RIPARIAN AND LITTORAL OWNERS

Law to properties abutting oceans, lakes, rivers, or streams grants riparian and littoral rights. The privileges and rights conferred upon the riparian and littoral owner may take the form of rights:

1. To construct dams, docks, and mills.
2. To the bed of the stream, lake, or sea.
3. To land gradually and imperceptibly deposited by accretion.
4. Of navigation.
5. To harvest ice.
6. To take minerals.
7. To appropriate water.

If there is erosion or inundation due to rising waters, the riparian owner may suffer losses.

**Definition of Terms**

**Riparian and Littoral Owners**

Webster's Dictionary defines riparian as "of, pertaining to, or living on, the bank of a river, of a lake, or of a tide water." Strictly speaking, those living adjacent to tidewater and lakes are littoral owners. Any strip of land, no matter how small, between an upland owner and the body of water deprives the upland owner from riparian or littoral rights.

**Accretion and Alluvion**

Where, from natural causes, land forms by imperceptible degrees upon the bank of a river, stream, lake, or tidewater, either by accumulation of material or recession of the water, the process and end result are called accretion or alluvion. The process by which the land is formed is usually called accretion and the land formed is usually called alluvium. Ownership in California resides in the adjoining riparian proprietor.

**Reliction**

Reliction is land left uncovered by the gradual receding of waters, and comes within the legal meaning of accretion.

**Avulsion or Revulsion**

Avulsion is opposite to accretion. Accretion is an imperceptible gradual deposition of land that may be observed over a period of time, but not at any one instant Avulsion is the sudden and perceptible removal of a considerable quantity of land by water, such as a river changing its course in time of flood.
**Bank of a River**

When traveling down stream, the right bank is on the right side and the left bank is on the left side.

**Thread of a River**

The thread of a river is the line formed an equal distance from the shores, and is not to be confused with the center of the main channel which may be closer to one bank than to the other. The thread of a lake is the center line which passes through the thread of the inlet and the thread of the outlet. Where there is no inlet or outlet, the thread passes through the center of the lake on its longest axis. The thread of a river or lake is determined when the water is in its natural and ordinary stage, at medium height.

**Thalweg Line**

In a river thalweg means the deepest part of the river and is often the main channel. This is not to be confused with half way between banks.

**Bed**

The bed of a lake or river is normally that land which is covered by water sufficiently long to keep it bare of vegetation and destroy its value for agriculture.

**Meander Line**

A meander line run by a surveyor is for the purpose of platting the size and extent of a body of water. Patents issued by the government, except for fraudulent surveys and swamplands, are not limited to the meander line as run by the surveyor, but to the actual shore line where it exists.

**Navigability**

According to federal law, the beds of all navigable waterways belong to the states, and the beds of nonnavigable waterways belong to the upland owner. Thus the definition of navigability or navigable determines the division of ownership between the state and the upland owner. However, considerable confusion exists as to the exact definition of "navigable," especially in the state courts.

The rule laid down by the U.S. Supreme Court is that streams, lakes, and other bodies of water that are navigable in fact are navigable in law; and, to be navigable in fact, it is necessary that they be used or be susceptible of being used "in their ordinary condition, as highways of commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water" (United States v. Holt State Bank, 270 US 49). Some states have defined "navigable," differently, and where the state definition cannot be appealed to the federal courts, its definition is controlling.
**Tides**

The elevation of the ocean's surface changes from moment to moment due primarily to the gravitational attraction of the sun, the moon, and to a lesser degree by changes in barometric pressure, winds, and configuration of the shoreline and bottom. The changes in sea level caused by the sun and the moon are of a predictable nature. Along the Pacific Ocean there are two high and two low tides during a tidal day, with a marked difference between the morning and afternoon heights. Such variation is called diurnal (or daily) inequality, and is described as being characteristic of the mixed type of tide.

During different times of the month, the relationship between the positions of the sun and moon vary, causing changes in the heights and range (distance of rise or fall) of the tide. At the time of full and new moon, the sun, moon, and earth are in line with each other, and spring tides or the maximum range of tides occur. When the moon is at the first or last quarter phase, the sun and the moon are in quadrature with respect to the earth, and neap tides or the minimum range of tide occurs. In certain instances water boundaries have been related to neap or spring averages, rather than the mean of all elevations.

**18.6-Year Tidal Cycle**

Tidal riparian boundaries are generally defined as the average over 18.6 years of a specified phase of the tide, since it takes 18.6 years to complete a full cycle of the varying relationship among the positions of the earth, sun, and moon.

**Tidal Datum Planes**

A tidal datum is a surface defined by a phase of the tide and used either as a reference elevation for heights and depths or for the demarcation of waterfront boundaries. Level surface is a curved surface which is a every point perpendicular to the plumb line or to the direction in which gravity acts. The surface of a body of still water assumes a level surface.

Different tidal datums are used for varying purposes. California uses the low-low mean water level.

**Tidelands**

Tidelands are lands covered and uncovered by ordinary tides. The term commonly has been used, in a broad sense, to include permanently submerged lands, as the "Tidelands" litigation between the United States and several of the states. In the case of submerged interior waterways, ownership of the tidelands is vested in the states. Several states have authorized the sale of tidelands, primarily for reclamation purposes.
Reach of Tidal Waters

The water-ward limit of upland riparian property often depends upon whether or not the shore is covered and uncovered by the daily tides. In California along non-tidal navigable streams the upland owner owns to low water; in tidal areas he owns to mean high water. Many waterways, such as large rivers, are tidal in their lower reaches, but are not tidal some distance upstream. In the lower tidal areas there is often a change in direction of the current accompanying the change of tide. Water in these areas ranges from normal ocean salt water to fresh water. Progressing further upstream, there is a noticeable rise and fall of the tide, but no change in direction of the current due to the prevalence of the fresh water runoff. Such lands are still considered to be tidal. Further upstream the pronounced rise and fall of the tide lessens, depending upon the intensity of runoff water, gradient of the stream, and so on. In these areas there are no established criteria for determining whether lands are tidal. To determine the exact point at which ownership changes from mean high water (tidal stream) to low water (non-tidal stream), as in California, it may be necessary for the involved parties to compromise or litigate a settlement.

Submerged Lands

Submerged lands in tidal areas are those that are continuously covered during the rise and fall of the ordinary tides, and extend water-ward from the line of ordinary low water. In non-tidal areas, the term "submerged lands" is not clearly defined in a legal sense.

Ownership of Tidelands

Ownership of the former public domain tidelands between high water mark and low water mark is vested in the state, which may dispose of it.

In U.S. v. California, 382 U.S. 448, the U.S. Supreme Court ruled on the interpretation of the term "line of ordinary low water" as used in the Submerged Lands Act for the purpose of defining the line of demarcation between tidelands and the submerged lands. The Court found that this term as applied in California was the line of mean lower low water in accordance with the principles of international law was held that the applicable low water line is the line marked on the large scale nautical charts officially recognized by the coastal nation. Along the Pacific Coast of the United States the low water datum used by the U.S. Coast and Geodetic Survey on their coastal charts is the line of mean lower low water.

Swamp and Overflowed Lands

Certain swamp and overflowed lands that were subject to inundation to the extent that they were unfit for agriculture in their natural state were granted to the states provided proper application, classification, and survey were made. The grants were limited to unappropriated lands whose character at the time of the grant (Sept. 28, 1850) would bring them within the limits of the law.

The inundation of the lands can be either by fresh or salt water or by a combination of both. These lands can occur near sea level, below sea level, or in the high mountains. Swampy lands which are
covered and uncovered by the daily tide are classified as tidelands rather than as swamp and overflowed. In an area subject to the action of the tides the water-ward limit of a tract of swamp and overflowed land patents have been confirmed to the patentee.

If a quarter-quarter section of land contained more than 50% actual swamp and overflowed land, it was classified as wholly swamp and overflowed. Those with less than 50% were treated as wholly upland. Thus the boundaries of swamp and overflowed lands usually depend upon the location of quarter-quarter section lines.

In some cases the swamp and overflowed lands were meandered and the upland segregated. When the state acquired only that portion below the meander line, the line as originally run became the boundary between the upland and the swamp area. The boundary is not a given water line since overflowed land has no permanent water line.

Ownership of Interior (Rivers, Lakes and Ponds)

Normally the law that determines the ownership of the bed of streams, ponds or lakes, and tidelands is regulated by the state; but such regulation cannot extinguish, without due process of law, a title already granted by a duly constituted body.

The laws of the United States that regulated the disposal of the public domain granted to the riparian owner the bed of all non-navigable streams. Upon admission of a territory into statehood, the adoption of a law vesting non-navigable river beds in the state is not operative where the United States had previously patented such land in another.

Land grants made by the United States did not include the bed of navigable streams. On admission to the Union all sovereign rights to the bed of navigable streams, subject to a public easement for commerce, passed to the state. After having acquired the bed of navigable streams, each state has the right, by statute law, to dispose of the bed as it sees fit. The limit of upland proprietors, as reserved by the United States for navigable streams, is the high-water mark, but California, has transferred to the riparian owner lands between the high-and low-water marks. The question of ownership of the bed of water can differ significantly from state to state. For fresh water any one of the following laws may exist:

a. The bed belongs to the adjoining riparian owner.
b. The state owns the bed below the low-water mark, and the upland riparian owner has the remainder.
c. The state owns the bed up to the high-water mark.
d. The rule in each state may be different for navigable or non-navigable waters.

Ownership of Offshore Submerged Lands

Until 1947 the states presumed that they had fee title to the lands seaward of the ordinary low-water mark of the coast line; some states leased oil rights and collected oil royalties. In United States v. California (332 U.S. 19), United States v. Louisiana (339 U.S. 699), and the United States v. Texas (339 U.S. 707) it was decreed that the states were not the owners of the 3-miles marginal belt along
their coast lines and that the federal government, rather than the state, has paramount rights in and power over that belt, an incident of which is full dominion over the resources of the soil under the water, including oil. The provisions of the Submerged Lands Act, 1953 except as specifically provided, were the following:

1. All rights of the federal government to mineral resources, fee title, and so on were quitclaimed to the states for a distance of 3 geographical miles seaward of the coastline in the Atlantic and Pacific Oceans.

2. The fee title, mineral rights, and so on, in all bays and inland waters (including the Great Lakes and excepting lands acquired by the federal government) were quitclaimed to the states.

3. Within the Gulf of Mexico, states could claim to the extent of their boundaries at the time of their admission to the Union, but not more than 3 marine leagues (9 geographical miles).

4. The United States reserved to itself lands on the continental shelf beyond the 3 geographical mile limit. The United States additionally reserved the usual rights to control commerce, navigation, and national defense within the 3-mile limit.

5. The act defines the 3 geographical mile limit as being measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea, and the line marking the seaward limit of inland waters.

**Ownership of Land Built Up by Accretion**

Land gradually built up by accretion, except where otherwise stipulated, belongs to the riparian owner to whose property it is attached, irrespective of whether the state owns the bed of the stream or not.

Land added to the shore by imperceptible means presents complex problems in the distribution of the alluvium. Different states have devised different means to arrive at a fair and equitable solution, they have agreed that the riparian proprietor has the right of ownership. Land attached to a public highway by process of accretion becomes part of the road subject to the same easements.

**Ownership of Land Lost by Natural Erosion or Inundation**

Land gradually eroded away or permanently inundated by water becomes part of the bed of the water and belongs to the owner of the bed.

Land eroded away or submerged by water does not necessarily belong to the former owner. The land becomes a part of the bed of the water body. Ownership of the bed is determined by the laws of the state.
Ownership of River Bank Removed by Avulsion

Land detached from the land of an owner by the sudden process of avulsion belongs to the person from whose land it was detached.

Land is not lost by avulsion. A river that changes its course by cutting a new channel and forming an island does not change the ownership of the new island. Likewise, a parcel of ground detached from the land of one owner and attached to the land of another by the sudden change of a river course is not lost by the former owner.

Effect Upon Boundary by Man-Caused Shoreline Changes

Man-caused shoreline changes are generally referred to as artificial changes. Artificial changes can either alter a shore line directly as by installation of a fill or jetty, or can indirectly cause artificial accretions which further change the shore line. In most jurisdictions the fact that the process of accretion was initiated by manmade structures has no effect on the general rule of accretion or reliction on the property of third parties. In general, the State courts will not allow an upland owner himself to increase his land area by the installation of artificial barriers which either directly increase land area or which induce accretions.

In California the property line between the upland owner and the state is established by the neap high tide as of the date of the last natural conditions. The city of Long Beach in the process of improving their harbor caused a rock jetty to be installed a few thousand feet offshore. In accordance with the state common law the boundary between the upland owner and the state became fixed as the line of neap high tide as it existed before the jetty was installed.

The federal government rule of law is that the Pacific Coast states own three geographical miles outward from the mean lower low water where it exists. Because of the installation of the jetty, the state boundary was measured seaward from the jetty. Since the Long Beach oil field exists in this area, the state gained area in the oil field, yet at the same time it did not lose any of its tidelands to adjoining.

Ownership of Islands

The ownership of an island formed in a river or lake belongs to the owner of the bed of the river or lake.

If an island forms on one side of a stream and the riparian proprietor owns the bed of the stream, the island belongs to the proprietor on whose side of the stream it formed. If an island is formed in the middle of a stream and the riparian proprietors own the bed of the stream, the island is divided by a line drawn through the thread of the stream.

When the state owns the bed of a stream or lake, the adjoining riparian owner is not entitled to an island that springs up from the bed of the stream or lake. The right to new islands follows the right
of the soil on which they were formed. If the course of a river changes and cuts off a parcel of land to form a new island, the island belongs to the former owner.

Many islands of the public domain that existed at the time of statehood and were not shown on the township plat are part of the unsurveyed public domain. After survey by the federal government they may be sold or disposed of.

**Land Lost by Erosion and Regained by Accretion**

Land entirely eroded away or submerged ceases to be riparian, and the new land touched by the river becomes riparian. Upon reappearance of the land by accretion or reliction, ownership of the new accretion is vested in either the new riparian proprietor or the former owner, depending on the state in which the land is located.