



## COURSE 2 -- CHAPTER 9

# WATER RIGHTS AND RELATED ISSUES

(Definitions begin on page 9; explanations of exhibits begin on page 12)

### A. Introduction

The ownership of and rights to lands affected by the flow of water, such as navigable lakes, streams, or rivers or lands that abut the ocean and are, therefore, affected by the ebb and flow of the tides, raise issues of ownership and the right to use land as well as to the jurisdiction of the sovereignty where land upon which the waters flow is situated. The very nature of the subject matter, water, with its continuous movement and change, further confuses the issues of title and use. A determination of the permitted uses and the restrictions to be placed upon such areas only increases and frustrates an already existing problem. Ever increasing pressures being exerted by various and myriad interest groups to control the use of areas defined as "wetlands," coupled with the involvement of the state and federal government to establish sovereignty and control over all present and what-are-thought-to-be former "wetlands," combine to greatly diminish the use and enjoyment of these areas.

Wetlands have been defined to include tidelands and submerged lands, swamp and overflowed lands, and nontidal but navigable lakes, rivers, and streams.

Tracts of land that abut wetlands frequently disclose conflicts in the legal rights and ownerships among the owner, the sovereign, and others who have or allege to have an interest in the land or water or rights to or along the beaches and banks. An important general rule is that the law of the particular state where the land is located determines both the ownership of the land and the permitted use of water, subject only to the jurisdiction of the federal government with respect to the regulation of navigation and commerce on navigable waters of the United States.

Tidelands and submerged lands are those lands abutting the ocean or sea and subject to the ebb and flow of the tide in its normal or average condition. These tidelands are located between the lines of ordinary low tide and ordinary high tide. The term "mean high-tide line" is the mean or average if available of all the high tides over a period of 18.6 years. (See Exhibit 3) All lands below the mean high-tide line are subject to ownership by the sovereign, usually the state. Land that is considered tidelands and subject to a claim of interest or ownership by the state depends on a determination of the location of the mean high-tide line in its last natural state or condition. The term "last natural state" means the true line as established by natural or nature forces before any artificial conditions have been created and excludes steam shoveled or other artificially filled accreted lands. The land below the mean high-tide line is classified as submerged, and the land above the mean high-tide line as upland. The distance between the two lines can be great or quite limited, depending upon the type or character of the land. A long sloping beach area would have a substantial tideland area when contrasted with the generally narrow beach below a steep cliff.

Titles to tidally affected lands have historically been owned by and under the control of the sovereign government, either federal or state. These lands are usually conveyed to the states by the federal government at the time of statehood. The lands are held by the state in trust for the public, and any conveyance from the sovereign must be reviewed prior to title insurance being issued to determine the validity of the conveyance and to determine if there are interests remaining in the sovereign.

Land considered tidelands and subject to a claim of interest or ownership by the state depends on a determination of the mean high-tide line in its last natural state or condition.

Accretion is the gradual and imperceptible addition of soil to the riparian or littoral lands (beaches and banks) of an ocean, lake, river, or stream by the operation of water. The action of waves or force of water causes sand, dirt, or other forms of earth to accumulate on the seashore or the banks of a river by a slowing down of the water or by ebb and flow in the stream water mark, or the ordinary low water mark, or the center of the stream or river. The upland ownership in some states may be subject not only to sovereign rights but also to any existing rights water mark, or the ordinary low water mark, or the center of the stream or river. The upland ownership in some states may be subject not only to sovereign rights but also to any existing rights of the public to reach the water over the land of the upland owner. Natural accretion to land fronting on tidal waters, including direct frontage on the ocean, attaches to the land of the upland owner. Any accretions caused by artificial means, whether caused by the owner or some other artificial means such as dike or levee, even though formed gradually and imperceptibly, may belong to the sovereign, although this varies among jurisdictions. In general, each state and federal government have differing rules for determining the ownership of accretion. For example, in California artificial accretion belongs to the State of California, except when the uplands have always belonged to the United States – a lighthouse reservation is an example.

When ownership is dependent upon whether accretion is natural or artificial, lawsuits are likely to settle such questions as:

- When did the artificial accretion occur?
- How far from the property did the event causing the accretion occur?
- What is the last natural location of the mean high tide line?

The loss of land can and all too frequently does result from erosion, which is the gradual and imperceptible loss of dry land through the wearing away of the shoreline by the action of the waters. Title is lost by erosion just as it is gained by accretion. Another form of land movement or relocation is avulsion, which is a sudden and perceptible gain or loss of shore land along a body of water caused by the action of water or a sudden change in the bed or course of a stream. Such a change in the course of a moving body of water resulting from avulsion does not, in most states, change the legal boundary. When a stream by a violent and sudden change of its course creates a new channel, the middle of the old channel will continue to be the boundary. (See Exhibit 4) This is particularly true of uncontrolled rivers that change rapidly because of storms or winter runoffs. The three basic factors that distinguish accretion and erosion from avulsion are (a) speed, (b) perceptibility, and (c) cause.

Notice on Exhibit 4 how easily a casual inspection could mislead a title officer. The large piece of land lying between the old and new channel could appear as an island, and create a different set of ownership circumstances. Islands generally belong to the owner of the bed of the stream. If the old channel, as is

frequently the case, still had water in it, the piece would appear to be an island instead of a piece of land belonging in to I. C. Snow, as is the case when an avulsive change takes place.

Two more elements that can affect title, in addition to accretion and erosion, are reliction and submergence. Reliction is the gradual withdrawal of water from the shoreline, leaving land exposed that had been previously submerged. This has the same effect as accretion but is not the same as land being added through accretion. Submergence, the opposite of reliction, is the submerging of land previously exposed, but like reliction, it must be gradual and imperceptible. Seasonal reliction or submergence does not create a change of title.

#### B. Swampland And Marshland

Land too wet for cultivation is termed "swamp" and "overflowed," regardless of whether the water flows over or stands upon the land. Swamps are lands that are perpetually wet and require drainage before they can be cultivated. In contrast, overflowed lands are those which are subject to periodic overflows. Neither is subject to the ebb and flow of the tide, but they frequently require levees or embankments to render them suitable for cultivation.

Salt marshlands are yet another type of swamp or overflowed land, and they too are subject to overflow. With reclamation and drainage, however, these areas may be rendered tillable or useful for farming and livestock grazing. The real distinction between salt marshlands and swamps and overflowed lands is that the waters that overflow them may have been influenced by the tides and are frequently brackish. To the contrary, marshlands, as noted from the definition, are not tidal controlled and, therefore, unless they constitute a navigable lake, are owned by the upland owner. The same issue is presented by flood plains, which would not be subject to outside ownership but might be subject to the problems concerning ability to divert waters that create problems for surrounding landowners. Many states have statutes authorizing the sale of swamps and overflowed lands acquired by the state from the federal government.

The issue of ownership of swamps and overflowed lands is not a recent development but one that has been debated for many years on the state and federal level. By an 1850 act of Congress – the Arkansas Act<sup>1</sup> – all the swamps and overflowed lands within the limits of many states, that had not been disposed of prior to the Act were granted to the state in which they were located.

While it has been held that the Arkansas Act was a present legislative grant of all the public swamps and overflowed land within the several states, the act failed to make adequate provision for the actual severance of the title from the federal government or for the segregation of the property into uplands or swamps and overflowed lands. On the contrary, this important feature was casually dismissed in the act by an order to the United States Secretary of the Interior to make a list of swamps and overflowed lands as soon as practicable.

For many years swamps and overflowed lands remained unsegregated and unidentified in some states and, therefore, could not be validly sold. While the lands remained in this condition, the state had no means

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<sup>1</sup> Several earlier acts dealt with swamp lands but only at a specific area. The Arkansas Act applied throughout the public land states, and to all lands so classified but unsold.

of protecting its rights to them, for they were open to settlement through sales by the United States Land Office under the Pre-emption Act, the Homestead Act, and other federal lands laws.

In some states where there was great demand for purchase (prior to when the Secretary of the Interior segregated and listed the swamps and overflowed lands) land was sold through state authorization. Because there was no coordination between the state and federal governments regarding the sale of these lands, patents were often issued by both governments to different people. Congress has passed several curative acts specifically designed to clarify and validate these patents.

An additional and more serious problem arises in most coastal jurisdictions with regard to swamp and overflow patents. It is the difficulty of distinguishing tideland from swampland. Many patents by the states to private individuals for swampland included grants of land that were, in fact, tidelands. The question arose as to what the patentee actually received by the grant. Many of the states today are taking a position declaring the patents invalid because they were issued for swampland when, in fact, the land was really not swamp. By such actions, the states are attempting to take back a substantial area of land held by private owners based on the allegation that the land could not be conveyed in the first place.

### C. Navigable Waters

The determination as to whether a stream or river is navigable has differed from one jurisdiction to another. Under early British common law, whether the stream was considered navigable was determined by whether or not the tide ebbed and flowed in a given portion of a stream or tributary. If it did, the stream was considered navigable. However, this was not the rule adopted in the United States. It is important to understand the concept of navigable waters because whether a particular body of water is navigable or not will have a substantial effect not only upon the ownership and use of the water but also upon the ownership and use of the land under and surrounding the water.

In essence, waters are legally navigable when they are used or are capable of being used in their ordinary condition as highways for commerce. Navigable waters are public highways and are subject to reasonable use by all. The public right of navigation is superior to the rights of the upland owner but may not include the right of use of the uplands except in the case of an emergency. The public also has the right to use the water for commerce, navigation, and fishery, which also includes bathing, fishing, taking ice, and sometimes even the taking of soil from the bed of the navigable river or ocean.

While different states have different tests for navigability, the federal test is most often observed. For example, a small stream that is not navigable for boats may be important for electric power, for the floating of timber, or for many other uses and would be navigable under federal law. Under the Federal Rivers and Harbors Act of 1899 (33 U.S.C. 403), a waterway is navigable if it was used in the past, is now used, or could be used to transport interstate or foreign commerce. The general rule in the United States is that if the waters are navigable in fact, they are navigable in law. A simple statement, but one that generates much litigation still today.

The United States has paramount control over actual navigation – the control is regulatory and hard to relate to title, unless the United States is owner of the upland, where federal rules apply. There is also the federal navigational servitude where the federal government can take property without compensation to further actual navigation.

The various states, upon entry to the Union on an equal footing with the original 13, acquired the title to sovereign lands, which are navigable waters for title purposes, and the public trust doctrine may burden the sovereign lands. This title is superior to all except the federal government; unwritten rights do not operate against sovereign lands.

Prior to entry into the union – the territorial period – federal rules relating to navigable, for title purposes, waterways were applied. After statehood, the states were able to administer their own lands and in a number of states the tidelands were patented. These tidelands may still be burdened by the public trust. A title person insuring along waterways needs to exercise extreme care, and take steps to become acquainted with the local practice.

Several states, Nebraska and Mississippi for example, do not follow the general rule concerning sovereign ownership of the beds of navigable rivers or lakes and take the position that the beds are owned by the upland title holders to the "thread" of the stream. (The center of the of the main current is sometimes called the thread of the stream.) The thread of the current may shift from time to time and, accordingly, the boundary will also shift.

#### D. Riparian Rights

The owners of land abutting a waterway or course have certain long-established rights to the use of the water and the waterfront lands. These rights are referred to as "common law" riparian rights. This means that the owner has the right to a reasonable use of the water for any purpose incidental to the use and enjoyment of the land so long as the use does not materially affect the rights of others. The owner of the land abutting a river or lake is called a "riparian owner." When the same set of rights is applied to land abutting the ocean or the Great Lakes, the rights are called "littoral rights," and the owner of such land is correctly called a "littoral owner." Today, however, the distinction has disappeared, and the terms are used synonymously with "riparian," which has virtually replaced "littoral" altogether in modern usage.

Riparian rights were property rights at common law and are part of the owner's estate in the land. These rights pass with the conveyance of the land but may be separately conveyed, leased, or otherwise contracted for in the same way as other real property interests depending upon the laws of the state where the adjoining land is located. Riparian rights, being property rights, cannot be condemned or taken in eminent domain proceeding for public use without just compensation being paid. Riparian land must be in actual contact with the water.

Included in the scope of riparian rights is the right of access to the water, even if the title extends only to the high-water mark. In addition to access the riparian owner generally has the right to build docks and piers, so long as such usage does not interfere with the public's rights of navigation, commerce, and recreation on navigable waters and, in the case of unnavigable ponds, so long as the docks and piers do not interfere with the rights of other riparian owners around the pond.

#### E. Tidelands

With respect to tidelands, a state is the owner of all land below the ordinary high-water mark for a distance of three miles, or in some instances ten miles out from the shore. The land belongs to the state by virtue of its sovereignty. The state becomes the owner of both submerged and tidal-affected lands within

the boundaries of a state in fee simple on admission to the Union and holds them subject to the public trust for navigation, commerce, and fishing.

Congress, by the Submerged Lands Act in 1953, confirming the Supreme Court decision and intervening statutes, provided that a state shall have control of the ground underlying navigable waters for three miles oceanward from the ordinary low-water mark of the seacoast. This act granted to the several states bordering on oceans the right, title, and interest of the federal government in and to submerged lands and tidelands. This included proprietary rights of ownership, management, leasing, use, and development of the lands and natural resources. However, the United States specifically retained a navigational servitude over these lands.

There is a major concern in any area onto which tidal water is permitted to flow, even though ownership of the land can be established. In the ocean-bordering or island states, marina-type subdivisions have been established and cuts made to permit the flooding of land or non-tidal pools with ocean water to use for recreational purposes. The government, through the U.S. Army Corp of Engineers, has exercised dominion over these areas for commerce, navigation, and fishing through navigational servitude but does not recognize private ownership of the submerged lands.

A court decision dealing with the particular issue of tidelands has come from the United States Supreme Court and specifically deals with the issue of ownership, navigability, and change of ownership. The case is *Phillips Petroleum v. State of Mississippi*, 108 S. Ct. 791, U. S. Feb., 1988. The Supreme Court has taken the position like that previously taken in some states, California and New Jersey specifically, that ownership depends upon the mean high-tide line, not upon any particular depth of navigability. Navigability is not governed solely by there being sufficient water to commercially float barges or boats but rather by the ability of the tide or the water to be used in any commercial manner; in some instances it has been declared by the courts that if the water will float a toothpick, then it is considered navigable. It is obvious that the toothpick theory would also demonstrate the existence of tidal influence, which, as noted, goes to the determination of ownership. Sovereign ownership goes inland to the point of the mean high-tide line, no matter where that line is. In addition, as stated previously, the mean high-tide line is governed by its last natural condition, and its existence cannot be affected by reason of artificial accretion. In many states rivers and lakes are governed by the line of high-water rather than the low-water line. This would mean that the adoption of the high-water mark by a state rather than the low-water mark could increase the amount of land owned by the state.

The *Phillips* case raised an additional issue concerning the permanency of the mean high-tide line and indicated that land originally upland, that is landward of the mean high-tide line, which becomes inundated by the tidal waters on a permanent basis, changes ownership to the sovereign. As has been noted, if the water is navigable, the title to the bed of the body of water is in the sovereign in most states.

#### F. Water Boundary Lines

Depending on applicable state or federal law, where a legal description for legal title ownership touches water, the boundary line may be (a) the meander line, (b) the high-water mark, (c) the low-water mark, (d) the centerline of the water at the time the boundary was first established, (e) the centerline of the main current of a flowing stream, or (f) not at all in the case of non-tidal unnavigable waters. Let us now consider the different types of water boundaries.

As noted above, the boundary of lands abutting the ocean or which are tidally controlled is the mean high-tide line, often called the mean high-water mark. The nature of the lands between low water and high water preclude ordinary and private occupation, and their natural use is public for navigation and commerce. There appear to be some exceptions in areas such as the Boston Harbor.

The boundaries of lakes and ponds depend upon the law of the situs of the lake or pond and the navigability doctrine of the state. If the lake or pond is navigable as stated above and the state recognizes navigability as the determination of ownership, then the bed belongs to the state. If not, the bed belongs to the upland owners. If the lake is a perfect circle, then the task of locating the respective boundaries of the submerged land is simple – each parcel will be pie-shaped meeting at the exact center of the lake. The rule of ownership to the center of an irregularly shaped (as most are) unnavigable lake is easier in concept than in reality and very difficult to survey.

There are numerous cases that establish ownership of banks of rivers or oceans on the basis of accretion with the title to the bed of the river moving in accordance with an accretive action of the river but not because of an avulsive action. If, in fact, the river that acts as a boundary to the land has moved from its natural bed, then the boundary may not be at its present location. In those situations where the change in the bed of the river has been the result of an avulsive action, the bed remains in its last natural location and does not move with the water of the river. Should the change occur because of an artificial action, the bed also remains in its natural location. States such as California, Nevada, and Arizona have entered into boundary-line agreements to settle the boundary, but these agreements do not and cannot settle the private ownership of property that has been left through changes in a stream's course.

#### G. Jurisdiction and Control

There is no universal law concerning the trust in which a state holds its tidelands. Each state has developed case law dealing with its lands under the tidewaters in accordance with its own views of justice and policy. The state courts have traditionally reserved their own control over such land even while granting rights in the best interests of the public to individuals or corporations.

Caution is necessary in applying precedents established in one state to facts arising in another. Theoretically the state can make no disposition of tidelands prejudicial to the right of the public to use them for navigation and fishery, since public easement and servitude perpetually exist over these lands for those purposes. The state may dispose of tidelands in furtherance of the public trust, but the grantee takes on the same terms under which the state holds them. These terms are subject to the public rights of navigation and fishery, to the paramount rights of the United States, and to any state constitutional prohibition against alienation of tidelands or submerged lands.

Congress has retained control of navigation but can make no disposition of the soil beneath. The various states cannot allow interference with the navigable waters or impair the right and power of the United States over navigation.

The regulatory power of the states is limited by the supervisory control that the federal government may actually exercise over navigable waters. In the absence of legislation by Congress or acts by the federal authorities, the state has the right to improve its navigable waters and harbors, provided the local system does not interfere with free navigation or defeat any general system for the improvement of navigation.

The state and federal governments possess concurrent regulatory powers over navigable waters within the state. The federal power is paramount. However, where this power is not exercised, the state's power is plenary. The federal government's power apparently persists even if the tidelands are reclaimed and improved with the consent of both state and federal government. Additionally, the state's abandonment of the public trust does not affect the federal power.

The modern public tideland trust law grew out of ancient Roman law. The English law developed from the Roman law and preserved, for the public benefit, certain property rights in rivers, seashores, and seas. Navigation and fishing were primarily reserved in these properties, but also through perpetual use the English law creates a public trust in certain public land. Thus the general rule is that land titles from the federal government only run to the high-water mark, with title below high water being vested in the state as trustee for the people.

In many states the title to tidelands is held in trust by the state for its people for purposes of commerce, navigation, and fishery. Because tidelands are held in public trust, the state is not allowed to dispose of them in violation of this trust. The state may, however, convey tidelands in furtherance of the public trust, with the grantee's interest being subject to a trust easement.

There is no general prohibition against the disposition of trust properties. In fact, a state may sell tidelands to private individuals and receive judicial approval. However, most courts have strictly interpreted such grants as being very limited and do not permit the transfer of large amounts of land.

Generally, the state cannot abdicate its trust over tidelands so as to leave them entirely under the use and control of private parties. However, there are several exceptions to this rule. One exception is the situation of grants where the land will be used to promote the interest of the public. A second is when the granted parcel is disposed of without impairment of the public interest in surrounding land.

Most states hold complete sovereignty over their tidelands. Although this ownership is attributed to the state to preserve the public easement or right of navigation, there is nothing to prevent the state from destroying the easement for the general good and conveying the land to private ownership.

The states have the right to absolutely alienate their tidelands and submerged lands when they are unfit for navigation, useless as aids of commerce, and possess no substantial value as fishing grounds. It is only where the reduction of the water area amounts to a substantial interference with navigation, commerce, or fisheries that the absolute power of alienation by the sovereign can be questioned. If the state makes a disposition of tidelands that is subject to the public trust and then abandons the trust, the grantee holds the absolute title in the land free of the trust.

Although there are general statements that govern the ownership and control of wetlands in all categories, the important factor is that each jurisdiction has its own rules. Consequently, statements of generality do not apply.

#### H. Public Interest and Regulation

It is also important to understand the implications of demands from ecological and environmental agencies at all levels of government and the private sector that additional lands be acquired and reserved for public use. However, in lieu of condemning new lands, the response in various states has been to apply



contemporary standards to old wetland transfers and to review laws enacted long ago to determine the correctness of these transfers. This could mean the divestiture of substantial areas of privately held land in favor of state ownership.

In tandem with, and as a part of, the public trust doctrine on tidelands is the public navigational servitude. In *Gibson v. United States*, U. S. 269 (1897), the United States Supreme Court held that "although the title to the shore and submerged soil is in the various States and individual owners under them, it is always subject to the servitude in respect of navigation created in favor of the federal government by the Constitution."

The right of the state to destroy the navigational servitude easement has long been recognized in California. In *People v. California Fish*, 166 Cal. 576 (1913), 138 P. 75. the court stated that if part of the tidelands are cut off so that they are no longer useful for navigation, "the state may thereupon sell and dispose of such excluded lands into private ownership or private uses, thereby destroying the public easement in such portion of the lands and giving them over to the grantee, free from public control and use." The court further held it was "obvious that the claim of the plaintiff to the effect that such lands cannot, under any circumstances, be alienated in fee to private parties to the exclusion of the public, cannot be sustained."

Additionally, a public easement over tidelands may be lost if the state fails to assert its interest at the time of the original patent proceedings. As demonstrated in *Summa Corp. v. California ex rel. State Lands Commission*, 466 U.S. 198, reh. denied 467 U.S. 1231, on remand *City of Los Angeles v. Venice Peninsula Properties*, 251 Cal Rptr 756, transf. to 205 CA 3d 1522, reh. denied and opinion mod., review denied. *Summa's* predecessors-in-interest had their interest in a lagoon confirmed in federal patent proceedings under the Act of 1851. At that time California did not assert its interest. The court in stating that California could not now assert its interest said:

The interest claimed by California is one of such substantial magnitude that regardless of the fact that the claim is asserted by the state in its sovereign capacity, this interest must be presented in the patent proceedings or be barred.

*Summa* again established that private parties to whom tidelands have been conveyed held good title, which could not be divested by the state. This is crucial when the implications of demands from ecological and environmental agencies at all levels of government and the private sector are considered. These agencies and organizations generally work toward acquiring additional lands to be reserved for public use. However, in lieu of condemning new lands, the response in various states has been to apply contemporary standards to old wetlands transfers and to review laws enacted long ago to determine the correctness of these transfers. In light of the propositions discussed in this chapter, the result would be contrary to existing case law that the present owners have valid title, but, more significantly, this trend could pose serious problems for the future of private property ownership.

## I. Definitions

**ACCRETION** - The build up of dry land, such as silt or sediment, by the gradual and imperceptible action of water forces.

**ALLUVIAN** - Land added by accretion.

AVULSION - A sudden change in the course of a river or stream which often results from a flood or earthquake.

BULKHEAD LINE - Under federal law, the seaward limit where a party can fill without an Army Corps of Engineers permit. It is often located at the same place as the inner harbor line established under Washington state law.

EROSION - The wearing away of dry land by the gradual action of water.

EXTREME LOW TIDE - The tide which is lower than either mean lower low tide (the average of all daily lower low tides) or daily lower low tide. It occurs only during certain seasons of the year. In several jurisdictions this line is considered, by state statute, to be the outer boundary of tideland conveyances.

FIRST CLASS SHORELANDS - Non-tidal lands in front of the corporate limits of any city between the line of ordinary high water and either ( 1 ) the inner harbor line within one mile on either side of the city limits or (2) the line of navigability within two miles and outside one mile on either side of the city limits. This is a statutory definition unique to State of Washington.

FIRST CLASS TIDELANDS - Tidal lands in front of the corporate limits of any city between the line of ordinary high tide and either ( 1 ) the inner harbor line within one mile on either side of the city limits or (2) the line of extreme low tide (or mean low tide for properties conveyed by the State prior to 1911) within two miles and outside one mile on either side of the city limits. This is a statutory definition unique to State of Washington.

GOVERNMENT LOT - Fractional sections in government surveys of the public lands.

HARBOR AREA - The area between the inner and outer harbor lines within city limits.

LATERAL LINES - Boundary lines between adjoining parcels of submerged lands, extending from a point on the line of ordinary high tide or line of ordinary high water to a point on the outer limit of the submerged lands. Must be apportioned by common owner(s) of the submerged lands by plat or conveyance.

LINE OF NAVIGABILITY - A line beyond which the water is deep enough for commercial navigation. Outer boundary of shorelands conveyed by the State. Exact location undetermined until fixed by the Department of Natural Resources. It is the same as the inner harbor line if that line has been fixed by the State.

LINE OF VEGETATION - Sometimes, though not technically correct, referred to as the boundary between uplands and state sovereign lands in the beds of navigable (for title purposes) water bodies.

LITTORAL - Belonging or pertaining to shore. Littoral land is land bordering an ocean, sea, or lake, contrasted with riparian land bordering a river or stream, although riparian is often now commonly used for both types of land. Riparian is also used to refer to the rights of landowners abutting water bodies of the landowners are often referred to as littoral owners. Said another way, littoral owners have riparian rights. As with so many aspects of land title along water bodies, the use of littoral and riparian are defined by state and local custom, and sometimes state statutes.

MEANDER LINE - A line run by the government generally following the sinuosities of the shore or bank of a body of water; meander lines were established to provide a means of calculating the acreage on the upland. Public lands were sold by the acre. In Washington State it may be a boundary if it is seaward of uplands patented by the federal government prior to statehood, but during the territorial period. It may also be a boundary if clearly intended in the terms of the land description.

MEAN HIGH TIDE - The average elevation of all high tides over a period of 18.6 years. See also ordinary high tide.

MEAN LOW TIDE - The average of all daily low tides over a period of 18.6 years. Outer boundary of the lands conveyed by the State between 1895 and 1911.

NAVIGABLE (FOR TITLE PURPOSES) - A body of water, existing naturally at the time of statehood that was used, or is susceptible of being used in its ordinary condition, for commerce, navigation, fisheries, and more recently in other general statewide public uses such as canoeing, swimming, diving and similar related uses.

ORDINARY HIGH TIDE - Sometimes the same as mean high tide. Boundary between uplands and tidelands on navigable waters. Sometimes referred to as the line of vegetation, although the latter term is not technically the same.

ORDINARY HIGH WATER - The visible line of the bank along non-tidal waters. Sometimes referred to as the line of vegetation, although the latter term is not technically the same. Boundary between uplands and shorelands on navigable waters. The line that was the waterward boundary of public land patents.

OUTER HARBOR LINE - The outer boundary of the harbor area within city limits as established by the State. The area beyond cannot be given, sold, or leased by the State.

OYSTER LANDS - Usually submerged land below extreme low then leased or conditionally deeded for the cultivation of oysters or other shellfish.

PATENT - The instrument by which the United States grants or conveys title to public lands. States may also issue patents; swamp and overflow lands are one example. An instrument of original conveyance issued by the federal or a state government.

PIERHEAD LINE - Under federal law, the seaward limit where private open-pile structures can be placed with a permit from the Army Corps of Engineers. It is often located at the same place as the outer harbor line established under State law.

PUBLIC TRUST DOCTRINE - The theory under which state government, for the benefit of the general public, controls and regulates use of sovereign lands. The doctrine attached to all lands that the state acquired upon entry into the Union on an equal footing with the original thirteen states. Each state has treated the public trust differently from the time of statehood to the present time. The viewpoints associated with the public trust have changed over time, and continue to evolve. Since the trust involves sovereign lands, it may lie dormant without fear of forfeiture until such time as the state may wish to assert itself; on occasion, private groups force states through legal action to assert the public trust. Title companies that

insure land along sovereign water bodies must determine and keep abreast of the current approaches to the public trust within each state. The federal government is involved with the public trust doctrine on sovereign navigable waters, during the territorial period, until statehood.

RELICTION - The permanent uncovering or exposure of lands formerly covered by waters, usually gradual but sometimes sudden and/or man-made.

RIPARIAN - Belonging or pertaining to lands abutting a stream or river (and generally used also with respect to lands abutting all water, e.g. even littoral lands). See also littoral.

SHORELANDS - Public lands, bordering on shores of a navigable lake or river covered by water, not subject to tidal ebb and flow. A legal term applying to a class of lands in Washington State.

SUBMERGED LANDS - Land that is covered by water some or all of the time. On navigable bodies of water, tidelands or shorelands are public lands, some of which have been conveyed by the State between 1895 and 1971, or leased after 1971. Submerged lands under non-navigable rivers or streams are owned by the upland owner to the thread; under non-navigable lakes by upland owners.

THREAD - The fastest running, usually lowest, part of the main channel of a stream or river. The usual boundary between parcels abutting non-navigable streams or rivers. Sometimes the term center line is used, but the definition is less precise and dependent upon the definition of the bank or shoreline to be used to determine the starting point for locating the centerline of the banks must be defined for a centerline to be determined, whereas the thread is a geographic feature not dependent upon the location of the opposite banks.

TIDELANDS - Public lands over which tidal water ebbs and flows. Lands generally defined as lying between the mean high tide line and the mean low tide line. However, definitions vary from state, and sometime from area to area.

UPLANDS - The dry lands bordering a body of water, the outer boundary of which is a water boundary such as the line of ordinary high tide, ordinary high water, mean high tide, mean tide line, ordinary low water mark, and other similar designations. Title insurers are obligated to know and use the correct terms within their areas of practice.

WETLANDS - Sensitive areas, which may or may not include submerged lands, as defined under state law. A term of increasing importance as a land use planning, often established by federal or state law. They are most appropriately referred to as regulatory wetlands in order to differentiate between navigable sovereign lands which are sometime wet and sometimes dry. The term is greatly misused and consequently misunderstood among title insurers.

## J. Exhibits

Several exhibit sketches illustrate many of the terms that are defined.

Exhibit 1 is a birds eye view of typical land classes along waterways. It illustrates some California specifics, the classes of land – tidelands, swamplands, rivers, and lakes. Some different boundaries are also shown where typically applied. Mean high tide and ordinary high water are examples.

Exhibit 2 is a typical cutaway view of a cross section along a waterway.

Exhibit 3 shows tide lines typically found along coastal areas. The lines are determined by an agency of the federal government by observing the rise and fall of the tides and measuring the elevations above a datum such as mean lower lowwater along the Pacific Coast. The purpose for collecting this information is to prepare coastal charts for sailing purposes. However, states, and courts, have adopted some of these lines for use as boundaries between the sovereign navigable waters and the privately owned uplands. Note the term Sea level datum (SLD). This is the datum for land elevations throughout the United States, whereas the water line datum -- in this instance the mean lower low water -- is the datum used to construct nautical sailing charts. Further information may be obtained by contacting the National Ocean Survey in Washington D.C.

Exhibit 4 suggests that what may seem apparent to a casual observer may not, in fact, provide a title person with the complete story of title. This exhibit shows a typical situation found when reviewing maps in connection with a title search. It illustrates the title location axiom, "What you see on a map may lead to different and often contrary interpretations." Carefully reading land descriptions of both the client and the adjoining, factored into a knowledge of local water boundary law, are the first steps in seeing the rest of the picture.



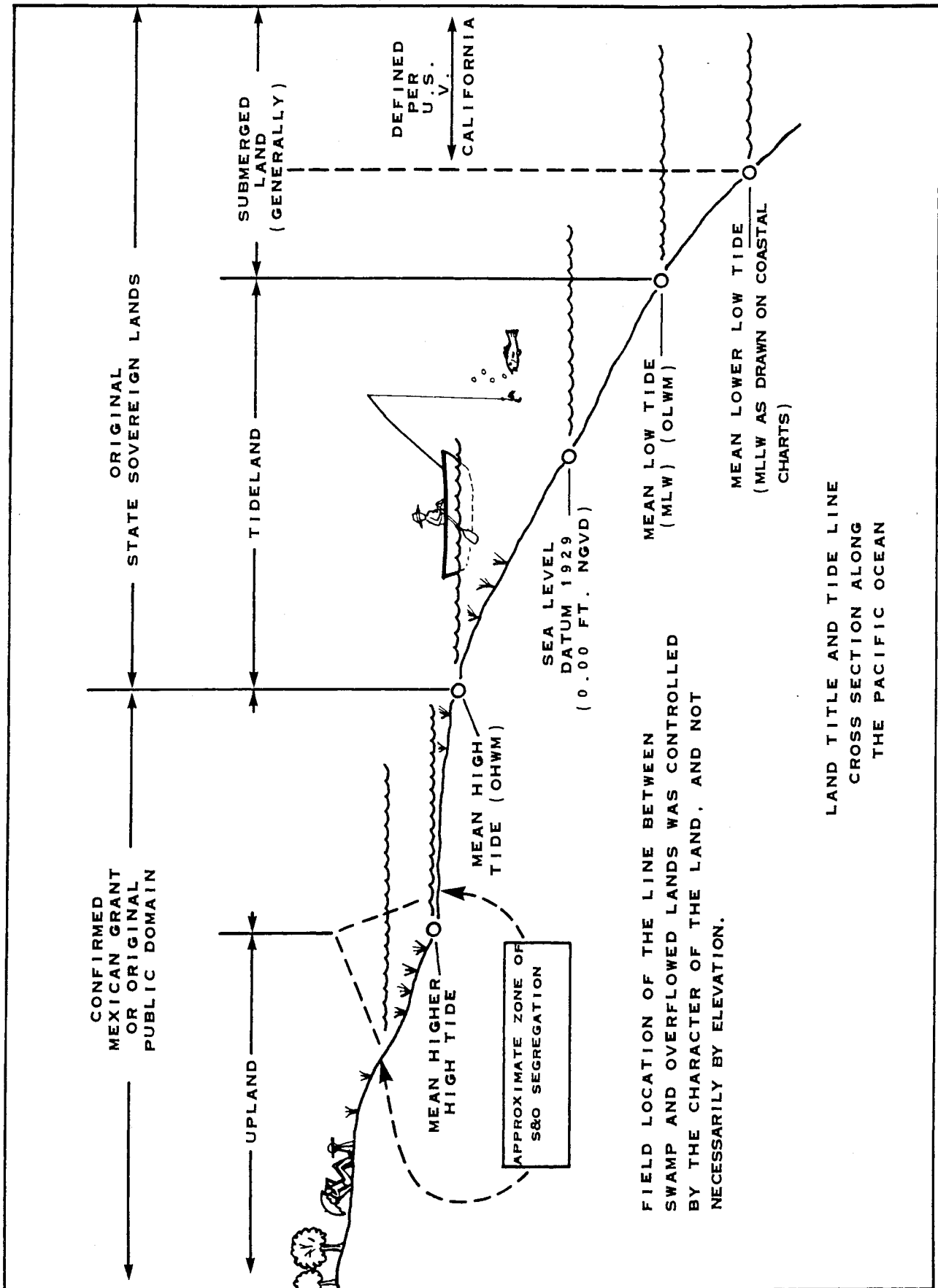
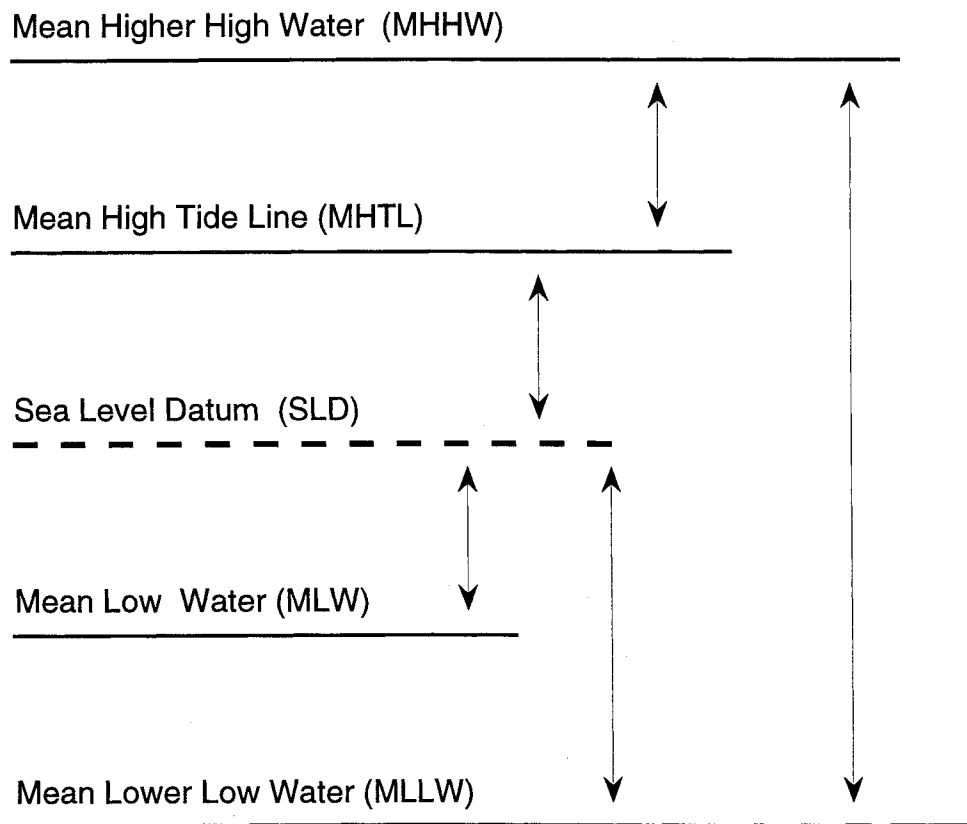


EXHIBIT 2 *Land title and tide line cross section along the Pacific Ocean in California*  
 From *Water Boundaries for California Surveyors*, 2d ed 1992. Permission granted by the author, Roy Minnick.

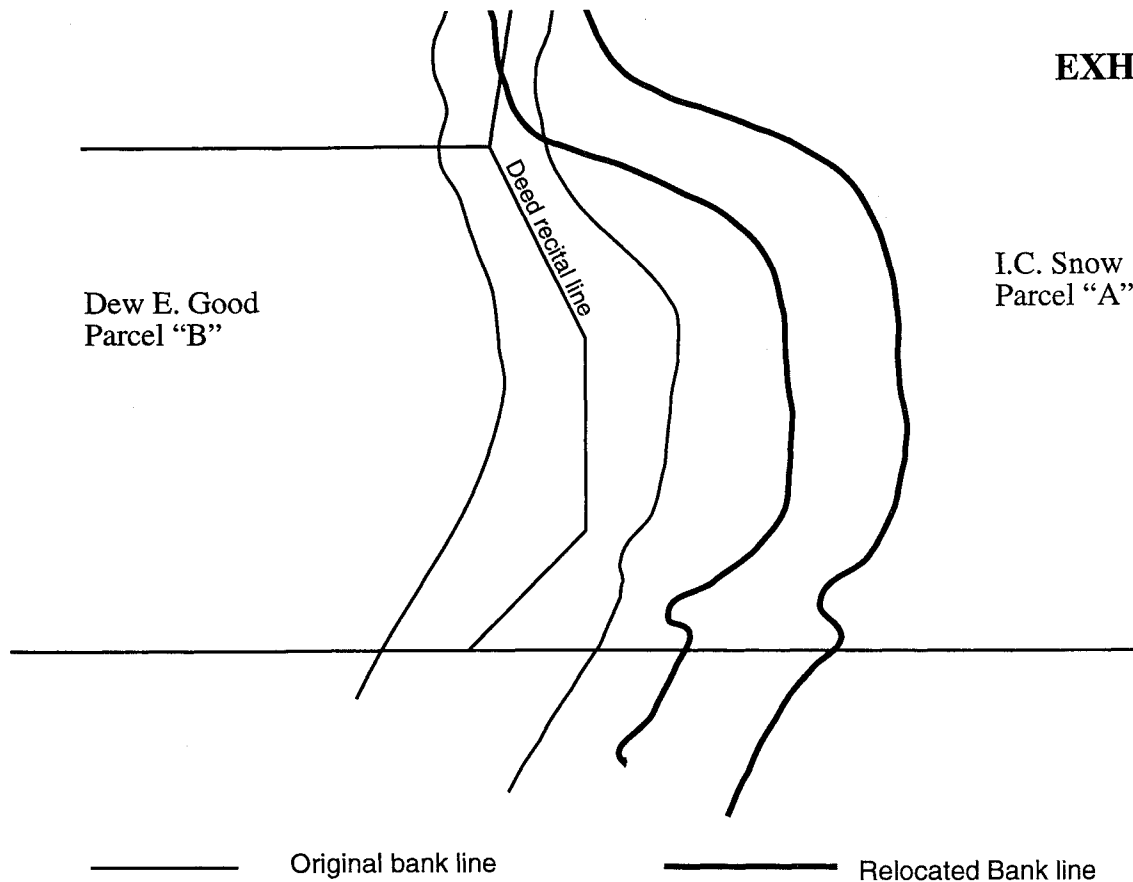
## TIDAL DATUM PLANES ALONG THE CALIFORNIA COAST



### Exhibit 3

The diagram shows the relationship between various reference datums along the Pacific Coast. A different scheme would appear on the Atlantic Coast. The information is collected and published by the National Ocean Survey, as the federal agency responsible for nautical chart preparation. Tide gauges are set at various places and the rise and fall of the tides are continuously recorded, and then an average is taken. The information, while used to compile nautical charts for sailors, has been impressed into service in title and boundary matters. Courts, and some states, have adopted these datums for boundaries between privately owned uplands and state owned tide and submerged lands. The most commonly used is the Mean High Tide Line and in tidal areas it may be decreed the ordinary high water mark boundary. The vertical difference in elevation between each datum varies at each station where the tides are observed; in central California, for example, the range between MLLW and MHW is about five feet on the open coast.





**FACTORS:**

1. Did the change result from natural causes?
2. Does the land description recite a moving or fixed line along the stream?
3. What is State or local practice regarding man-caused alterations in the shoreline?

**Non-Navigable Stream**

If the meandered line of the stream is described to move with the stream—centerline, edge of water, etc.— accretion does not pose a problem. The accretion belongs to the adjacent owner. On the erosion side, there is no concern unless the land owner's policy suggests a certain acreage has been included. The suggested exception is placed in schedule B:

A public easement for navigation and the incidents of navigation such as boating, fishing, swimming, hunting and other recreational uses in and under the (river, lake, canal etc.) and including a public right of access to the water of said (river, lake, canal, etc.)

*NOTE: This is a recreational easement running parallel with the stream; it exists as long as the water exists. It does not include access to the bank, nor does it cover access across property to the stream.*

If there is reason to believe that avulsion took place, or if an artificial influence was introduced, then the following is suggested for schedule B:

Any adverse claim to any portion of said land which has been created by avulsion, or by artificial means, is not insured.

A fixed line recital may not require an exception in the case of artificial or natural accretion — or erosion—the line is fixed obviously; this may vary from state to state. The public recreation easement is suggested for schedule B.