

Chapter 14

Natural hazard disclosures by the listing agent

This chapter discusses the use of the Natural Hazard Disclosure (NHD) Statement by sellers and listing agents to fulfill their obligations to inform prospective buyers.

A unified disclosure for all sales

Natural hazards come with the **location** of a parcel of real estate, not with the man-made aspects of the property. Locations where a property might be subject to natural hazards include:

- special flood hazard areas, a federal designation;
- potential flooding and inundation areas;
- very high fire hazard severity zones;
- wildland fire areas;
- earthquake fault zones; and
- seismic hazard zones. [Calif. Civil Code §1103(c)]

The existence of a hazard due to the geographic location of a property affects its value and desirability to prospective buyers. Hazards, by their nature, limit a buyer's ability to develop the property, obtain insurance or receive disaster relief.

Whether a seller markets his property himself or lists the property with a broker, the seller must disclose to prospective buyers any natural hazards **known to the seller**, as well as those **contained in public records**.

To unify and streamline the disclosure by a seller (and his listing agent) about those natural hazards which affect a property, the California legislature created a statutory form entitled the *Natural Hazard Disclosure (NHD) Statement*.

The NHD form is used by a seller and his listing agent for their preparation (or acknowledgement of their review of a report prepared by an NHD expert) and disclosure of natural hazard information. The information is both known to the seller and listing agent (and the NHD expert) and available to them as shown on maps in the public records of the local planning department. [CC §1103.2; see Form 314 accompanying this chapter]

Actual use of the NHD Statement by sellers and their agents is **mandated** on the sale of **one-to-four unit residential properties**, called *targeted properties*. Some sellers of targeted properties are excluded from mandatory use of the form, but never their listing agents. Thus, the form, filled out and signed by the seller (unless excluded) and the listing agent, must be included in listing packages handed to prospective buyers on every one-to-four unit residential property.

Editor's note — Any attempt by a seller or listing agent to use an "as-is" provision or otherwise provide for the buyer to agree to waive his right to receive the seller's NHD statement is void as against public policy. [CC §1103(d)]

Regarding excluded sellers and sales of property other than one-to-four unit residential property, use of the statutory NHD Statement by sellers and listing agents is an **optional** method for making their disclosure of natural hazard information to buyers. However, delivery of the information by use of one form or another is not optional. A natural hazard disclosure is mandated on all types of property. [CC §1103.1(b)]

All sellers, and any listing or selling agent involved, have an initial common law duty owed to prospective buyers to disclose conditions on or about a property which are **known to them** and might adversely affect the buyer's willingness to buy or influence the price and terms of payment he is willing to offer.

NATURAL HAZARD DISCLOSURE STATEMENT

DATE: _____, 20_____, at _____, California.

Note: The seller's listing broker (and the seller) of one-to-four residential units shall prepare a NHD form and deliver it to prospective buyers prior to making a purchase agreement offer and indicate compliance in the purchase agreement or a counteroffer. If not so disclosed, the buyer has the right to cancel the purchase agreement within three days of delivery of the disclosure in person. [Calif. Civil Code §1103.3]

This disclosure statement is prepared for the following:

- Seller's listing agreement
- Purchase agreement
- Counteroffer
- _____

Dated: _____, 20_____, at _____, California

Entered into by: _____

Regarding property referred to as: _____

Natural Hazard Disclosure Statement

Seller and Seller's Agent(s) or a third-party consultant disclose the following information with the knowledge that even though this is not a warranty, prospective buyers may rely on this information in deciding whether and on what terms to purchase the subject property.

Seller hereby authorizes any agent(s) representing any principal(s) in this action to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the property.

THE FOLLOWING ARE REPRESENTATIONS MADE BY SELLER AND SELLER'S AGENT(S) BASED ON THEIR KNOWLEDGE AND MAPS DRAWN BY THE STATE AND FEDERAL GOVERNMENT. THIS INFORMATION IS A DISCLOSURE AND IS NOT INTENDED TO BE PART OF ANY CONTRACT BETWEEN BUYER AND SELLER.

THIS REAL PROPERTY LIES WITHIN THE FOLLOWING HAZARDOUS AREA(S): (Check appropriate response)

1. A SPECIAL FLOOD HAZARD AREA (Any type Zone "A" or "V") designated by the Federal Emergency Management Agency.
Yes ___ No ___ Do not know/information not available from local jurisdiction ___
2. AN AREA OF POTENTIAL FLOODING shown on an inundation map pursuant to Section 8589.5 of the Government Code.
Yes ___ No ___ Do not know/information not available from local jurisdiction ___
3. A VERY HIGH FIRE HAZARD SEVERITY ZONE pursuant to Section 51178 or 51179 of the Government Code. The owner of this property is subject to the maintenance requirements of Section 51182 of the Government Code.
Yes ___ No ___
4. A WILDLAND AREA THAT MAY CONTAIN SUBSTANTIAL FOREST FIRE RISKS AND HAZARDS pursuant to Section 4125 of the Public Resources Code. The owner of this property is subject to the maintenance requirements of Section 4291 of the Public Resources Code. Additionally, it is not the state's responsibility to provide fire protection services to any building or structure located within the wildlands unless the Department of Forestry and Fire Protection has entered into a cooperative agreement with the local agency for those purposes pursuant to Section 4142 of the Public Resources Code.
Yes ___ No ___
5. AN EARTHQUAKE FAULT ZONE pursuant to Section 2622 of the Public Resources Code.
Yes ___ No ___
6. A SEISMIC HAZARD ZONE pursuant to Section 2696 of the Public Resources Code.
Yes (Landslide Zone) ___ Yes (Liquefaction Zone) ___
No ___ Map not yet released by state ___

THESE HAZARDS MAY LIMIT YOUR ABILITY TO DEVELOP THE REAL PROPERTY, TO OBTAIN INSURANCE OR TO RECEIVE ASSISTANCE AFTER A DISASTER.

THE MAPS ON WHICH THESE DISCLOSURES ARE BASED ESTIMATE WHERE NATURAL HAZARDS EXIST. THEY ARE NOT DEFINITIVE INDICATORS OF WHETHER OR NOT A PROPERTY WILL BE AFFECTED BY A NATURAL DISASTER. BUYER(S) AND SELLER(S) MAY WISH TO OBTAIN PROFESSIONAL ADVICE REGARDING THOSE HAZARDS AND OTHER HAZARDS THAT MAY AFFECT THE PROPERTY.

Check only one of the following:

- Seller and their agent represent that the information herein is true and correct to the best of their knowledge as of the date signed by Seller and Seller's Agent.
- Seller and their agent acknowledge that they have exercised good faith in the selection of a third-party report provider as required in Civil Code Section 1103.7, and that the representations made in this Natural Hazard Disclosure Statement are based upon information provided by the independent third-party disclosure provider as a substituted disclosure pursuant to Civil Code Section 1103.4. Neither seller nor their agent has independently verified the information contained in this statement and report or is personally aware of any errors or inaccuracies in the information contained on the statement. This statement was prepared by:

Third-Party Disclosure Provider: _____ Date: _____

Date: _____, 20 _____

Date: _____, 20 _____

Seller: _____

Seller's Broker: _____

Seller: _____

Agent: _____

Buyer represents that he has read and understands this document. Pursuant to Civil Code Section 1103.8, the representations made in this Natural Hazard Disclosure Statement do not constitute all of Seller's or Seller's Agent's disclosure obligations in this transaction.

Buyer: _____ Date: _____

Buyer: _____ Date: _____

Natural hazards, or the lack thereof, irrefutably affect a property's value and desirability to a prospective buyer. If a hazard is known to any agent (as well as the seller) or noted in public records, it must be disclosed to the prospective buyer before he agrees to purchase the property. If not disclosed, the buyer can cancel the transaction, called *termination*. And if the transaction has closed escrow, the buyer may *rescind* the sale and be **refunded** his investment, called *restoration*. [**Karoutas v. HomeFed Bank** (1991) 232 CA3d 767]

Therefore, the need to prepare the seller's NHD statement in advance of locating a prospective buyer **must be anticipated** by the seller and listing agent.

If the need is not anticipated, the NHD will not be prepared, signed and available for delivery to prospective buyers before an offer is accepted or a counteroffer is made, all requisites to delivery of the NHD *as soon as practicable*. [Calif. Attorney General Opinion 01-406 (August 24, 2001); CC §1103.3(a)(2)]

Investigating the existence of a hazard

Natural hazard information must be obtained from the public records. If not obtained, the seller and listing agent cannot make their required disclosures.

To obtain the natural hazard information for delivery to prospective buyers, the seller and his listing agent are required to exercise *ordinary care* in gathering the information. They may gather the information themselves or the seller may employ an NHD expert to gather the information. When an expert is employed, he prepares the NHD form for the seller and the listing agent to review, add any comments, sign and deliver to prospective buyers. [CC §1103.4(a)]

Thus, the seller and listing agent may obtain natural hazard information:

- directly from the public records themselves; or
- by employing a natural hazard expert, such as a geologist.

For the seller and the listing agent to rely on an NHD report prepared by others, the listing agent need only:

- **request** a NHD report from a reliable expert in natural hazards, such as an engineer or a geologist who has studied the public records (as some natural hazards clearly do not pertain to engineering or geology);
- **review** the NHD form prepared by the expert and **enter** any actual knowledge the seller or listing agent may possess, whether contrary or supplemental to the expert's report, on the form prepared by the expert or in an addendum attached to the form; and
- **sign** the NHD Statement provided by his NHD expert and **deliver** it with the NHD report to prospective buyers or buyer's agents. [CC §1103.2(f)(2)]

When prepared by an NHD expert, the NHD report must also note whether the listed property is located within 2 miles of an existing or proposed airport, an environmental hazard zone called an *airport influence area* or *airport referral area*. The buyer's occupancy of property within the influence of an airport facility may be affected by noise and restrictions, now and later, imposed on the buyer's use as set by the airport's land-use commission. [CC §1103.4(c)]

Also, the expert's report must note whether the property is located within the jurisdiction of the San Francisco Bay conservation and development commission.

Broker uses experts to limit liability

The Natural Hazard Disclosure scheme, while not making the practice mandatory, encourages brokers and their agents to use natural hazard experts rather than gather the information from the local planning department themselves. The use of an expert, who himself relies on the con-

tents of the public record to prepare his report, relieves the listing agent of any liability for errors not known to the agent to exist.

Neither the seller nor any agent, be he the seller's or the buyer's agent, is liable for the erroneous preparation of a NHD Statement they have delivered to the buyer, if:

- the NHD report and form is prepared by an **expert in natural hazards**, consistent with his professional licensing and expertise; and
- the seller and listing agent used **ordinary care** in selecting the expert and in their review of the expert's report for any errors, inaccuracies and omissions of which they have **actual knowledge**. [CC §§1103.4(a), 1103.4(b)]

Neither the seller nor the listing agent need enter into an *indemnification agreement* with the natural hazard expert to avoid liability for errors. By statute, the expert who prepared the NHD is liable for his errors, not the seller or listing agent who relied on the report of a non-negligently selected expert to fulfill their duty to check the public records.

However, if brokers are sued based on the inaccuracy of the expert's report, an indemnity agreement entered into by the expert, given in exchange for the request to prepare a natural hazard report, will cover the cost of any litigation which might unnecessarily haul the broker into court.

The listing agent's dilatory delivery of an expert's NHD to the buyer or the buyer's agent, after the offer has been accepted, will not protect the broker from liability for the buyer's lost property value due to the nondisclosure before acceptance. If the agent **knew or should have known** of a natural hazard based on the readily available planning department's parcel list, he is exposed to liability. Liability exposure includes costs the buyer may incur to correct or remedy the undisclosed hazardous condition and that portion of the agreed price which exceeds the property's fair market value based on the undisclosed hazard. [CC §1103.13]

Further, the agents, seller and expert are not exposed to liability from **third parties** to the sale transaction who might receive their erroneous NHD Statement and rely on it to analyze the risk they undertake by their involvement. Such third parties include insurance companies, lenders, governmental agencies and others who may become affiliated with the transaction. [CC §1103.2(g)]

Documenting compliance with NHD law

Compliance by the seller and listing agent to deliver the NHD Statement to the buyer is required to be documented by a provision in the purchase agreement. [CC §1103.3(b); see **first tuesday** Form 150 §11.4]

However, should the listing agent fail to disclose a natural hazard and then provide in the purchase agreement for the compliance to be an untimely "in escrow" disclosure, his seller is statutorily penalized. The buyer, on an in-escrow disclosure, is allowed either a three-day right of cancellation should he be handed the NHD Statement, or a five-day right of cancellation should the NHD Statement be mailed to the buyer. [CC §1103.3(c)]

Further, delivery of the NHD after acceptance of an offer, when it could have been previously prepared by the seller or listing agent and timely delivered, imposes liability on the seller and listing agent, but not the buyer's agent. Liability is based on any money losses (including a reduced property value) inflicted on the buyer by the disclosure should the buyer choose not to exercise his right to cancel and instead proceed with the agreement and close escrow. [CC§1103.13; **June v. Smiser** (1994) 23 CA4th 312]

Delivery of the NHD to the buyer

It is the **buyer's agent** who has the duty to hand the buyer the NHD Statement the buyer's agent receives from the seller or the listing agent, called *delivery*. [CC §1103.12(a)]

The **buyer's agent**, on receiving the NHD form from the listing agent, owes the buyer a special agency duty to care for and protect his buyer's best interest by reviewing the NHD Statement himself for any disclosure which might affect the property's value or its desirability for his buyer. The buyer's agent is then required to deliver the NHD to the buyer and make any recommendations or explanations the buyer's agent may have regarding its content. [CC §§1103.2, 1103.12]

If the buyer does not have a broker, the seller's agent is responsible for delivering the NHD Statement to the prospective buyer.

However, the listing agent is not required to understand the effect hazards have on the property or the buyer. Also, the listing agent has absolutely no duty to voluntarily explain to a prospective buyer the effect a known natural hazard (which is itself disclosed) might have on the property or the buyer. The task of explaining the consequence of living with a natural hazard is the duty of a buyer's agent.

Delivery may be in person or by mail. Also, delivery is considered to have been made if the NHD is received by the spouse of the buyer. [CC §1103.10]

Sellers occasionally act as "For Sale By Owners" (FSBOs) and directly negotiate a sale of their property with buyers in transactions which exclude brokers and agents. Here, the seller is responsible for preparing or obtaining an NHD statement and delivering the NHD Statement to the prospective buyer.

No warranty, just awareness

A seller's NHD Statement is **not a warranty or guarantee** by the seller or listing agent of the natural hazards affecting the property. The NHD Statement is a report of the seller's and listing agent's (or the NHD expert's) knowledge (actual and constructive) of any natural hazards affecting the property.

However, the NHD Statement is relied on by prospective buyers. The NHD is designed to assist them in their decisions as to whether they should buy the property, and if they do decide to buy, at what price and on what terms. These conditions all need to exist before entering into a purchase agreement to avoid misleading the buyer, called *deceit*. [AG Opin. 01-406]

Disclosures concerning the value and desirability of a property, such as an NHD Statement, are **price-sensitive information**. Thus, the statement must be delivered to the prospective buyer before he enters into a purchase agreement in order to accomplish their intended result. If not timely disclosed, the seller and listing agent subject themselves to claims for price adjustments (offsets) which may be made by the buyer either before or after closing. Alternatively, the buyer may cancel the purchase agreement and have his deposit refunded.

Good brokerage practice would deliver the NHD to the prospective buyer on or before he makes an offer or accepts a counteroffer, while he is still the prospective buyer. Disclosures should not be made later when the prospect has become the buyer under a purchase agreement and entitled to ownership of the property at the price and on the terms agreed. Properly, the purchase agreement offer would then include a copy of the seller's NHD Statement as an addendum (along with all other disclosures), noting the transaction is in compliance with NHD law.

As for an **escrow officer** handling a sale in which the listing agent fails to provide the buyer's agent or the buyer with the NHD prior to opening escrow, the escrow officer has no duty to the seller or buyer to prepare, order out or deliver the NHD to the buyer. The obligation remains that of the seller and listing agent. However, escrow may accept instruction to perform any of these activities, in which case escrow becomes obligated to follow the instructions agreed to by the escrow officer. [CC §1103.11]

Excluded sellers, not agents

While all sellers of properties must disclose what is known to them about the natural hazards endemic to a property's location, sellers in some transactions **do not need to use** the mandated NHD form to make their disclosures, such as:

- court-ordered transfers or sales;
- deed-in-lieu of foreclosures;
- trustee's sales;
- lender resales after foreclosure or deed-in-lieus;
- estates on death;
- transfers between co-owners;
- transfers to relatives/spouses; or
- transfers to or by governmental entities. [CC §1103.1(a)]

However, any listing agent involved in an excluded transaction must himself make hazard disclosures, even though he does not need to use the statutory form. [CC §1103.1(b)]

Also, all sellers of any type of property, included or excluded, must, as always, disclose what **they know about any hazards**. Again, the disclosure is best accomplished by use of the NHD Statement on all sales. The NHD expert will definitely include the statement as part of his report. [CC §1103.2(f)(2)]

On properties not mandated to use the form, the listing agent can comply with his and his seller's duty to disclose by ordering a report from a natural hazard expert. On the listing agent's receipt of the expert's report, he will review the report (preferably with the seller), add what they know about hazards which are not included in the expert's report, sign the NHD statement accompanying the report and hand the entire NHD package to prospective buyers before an offer is submitted or a counteroffer made.

Other disclosure statements distinguished

The NHD Statement handed to a prospective buyer of one-to-four unit residential property is an additional disclosure unrelated to the environmental hazards and physical deficiencies in the soil or improvements located on or about a property as disclosed on Transfer Disclosure Statement (TDS) or in the purchase agreement. [See **first tuesday** Form 304 §C(1)]

The TDS discloses health risks resulting from **man-made** physical and environmental conditions affecting the use of the property. They are limited to facts known to the seller and listing agent without concern for a review of public records on the property at the planning department or elsewhere. The NHD Statement discloses risks to life and property which exist **in nature** due to the property's location and are known and readily available from the public records (planning department).

Other than one-to-four

Use of the statutory NHD form for hazard disclosures by sellers and their agents is mandated only on the sale of non-exempt, targeted one-to-four unit residential property. [CC §1103]

Thus, sellers and listing agents on all other properties do not need to use and deliver the statutory NHD form to prospective buyers of those properties. However, all sellers and their listing agents still have a duty to disclose hazardous conditions known to them to exist.

Sellers and listing agents of **any type of real estate** must disclose whether the property is located in:

- an area of potential flooding;
- a very high fire hazard severity zone;
- a state fire responsibility area;
- an earthquake fault zone; and
- a seismic hazard zone. [CC §1103.2]

Even though use of the form is not mandated for sales of property other than one-to-four residential units, agents best meet their hazard disclosure duty in all transactions by using the NHD Statement to convey their knowledge and information contained in public records. [CC §1103.1(b)]

Editor's note — The following discussion details the different hazards which must be disclosed on the NHD Statement.

Flood zones

Investigating flood problems was facilitated by the passage of the National Flood Insurance Act of 1968 (NFIA).

The NFIA established a means for property owners to obtain flood insurance with the National Flood Insurance Program (NFIP).

The Federal Emergency Management Agency (FEMA) is the administrative entity created to police the NFIP by investigating and mapping regions susceptible to flooding.

Any flood zone designated with the letter "A" or "V" is a *special flood hazard area* and must be disclosed as a natural hazard on the NHD Statement. [See Form 314 §1]

Zones "A" and "V" both correspond with areas with a 1% chance of flooding in any given year, called 100-year floodplains, e.g., a structure located within a special flood hazard area shown on an NFIP map has a 26% chance of suffering flood damage during the term of a 30-year mortgage.

However, Zone "V" is subject to additional storm wave hazards.

Both zones are subject to mandatory flood insurance purchase requirements.

Information about flood hazard areas and zones can come from:

- city/county planners and engineers;
- county flood control offices;
- local or regional FEMA offices; and
- the U.S. Corps of Engineers.

Additional information concerning flood hazard areas can be obtained in the Community Status Book. The book lists communities and counties participating in the NFIP and the effective dates of the current flood hazard maps available from FEMA.

The Community Status Book can be obtained via the web at: <http://www.fema.gov/fema/csb.shtm>.

Flood Insurance Rate Maps and Flood Hazard Boundary Maps are all available at the FEMA Flood Map store by calling (800) 358-9616 or via the web at: <http://msc.fema.gov/>.

Another flooding disclosure which must be made on the NHD Statement arises when the property is located in an area of **potential flooding**. [See Form 314 §2]

An area of potential flooding is a location subject to partial flooding if sudden or total **dam failure** occurs. The inundation maps showing the areas of potential flooding due to dam failure are prepared by the California Office of Emergency Services. [Calif. Government Code §8589.5(a)]

Once alerted by the listing agent to the existence of a flooding condition, the buyer's agent must inquire further to learn the significance of the disclosure to the buyer.

Very high fire hazard severity zone

Areas in the state which are subject to significant fire hazards have been identified as *very high fire hazard severity zones*. If a property is located in a very high fire hazard severity zone, a disclosure must be made to the prospective buyer. [See Form 314 §3]

The city, county or district responsible for providing fire protection have designated, by ordinance, very high fire hazard severity zones within their jurisdiction. [Gov C §51179]

The fire hazard disclosure on the NHD form mentions the need to maintain the property. Neither the seller nor the listing agent need to explain the nature of the maintenance required or its burden on ownership. Advice to the buyer on the type of maintenance and the consequences of owning property subject to the maintenance are the duties of the buyer's agent, if they have an agent.

For example, a buyer occupying a residence located in a very high fire hazard severity zone is advised by his agent that as the new owner, the buyer must:

- maintain a firebreak around the structure of a distance of no less than 30 feet or to the property line, whichever is nearer, unless the local agency requires up to 100 feet or more;
- remove tree branches extending within 10 feet of any chimney or stovepipe;
- clear dead or dying wood from trees adjacent to or overhanging the structure;
- remove leaves, needles or other dead vegetative growth from the roof; and
- maintain a screen over the chimney or stovepipe. [Gov C §51182]

State Fire Responsibility Areas

If a property is in an area where the financial responsibility for preventing or suppressing fires is primarily on the state, the real estate is located within a *State Fire Responsibility Area*. [Calif. Public Resources Code §4125(a)]

Notices identifying the location of the map designating State Fire Responsibility Areas are posted at the offices of the county recorder, county assessor and the county planning agency. Also, any information received by the county after receipt of a map changing the State Fire Responsibility Areas in the county must be posted. [Pub Res C §4125(c)]

If the property is located within a **wildland area** exposed to substantial forest fire risks, the seller or his listing agent must disclose this fact. If the property is located in a wildland area, it requires maintenance by the owner to prevent fires. [Pub Res C §4136(a); see Form 314 §4]

In addition, the NHD Statement advises the prospective buyer of a home located in a **wildland area** that the **state has no responsibility** for providing fire protection services to the property, unless the Department of Forestry and Fire Protection has entered into a cooperative agreement with the local agency. No further disclosure about whether a cooperating agreement exists need be made by the seller or listing agent. [See Form 314 §4]

However, if property disclosures place the property in a wildland area, the buyer's agent has the duty to advise the buyer about the need to inquire and investigate into what agency provides fire protection to the property.

Earthquake fault zones

To assist seller's agents in identifying whether the listed property is located in an earthquake fault area, maps have been prepared by the State Geologist.

The State Mining and Geology Board and the city or county planning department have maps available which identify special studies zones, called *Alquist-Priolo Maps*. [Pub Res C §2622]

The maps are used to identify whether the listed property is located within one-eighth of a mile on either side of a fault.

Also, the NHD Statement requires both the seller and the listing agent to disclose to a prospective buyer or the buyer's agent whether they have knowledge the property is in a fault zone. [See Form 314 §5]

Seismic hazards

A *Seismic Hazard Zone* map identifies areas which are exposed to earthquake hazards, such as:

- strong ground shaking;
- ground failure, such as liquefaction or landslides [Pub Res C §2692(a)];
- tsunamis [Pub Res C §2692.1]; and
- dam failures. [Pub Res C §2692(c)]

If the property for sale is susceptible to any of the earthquake (seismic) hazards, the seismic hazard zone disclosure on the NHD Statement must be marked "Yes." [See Form 314 §6]

Seismic hazard maps are not available for all areas of California. Also, seismic hazard maps do not show Alquist-Priolo Earthquake Fault Zones. The California Department of Conservation creates the seismic hazards maps.

The seismic hazard maps which exist are on the web at <http://www.consrv.ca.gov/shmp/>.

If the NHD indicates a seismic hazard, the buyer's agent must then determine which type of hazard, the level of that hazard and explain the distinction to the buyer, or see to it that someone else does. The listing agent has no such obligation to the buyer.

For example, property located in Seismic Zone 4 is more susceptible to **strong ground shaking** than areas in Zone 3. But which zone the property is located in is a question the buyer's agent must answer. Most of California is in Zone 4, except for the southwest areas of San Diego County, eastern Riverside and San Bernardino Counties, and most of the Northern California Sierra Counties.

Homes in Zone 4 can be damaged even from earthquakes which occur a great distance away.

Ground failure is a seismic hazard which refers to landslides and liquefaction. Liquefaction occurs when loose, wet, sandy soil loses its strength during ground shaking. Liquefaction causes the foundation of the house to sink or become displaced. The condition is prevalent in tidal basins which are fills.

A **tsunami** is a large wave caused by an earthquake, volcanic eruption or an underwater landslide. Coastal areas are the ones at risk for loss of property and life.

Tsunami inundation maps are available from the National Oceanic and Atmospheric Administration (NOAA) led National Tsunami Hazard Mitigation Program (NTHMP) at: <http://www.pmel.noaa.gov/tsunami-hazard>.

Also, FEMA's Flood Insurance maps consider tsunami wave heights for Pacific coast areas.

Dam failure results in flooding when an earthquake causes a dam which serves as a reservoir to rupture. The city or county planning department has maps showing areas which will be flooded if a local dam fails.

Areas susceptible to inundation due to dam failure caused by an earthquake are also noted on the NHD Statement as a potential flooding area.