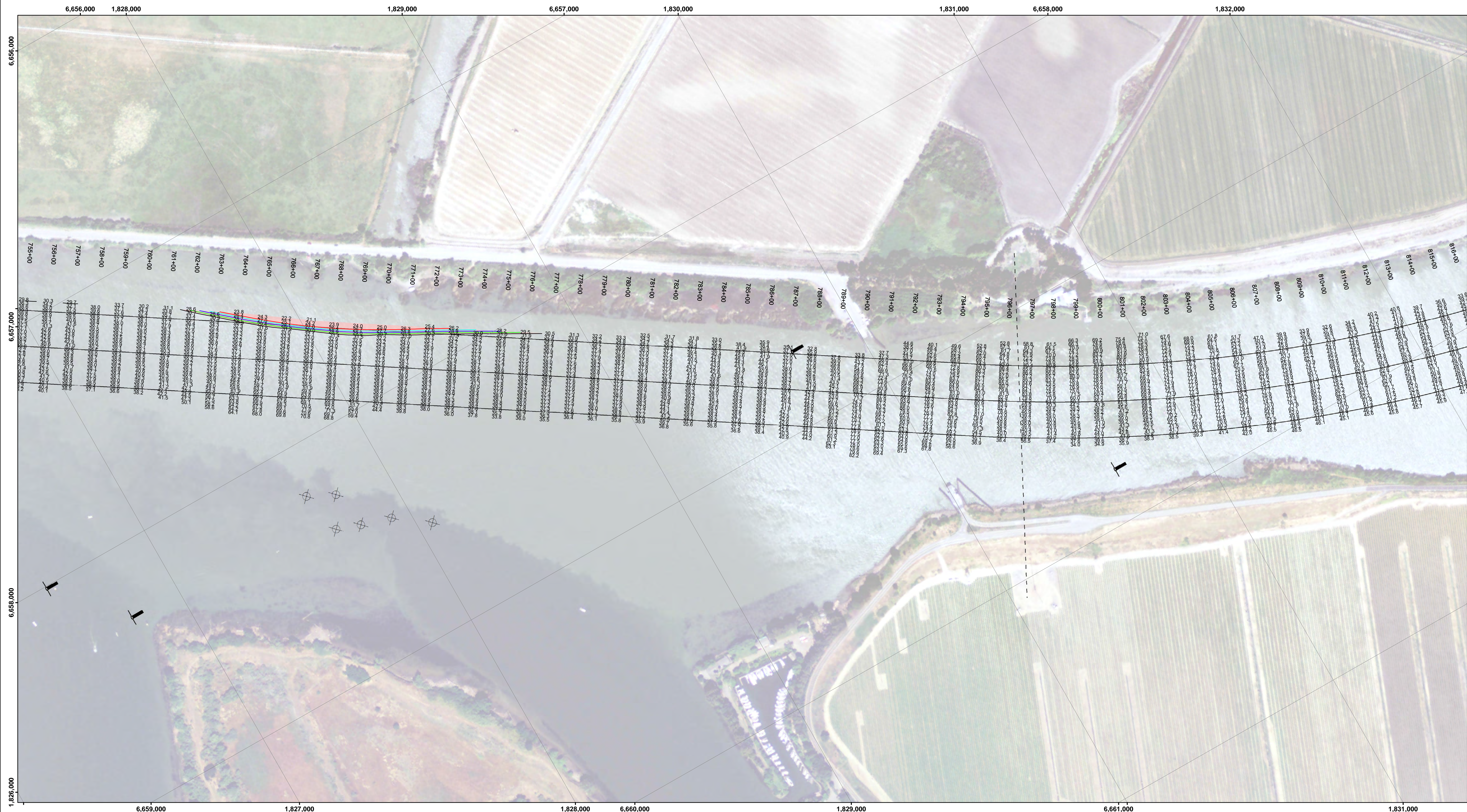


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Chart Date:	May 30, 2018
Prepared Under the Direction of:	TRAVIS J. RAYFIELD
Surgeon:	Hydro Survey Team Leader
Recommended:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

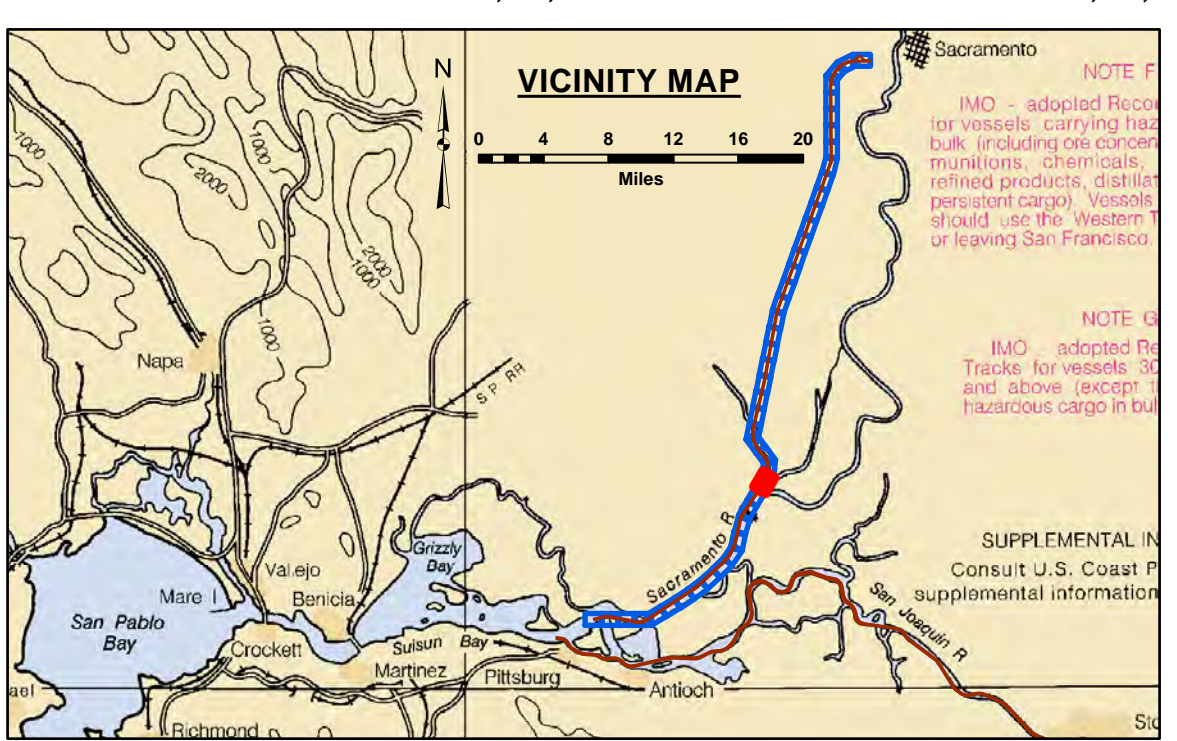
CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
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Survised By: _____	Designed by: _____
Plotted By: PDT	Drawn by: PDT
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Approved: Chief, Construction Branch	



0 400 800 1,200 Feet

LEGEND

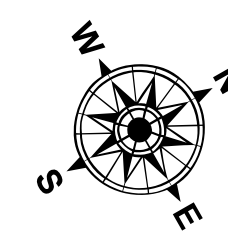
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
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 TIDE GAUGE: NAIL @ 8.2 FT MLLW
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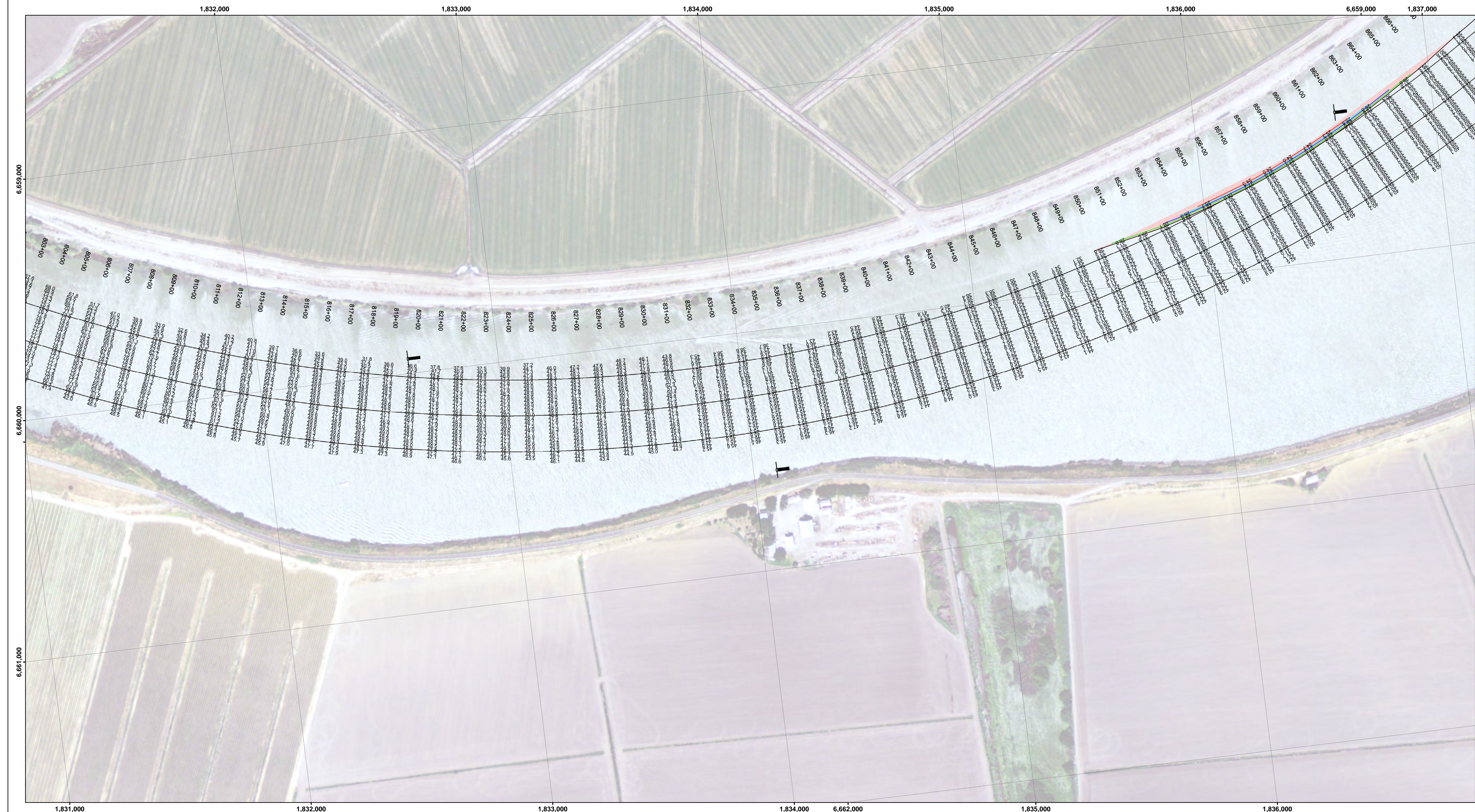
LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

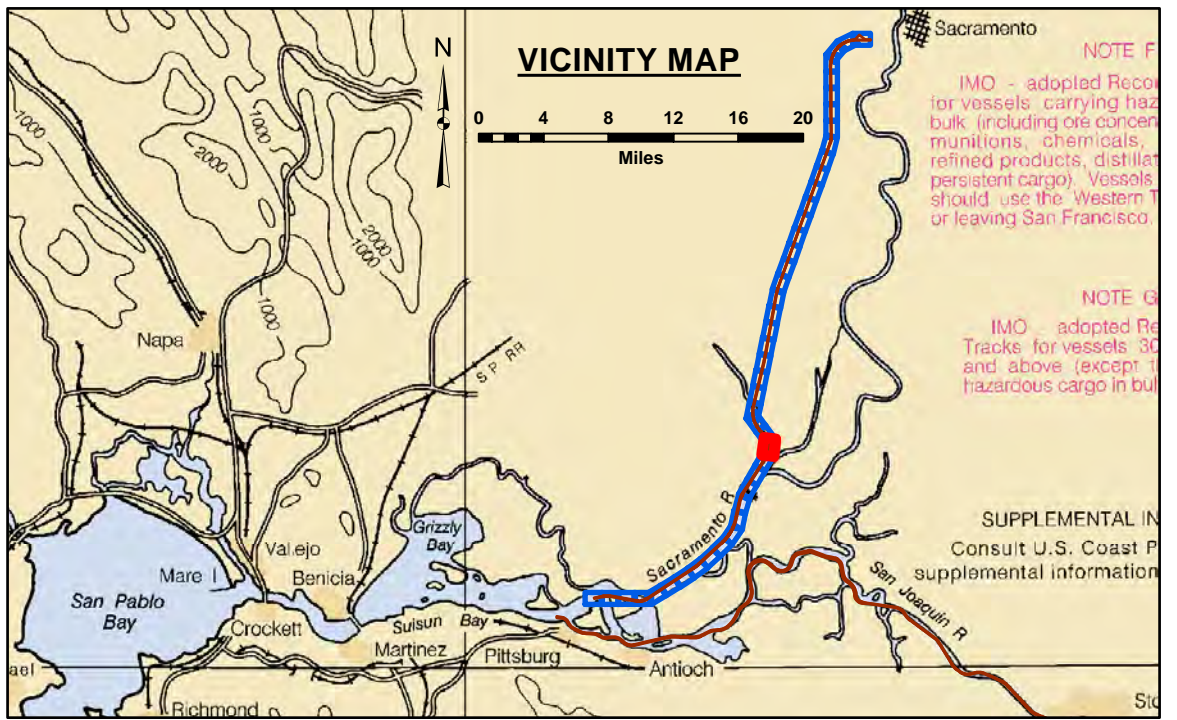
Sheet Reference Number
16 of 45



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Prepared Under the Direction of: TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Surveyed By: Hydro Survey Team Leader	Designed by: PDT
Plotted By: PDT	Checked By: PDT
Recommended: Chief, Hydro Survey Section	Drawn by: PDT
Approved: Chief, Construction Branch	

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



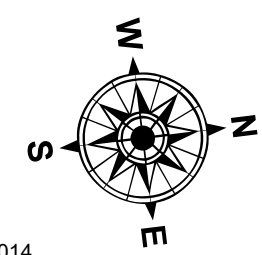
LEGEND			Contours	
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— -30	
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29	
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -28	
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -27	
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy	— -26	

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 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
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CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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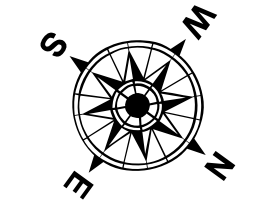
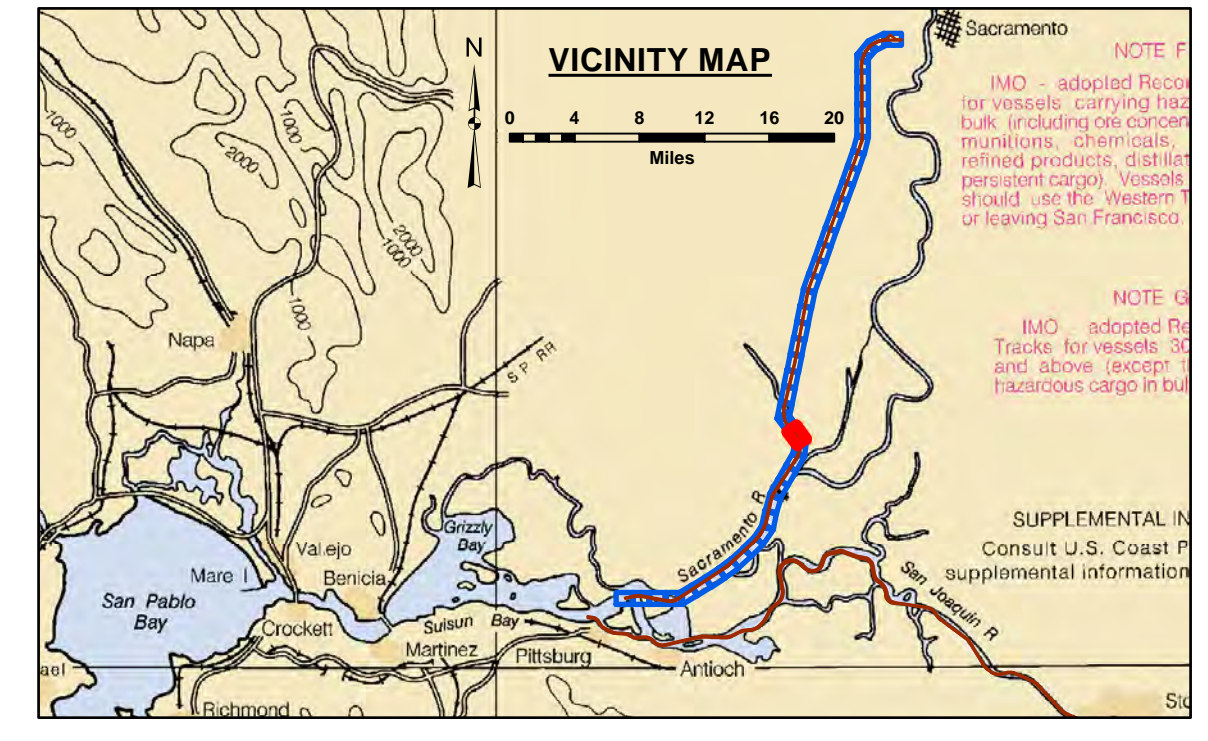
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Survised By: _____	Designed By: _____
Plotted By: PDT	Drawn By: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT
Approved: Chief, Construction Branch	



LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▨ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✦ Wrecks-Submerged	— -26	
	● Shoalest Sounding**		
	⬇ Beacon, General		
	◆ Red Navigation Buoy		
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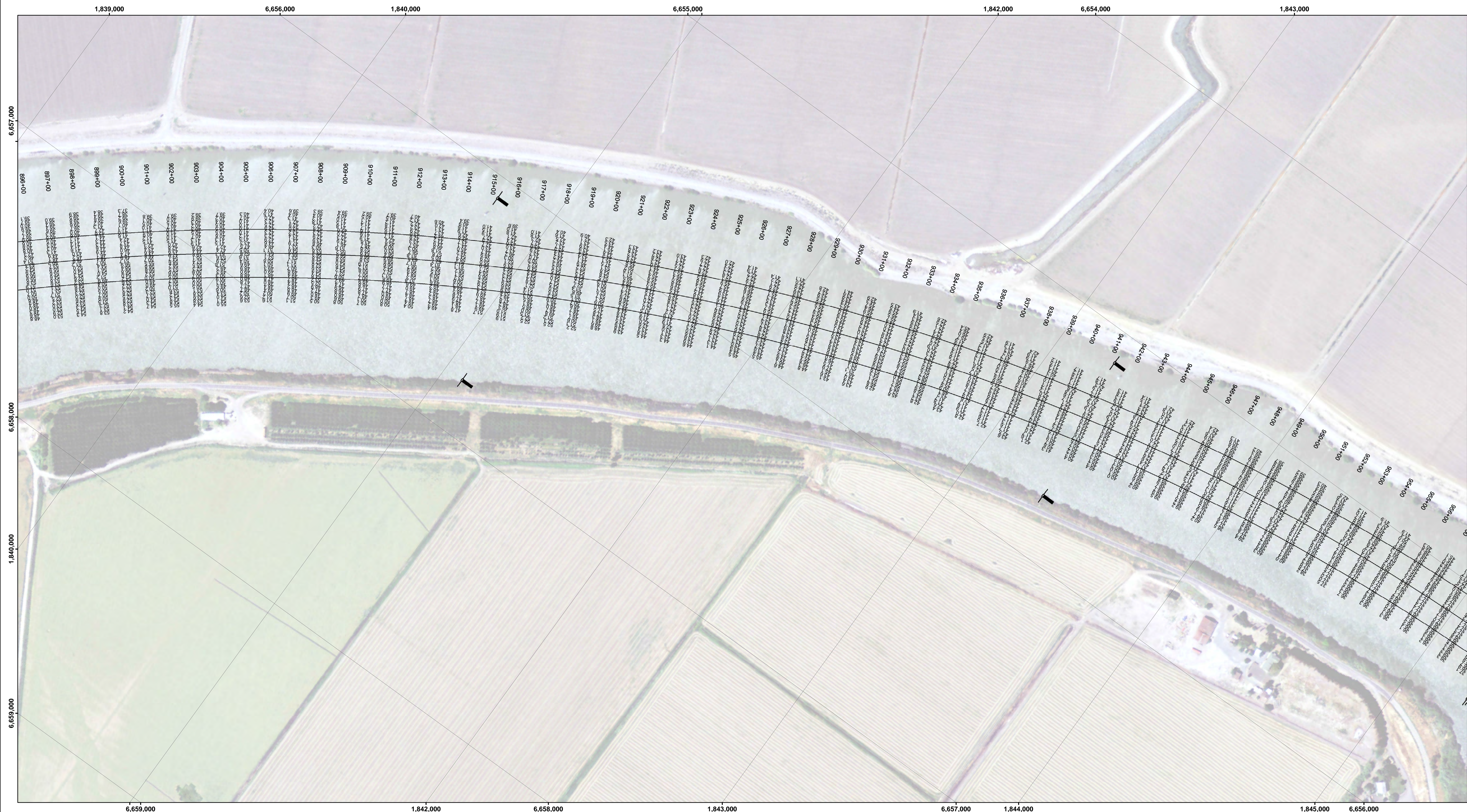
CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 8415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 8416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

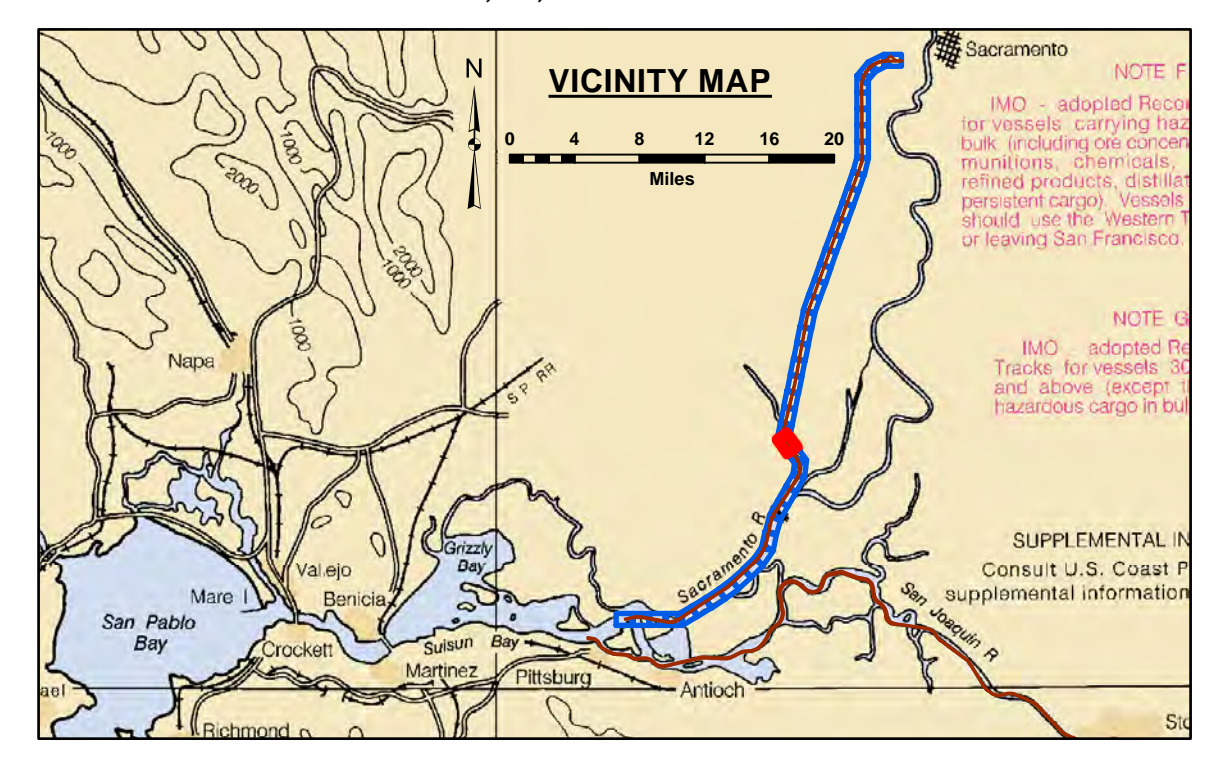
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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Surveyed By: _____	Designed by: _____
Plotted By: PDT	Drawn by: PDT
Recommended: Chief, Hydro Survey Section	Checked by: PDT
Approved: Chief, Construction Branch	

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



0 400 800 1,200 Feet

LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	
— Federal Navigation Center Line	□ Placement Area	— -29	
..... Cable Submarine	▭ Anchorage Area	— -28	
- - - Cable Overhead	⊗ Obstruction Point	— -27	
— Contour Line	✦ Wrecks-Submerged	— -26	
	● Shoalest Sounding**		
	⬇ Beacon, General		
	◆ Red Navigation Buoy		
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	■ Shoaling Area		

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CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
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 BENCHMARK: POWS1 (NO PID)
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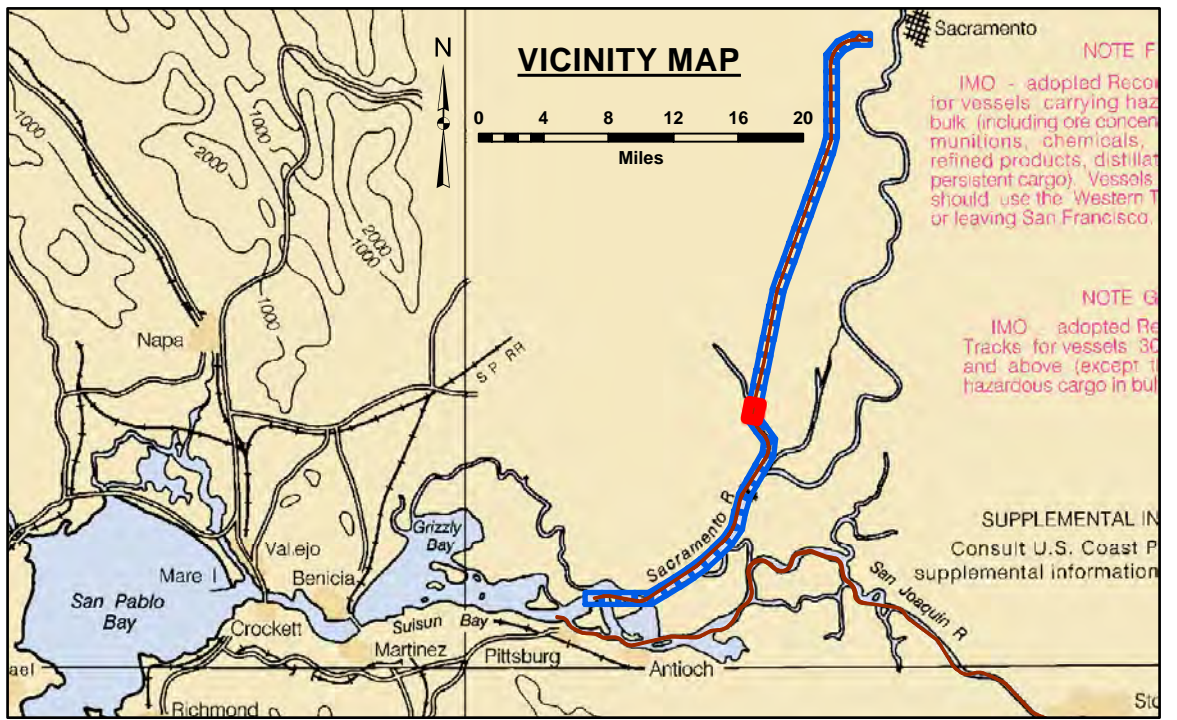
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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Surgeon: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked by: PDT
Approved: Chief, Construction Branch	Drawn by: PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



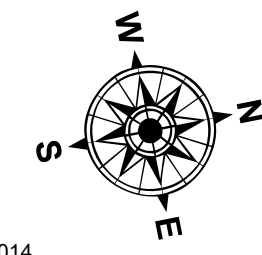
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--- Federal Navigation Channel	▨ Cable Area	● Shoaling Area	— -30
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29
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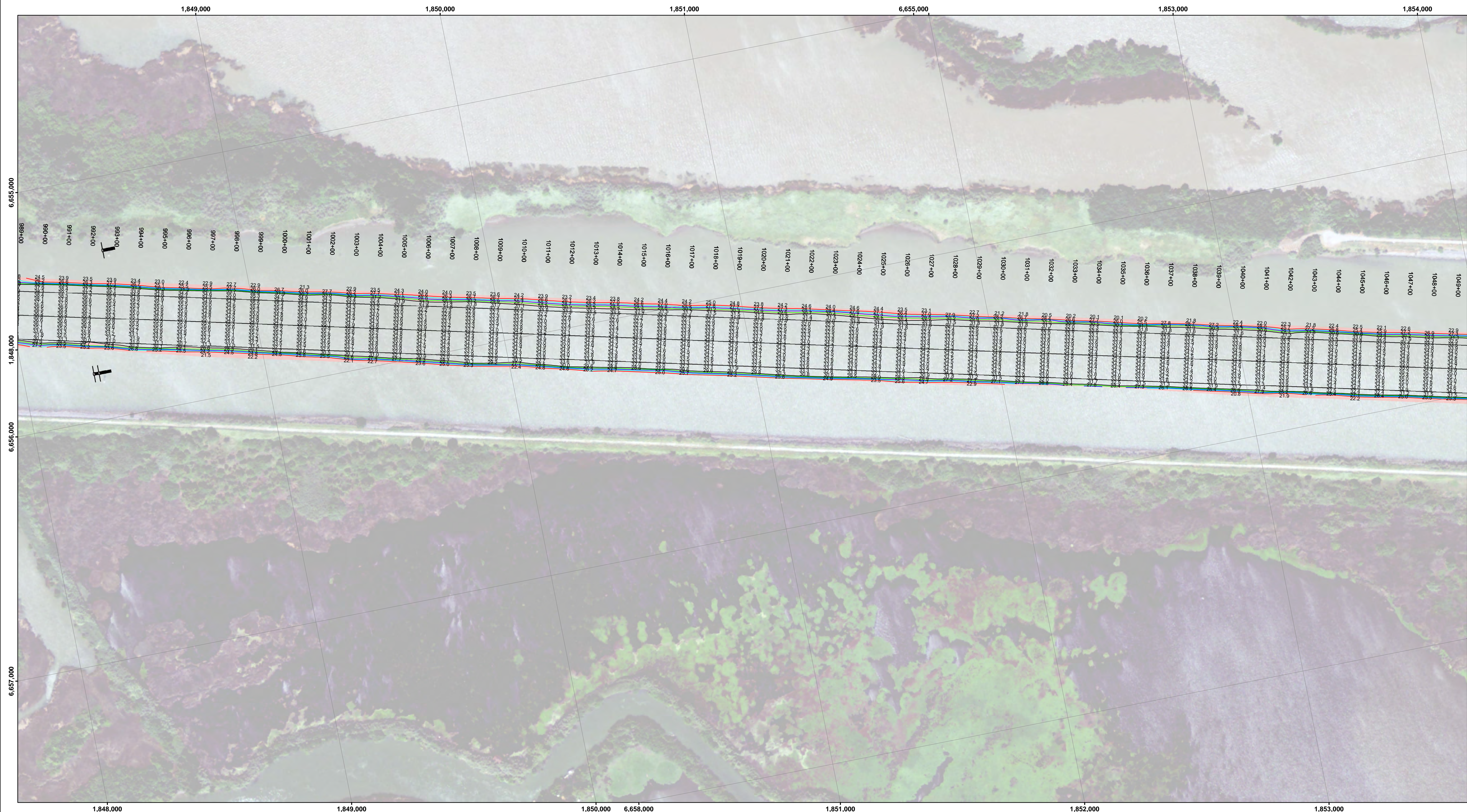
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CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
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LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
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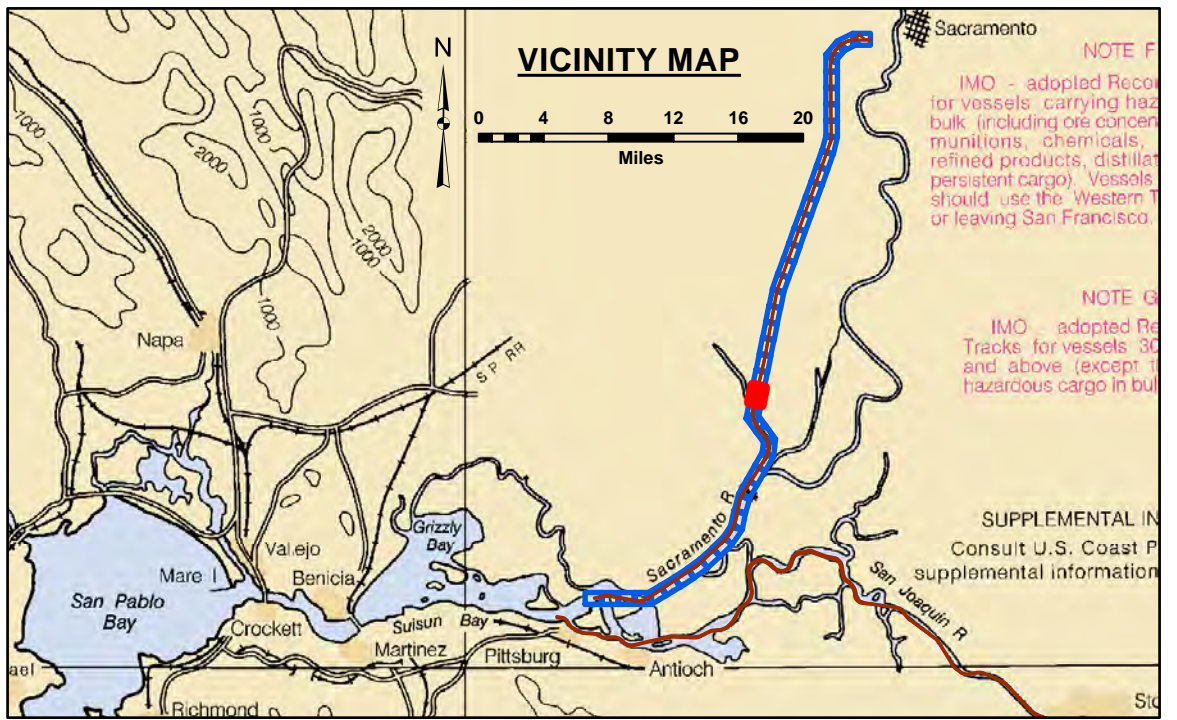




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Prepared Under the Direction of TRAVIS J. RAYFIELD LT Colonel, C.E., District Engineer	Chart Date: May 30, 2018
Surgeon: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Plotted by: PDT
Approved: Chief, Construction Branch	Checked by: PDT
	Drawn by: PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



Feet
0 400 800 1,200

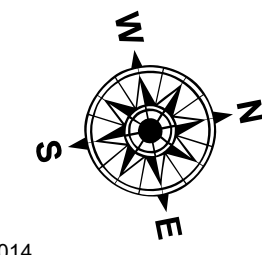
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⬇ Beacon, General	— -29
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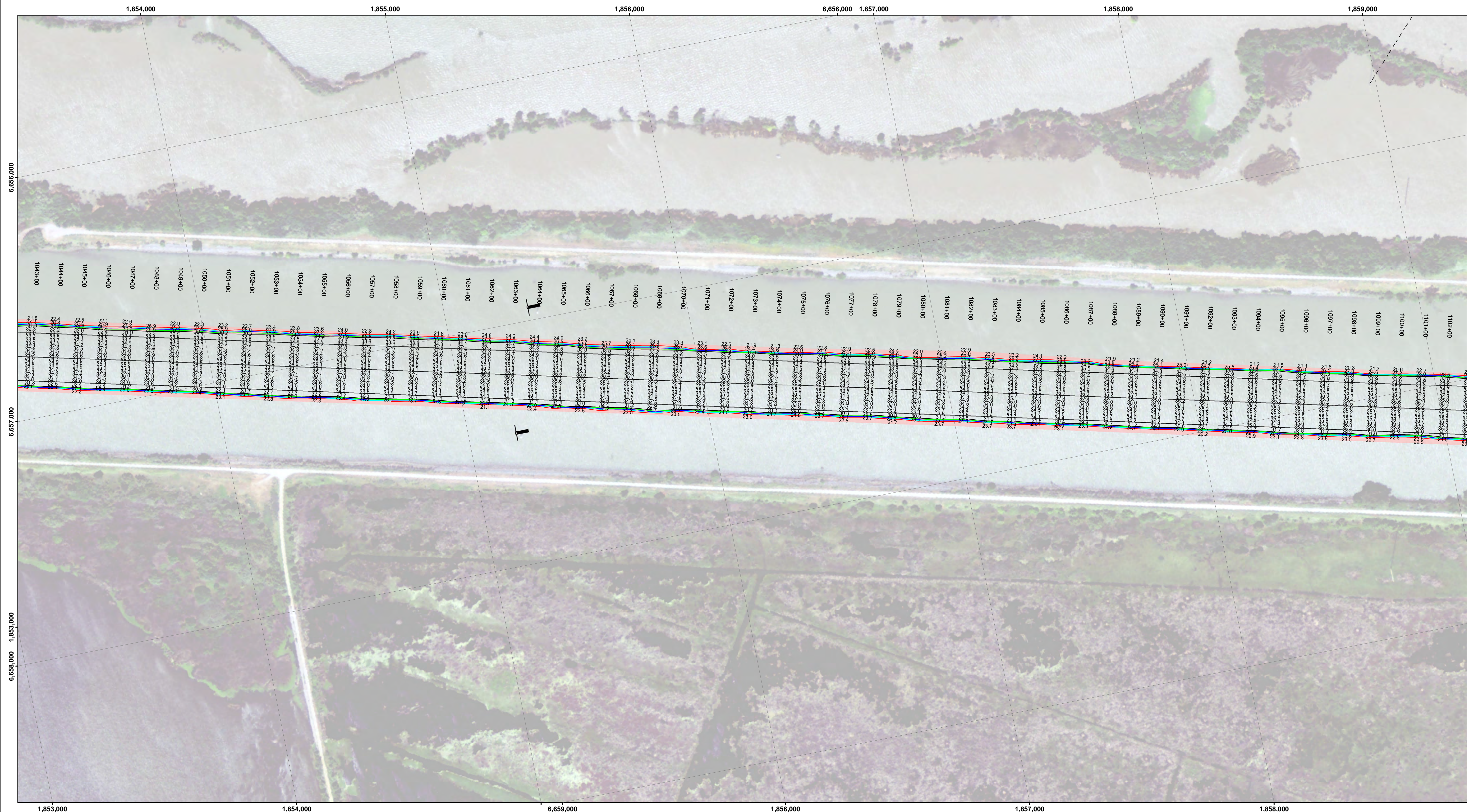
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CONTROLS:
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 TIDE GAUGE: NAIL @ 8.2 FT MLLW
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 BENCHMARK: POWS1 (NO PID)
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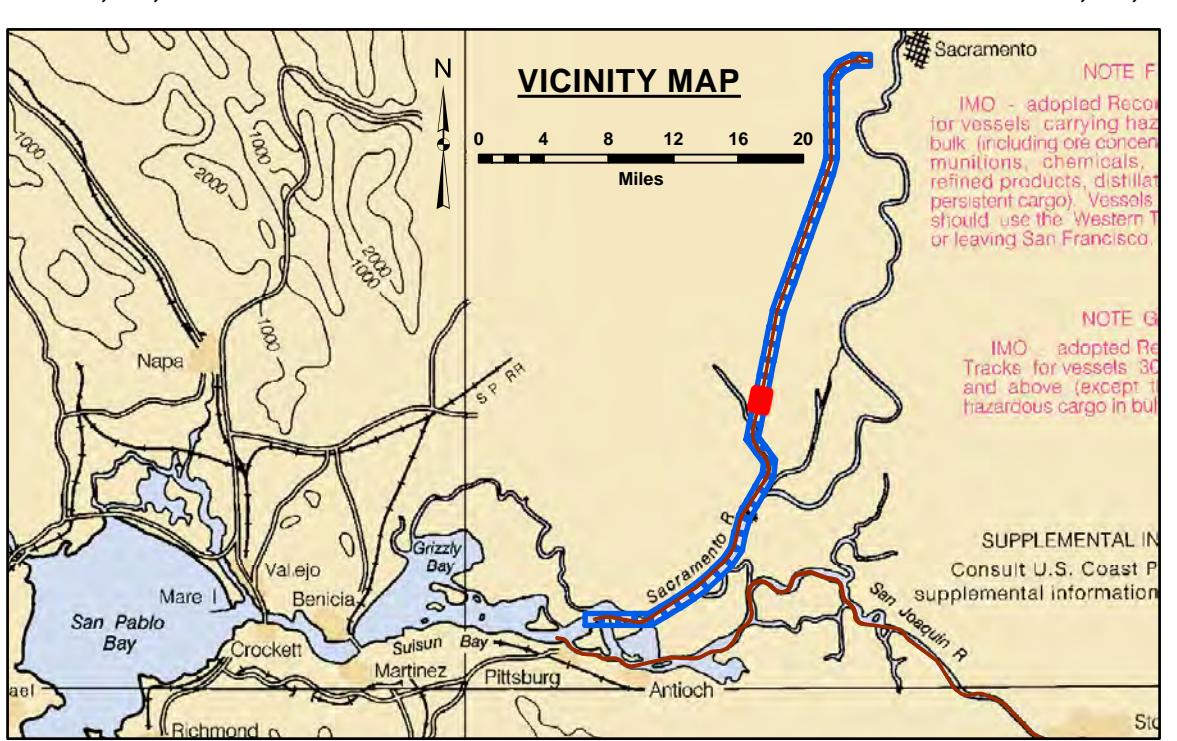




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Chart Date:	May 30, 2018
Designed By:	PDT
Drawn By:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



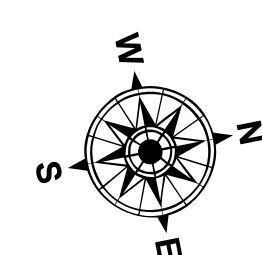
LEGEND			
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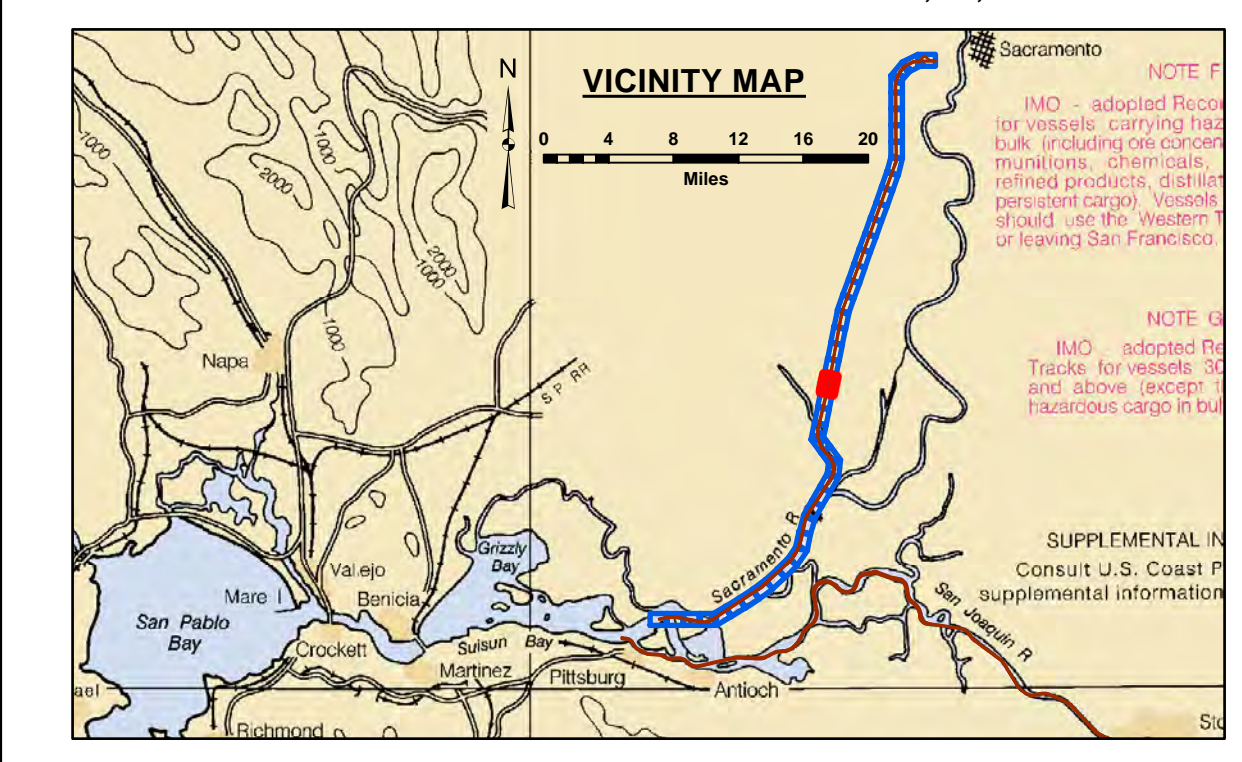
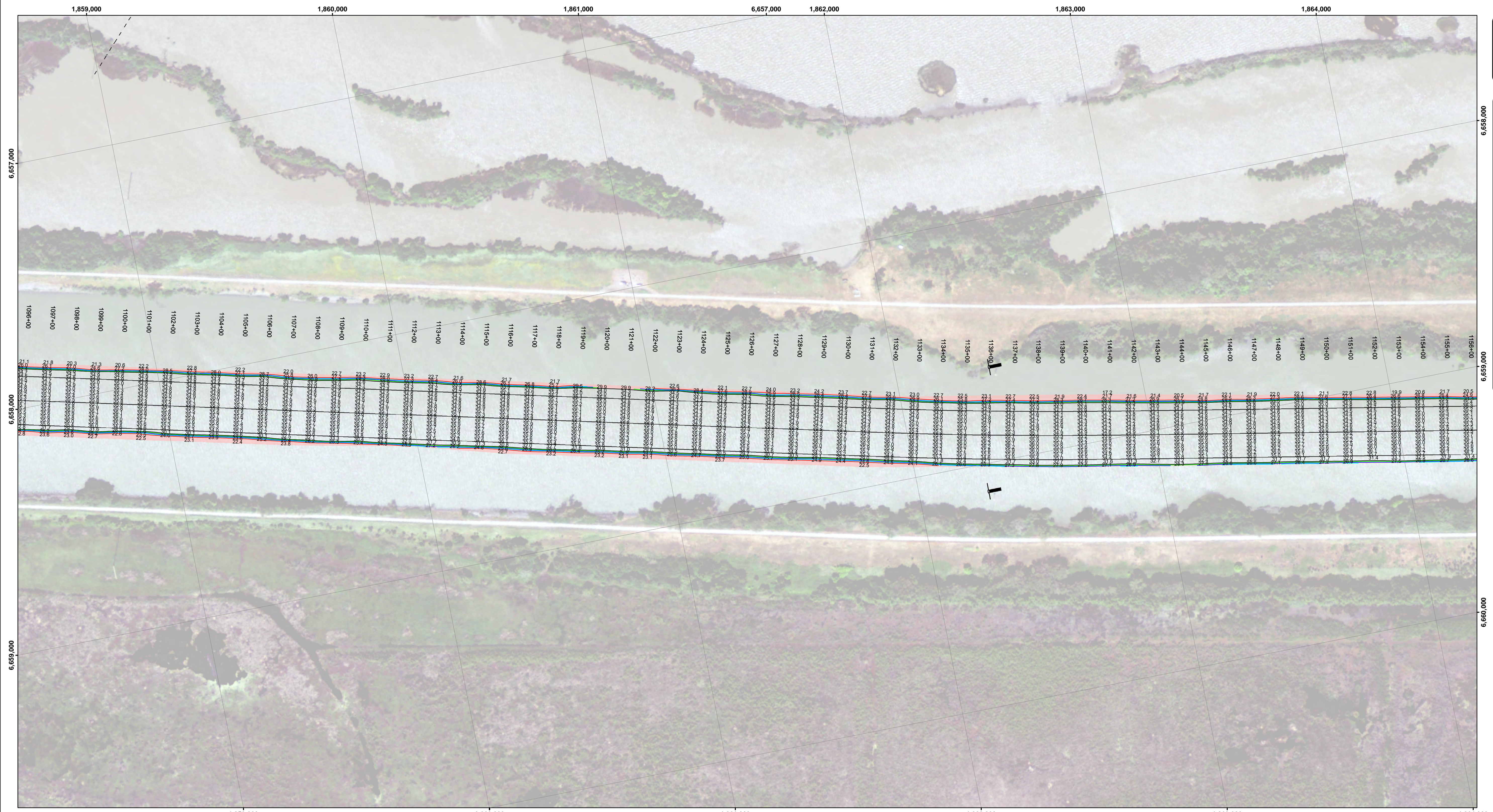
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0 400 800 1,200
Feet

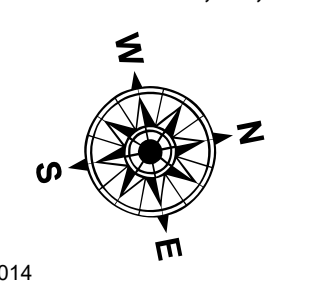
LEGEND		Contours	
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— Federal Navigation Center Line	□ Placement Area	— -29	— -27
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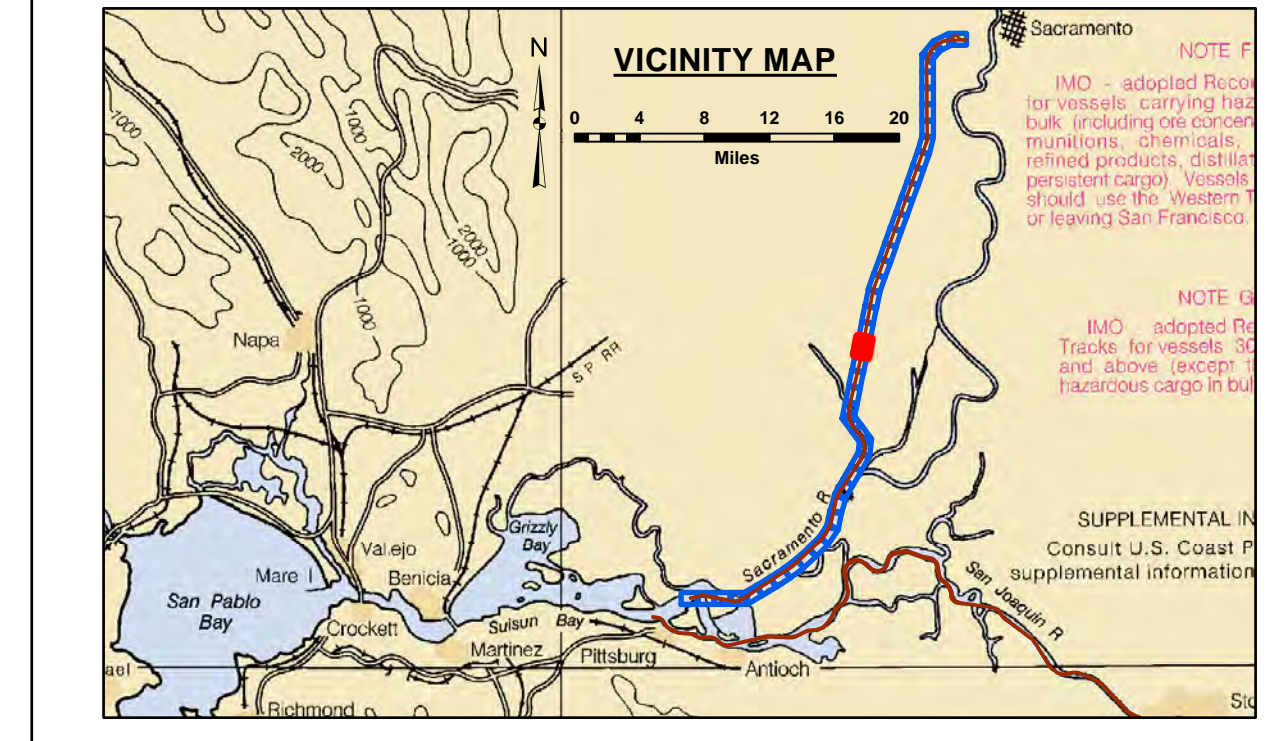
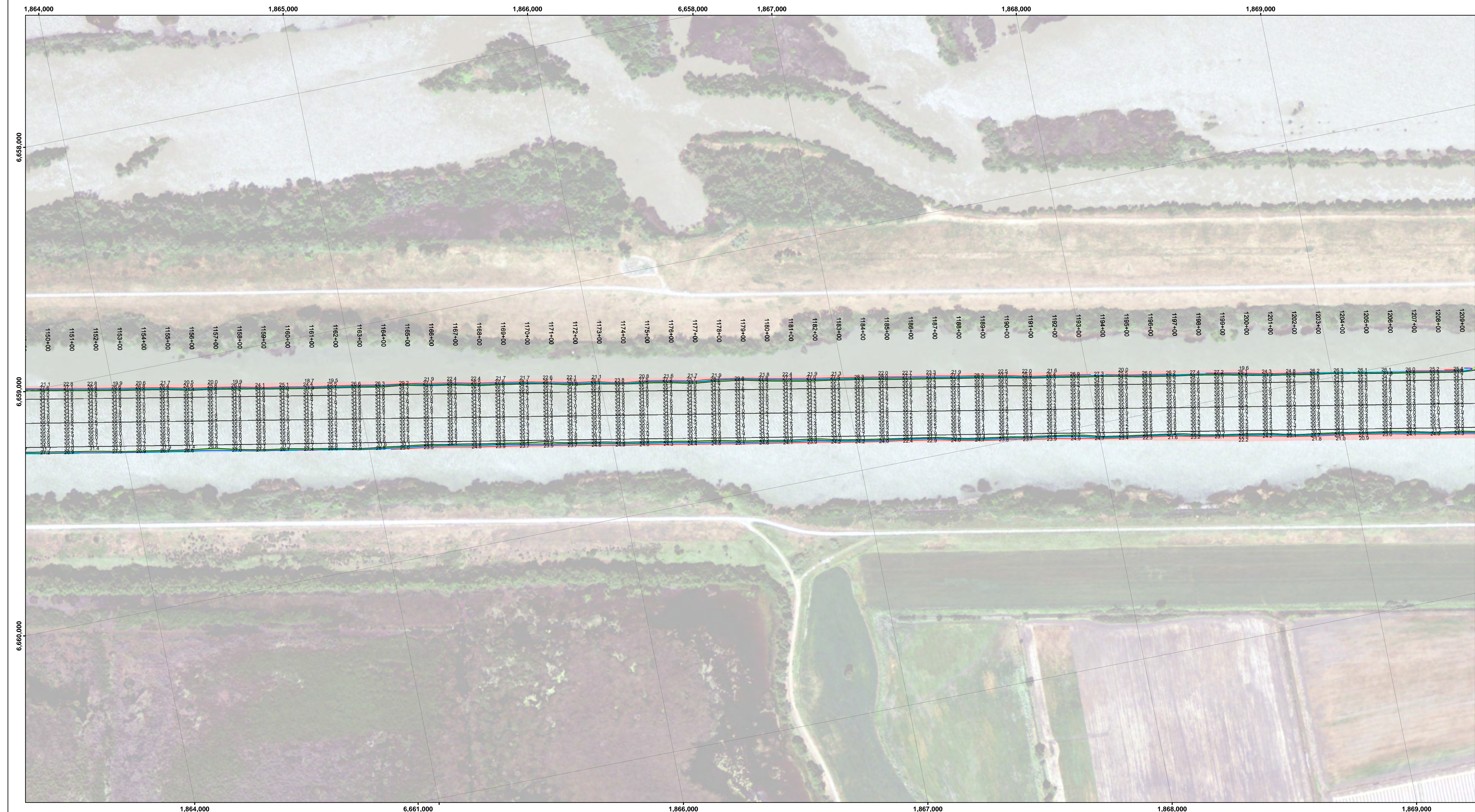
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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Surveyed By:	Travis J. Rayfield
Plotted By:	PDT

PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
LT COLONEL, C.E., DISTRICT ENGINEER
Suggested: Hydro Survey Team Leader
Recommended: Chief, Hydro Survey Section
Approved: Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
23 of 45



Feet
0 400 800 1,200

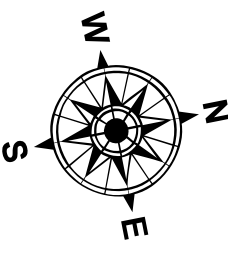
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	— -30	— -29
— Federal Navigation Center Line	□ Placement Area	— -28	— -27
..... Cable Submarine	▭ Anchorage Area	— -26	
- - - Cable Overhead	⊗ Obstruction Point		
— Contour Line	✈ Wrecks-Submerged		
	● Shoalest Sounding**		
	⊥ Beacon, General		
	◆ Red Navigation Buoy		
	◆ Green Navigation Buoy		

NOTES:
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PROJECT DEPTH: -30'
VERTICAL DATUM: MLLW
THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 5415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 5416131
BENCHMARK: POW51 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.



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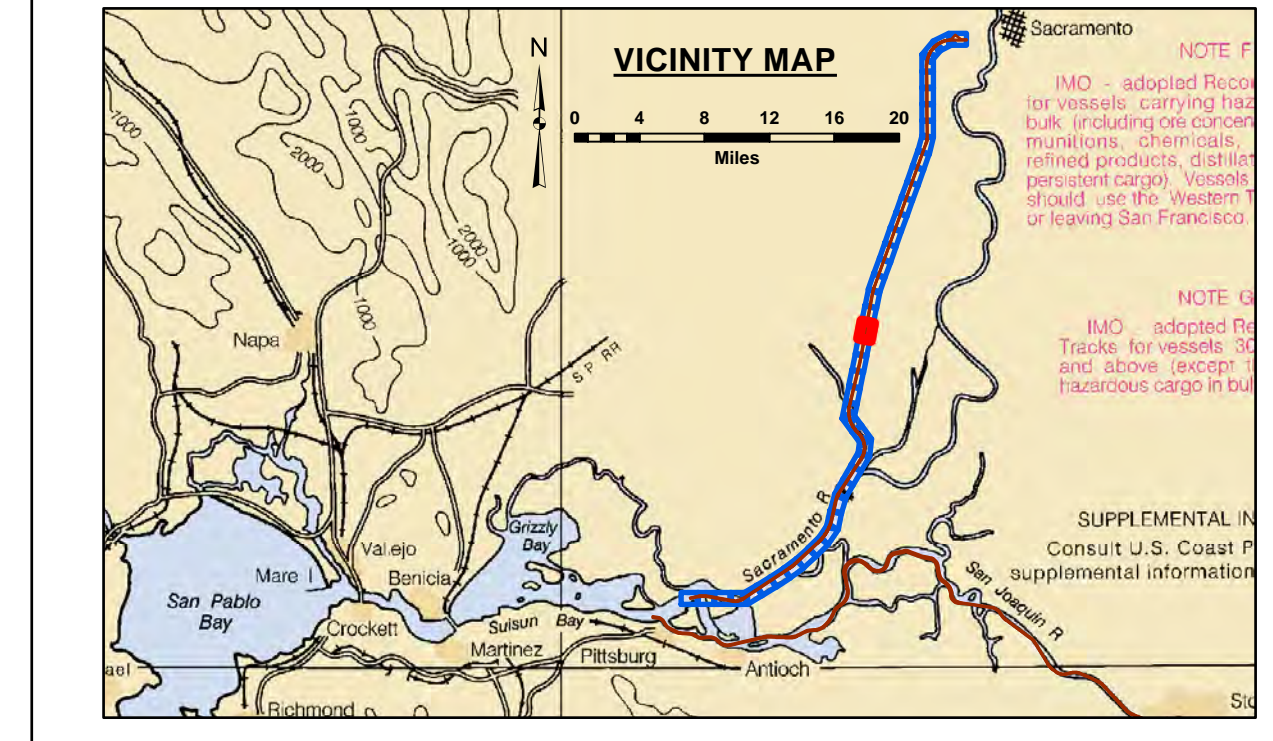
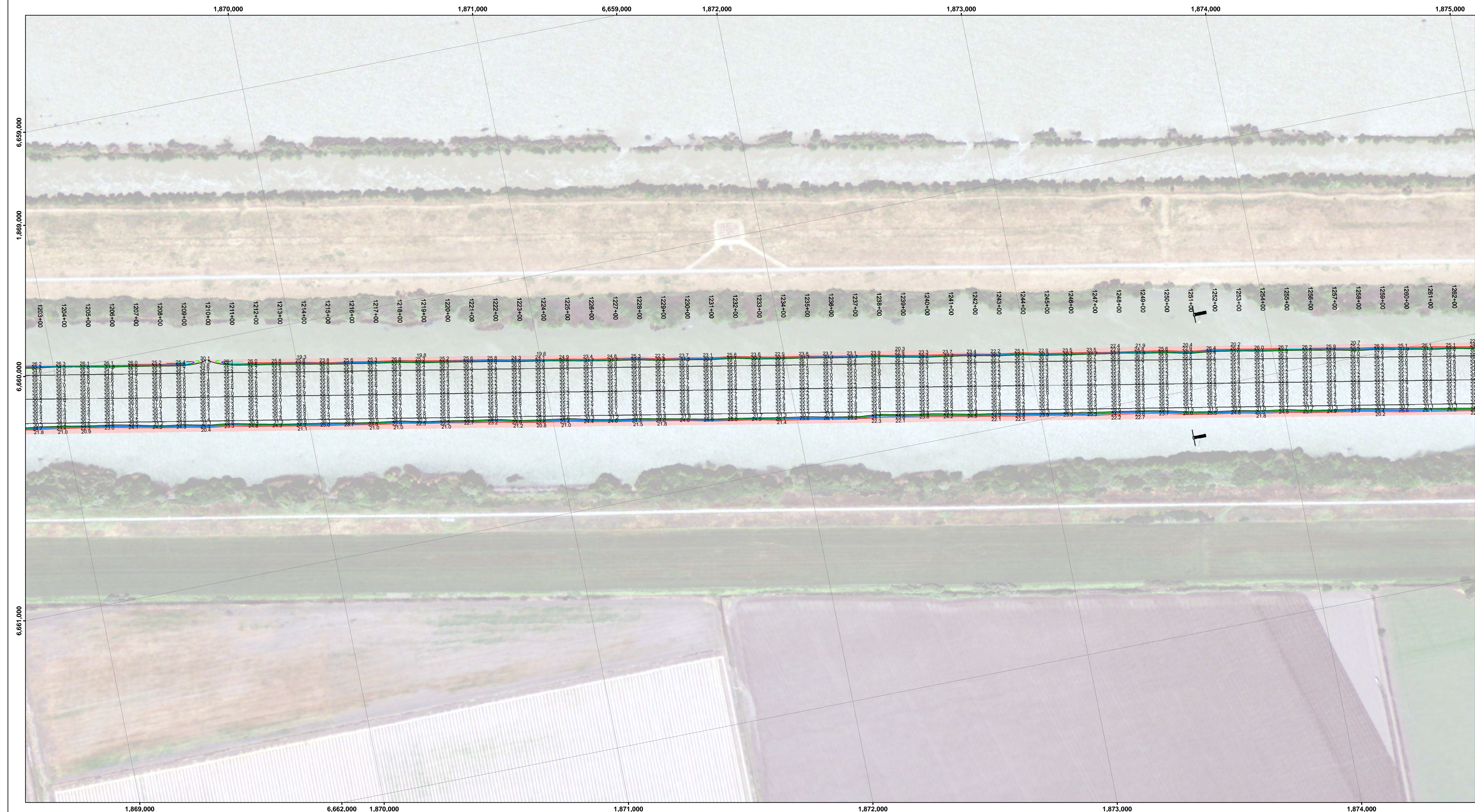
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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	TRAVIS J. RAYFIELD
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
24 of 45

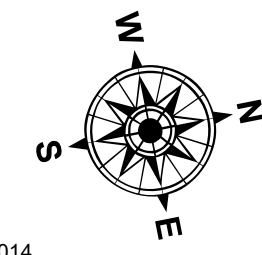


Feet
0 400 800 1,200

LEGEND			Contours	
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— -30	
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29	
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -28	
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -27	
— Contour Line	✈ Wrecks-Submerged	◆ Green Navigation Buoy	— -26	

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CONTROLS:
LOCATION: RIO VISTA
NOAA STATION: 8415316
BENCHMARK: 5316 B 1996 (NO PID)
TIDE GAUGE: NAIL @ 8.2 FT MLLW
METADATA: NAIL SET BY USACE 31 MARCH, 2014
LOCATION: PORT OF WEST SACRAMENTO
NOAA STATION: 8416131
BENCHMARK: POWS1 (NO PID)
TIDE GAUGE: NAIL @ 10.0 FT MLLW
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Chart Date:	May 30, 2018
Surveyed By:	LT COLONEL C.E. DISTRICT ENGINEER
Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
25 of 45

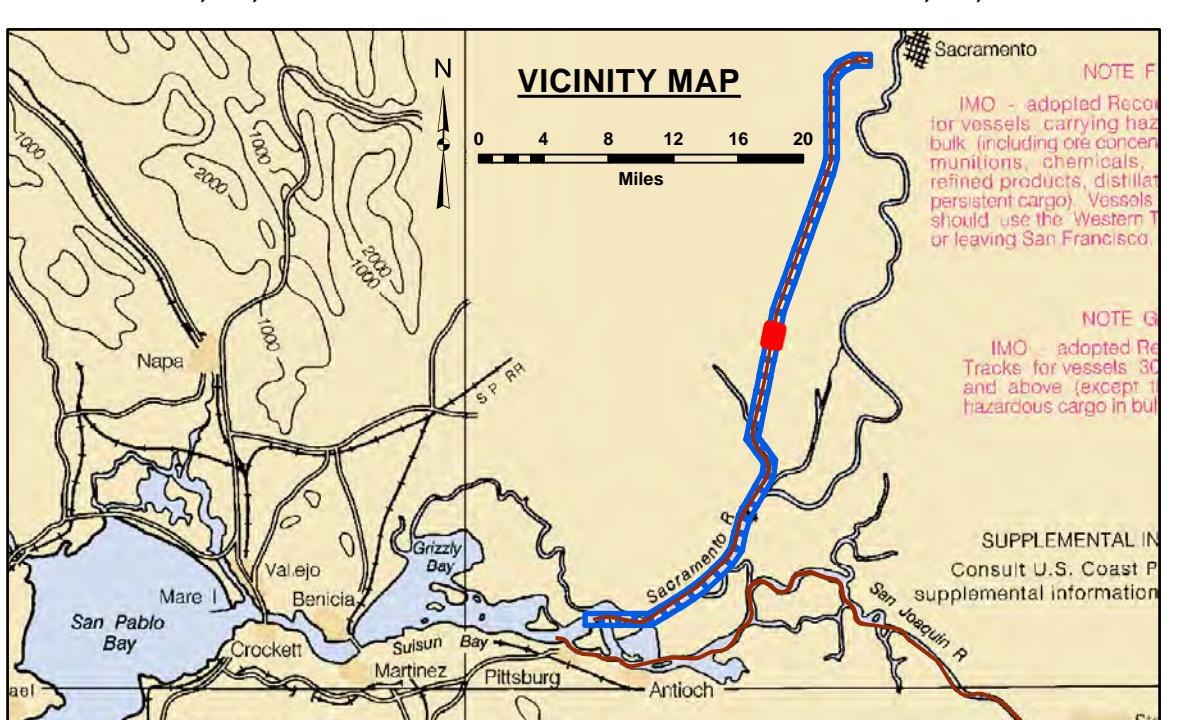


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Chart Date:	May '30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy
— Contour Line	✈ Wrecks-Submerged	◆ Green Navigation Buoy

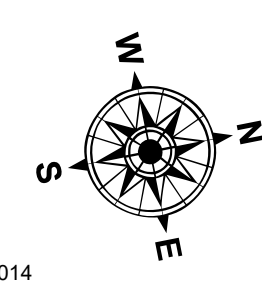
Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

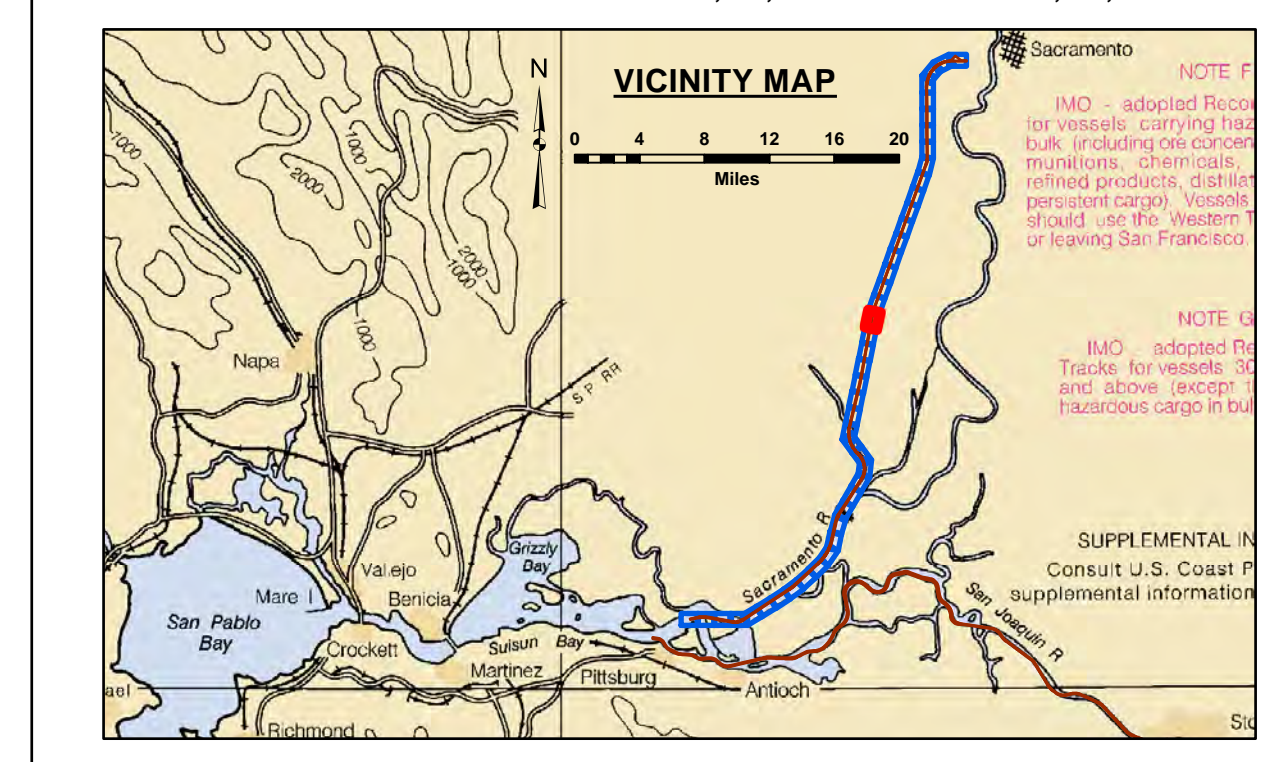
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 LOCATION: RIO VISTA
 NOOA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOOA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

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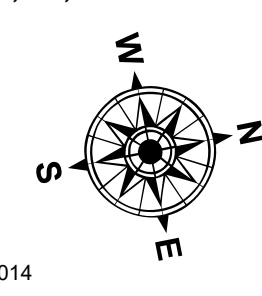


LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy	— -27
			— -26

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 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
 THE LOCATION OF NAVIGATION AIDS ARE BASED ON AND PROVIDED BY THE U.S. COAST GUARD

CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 8415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014
 LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 8416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014
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PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
 LT COLONEL, C.E. DISTRICT ENGINEER

Surveyed By:	Chart Date:
Plotted By:	May 30, 2018
Checked By:	Designed by:
Approved:	Drawn by:
Chief, Hydro Survey Section	PDT
Chief, Construction Branch	PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

Sheet Reference Number
27 of 45

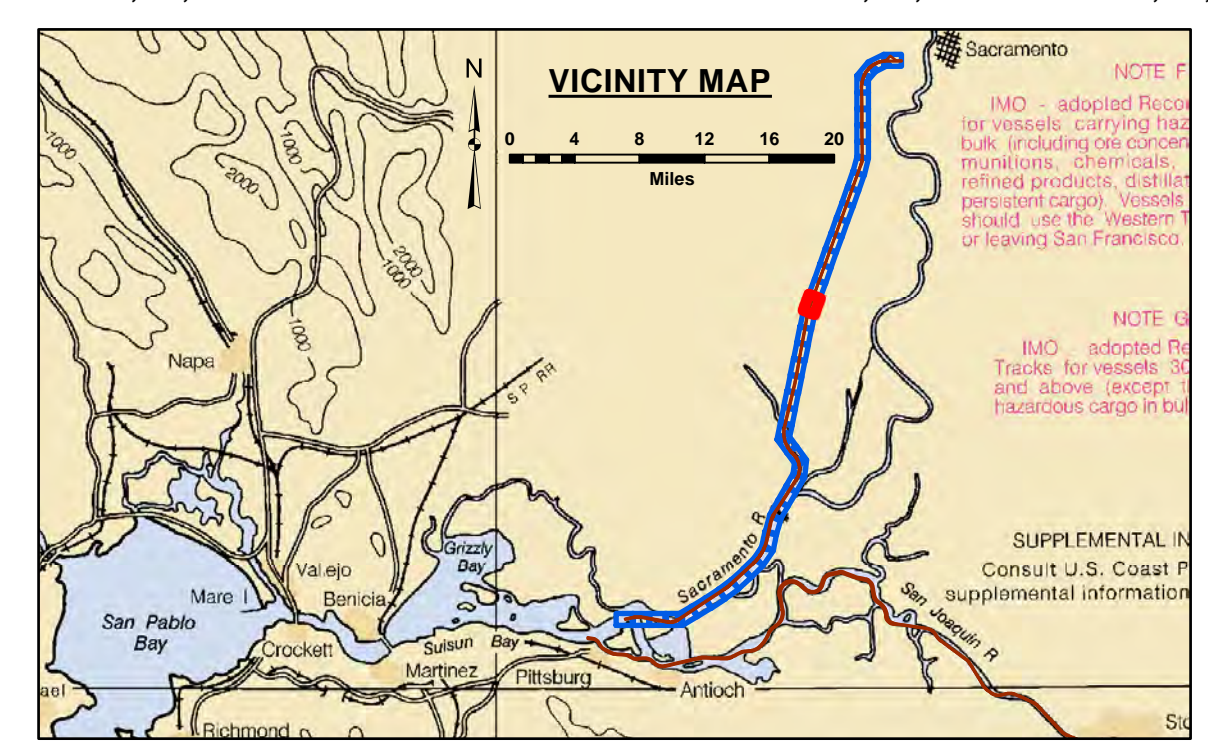


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Chart Date:	May 30, 2018
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Surveyed By:	PDT
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Checked By:	PDT

PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
 LT COLONEL, C.E., DISTRICT ENGINEER

San Joaquin County
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy
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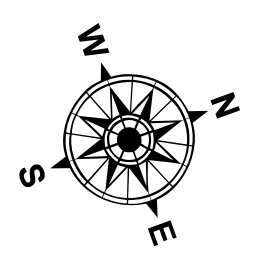
Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

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 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 8416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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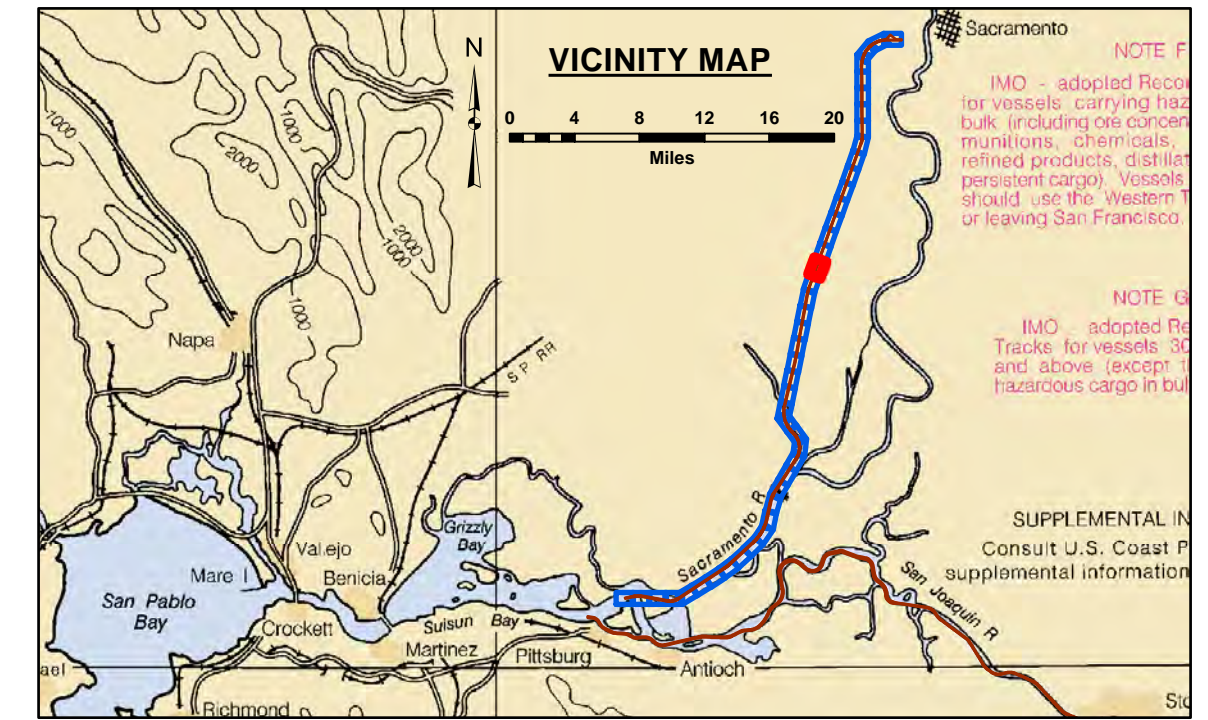


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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed by:	PDT
Plotted by:	PDT
Checked by:	PDT

CALIFORNIA
 SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

Sheet Reference Number
 29 of 45



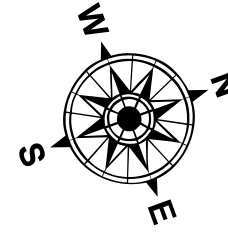
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	● Shoaling Area	— -30
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -28
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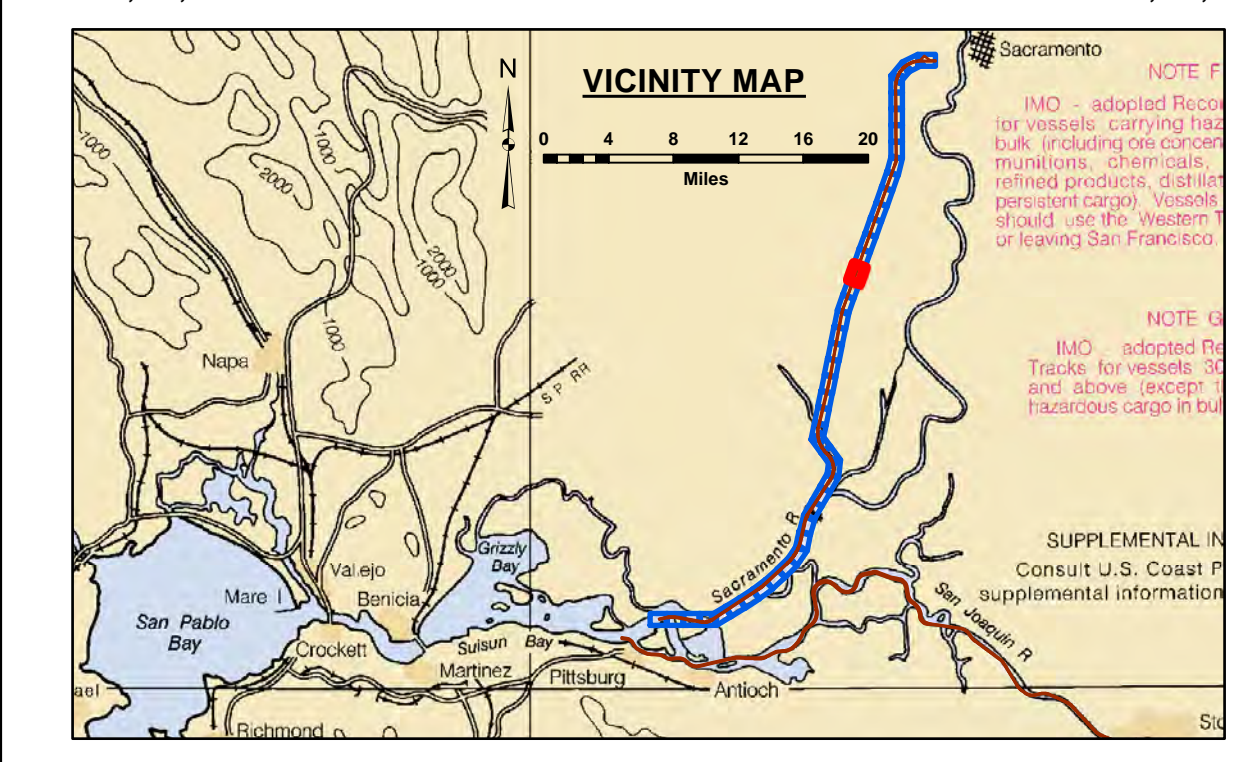
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CONTROLS:
 LOCATION: RIO VISTA
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 BENCHMARK: POWS1 (NO PID)
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0 400 800 1,200
Feet

LEGEND			Contours	
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— -30	
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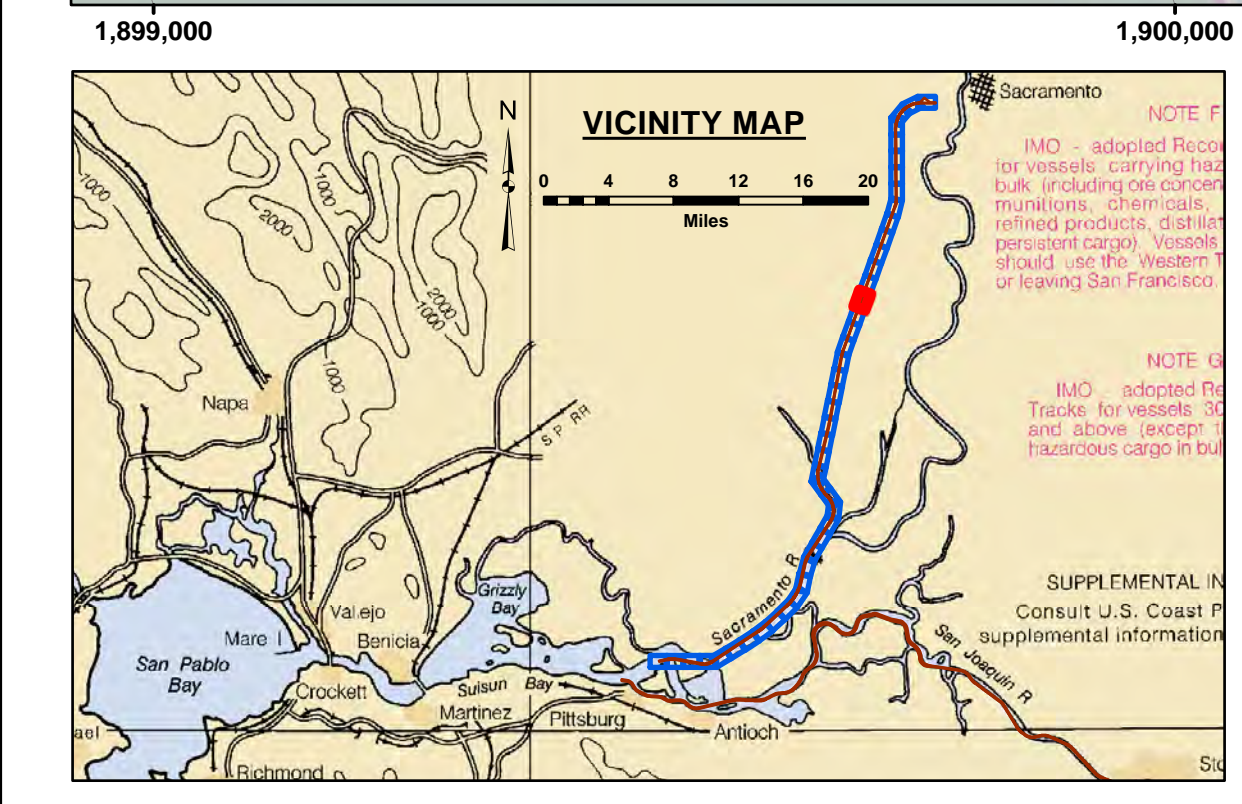
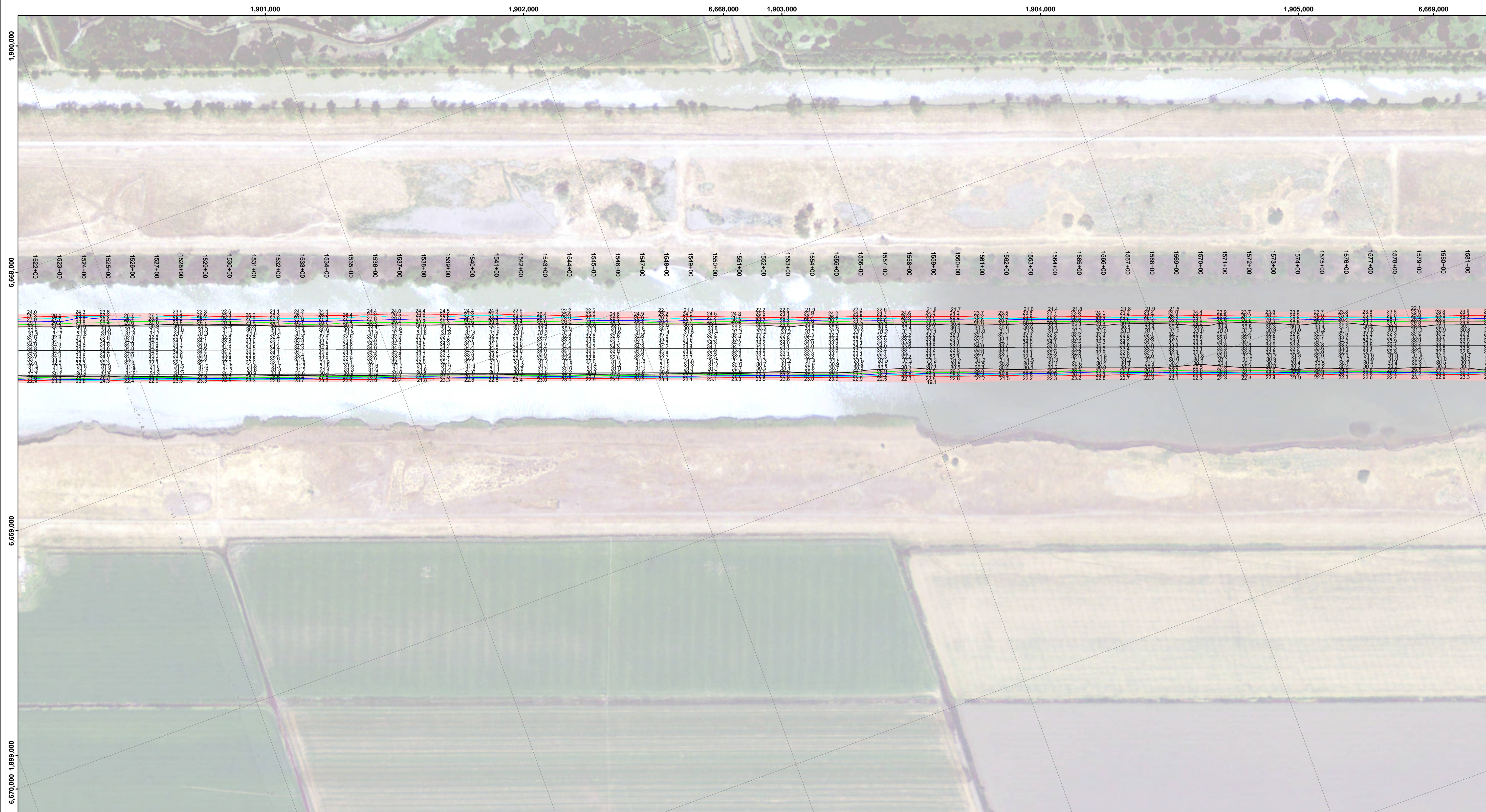


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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Survised By: _____	Designed by: _____
Plotted By: PDT	Drawn by: PDT
Checked By: PDT	
Approved: Chief, Construction Branch	

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
30 of 45



0 400 800 1,200
Feet

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— -30
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29
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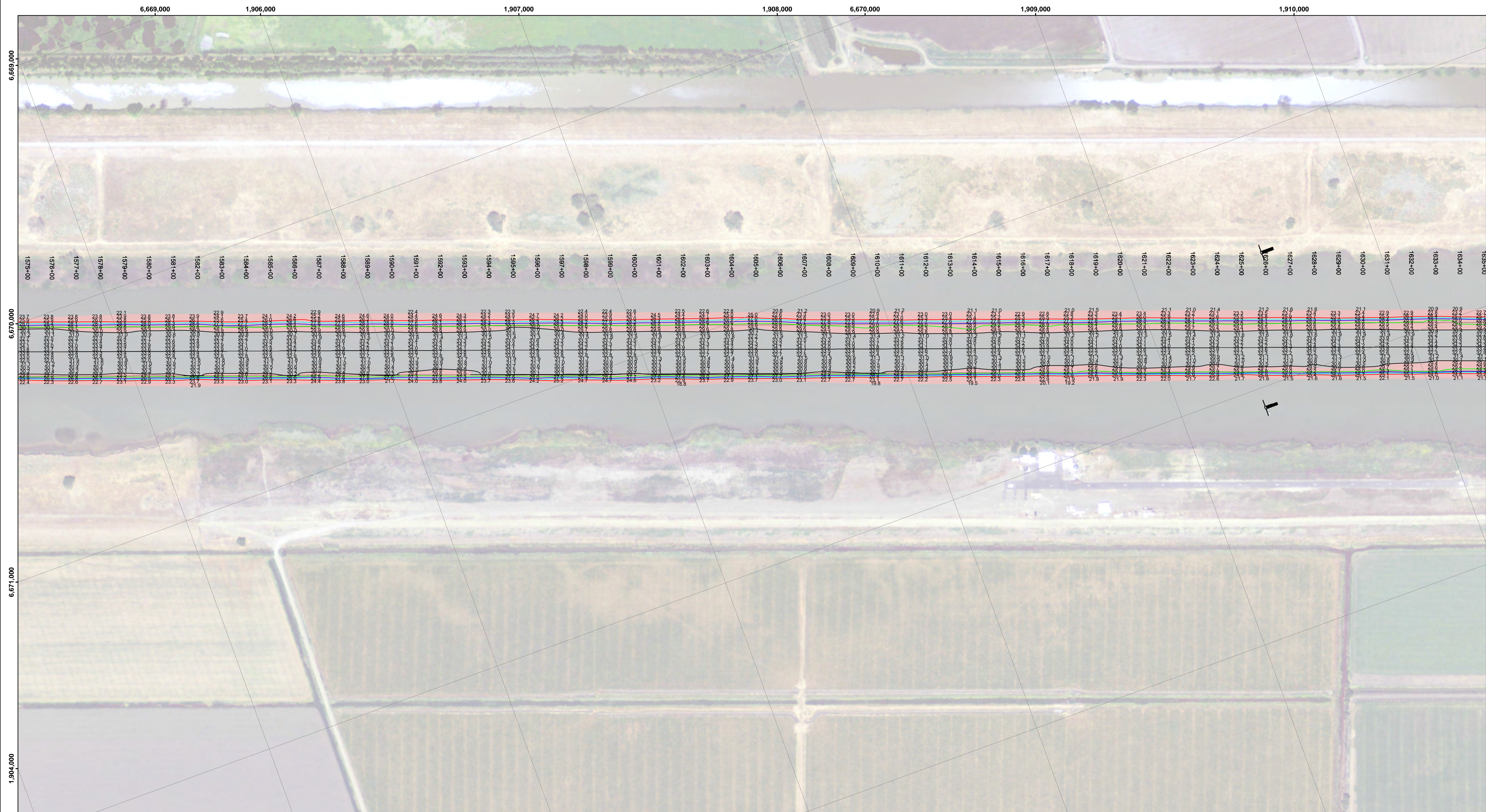
Chart Date:	May 30, 2018
Surveyed By:	Plotted By: PDT
Designed By:	Checked By: PDT
Drawn By:	PDT

PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
LT COLONEL, C.E. DISTRICT ENGINEER

Supervised: Hydro Survey Team Leader
Recommended: Chief, Hydro Survey Section
Approved: Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
31 of 45

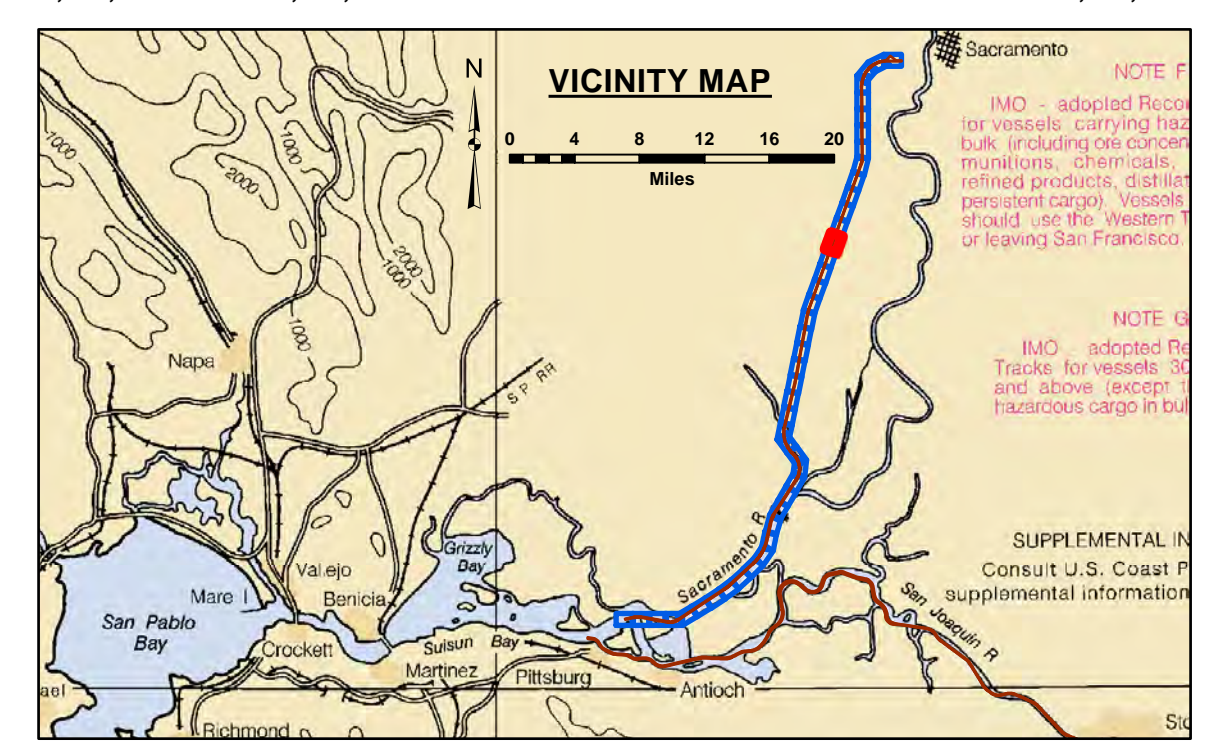


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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Chart Date: May 30, 2018
Surveyed By: _____	Designed by: _____
Plotted By: PDT	Drawn by: PDT
Recommended: Chief, Hydro Survey Section	Checked by: PDT
Approved: Chief, Construction Branch	

CALIFORNIA
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

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32 of 45



LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy
— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy

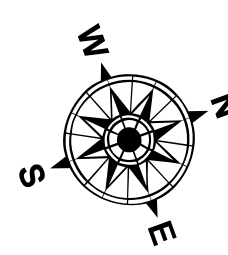
Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

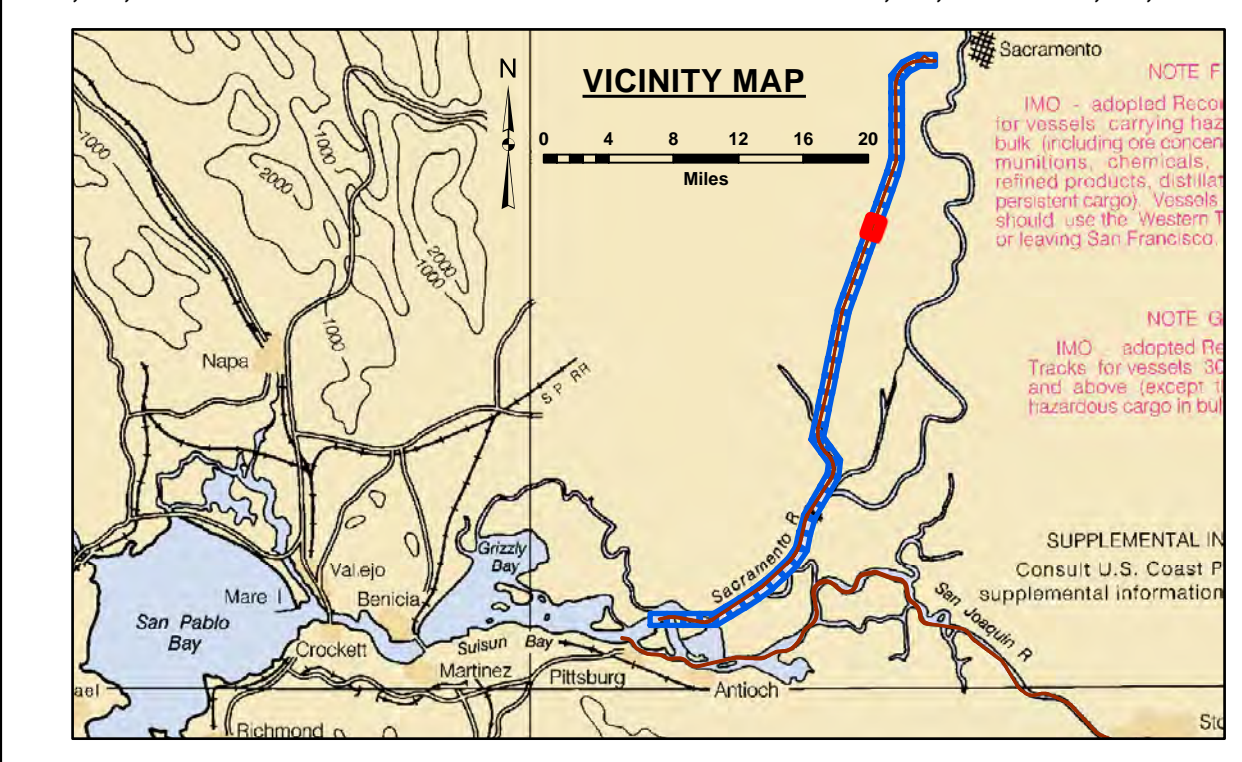
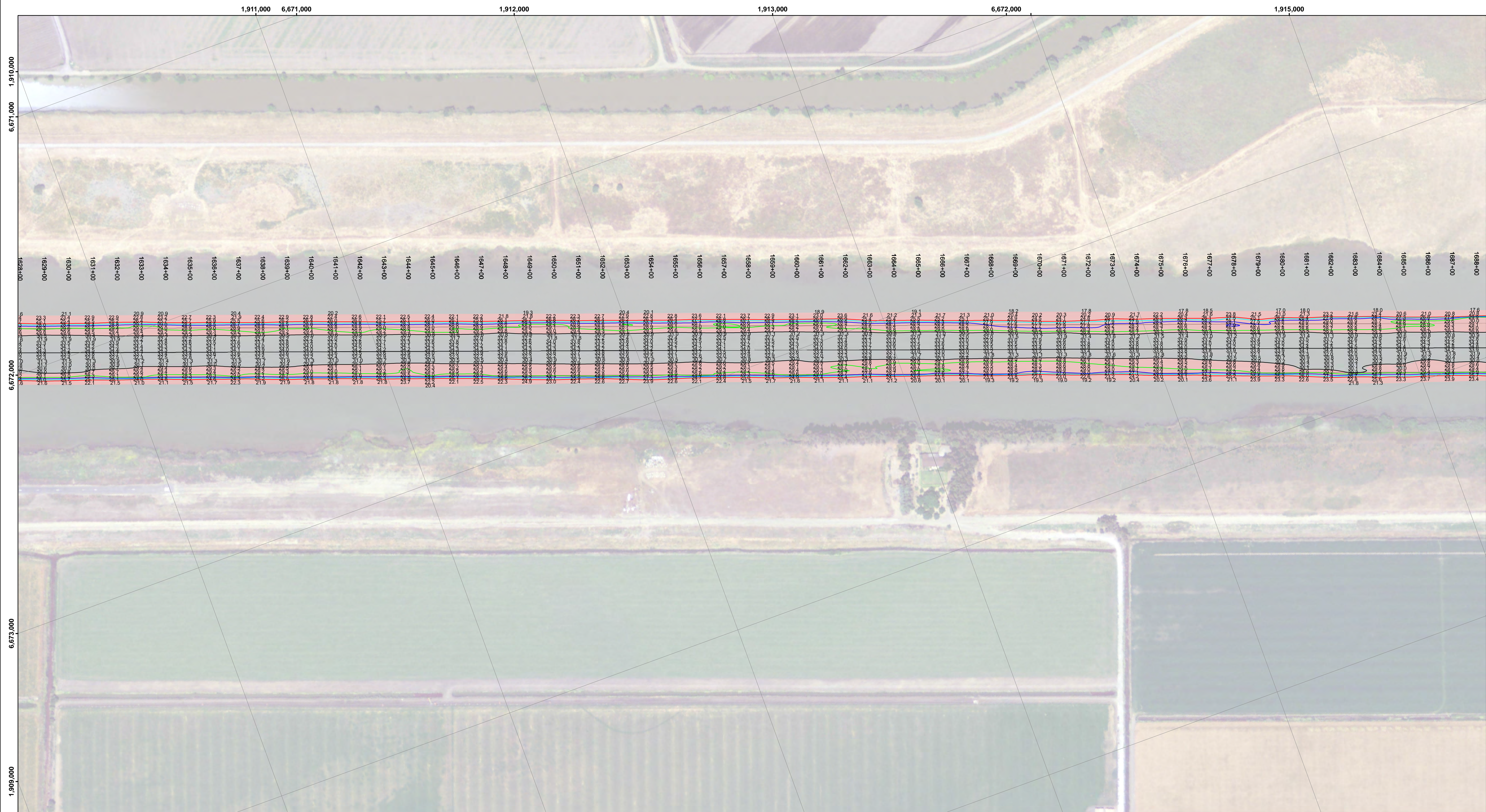
NOTES:
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 PROJECT DEPTH: -30'
 VERTICAL DATUM: MLLW
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CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
 METADATA: NAIL SET BY USACE 8 APRIL, 2014

ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.





Feet
0 400 800 1,200

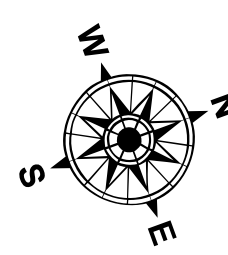
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
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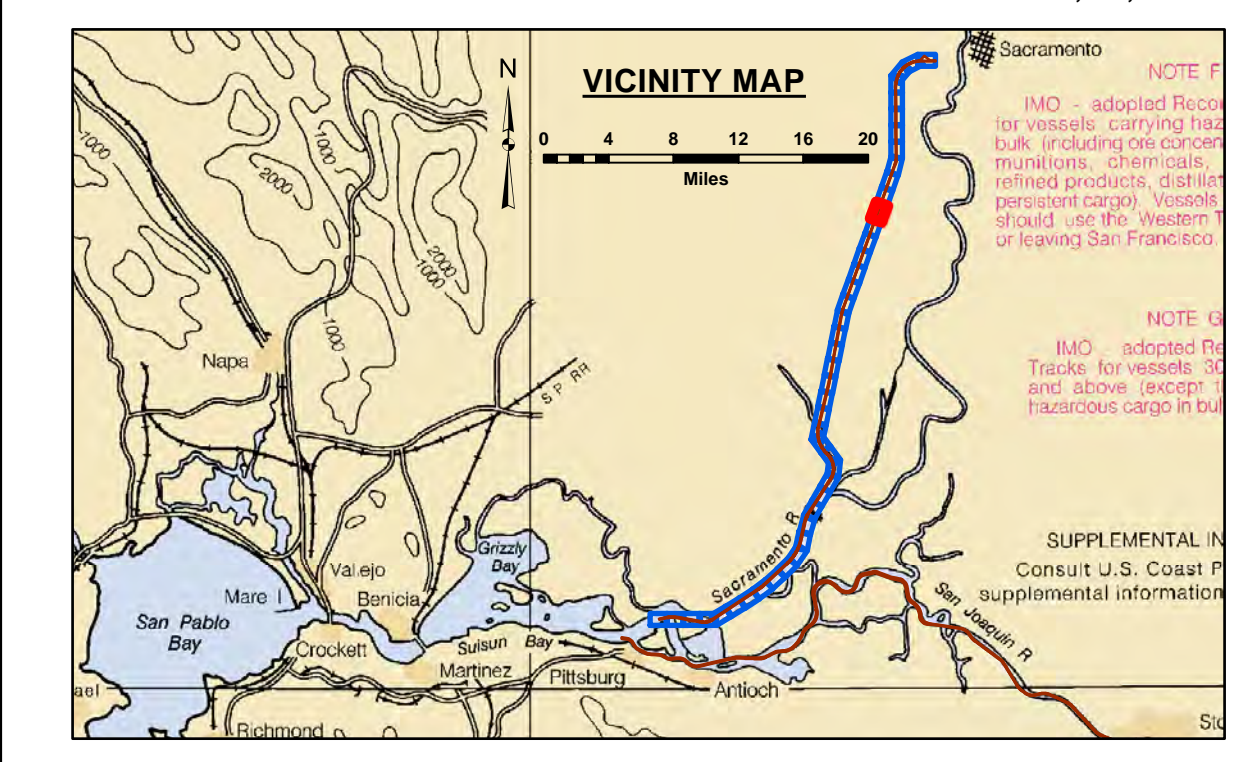
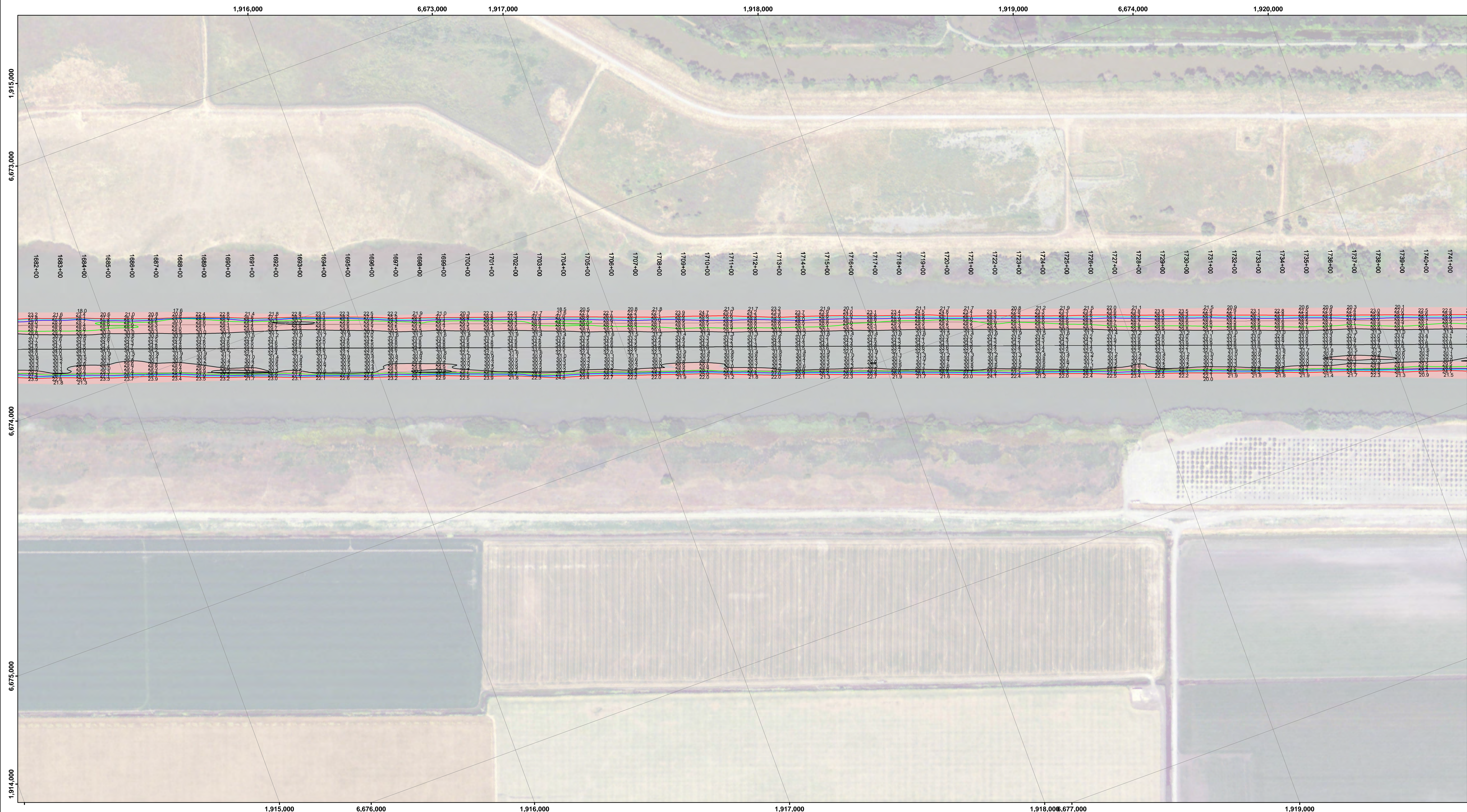


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PREPARED UNDER THE DIRECTION OF TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By:	Chart Date:
Stippled: Hydro Survey Team Leader	Plotted By:	May 30, 2018
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	Drawn By:	PDT

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

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33 of 45



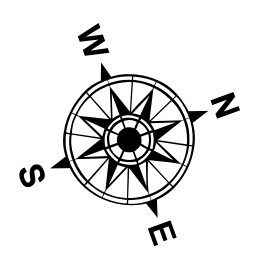
LEGEND

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..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
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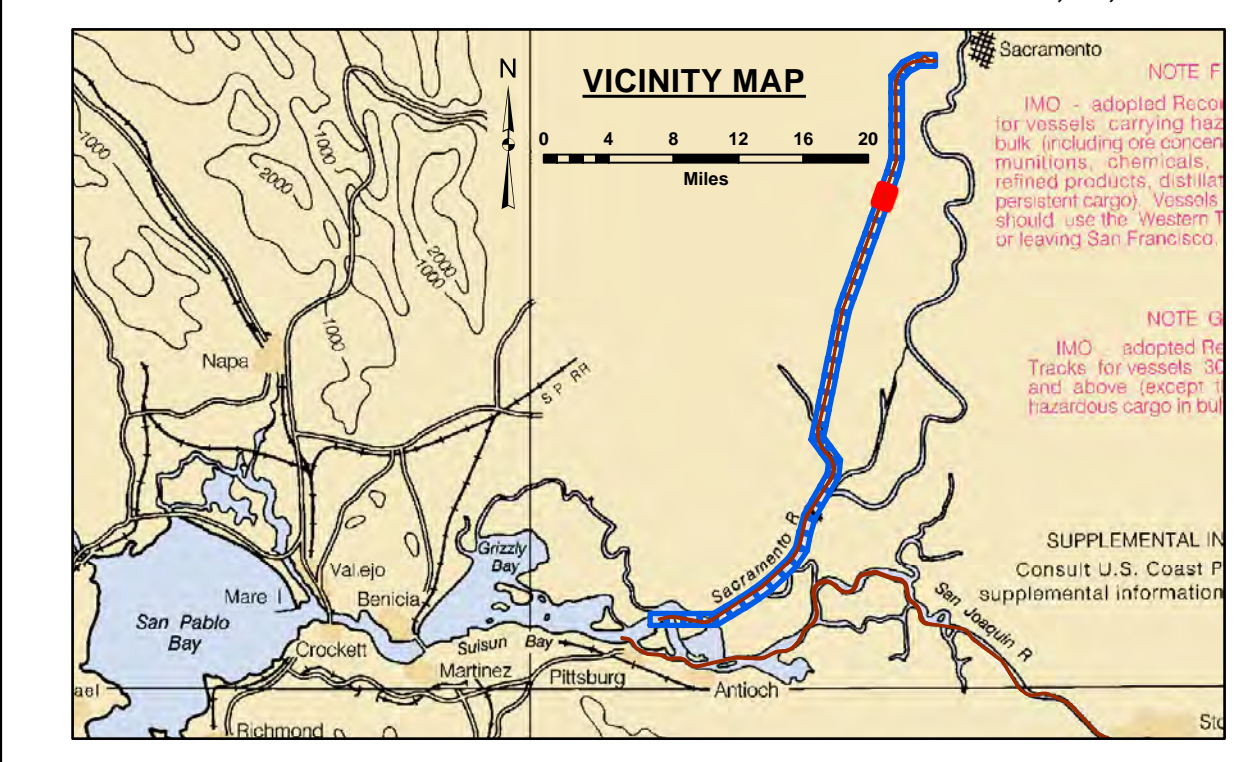
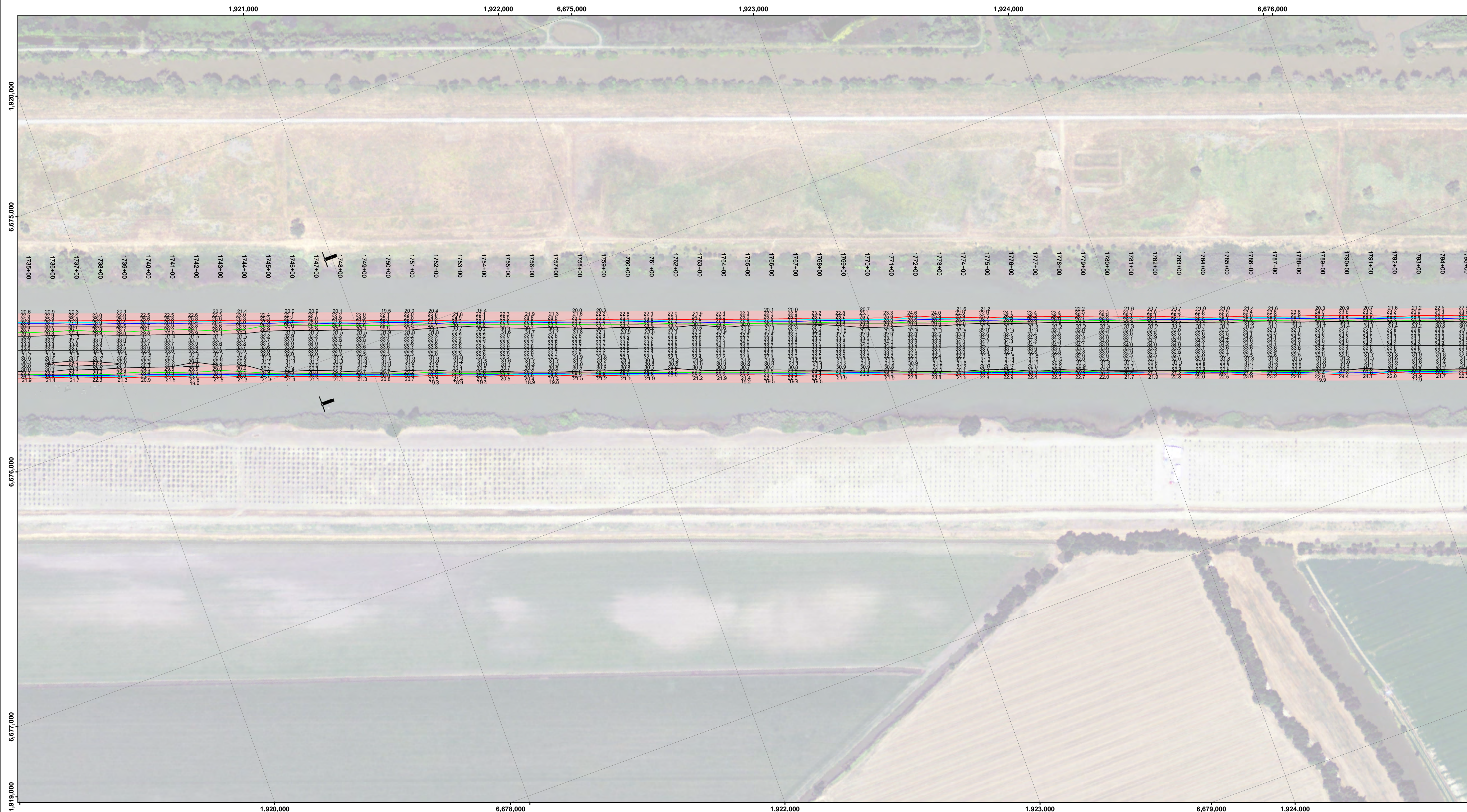
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Prepared Under the Direction of TRAVIS J. RAYFIELD LT COLONEL, C.E., DISTRICT ENGINEER	Surveyed By: PDT	Chart Date: May 30, 2018
Staged by: Hydro Survey Team Leader	Plotted By: PDT	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked By: PDT	Drawn by: PDT
Approved: Chief, Construction Branch		

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

Sheet Reference Number
34 of 45



LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	♦ Red Navigation Buoy	— -28
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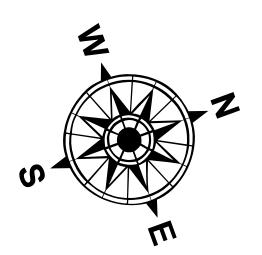


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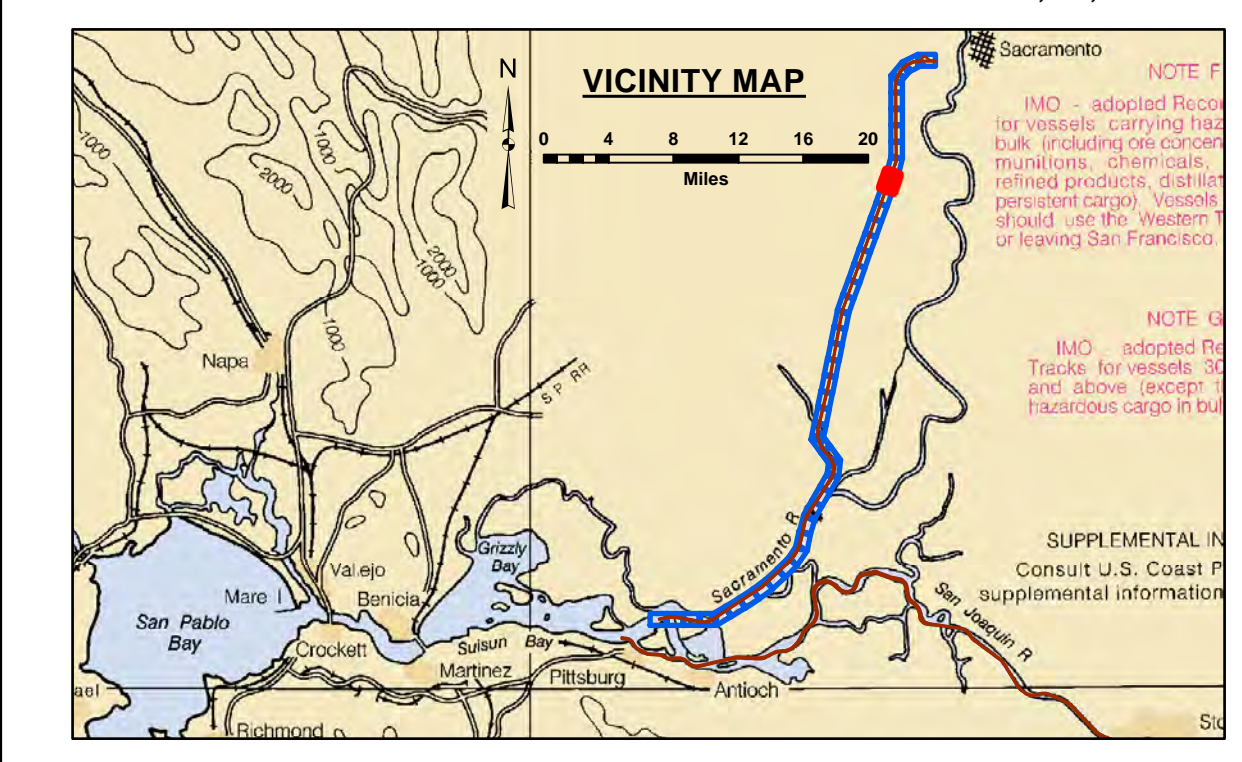
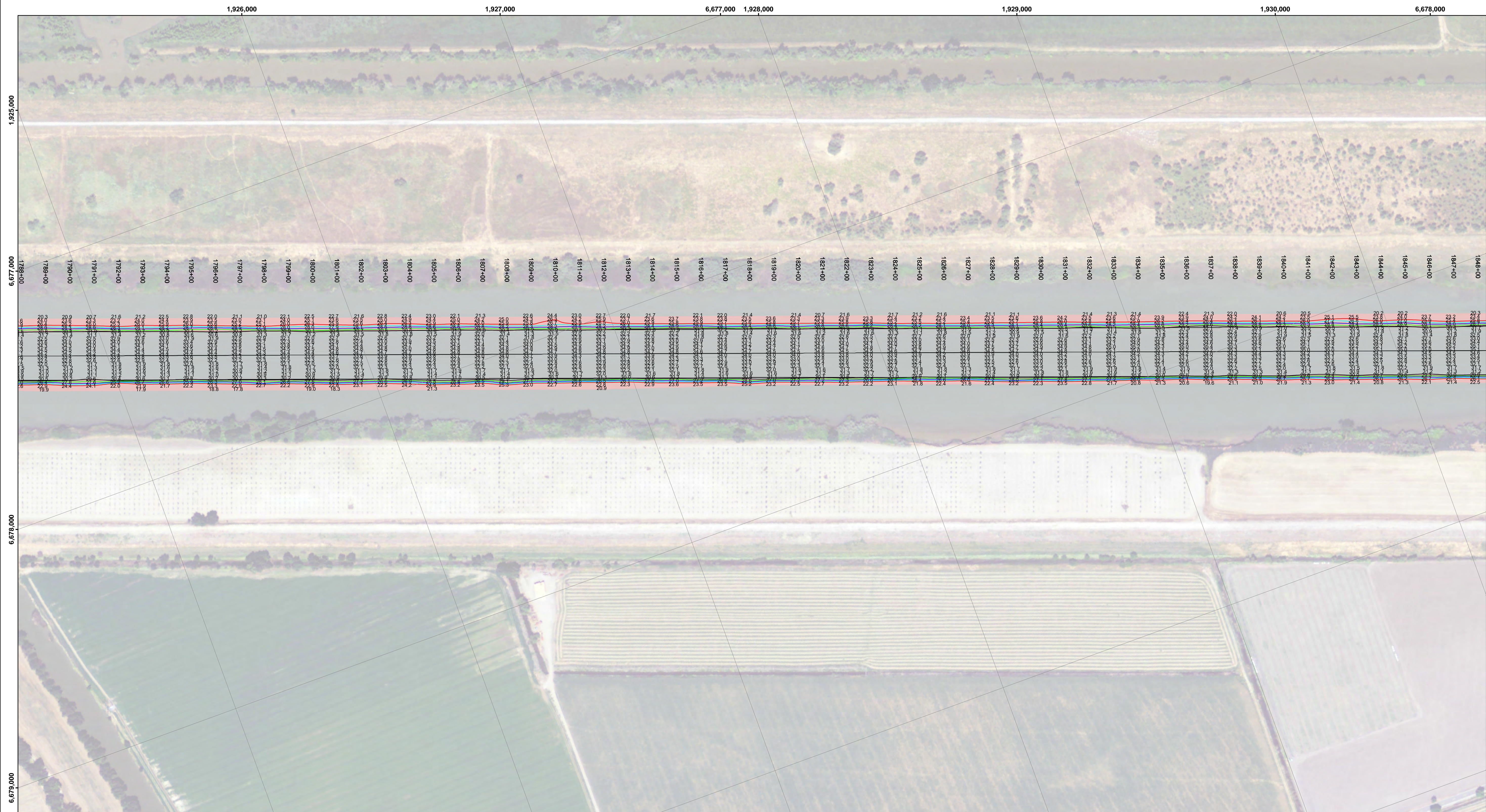


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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

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35 of 45



0 400 800 1,200
Feet

--- Federal Navigation Channel	Cable Area	Shoaling Area	-30
— Federal Navigation Center Line	Placement Area	Shoalest Sounding**	-29
..... Cable Submarine	Anchorage Area	Beacon, General	-28
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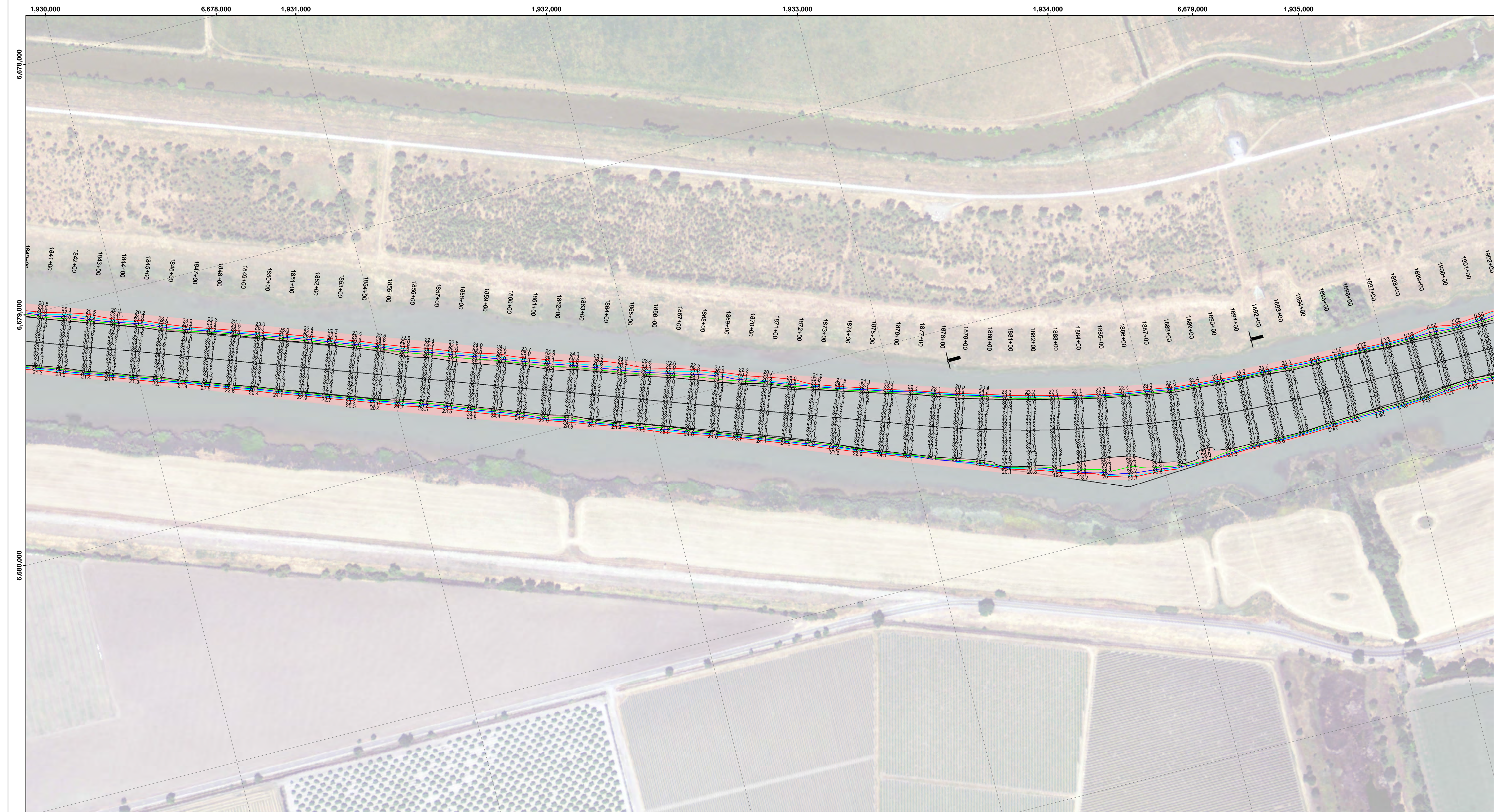


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Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
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17-21 MAY 2018

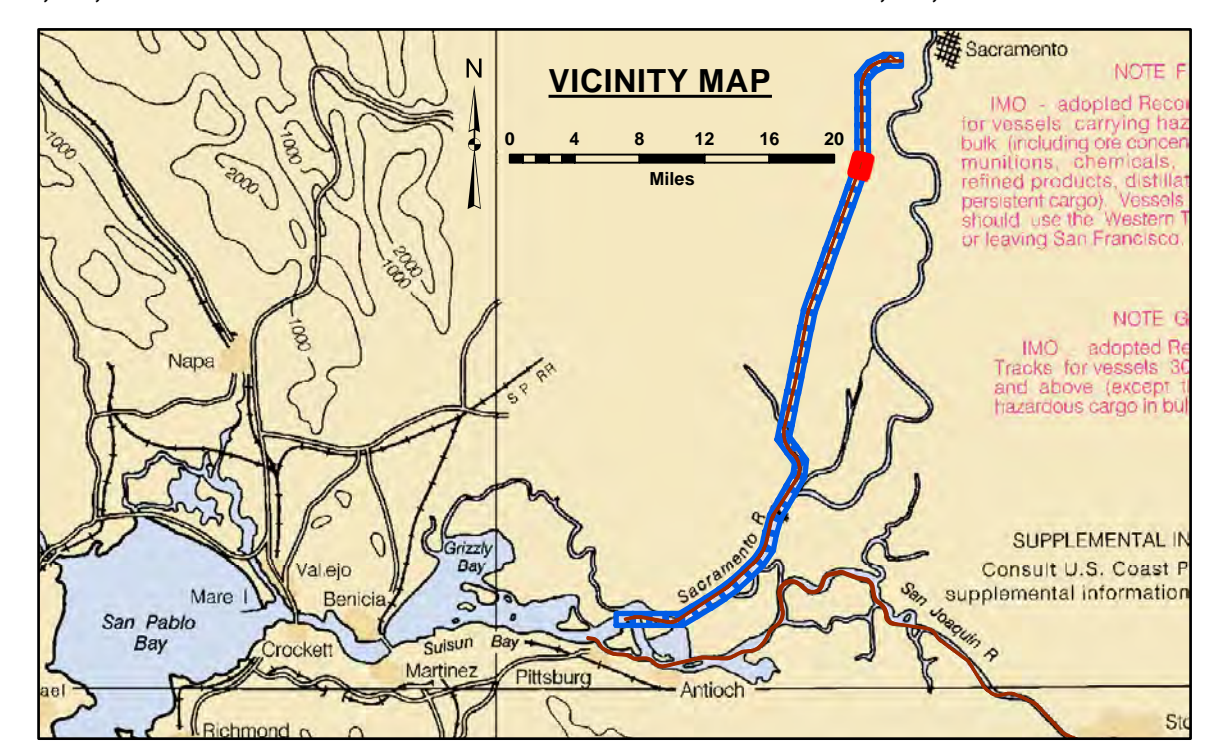
Sheet Reference Number
36 of 45



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Chart Date:	May '30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



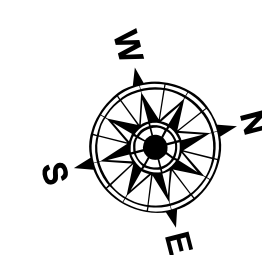
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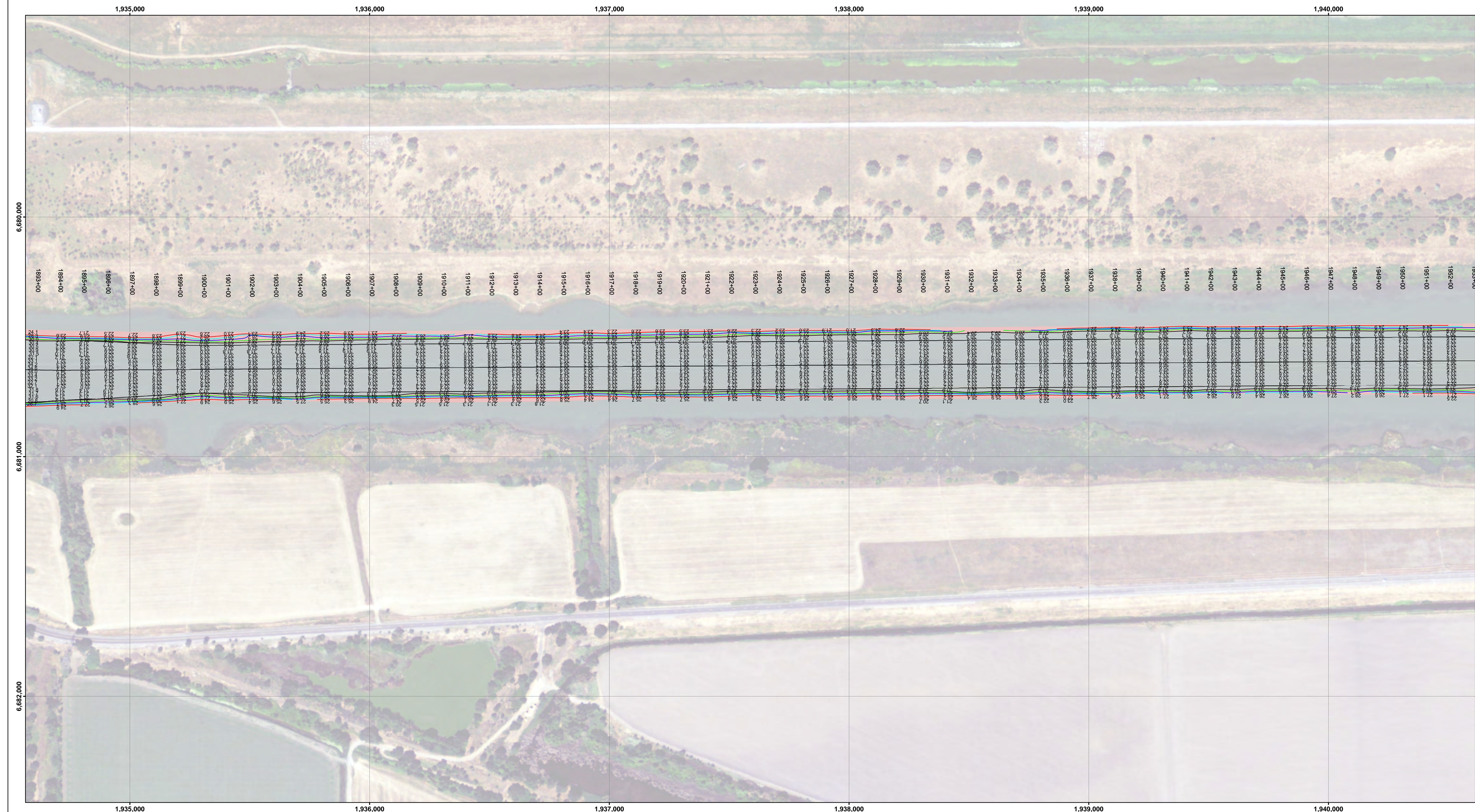
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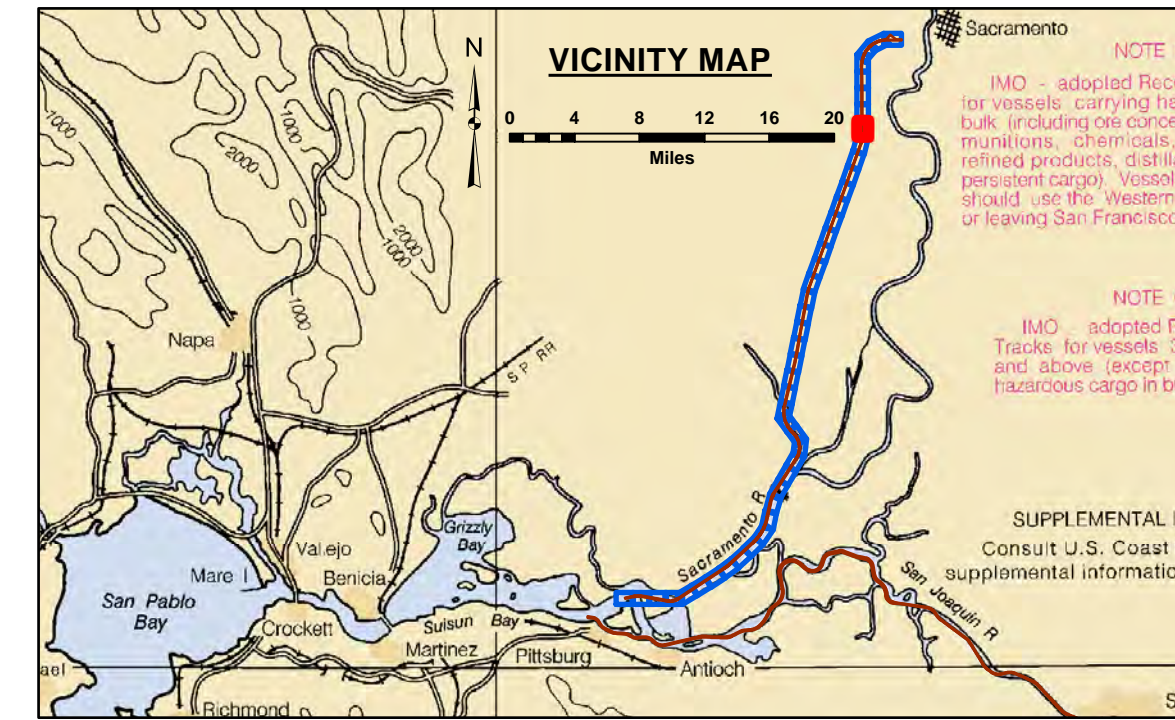


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Stippled: Hydro Survey Team Leader	Plotted By:	May 30, 2018
Recommended: Chief, Hydro Survey Section	Checked By:	Designed by:
Approved: Chief, Construction Branch	Checked By:	Drawn by:
	PDT	PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
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Sheet
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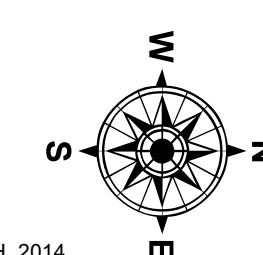
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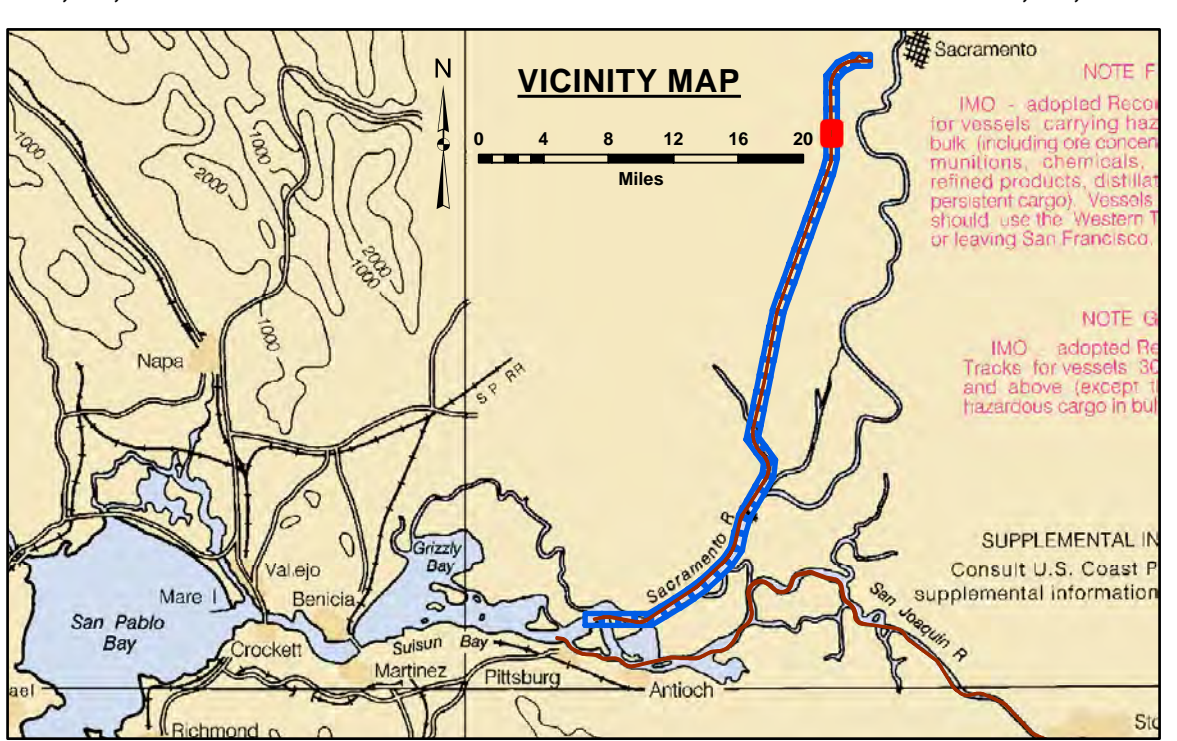




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Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

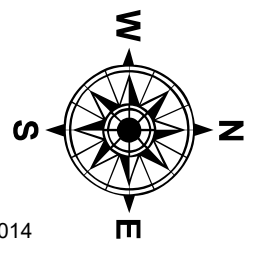


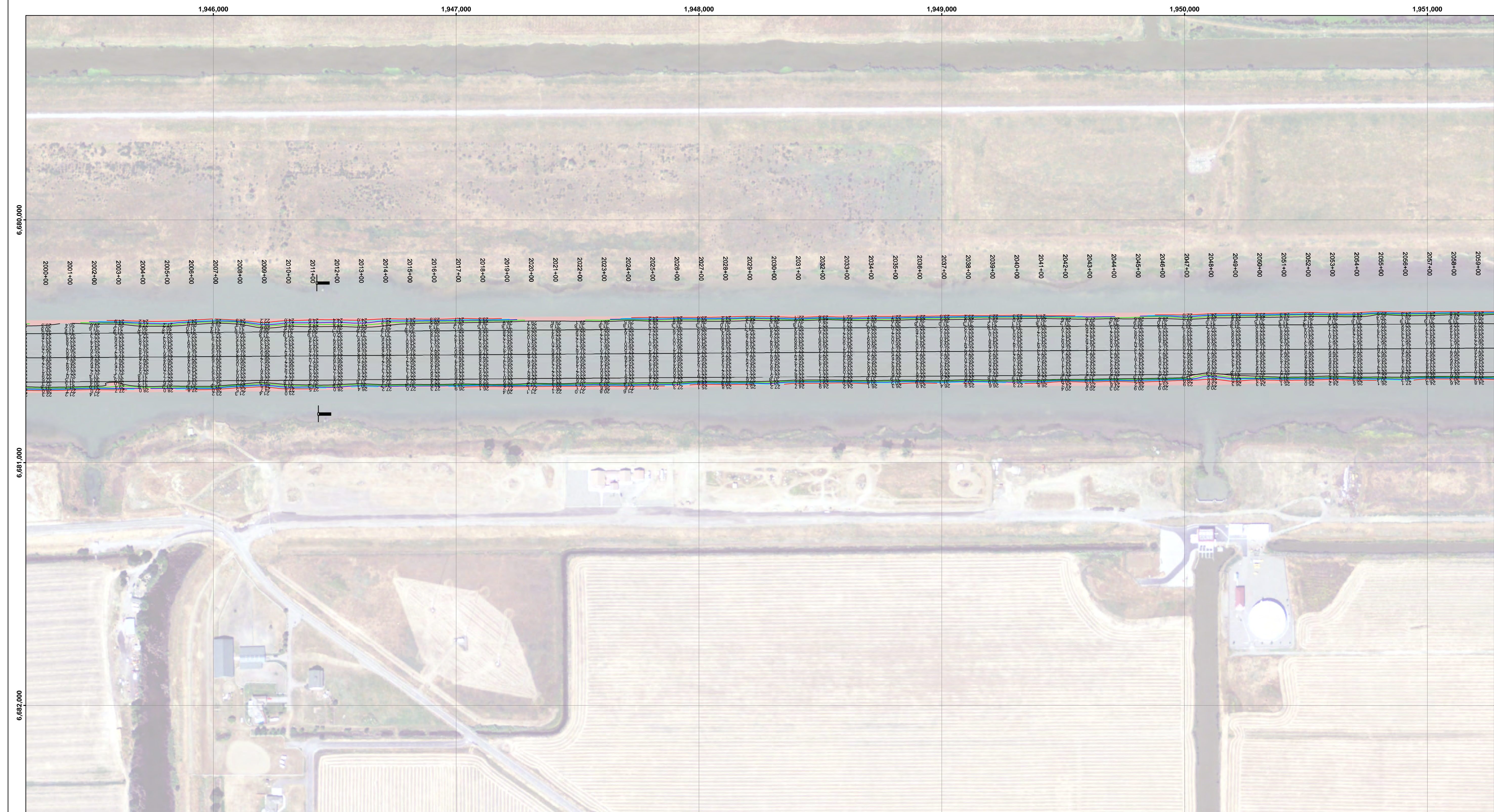
LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy
— Contour Line	✈ Wrecks-Submerged	◆ Green Navigation Buoy

Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

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 PROJECT DEPTH: -30'
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CONTROLS:
 LOCATION: RIO VISTA
 NOAA STATION: 9415316
 BENCHMARK: 5316 B 1996 (NO PID)
 TIDE GAUGE: NAIL @ 8.2 FT MLLW
 METADATA: NAIL SET BY USACE 31 MARCH, 2014
 LOCATION: PORT OF WEST SACRAMENTO
 NOAA STATION: 9416131
 BENCHMARK: POWS1 (NO PID)
 TIDE GAUGE: NAIL @ 10.0 FT MLLW
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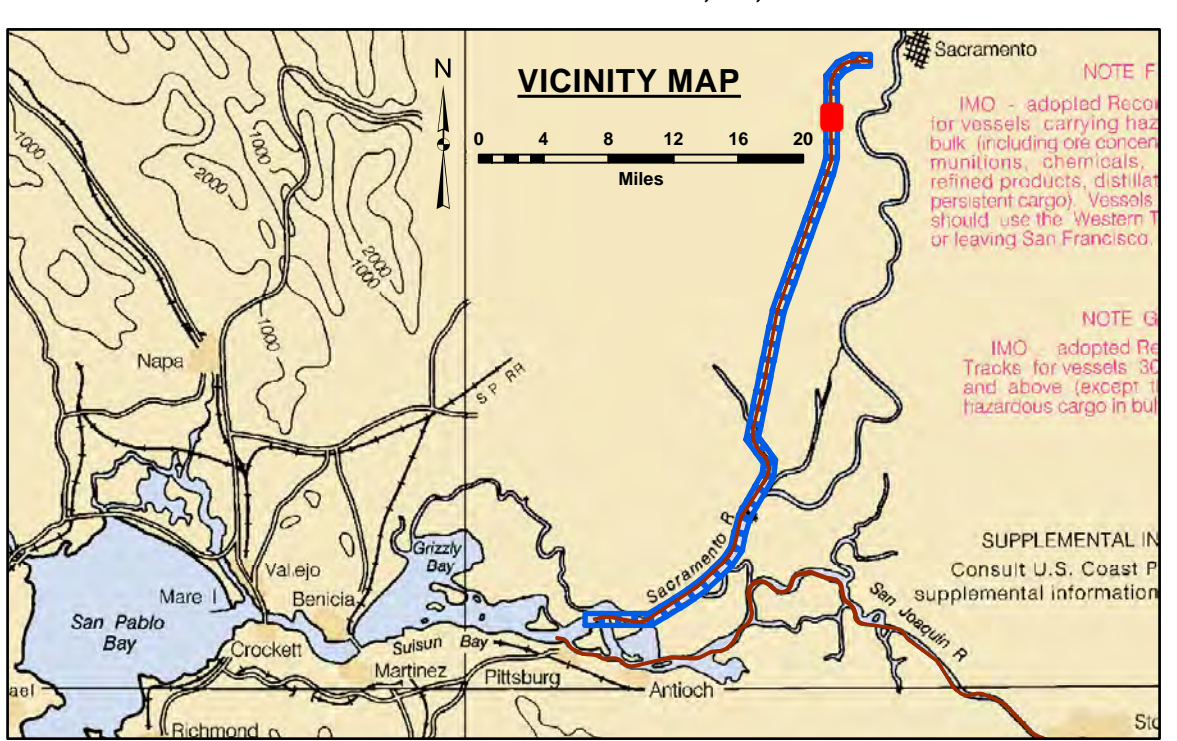


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Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT

CALIFORNIA
 PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
 LT COLONEL, C.E., DISTRICT ENGINEER
 San Joaquin County Hydro Survey Team Leader
 Recommended: Chief, Hydro Survey Section
 Approved: Chief, Construction Branch

SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
Sheet Reference Number
40 of 45



LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
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— Contour Line	✦ Wrecks-Submerged	◆ Green Navigation Buoy

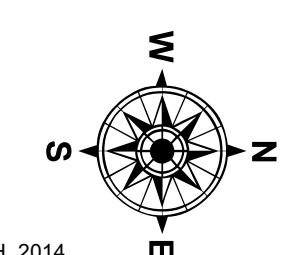
Contours	
—	-30
—	-29
—	-28
—	-27
—	-26

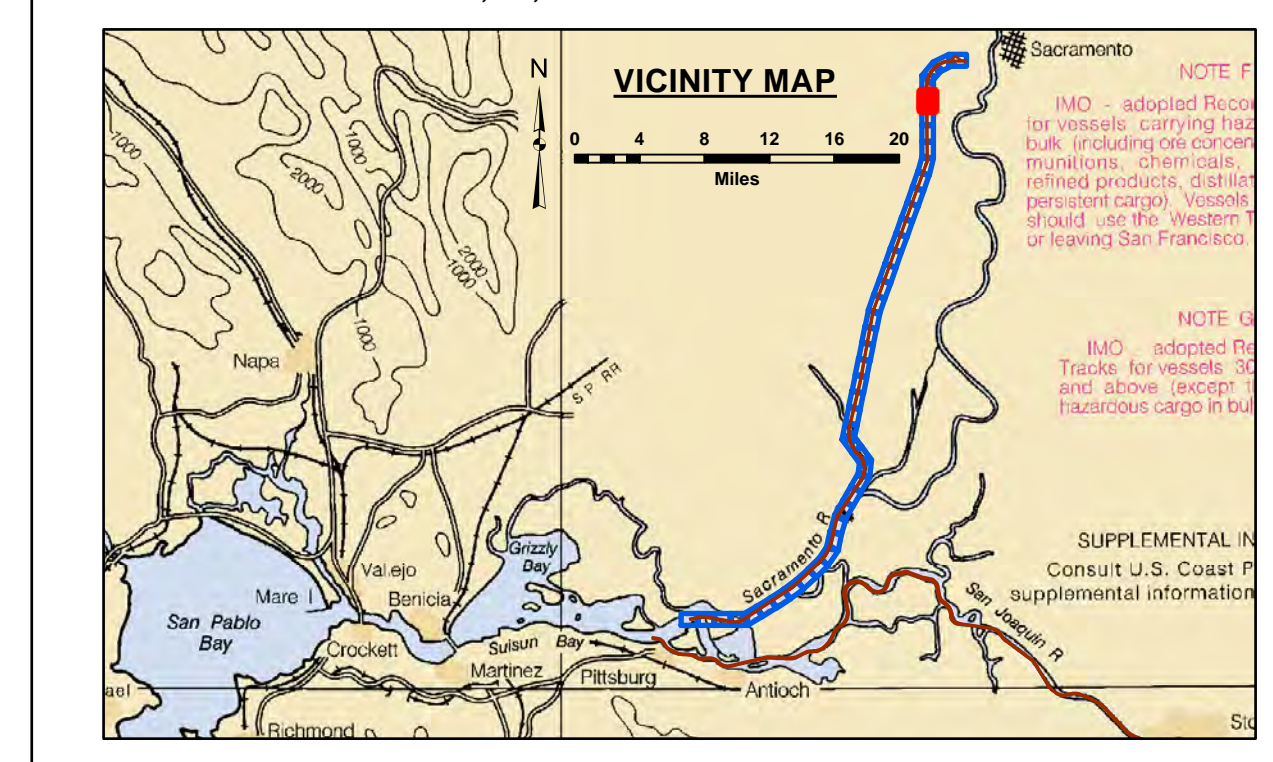
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0 400 800 1,200 Feet

LEGEND

--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area	— Contours
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -30
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General	— -29
- - - Cable Overhead	⊗ Obstruction Point	◆ Red Navigation Buoy	— -28
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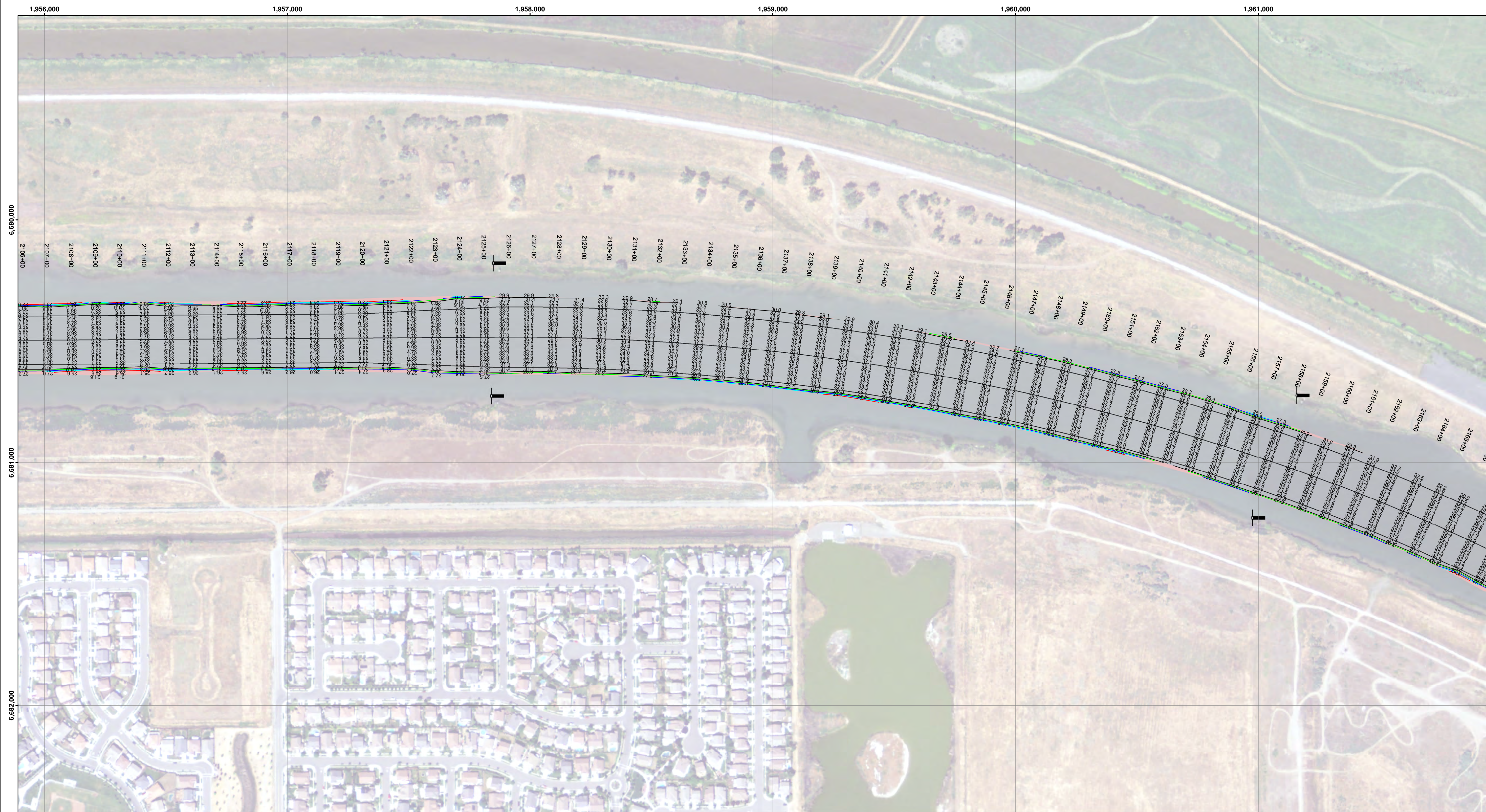
Chart Date:	May 30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT

PREPARED UNDER THE DIRECTION OF
TRAVIS J. RAYFIELD
LT COLONEL, C.E., DISTRICT ENGINEER

Suggested: Hydro Survey Team Leader
Recommended: Chief, Hydro Survey Section
Approved: Chief, Construction Branch

CALIFORNIA
SAN JOAQUIN COUNTY
SACRAMENTO RIVER
CONDITION SURVEY
17-21 MAY 2018

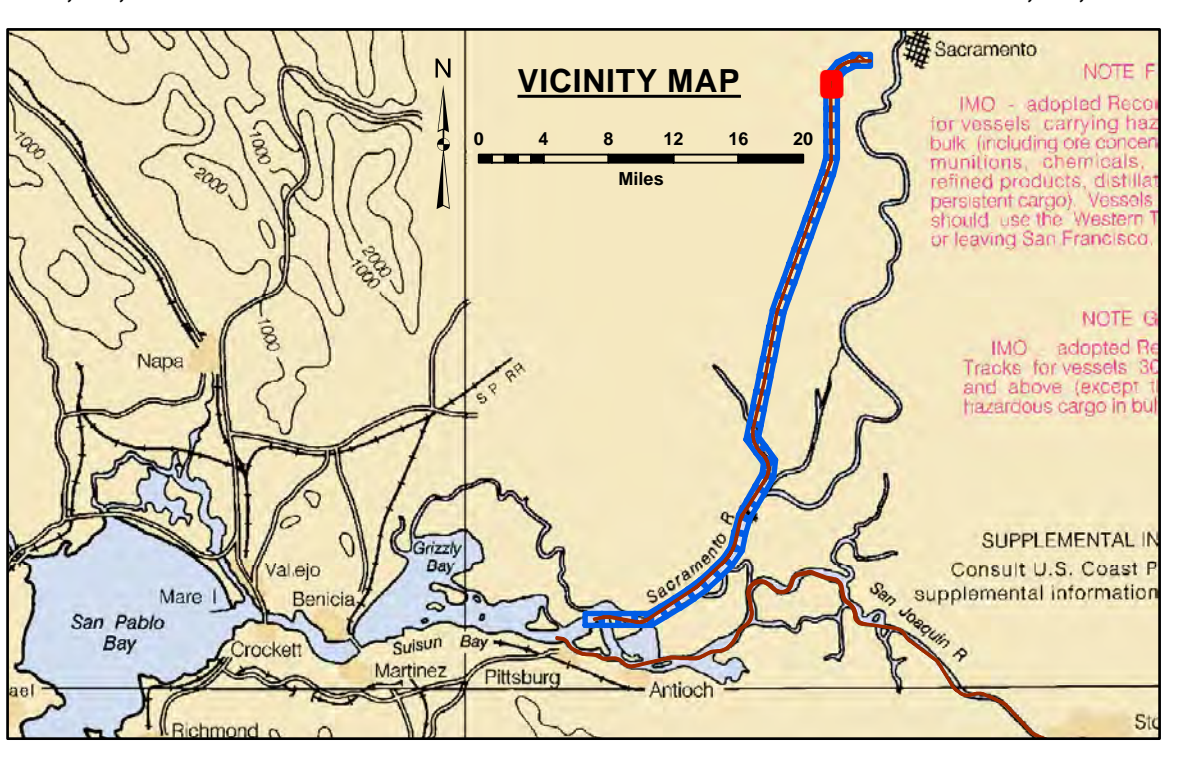
Sheet Reference Number
41 of 45



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Chart Date:	May '30, 2018
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018

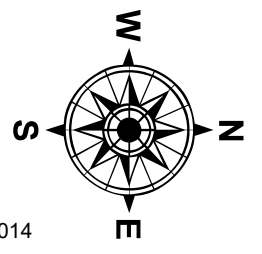


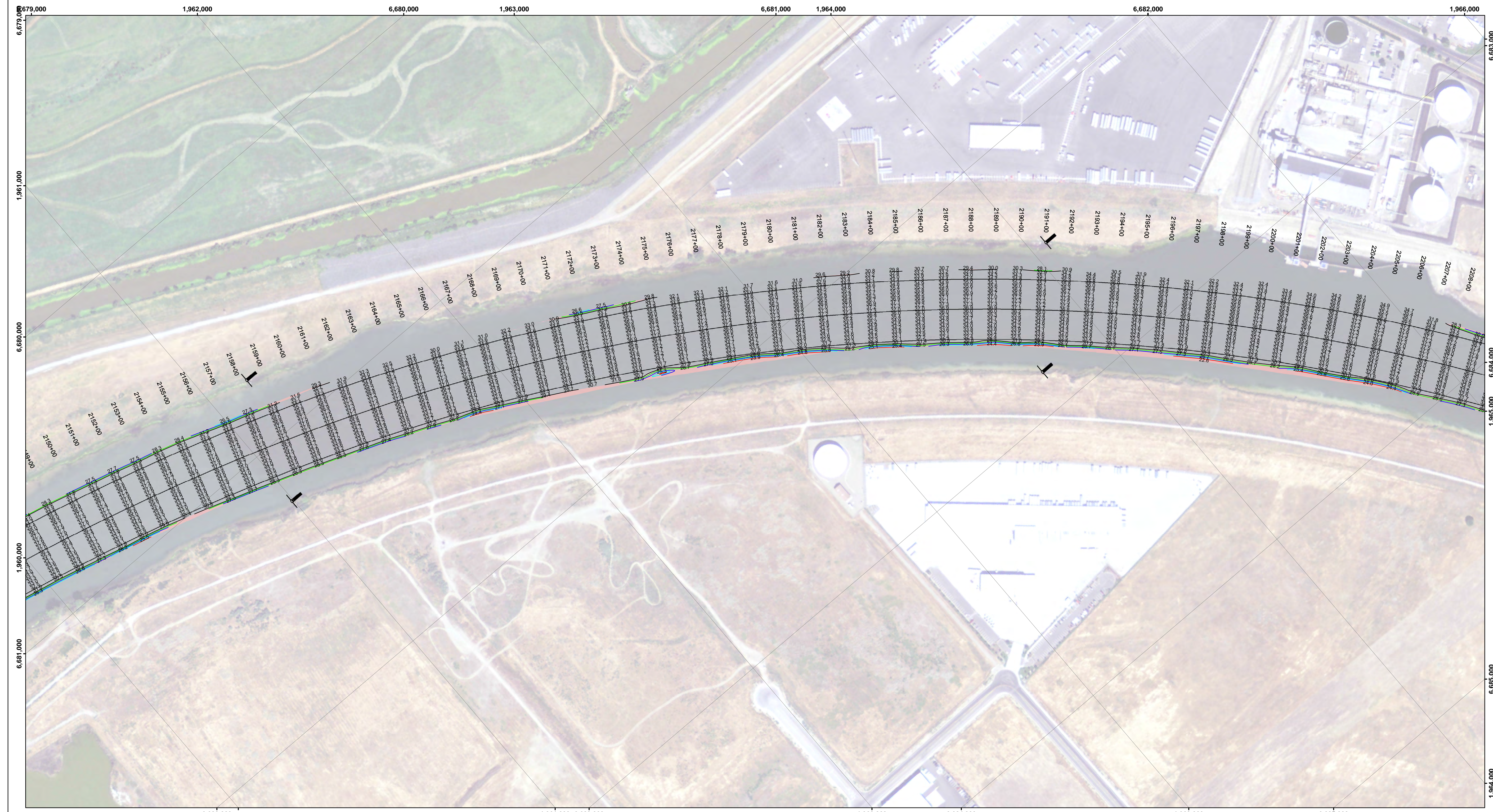
LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
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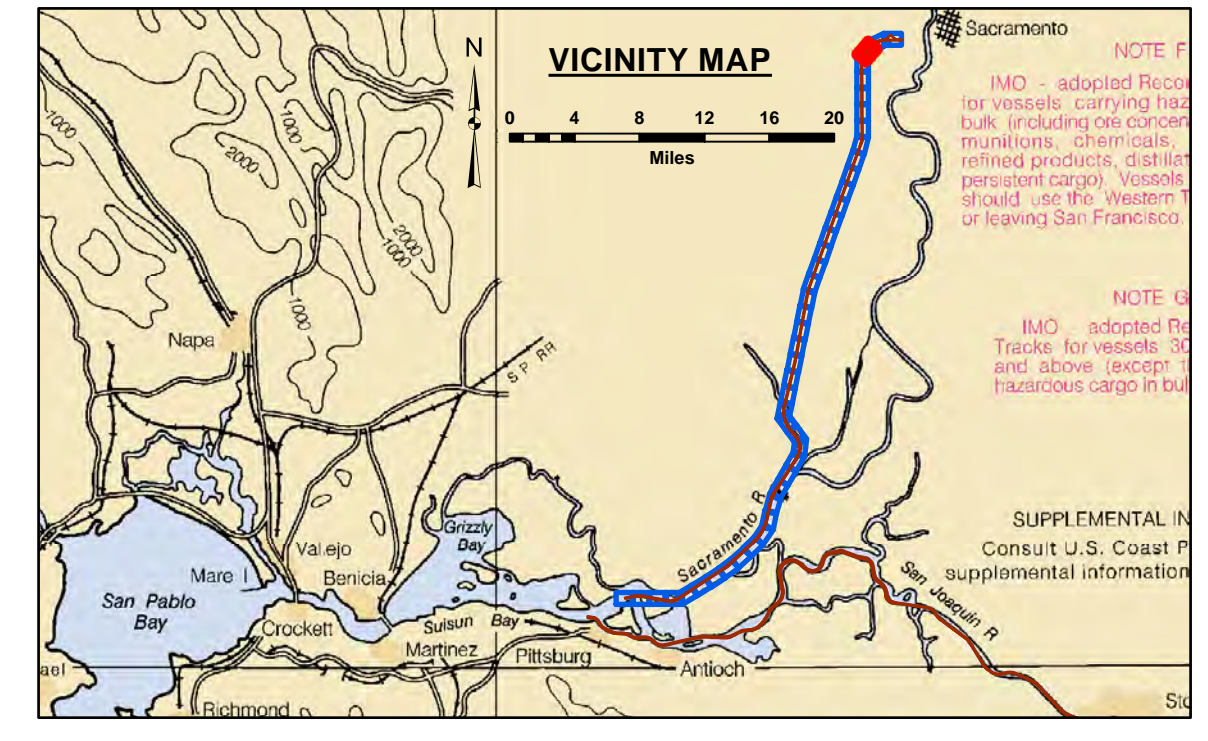




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Prepared Under the Direction of TRAVIS J. RAYFIELD LT Colonel, C.E., District Engineer	Chart Date: May 30, 2018
Standby: Hydro Survey Team Leader	Designed by: PDT
Recommended: Chief, Hydro Survey Section	Checked by: PDT
Approved: Chief, Construction Branch	Drawn by: PDT

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



0 400 800 1,200 Feet

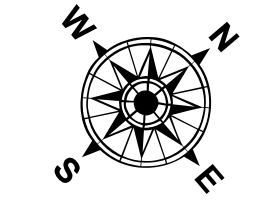
LEGEND		Contours	
--- Federal Navigation Channel	▨ Cable Area	● Shoaling Area	— -30
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	— -29
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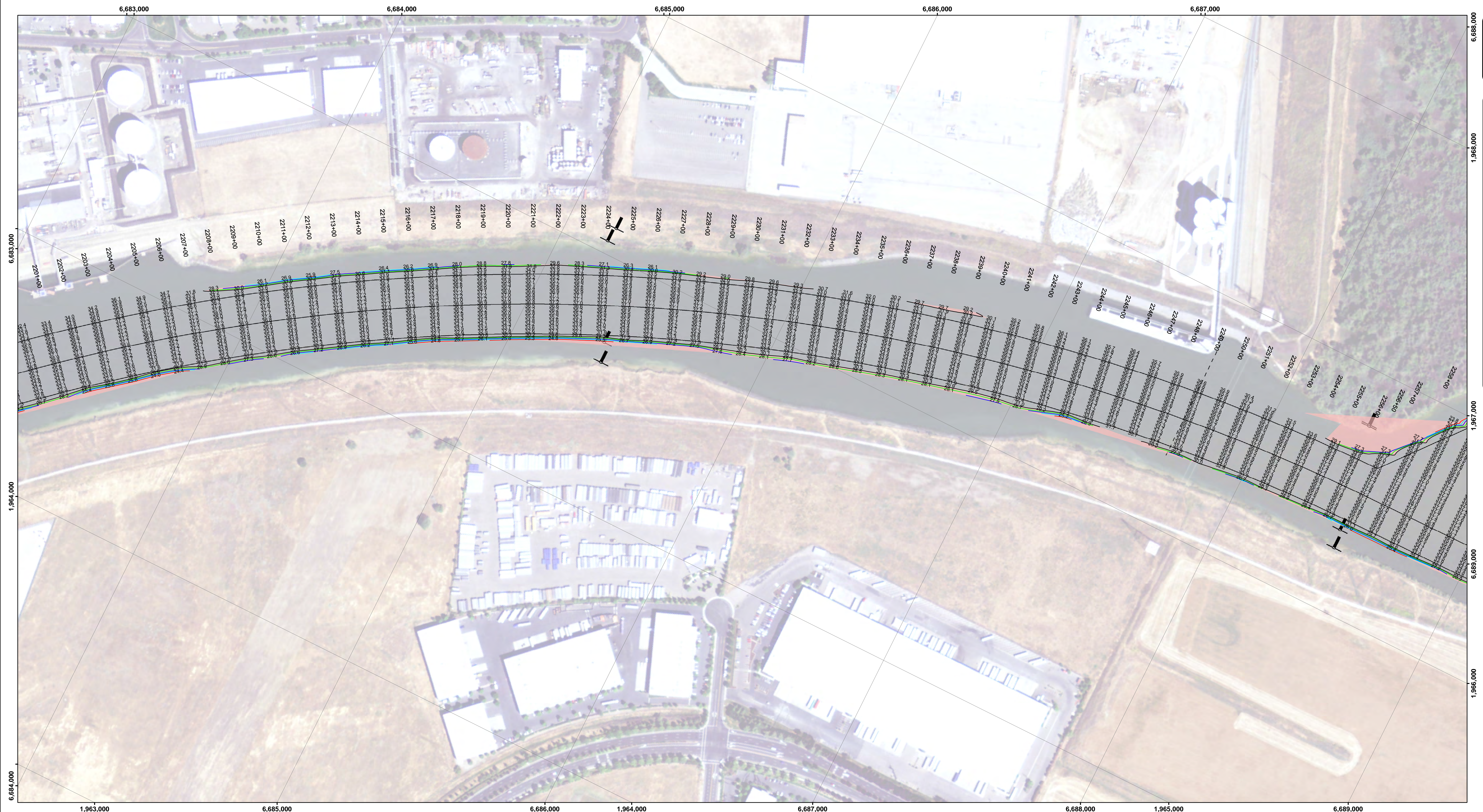
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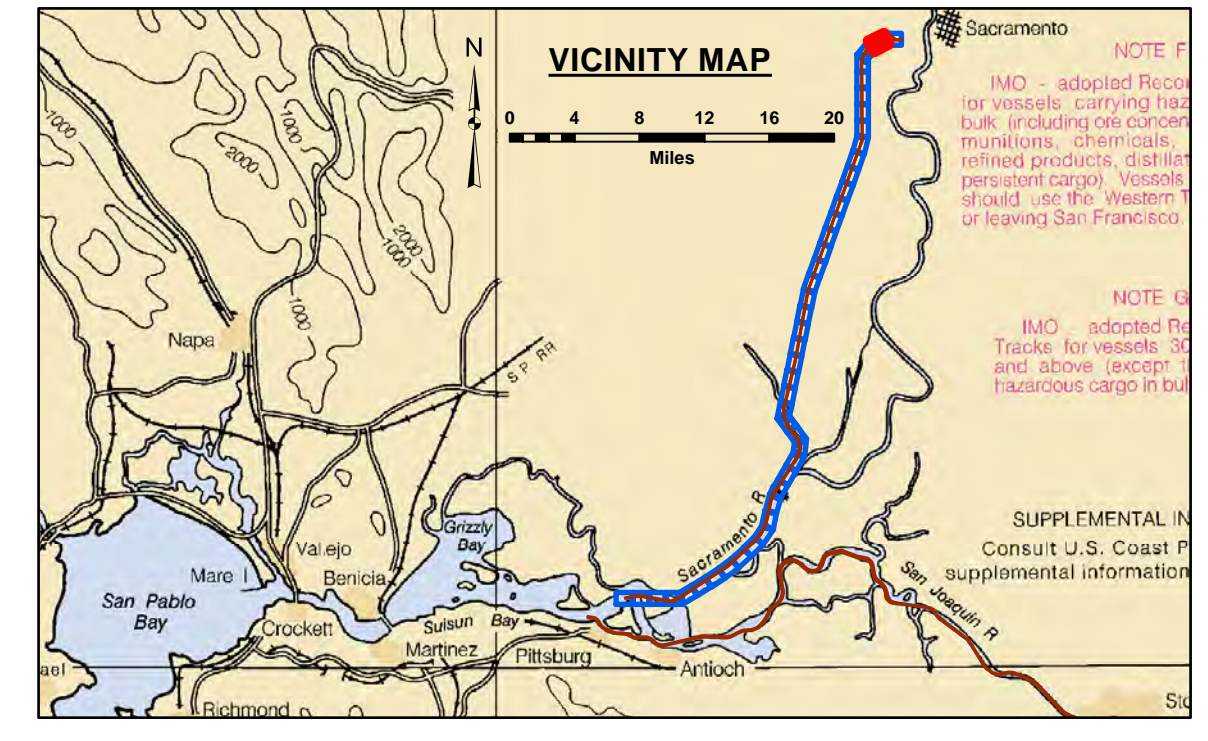




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Drawn by:	PDT
Surveyed By:	Plotted By: PDT
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Approved:	Chief, Construction Branch

CALIFORNIA
 SAN JOAQUIN COUNTY
SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018



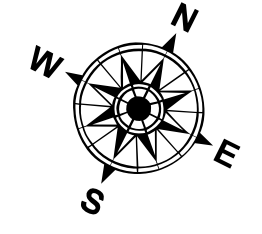
LEGEND		Contours	
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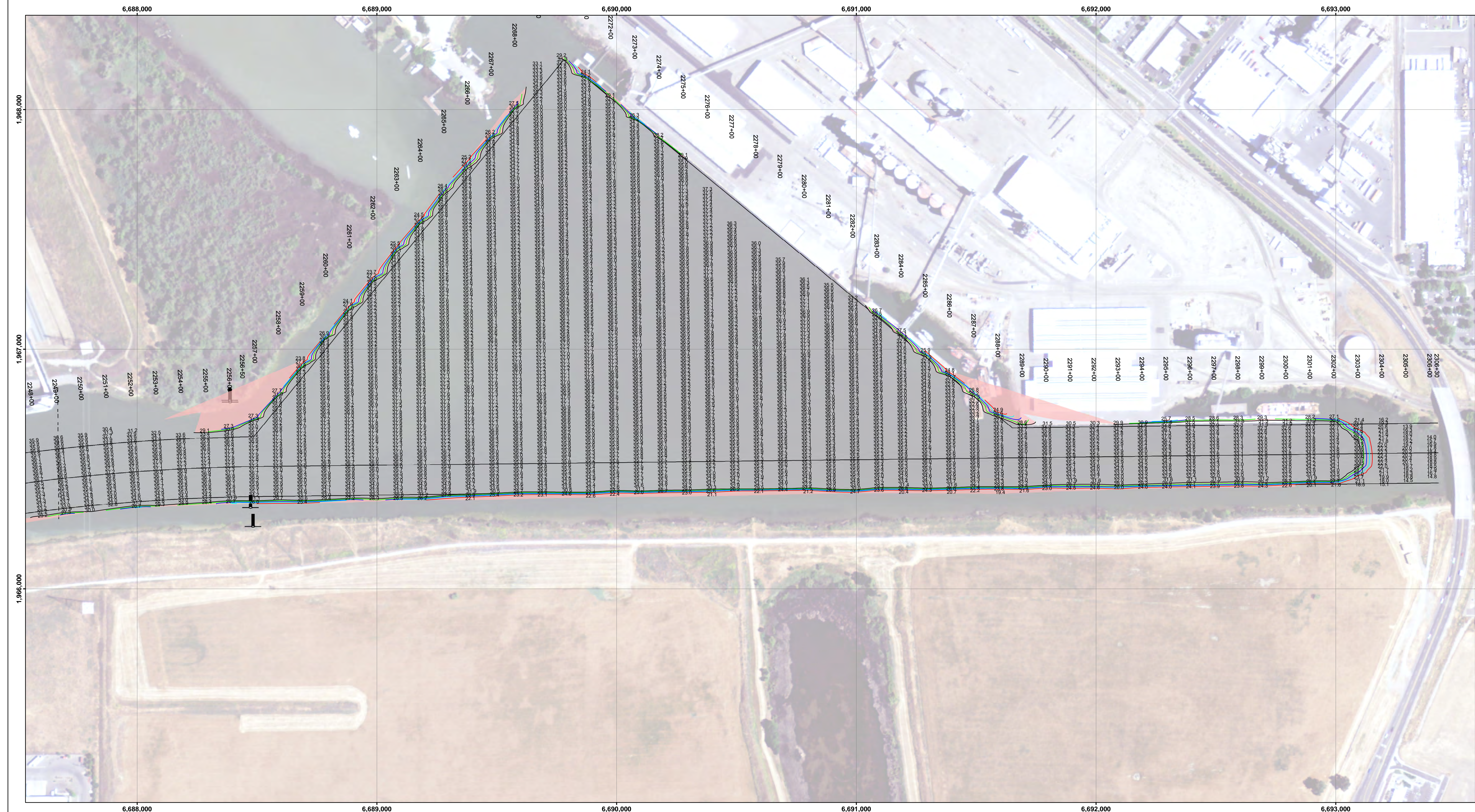
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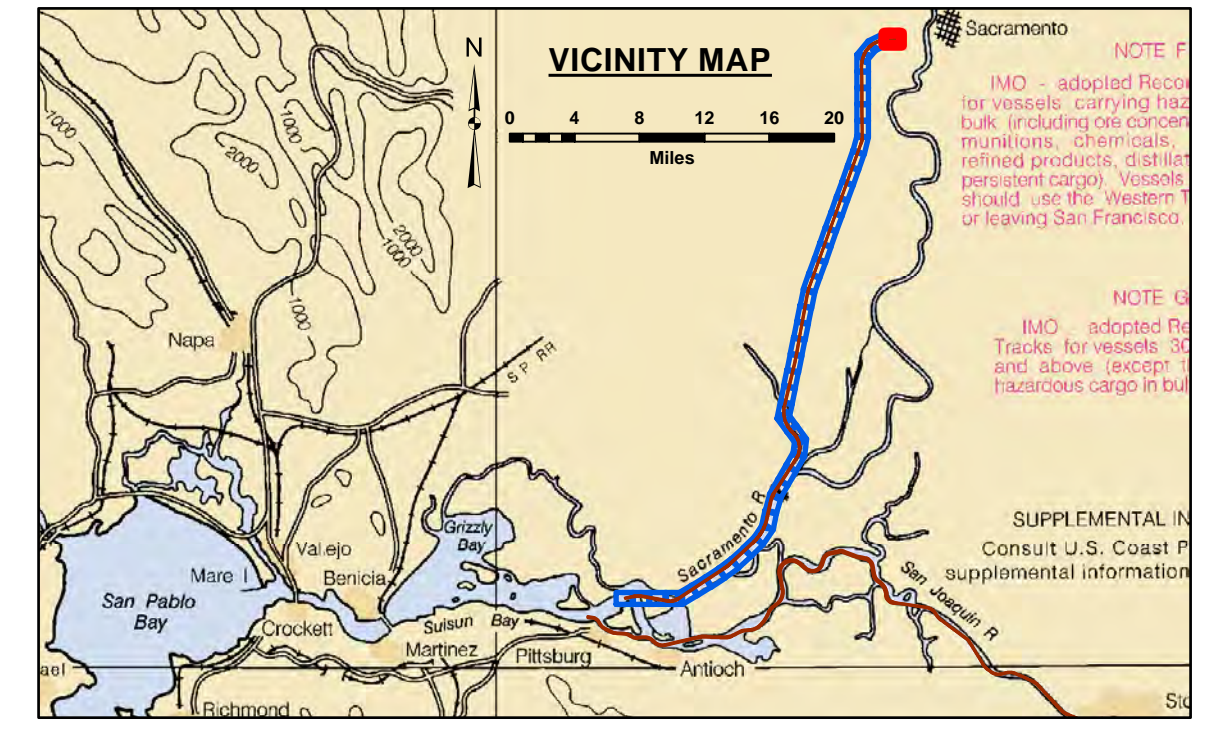


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SACRAMENTO RIVER
 CONDITION SURVEY
 17-21 MAY 2018
45 of 45



LEGEND		Contours	
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