

Cross Section	Distance from Dam (mi)	Station	Initial Wave Arrival Time, 1 Foot (hh:mm)	Time to Peak (hh:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
-	-	0+00	-	-	-	-	833,330	-	At Lopez Dam
1	1.6	83+22	0:15	0:58	39.7	37.6	825,491	380	Downstream of Lopez Lake
2	2.5	131+49	0:21	1:00	43.5	38.6	822,973	344	Camino Las Ventanas
3	2.9	153+20	0:24	1:01	35.7	37.1	820,185	329	Talley Farms Road
4	3.4	179+80	0:27	1:02	28.5	25.7	819,320	301	Downstream of Terminal Reservoir
5	4.8	255+54	0:35	1:05	37.3	32.3	815,789	251	Cecchetti Road
6	6.1	320+24	0:41	1:08	51.3	21.0	810,902	218	Upstream of Huasna Road
7	6.8	359+57	0:46	1:11	55.9	22.6	800,646	193	Downstream of Tar Spring Creek
8	7.7	406+81	0:51	1:15	55.9	23.2	778,847	172	
9	8.7	460+77	1:00	1:20	54.2	15.4	747,274	143	Traffic Way
10	8.9	467+83	1:01	1:21	47.2	13.6	745,518	137	US 101 Highway
11	9.5	503+18	1:07	1:24	42.9	23.5	738,637	104	Fair Oaks Avenue
12	10.6	560+97	1:17	1:30	23.0	19.3	712,253	69	Cabrillo Highway (Hwy 1)
13	11.6	610+70	1:23	1:35	18.2	17.1	687,619	42	Railroad Bridge downstream of 22nd Street
14	12.6	667+86	1:29	2:18	22.7	13.6	243,239	31	Outlet of Arroyo Grande Creek into Ocean

**Notes:**

- This map is part of the emergency action plan for Lopez Dam.
- The inundation map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards by a licensed civil engineer.
- The results presented herein do not reflect the structural integrity of the dam and are not a statement of the dam's safety. The analysis presented is based on a hypothetical dam failure using 2D modeling software with a 100' grid.
- Cross Section Values:  
 Distance from Dam and Stationing are reckoned from the centerline of Lopez Dam along the displayed Flow Path. Distance from Dam is in miles and Stationing is in feet (Stationing 12+34 = 1,234').  
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 Peak Inundation Depth is the maximum water depth.  
 Peak Velocity is the maximum velocity.  
 Peak Discharge is an estimate of the maximum flow rate integrated over the entire cross section line.  
 Peak Water Elevation is the maximum water surface elevation.  
 Time Above 1 Foot is the time water depth is above 1 foot.  
 Location Description indicates major roads that cross, or are near, the Flow Path at that cross section.
- The values displayed in the table for each cross section are the maximum for that parameter along each cross section line, except for the Initial Wave Arrival Time, 1 Foot and Time to Peak which are the minimum for that parameter along each cross section line. The minimum time values associated with 1D channels embedded in the 2D model are excluded.
- For other details refer to the supporting report "Lopez Dam Failure and Inundation Study" 31 December 2017.
- Map projection: California State Plane, Zone 5, Feet, North American Datum 1983. Reference Points and border tics display these coordinate values. All elevations are referenced to North American Vertical Datum 1988.



**San Luis Obispo County**

0 3,500 7,000 Feet  
Scale 1:42,000

- Flow Path
- Cross Section
- Detailed Sheet Extent
- Approx. Inundation Extent
- Approx. Limits of Fair Weather Dam-Failure Inundation

**NOTICE**  
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**Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam**

Federal Dam ID: CA00887 State Dam ID: 1055.000

**Overview Sheet**

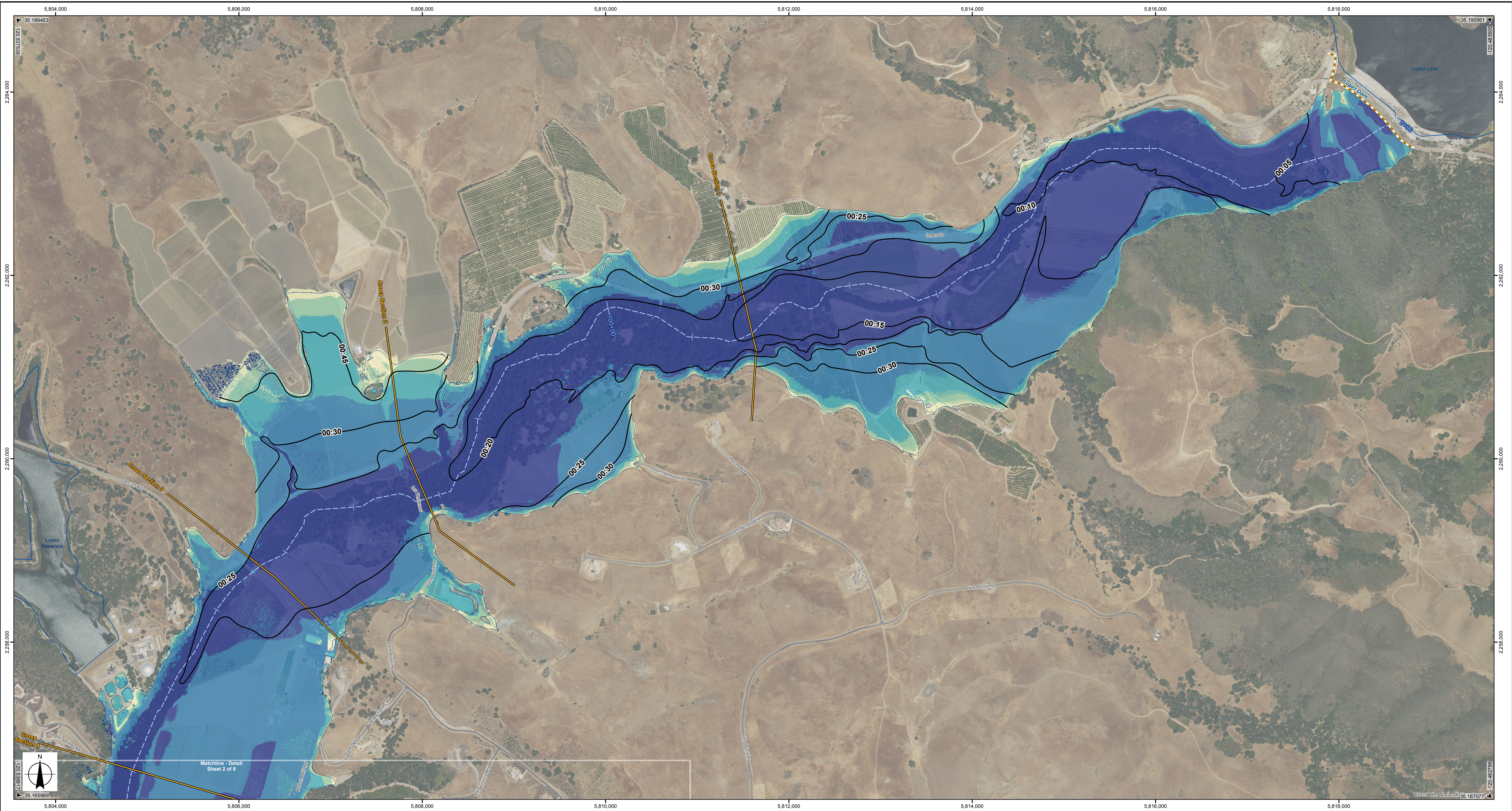
San Luis Obispo County  
© 2017 San Luis Obispo County

Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diodati, (805) 781-5252  
 Emergency Contact: (805) 781-5252

Inundation Analysis Performed by: GEI Consultants, Inc.  
 Mark Fortner, PE 48266

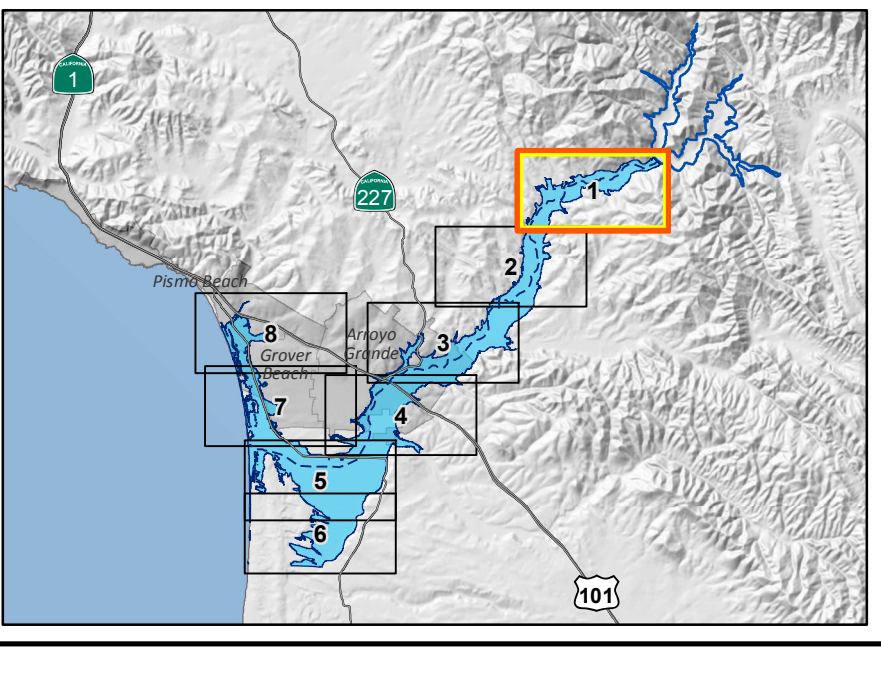
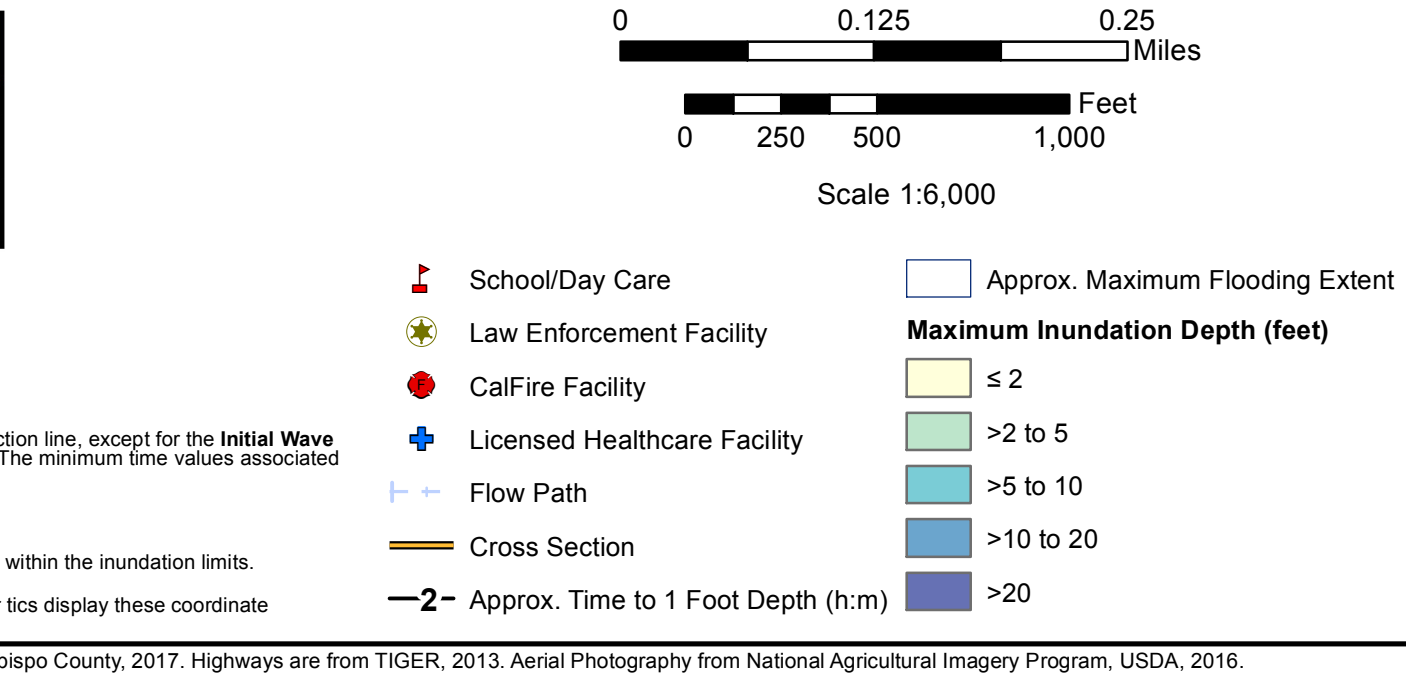




Cross Section	Distance from Dam (mi)	Station	Initial Wave Arrival Time, 1 Foot (h:mm)	Time to Peak (h:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
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1	1.6	83+22	0:15	0:58	39.7	37.6	825,491	380	Downstream of Lopez Lake
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3	2.9	153+20	0:24	1:01	35.7	37.1	820,185	329	Talley Farms Road
4	3.4	179+80	0:27	1:02	28.5	25.7	819,320	301	Downstream of Terminal Reservoir

**Notes:**

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- Cross Section Values continued:  
**Peak Inundation Depth** is the maximum water depth.  
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- For other details refer to the supporting report "Lopez Dam Inundation Technical Study" 31 December 2017.
- Structures are shown in the aerial photo on the maps but may not clearly display all possible structures potentially within the inundation limits.
- Map projection: California State Plane, Zone 5, Feet, North American Datum 1983. **Reference Points** and border tics display these coordinate values. All elevations are referenced to North American Vertical Datum 1988.



**COUNTY OF SAN LUIS OBISPO**

**DO NOT DISTRIBUTE THIS MAP OR THE ASSOCIATED MODEL INFORMATION WITHOUT PRIOR NOTIFICATION TO THE FEDERAL DAM OWNER**

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Inundation Depth Map for Fair Weather Hypothetical Failure of **Lopez Dam**  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 1 of 8**  
 San Luis Obispo County  
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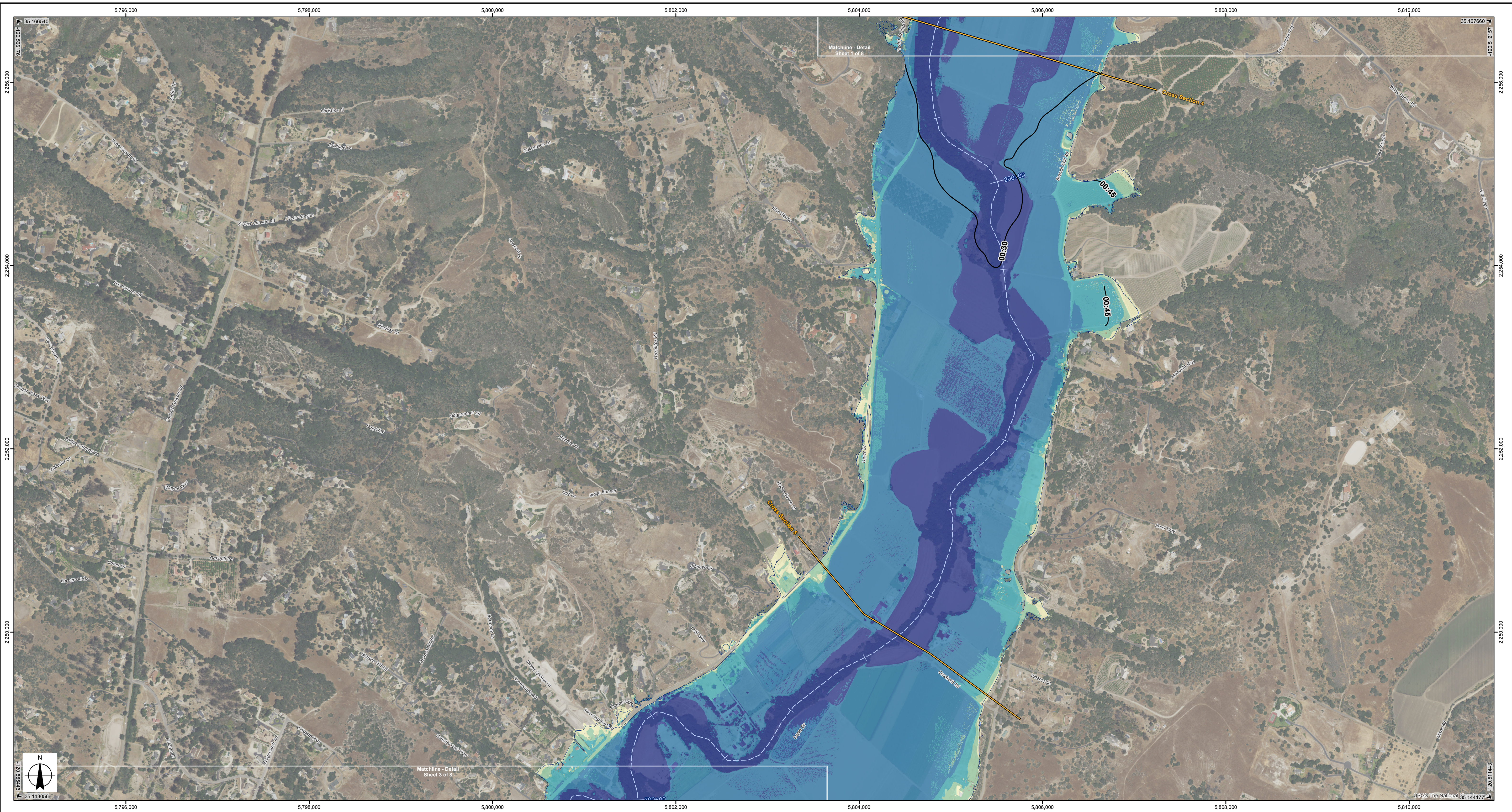
Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diodati, (805) 781-5252  
**Emergency Contact: (805) 781-5252**

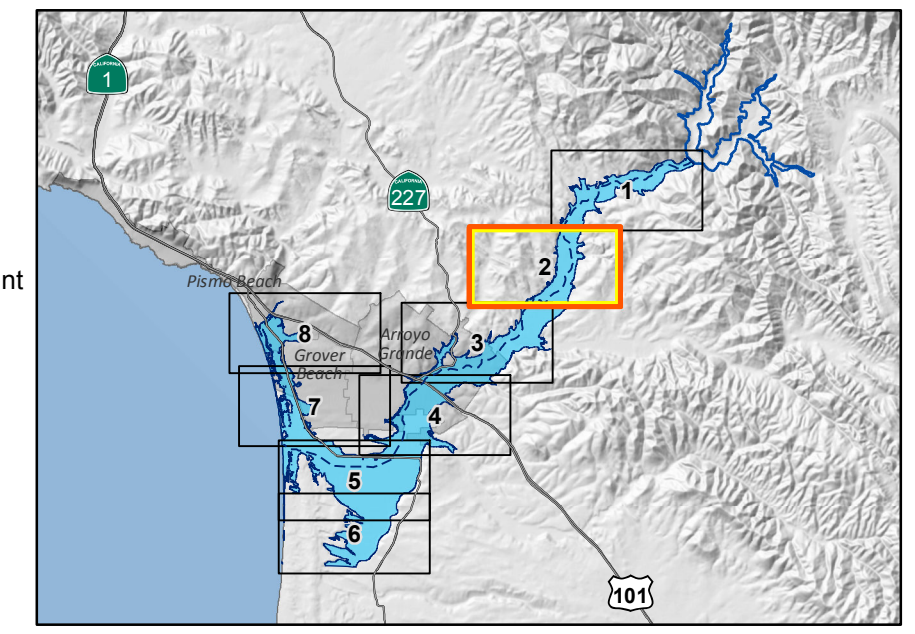
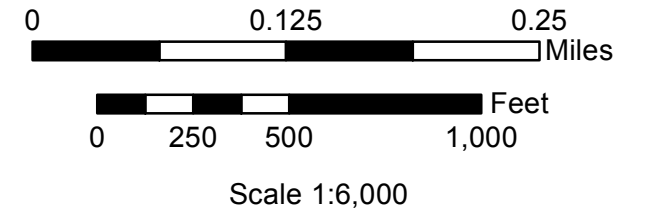
Inundation Analysis Performed by and Inundation Maps Created by:  
 GEI Consultants, Inc.  
 Mark Fortner, PE 48266

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Cross Section	Distance from Dam (mi)	Station	Initial Wave Arrival Time, 1 Foot (hh:mm)	Time to Peak (hh:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
4	3.4	179+80	0:27	1:02	25.5	25.7	819,320	301	Downstream of Terminal Reservoir
5	4.8	255+54	0:35	1:05	37.3	32.3	815,789	251	Cecchetti Road



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Inundation Depth Map for Fair Weather Hypothetical Failure of **Lopez Dam**  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 2 of 8**  
 San Luis Obispo County  
 © 2017 San Luis Obispo County

Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

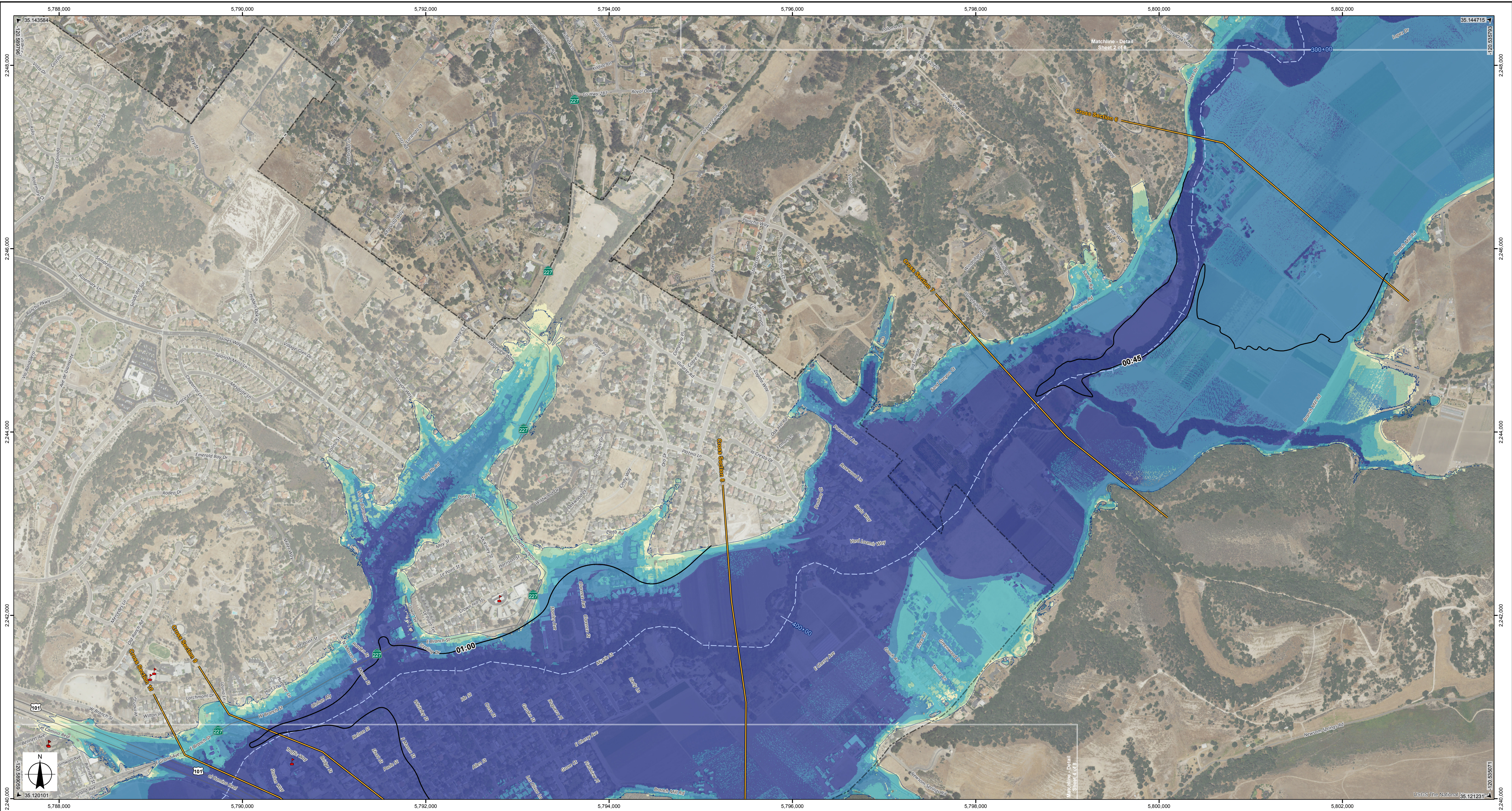
Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diodati, (805) 781-5252  
**Emergency Contact: (805) 781-5252**  
 Inundation Analysis Performed by: GEI Consultants, Inc.  
 Mark Forthner, PE 48266

**Notes:**  
 1. This map was developed for the benefit of local emergency managers and the California Emergency Management Agency. The information shown is approximate and should be used as a guide for emergency response and preparation purposes.  
 2. The inundation map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards by a licensed civil engineer.  
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4. Cross Section Values continued:  
**Peak Inundation Depth** is the maximum water depth.  
**Peak Velocity** is the maximum velocity.  
**Peak Discharge** is an estimate of the maximum flow rate integrated over the entire cross section line.  
**Peak Water Elevation** is the maximum water surface elevation.  
**Time Above 1 Foot** is the time water depth is above 1 foot.  
**Location Description** indicates major roads that cross, or are near, the Flow Path at that cross section.  
 5. The values displayed in the table for each cross section are the maximum for that parameter along each cross section line, except for the **Initial Wave Arrival Time, 1 Foot and Time to Peak** which are the minimum for that parameter along each cross section line. The minimum time values associated with TD channels embedded in the 2D model are excluded.  
 6. For other details refer to the supporting report "Lopez Dam Inundation Technical Study" 31 December 2017.  
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 8. Map projection: California State Plane, Zone 5, Feet, North American Datum 1983. **Reference Points** and border tics display these coordinate values. All elevations are referenced to North American Vertical Datum 1988.

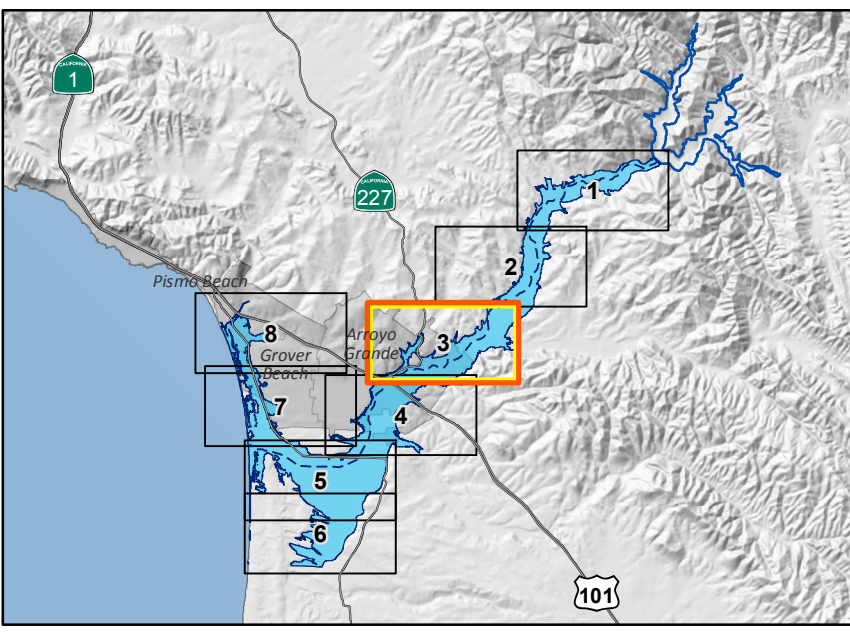
- School/Day Care
  - Law Enforcement Facility
  - CalFire Facility
  - Licensed Healthcare Facility
  - Flow Path
  - Cross Section
  - 2- Approx. Time to 1 Foot Depth (h:m)
  - Approx. Maximum Flooding Extent
- Maximum Inundation Depth (feet)**
- ≤ 2
  - >2 to 5
  - >5 to 10
  - >10 to 20
  - >20





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- School/Day Care
- Law Enforcement Facility
- CalFire Facility
- Licensed Healthcare Facility
- Flow Path
- Cross Section
- Approx. Time to 1 Foot Depth (h:m)
- Approx. Maximum Flooding Extent
- Maximum Inundation Depth (feet)
  - <= 2
  - >2 to 5
  - >5 to 10
  - >10 to 20
  - >20



**COUNTY OF SAN LUIS OBISPO**

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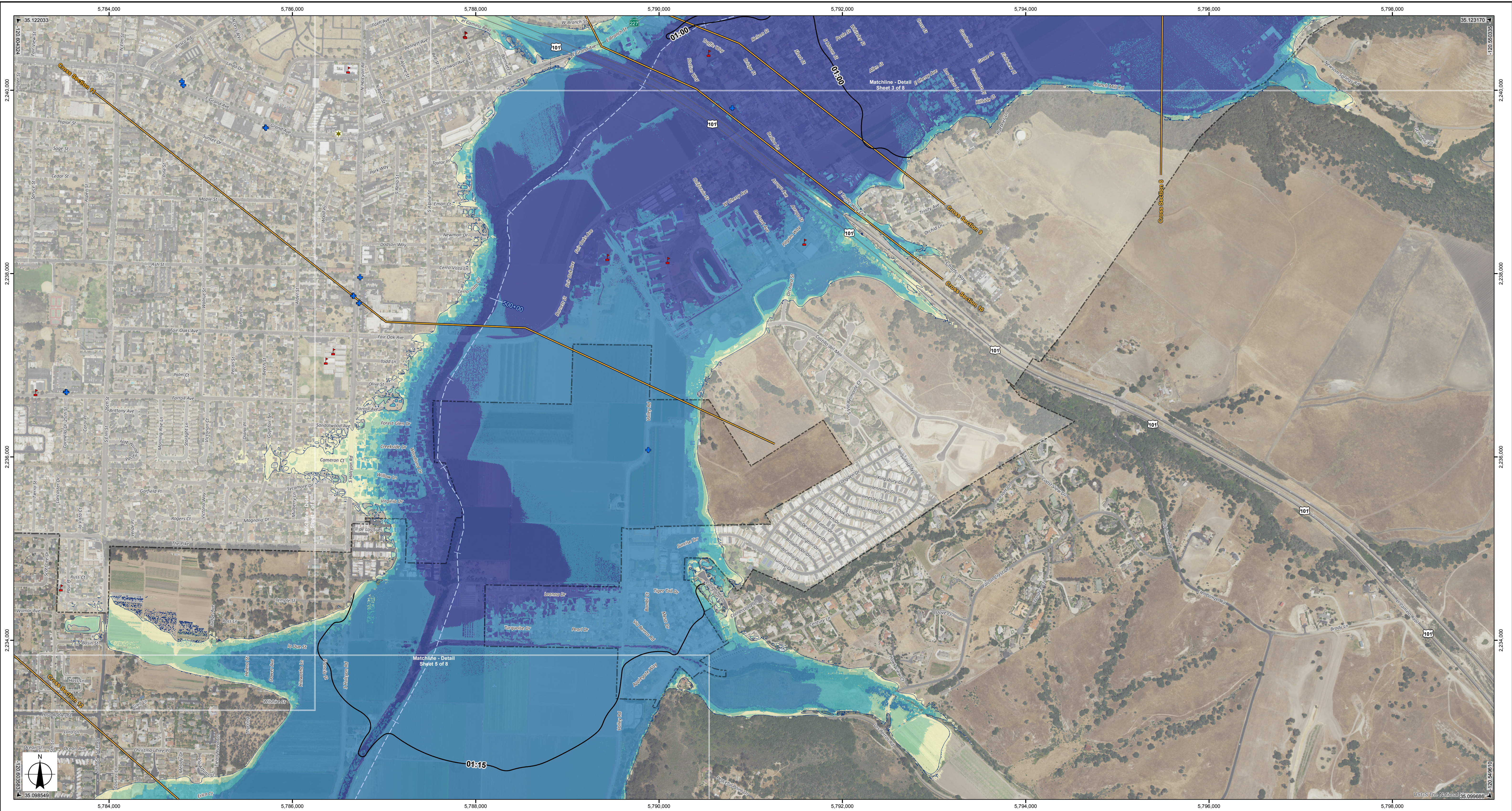
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Inundation Depth Map for Fair Weather Hypothetical Failure of **Lopez Dam**  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 3 of 8**  
 San Luis Obispo County  
 © 2017 San Luis Obispo County

Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

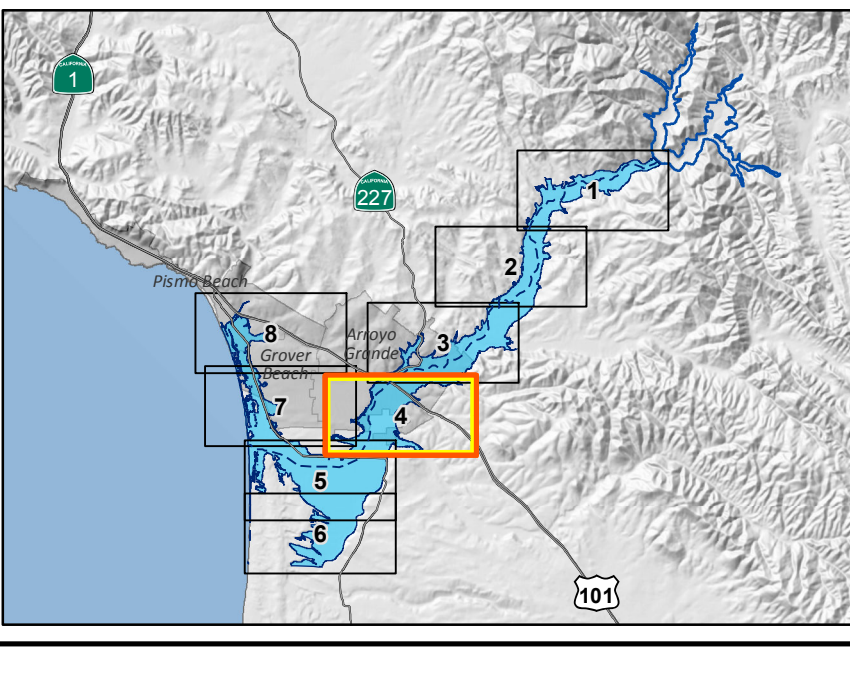
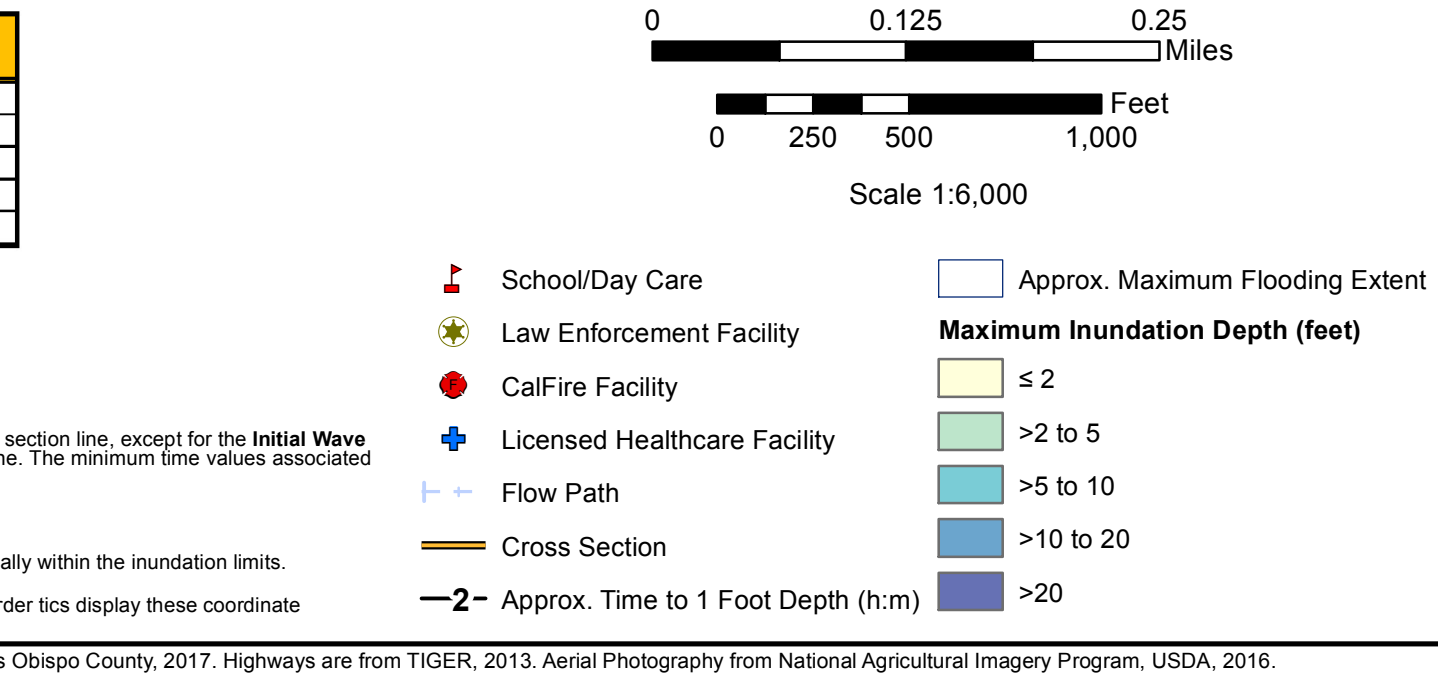
Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diodati, (805) 781-5252  
**Emergency Contact: (805) 781-5252**  
 Inundation Analysis Performed by: GEI Consultants, Inc.  
 Mark Forthner, PE 48266





Cross Section	Distance from Dam (mi)	Stationing	Initial Wave Arrival Time, 1 Foot (hh:mm)	Time to Peak (hh:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
8	7.7	406+61	0:51	1:15	55.9	23.2	778,847	172	
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10	8.9	467+83	1:01	1:21	47.2	13.6	745,518	137	Fair Oaks Avenue
11	9.5	503+18	1:07	1:24	42.9	23.5	738,637	104	Cabrillo Highway (Hwy 1)
12	10.6	560+97	1:17	1:30	23.0	19.3	712,253	69	

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**COUNTY OF SAN LUIS OBISPO**

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**Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam Flood Depth and Arrival Time**

Federal Dam ID: CA00887 State Dam ID: 1055.000

**Detail Sheet 4 of 8**  
San Luis Obispo County

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Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

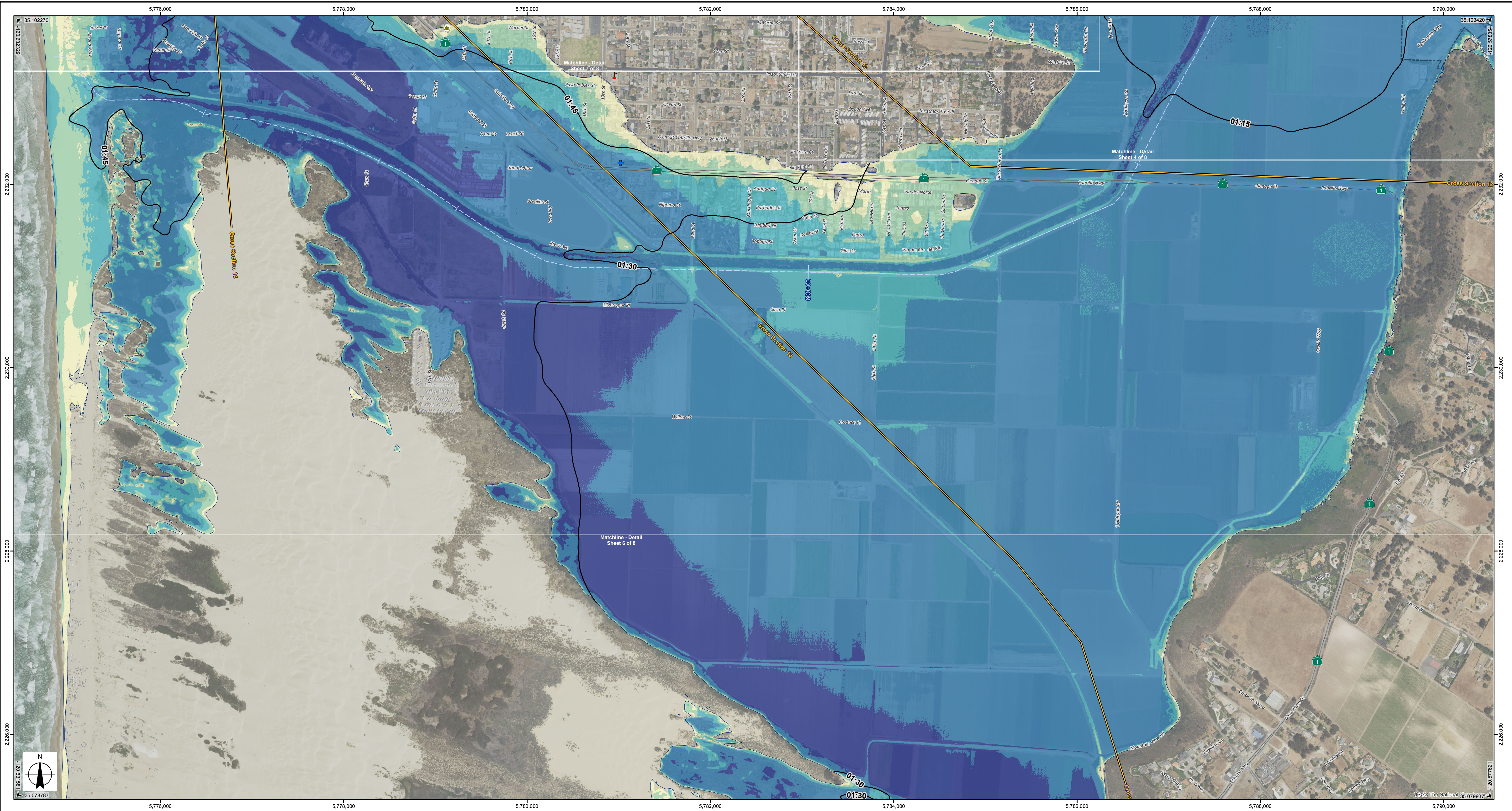
Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
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Inundation Analysis Performed by: GEI Consultants, Inc.  
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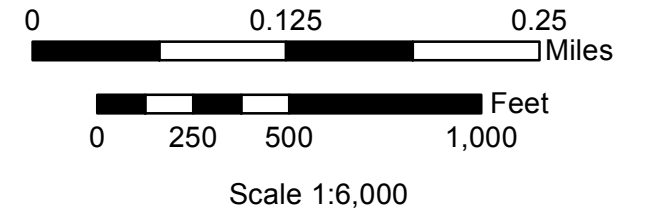




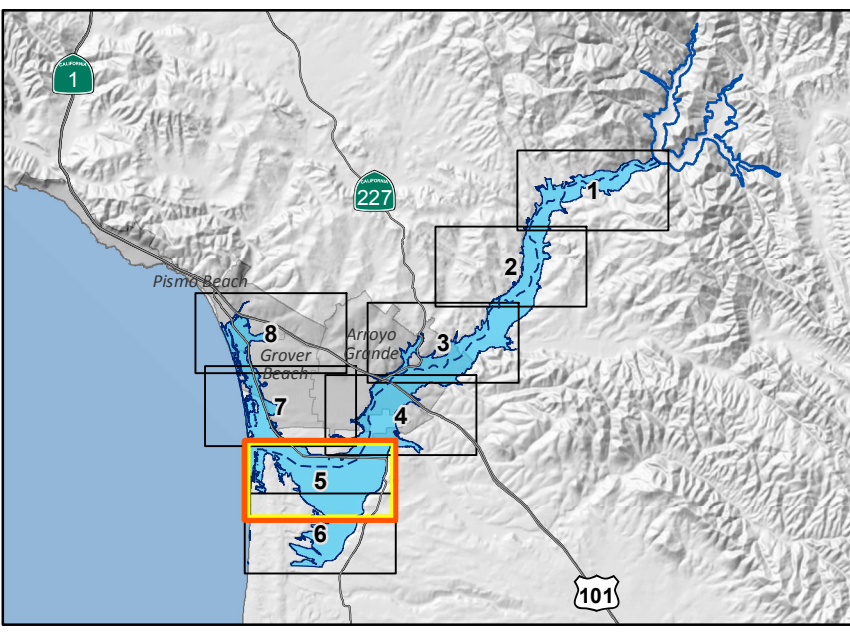
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14	12.6	667+86	1:39	2:18	22.7	13.6	243,239	31	Outlet of Arroyo Grande Creek into Ocean

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- Data Sources: Incorporated City Limits from CalFire, January 2017. Licensed Healthcare Facilities from Office of Statewide Health Planning and Development, January 2012. Schools, Fire Stations and Law Enforcement Facilities from San Luis Obispo County, 2017. Highways are from TIGER, 2013. Aerial Photography from National Agricultural Imagery Program, USDA, 2016.



- School/Day Care
- Law Enforcement Facility
- CalFire Facility
- Licensed Healthcare Facility
- Flow Path
- Cross Section
- Approx. Time to 1 Foot Depth (h:m)
- Approx. Maximum Flooding Extent
- ≤ 2
- >2 to 5
- >5 to 10
- >10 to 20
- >20



**COUNTY OF SAN LUIS OBISPO**

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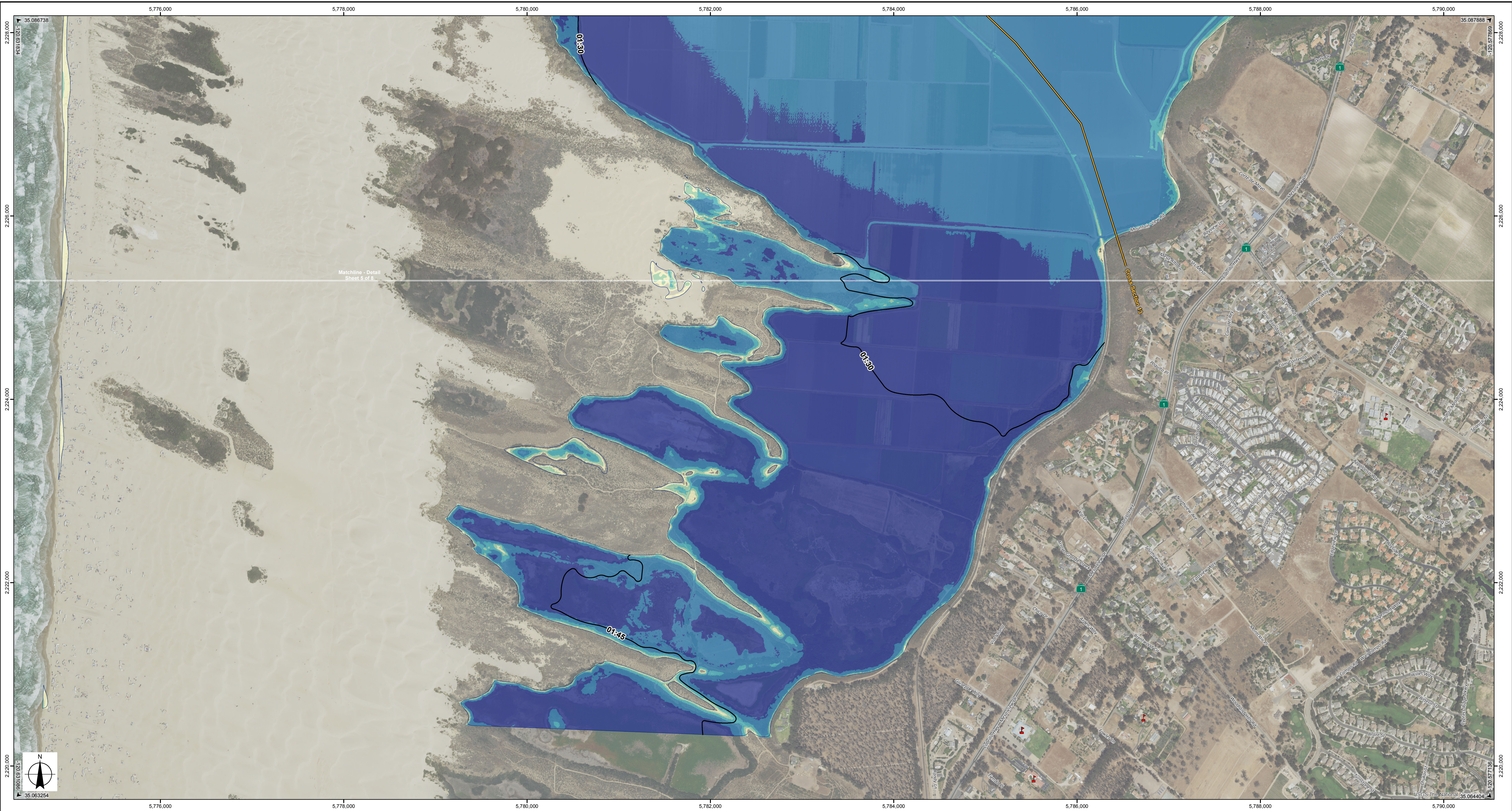
Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 5 of 8**  
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Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

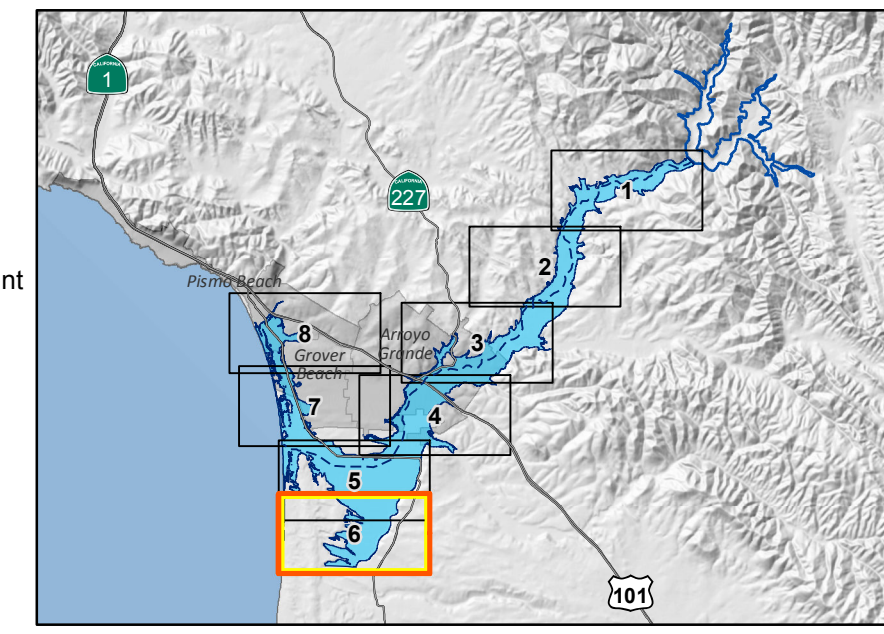
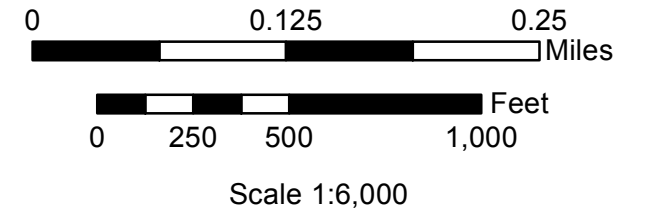
Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diodati, (805) 781-5252  
**Emergency Contact: (805) 781-5252**

Inundation Analysis Performed by and Inundation Maps Created by:  
 GEI Consultants, Inc.  
 Mark Forthner, PE 48266





Cross Section	Distance from Dam (mi)	Station	Initial Wave Arrival Time, 1 Foot (hh:mm)	Time to Peak (hh:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
13	11.6	610+70	1:23	1:35	18.2	17.1	687,519	42	Railroad Bridge downstream of 22nd Street



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**Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam**  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 6 of 8**  
 San Luis Obispo County  
 © 2017 San Luis Obispo County

Model Date 12/24/2017	Map Date 02/18/2019	Description FINAL	Prepared By GEI Consultants	Accepted By DSOD
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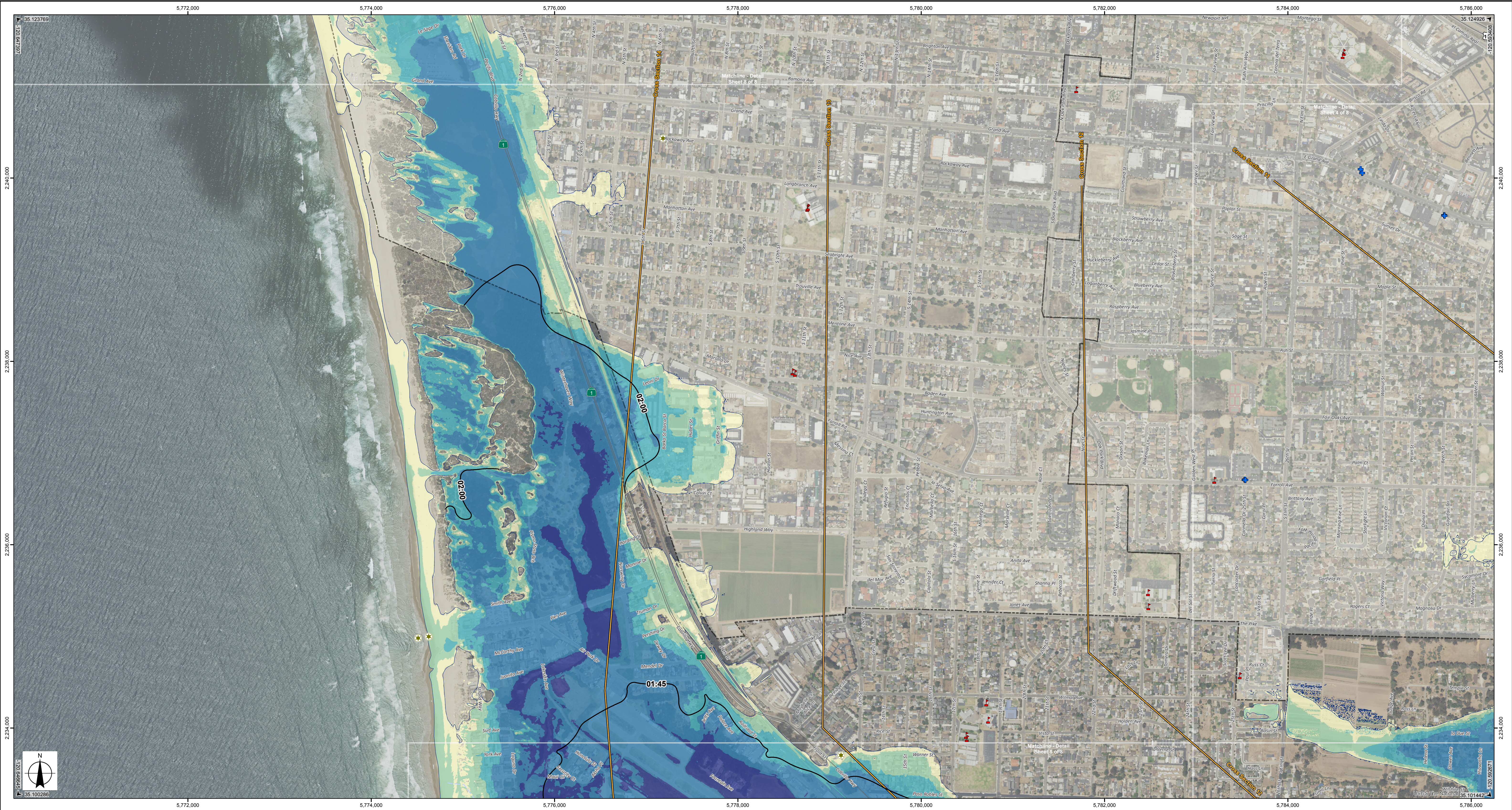
Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
 San Luis Obispo, CA 93408  
 Information Contact: John Diotallevi, (805) 781-5252  
**Emergency Contact: (805) 781-5252**  
 Inundation Analysis Performed by and Inundation Maps Created by: GEI Consultants, Inc.  
 Mark Fortner, PE 48266

**Notes:**  
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 2. The inundation map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards by a licensed civil engineer.  
 3. The results presented herein do not reflect the structural integrity of the dam and are not a statement of the dam's safety. The analysis presented is based on a hypothetical dam failure using 2D modeling software with a 100' grid.  
 4. Cross Section Values:  
**Distance from Dam and Stationing** are reckoned from the centerline of Lopez Dam along the displayed Flow Path. **Distance from Dam** is in miles and **Stationing** is in feet (Stationing 12+34 = 1,234').  
**Initial Wave Arrival Time, 1 Foot** is the time to achieve 1 foot of water depth after initiation of the dam break.  
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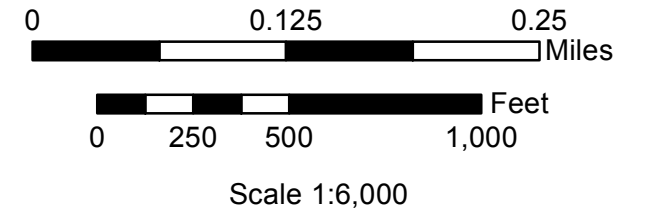
4. Cross Section Values continued:  
**Peak Inundation Depth** is the maximum water depth.  
**Peak Velocity** is the maximum velocity.  
**Peak Discharge** is an estimate of the maximum flow rate integrated over the entire cross section line.  
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- School/Day Care
  - Law Enforcement Facility
  - CalFire Facility
  - Licensed Healthcare Facility
  - Flow Path
  - Cross Section
  - Approx. Time to 1 Foot Depth (h:m)
  - Approx. Maximum Flooding Extent
- Maximum Inundation Depth (feet)**
- ≤ 2
  - >2 to 5
  - >5 to 10
  - >10 to 20
  - >20



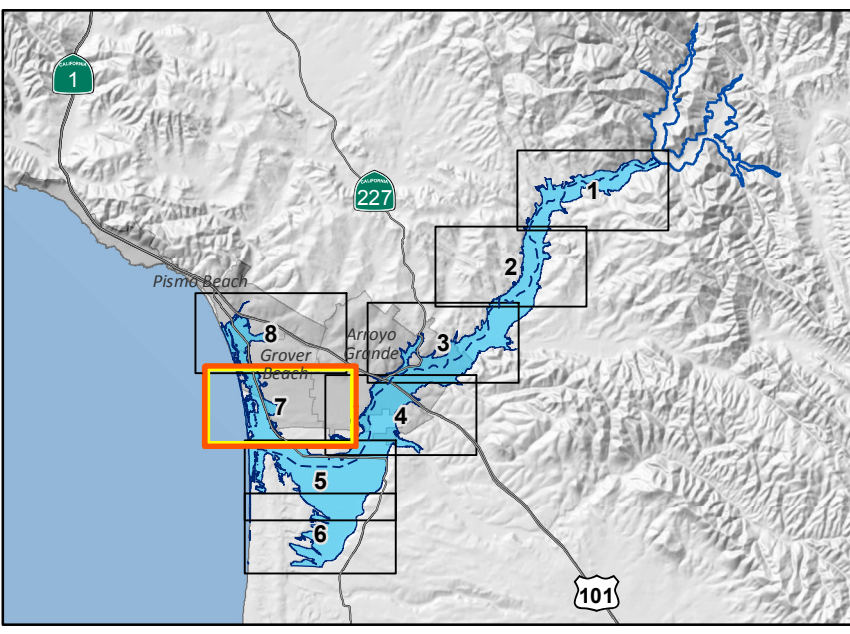


Cross Section	Distance from Dam (mi)	Stationing	Initial Wave Arrival Time, 1 Foot (h:mm)	Time to Peak (h:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
11	9.5	503+18	1:07	1:24	42.9	23.5	738,637	104	Fair Oaks Avenue
12	10.6	560+97	1:17	1:30	23.0	19.3	712,253	69	Cabrillo Highway (Hwy 1)
13	11.6	610+70	1:23	1:35	18.2	17.1	687,619	42	Railroad Bridge downstream of 22nd Street
14	12.6	667+86	1:39	2:18	22.7	13.6	243,239	31	Outlet of Arroyo Grande Creek into Ocean



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- School/Day Care
- Law Enforcement Facility
- CalFire Facility
- Licensed Healthcare Facility
- Flow Path
- Cross Section
- Approx. Maximum Flooding Extent
- Maximum Inundation Depth (feet)**
  - ≤ 2
  - >2 to 5
  - >5 to 10
  - >10 to 20
  - >20
- Approx. Time to 1 Foot Depth (h:m)



**COUNTY OF SAN LUIS OBISPO**

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**Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam Flood Depth and Arrival Time**

Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 7 of 8**  
 San Luis Obispo County  
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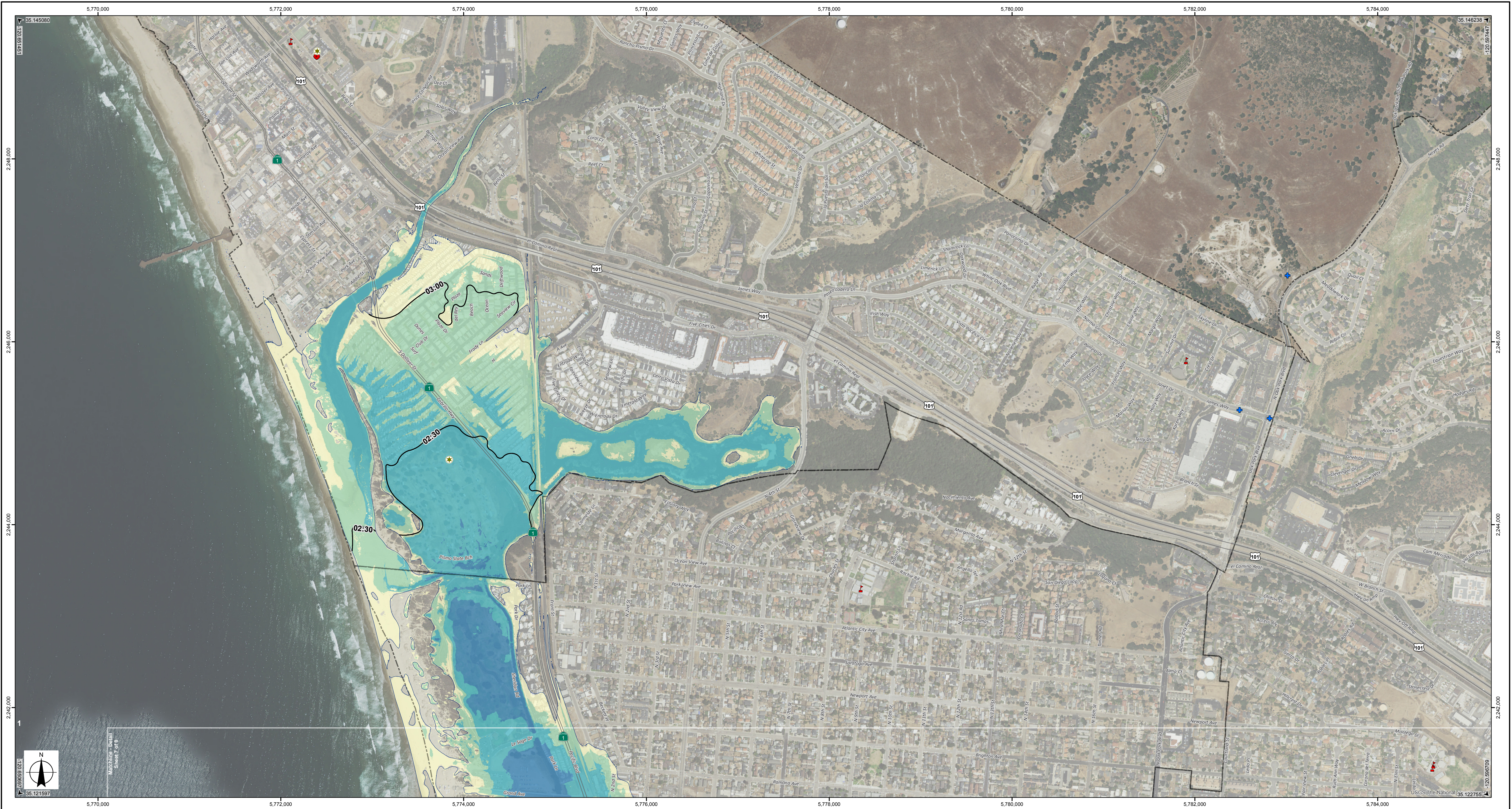
Model Date	Map Date	Description	Prepared By	Accepted By
12/24/2017	02/18/2019	FINAL	GEI Consultants	DSOD

Dam Owner: San Luis Obispo County Flood Control and Water Conservation District  
 County Government Center, Room 206  
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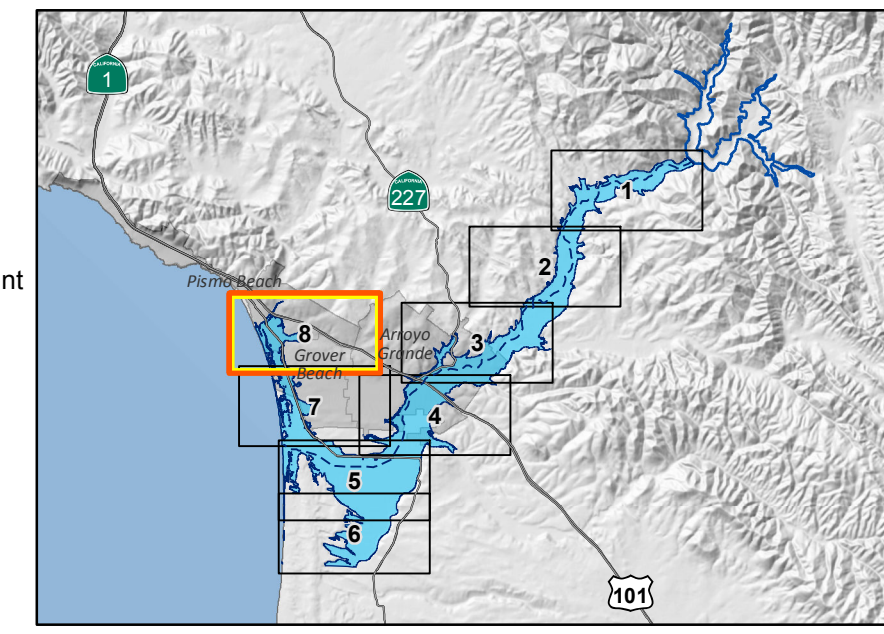
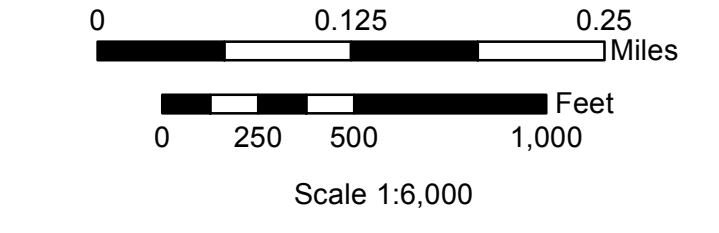
Inundation Analysis Performed by:  
 GEI Consultants, Inc.  
 Mark Fortner, PE 482266

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Cross Section	Distance from Dam (mi)	Station	Initial Wave Arrival Time, 1 Foot (hh:mm)	Time to Peak (hh:mm)	Peak Inundation Depth (ft)	Peak Velocity (fps)	Peak Discharge (cfs)	Peak Water Elevation (ft)	Location Description
1	0.0	0+00	02:30	03:00	4.5	1.2	1500	11.5	At Lopez Dam



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- Flow Path
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Inundation Depth Map for Fair Weather Hypothetical Failure of Lopez Dam  
**Flood Depth and Arrival Time**  
 Federal Dam ID: CA00887 State Dam ID: 1055.000  
**Detail Sheet 8 of 8**  
 San Luis Obispo County  
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Model Date	Map Date	Description	Prepared By	Accepted By
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Inundation Analysis Performed by:  
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 Mark Fortner, PE 48266

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Data Sources: Incorporated City Limits from CalFire, January 2017. Licensed Healthcare Facilities from Office of Statewide Health Planning and Development, January 2012. Schools, Fire Stations and Law Enforcement Facilities from San Luis Obispo County, 2017. Highways are from TIGER, 2013. Aerial Photography from National Agricultural Imagery Program, USDA, 2016.