VENTURA COUNTY
OPERATIONAL AREA
TSUNAMI EVACUATION PLAN

Prepared by:
Ventura County Sheriff's
Office of Emergency Services
With the assistance and input of the
Cities of Ventura, Oxnard and Port Hueneme, as well as many other agencies and jurisdictions

August, 2006

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INTRODUCTION

Tsunamis are geologic hazards that can be the result of both ground shaking forces and forces other than ground shaking (sub-sea and sub-aerial landslides). Man-made tsunamis have been generated by the detonation of underwater nuclear bombs at Bikini atoll and elsewhere. Tsunami hazards remain the same regardless of whether caused by a seismic event or an event not associated with an earthquake.

A tsunami is a traveling ocean wave generated by disturbances associated with earthquakes, volcanoes or major submarine landslides. These waves have a long wavelength (distance from the crest of one wave to the crest of the succeeding wave), normally over 100 miles, and a very low amplitude (height from crest to trough). As these waves approach shallow water, the speed decreases from a deep water speed of over 600 m.p.h. to less than 30 m.p.h., and their energy is transferred from wave speed (velocity) to wave height (amplitude); waves as high as 80-100 feet can be formed. Although the arrival time of waves can be predicted, the intensity of the wave when it reaches shore cannot be predicted.

Tsunamis are a threat, not because they are extensive or frequent, but because the destruction they cause can be devastating. Tsunamis can cause loss of life from drowning, and they can cause extensive damage to structures on or near beaches and river mouths. In addition, water systems can be contaminated, power supplies disrupted, transportation systems blocked or disrupted, oil and gas pipelines compromised, and communications pathways along the coast destroyed. There can also be an increased occurrence of fire from broken oil or gas tanks or lines, as well as flooding from blocked rivers, etc. The danger is compounded by the fact that the intensity of the wave is unpredictable and the threat is intermittent over many hours. The waves can arrive onshore in intervals of up to an hour, and since there are usually a number of waves (rather than just one), the threat usually exists for as long as ten to twelve hours. Tsunamis are sometimes preceded by a trough which appears to be similar to an extremely low tide. The wave itself may follow the trough by 15 to 45 minutes.

The tsunami threat is mainly confined to the immediate beach areas and river mouths (deltas). All of the coastal areas in Ventura County are susceptible to tsunamis. Most of the land between the beach and the cliffs on both the north and south coasts is included within the hazard zone. The hazard zone is delineated as roughly the elevation of 33 feet (10 meters); however, effects of structures and topography may locally affect the inland extent of the tsunami (runup). The estimated population of the potential inundation area in Ventura County is approximately 40-45,000 (daytime) and 25,000 (night). Ventura County is subject to threats from both tele-tsunamis (distant generated, trans-oceanic) and locally generated events in the Santa Barbara Channel and Gulf of Catalina.

ACKNOWLEDGEMENTS

The Sheriff's Office of Emergency Services gratefully acknowledges the assistance of the following agencies and personnel:

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Oxnard School District-Robert Foster
Hueneme School District-Harry Thomas
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California Highway Patrol-Susan May
California Department of Transportation-Jim Fowler
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U.S. Department of Commerce, National Weather Service-Eric Boldt

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Information Systems Department/Geographic Information Systems-Eric Alger, Laurie Kurilla
Channel Islands Harbor Patrol-Dan Smock
Emergency Medical Services Agency-Steve Carroll
Public Health Agency-Steve Johnston
Radio Amateur Civil Emergency Services-David Gilmore
Public Works Agency-Phil Raba
Fire Protection District-Ted Smith
Sheriff-Stephen Wade, Todd Inglis, Dale Carnathan, Ivan Rodriguez, Laura Hernandez

BACKGROUND & HISTORICAL INFORMATION

Ventura County has not been seriously impacted by a tsunami since the early 18th Century. Historical records, confirmed by geologic exploration, indicate that a tsunami occurred in the Santa Barbara Channel around 1812. However, what is not clear is the source of the event. Current theories about what generated that event include a sub-aerial landslide on the east coast of Santa Cruz Island and a submarine landslide in the vicinity of Coal Oil Point (near UCSB). Either of these potential source events could have been related to a major earthquake in the Santa Barbara Channel around the same time. Anecdotal reports indicate that the tsunami caused damage to both Mission San Buenaventura and Mission Santa Barbara.

The most significant remote tsunami to hit southern California was in 1960, when an 9.5 magnitude earthquake off the coast of Chile generated a tsunami resulting in 4 ½ foot waves at Santa Monica and Port Hueneme, and caused major damage to the Los Angeles and Long Beach harbors.

The 1964 Good Friday Alaskan Earthquake (Magnitude 9.2) generated a tsunami that caused major damage to port facilities up and down the California Coast, and 11 deaths in Crescent City, California. However, only minor damage was reported in either Ventura Harbor or the Port of Hueneme.

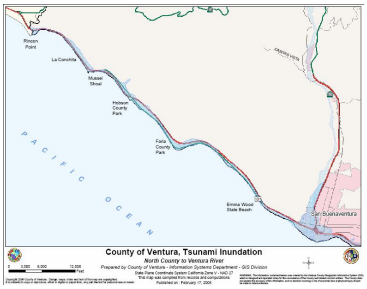
Ventura County Sheriff's Office of Emergency Services has participated in the Governor's Office of Emergency Services Tsunami Steering Committee (TSC) for several years. The State OES Tsunami Steering Committee members include representatives from all coastal Operational Areas, as well as State and Federal Agencies. Led by State OES, the TSC has jointly determined the priorities for use of dollars received from the State and Federal Government, as well as performing as a clearinghouse for information and planning tools. The TSC has promulgated educational and training materials, exercises and a policy of standardization that all member agencies have agreed upon.

In July of 2005, Ventura County hosted the first Operational Area Tsunami Planning Conference, which has served as a template for other OpAreas to use. Representatives from Cities, Special Districts, State and Federal Agencies and the County met to learn the latest information derived from the December 2004 Indian Ocean Tsunami, and to review the lessons learned from the June 2005 Tsunami Warning. From this group, volunteers from many local, state and federal agencies came together to form the Tsunami Planning Group for the Ventura County Operational Area.

While Ventura County is potentially affected by both locally generated and tele-tsunamis, this plan is primarily intended for use during events occurring more than two hours travel time from Ventura. However, the identified routes, procedures, resources and assembly points are applicable during any tsunami event.

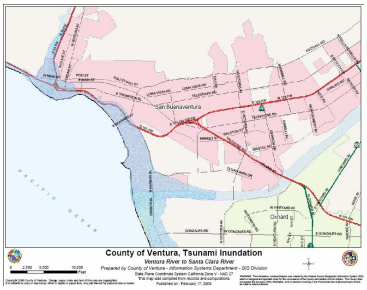
JURISDICTIONS & FACILITIES POTENTIALLY AFFECTED

North Coastal Area



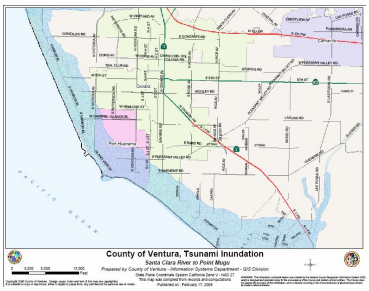
County of Ventura
California State Parks
California Department of Transportation (CalTrans) & CHP
Union Pacific Railroad/AMTRAK/Metrolink
Rincon Island (Dos Cuadros Offshore Resources)

Ventura to Santa Clara Rivers



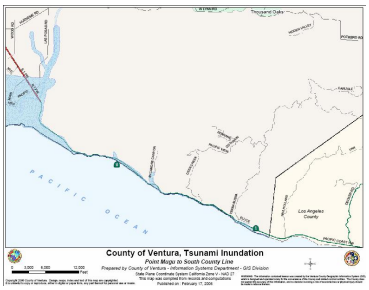
County of Ventura
City of San Buenaventura
California State Parks
California Department of Transportation (CalTrans) & CHP
Union Pacific Railroad/AMTRAK/Metrolink
Seaside Park (State of California 31st Agricultural District)
Crowne Plaza Hotel
Ventura Harbor (Ventura Port District) & Tenants
Channel Islands National Park (Islands & Headquarters)
Ventura (City) Wastewater Treatment Plant
Ventura Unified School District (Pierpont Elementary School)

Santa Clara River to Mugu Rock



County of Ventura
City of Oxnard
California State Parks
California Department of Transportation (CalTrans) & CHP
Reliant Energy (Mandalay & Ormond Power Plants)
Berry Petroleum
Port of Hueneme (Oxnard Harbor District)
Channel Islands Harbor (County of Ventura) and Tenants
Coast Guard Station Channel Islands Harbor
Casa Sirena Hotel
Naval Base Ventura County (Port Hueneme and Point Mugu)
Hueneme Elementary School District (Hollywood Beach Elementary School, Hueneme School)

South Coastal Area

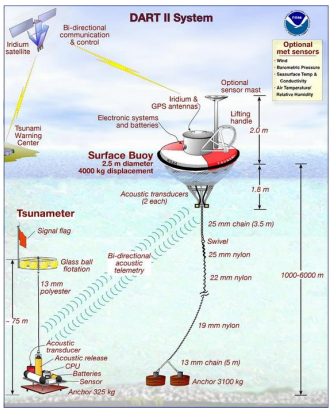


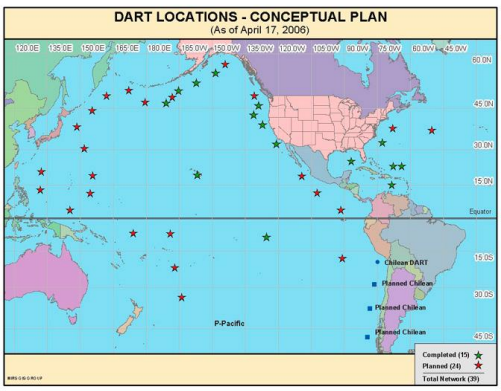
County of Ventura
California State Parks
California Department of Transportation (CalTrans) & CHP

WARNING AND COMMUNICATIONS SYSTEMS

Tsunami "Watch" (a tsunami may have been generated) and "Warning" (a tsunami has been generated) messages are issued for our area by the *West Coast and Alaska Tsunami Warning Center* (WCATWC – http://wcatwc.arh.noaa.gov/), located in Palmer, Alaska. The WCATWC is an element of the Department of Commerce, National Oceanographic & Atmospheric Administration (NOAA). Since late 2005, the WCATWC has been staffed twenty-four hours a day, and is backed up by (and backs up, as well) the *Pacific Tsunami Warning Center* (PTWC), located in Ewa Beach, Hawaii. Both centers also transmit "Information" messages when significant seismic events occur under the sea floor, but do not have the potential to generate a tsunami.

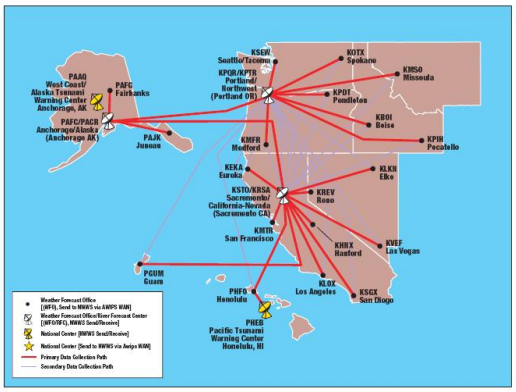
Both Tsunami Warning Centers receive and share seismic information with numerous national and international networks, and also receive data from tide gauges, recording stations and Deep Ocean Assessment and Reporting of Tsunami (DART) buoys located throughout the world. In 2005, President Bush ordered an expansion of the DART Buoy system from eight (7 US, 1 Chilean) buoys to thirty-seven US sponsored buoys. In coordination with the US plan, Chile has also begun to expand their system by adding additional sites.

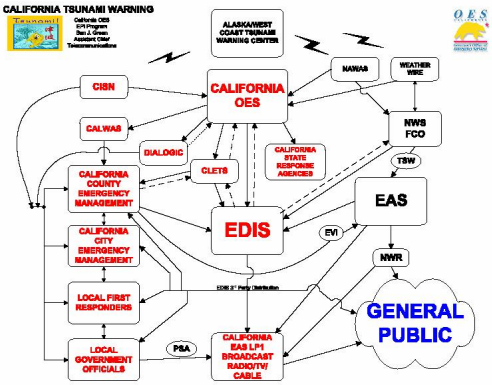




Watch and Warning messages are transmitted by the respective Warning Centers over the NOAA *Weather Wire* system directly to each other, Coastal National Weather Service Forecast Offices and their Area of Responsibility's State Warning Centers. Our local National Weather Service Office is located in Oxnard, and serves the Counties of San Luis Obispo, Santa Barbara, Ventura and Los Angeles. The Governor's Office of Emergency Services operates California's State Warning Center in Sacramento.

Some messages are transmitted automatically based upon seismic event magnitude and location, and followed shortly by amplifying information (after review by scientists at the Tsunami Warning Centers). Generally, a message is generated within five minutes of the seismic event. If a tsunami is suspected to have been generated, the Warning Center will issue a **Warning** message, including a "forecast" of probable arrival times at various points in their area of responsibility. Arrival times and heights are estimates, based on both historical data and current data from monitoring systems. The information is refined as the event passes (or doesn't!) tide gauges and DART Buoys.





Tsunami Watch and Information messages are re-transmitted by the State Warning Center over the *California Law Enforcement Telecommunications System* (CLETS) to coastal jurisdictions. In Ventura County, these messages are received by Dispatch Centers for the Sheriff's Department, Fire Protection District, Ventura, Oxnard and Port Hueneme Police Departments, and the Naval Base, Ventura County.

Tsunami Watch and Information messages are also "ported" into the *Electronic Digital Information System* (EDIS- http://www.edis.ca.gov). EDIS is a publicly accessible internet based information dissemination system originally designed to provide media text information about current events. Today, anyone with an e-mail address may subscribe to EDIS messages through http://www.incident.com .

Tsunami Warning messages are received by the State Warning Center, and immediately retransmitted over both CLETS and EDIS. The Warning Center then follows up by calling each coastal OpArea over CalWAS (California Warning and Alerting System, the State network portion of NAWAS (National Alert and Warning System). The State Warning Center has also programmed their automatic dialing system with the office, cell, home and pager number for OpArea Emergency Managers. OpArea Emergency Managers will receive an automated message to contact the Warning Center for detailed information, which may include the time and location for receipt of additional information. The Ventura County Sheriff's Office of Emergency Services Duty Officer will confirm receipt of the information by local jurisdictions' Emergency Coordinators. Based upon the available information, the OES Duty Officer may recommend EOC Activation and commencement of evacuation plans.

The Oxnard Weather Forecast Office receives Tsunami Warning Messages via NWS "Weather Wire." Upon receipt, the message is reviewed and edited for the local service area (the message from WCATWC includes information for the entire West Coast, Alaska and British Columbia). The transcribed message is then recorded for transmission over the Emergency Alert System (EAS) and local National Weather Radio sites. The Oxnard office controls NWR sites at Avalon (Catalina Island), San Luis Obispo, Mt. Wilson (Los Angeles), San Simeon and Santa Barbara (both marine and terrestrial forecasts).

EAS messages coded as TSU (Tsunami) and CEM (Civil Emergency Message) are automatically relayed and broadcast by participants in the local EAS, including radio (AM & FM), television and cable stations. EAS audio messages are limited to 118 seconds in length, and will generally inform listeners of the need for specific actions (evacuation), and to tune to a local broadcast station for further information.

The Cities of Ventura, Oxnard and Port Hueneme have the capability to put emergency and preparedness information on local government cable television channels There is currently no such option available for the unincorporated areas of Ventura County.

There is no fixed, audible warning system that covers the entire 42 mile coast of Ventura county. Three of the Casitas Dam Warning System sites are within the inundation area, but have not been maintained or prepared for use in events other than their original purpose (failure of Casitas Dam during the seismic retrofit).

The County of Ventura is preparing to purchase a telephone mass-notification system capable of multi-lingual notifications. Further information will be included as the system is installed and becomes functional.

Emergency vehicle (and helicopter) public address systems and sirens may be used to alert residents of the need to evacuate. These tools may be most effective during the night hours, when most televisions and radios are not in use. The vehicles' audible warning systems (siren) should be used in conjunction with verbal direction to turn on radios or televisions and tune to emergency information sources.

Occupants of the inundation area should become familiar with evacuation routes, refuge and assembly areas, and shelters. Warning may not be possible in the event of a tsunami generated by a local seismic event, and will not be available if a tsunami is generated by a local non-seismic event (sub-aerial or sub-sea landslide). If on the beach (or in the defined inundation area) during an earthquake, move to high ground immediately. DO NOT WAIT for a warning!

Tsunami and evacuation information is available from local emergency managers, and on the Sheriff's Office of Emergency Services web site: www.vcsd.org/oes/index.html. Further information about tsunamis, including the latest warning and information messages are available from the West Coast & Alaska Tsunami Warning Center's web site: http://wcatwc.arh.noaa.gov/.

Concept of Operations

Upon receipt and confirmation of a Tsunami Warning, the Sheriff's Office of Emergency Services Duty Officer will notify: All OES Staff, Sheriff's Watch Commander, Sheriff's EOC Commander (WCPS Commander), Coastal Emergency Managers (Cities of Ventura, Oxnard, Port Hueneme, NBVC). In conjunction with the EOC Commander, a decision to activate the OpArea EOC immediately, or at a particular time will be made, and relayed to all affected jurisdictions, agencies and personnel.

If the event is locally generated, no warning may be available, and EOC's and DOC's will activate in response to local requirements or damage.

A tele-tsunami (distant generated or trans-oceanic) may be detected, and warning provided anywhere from two to 12 hours in advance of an event striking our coast. Distant events may also pass gauge or measuring points that will allow further analysis of the threat to the County.

When the decision to activate the OpArea EOC is made, all Cities and Jurisdictions in the OpArea and State OES will be notified. City EOC's and Agency DOC's will activate in accordance with existing plans, and two-way, redundant communications will be established.

The Ventura County Chapter of the American Red Cross will be notified to assist in the establishment of assembly areas (Oxnard College, Ventura College, Southwest Regional Park). Shelter Operations will not commence until residential damage is assured.

The Ventura County Transportation Commission will assist in the notification and assignment of mass transportation resources, initially to evacuation points, and (if necessary) from assembly areas to shelter sites.

Evacuation Orders will be issued via the Emergency Alert System, with specific route and destination information sent to all media and the National Weather Service immediately following the EAS Broadcast. If time permits, vehicle public address systems and sirens may also be used to notify coastal residents.

Emergency equipment and personnel will stage outside the potential inundation area. Command Posts should be established to facilitate management of rescue operations and use of resources. Rescue operations may commence when the water recedes, or an "ALL CLEAR" message has been received, generally 2-3 hours after the last "wave." Lookout systems should be established to warn of additional "waves," which can occur at intervals greater than 2-3 hours after the initial event. Rescuers should ensure escape routes and constant communication with Command Posts and/or lookouts.

NO TRANSPORTATION RESOURCE SHOULD BE DIRECTED INTO MOVING WATER OR STANDING WATER WITH A DEPTH GREATER THAN 24 INCHES (2 FEET). Some mass transit resources cannot transit water depths over 12-18 inches.

Mass Transit Support for Evacuation

While the majority of the population of the potential tsunami inundation area will be able to walk to safety, there are some individuals, families and facilities that will need assistance in moving out of the hazard area.

Provided there is enough time before the predicted arrival of the event, an evacuation order and instructions will be issued. Ideally, mass transit resources will be advised of the need to report to assembly areas prior to the issuance of an evacuation order, to facilitate their access to areas within the evacuation zone. Those resources will be directed to identified assembly areas with both large group capacity and the space for large vehicles to turn around. Egress routes will generally be the published evacuation routes, which will (probably) mean each vehicle will only be able to accomplish one trip, due to traffic congestion.

Individual facilities (licensed care, rehabilitation, schools and other group care establishments) are either required by regulation to provide disaster plans (including evacuation and relocation), or should make advance arrangements to evacuate their facilities (while providing required care and supervision) with other resources.

The following sites have been identified as assembly points for access to mass transit resources in the event of a tsunami evacuation:

1 Ventura: (to Ventura College)
Schooner & Anchors Way (Ventura Harbor Mobile Home Park)

2 Ventura: (to Ventura College)
Seaward and Harbor (Von's Parking Lot)

3 North Oxnard: (to Southwest Community Park)
5th & Harbor (Mobile Home Park)

4 North Hollywood Beach: (to Southwest Community Park)
Mandalay Beach School parking lot

5 Channel Islands/Hollywood Beach:(to Southwest Community Park)
Harbor Landing/Marine Emporium Parking Lot

6 South Hollywood Beach: (to Southwest Community Park)
Harbor Boulevard and Albacore Way

7 Silver Strand Beach: (to Southwest Community Park)
Channel Islands Beach Park parking lot (Kiddie Beach)

8 Port Hueneme: (to Oxnard College)
Tradewinds Shopping Center Parking Lot

9 Port Hueneme: (to Oxnard College)
Scott & Ventura Road (Senior Center)

Shelter and Assembly Areas

Residents of the inundation area will be encouraged to WALK to safe areas. The majority of residents should be able to move to high ground on foot in less than one hour. Residents are encouraged to "scout" their evacuation routes in advance, to fully make themselves aware of the route and potential problems they may encounter.

Three primary assembly areas have been identified. Oxnard Community College, Ventura Community College and Southwest Regional Park all have large open areas, access to sanitation facilities, and room for large vehicles to turn around. These sites will be used for temporary shelters, and for families to re-connect, or to make contact with other friends to arrange for alternate housing.

If there is damage to housing, the Red Cross will transition to opening traditional shelters at various community locations, depending upon need and numbers requiring shelter. Mass transportation resources may be required to transport evacuees from Assembly Areas to shelters. The standard estimate used by Red Cross is that about 20% of the population of an affected area will make use of the shelters.

As in any evacuation, displaced residents will arrive at shelters without critical necessities: medicines, prosthetic devices, assistive appliances, and personal sanitation supplies. However, it is highly likely that they will arrive with mild to moderate injuries and pets. Red Cross Shelters have minimum capabilities to address mild illness and injuries, but will need the assistance of additional health resources for long-term care or emergent needs. Red Cross and the Ventura County Animal Regulation Department have an agreement to provide small animal (pet) facilities in close proximity to shelters, whenever possible.

Law Enforcement, Emergency Medical Services and Animal Regulation units should be assigned to assembly areas, and remain if the facility transitions to a shelter.

If the event causes little or no damage to habitations, residents may be allowed to return to their homes after the danger has passed.

If significant damage has occurred, re-entry may be delayed until the conclusion of Search, Rescue and Recovery efforts, and the mitigation of hazards.

EVACUATION ROUTES

Note 1: Further direction will be given when Red Cross Shelter sites have been identified.

VENTURA COUNTY LINE NORTH

People south of the Ventura County Line and north of the Ventura Beach RV Park will proceed to Highway 101. Turn onto Highway 101 and proceed to Highway 150. Turn onto Highway 150 and proceed on Highway 150. (Note 1). Depending on time, instruction may be for people in this area to use available roads to travel uphill.

VENTURA

People at the Ventura Beach RV Park will proceed to Main Street and turn right. Proceed on Main Street to Loma Vista and turn left. Proceed on Loma Vista Street to Ventura Community College. (Note 1).

People at the Ventura County Fairgrounds will proceed to Harbor Blvd to either the Garden Street maintenance road or Figueroa Street and turn north. Proceed on either Garden Street or Figueroa Street across Thompson Blvd to Main Street. Turn right on Main Street, proceed on Loma Vista Street to Ventura Community College. (Note 1).

People north of San Jon Road, the Crown Plaza Hotel and Paseo De Playa will proceed to California Street. Proceed on California Street across Thompson Blvd to Main Street. Turn right on Main Street, proceed on Loma Vista Street to Ventura Community College. (Note 1).

People north of Seaward will proceed on Pierpont Blvd, and Harbor Blvd to San Jon Road and turn right. Turn right on Thompson Blvd, and proceed to Telegraph Road. Turn left on Telegraph and proceed to Ventura Community College.

People north of Beachmont Street and south of Seaward Avenue will proceed to Seaward Avenue. Turn onto Seaward Avenue and proceed on Seaward Avenue to Thompson Blvd. Turn right on Thompson Blvd, and proceed to Telegraph Road. Turn left on Telegraph and proceed to Ventura Community College.

People north of the Santa Clara River and south of Beachmont Street will proceed to Harbor Blvd. and then proceed on Harbor Blvd to Olivas Park Drive. Turn on Olivas Park Drive and proceed to Victoria Avenue. Turn left and proceed to Telegraph Road. Turn left and proceed to Ventura Community College. (Note 1).

OXNARD/PORT HUENEME WEST/SILVERSTRAND

People in the area of Silver Strand Beach and South of Channel Islands Blvd on Victoria Avenue will proceed north on Victoria Avenue to Wooley Road and turn right. Proceed on Wooley Road. (Note 1).

People on Peninsula Road and the inward side of the Channel Islands Bridge in Mandalay Bay will proceed to Victoria Avenue and turn left. Proceed on Victoria Avenue and turn right onto Wooley Road. Proceed on Wooley Road. (Note 1).

People in the Wingfield development will proceed to Wooley Road and turn Right. Proceed on Wooley Road and turn left on Victoria Avenue. Proceed on Victoria Avenue and turn Right on Fifth Street. Proceed on Fifth Street. (Note 1).

NBVC CBC PORT HUENEME INSTALLATION

People in the area east of Pacific Road and south of 34th Avenue will proceed to 34th Avenue and turn right. Exit the installation via the Bard Gate and turn left onto Ventura Road. Proceed on Ventura Road to Channel Islands Blvd. and turn right Proceed on Channel Islands Blvd. (Note 1).

People in the area east of Pacific Road and north of 34th Avenue will proceed to 23rd Avenue and exit the installation via the Sunkist Gage. Turn left onto Ventura Road and Proceed to Channel Islands Blvd. Turn right and proceed on Channel Islands Blvd. (Note 1).

People in the area west of Pacific Road will proceed to Patterson Road and exit the installation via the Patterson Gate. Turn right onto Channel Islands Blvd., and proceed on Channel Islands Blvd. (Note 1).

OXNARD/PORT HUENEME (SOUTH)

People south of Hueneme Road will proceed north to Hueneme Road and turn right. Proceed on Hueneme road to Wood Road. Turn left and proceed on Wood Road. (Note 1)

People in the Port of Hueneme will exit the port area via Hueneme Road and proceed on Hueneme Road to Wood Road. Turn left and proceed on Wood Road. (Note 1)

People north of Hueneme Road will proceed to Pleasant Valley Road and turn right. People south of Bubbling Springs Park will proceed to Pleasant Valley Road and turn left. Proceed on Pleasant Valley Road to Fifth Street, turn right and proceed on Fifth Street. (Note 1).

People north of Pleasant Valley Road Except for those south of Bubbling Springs Park will proceed to Bard Road and turn Right. Proceed on Bard Road to Rose Avenue and turn left. Proceed on Rose Avenue. (Note 1).

People north of Bard Road will proceed to Pearson Road and turn right. Proceed on Pearson Road to Yucca Street and continue on Yucca Street. (Note 1).

OXNARD/HOLLYWOOD BEACH

People in the Hollywood Beach area, the Oxnard Shores area and the seaward side of the Channel Islands Bridge in Mandalay Bay will proceed to Harbor Blvd. Turn onto

Harbor Blvd and proceed to Fifth Street. Turn Right and proceed on Fifth Street. (Note 1).

People in the area north of Fifth Street and sough of the Santa Clara River will proceed to Gonzales Road and proceed on Gonzales Road. (Note 1).

NBVC NAS POINT MUGU INSTALLATION:

People in the residential/admin area (inland side of Oxnard Drainage Ditch #2) and People in the area of Donald Road will exit via Gate 1 or Gate 2 and turn left onto the frontage road. Proceed to Wood Road and travel on Wood Road to Hueneme Road. Turn right and proceed on Hueneme Road to Las Posas Road. Turn left and proceed on Las Posas Road. (Note 1).

People in the industrial area (seaward side of Oxnard Drainage Ditch #2) will proceed to the Las Posas Gate, exit and proceed on Las Posas Road to Hueneme Road. Turn right and proceed on Hueneme Road. (Note 1).

MUGU ROCK TO LAS POSAS ROAD:

People in this area will be instructed to travel north on Pacific Coast Highway and continue on the Pacific Coast Highway to Fifth Street. (Note 1)

SOUTHERN VENTURA COUNTY LINE TO MUGU ROCK:

Instruction will be for people in this area to use available roads to travel uphill. (Note 1)

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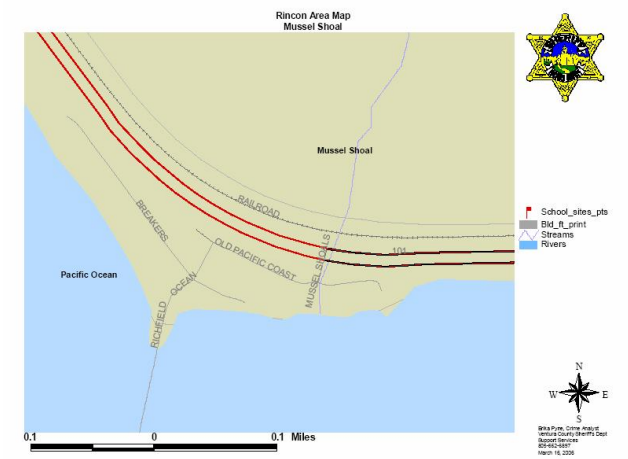
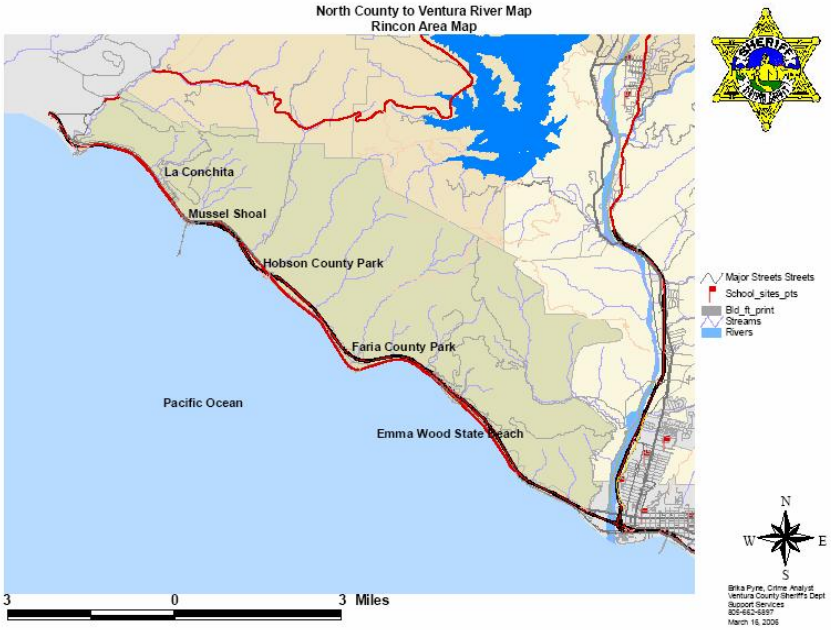
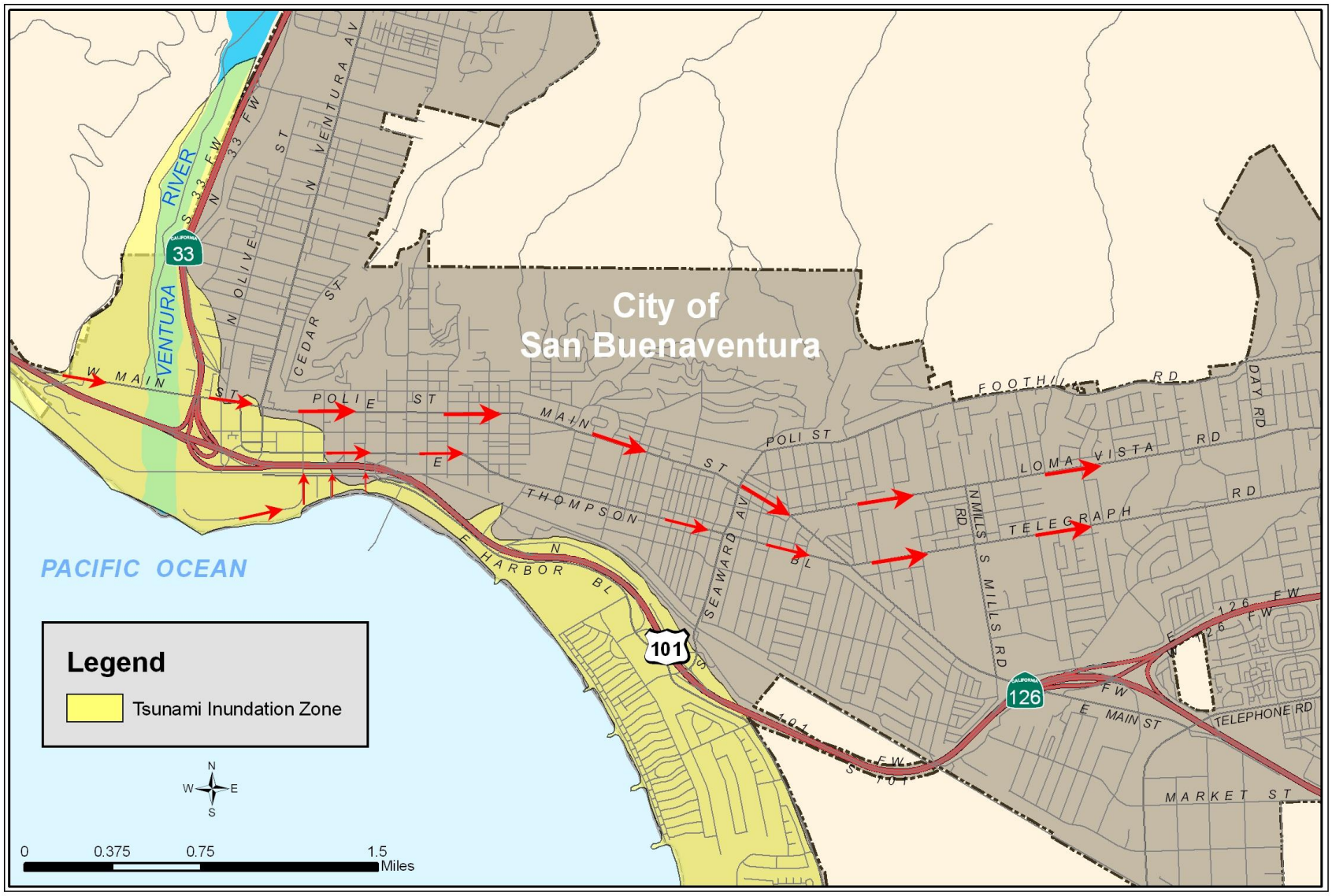
RINCON – NORTH OF VENTURA



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	**950-1200**
Evacuation Routes:	Immediate: Cross Freeway, Move to High Ground Extended: People south of the Ventura County Line and north of the Ventura Beach RV Park will proceed to Highway 101. Turn onto Highway 101 and proceed to Highway 150. Turn onto Highway 150 and proceed on Highway 150.
Destination:	To be Determined
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	_____





City of San Buenaventura

Sectors 1 & 2

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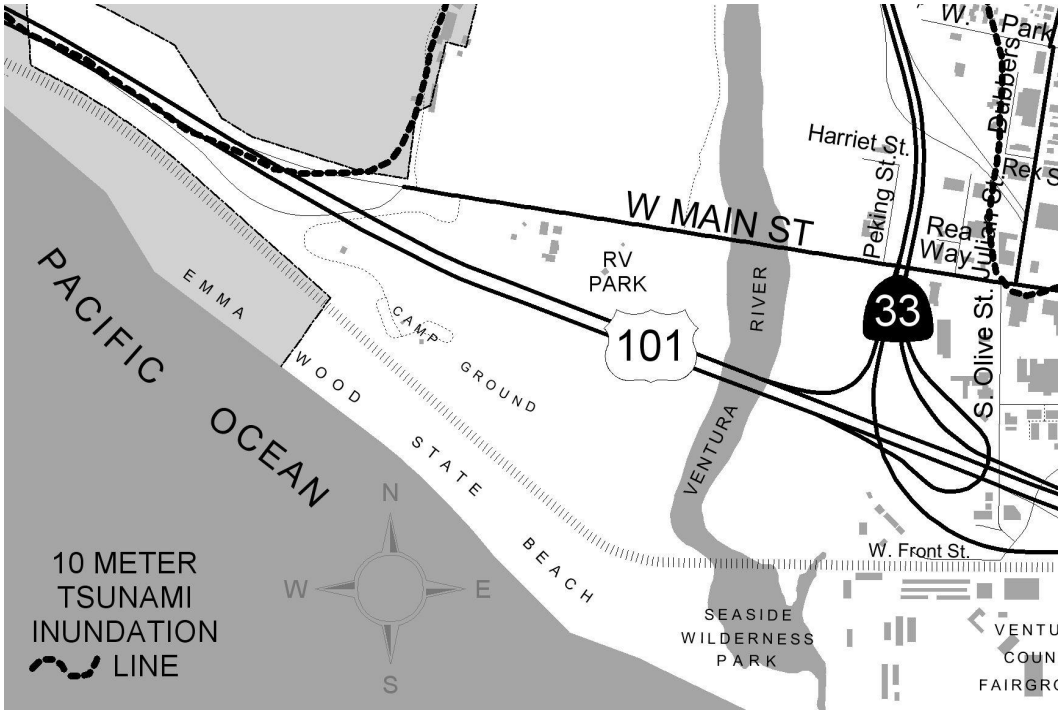
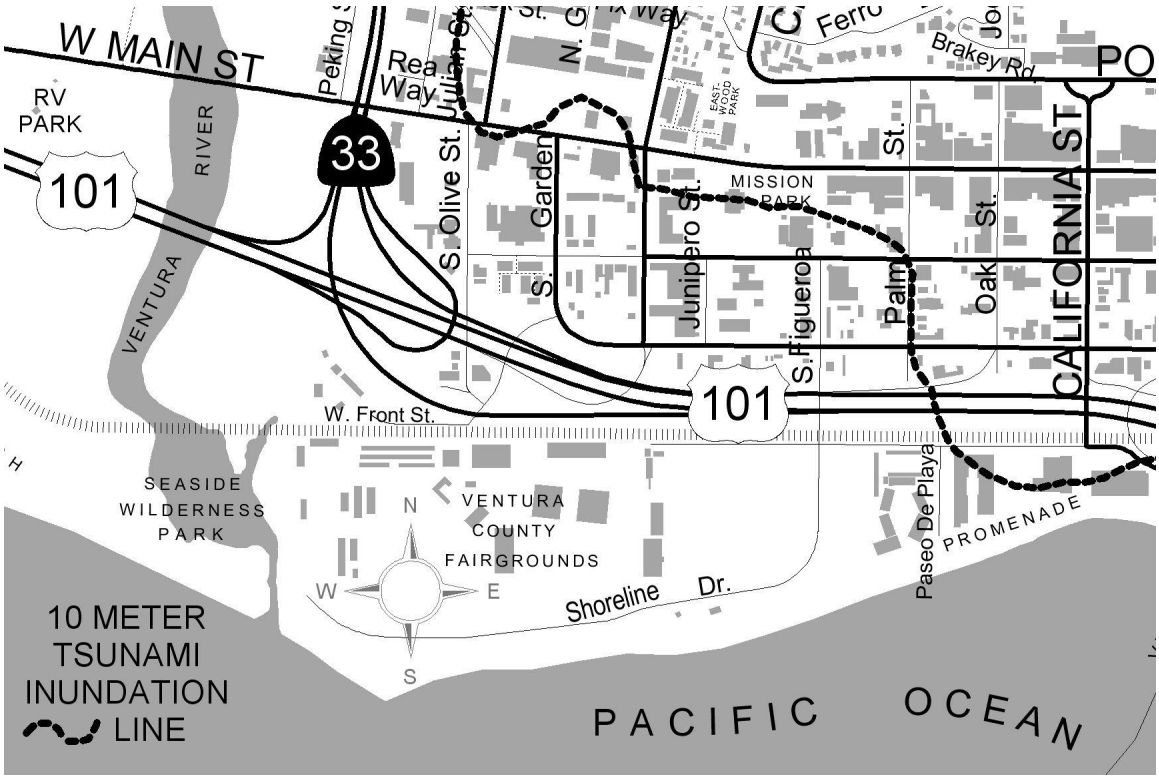
City of San Buenaventura
Sector # 1
Ventura Beach RV Park

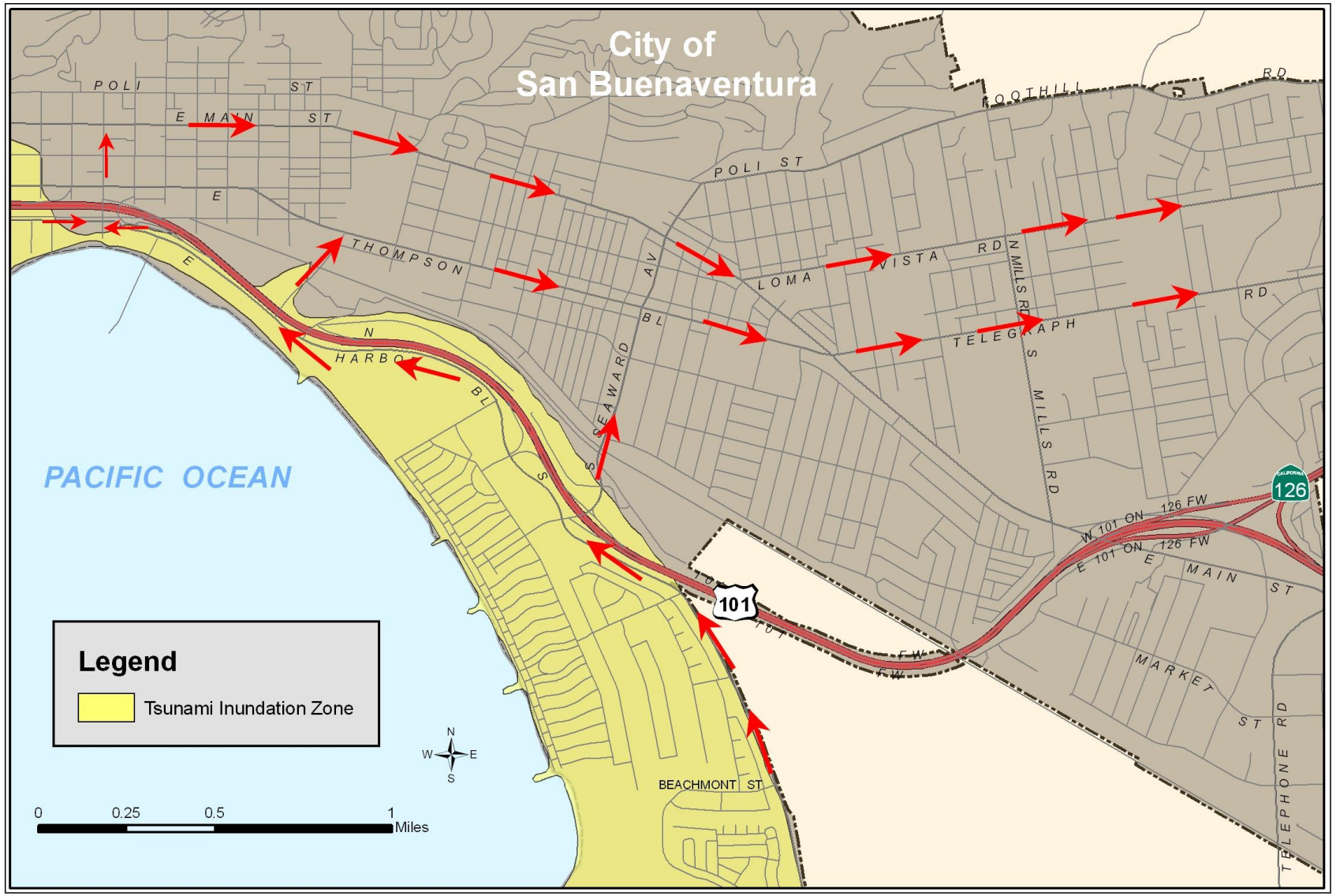


Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	**<3300**
Evacuation Routes:	Move to Main Street, go East to Loma Vista, turn left on Loma Vista to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Ventura RV Park & Emma Wood State Park_
Units Assigned/Involved:	_____

City of San Buenaventura
Sector # 2
Ventura County Fairgrounds

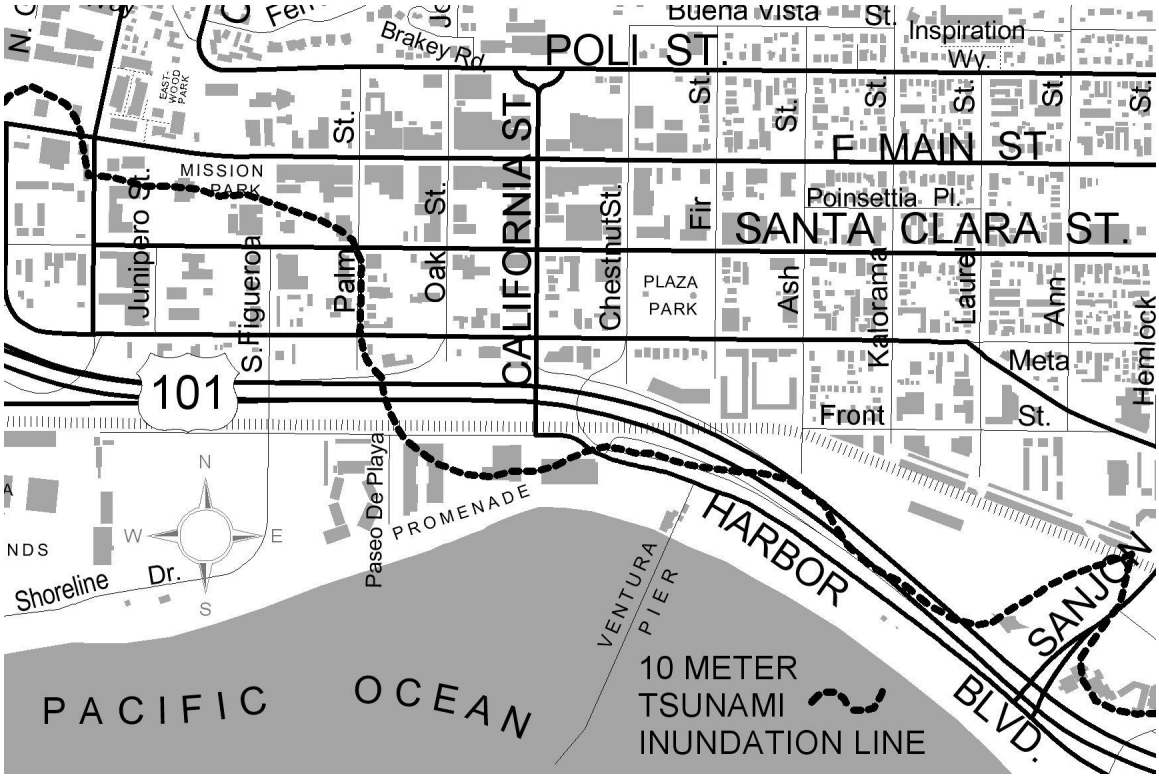


Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	**<3300**
Evacuation Routes:	Move to Front Street, go to the Garden Street undercrossing or Figueroa Street. Turn north, cross Thompson Blvd. to Main Street. Turn right on Main Street and left on Loma Vista Road. Proceed to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Ventura County Fairgrounds (Seaside Park), Condominiums_
Units Assigned/Involved:	_____



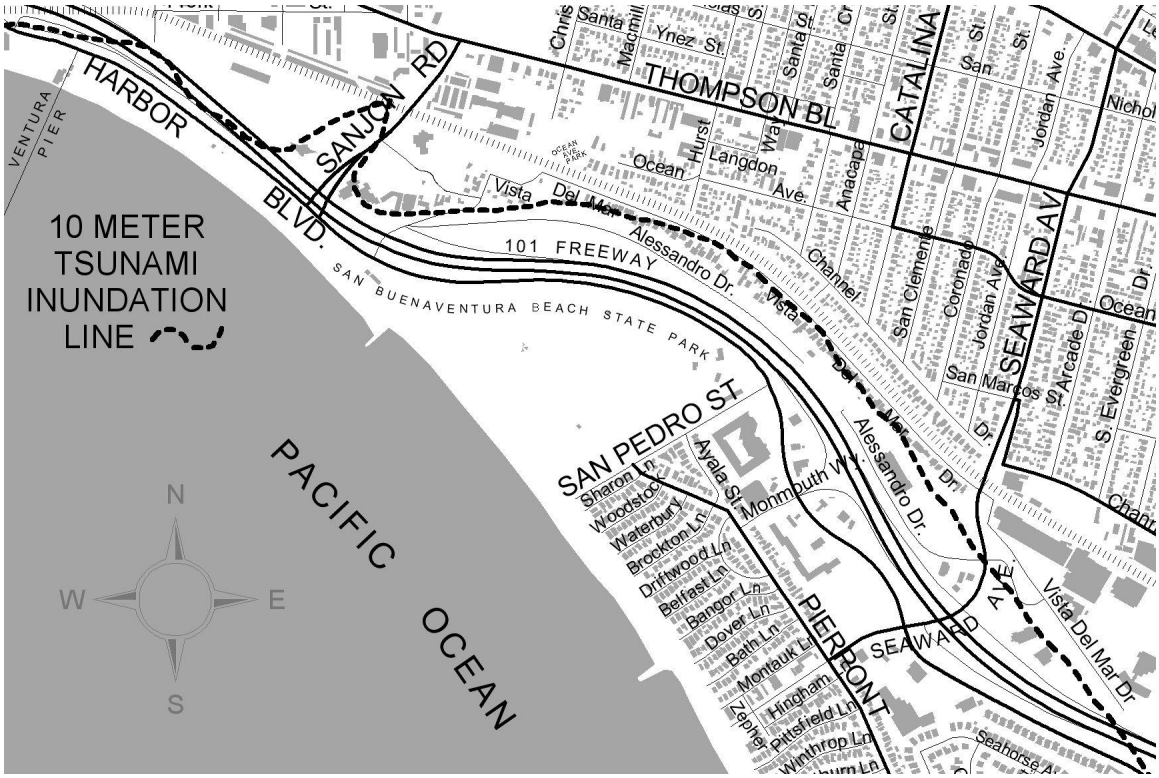
City of San Buenaventura
Sectors 3 & 4 & 5

City of San Buenaventura
Sector # 3
Crowne Plaza Hotel & Paseo de Playa



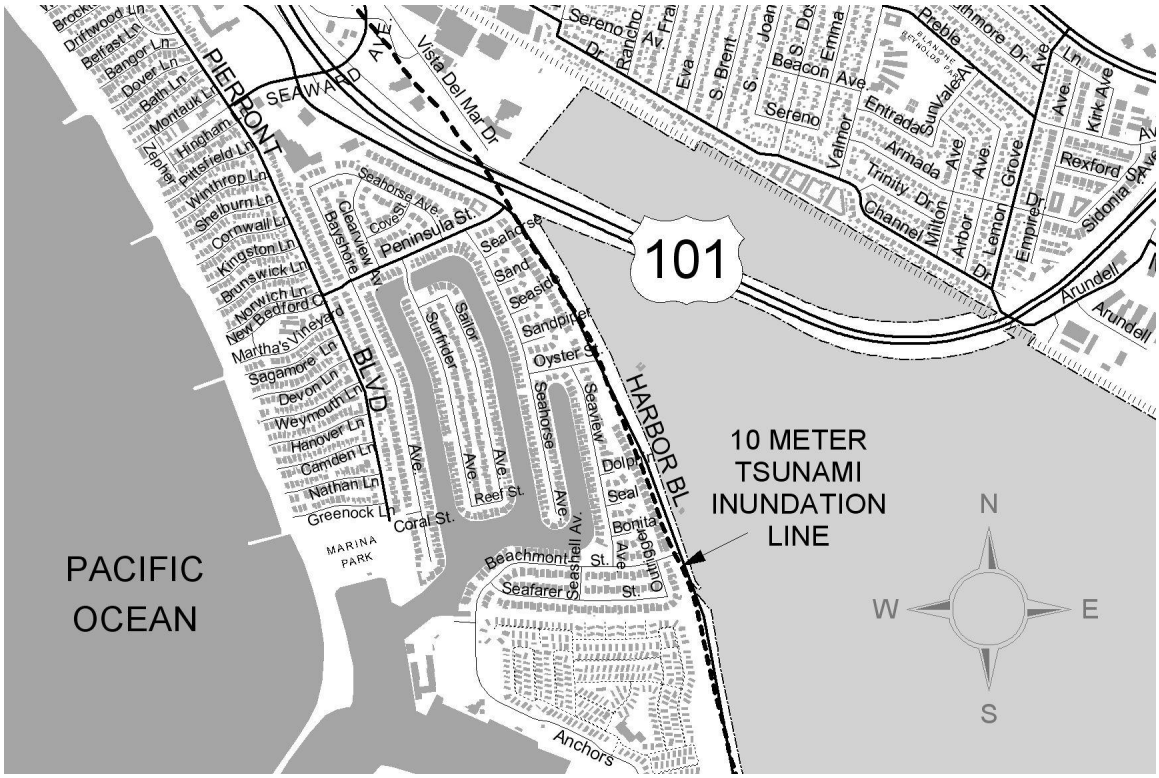
Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	**<6500**
Evacuation Routes:	People north of San Jon Road, the Crown Plaza Hotel and Paseo de Playa will proceed to California Street. Go north on California, right on Main Street to Loma Vista. Left on Loma Vista to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Paseo de Playa & Crown Plaza Hotel
Units Assigned/Involved:	_____

City of San Buenaventura
Sector # 4
Pierpont area west of Seaward Avenue

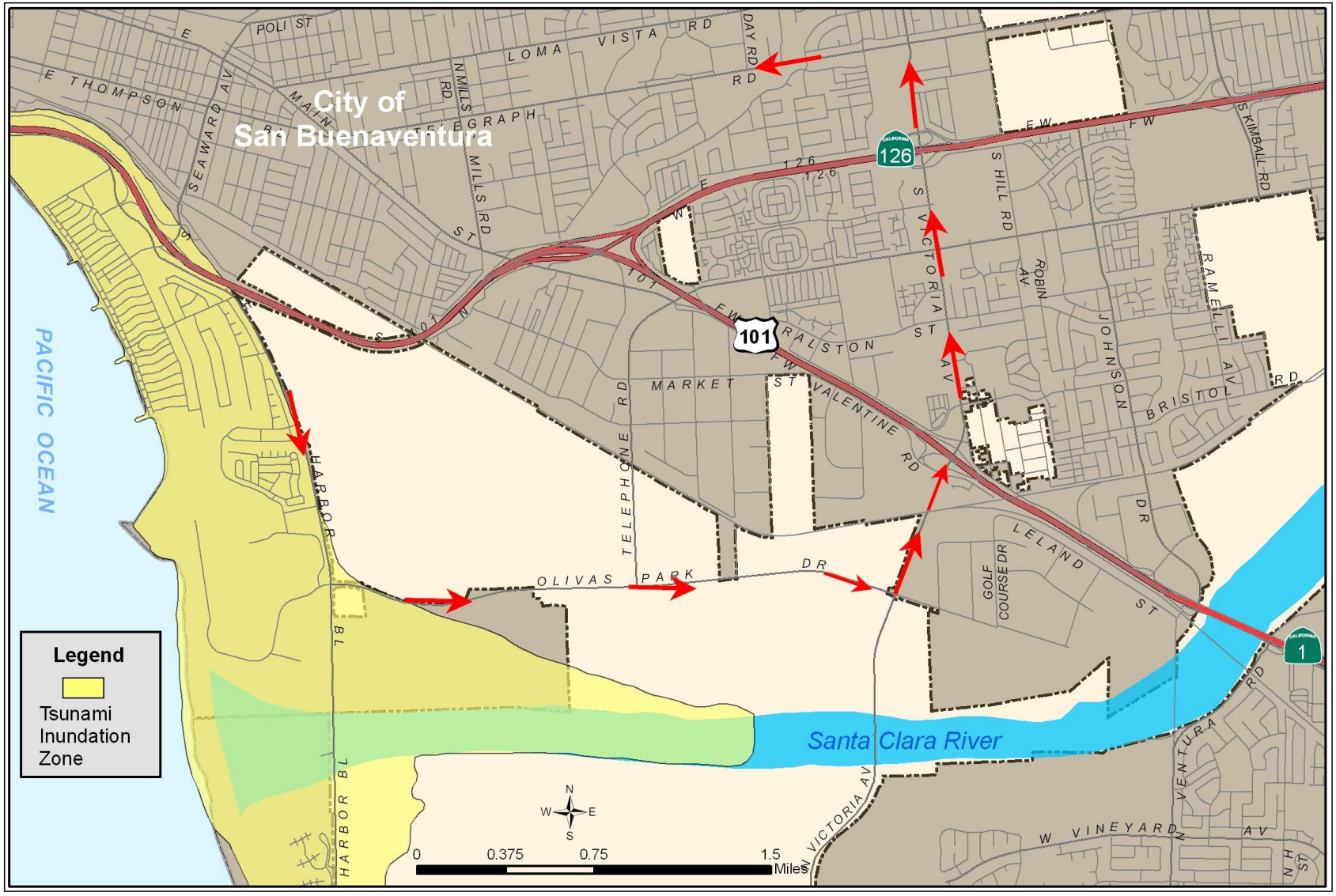


Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	<6500
Evacuation Routes:	Move West on Pierpont or Harbor to San Jon Road, North on San Jon to Thompson, East on Thompson Blvd. to Telegraph. Left on Telegraph to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	San Buenaventura State Beach, Marriott Hotel
Units Assigned/Involved:	_____

City of San Buenaventura
Sector # 5
Pierpont Area & Keys east of Seaward Avenue

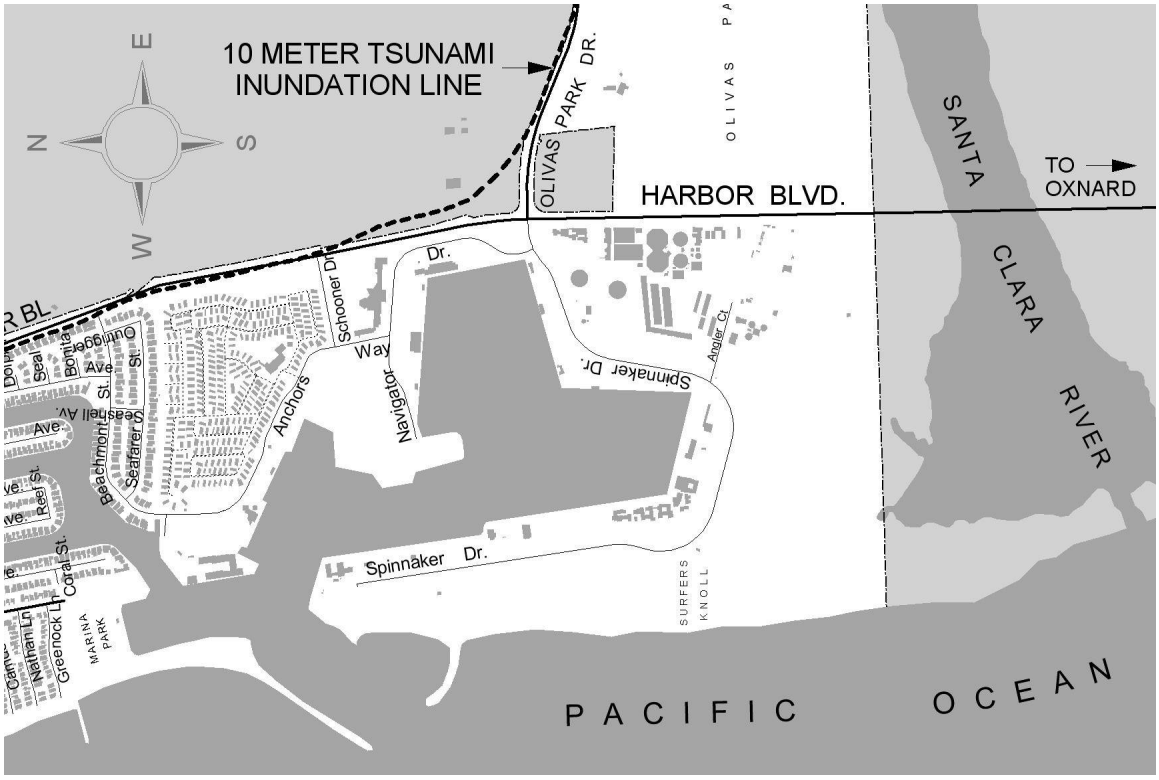


Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	**<3300**
Evacuation Routes:	West on Harbor to Seaward, North on Seaward, East on Thompson Blvd. to Telegraph. Left on Telegraph to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Pierpont Elementary School, Keys
Units Assigned/Involved:	_____

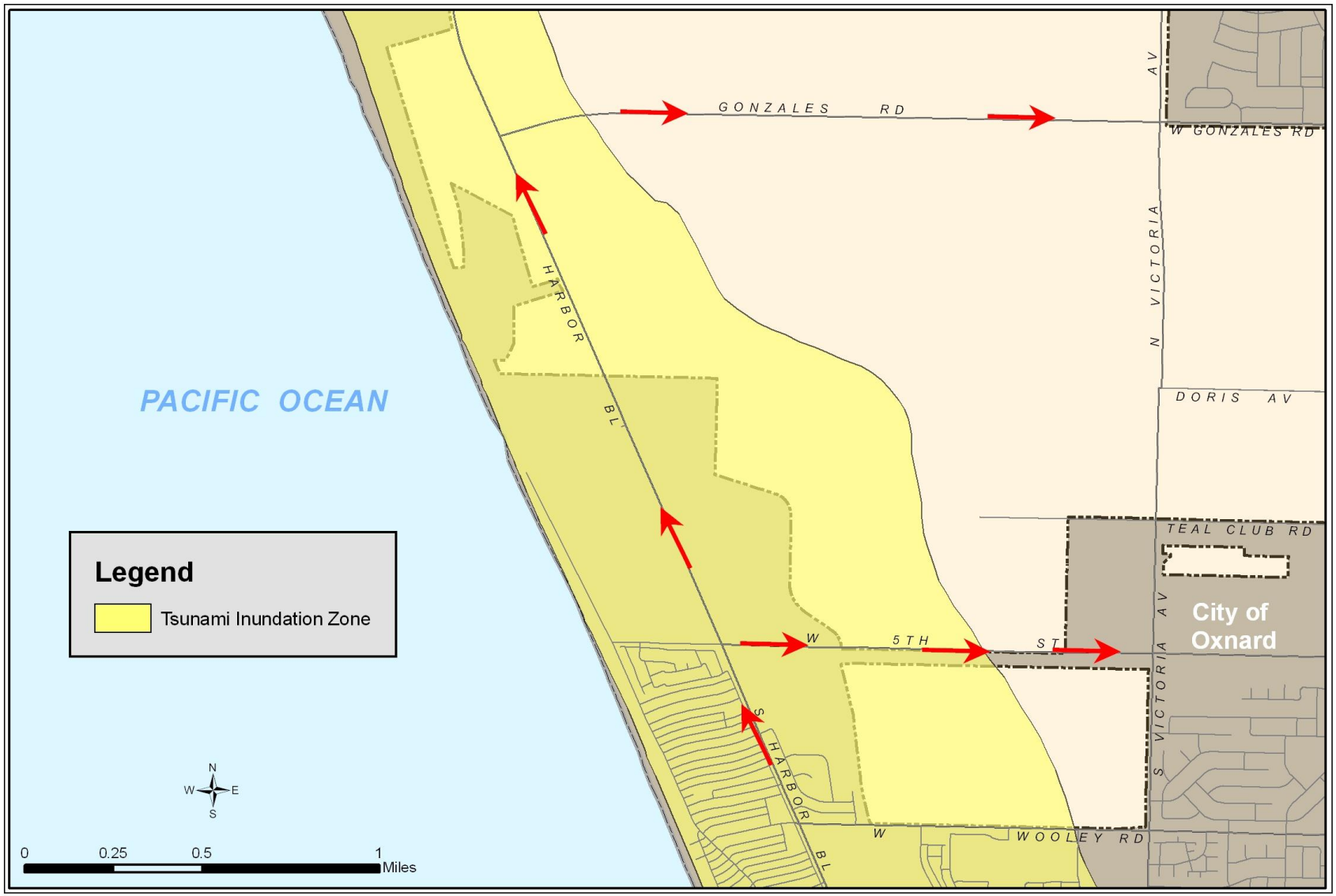


City of San Buenaventura
Sector # 6

City of San Buenaventura
Sector # 6
Harbor Boulevard east of Beachmont



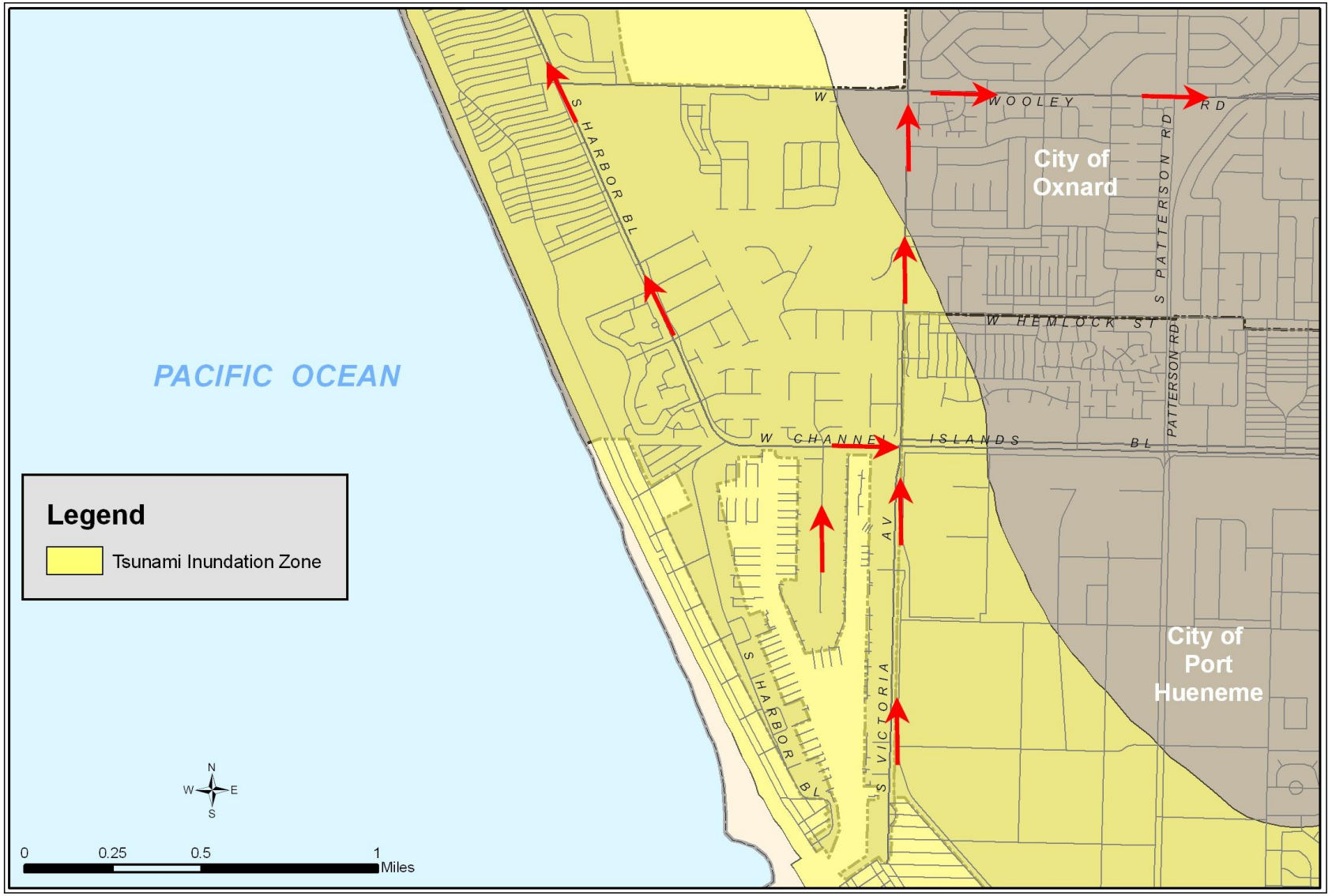
Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	+/- 6000
Evacuation Routes:	Move East on Harbor Blvd, to Olivas Park and turn left. If using Spinnaker Drive, continue straight onto Olivas Park. Move to Victoria Road and turn left. Proceed to Telegraph Road and proceed to Ventura Community College.
Destination:	Ventura Community College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Mobile Home Park, Numerous retail & tourist sites, launch ramp, live-aboards
Units Assigned/Involved:	_____



City of Oxnard & North Hollywood Beach

City of Oxnard
BEAT 21/ AREA 3

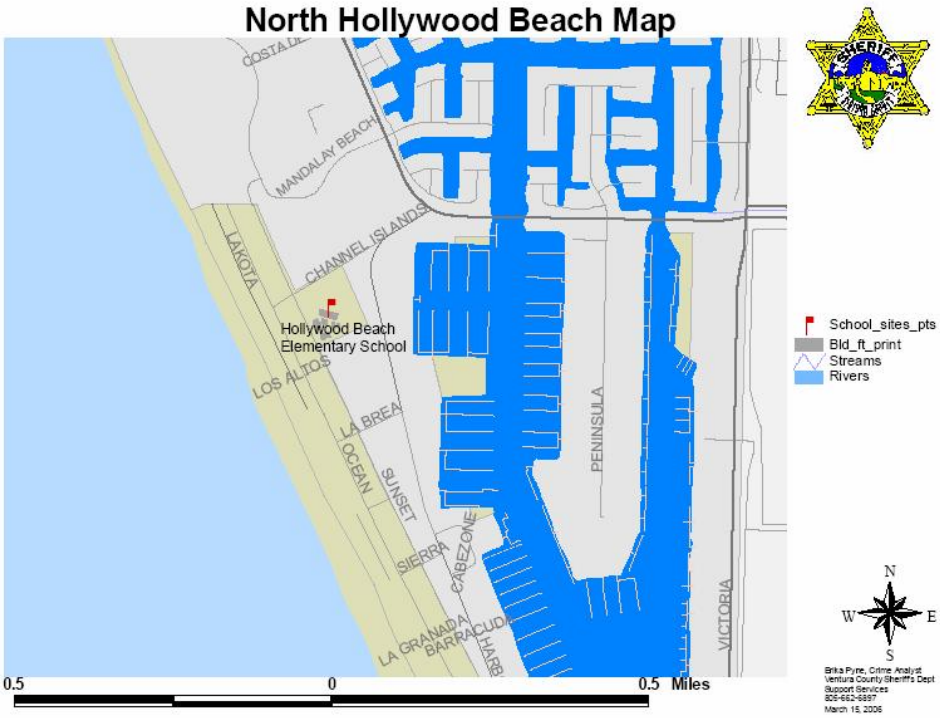
Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	+/- 5400
Evacuation Routes:	Proceed to Harbor Blvd, move North on harbor and turn East on Wooley or Fifth.
Destination:	Southwest Regional Park (across from airport)
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	
Units Assigned/Involved:	_____



City of Oxnard & Hollywood Beach

Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 6600
Evacuation Routes:	Proceed to Harbor Blvd, move north on Harbor to Wooley, turn east on Wooley
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	
Units Assigned/Involved:	_____

North Hollywood Beach Area
(Sheriff)



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 6600
Evacuation Routes:	Proceed to Harbor Blvd, Sunset or Ocean, move North to Channel Islands, East on Channel Islands to Victoria, north to Wooley, east on Wooley.
Destination:	Oxnard College

Command Radio Channel: _____

Tactical Radio Channel: _____

Additional/Amplifying Info:

Units Assigned/Involved: _____

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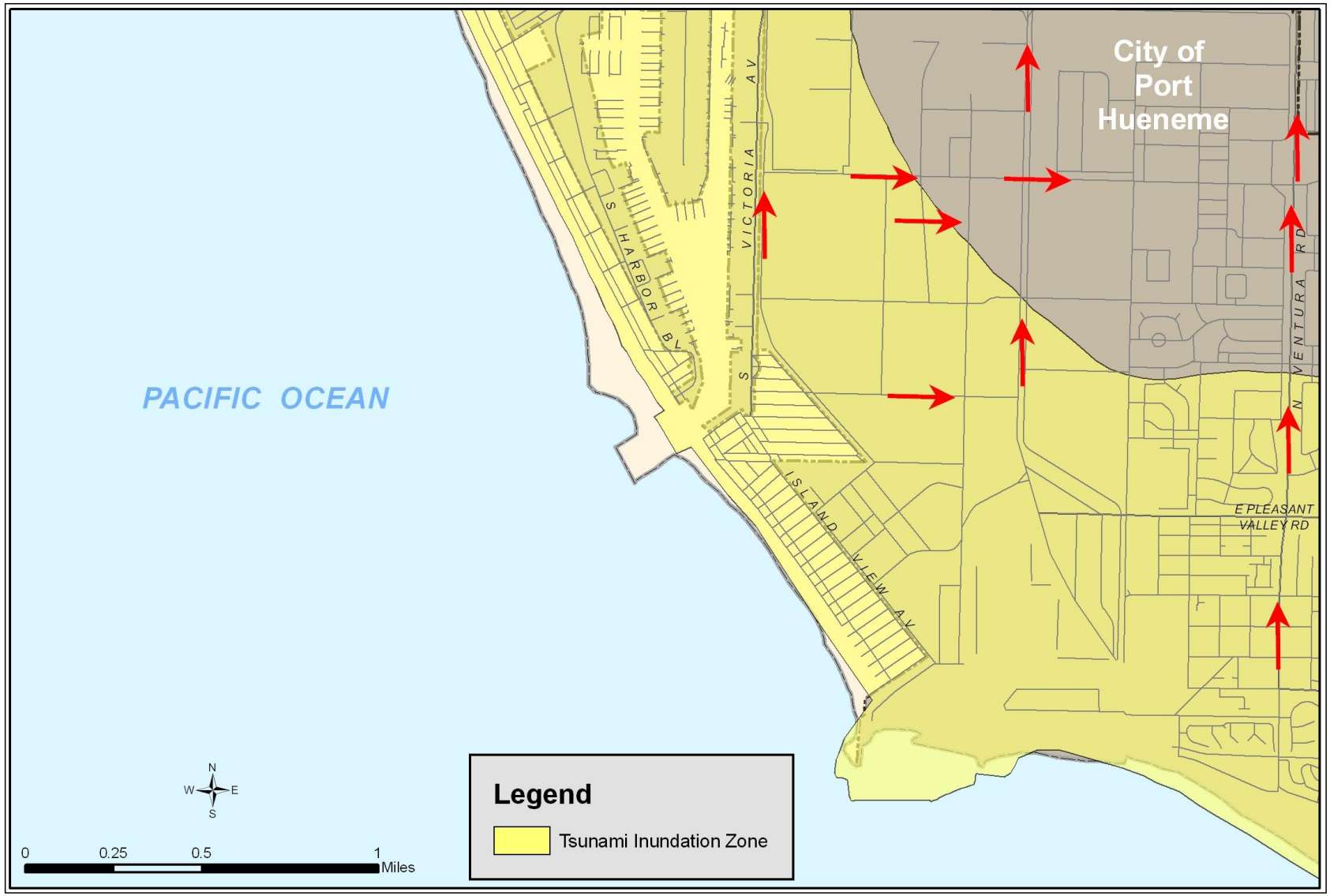

South Hollywood Beach, Silverstrand & City of Port Hueneme

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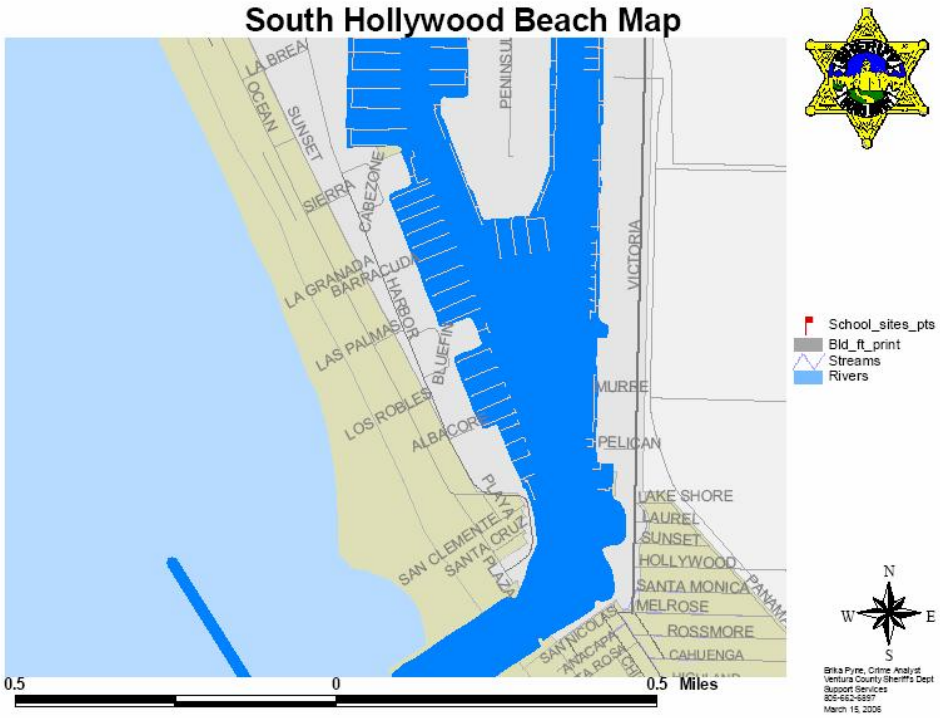
South Hollywood Beach
(Sheriff)



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 6600
Evacuation Routes:	Proceed to Harbor Blvd, Sunset or Ocean, move North to Channel Islands, East on Channel Islands to Victoria, north to Wooley, east on Wooley.
Destination:	Oxnard College

Command Radio Channel: _____

Tactical Radio Channel: _____

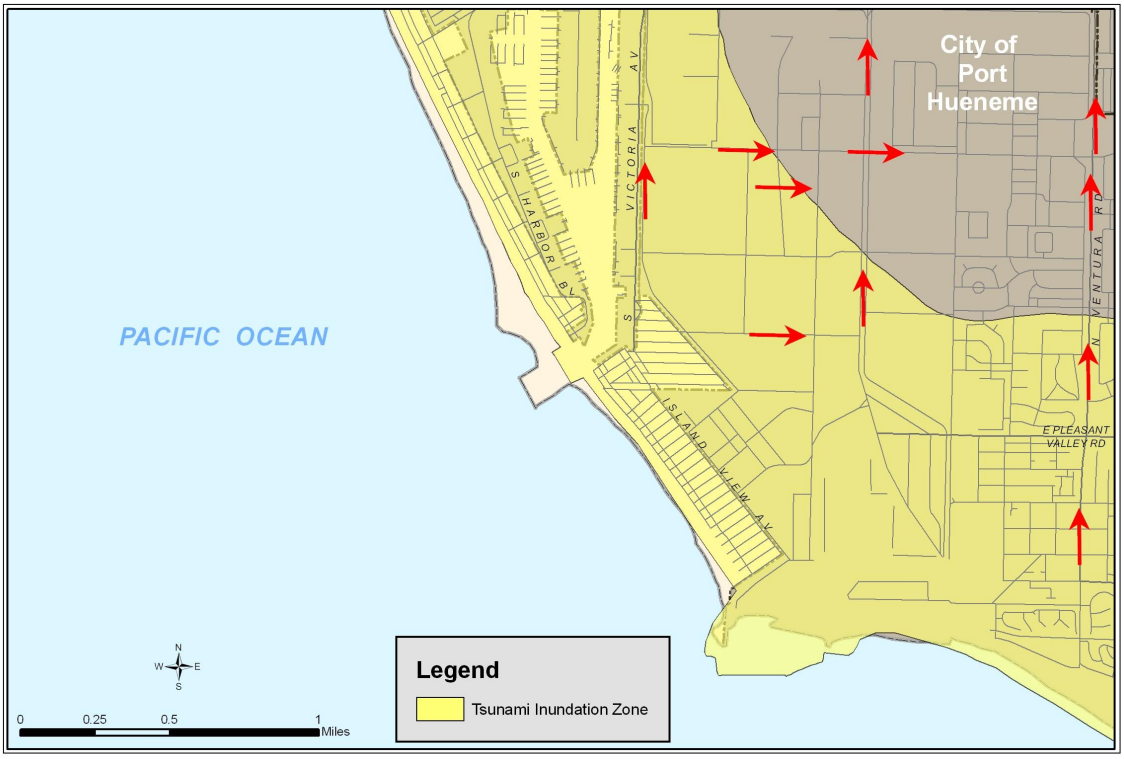
Additional/Amplifying Info:

Units Assigned/Involved: _____

Silverstrand Beach
(Sheriff)

Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 8500
Evacuation Routes:	Proceed to Ocean View or Island View, north on Victoria east on Channel Islands Blvd.
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	
Units Assigned/Involved:	_____

NBVC Port Hueneme Facility
(West of Pacific Road)



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	Varies
Evacuation Routes:	Proceed to Patterson Road, turn north to Channel Islands Blvd., east on Channel Islands
Destination:	Oxnard College

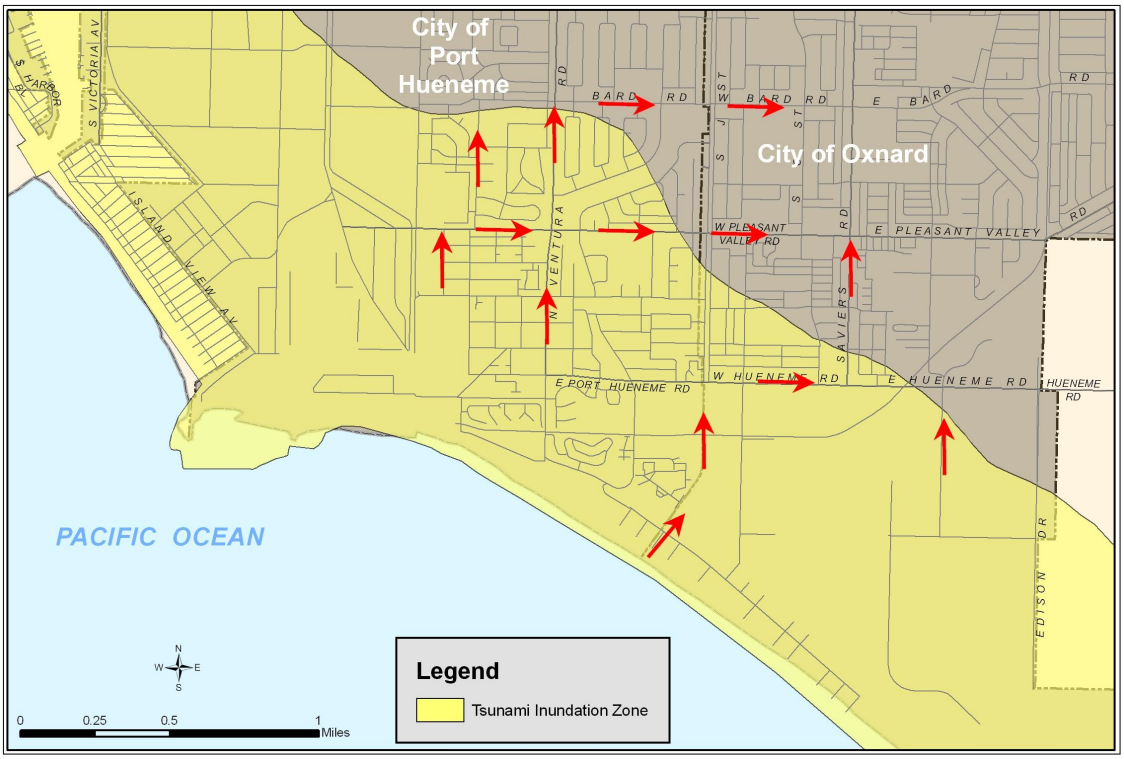
Command Radio Channel: _____

Tactical Radio Channel: _____

Additional/Amplifying Info: Industrial/Military

Units Assigned/Involved: _____

NBVC Port Hueneme Facility
(East of Pacific)



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	Varies
Evacuation Routes:	North of 34th-Proceed to 23rd Ave, exit Sunkist gate, north on Ventura Road, east on Channel Islands Blvd. South of 34th-Proceed to 34th, move east to Bard Gate, north on Ventura Road, east on Channel Islands Blvd.
Destination:	Oxnard College

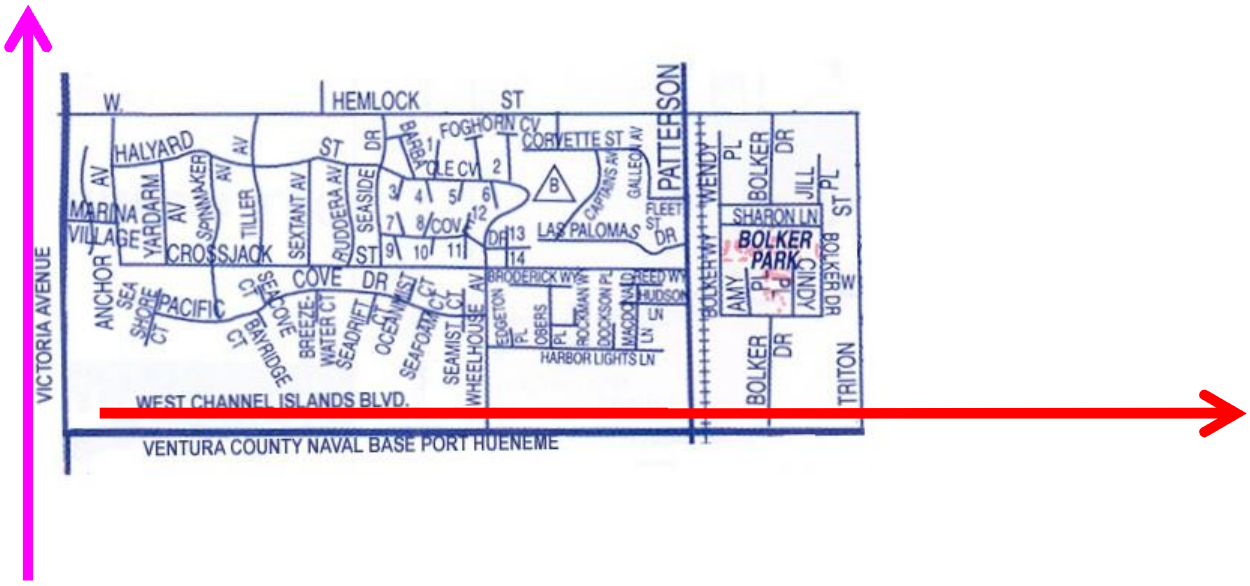
Command Radio Channel: _____

Tactical Radio Channel: _____

Additional/Amplifying Info: Base Housing/Industrial/Military

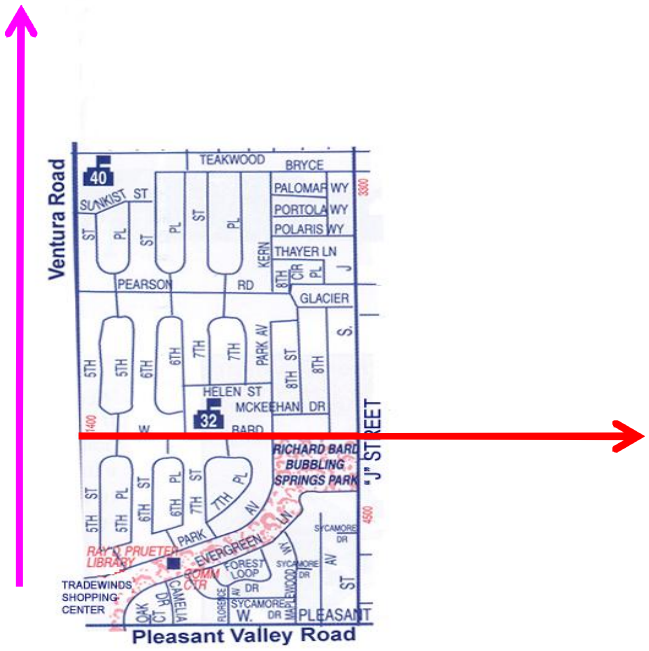
Units Assigned/Involved: _____

City of Port Hueneme
Sector 1
(North End of City)
Red-Primary Route



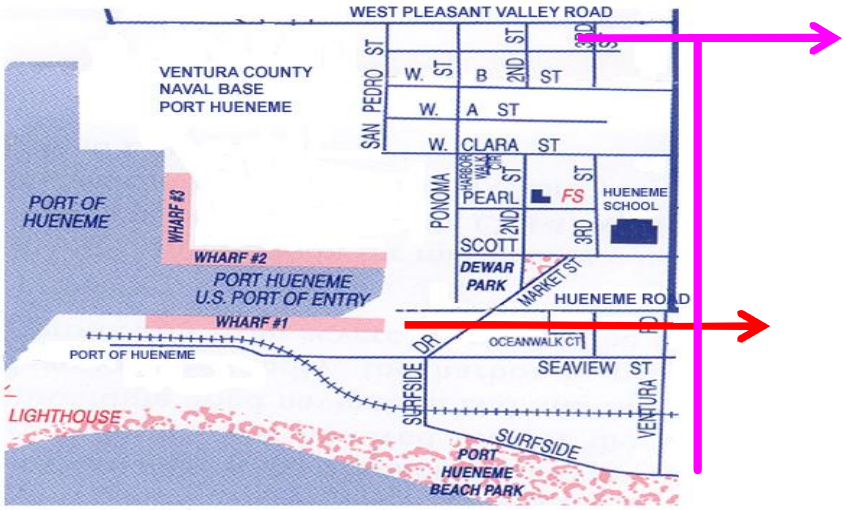
Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	6000-7500
Evacuation Routes:	Primary:Move to Channel Islands Blvd., east on Channel Islands. Secondary:North on Victoria
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	This sector has a large senior citizen retirement community made up of mainly of one and two-story attached town homes. This area's main population is 50+ and many residents in this area may need special assistance for evacuation.
Units Assigned/Involved:	_____

City of Port Hueneme
Sector 2
Mid-City
Red-Primary Route



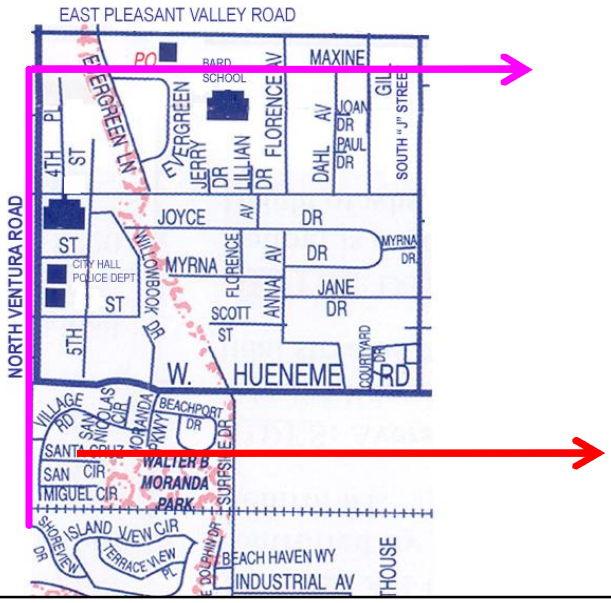
Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	6000-7500
Evacuation Routes:	Primary: Move to Bard Road, proceed east on Bard Road Secondary: North on Ventura Road
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	There are two (2) elementary schools located within this sector Kindergarten to 6th grade. Both are on a traditional school calendar. (Sunkist Elementary, and Parkview Elementary).
Units Assigned/Involved:	_____

City of Port Hueneme
Sector 3
Southwest Area of City
Red-Primary Route

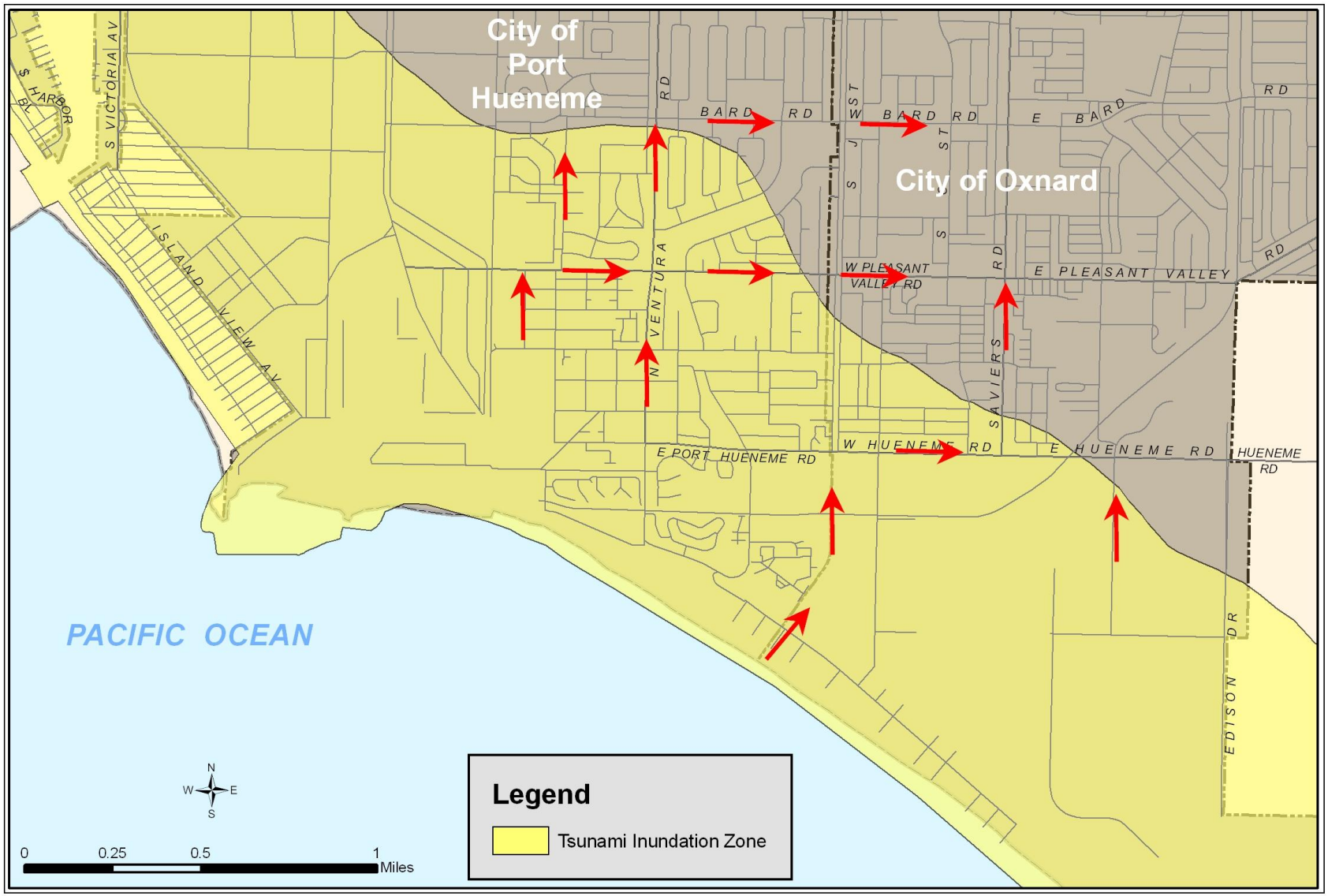


Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	6000-7500
Evacuation Routes:	Primary: Move to Hueneme Road, proceed east on Hueneme Road. Secondary: North to Pleasant Valley, east on Pleasant Valley
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	There are two Senior Housing Complexes (Mar Vista, a five-story high rise building located on Scott street adjacent to the Port, and Casa Pacifica, a three-story building located on Ventura Road, just south of Pleasant Valley Road. There are two motels located in this sector. One on Pleasant Valley Road, the Moon Lite Motel and the other on Hueneme Road, the Country Inn at Port Hueneme. This sector has one public school, (Hueneme Elementary) kindergarten to 6th grade, located across from the Police Department. This sector also has a private pre-school, (Hueneme Private School) located at Third Street and Pearl Street. Port of Hueneme
Units Assigned/Involved:	_____

City of Port Hueneme
Sector # 4
Southeast Area of City
Red-Primary Route



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	6000-7500
Evacuation Routes:	Primary: Move to Hueneme Road, proceed east on Hueneme Road. Secondary: North to Pleasant Valley, east on Pleasant Valley
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	There are two motels located on Hueneme Road. (Surfside Motel and the Seaside Inn). This sector has two elementary schools (Kindergarten to grade six), one located on Ventura Road (Hueneme Christian) and the other on Pleasant Valley Road. (Bard Elementary). The City's Police Department and City Hall located at Ventura Road and Scott Street are in this sector, as well as a medium sized City park just south of Hueneme Road. (Moranda Park). The City's Utility Services and Public Works service areas are also located within this sector located within a block of each other on Surfside Drive, just south of Hueneme Road and on Industrial Avenue, just east of Surfside Drive.
Units Assigned/Involved:	_____

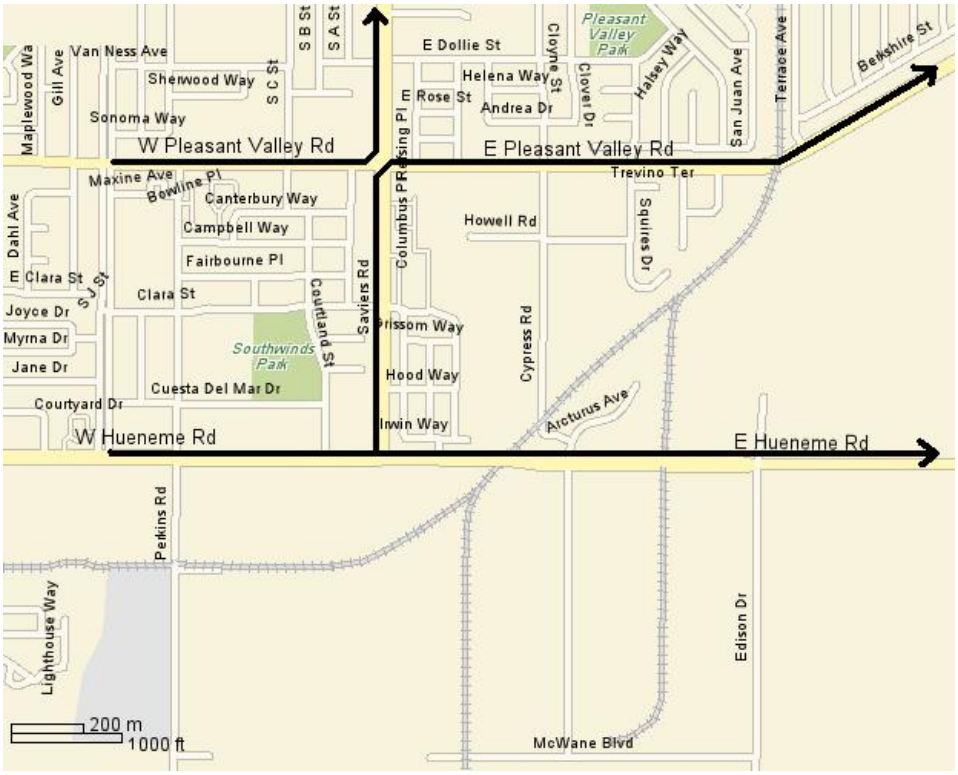


Cities of Oxnard & Port Hueneme

City of Oxnard
Beat 42

Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 7500
Evacuation Routes:	The first evacuation route for this area will be eastbound Pleasant Valley Road to northbound Saviers Road to Channel Islands Boulevard. The second evacuation route for this area will be northbound Saviers Road to eastbound Pleasant Valley Road. The third evacuation route for this area will be eastbound Hueneme Road to northbound Rice Avenue.
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	There is a convalescent home (Shoreline Care Center) located at 5225 South "J" Street. There is an elementary school located at 5400 Perkins Road (Art Haycox elementary school.)
Units Assigned/Involved:	_____

City of Oxnard
Southwinds Area



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	< 7500
Evacuation Routes:	The first evacuation route for this area will be eastbound Pleasant Valley Road to northbound Saviers Road to Channel Islands Boulevard. The second evacuation route for this area will be northbound Saviers Road to eastbound Pleasant Valley Road. The third evacuation route for this area will be eastbound Hueneme Road to northbound Rice Avenue.
Destination:	Oxnard College
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	There is a convalescent home (Shoreline Care Center) located at 5225 South “J” Street. There is an elementary school located at 5400 Perkins Road (Art Haycox elementary school.)
Units Assigned/Involved:	_____

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Naval Base Ventura County –Point Mugu Facilities

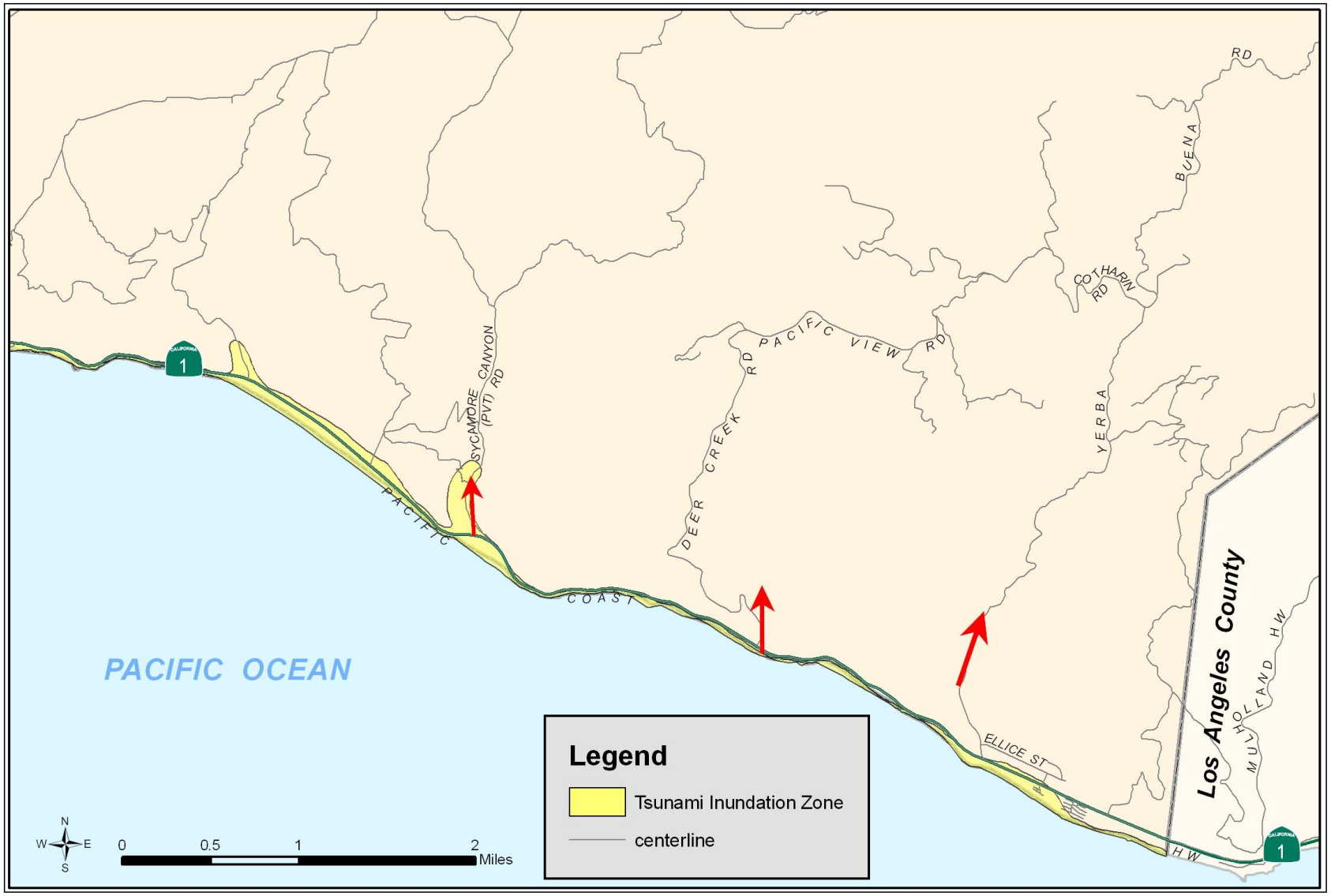
Naval Base Ventura County
Point Mugu Facility

Residential/Administration Areas
(inland of Oxnard Drainage Ditch #2)

Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	Varies, could be in excess of 20,000
Evacuation Routes:	People in the area of Donald Road will exit via Gate 1 or Gate 2 and turn left onto the frontage road. Proceed to Wood Road and travel on Wood Road to Hueneme Road. Turn right and proceed on Hueneme Road to Las Posas Road. Turn left and proceed on Las Posas Road.
Destination:	Note # 1
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Industrial/Military
Units Assigned/Involved:	_____

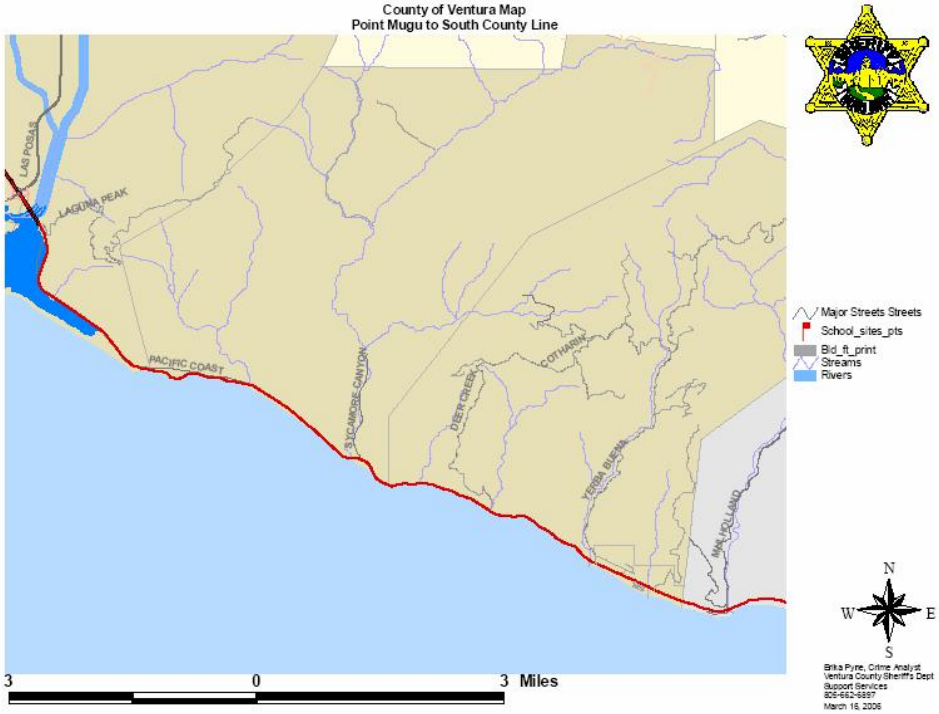
Industrial Areas
(seaward of Oxnard Drainage Ditch #2)

Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	Varies, could be in excess of 20,000
Evacuation Routes:	People in the industrial area (seaward side of Oxnard Drainage Ditch #2) will proceed to the Las Posas Gate, exit and proceed on Las Posas Road to Hueneme Road. Turn right and proceed on Hueneme Road.
Destination:	Note # 1
Command Radio Channel:	_____
Tactical Radio Channel:	_____
Additional/Amplifying Info:	Industrial/Military
Units Assigned/Involved:	_____



Ventura County South Coast Area

Ventura County
South Coast
(Sector 5 – Sheriff)



Type of Warning:	**TSUNAMI**
Reason for Warning:	**POTENTIAL INUNDATION OF AREA**
Notification Method:	**PERSONAL PUBLIC ADDRESS SIREN**
Estimated Population:	Varies, could be in excess of 1,200
Evacuation Routes:	Immediate: Move to high ground Delayed: Pacific Coast highway to Las Posas, Deer Creek, Yerba Buena, Decker Canyon Road(s) or Mulholland Highway, and eastward (uphill)
Destination:	Note # 1

Command Radio Channel: _____

Tactical Radio Channel: _____

Additional/Amplifying Info: light residential, Neptune's Net, numerous campgrounds

Units Assigned/Involved: _____