Inundation Map for the Hypothetical Fair Weather Failure of Stevens Creek Dam

Federal Dam ID: CA00292     State Dam ID: 72-007
Sheet 1 of 12

Inundation Analysis and maps created by SCVWD
August 2019

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Vertical Datum: NAVD88, U.S. Feet

The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used as guidance for developing evacuation zones. Actual areas inundated will depend on actual failure and pre-failure hydrologic conditions and may differ significantly from information shown on maps.

This map meets all applicable state and federal standards and has been prepared in accordance with all potential downstream hazards by a licensed civil engineer.

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.
Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.

**Legend**

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>Cities</td>
</tr>
<tr>
<td>1 to 2</td>
<td>Schools</td>
</tr>
<tr>
<td>2 to 5</td>
<td>Fire Stations</td>
</tr>
<tr>
<td>5 to 10</td>
<td>Road Callouts</td>
</tr>
<tr>
<td>10 to 20</td>
<td>Flood Wave Arrival Time</td>
</tr>
</tbody>
</table>

This map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards. The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used as guidance for establishing evacuation zones. Actual areas inundated will may differ significantly from information shown on maps.
This map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards for establishing evacuation zones. Actual areas inundated will vary.

Inundation Analysis and maps were developed in accordance with the California Administrative Code Title 17, Chapter 3, and the Federal Emergency Management Agency guidelines for flood zone delineation. This map reveals applicable state and federal criteria, but has been prepared independently of all Federal Emergency Management Agency criteria, and is based on analysis of data and flood wave parameters.

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.

Legend

- **Cities**
- **Schools**
- **Road Callouts**

**Maximum Inundation Depth (feet)**
- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

**Flood Wave Arrival Time**
- 5 to 10 Minutes
- 10 to 20 Minutes
- 20 to 30 Minutes
- 30 Minutes and over

**Island Dam**
- Federal Dam ID: CA00292
- State Dam ID: 72-007
- Dam Owner: Santa Clara Valley Water District
- August 2019

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Road Callouts

Santa Clara Valley Water District

Location: Fremont Ave
Arrival: 30 Minutes
Depth: 2 ft
Velocity: 7 fps

Location: Fremont Ave
Arrival: 30 Minutes
Depth: 6 ft
Velocity: 12 fps

Location: Fremont Ave
Arrival: 1955000

Location: Fremont Ave
Arrival: 1957000

Location: Fremont Ave
Arrival: 1960000

Location: Fremont Ave
Arrival: 1961000

Legend

Maximum Inundation Depth (feet)

- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

Flood Wave Arrival Time

- Fire Stations
- Road Callouts
- Hospitals
- Schools
- Cities

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without additional inflow.

Inundation Map for the Hypothetical Fair Weather Failure of Stevens Creek Dam

Federal Dam ID: CA00292
State Dam ID: 72-007
Sheet 4 of 12
1 in = 1,000 ft

August 2019
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The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used as guidance for evaluating evacuation zones. A flood wave arrival time and depth indicates the time and depth of inundation at individual locations for dam failure scenarios. Failure scenarios do not consider the effects of internal reservoir levels, and therefore, maximum inundation depths and flood wave arrival times may differ significantly from information shown on maps.

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.

This map meets all applicable state and federal standards and has been prepared to facilitate understanding water resources and has been created by SCVWD.
Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.

Arrival: 1.5 Hours
Location: Middlefield Rd
Velocity: 2 ft/s

Arrival: 1.5 Hours
Location: CA-101
Depth: 3 ft
Velocity: 2 ft/s

Arrival: 1.5 Hours
Location: Moffett Blvd
Velocity: 2 ft/s

Arrival: 1.5 Hours
Location: Middlefield Rd
Velocity: 2 ft/s

Maximum Inundation Depth (feet)
- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

Legend
- Cities
- Schools
- Fire Stations
- Road Callouts

Approximate Scale
Vertical Datum: NAVD88, U.S. Feet

The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used as guidance for assessing evacuation points. Flood waves, traveled at a constant rate of 2 ft/s with maximum water surface slopes of 0.5%, may differ significantly from information shown on maps.
This map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards for establishing evacuation zones. Actual areas inundated will vary from information shown on maps.

The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used for general guidance by adopting agencies. A final series of analytical and hydrologic calculations were conducted which determined flood stages and areas inundated. Additional information and resources can be found at SCVWD’s website.

This map meets all applicable state and federal standards and has been prepared in consideration of all potential downstream hazards for establishing evacuation zones. Actual areas inundated will vary from information shown on maps.

The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used for general guidance by adopting agencies. A final series of analytical and hydrologic calculations were conducted which determined flood stages and areas inundated. Additional information and resources can be found at SCVWD’s website.

Legend
Maximum Inundation Depth (feet)
- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20
- Flood Wave Arrival Time

Cities
Schools
Fire Stations
Road Callouts

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.

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Inundation Map for The Hypothetical Fair Weather Failure of Stevens Creek Dam
Federal Dam ID: CA00292  State Dam ID: 72-007
Sheet 9 of 12  1 in = 1,000 ft

E.S. Masters
Santa Clara Valley Water District

August 2019
San Jose, CA 95118

This 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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Legend

Maximum Inundation Depth (feet)

- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

- Cities
- Schools
- Fire Stations
- Road Callouts

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow.
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Legend

- **Cities**
- **Schools**
- **Fire Stations**
- **Road Callouts**

### Maximum Inundation Depth (feet)

- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

### Flood Wave Arrival Time

**Legend**

- **Cities**
- **Schools**
- **Fire Stations**
- **Road Callouts**

### Arrival Times

- **Arrival: 2.5 Hours**
  - Depth: > 1 ft
  - Velocity: 0.5 ft/s
- **Arrival: 3 Hours**
  - Depth: > 1 ft
  - Velocity: 0.5 ft/s

### Additional Information

- **Vertical Datum:** NAVD88, U.S. Feet
- **Approximate Scale:** 1 in = 1,000 ft
- **Hypothetical Fair Weather Failure of Stevens Creek Dam**
- **Dam Owner:** Santa Clara Valley Water District
- **Federal Dam ID:** CA00292
  **State Dam ID:** 72-007
- **Sheet 11 of 12**

**Notes:**

- Arrival times are approximate and should only be used as guidance for establishing evacuation zones. Actual areas inundated may differ significantly from information shown on maps.
- The methods used to develop inundation zones and flood wave arrival times are meant as approximate tools only to serve as guidance for assisting evacuation zones. Field work, verified and approved by a licensed civil engineer, is required where inundation zones and flood wave arrival times may impact a community.
- This map meets all applicable state and federal standards and has been prepared to support public health and safety decisions and to support civil engineering and emergency management.

**Year:** August 2019

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Legend

Maximum Inundation Depth (feet)

- <1
- 1 to 2
- 2 to 5
- 5 to 10
- 10 to 20
- >20

Cities

Fair Weather (FW) failure assumes a dam failure at full capacity at the spillway lip without any additional inflow

The methods used to develop inundation zones and flood wave arrival times are approximate and should only be used as guidance for establishing evacuation zones. Actual areas inundated will depend on actual failure and pre-failure hydrologic conditions and may differ significantly from information shown on maps. This 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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