

**Savage Dam
Sunny Day Dam Breach
Overview**
San Diego County, California
State Dam ID: 8.004
& National Dam ID: CA00109



Modeling Date: June-2018
Map Creation Date: September-2018
BY: C. Kissick

- Legend**
- Cross Section
 - Flow Path
 - Detailed Sheet Extent
 - Approx. Maximum Flooding Extent



- Notes:**
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 6. Mapped depths and arrival times downgradient of I-5 vary more significantly as a result of tidal influences, hydraulic factors, and specific model assumptions. Inundation depths and arrival times over water bodies (Mission Bay and San Diego Bay) should not be used. Please refer to report text for additional information.

Inundation Analysis Performed by
and Inundation Maps Created By:
GEI Consultants, Inc.
2868 Prospect Park Dr. #400
Rancho Cordova, CA 95670



Engineer Katherine Maher
License No. 81144

0 5,000 10,000 20,000 Feet 1 inch = 10,000 feet

117°0'0"W

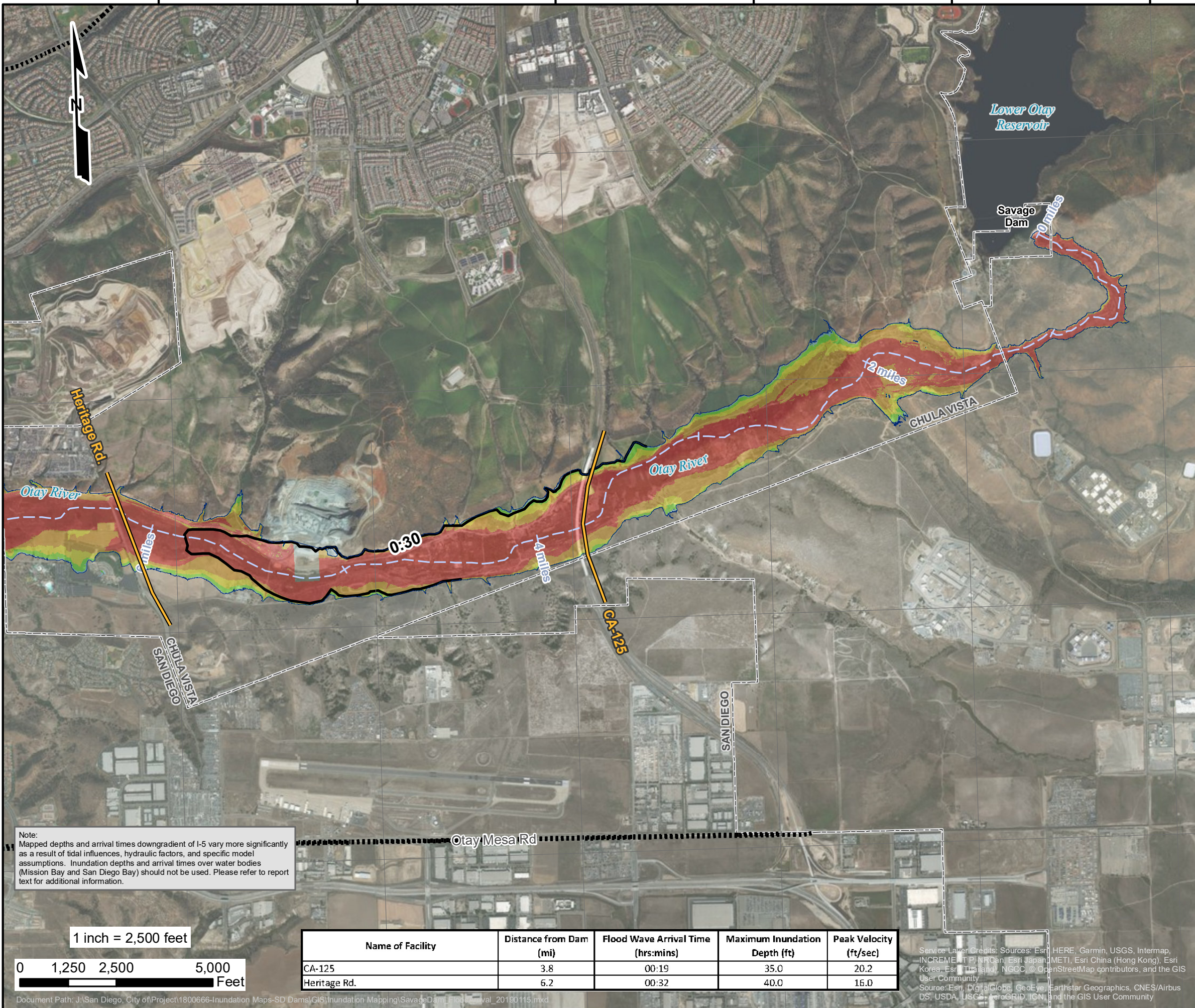
116°59'0"W

116°58'0"W

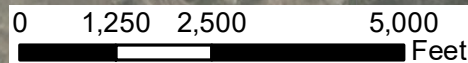
116°57'0"W

116°56'0"W

116°55'0"W



1 inch = 2,500 feet



Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
CA-125	3.8	00:19	35.0	20.2
Heritage Rd.	6.2	00:32	40.0	16.0

Note:
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Document Path: J:\San Diego, City of\Project\1800666-Inundation Maps-SD Dams\GIS\Inundation Mapping\SavageDam\Final\aval_20190115.mxd

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Savage Dam Sunny Day Dam Breach Flood Arrival Times San Diego County, California City of San Diego Dam# 8.004 & National Dam ID CA00109



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Legend

Critical Structures (within 200ft of Max. Flood Extent)

- Critical Road Point
- CalFire Facility
- Licensed Healthcare Facility
- Law Enforcement Facility
- School

Cross Section
 Flow Path
 Critical Road
 Municipal Boundary
 Approx. Maximum Flooding Extent
 Approx. Time to 1 Foot Depth (hrs:mins)

Maximum Inundation Depth (ft)

- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- 20+

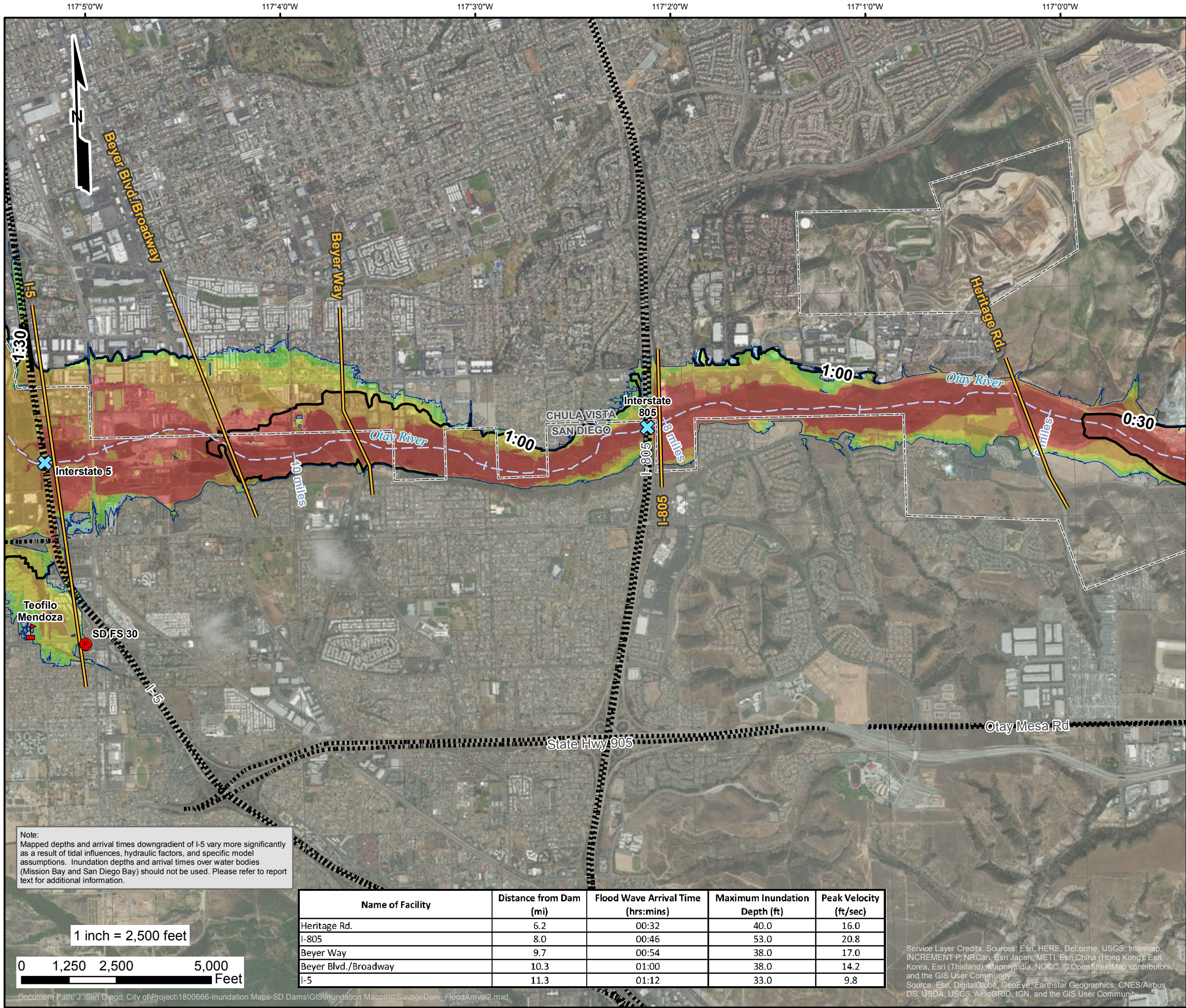
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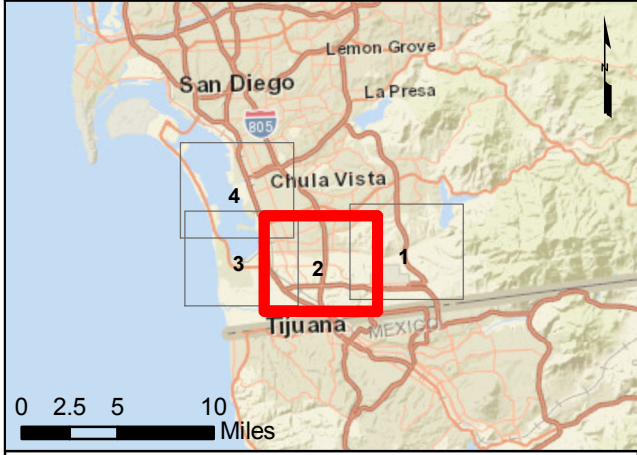
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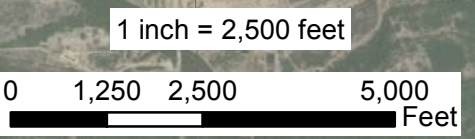
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Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
Heritage Rd.	6.2	00:32	40.0	16.0
I-805	8.0	00:46	53.0	20.8
Beyer Way	9.7	00:54	38.0	17.0
Beyer Blvd./Broadway	10.3	01:00	38.0	14.2
I-5	11.3	01:12	33.0	9.8

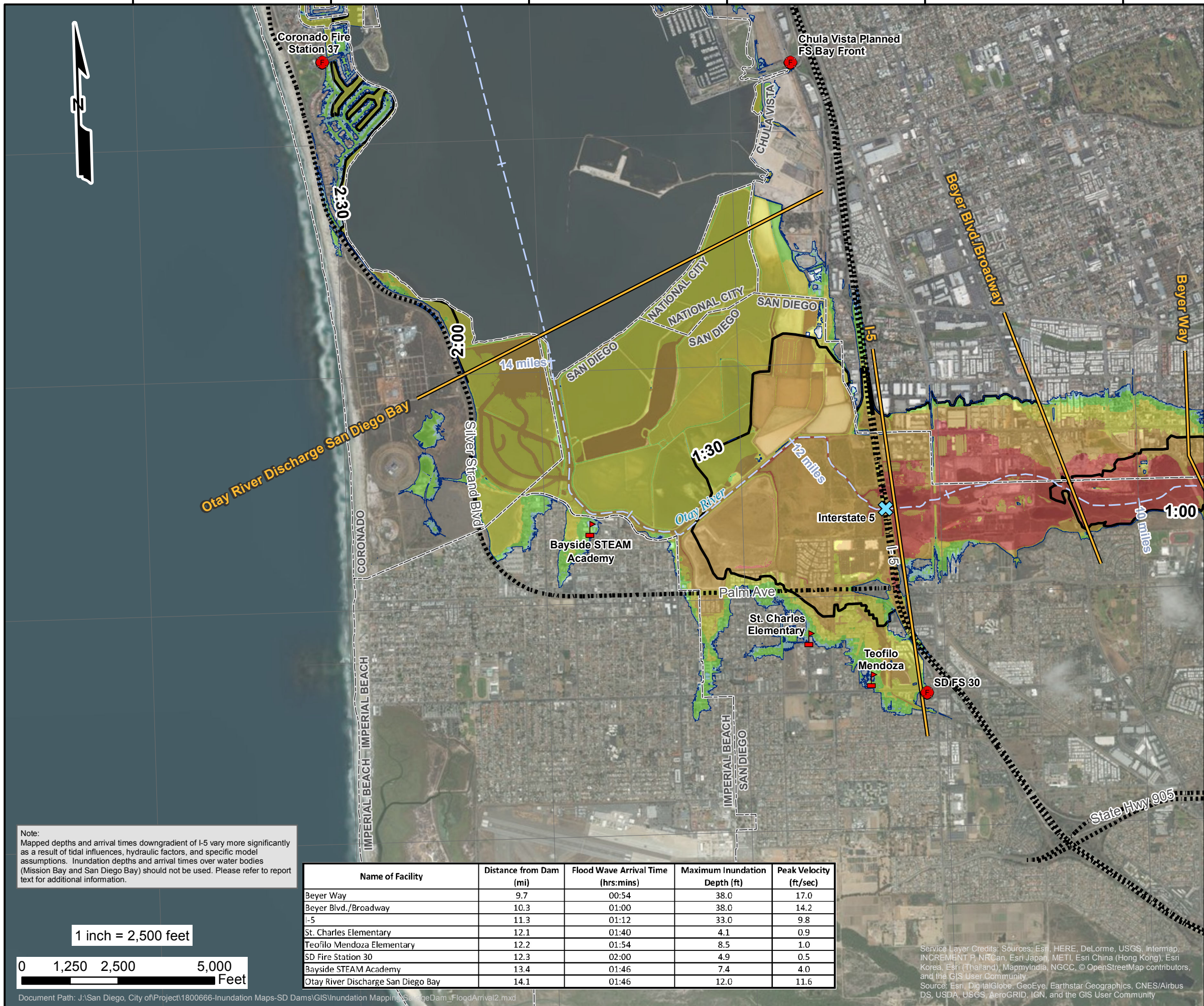


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Beyer Blvd./Broadway	10.3	01:00	38.0	14.2
I-5	11.3	01:12	33.0	9.8
St. Charles Elementary	12.1	01:40	4.1	0.9
Teofilo Mendoza Elementary	12.2	01:54	8.5	1.0
SD Fire Station 30	12.3	02:00	4.9	0.5
Bayside STEAM Academy	13.4	01:46	7.4	4.0
Otay River Discharge San Diego Bay	14.1	01:46	12.0	11.6

1 inch = 2,500 feet



Savage Dam Sunny Day Dam Breach Flood Arrival Times San Diego County, California City of San Diego Dam# 8.004 & National Dam ID CA00109



Modeling Date: June-2018
 Map Creation Date: September-2018
 BY: C. Kissick

Legend

Critical Structures (within 200ft of Max. Flood Extent)

- Critical Road Point
- CalFire Facility
- Licensed Healthcare Facility
- Law Enforcement Facility
- School

Other Symbols:

- Cross Section
- Flow Path
- Critical Road
- Municipal Boundary
- Approx. Maximum Flooding Extent
- Approx. Time to 1 Foot Depth (hrs:mins)

Maximum Inundation Depth (ft)

- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- 20+

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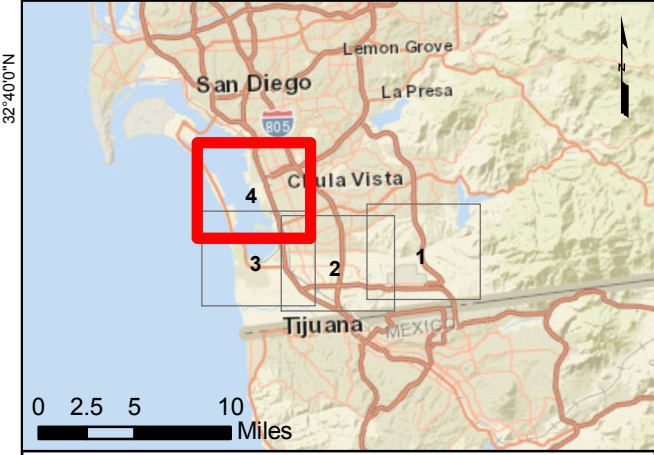
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117°9'0"W 117°8'0"W 117°7'0"W 117°6'0"W 117°5'0"W 117°4'0"W



**Savage Dam
Sunny Day Dam Breach
Flood Arrival Times**
San Diego County, California
City of San Diego Dam# 8.004
& National Dam ID CA00109



Modeling Date: June-2018
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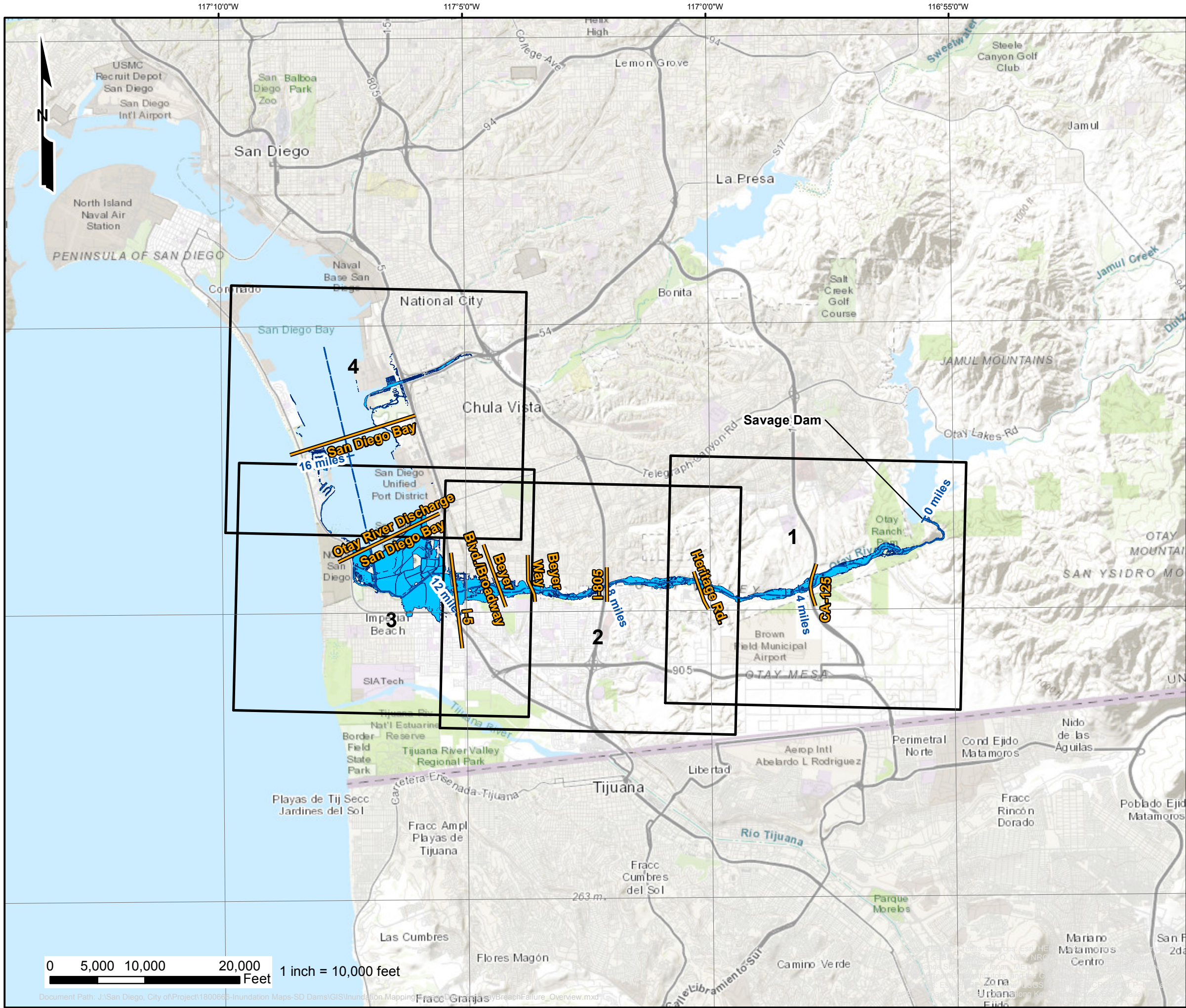
Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
Otay River Discharge San Diego Bay	14.1	01:46	12.0	11.6
San Diego Bay	16.4	02:30	N/A	4.5

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**Savage Dam Spillway
Sunny Day Auxiliary Spillway Breach
Overview**
San Diego County, California
State Dam ID: 8.004
& National Dam ID: CA00109



Modeling Date: June-2018
Map Creation Date: September-2018
BY: C. Kissick

- Legend**
- Cross Section
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 - Detailed Sheet Extent
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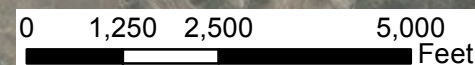
0 5,000 10,000 20,000 Feet 1 inch = 10,000 feet

117°0'0"W 116°59'0"W 116°58'0"W 116°57'0"W 116°56'0"W 116°55'0"W



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Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
CA-125	3.8	00:47	9.8	6.8
Heritage Rd.	6.2	01:32	15.9	11.0

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- Legend**
- Critical Structures (within 200ft of Max. Flood Extent)**
- Critical Road Point
 - CalFire Facility
 - Licensed Healthcare Facility
 - Law Enforcement Facility
 - School
- Critical Road**
- Critical Road
- Approx. Time to 1 Foot Depth (hrs:mins)**
- Approx. Time to 1 Foot Depth (hrs:mins)
- Cross Section**
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117°50'W 117°40'W 117°30'W 117°20'W 117°10'W 117°00'W

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Critical Road

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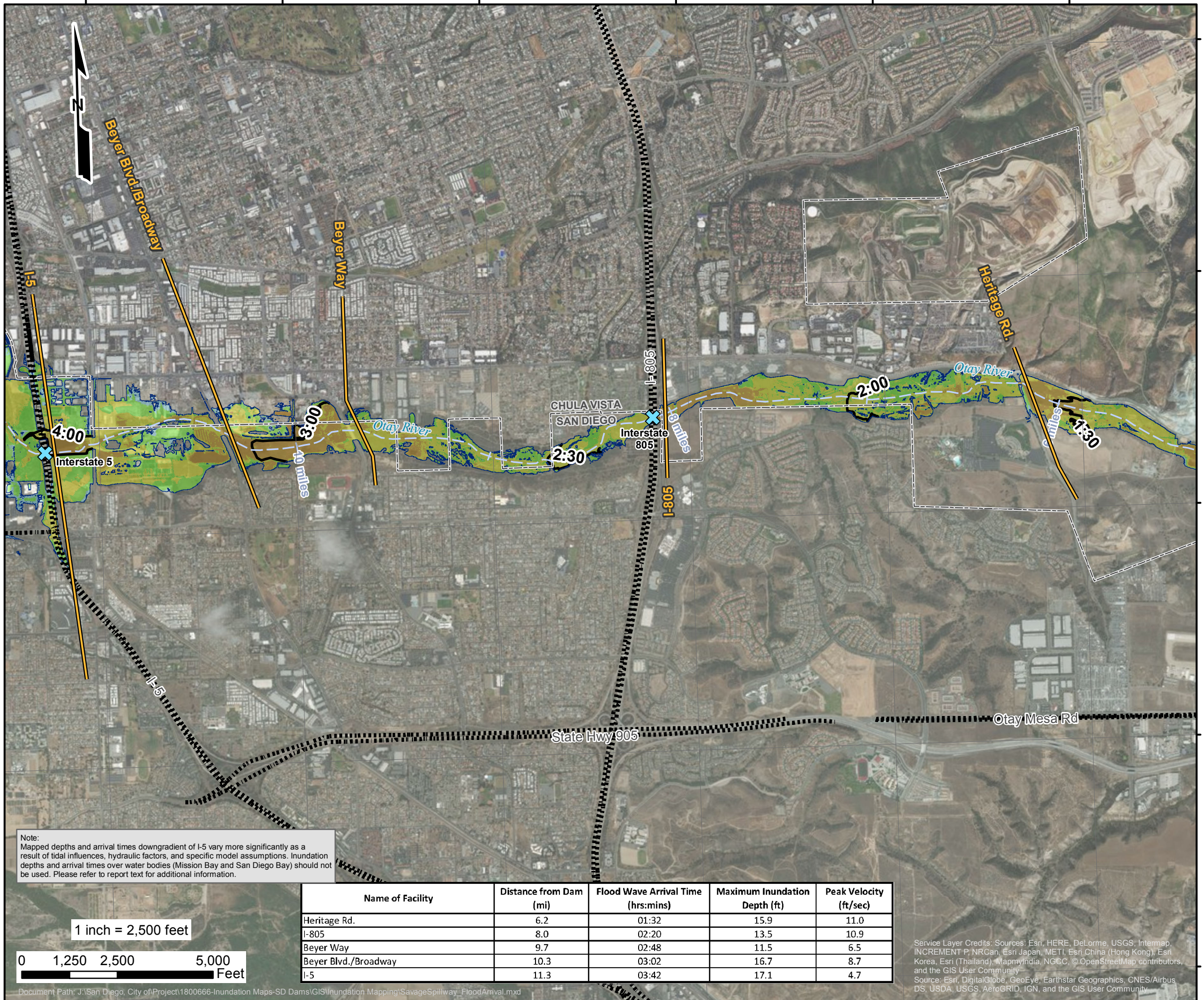
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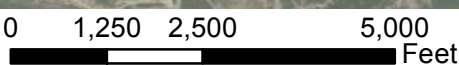
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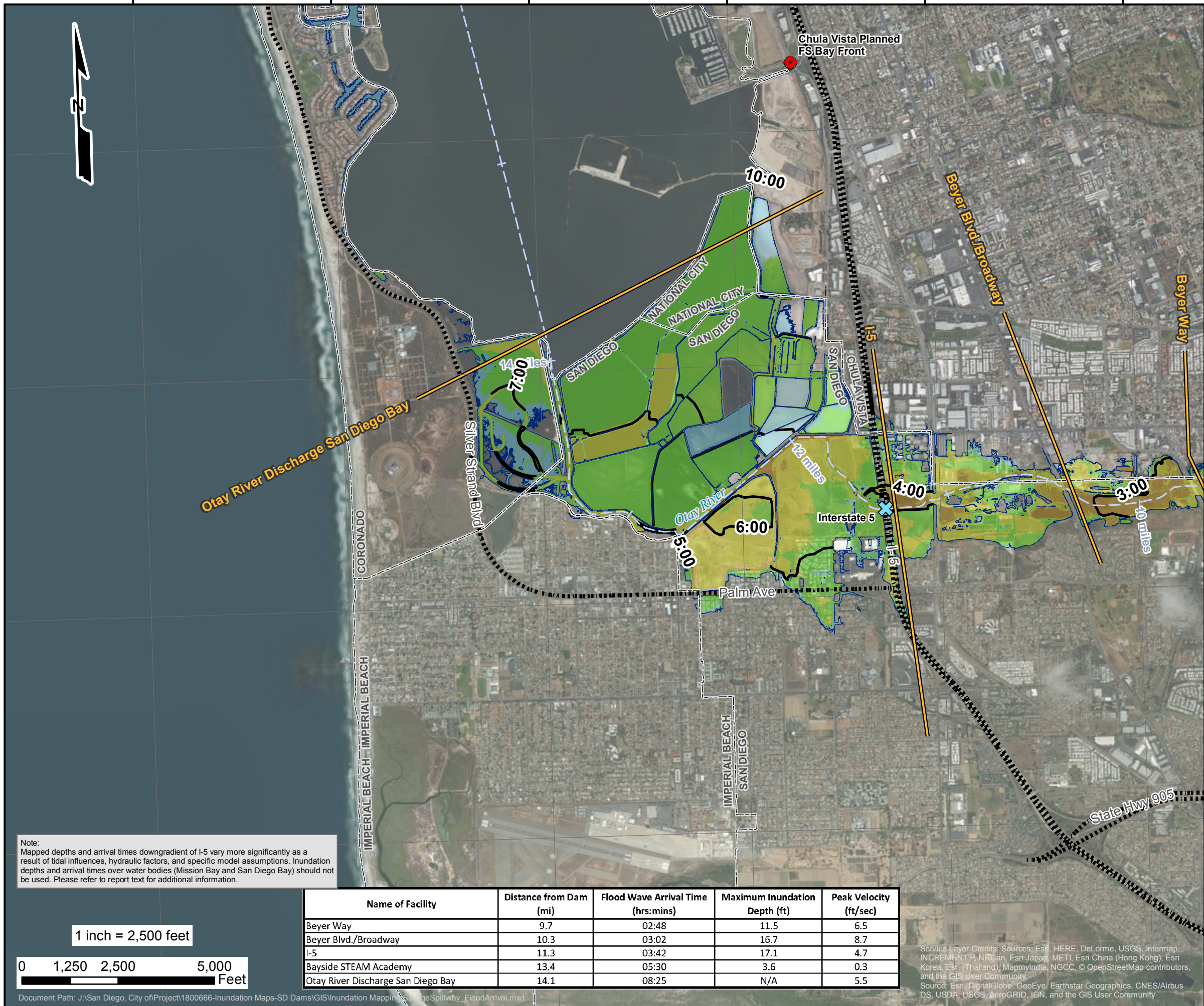
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117°90'W 117°80'W 117°70'W 117°60'W 117°50'W 117°40'W



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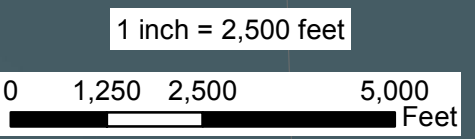
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 - CalFire Facility
 - Licensed Healthcare Facility
 - Law Enforcement Facility
 - School
- Critical Road**
- Critical Road
- Approx. Time to 1 Foot Depth (hrs:mins)**
- Approx. Time to 1 Foot Depth (hrs:mins)
- Cross Section**
- Cross Section
- Flow Path**
- Flow Path
- Municipal Boundary**
- Municipal Boundary
- Approx. Maximum Flooding Extent**
- Approx. Maximum Flooding Extent
- Maximum Inundation Depth (ft)**
- 1 to 2
 - 2 to 5
 - 5 to 10
 - 10 to 20
 - 20+
- * Variations in color are dependent upon the background imagery

Notes:

1. This inundation map has been prepared in a manner consistent with that level of care and skill ordinarily exercised by GEI's profession practicing in the same locality, under similar conditions and at the date services are provided. Our conclusions, opinions, and recommendations are based on a limited number of observations, data, and the current guidance and requirements outlined by the California DSOD.
2. The information on this graphic representation has been compiled from a variety of sources and is subject to change without notice. GEI makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. The information shown on this map is approximate and should be used as a guideline for emergency response and preparation purposes. This document is not intended for use as a land survey project nor is it designed or intended as construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.
3. All elevations are reported in the NAVD88 vertical datum.
4. Inundation depths less than one foot are not shown.
5. Mapped depths and arrival times will vary based on breach conditions, hydrologic conditions, modeling assumptions, and other factors. Emergency action plans that utilize these maps may want to consider a factor of safety for arrival times.

Note:
 Mapped depths and arrival times downgradient of I-5 vary more significantly as a result of tidal influences, hydraulic factors, and specific model assumptions. Inundation depths and arrival times over water bodies (Mission Bay and San Diego Bay) should not be used. Please refer to report text for additional information.

Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
Beyer Way	9.7	02:48	11.5	6.5
Beyer Blvd./Broadway	10.3	03:02	16.7	8.7
I-5	11.3	03:42	17.1	4.7
Bayside STEAM Academy	13.4	05:30	3.6	0.3
Otay River Discharge San Diego Bay	14.1	08:25	N/A	5.5



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 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Inundation Analysis Performed by and Inundation Maps Created By:
 GEI Consultants, Inc.
 2868 Prospect Park Dr. #400
 Rancho Cordova, CA 95670



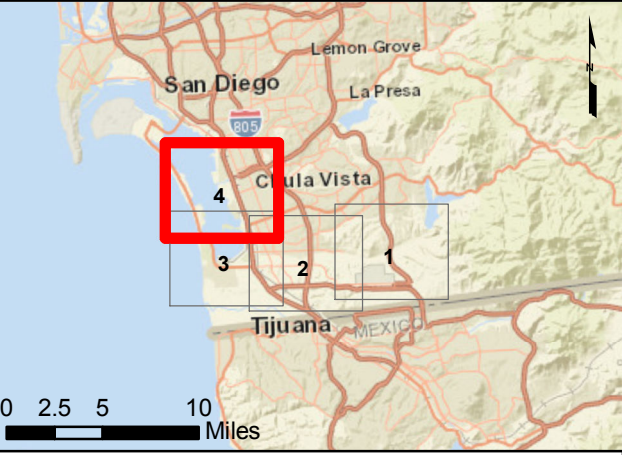
Engineer Katherine Maher
 License No. 81144

117°9'0"W 117°8'0"W 117°7'0"W 117°6'0"W 117°5'0"W 117°4'0"W



Note:
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Savage Dam Sunny Day Auxiliary Spillway Breach Flood Arrival Times San Diego County, California City of San Diego Dam# 8.004 & National Dam ID CA00109



Modeling Date: June-2018
Map Creation Date: September-2018
BY: C. Kissick

- Legend**
- Critical Structures (within 200ft of Max. Flood Extent)**
- Critical Road Point
 - CalFire Facility
 - Licensed Healthcare Facility
 - Law Enforcement Facility
 - School
- Critical Road**
- Critical Road
- Approx. Time to 1 Foot Depth (hrs:mins)**
- Approx. Time to 1 Foot Depth (hrs:mins)
- Cross Section**
- Cross Section
- Flow Path**
- Flow Path
- Municipal Boundary**
- Municipal Boundary
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Name of Facility	Distance from Dam (mi)	Flood Wave Arrival Time (hrs:mins)	Maximum Inundation Depth (ft)	Peak Velocity (ft/sec)
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San Diego Bay	16.4	16:25	N/A	0.7



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