



CITY OF MORRO BAY HARBOR ADVISORY BOARD A G E N D A

*The City of Morro Bay is dedicated to the preservation and enhancement of the quality of life.
The City shall be committed to this purpose and will provide a level of municipal service and safety
consistent with and responsive to the needs of the public.*

**Regular Meeting - Thursday, November 6, 2014
Veteran's Memorial Building - 6:00 P.M.
209 Surf Street, Morro Bay, CA**

Jeff Eckles, Chair	Waterfront Leaseholders
Bill Luffee, Vice-Chair	Marine Oriented Business
Alan Alward	Morro Bay Commercial Fishermen's Organization
Dana McClish	Recreational Boating
Gene Doughty	South Bay/Los Osos
Lynn Meissen	Member at Large
Ron Reisner	Member at Large
Tom Hafer	Alternate to Alan Alward (MBCFO)
Joe Conchelos	Alternate to Alan Alward (MBCFO)

ESTABLISH QUORUM AND CALL TO ORDER

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CHAIR AND ADVISORY BOARD MEMBER ANNOUNCEMENTS & PRESENTATIONS

PUBLIC COMMENT PERIOD

Members of the audience wishing to address the Board on City business matters other than scheduled items may do so at this time. To increase the effectiveness of the Public Comment Period, the following rules shall be followed:

- When recognized by the Chair, please come forward to the podium and state your name and address for the record. Board meetings are audio and video recorded and this information is voluntary and desired for the preparation of minutes.
- Comments are to be limited to three minutes.
- All remarks shall be addressed to the Board, as a whole, and not to any individual member thereof.
- The Board respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, Board member and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Board to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.
- Your participation in Board meetings is welcome and your courtesy will be appreciated.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Harbor Department's Office Assistant at (805) 772-6254. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

A. CONSENT CALENDAR

- A-1 Approval of Minutes from Harbor Advisory Board meeting held on October 2, 2014
Staff Recommendation: Approve minutes.

B. PUBLIC HEARINGS, REPORTS, AND APPEARANCES

- B-1 Harbor Department Status Report
Staff Recommendation: Receive and file.
- B-2 Lifeguard Season-End Report
Staff Recommendation: Receive and file.

C. UNFINISHED BUSINESS

- C-1 Update from the Marine Services Facility/Boatyard Ad-Hoc Committee on Committee's Recent Activities
Staff Recommendation: Receive and file.
- C-2 Update from the Capital Improvement Planning Ad-Hoc Committee on Committee's Recent Activities
Staff Recommendation: Receive and file.

D. NEW BUSINESS

- D-1 Review of Harbor Department Rules and Regulations Document and Harbor Advisory Board Input and Direction on Sections Warranting Updating and Revision
Staff Recommendation: Review Harbor Department Rules and Regulations document and provide staff input and direction on sections deemed in need of updating and revising.
- D-2 Tsunami Event Protocols and Public Safety Information
Staff Recommendation: Receive and file.

E. DECLARATION OF FUTURE AGENDA ITEMS

F. ADJOURNMENT

This agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the agenda posted at the Morro Bay Harbor Department, 1275 Embarcadero, for any revisions or call the department at 772-6254 for further information.

Materials related to an item on this Agenda are available for public inspection during normal business hours at the Harbor Department and at Mill's/ASAP, 495 Morro Bay Boulevard, or online at www.morro-bay.ca.us. Materials related to an item on this Agenda submitted to the Board after publication of the Agenda packet are available for inspection at the Harbor Department during normal business hours or at the scheduled meeting.

CITY OF MORRO BAY

HARBOR ADVISORY BOARD

SYNOPSIS MINUTES

The regular meeting of the City of Morro Bay Harbor Advisory Board was held Thursday, October 2, 2014 at 6:00 PM in the Veteran's Hall, 209 Surf ST, Morro Bay, California.

ESTABLISH QUORUM AND CALL TO ORDER

Present:	Members:	Gene Doughty Jeff Eckles Bill Luffee Dana McClish Lynn Meissen Ron Reisner
	Absent:	Tom Hafer (MBCFO Rep)
	Staff:	Eric Endersby, Harbor Director Polly Curtis, Office Assistant

MOMENT OF SILENCE

PLEDGE OF ALLEGIANCE

CHAIR AND ADVISORY BOARD MEMBER ANNOUNCEMENTS & PRESENTATIONS

Chair Eckles presented a 15-year employee recognition pin to Polly Curtis, thanking her on behalf of the City of Morro Bay for the years of service.

Mr. McClish said all boat owners are encouraged to fill out the Morro Bay Boatyard-Haul Out Facility Survey to express their desires or needs for a local boatyard. The survey can be taken online at Survey Monkey, and there are copies available in the Harbor Office and as a link on the City's website.

Mr. Doughty left the meeting at 6:30 p.m.

PUBLIC COMMENT

Mr. Michael Roland, who lives on his boat in Morro Bay, said he is still having problems paying his bill with the Harbor Department and obtaining a legal Liveaboard permit. He said he's been living here for 40 years and lives on an old boat that he shares with his wife, two dogs, two cats, and a bird. He presented several Citations he had received from the Harbor Patrol. He said he should not need to obtain a Liveaboard permit and should be left alone.

A. CONSENT CALENDAR
A-1 MINUTES

Ms. Meissen moved the September 4, 2014 Harbor Advisory Board minutes be approved. The Motion was seconded by Mr. Doughty and carried unanimously.

B. PUBLIC HEARINGS

B-1 Harbor Department Status Report

Mr. Endersby briefed the Board on the following topics:

North T-Pier Maintenance and Repair Project

Recent City Council Actions

FERC Opposition to Dynegy Wave Parks

License Agreement for Central Coast Maritime Museum Assn

Bayshore Bluffs Beach Cleanup/Coastal Cleanup Day

Recent Events:

August 15-19 – CalPoly WOW Week

September 6 – Dahlia Daze and MB Founders Day Parade

September 7 & 17 – Shark Sightings

September 7-11 – Never Quit Challenge for Veterans

September 8 – Avocado and Margarita Festival

September 29 – Snowy Plover Fencing Down

September 29 – New City Manager

September 30 – Meet and Greet New City Manager

Upcoming Events:

October 4-5 – Harbor Festival

State Lands Commission

C. UNFINISHED BUSINESS

C-1. Review of Liveboard Ordinance Regarding Liveboard Permit Inspections and Marine Surveyor Requirements

Mr. Endersby reviewed the current Liveboard Ordinance requirements for inspection, and said the Ordinance states the inspections can be performed by a Harbor Patrol Officer or a qualified marine surveyor acceptable to the City. He reviewed the terms of “Operable” and “Seaworthy” as defined in the Harbor Department Rules and Regulations.

Mr. Endersby said staff is seeking Board input regarding the Liveboard inspection and what additional criteria or standards could be applied to them to ensure adequate and consistent application. He also requested further definition of marine surveyors performing Liveboard inspections which are “acceptable to the City” or “qualified.”

Mr. Endersby asked the Board to consider amendments to the Liveboard Ordinance through one of the following three approaches:

1. Identify global or general areas of interest for amendment and request staff to bring back at a future meeting specific amendment language to address those areas.
2. Propose specific amendment language now with the information presented in the staff report or proposed at this meeting.
3. Form an Ad-Hoc Committee to discuss and determine possible amendments.

Discussion by the Board.

Public Comment: Mr. Drew Jacobson read a statement he wrote, referring to definitions in Agenda Item C-1, Appendix A. Ms. Denise Jacobson asked for the permit inspections to be objective, not subjective. Mr. Rory Kramer said he’s been a commercial fisherman for 25 years and the Harbor Department should leave people alone.

Further discussion by the Board. Mr. Reisner reviewed the organizations that certify marine surveyors and their varied requirements and standards for certification. Chair Eckles said the qualifications of a marine surveyor being “acceptable to the City” leaves full discretion to the Harbor Director. Discussion on various types of Marine Sanitation Devices.

Public Comment: Mr. Jacobson discussed the liability issue of the terms “operable and seaworthy” and gave the Board a detailed process of a vessel survey. He said there are many recreational boats on the bay that do not fall under the Liveboard Permit requirements but he believes do discharge sewage into the bay.

Further discussion by the Board. Ms. Meissen said the term “survey” continues to be used in the discussion, but the Liveboard Permit Inspection is not a survey, it is only an inspection, and all the Harbor Patrol Officers are qualified to perform this inspection. Mr. McClish suggested the possibility of changing the language of the Harbor Rules & Regulations to say: “...suitable for operation on the waters of Morro Bay,” rather than on the Pacific Ocean.

Public Comment: Mr. Jacobson told the Board this Agenda Item is nonsense. He said he believes the Harbor Department has refused to address the issue of all boats discharging sewage in the bay and that all boats should be checked for functioning Marine Sanitation Devices. Ms. Jacobson said the Harbor Department should stop focusing on the twenty or so Liveboard boats but should look at all boats in the bay.

Mr. Endersby said under current state laws he would not be allowed to board all the vessels in Morro Bay to inspect Marine Sanitation Devices without reasonable cause, and is only allowed to inspect vessels applying for a Liveboard Permit. He said the State Lands Commission has mandated only 10% of all vessels in Morro Bay be allowed to have Liveboards and those must pass the required inspection to receive a permit. He reminded boat owners who live on their boats that they are living on public property.

Mr. Endersby said he will follow the directions of the Board and have the City Attorney review the wording of the Liveboard Permit and the “Harbor and Ocean Regulations, Chapter 15.40 Vessel Habitation” to minimize liability issues, and to possibly change the term “Pacific Ocean” to “Morro Bay.”

C-2. Update from the Marine Services Facility/Boatyard Ad-Hoc Committee on Committee’s Recent Activities

Mr. Reisner said the Ad-Hoc Committee has nothing new to present since the previous Harbor Advisory Board meeting. Mr. Endersby said the previously mentioned survey is available online and in the Harbor Office, and the Case Studies document is currently in draft form.

C-3. Update from the Capital Improvement Planning Ad-Hoc Committee on Committee’s Recent Activities

Chair Eckles said the Ad-Hoc Committee has nothing new to present since the previous Harbor Advisory Board meeting.

D. NEW BUSINESS

D-1 Selection of Two Harbor Advisory Board Members to Sit on the Selection Panel To Review Request for Proposals Received for Redevelopment of Lease Site 69-70/69W-70W (Morro Bay Aquarium Located at 595 Embarcadero)

Mr. Endersby briefed the Board on the Aquarium lease site, saying the Request for Proposals was issued on October 15, 2013. The deadline has been extended to October 14, 2014 to allow more time for interested parties to submit.

Chair Eckles asked the Board for volunteers to serve on the Selection Panel. Discussion.

Motion: Ms. Meissen moved to nominate Chair Eckles and Mr. Doughty to serve on the Selection Panel for the Request for Proposals on the Morro Bay Aquarium lease site. The Motion was seconded by Mr. Reisner and carried unanimously.

E. DECLARATION OF FUTURE AGENDA ITEMS

November:

**Changes to Harbor Rules and Regulations
Tsunami Warning and Emergency Notification
Marine Service Facility Ad-Hoc Committee Report
Capital Improvements Planning Ad-Hoc Committee Report**

Future:

**State Park Marina Operating Agreement
Sublease Fee Schedule for Commercial Slips
Inspecting Marine Sanitation Devices on All Vessels in Morro Bay Harbor
Morro Bay Fish Quota Share and Trawl Permits
Water Lease Site Improvements Including Dock Configurations
Mooring Field Design and Maintenance
Coast Guard Building Location Plans
Planning for Power Plant Property**

F. ADJOURNMENT

This meeting was adjourned at 8:50 PM.
Submitted by,

Polly Curtis
Harbor Department



AGENDA NO: B-1

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Harbor Department Status Report

RECOMMENDATION

Receive and file.

DISCUSSION

North T-Pier Maintenance & Repair: All major structural work on the pier is complete, with only two items remaining: installation of the light pole on the south leg-end of the pier, and ramping the transition area of the base of the pier where the new decking meets the pavement. Our construction manager is currently wrapping up the financials and other project accounting.

Oil Recycling Yard: Our new used oil, filter and engine coolant recycling yard is in the final stages of equipping, and we expect to get our permit "certificate of occupancy" in the very near future. This project, spearheaded by Harbor Patrolman Scott Mather on the ground and Harbor Business Coordinator Lori Stilts in the office with grant and purchasing management, will bring all of our used oil, filter and pad recycling equipment under one purpose-built roof. This project was funded by Morro Bay National Estuary Program and San Luis Obispo Integrated Waste Management Authority grant funding. See attached photo.

Aquarium RFP: The Morro Bay Aquarium lease site redevelopment request for proposals process closed for submittals on October 16 with no submissions. City staff are developing next steps.

Recent City Council Action: To date all employee groups were approved by Council with 2 year MOU contracts all expiring June 30, 2016.

October 28 – Adopted Resolution 69-14 for the Assignment and Assumption of Lease Site68/68W (Harbor Front Suites, Held) Located at 591 Embarcadero from 591 Embarcadero, LLC to the Viole' Family, LLC.

Prepared By: EE

Dept. Review: EE

October 28 – Adopted Resolution No. 71-14 Authorizing the City of Morro Bay to Enter Into a 2014/2015 Boating Safety and Enforcement Equipment Grant Contract with the State of California Division of Boating and Waterways in the Amount of \$50,000 for Purchase of Two New Engines for Harbor Patrol Vessel 68

Recent Events: October 4-5 The 33rd Annual Harbor Festival took place with beautiful weather on the waterfront. The Harbor Department had their touch tank for the kids and our old Lifeguard tower building that was used as a “photo booth” for people to take their pictures in.

October 12th - two children and one adult were washed off of the inside of the North Jetty by large winter surf, one suffering major injuries. Beach and bay goers are always reminded to never turn their backs on the ocean, and to be aware that previously dry areas can be swept at any time by large waves without warning.

October 19th - Underwater dive clean up at the South T-Pier and Beach St slips with 72 participants including recreational Divers, Tenera Environmental, Cal Poly Marine Sciences, San Luis Obispo County Sheriff Divers & California Department of Fish & Wildlife Divers. Recovered were: 1 Alum Skiff, 1 Lap Top Computer, 10 Tires, 1 Cassette Deck Tape Player, 1 AM/FM Stereo, 4 other electronic devices, 200 glass bottles, 6 plastic bottles, 1 plastic trash bag, 2 pump motors, 1 down rigger weight, 1 ceramic bowl, 1 stainless steel cooking pot, 6 bricks, 2 crab nets, 2 plastic mesh bags, 1 crock pot, misc. fishing leader, plastic 7 rubber tubing, metal tubing 7 metal fittings. Thanks again go to Chuck Rawlinson of Depth Perceptions Diving Services for organizing and spearheading the event.

October 19th – The 32-foot wooden Chris Craft motor vessel “Glowing Star” sunk in the State Park Marina in her slip due to failure of her bilge pumps. She was raised by the owner using a private contractor without major incident. Fortunately, there were no fuel tanks aboard the vessel so the pollution spilled was minimal. The vessel is likely to be demolished under the City’s “SAVE” grant program with Boating and Waterways.

November 2 – The Morro Bay Triathlon will have taken place by the time of the Harbor Advisory Board meeting, but as of this writing has not. Morro Bay Lifeguards, under contract, will be assisting with water safety during the event, with the Harbor Patrol standing by as well.

Upcoming Events: November 1-28, Morro Bay in Bloom presents the 1st Annual Morro Bay Surfboard Art Festival. This month-long event will support Project Surf Camp and Morro Bay in Bloom. Twenty renowned artists and community groups will have their surfboard art creations displayed publicly throughout the City of Morro Bay. Join the fun on November 29th at the Inn at Morro Bay for the Surfboard Art Festival Gala Auction from 2 p.m. to 5 p.m.

Dec 3-8th Lady Washington and Hawaiian Chieftain will be at Marina Square, 699 Embarcadero, for dockside tours and weekend sailing excursions.

Dec 6th The Lighted Boat Parade will take place on the bay, weather permitting.

Training: During the week of October 20 Harbor Patrolmen Dana Stein and Jeremiah Jacobs traveled to Wisconsin to attend factory service technical training put on by Konrad Industries, the makers of the outdrive units on our new Harbor Patrol vessel.

October 29th the Harbor Patrol participated in helicopter lifting operations with the Coast Guard offshore of Morro Bay. See attached photo. That evening a multi-agency mass casualty drill was put on by the Morro Bay Fire and Harbor departments that simulated a large passenger-for-hire vessel grounding, breakup, persons in the water and fire inside the harbor.







AGENDA NO: B-2

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Lifeguard Season-End Report

Verbal report to be given by Kyle Shaffer, Morro Bay's Lifeguard Supervisor, on this past season's activities, statistics and other information.

Prepared By: EE

Dept. Review: EE



AGENDA NO: C-1

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Update from the Marine Services Facility/Boatyard Ad-Hoc Committee on Committee's Recent Activities

RECOMMENDATION

Receive and file.

DISCUSSION

The Marine Services Facility/Boatyard Ad-Hoc Committee will be presenting an oral update on their activities and progress, if any. This is a standing committee report agenda item.

Prepared By: EE

Dept. Review: EE



AGENDA NO: C-2

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Update from the Capital Improvement Planning Ad-Hoc Committee on Committee's Recent Activities

RECOMMENDATION

Receive and file.

DISCUSSION

The Capital Improvement Planning Ad-Hoc Committee will be presenting an oral update on their activities, if any. This is a standing committee report agenda item.

Prepared By: EE

Dept. Review: EE



AGENDA NO: D-1

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Review of Harbor Department Rules and Regulations Document and Harbor Advisory Board Input and Direction on Sections Warranting Updating and Revision

RECOMMENDATION

Review Harbor Department Rules and Regulations document and provide staff input and direction on sections deemed in need of updating and revising.

FISCAL IMPACT

There is no fiscal impact associated with this item.

BACKGROUND

Recently the Harbor Advisory Board has considered revisions to the Liveboard Ordinance. In addition, the Board has received public input and has expressed interest regarding several aspects of the Harbor Department Rules and Regulations as to areas of the Regulations that warrant updating and/or revising.

DISCUSSION

It is staff's intent to review each section of the Harbor Department Rules and Regulations document with the Harbor Advisory Board and identify areas or items that either the Board or staff identify as warranting updating and/or revising. While input and direction on said sections will be taken, including suggested language or content revisions, it would be staff's preference to note the input and bring draft language revisions to a future Board meeting for final discussion and possible recommendation. This process could be taken in one or more future Board meetings depending on the volume and nature of the recommendations.

Once the Board's recommendations on the various Rules and Regulations sections are completed, staff will bring a revised draft document to the City Council for review, input and approval. In addition, currently Harbor Department staff are in the process of reviewing and updating all department legal, rental, leasing and other documentation relating to facility and harbor use. This Rules and Regulations update process will dovetail with staff's updating of the department's various legal and other documentation.

Prepared By: EE

Dept. Review: EE

CONCLUSION

Staff is seeking public and Harbor Advisory Board input on the Harbor Department Rules and Regulations document for possible revision of sections warranting it. Any proposed revisions will be brought to the City Council for consideration at a future date. A copy of the Rules and Regulations is included with this staff report.

EXHIBIT "A"

CITY OF MORRO BAY - HARBOR DEPARTMENT RULES AND REGULATIONS FOR VESSELS USING CITY PIERS, DOCKS AND OFFSHORE MOORINGS

INTRODUCTION

The City of Morro Bay directly operates 2 piers, approximately 50 slips and 70 individual moorings. The City also provides a floating dock and anchorage area for transient vessels. City-managed individual mooring sites are in the A2, A1-1 and A1-2 mooring areas as shown in the attached map. The City leases out the A1-3 and A1-4 mooring areas to the Morro Bay Yacht Club and Morro Bay Marina respectively which manage individual mooring assignments in those areas. Most Embarcadero slips and the State Park Marina slips are privately operated with rules and regulations set by the operator. Following are rules and regulations for City-managed facilities and general operation of the Harbor within City limits. The Harbor Department shall mean the Harbor Director, or any designated employee of the City of Morro Bay Harbor Department.

1. MORRO BAY HARBOR DEPARTMENT - GENERAL REGULATIONS

No person shall anchor, moor or secure a vessel or any object within the City of Morro Bay except in designated areas and locations set by the Morro Bay Harbor Department and the Morro Bay Municipal Code. Any vessel or object moored, anchored or secured in violation of this section may be declared a hazard pursuant to California Harbor and Navigations Code Section 523 and shall be relocated to a safe anchorage or berthing location by the Harbor Patrol. The owner will be charged for all costs associated with such relocation and may be subject to impoundment at the fee shown in the Master Fee Schedule. No vessel may exceed 5 MPH speed limit within the Morro Bay City limits with the exception of governmental agencies in the performance of duties. Discharge of sewage is strictly prohibited. No person may liveaboard a non-transient vessel in excess of 4 days without first obtaining a permit as provided for in Morro Bay Municipal Code, Section 15.40.

To use or occupy City docks, City moorings, City Piers, the A1-5 anchorage area or City floating dock a vessel must be registered with the Harbor Department including submission of a signed RENTAL AGREEMENT or transient berthing agreement card.

2. CITY SLIPS

A: General

City slips shall be assigned to commercial fishing vessels as defined in Morro Bay Municipal Code 15.04.150 and Resolution 23-91 of the City of Morro Bay. Rental agreements for use of City slips are not transferable. If a vessel is sold or ceases to qualify for a slip, the agreement is terminated. No city slip agreement holder may allow the use of any city slip by another vessel without the prior permission of the Harbor office. The City may rent any unoccupied slip on a temporary basis.

A commercial fisherman with a qualified commercial fishing vessel, as defined, occupying a City slip may, at the fisherman's discretion, occupy said slip with a second qualified commercial fishing vessel owned by the fisherman in place of the first vessel provided that said second vessel is of an appropriate size for said slip, and that both vessels remain qualified commercial fishing vessels as defined. This allowance will in no way be used by said fisherman for the purposes of transfer of the slip to a second owner or owners of either vessel in order to bypass the commercial slip waiting list by the

second owner or owners. (Resoluiton 60-13)

Berthing space behind head floats on City slips will be designated as "head float berth" in the City's Master Fee Schedule and may be assigned to qualified commercial fishing vessels which will be charged at the monthly commercial slip rate. Vessels other than skiffs or qualified commercial fishing vessels desiring to use the "head float berth" will be charged as set forth in the City Master Fee Schedule. This "head float berth rate" may be adjusted annually by the City Council. Head Float Berth spaces will be assigned on a first come, first serve basis with prior approval of the Harbor Department.

B: Waiting List Procedures And Assignment Of Vacant Slips

The City has established a Commercial Slip Waiting List with a refundable fee as set forth in the City Master Fee Schedule and a Recreational Slip Waiting List with a refundable fee as set forth in the City Master Fee Schedule. When a slip vacancy occurs, the slip will be assigned to the next eligible vessel on the commercial slip waiting list. It is the responsibility of all waiting listees to keep the Harbor Office informed of current address and contact numbers. If no response is received after two attempts to contact waiting listee at the address and/or phone number on record with the Harbor Office, then the waiting listee will be passed over until such time as they recontact the Harbor Department.

A vessel and the vessel's owner must meet the definition for commercial fishing vessels to be placed on the commercial slip waiting list and must qualify for the year in which they are offered a permanent slip. A vessel owner may substitute a different vessel and maintain the same position on the list up to one time in any three-year period. Anyone on the commercial slip waiting list for more than 5 years will have to re-qualify as a commercial vessel to remain on the list. Failure to re-qualify the vessel will result in removal from the list and a refund of the deposit.

The recreational slip waiting list would be used in the event the City develops new slips for recreational boaters.

C: Temporary Cancellation Of City Slips And Slip Subleasing

Any City slip agreement holder may, by giving City notice at the Harbor Office of a pending absence and vacation of the slip in excess of 30 days, have their slip fees reduced to 25% of the regular monthly fees listed in the Master Fee Schedule. If the slip holder returns to the slip in a period less than the 30 days and another vessel is occupying the slip under a sublease, the slip holder will have to dock at the T-Piers as space is available. Vessels on the Commercial Slip Waiting List will have priority for subleases. The City will maintain a slip sublease waiting list and will make the vacated slip available to the next available qualified vessel on the slip sublease waiting list if there is no vessel on the Commercial Slip Waiting List which desires a sublease. If a vessel or person on the sublease waiting list declines a slip sublease assignment or if the City is unable to contact the person after two attempts; then that person's name shall be removed from the waiting list. The City may assign any vessel to a vacated slip on a daily basis at the daily transient fee but no subleases will be allowed for a period less than one month. No vessel will be allowed to use any vacated slip either on a transient daily fee or monthly sublease basis without paying in advance. As long as there are vessels on the sublease waiting list, there will be a 3-month maximum for any one vessel to remain in a sublease slip. If there are no suitable vessels on the sublease waiting list or commercial waiting list, a vessel may remain in a sublease slip in excess of 3 months.

If a vessel on temporary cancellation does not occupy the assigned slip for a period of at least 3 months in any 24-month period then the City may terminate the berthing agreement and assign the slip to the next qualified vessel on the commercial slip waiting list.

3. OFFSHORE MOORINGS

A: Moorings - General

Moorings are allowed only in designated locations within the outlined mooring zones or as approved by the Harbor Director and allowed by the Morro Bay Municipal Code. Some mooring locations have tackle and gear owned and installed by the City; most mooring locations have tackle and gear owned and installed by the private party. Each mooring is for one vessel and its associated tender. Floating docks or arrangements other than mooring tackle and gear as outlined and approved by the Harbor Department are prohibited.

Moorings sites A2-0-21A and A1-2-7A were assigned when previous unpermitted floating docks were removed off these moorings. The Harbor Department at its sole discretion shall set maximum vessel size limits for these moorings. Mooring sites A2-0-21A and A1-2-7A are owned by Jim Entwisle and Associated Pacific Constructors respectively and may not be sold, transferred or assigned to new parties. Should Jim Entwisle or Associated Pacific Constructors no longer desire to use mooring sites A2-0-21A or A1-2-7A then these moorings shall be removed.

Assigned mooring agreement holders must at all times keep the Harbor Department notified of the vessel which is currently using the mooring site.

If an offshore mooring agreement is terminated for non-payment of rent or failure to inspect mooring gear, the City may take possession of the location and any personal property as outlined in Chapter 15 of the Morro Bay Municipal Code. In such case the Harbor Department may either take the mooring location out of service or install City owned mooring tackle and gear on the location.

B: Moorings - Tackle And Gear Privately Owned

Moorings locations where a private party owns the mooring tackle and gear shall be held under a monthly rental agreement. Said agreement may be assigned to another party, subject to approval of the City of Morro Bay, by making written request to the Harbor Department. The City reserves the right of approval of any assignment and may not approve such assignment if the mooring agreement holder or assignee is in violation of these rules and regulations or has a past due account with the City or if the proposed use of the mooring will violate these rules and regulations or the Morro Bay Municipal Code or safe boating practices as determined by the Harbor Director. The rental agreement shall have a month-to-month term and fees shall be set forth in the Master Fee Schedule under Offshore Moorings.

C: Moorings - Tackle And Gear City Owned

The City will rent City owned moorings on a daily or monthly agreement at fees set forth in the Master Fee Schedule under City Owned Moorings. City owned mooring agreements are not assignable or transferable or to be subleased.

The City may set up a waiting list for City moorings with no fee or deposit required. It is the responsibility of the person on the waiting list to provide the City with a current

mailing address and phone number at all times. If a phone number is disconnected and/or the mail comes back as undeliverable, the person shall be removed from the waiting list. If a person is offered a mooring and refuses it, they shall be removed from the waiting list.

D: Mooring Tackle And Gear Maintenance

The offshore mooring holder shall maintain the tackle and gear to the specifications set by the Harbor Department including biennial inspections meeting the requirements set by the Chief Harbor Patrol Officer. The City will maintain and inspect City owned moorings. Moorings leased to the Morro Bay Yacht Club and Morro Bay Marina will be maintained and inspected by those lessees to meet the specifications set by the Harbor Department.

4. T-PIERS, FLOATING DOCK OR ANCHORAGE AREA

The T-Piers, floating dock or anchorage area shall be available to registered transient vessels on a first come first serve daily basis at fees established in the Master Fee Schedule, except that no vessel may use the anchorage area or floating dock for more than 30 days in any six month period. To maintain safe and efficient Harbor operations, the Harbor Department may relocate vessels or designate specific sites for certain vessels at these facilities at any time.

5. HARBOR DEPARTMENT RESPONSIBILITY TO PROTECT SAFE AND EFFICIENT OPERATION OF CITY-MANAGED FACILITIES

When a vessel enters a mooring or docking facility or anchorage area in the waters of the City of Morro Bay, it immediately comes under the jurisdiction of the City and may be moored or docked or anchored at the direction of the Harbor Department. The Harbor Department may refuse use of City-managed facilities to any vessel or vessel operator who represents, in the opinion of the Harbor Department, a potential to pollute or that potentially threatens the safety and security of City facilities.

When a vessel or vessel operator, who has been denied use of City facilities, continues to use those facilities without permission, that vessel or vessel operator shall be subject to impoundment under Morro Bay Municipal Code 15.56.010 and/or fines for violation of Section 525 of the Harbor and Navigations Code.

Any vessel using City-managed facilities shall operate under its own power and be seaworthy and maintained in good and safe condition as determined by the Harbor Department. Any vessel that requires Harbor Patrol emergency assistance to pump out, take under tow or otherwise care for the vessel more than once in any 12-month period will be subject to termination of its use of City facilities and/or its berthing agreement.

All vessels at City-managed facilities including piers, moorings, docks and wharves must be operable and seaworthy.

Operable means capable of maneuvering under a vessel's own power to the Harbor entrance or to an inspection site designated by the Harbor Director and back to its berthing location.

Seaworthy shall mean the vessel's hull, keel decking, cabin, and mast are structurally sound and generally free from structural rusting, delamination, or dry rot.

If a vessel at any City-managed facility is determined to potentially be not seaworthy or inoperable, at the sole determination of the Harbor Department, then the Harbor Department shall provide the owner of the vessel a 30-day written notice. The notice will either require the owner to prove the vessel is operable as described above, or it may require the owner to prove the vessel is seaworthy by obtaining the opinion of a qualified independent marine surveyor as to the seaworthiness of the vessel at the owner's expense.

If the vessel owner fails to successfully respond to the notice within the 30-day period, the vessel owner will be granted an additional 120 days to make repairs for seaworthiness or to prove the vessel is operable as defined above.

If after this period of time the vessel cannot successfully complete the required test, the mooring or slip agreement shall be terminated or the vessel will be denied further use of City-managed facilities and the vessel may be subject to citation and impoundment as outlined herein or in Morro Bay Municipal Code, Section 15.56.

6. FEES

Fees for use of City-managed facilities shall be set in the City's Master Fee Schedule. All fees are due and must be paid in advance. The Harbor Department may allow billings for qualified and registered vessels with current account status at the discretion of the Harbor Department. Transient fees must be paid in advance provided that the Harbor Department may allow 48 hours after arrival for any vessel to make payment or acceptable arrangements for payment. Transient Vessels not complying with this section within 48 hours of arrival shall be subject to impoundment as specified in Chapter 15, Section 15.56 of the Morro Bay Municipal Code.

The City will refund upon request any prepaid unused transient fees in excess of \$20. Unused prepaid transient fees of less than \$20 may be held as a credit to payee's account. City slips and moorings will be billed on a monthly basis in advance, will be delinquent and subject to a late payment penalty if not paid by the 10th day of the month, whether the tenant receives a bill or not. After a City slip or offshore mooring assignment is made and until the mooring or slip agreement is cancelled or assigned with prior approval of the Harbor Department, the agreement holder shall be responsible for payment of all fees whether the agreement holder occupies the slip or mooring or not. All fees will be adjusted annually as set forth in the Master Fee Schedule. Slip fees shall include electricity services but T-Pier fees shall not and the harbor patrol will limit electric service on the piers to those vessels, which pay the daily use fees. The established electric use fee will be for one vessel only and must be paid prior to use.

The Harbor Department may terminate any vessel's use of City-managed facilities and/or their berthing rental agreement for violation of these requirements or of any other section hereof.

7. DAMAGE TO CITY PROPERTY

Any vessel that causes damage to City property will be responsible for repaying the cost of repair to such damage as determined by the Harbor Department and submitted in a written statement itemizing costs.

8. EMERGENCY MEASURES, CITY HELD HARMLESS

In the event of severe storm or tidal wave, the vessel owner, operator and/or agreement holder will provide preparation and damage prevention protection for their property. The vessel owner or their agent is solely responsible to take all emergency measures possible, and the City does not assume any responsibility for said protection and or damages to the vessel from storm or tidal wave action. The City assumes no responsibility for the safety of any vessel using City-

managed facilities, and will not be liable for fires, theft, loss or damage to said vessel, its equipment, or any property in or on said vessel.

Tenant expressly and by their use of City-managed facilities agrees to hold City and its officers and employees harmless from any claim tenant or any of tenant's crew, guests or agents have against City for damage to the vessel or other property or for personal injury arising from tenant's use of City property or facilities.

9. STORAGE AND SECURING OF VESSELS

Tenders and skiffs will be stored on board larger vessels when possible and are not allowed at City slips and docks except as designated by the Harbor Department personnel. The water space between the shore and City docks shall be used primarily for the storage of tenders, skiffs or dinghies used to serve vessels occupying moorings in a non-commercial mooring zone. Each City mooring holder may berth one tender or skiff (as defined by the Harbor Department) in this manner at no charge. Other users may store tenders skiffs or dinghies on City docks at designated locations with the prior approval of the Harbor Department at a fee of \$1.00 per day. No dock boxes, steps or any other installations may be made to City slips, moorings or other facilities without prior permission from the City. No rafting or storage of more than one vessel on any slip, mooring or anchorage is allowed without the permission of the Harbor Department. Temporary storage of crab or fish receivers may be allowed with the prior written permission of the City. It is the responsibility of each vessel owner or operator to safely secure that vessel to its berthing. Vessels shall be secured in their berths, moorings or anchorage in a manner acceptable to the City or the Harbor Department personnel may adequately secure the vessel and assess a service fee.

10. FISH UNLOADING OR SALES

Fish may be unloaded off City piers and slips only by the owner or operator of the commercial fishing vessel which caught the fish. Operations including commercial truck loading by fish processors or fish buyers are prohibited from City piers and docks, including the boat launch ramp. Commercial unloading of any cargo or materials (including kelp) requiring special heavy vehicles (such as crane, boom or stake bed trucks) is prohibited without the prior permission of the Harbor Department. Permission by the Harbor Department may be contingent on provision of an insurance certificate and payment of a fee.

Commercial fishermen may sell their catch only from their vessels at city slips and docks provided they are in conformance with these rules and regulations, State and Federal law, providing that such sales shall not negatively impact the safe or efficient operation of the harbor, at the discretion of the Harbor Department. Signage shall be minimal and fish sold from vessels must be fish that was caught by the vessel owner.

11. VIOLATIONS OF THE MORRO BAY MUNICIPAL CODE OR OF THE RULES AND REGULATIONS

Violations of Chapter 15 of the Morro Bay Municipal Code, the Harbor and Navigations Code or these Rules and Regulations are punishable by fines as follows:

1. Violation of MBMC 15.12.010, prohibiting operation of a vessel in excesses of 5 MPH, or in a manner which causes damaging wake within Morro Bay Harbor. \$100 first offense, \$200 second offense and each offense thereafter.

2. Violation of MBMC 15.24.010, prohibiting discharge of waste or refuse from vessels and prohibiting allowing vessels materials waste or refuse to remain on shorelines within City limits. \$200 first offense, \$500 second offense and each offense thereafter.
3. Violation of MBMC, 15.32.010, establishing rules and regulations for City wharves, piers and docks by resolution of the City Council. Violation of Harbor Rules and Regulations: first offense \$100 second offense and each offense thereafter \$200.
4. Violation of MBMC 15.40.030, requiring a permit for occupying or owning a liveaboard vessel in Morro Bay Harbor. First offense \$100, second offense and each offense thereafter \$200.
5. Violation of Harbor and Navigations Code Section 525, prohibiting abandoning a vessel without the facility owner's permission: \$500 first offense, \$1500 second offense and each offense thereafter.

For any violation of the Morro Bay Municipal Code or these Rules and Regulations for which a citation is not issued, or for which a vessel is not impounded, the City may provide written notice to tenant to correct such violation. Failure to comply with such written notice may subject the tenant or violator to suspension of future use of City-managed facilities and or termination or cancellation of a mooring or berthing agreement. For example: use of sub standard electrical cords or equipment after one warning may result, at a minimum, in suspension from use of City-managed facilities for 30 days.

12. STORAGE AND ELECTRICAL SERVICE

No storage of supplies, materials, accessories, fishing gear or debris will be allowed on piers or slips. No charcoal fires or open fires of any kind will be allowed on any City-managed facility. Electrical power cords must meet the standards of NFPA and the National Electric Code as determined by the Harbor Department. The Harbor Department may make exceptions during temporary supervised projects. No doubling off a unit is allowed.

13. OPERATIONS FROM CITY FACILITIES

No sport fishing, tour boat, charter boat or rental business operation shall be conducted from any City slip, pier, street end dock, mooring, anchorage or other City facility or beach except as specifically allowed under a lease or license agreement. Occasional charters for environmental research or commercial fishing research related purposes by qualified commercial fishing vessels in an assigned City slip may be allowed only by prior approval of the Harbor Department and at the Harbor Department's sole discretion.

14. SOUTH T-PIER HOIST

A. No fish, shellfish or seafood products are to be unloaded with the hoist except in the following cases:

1. All other commercial fish unloading facilities in the Morro Bay area are closed, overloaded, or unable to off-load the boat of the requesting party.
2. That the unloading by one of the commercial unloaders, in the Morro Bay area, would be untimely and cause extreme hardship or loss to the requesting party.

B. A key deposit of \$20 or a valid driver's license may be required.

C. A fee set by the Master Fee Schedule shall be by the hour for any part of an hour with a one-hour minimum.

D. No overweight use of the hoist is allowed and the Harbor Department may refuse use of the hoist to any party for any reason to insure proper safe and efficient use of Harbor facilities.

15. TIDELANDS PARK SIDE TIE DOCK, STREET END DOCKS AND BOAT LAUNCH RAMP

The Launch Ramp boarding floats are for temporary tie-up while launching and retrieving a vessel only. The Tidelands Park side tie dock shall be a 3 hour maximum tie up in any 24 hour period facility and may not be used for tie up from 10:00 p.m. through 4:00 a.m.. Vessels which exceed the three hour tie up limit in any 24 hour period, or are tied up to the Tidelands Park side tie dock between the hours of 10:00 p.m. through 4:00 a.m., shall be in violation of these Rules and Regulations and subject to citation and fines as outlined in Section 11 hereof. Tenders and skiffs assigned the inside portion of the Tidelands Park side tie dock under Section 9 hereof shall be exempt from the time limits above.

In an emergency or when all other available facilities are occupied, the City may, at the sole discretion of the Harbor Department, waive the 3-hour time limit on the Tidelands Park side tie dock. In that case, the Harbor Department shall issue a special permit at fees established in the City Master Fee Schedule for a period not to exceed 7 continuous days and said permit shall be displayed in open view on the permitted vessel.

No vehicle shall park or use any parking space in the boat Launch Ramp in excess of 72 hours. The Harbor Patrol shall monitor and enforce rules and regulation for the boat Launch Ramp parking lot to ensure that it is available for boaters. No storage or haul out is allowed in the Launch Ramp parking lot. Repairs and mechanical work are not allowed in the Launch Ramp parking lot except those minor immediately necessary jobs which will not result in any discharge or disposal of contaminants, as approved by the Harbor Patrol. Double stalls at the boat Launch Ramp are for trailers and towing vehicles only. Single vehicles without trailers attached using the double stalls shall be in violation of these Rules and Regulations. Double stalls shall be painted yellow. Parking time limits and regulations within the parking lot shall be appropriately signed and designated.

Use of floating docks at the end of Morro Bay Blvd., Harbor St. and Anchor St. and the Launch Ramp shall be limited to transient tie-ups by recreational boats. No overnight tie-ups will be permitted. Maximum duration of tie-ups at these docks shall be for a period not to exceed 3 hours per day. Shore fishing and angling shall not be permitted from the viewing platforms or the floating dock at the ends of Harbor St., Morro Bay Blvd., Marina St. and Anchor St.

The launch ramp docks are for temporary tie-up while launching and retrieving a vessel only. No vehicle shall park or use any parking space in the boat launch ramp in excess of 72 hours. The Harbor Patrol shall monitor and enforce rules and regulations in the boat launch ramp parking lot to ensure it is available for boaters. No storage or haul out is allowed.

16. PRIOR CITY RESOLUTIONS

A. Incorporation of Prior Resolutions:

City of Morro Bay Resolutions #112-89, 23-91 and 60-13 are incorporated into these rules and regulations by reference.

B. Rescinding of Prior City Resolutions:

Adoption of these rules and regulations shall serve to rescind City of Morro Bay Resolutions # 115-67, #30-74, #1-75, #66-78, #85-80, #86-80, #09-81, #27-82, #72-82, #123-82 #124-82, #19-83, #58-83, #59-83, #60-83, #95-83, #122-83, #8-84, #125-84, #90-85, #61-86, #85-87, #11-89, #76-89, #104-92, #83-97, #115-98.



AGENDA NO: D-2

MEETING DATE: November 6, 2014

Staff Report

TO: Harbor Advisory Board

DATE: October 30, 2014

FROM: Eric Endersby, Harbor Director

SUBJECT: Tsunami Event Protocols and Public Safety Information

RECOMMENDATION

Receive and file.

BACKGROUND

Having had several tsunamis and/or tsunami warnings over the past decade in Morro Bay, the Harbor Advisory Board recently declared a Future Agenda item to hear what the City's tsunami warning protocols were for vessels and vessel owners on Morro Bay waters.

DISCUSSION

There currently exists no set protocol for the Harbor Department or City to contact and notify vessels and/or vessel owners on Morro Bay waters in the event of a tsunami event. As every emergency incident is different, action plans are generally designed and executed in response to and in accordance with the nature of the incident and potential threats involved. Thus, there is no "one size fits all" approach. There are, however, certain protocols in place in the event of a tsunami event threat in Morro Bay.

There are four levels of tsunami danger levels:

<u>Warning</u>	Inundation wave possible – Full evacuation suggested
<u>Advisory</u>	Strong currents likely – Stay away from the shore
<u>Watch</u>	Danger level not yet known – Stay alert for more information
<u>Information Statement</u>	Minor waves at most – No action suggested

Attached to this staff report is a Tsunami Danger Levels Guide with complete information, in addition to a copy of Cal EMA's "How to Survive a Tsunami" brochure.

In the event of an Advisory or Warning the City of Morro Bay's Emergency Operations Center (EOC) would be activated. Depending on the nature and gravity of a Watch, the EOC could be activated in the event of a Watch as well. Once the EOC is activated, the City's safety (Police, Fire and Harbor) and governance personnel would gather, assess the threat, create appropriate action plans and set to execute those plans with the various City departments and other assisting

Prepared By: EE

Dept. Review: EE

agencies and organizations. In the event of a true tsunami threat, those plans would primarily consist of safety and evacuation notices and action plans of all areas identified as being in the inundation zone or other threat areas for the immediate life safety of our citizens and visitors. Of secondary importance would be the safety of key and critical infrastructure, equipment and facilities.

Obviously, of primary concern is our boaters and other water users – commercial and recreational fishermen, liveaboards, general recreational boaters, kayakers/canoists, stand-up paddlers and surfers – in the water at the time leading up to and during an actual tsunami event. How to warn and evacuate those users would depend largely on how much time there was until the tsunami arrived and available personnel and equipment to execute it. The method used would be simple face-to-face contacts by patrol boat and by land.

If time allowed and it was safe to do so, other boat owners could be notified in order that they be able to take their vessels out to sea beyond the tsunami threat.

CONCLUSION

This information is being presented an informational item with no requested or recommended action.

Tsunami Danger Levels Guide

There are four tsunami danger levels. From MOST to LEAST severe, the danger levels are:

- **Warning** – Inundation wave possible – Full evacuation suggested
- **Advisory** – Strong currents likely – Stay away from the shore
- **Watch** – Danger level not yet known – Stay alert for more information
- **Information Statement** – Minor waves at most – No action suggested

Tsunami Warning – A tsunami warning is issued when a potential tsunami with significant widespread inundation is imminent or expected. Warnings alert the public that widespread, dangerous coastal flooding accompanied by powerful currents is possible and may continue for several hours after arrival of the initial wave. Warnings also alert emergency management officials to take action for the entire tsunami hazard zone. Appropriate actions to be taken by local officials may include the evacuation of low-lying coastal areas, and the repositioning of ships to deep waters when there is time to safely do so. Warnings may be updated, adjusted geographically, downgraded, or canceled. To provide the earliest possible alert, initial warnings are normally based only on seismic information.

Tsunami Advisory – A tsunami advisory is issued due to the threat of a potential tsunami which may produce strong currents or waves dangerous to those in or near the water. Coastal regions historically prone to damage due to strong currents induced by tsunamis are at the greatest risk. The threat may continue for several hours after the arrival of the initial wave, but significant widespread inundation is not expected for areas under an advisory. Appropriate actions to be taken by local officials may include closing beaches, evacuating harbors and marinas, and the repositioning of ships to deep waters when there is time to safely do so. Advisories are normally updated to continue the advisory, expand/contract affected areas, upgrade to a warning, or cancel the advisory.

Tsunami Watch – A tsunami watch is issued to alert emergency management officials and the public of an event which may later impact the watch area. The watch area may be upgraded to a warning or advisory - or canceled - based on updated information and analysis. Therefore, emergency management officials and the public should prepare to take action. Watches are normally issued based on seismic information without confirmation that a destructive tsunami is underway.

Tsunami Information Statement – A tsunami information statement is issued to inform emergency management officials and the public that an earthquake has occurred, or that a tsunami warning, watch or advisory has been issued for another section of the ocean. In most cases, information statements are issued to indicate there is no threat of a destructive tsunami and to prevent unnecessary evacuations as the earthquake may have been felt in coastal areas. An information statement may, in appropriate situations, caution about the possibility of destructive local tsunamis. Information statements may be re-issued with additional information, though normally these messages are not updated. However, a watch, advisory or warning may be issued for the area, if necessary, after analysis and/or updated information becomes available.

IF YOU FEEL A STRONG EARTHQUAKE WHILE NEAR THE COAST:

1. PROTECT yourself during the earthquake



- If indoors, DROP under a sturdy table or object, COVER your head and neck and HOLD ON.
- If outdoors, move to a clear area if you can safely do so - away from trees, beach cliffs, signs and other hazards - and drop* to the ground.

* If you have mobility impairments that prevent you from getting up on your own, do not drop to the ground but do cover your head and neck and hold on.

2. MOVE to High Ground

- As soon as it is safe to move, go to higher ground. DO NOT WAIT for an official tsunami warning.
- Avoid downed power lines and weakened overpasses.
- If you are outside of a tsunami hazard zone, stay where you are.



3. STAY There

- Remain on high ground. Waves from a tsunami may arrive for eight hours or longer.
- Return to the coast only when officials have announced that it is safe to do so.



THINGS YOU SHOULD KNOW ABOUT TSUNAMIS

- A tsunami is a series of waves or surges most commonly caused by an earthquake beneath the sea floor.
- An unusual lowering of ocean water, exposing the sea floor, is a warning of a tsunami or other large wave. This "draw back" means the water will surge back strongly.
- Beaches, lagoons, bays, estuaries, tidal flats and river mouths are the most dangerous places to be. It is rare for a tsunami to penetrate more than a mile inland.
- Tsunami waves are unlike normal coastal waves. Tsunamis are more like a river in flood or a sloping mountain of water and filled with debris.
- Tsunamis cannot be surfed. They have no face for a surfboard to dig into and are usually filled with debris.
- Large tsunamis may reach heights of twenty to fifty feet along the coast and even higher in a few locales. The first tsunami surge is not the highest and the largest surge may occur hours after the first wave. It is not possible to predict how many surges or how much time will elapse between waves for a particular tsunami.
- The entire California Coast is vulnerable to tsunamis. The Crescent City Harbor on California's North Coast suffered significant tsunami damage as recently as 2006. A dozen people were killed in California following the 1964 Alaska earthquake.

ADDITIONAL RESOURCES

About tsunamis: <http://wcatwc.arh.noaa.gov/>

Identifying natural hazards in your neighborhood
www.myhazards.calema.ca.gov

Preparing for earthquakes and tsunamis
www.earthquakecountry.org

The California Geological Survey www.constrv.ca.gov/lgs

Or contact your county Office of Emergency Services.

Prepared by: **California Emergency Management Agency Earthquake and Tsunami Program**
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Concept and partial text from the Redwood Coast Tsunami Work Group.

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How to Survive a Tsunami

- **Protect yourself during the earthquake**
- **Move to high ground or inland as soon as you can**
- **Stay there**

Prepared by:



Cal E.M.A.
CALIFORNIA EMERGENCY
MANAGEMENT AGENCY

TWO WAYS TO FIND OUT IF A TSUNAMI MAY BE COMING

1. NATURAL WARNING

Strong ground shaking, a loud ocean roar, or the water receding unusually far exposing the sea floor are all nature's warnings that a tsunami may be coming. If you observe any of these warning signs, immediately go to higher ground or inland. A tsunami may arrive within minutes and may last for eight hours or longer. Stay away from coastal areas until officials announce that it is safe to return.



2. OFFICIAL WARNING

You may hear that a Tsunami Warning has been issued. Tsunami Warnings might come via radio, television, telephone, text message, door-to-door contact by emergency responders, NOAA weather radios, or in some cases by outdoor sirens. Move away from the beach and seek more information on local radio or television stations. Follow the directions of emergency personnel who may request you to evacuate beaches and low-lying coastal areas. Use your phone only for life-threatening emergencies.



Natural and official warnings are equally important.
Respond to whichever comes first.

WHEN SHOULD I EVACUATE?

Evacuation should not be automatic. Before evacuating you should determine if you are in a hazard zone and consider possible hazards that may exist along your evacuation route.

- Know if you live, work, or play in a tsunami hazard zone.
- **COUNT** how long the earthquake lasts. If you feel more than 20 seconds of very strong ground shaking and are in a tsunami hazard zone, evacuate as soon as it is safe to do so.
- If you are on the beach or in a harbor and feel an earthquake—no matter how small—immediately move inland or to high ground.
- **GO ON FOOT.** Roads and bridges may be damaged.
- Avoid downed power lines.
- If evacuation is impossible, go to the third or higher floor of a sturdy building or climb a tree. This should only be used as a last resort.
- If you hear that a tsunami warning has been issued but did not feel an earthquake, get more information. Listen to the radio, television or other information sources and follow the instructions of emergency personnel.
- If you are outside of a tsunami hazard zone, take no action. You are safer staying where you are.



WHERE SHOULD I GO?

All California coastal counties have tsunami hazard guidance maps and are in the process of posting tsunami hazard zone signs. These signs and maps will show you what areas are safe and what areas may be at risk. Use them to guide you to a safe area.

PREPARE NOW

How you prepare will affect how you recover. And being prepared for earthquakes and tsunamis prepares you for all kinds of disasters.

- Know if you live, work, or play in a tsunami hazard zone.
- Learn what the recommended tsunami evacuation routes are in your city, county and region. Identify safety zone(s) near you, and decide on your primary and secondary evacuation routes.
- If you live or work in a tsunami hazard zone get a NOAA weather radio with the public alert feature for your home and office. It will alert you even if turned off.
- Assemble a small evacuation kit with essential documents, medications, a flashlight, a portable NOAA weather radio and batteries, water, snacks and warm clothes. Include a silver "space blanket" in your kit—it can be used to signal your location to air search teams. Keep your evacuation kit by the door so you can "grab & go".
- Walk your route – consider what you would do at night or in stormy weather.
- Make a reunification plan with your loved ones. Decide when and where you will meet if you are separated, and what out of state relative or friend you will call if it is not possible to meet at your pre-designated reunification spot.
- Discuss plans with family, coworkers and neighbors.
- Make plans for how to address any functional needs or disabilities you might have. If you need help evacuating, prearrange assistance from neighbors including transport of mobility devices and durable medical equipment. If you are mobility impaired, account for the extra time that you may need.
- Decide on the best strategy for protecting your pets.
- Prepare to be on your own for several days or longer.
- Consider joining your Community Emergency Response Team (www.csc.ca.gov/cc/cert.aspx)