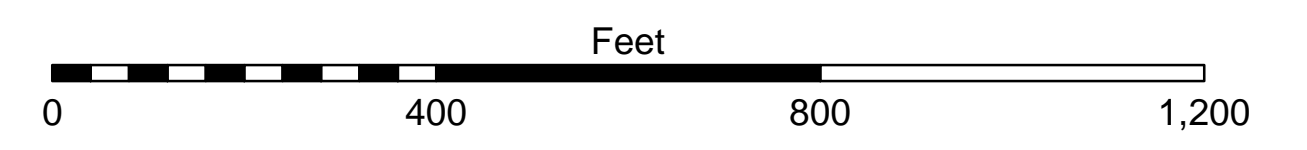
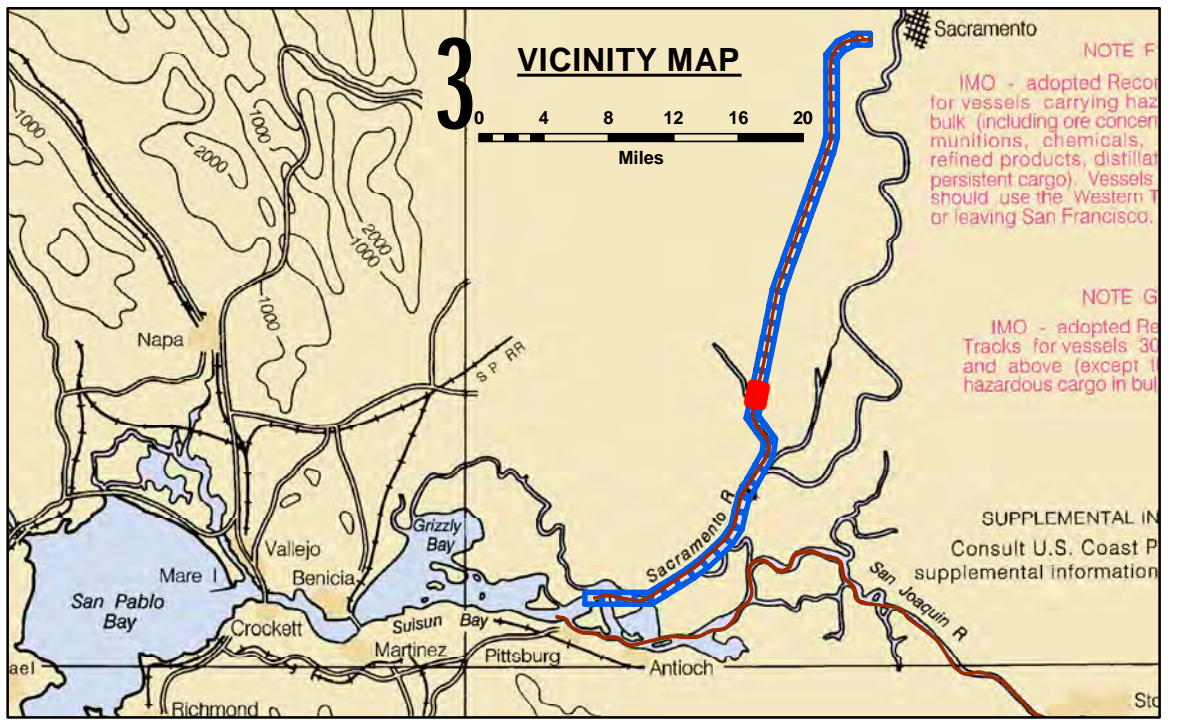


**DISCLAIMER:** The United States Government furnishes this data as a service to the public and does not warrant the accuracy, completeness, or timeliness of the data. The user is responsible for the results of any application of the data for other than its intended purpose. The user is not to be held liable for any damages, including consequential damages, arising from the use of this data. The United States shall be under no liability whatsoever to any person by reason of any use of this data, whether or not such use was foreseeable, or whether or not the recipient fully agrees not to reproduce these data to anyone as other than Government provided data. This recipient may not transfer these data to others without also transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch
Prepared Under the Direction of:	JOHN C. MORROW
LT. COLONEL, C.E., DISTRICT ENGINEER	
Subject:	Hydro Survey Team Leader
Recommendation:	Chief, Hydro Survey Section
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

**NOTES:**  
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
 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

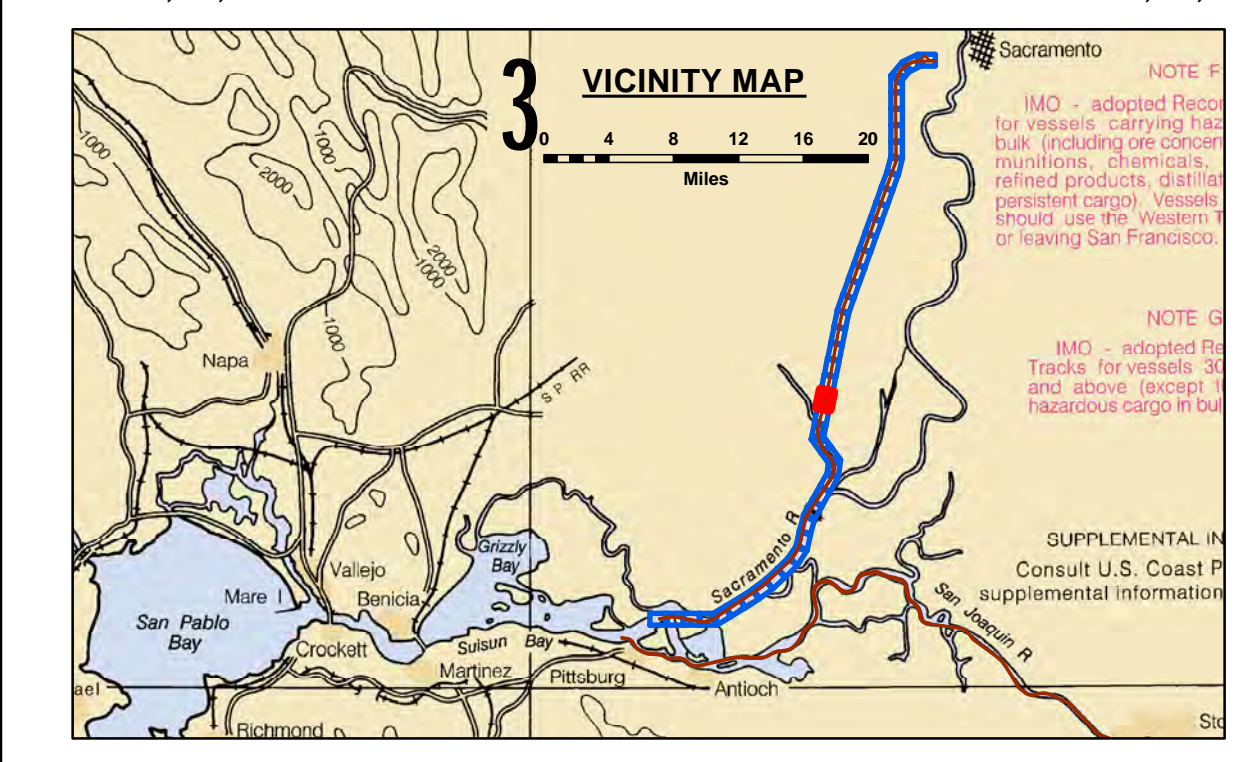
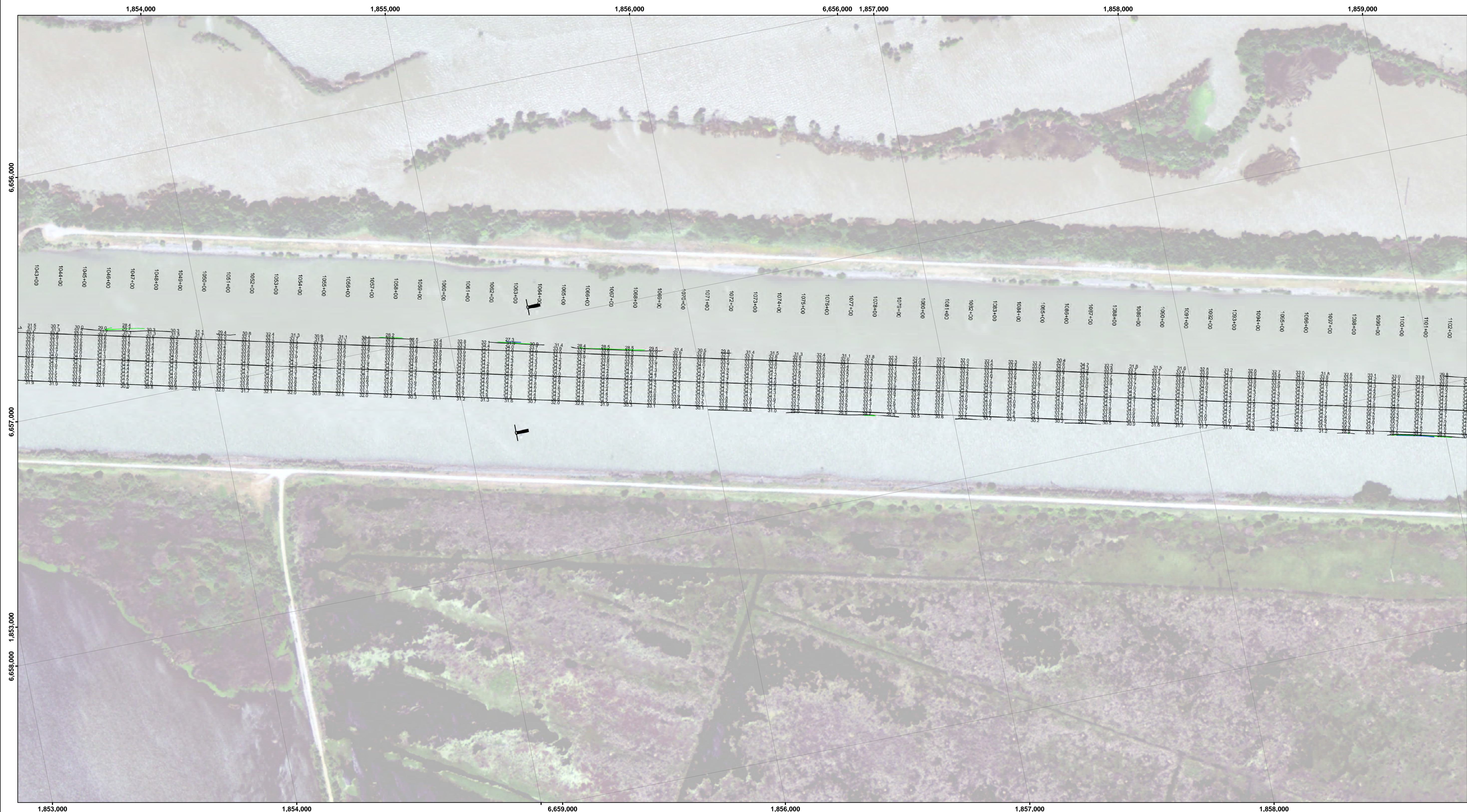
**CONTROLS:**  
 LOCATION: RIO VISTA  
 NOAA STATION: 9415316  
 BENCHMARK: 5316 B 1996 (NO PID)  
 TIDE GAUGE: NAIL @ 8.2 FT MLLW  
 METADATA: NAIL SET BY USACE 31 MARCH, 2014

**LOCATION: PORT OF WEST SACRAMENTO**  
 NOAA STATION: 9416131  
 BENCHMARK: POWS1 (NO PID)  
 TIDE GAUGE: NAIL @ 10.0 FT MLLW  
 METADATA: NAIL SET BY USACE 9 APRIL, 2014

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

CALIFORNIA  
 SAN JOAQUIN COUNTY  
**SACRAMENTO RIVER**  
 CONDITION SURVEY  
 11-16 MARCH 2017

Sheet Reference Number  
**21 of 45**



Feet  
0 400 800 1,200

--- 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

**NOTES:**  
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
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.



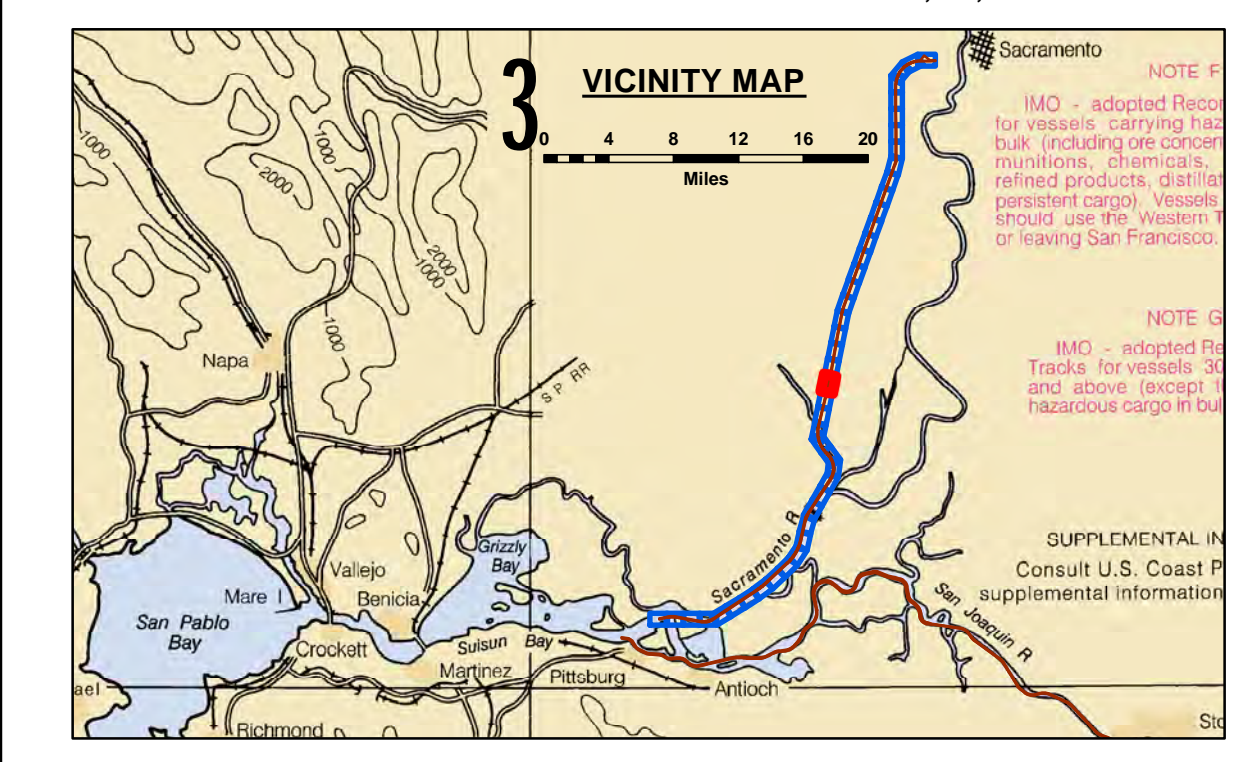
**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. At such, it is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results of any of the application of the data for other than its intended purposes.

**DISCLAIMER:** The United States Government furnishes this data and the US Army Corps of Engineers does not warrant the accuracy, completeness, or implied consequences of the data. The United States shall be under no liability whatsoever to any person by reason of any use of the data for other than its intended purposes. The recipient may not transfer these data to others without transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

PREPARED UNDER THE DIRECTION OF  
**JOHN C. MORROW**  
LT. COLONEL, C.E., DISTRICT ENGINEER  
Sponsor: Hydro Survey Team Leader  
Recommend: Chief, Hydro Survey Section  
Approve: Chief, Construction Branch

CALIFORNIA  
**SACRAMENTO RIVER**  
CONDITION SURVEY  
11-16 MARCH 2017



Feet  
0 400 800 1,200

--- 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

**NOTES:**  
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
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.

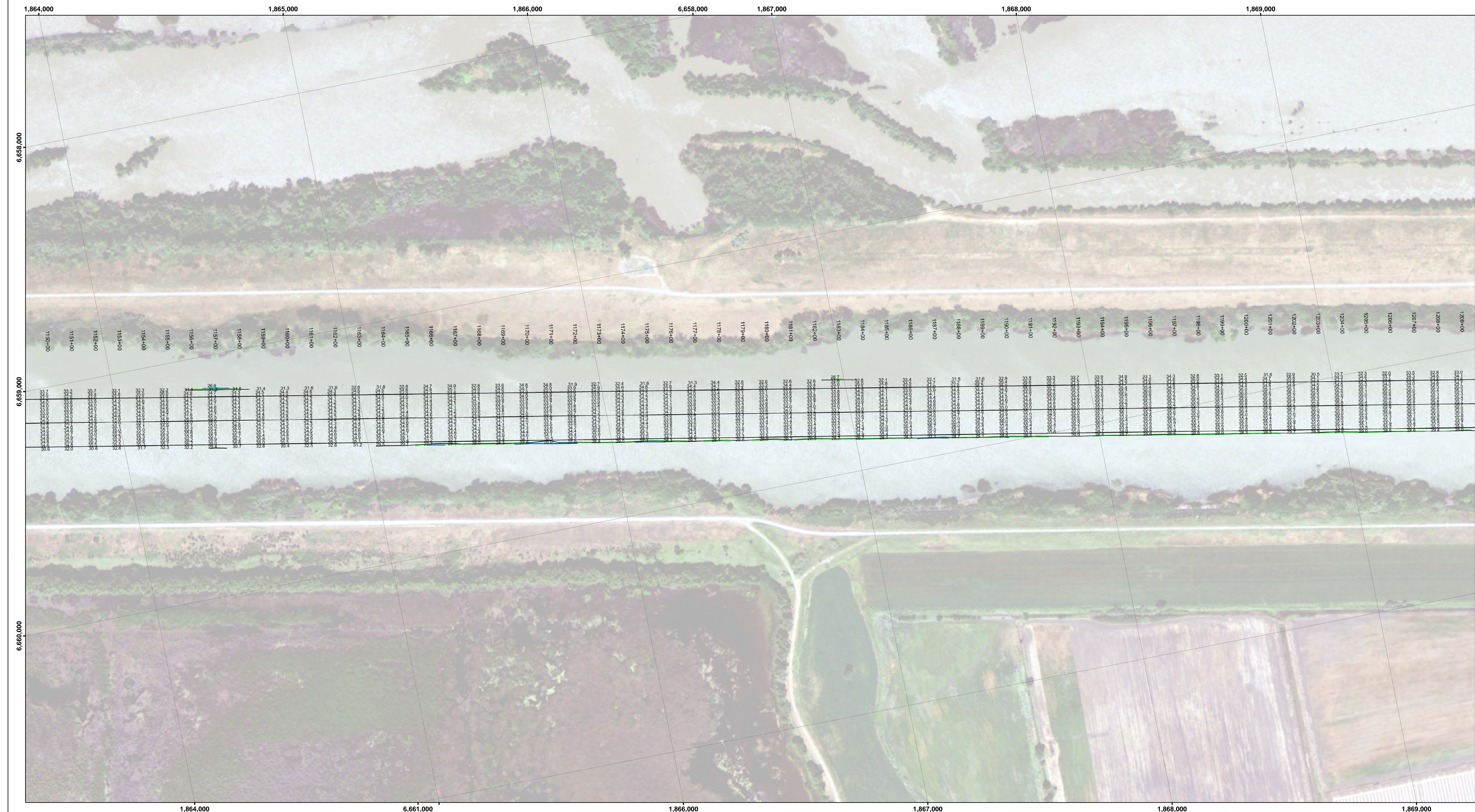


**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. Accuracy of the data is not guaranteed. The user is responsible for the results of any application of the data for other than its intended purpose. The United States shall be under no liability whatsoever to any person by reason of any use of the data for other than its intended purpose. The recipient may not transfer these data to others without transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

PREPARED UNDER THE DIRECTION OF  
**JOHN C. MORROW**  
LT. COLONEL, C.E., DISTRICT ENGINEER  
Standard: Hydro Survey Team Leader  
Recommended: Chief, Hydro Survey Section  
Approved: Chief, Construction Branch

CALIFORNIA  
SAN JOAQUIN COUNTY  
**SACRAMENTO RIVER**  
CONDITION SURVEY  
11-16 MARCH 2017

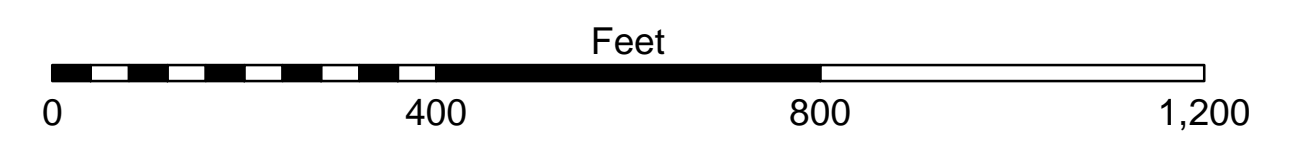
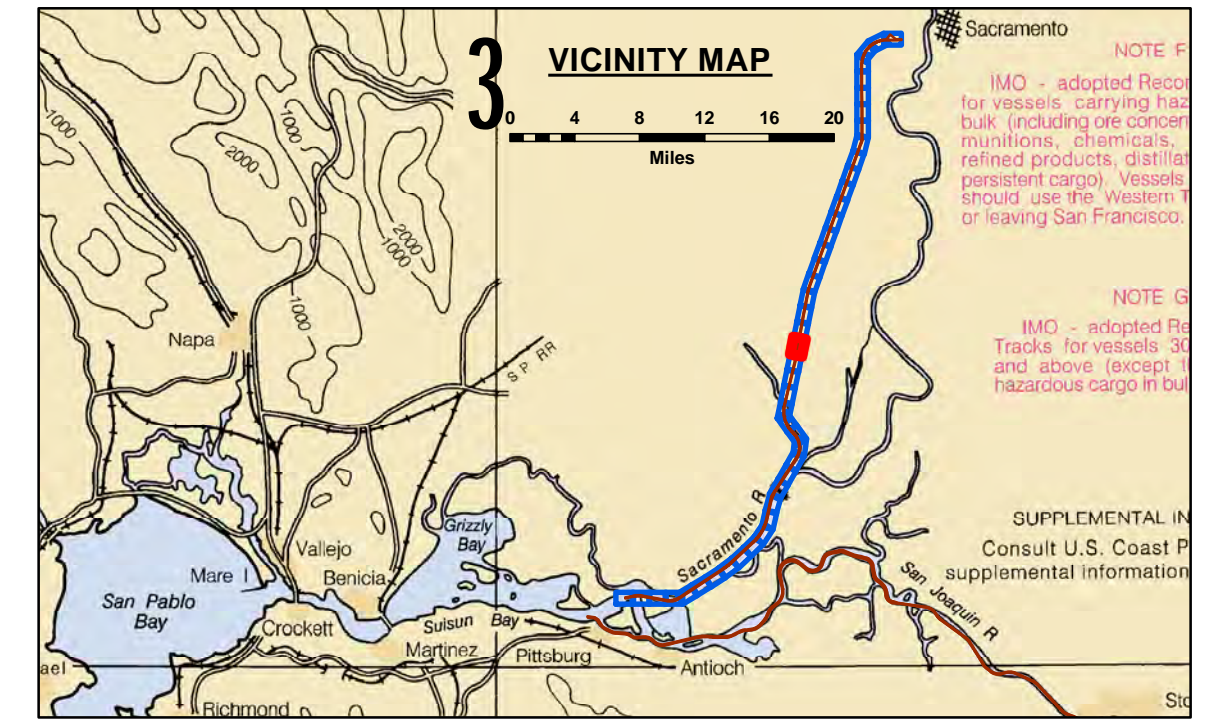


**DISCLAIMER**  
 The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

**SAN JOAQUIN COUNTY**  
**SACRAMENTO RIVER**  
 CONDITION SURVEY  
 11-16 MARCH 2017

**Sheet Reference Number**  
**24 of 45**



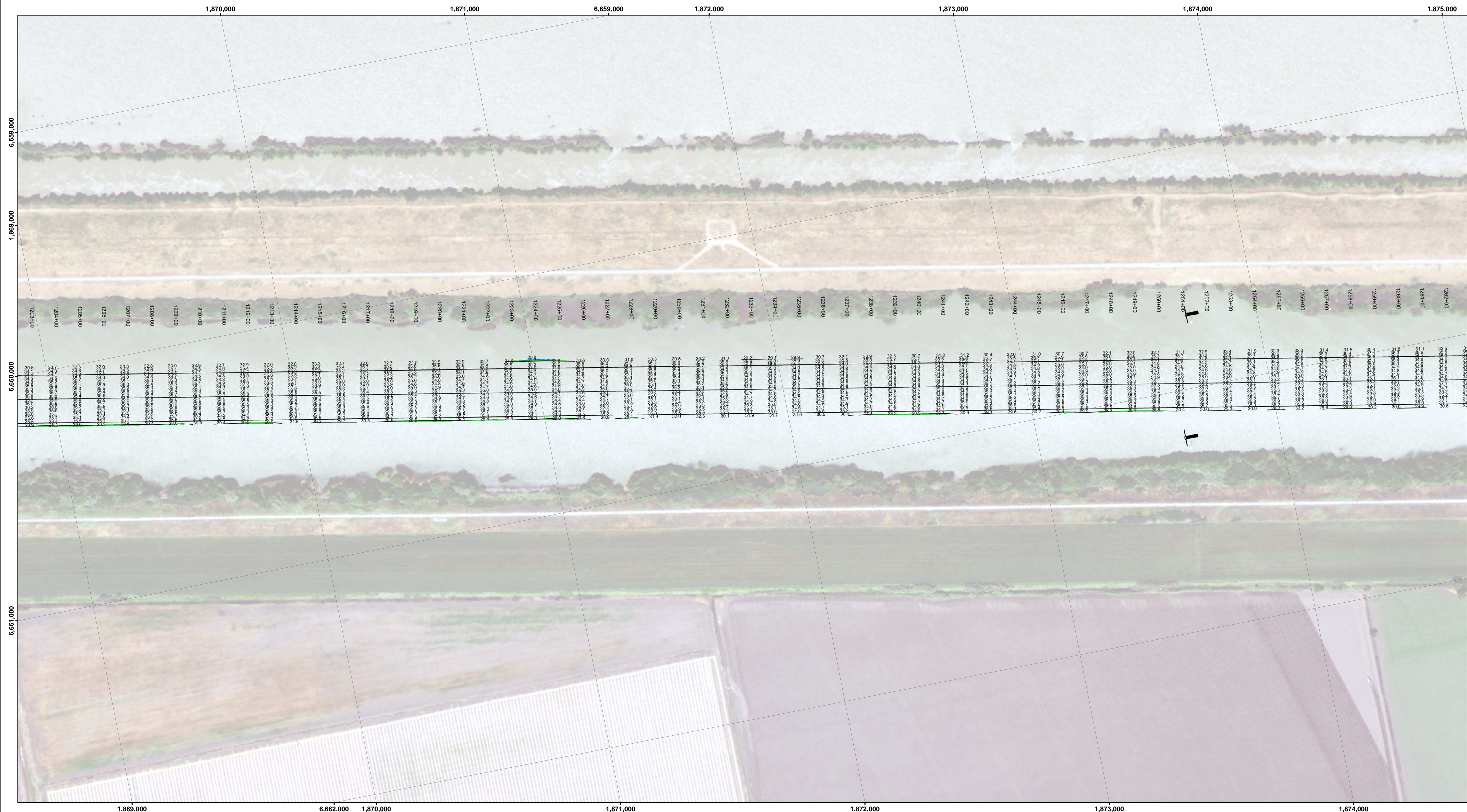
LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	○ Shoalest Sounding**
..... Cable Submarine	▭ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊙ Obstruction Point	⊗ Red Navigation Buoy
— Contour Line	⊙ Wrecks-Submerged	⊗ Green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

**NOTES:**  
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
 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  
 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

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

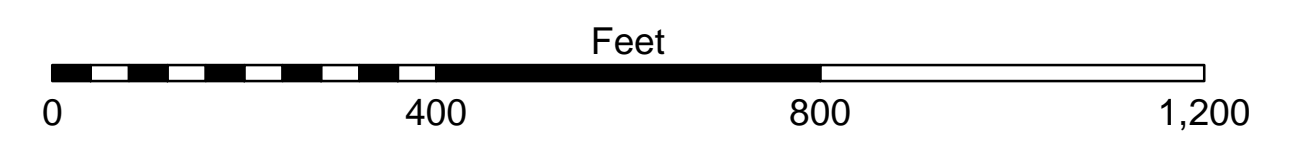
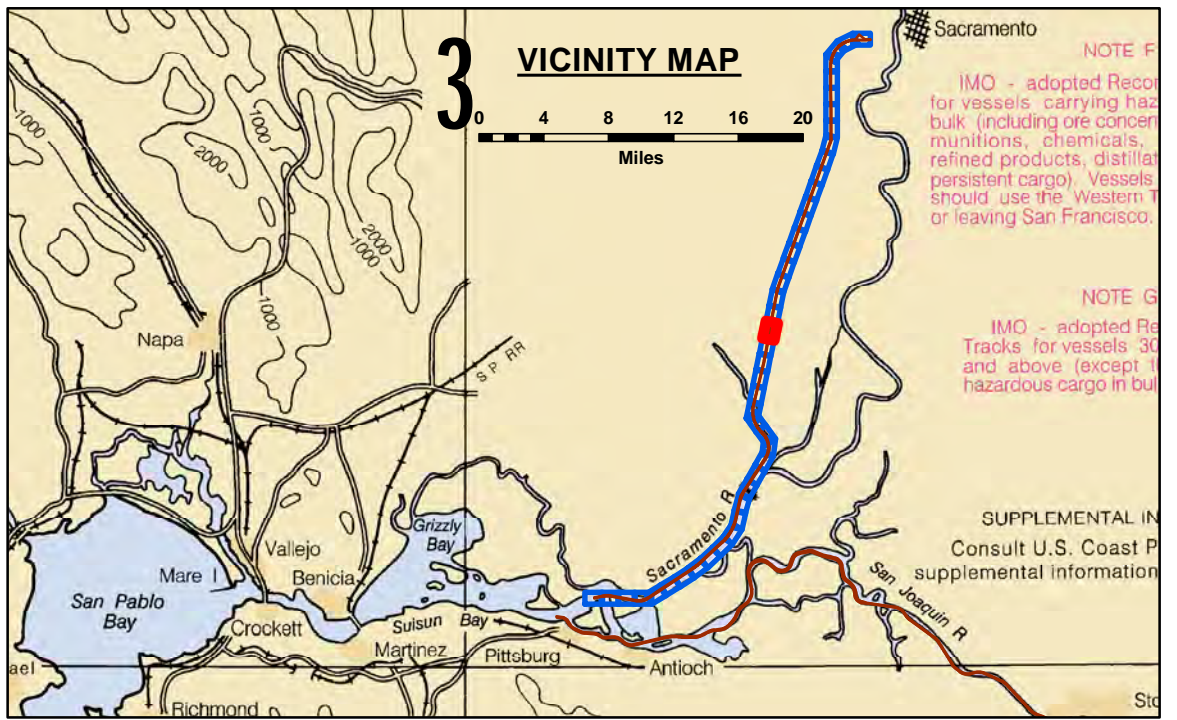


**DISCLAIMER**  
 The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. The user is responsible for the results of any application of the data for other than its intended purpose. The user is not to be held liable for any errors or omissions in the data. The user is not to be held liable for any damage or injury resulting from the use of the data. The user is not to be held liable for any loss of data or information. The user is not to be held liable for any other consequences of the use of the data. The user is not to be held liable for any other consequences of the use of the data. The user is not to be held liable for any other consequences of the use of the data.

Chart Date:	Mar 23, 2017
Surveyed By:	JOHN C. MORROW
Plotted By:	PDT
Checked By:	PDT
Drawn By:	PDT

CALIFORNIA  
 SAN JOAQUIN COUNTY  
**SACRAMENTO RIVER**  
 CONDITION SURVEY  
 11-16 MARCH 2017

Sheet Reference Number  
**25 of 45**



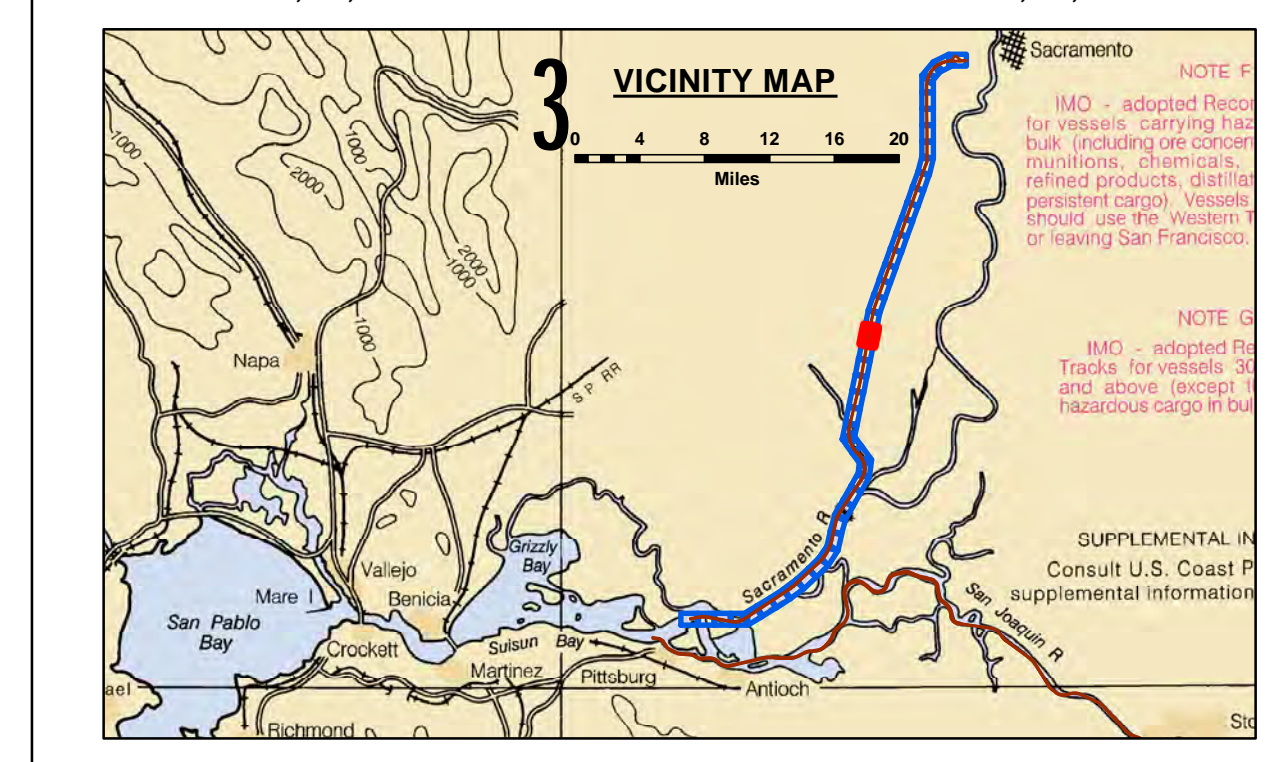
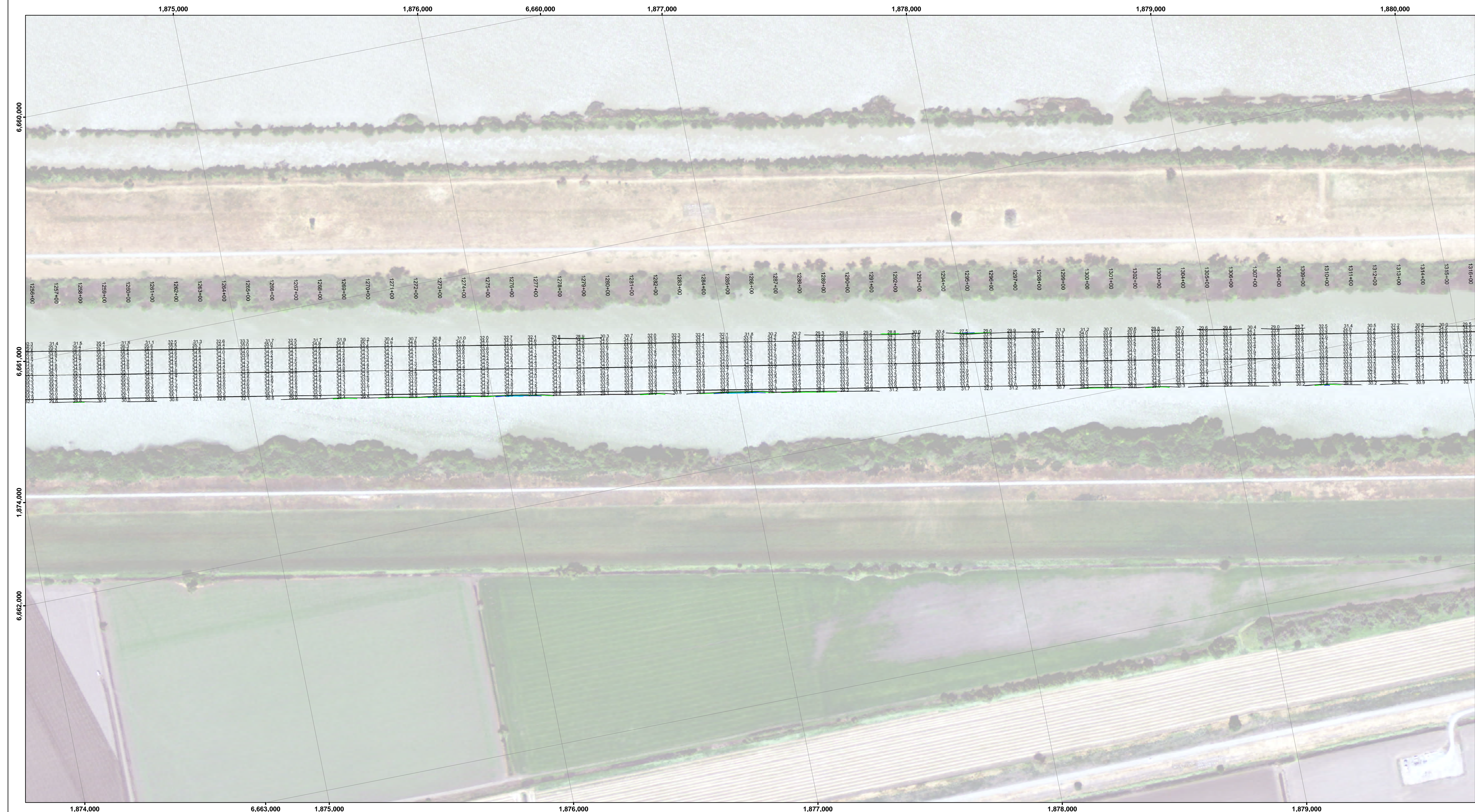
LEGEND		
--- Federal Navigation Channel	▨ Cable Area	■ Shoaling Area
— Federal Navigation Center Line	□ Placement Area	⊂ Shoalest Sounding**
⋯ Cable Submarine	⊠ Anchorage Area	⊥ Beacon, General
- - - Cable Overhead	⊠ Obstruction Point	⊗ Red Navigation Buoy
— Contour Line	⊠ Wrecks-Submerged	⊗ Green Navigation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

**NOTES:**  
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
 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  
 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

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



**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

**NOTES:**  
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
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.



**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

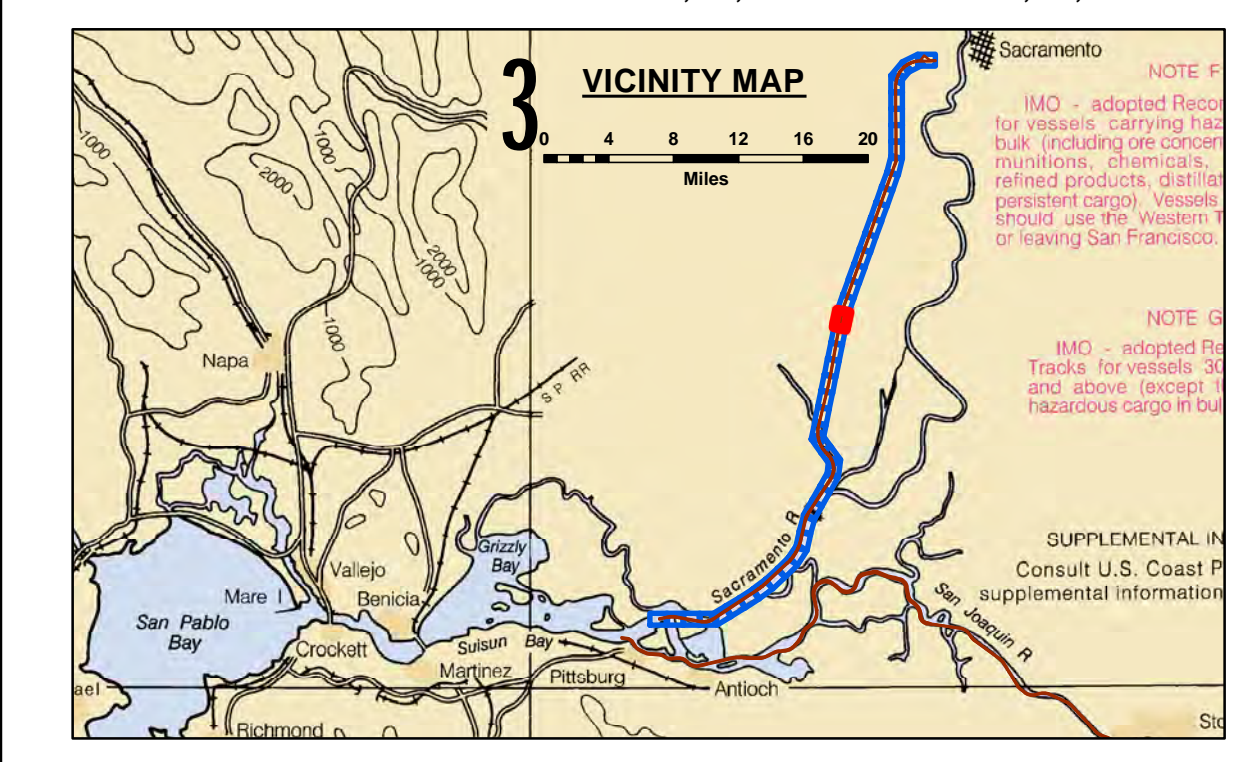
**ACCESS CONSTRAINTS:** The United States Government furnishes this information for the use of the public in the U.S. Government's interest. It is not to be distributed outside the U.S. Government. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT
Approved:	Chief, Construction Branch

PREPARED UNDER THE DIRECTION OF  
**JOHN C. MORROW**  
LT. COLONEL, C.E., DISTRICT ENGINEER

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

CALIFORNIA  
**SACRAMENTO RIVER**  
CONDITION SURVEY  
11-16 MARCH 2017



**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



**NOTES:**  
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
 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  
 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  
 ALL HORIZONTAL POSITIONS AND MLLW ELEVATIONS WERE POST-PROCESSED USING PUBLIC GPS REFERENCE STATIONS IN THE AREA.



**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. At such, it is only valid for its intended use, and the accuracy of the data is not guaranteed. The user is responsible for the results of any of the application of the data for other than its intended purpose.

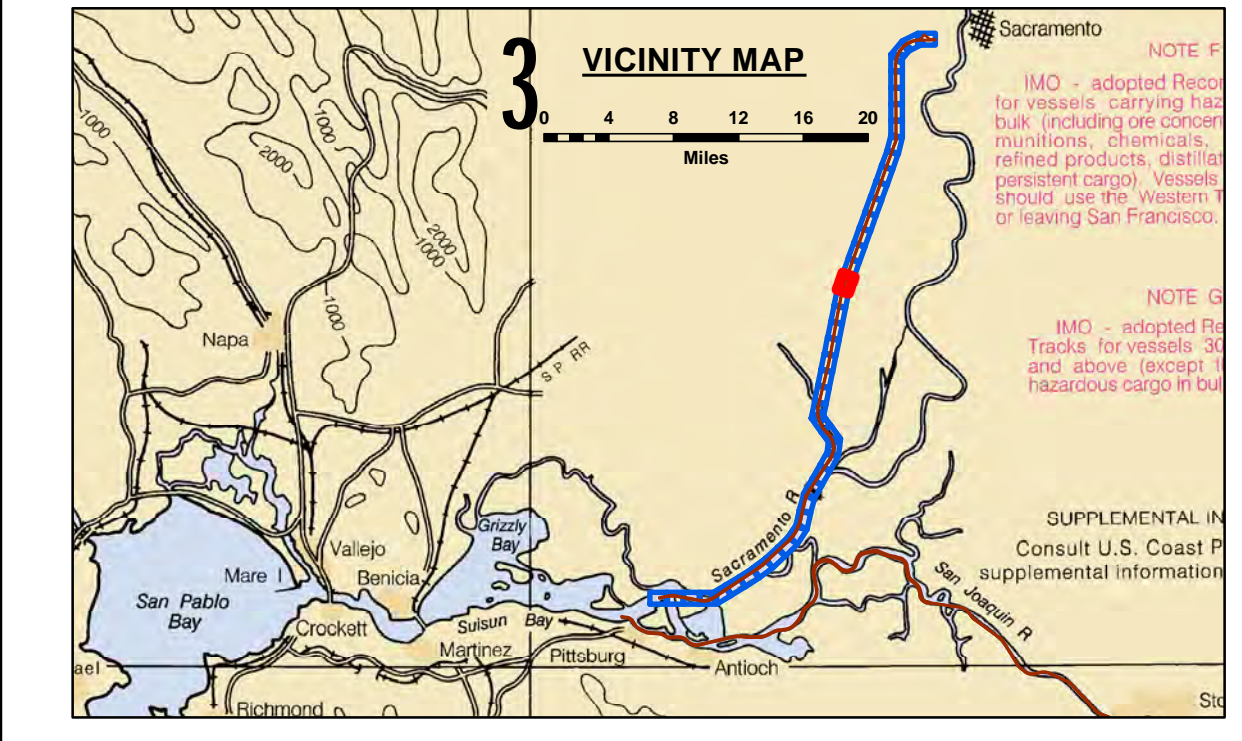
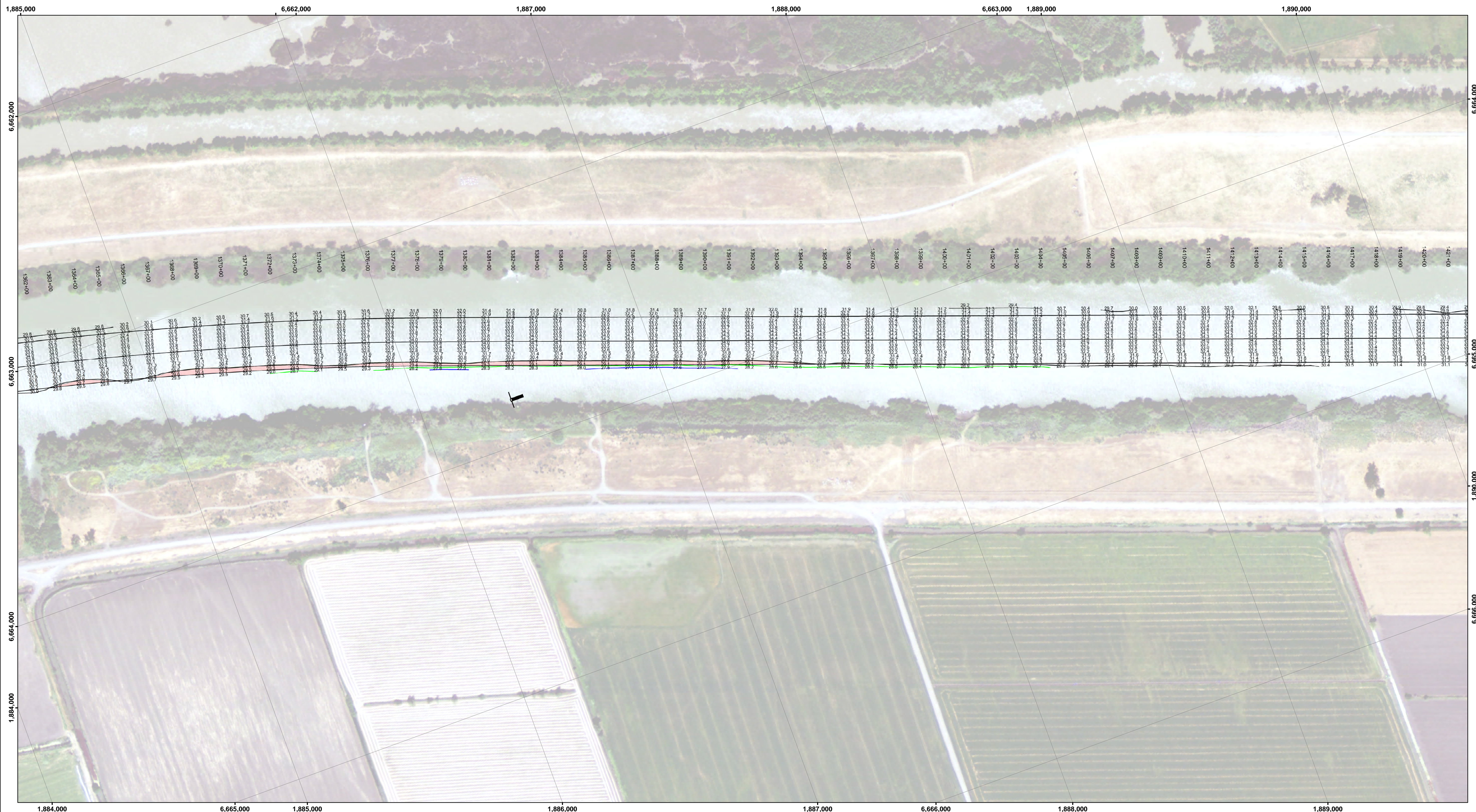
**ACCESS CONSTRAINTS:** The United States Government furnishes this information for the use of the recipient in accordance with the provisions of the Freedom of Information Act (5 U.S.C. 552). This information is not to be distributed, reproduced, or transmitted, in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the express written permission of the United States Government. The United States shall be under no liability whatsoever to any person by reason of any use of the information herein, and the recipient shall be responsible for protecting the information and the data furnished. This information is provided for the recipient's use only and is not to be used for any other purpose. The recipient may not transfer these data to others without also transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Plotted By:	PDT
Checked By:	PDT

PREPARED UNDER THE DIRECTION OF  
**JOHN C. MORROW**  
 LT. COLONEL, C.E., DISTRICT ENGINEER  
 Sounding: Hydro Survey Team Leader  
 Recommended: Chief, Hydro Survey Section  
 Approved: Chief, Construction Branch

CALIFORNIA  
**SACRAMENTO RIVER**  
 CONDITION SURVEY  
 11-16 MARCH 2017

Sheet Reference Number  
**27 of 45**



Feet  
0 400 800 1,200

**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

**NOTES:**  
DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
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.



**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. Accuracy of the data is not guaranteed. The user is responsible for the results of any application of the data for other than its intended purpose.

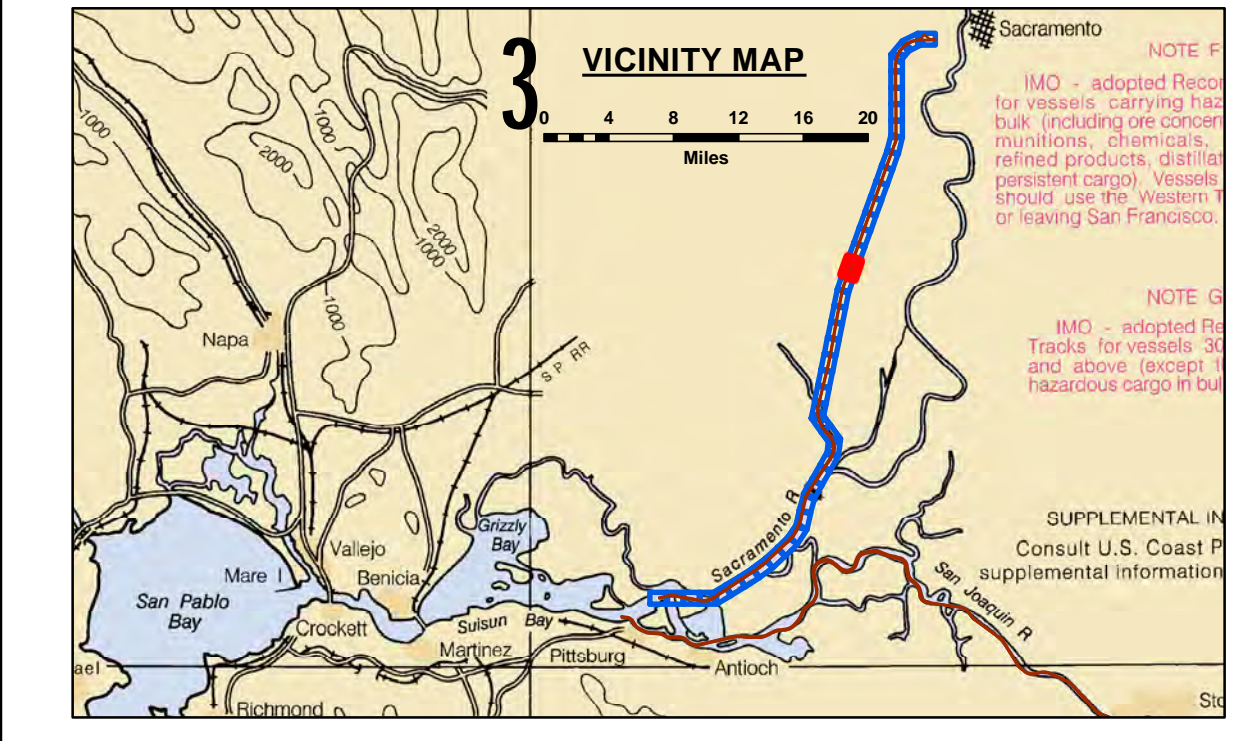
**ACCESS RESTRICTIONS:** The United States Government furnishes this data and the US Army Corps of Engineers does not assume any liability for its use. The user is responsible for the accuracy, completeness, and timeliness of the data. The United States shall be under no liability whatsoever to any person by reason of any use of the data. The recipient of this data shall be deemed to have accepted the data as provided and shall not be held liable for any errors or omissions. The recipient may not transfer these data to others without also transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Checked by:	PDT
Approved:	Chief, Construction Branch
Surveyed By:	JOHN C. MORROW LT. COLONEL, C.E., DISTRICT ENGINEER
Plotted By:	Hydro Survey Team Leader
Checked By:	Chief, Hydro Survey Section
Approved:	Chief, Construction Branch

CALIFORNIA  
SAN JOAQUIN COUNTY  
**SACRAMENTO RIVER**  
CONDITION SURVEY  
11-16 MARCH 2017

Sheet Reference Number  
**28 of 45**





0 400 800 1,200 Feet

**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

**NOTES:**  
 DRAWING NOT TO BE USED FOR NAVIGATION. ONLY CHANNEL CONDITION AT DATE OF SURVEY.  
 THE LOCATION OF ALL NAVIGATION AIDS ARE BASED ON INFORMATION PROVIDED BY THE U.S. COAST GUARD. BUOY LOCATIONS REPRESENT THE POSITION OF THE SINKER ONLY.  
 SOUNDINGS WERE TAKEN BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT.  
 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  
 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

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



**DISCLAIMER:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is not intended for use in any other project. Accuracy of the data is not guaranteed. The user is responsible for the results of any application of the data for other than its intended purpose.

**ACCESS CONSTRAINTS:** The United States Government furnishes this information for the use of the recipient. The recipient agrees to use the information for the purposes intended and to release the information to other persons as authorized by the recipient. The United States shall be under no liability whatsoever to any person by reason of any use of the information furnished hereunder. The recipient may not transfer these data to others without also transferring this Disclaimer.

Chart Date:	Mar 23, 2017
Designed by:	PDT
Drawn by:	PDT
Surveyed By:	PDT
Printed by:	PDT
Checked by:	PDT

PREPARED UNDER THE DIRECTION OF  
**JOHN C. MORROW**  
 LT. COLONEL, C.E., DISTRICT ENGINEER

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

CALIFORNIA  
 SAN JOAQUIN COUNTY  
**SACRAMENTO RIVER**  
 CONDITION SURVEY  
 11-16 MARCH 2017

