

tioned to cover the faithful performance of the duties of the principal as Resident Engineer of Lawrence County, Ohio.

Finding said bond legal and proper as to form, I have endorsed my approval thereon and return the same herewith.

Respectfully,
GILBERT BETTMAN,
Attorney General.

4810.

MAUMEE BAY—LAND ALONG SHORE LINE ERODED BY WATERS OF
BAY—TITLE TO SAME VESTED IN STATE IN TRUST FOR THE
PUBLIC.

SYLLABUS:

Where land along the shore line of Maumee Bay has been eroded by the action of the waters of the Bay during a period of many years, and, as the result of such erosion, lands which were formerly part of the upland have become submerged by the waters of the Bay, the littoral owner of the upland loses title to such submerged lands, and the title to the same vests in the State in trust for the benefit of the public.

COLUMBUS, OHIO, December 13, 1932.

HON. T. S. BRINDLE, *Superintendent of Public Works, Columbus, Ohio.*

DEAR SIR:—This is to acknowledge the receipt of a recent communication which reads as follows:

“The Village of Harbor View, situated on the southerly shore of Maumee Bay, on Lake Erie, a few miles east of Toledo, has filed with this department an application requesting a determination of the boundary line between certain lands owned by that municipality and lands owned by the State of Ohio in trust for the public, being the bed of said Maumee Bay.

A peculiar situation is presented in this application, for the reason that the shore line has been eroded several hundred feet back from the original line of the waters of the bay, as shown by the Government survey that was made in 1834.

This department is of the opinion that the line should be located in the water along the line of the original survey.

A question has been raised as to whether or not the lands that have been washed away and are now submerged by the waters of the Bay, have become the property of the State of Ohio. The question is important for the reason that the Federal Government, by the use of modern dredges, proposes to cut a channel not less than 300 feet wide and 24 feet in depth in the vicinity of the lands at Harbor View. The deposit from the dredges will assist very materially in reclaiming the land that has been washed away.

The question which we are submitting to you for solution is whether or not these new submerged lands shall be claimed by the State or

whether they are still the property of those who acquired their title originally from the Government, or their successors and assigns down to the present time.

I am enclosing herewith a plat of a survey made under the direction of this department which shows the situation so far as Harbor View lands are concerned."

The question presented in your communication is with respect to the title and ownership of certain submerged lands in Maumee Bay which were formerly a part of the upland on the south shore of the bay at or near the Village of Harbor View, Lucas County, Ohio.

It may be stated generally that the title to the subaqueous lands of Lake Erie and the open bays thereof within the territorial limits of the State of Ohio is in the state in trust for the benefit of the people, for the public uses to which such land may be adapted. *State of Ohio vs. The Cleveland and Pittsburgh Railroad Company*, 94 O. S. 61; *The East Bay Sporting Club vs. Miller*, 118 O. S. 360. Whether the state has title to the submerged land here in question depends upon the manner in which these lands were submerged. From your communication and from other information which has been imparted to me, I am advised that these lands have been submerged by erosion during a period of time dating back to the year 1834 when one Ambrose Rice, acting for the federal government, made a survey of the meander lines along the south shore of Lake Erie and Maumee Bay. Erosion may be defined as the wearing away of the land by the gradual and imperceptible action of the elements; and within this definition it may be said that such wearing away or change in the shore line is gradual and imperceptible when it is not discernible in its progress, although the fact that there has been a change may be perceptible from year to year or at shorter intervals. See Gould on Waters, section 155; *St. Clair vs. Lovington*, 23 Wall. 46. Erosion is the converse of accretion which is the increase of land along the shore of a river, lake or other body of water by the gradual deposit by action of the water of solid material, such as mud, sand or sediment, so as to cause that to become dry land which was before covered by water. In the case of the Matter of the Application of the City of Buffalo, 206 N. Y. 319, where the court of appeals had under consideration certain questions of title arising out of the action of the waters of Lake Erie on certain lands in the City of Buffalo in that state, the court stated the rules applicable in cases of accretion and erosion as follows:

"1. When land bordering a body of water is increased by accretion the new land thus formed belongs to the owner of the upland to which it attaches. Where the loss of the land occurs by avulsion, defined as the sudden or violent action of the elements, the effect and extent of which is perceptible while it is in progress, the boundaries do not change. When the sea, lake or navigable stream gradually and imperceptibly encroaches upon the land, the loss falls upon the owner, and the land thus lost by erosion returns to the ownership of the People by virtue of the sovereignty of the state.

2. Where parcels, formerly upland, have been for many years entirely submerged and surrounded by water as the result of the gradual and imperceptible wearing away of the lands by the natural action of the elements, in such a way that there is no prospect of their restoration, the former owners having made no attempt to stay the encroach-

ment of the water or to reclaim the lost land, and a railroad company has become the owner of the adjoining upland with such riparian rights as attach to it, the ownership of such parcels is in the state by virtue of its sovereign title to all lands below highwater-mark in its navigable waters, and the former owners have no right of reclamation."

The court in its opinion in this case, speaking with respect to claims of one Bowen and others who formerly were the owners of upland which had been eroded by the action of the waters of the lake, said :

"The appellants Bowen and others, who have the record title to parcels 64 and 65 (as marked on the commissioners' map), which are to the west of the railroad company's right of way and its adjacent uplands, claim to be the present owners of said parcels and insist that they are entitled to compensation therefor. These two parcels were formerly upland. When this proceeding was commenced they were entirely submerged and surrounded by water, as they had been for many years. The Commissioners decided that this flooding of the land was the result of erosion. That is a finding of fact which cannot be reviewed upon this appeal. Counsel for the appellants Bowen et al. concedes that if the submergence of these two parcels was caused by erosion, which means the gradual and imperceptible wearing away of the land by the natural action of the elements, the ownership is now in the state by virtue of its sovereign title to all land below highwater mark in the navigable waters of the state. It is urged, however, that these appellants, Bowen et al., have still a right of reclamation for which they are entitled to compensation. The commissioners decided against this contention and we concur in their conclusion. The law applicable to this branch of the proceeding is that 'when portions of the mainland have been gradually encroached upon by the ocean so that navigable channels have been extended thereover, the people, by virtue of their sovereignty over public highways, undoubtedly succeed to the control of such channels and the ownership of the land under them in case of its permanent acquisition by the sea,' (*Mulry vs. Norton*, 100 N. Y. 424, 434.) This is also the rule as applied to the waters of the great lakes and the navigable streams of the state. The loss of lands by the permanent encroachment of the waters is one of the hazards incident to littoral or riparian ownership. Such changes are due to natural causes to which the courts have from time immemorial applied rules of law founded upon considerations of natural justice and public necessity. When land bordering a body of water is increased by accretion, that is to say, by such a slow and gradual deposit of particles that its progress cannot be always measured even though its results may be discerned from time to time, the new land thus formed belongs to the owner of the upland to which it attaches. By the same reason the rule is that when the sea, lake or navigable stream gradually and imperceptibly encroaches upon the land, the loss falls upon the owner, and the land thus lost by erosion returns to the ownership of the state. This is not the rule where the loss of the land occurs by avulsion, defined as the sudden or violent action of the elements, the effect and extent of which is perceptible while it is in progress. In such cases the boundaries do not change. (*Jefferis vs. East Omaha Land Co.*, 134 U. S. 178; *Nebraska vs. Iowa*, 143 id. 359; *Phila-*

delphia Co. vs. Stimson, 223 U. S. 605; *Mulry vs. Norton*, 100 N. Y. 424; *Matter of Hull & Silby Railway*, 5 Mees. & W. 327.)”

The decision of the court of appeals of the State of New York in the case of in the *Matter of the Application of the City of Buffalo*, supra, was in recognition of a principle which reaches far back in the common law of England. Thus, in the case of *In re Hull & S. Railway Company*, 5 Mees. & W. 327, it was held that “if the sea, or an arm of the sea, by gradual and imperceptible progress, encroach upon the land of the subject, the land thereby covered with water belongs to the crown”. Following this principle, the Supreme Court of the State of Oregon in the case of *Wilson vs. Shively*, 11 Ore. 215, held that, “Where land is submerged by the gradual advance of the sea, the sovereign acquires the title to the part thereby covered with water”. The court in its opinion in this case said:

“There is in all such cases, where land is thus situated and contiguous to the sea, as the court say in *Trustees, etc., Town East Hampton, vs. Kirk*, 84 N. Y. 218, the possibility of gain or loss, to which all riparian owners are subject. They would be entitled to whatever should be gained from the sea by alluvian or dereliction, and their title was liable to be lost by the advance of highwater mark, so as to bring the strip reserved within the ebb and flow of the tide.”

This principle has been recognized and applied by the Supreme Court of this state in the case of *Nichaus vs. Shepherd*, 26 O. S. 40, in which case the court in its opinion said:

“We regard the principle of law to be well settled, that where by a gradual and imperceptible process of wearing away the land upon one side, and depositing soil upon the other, the thread of a stream, whether navigable or not, forming the boundary line between adjacent owners, is changed, the boundary line changes with it, since it is the thread of the stream for the time being, and not the one existing at the time the adjacent owners acquired their titles, which forms the boundary line between their estates. 3 Washburn on Real Prop. 56; Angell on Water courses, sec. 57.”

This case, it may be observed, involved principles applicable to erosion and accretion from the action of the waters of a river. As noted in the authorities before cited, however, the same principles apply with respect to the erosion and accretion of lands caused by the action of the waters of the seas and of the Great Lakes.

In this connection, it may be noted that in one of the states bordering on the Great Lakes, to wit, the State of Michigan, it was at one time held that the question with respect to the title of lands lying between the upland and the open waters of Lake St. Clair was conclusively determined by conditions existing at the time of the admission of that state into the Union. It was so held in the case of *State vs. Venice of America Land Company*, 160 Mich., 680. See also *Kavanaugh vs. Rabor*, 222 Mich. 68, and *Kavanaugh vs. Baird*, 241 Mich. 240. However, in the case of *Hill vs. Weber*, 252 Mich. 198, decided under date of December 2, 1930, the Supreme Court of that state receded from its former

position and held that the owner of the upland had title to the increase thereof caused by accretions from the action of the waters of Lake Michigan occurring after the state was admitted into the Union. A like decision on this point was made by the Supreme Court of Illinois in the case of *Brundage, Attorney General, vs. Knox*, 279 Ill. 450. Both of these cases arose out of accretions to upland by action of the waters of the Great Lakes. The principles recognized and applied by the courts in these cases would, however, apply conversely with respect to the erosion of upland by progressive action of waters in these lakes, with the result that the littoral owner would lose title to upland thus eroded.

The application of the principles of law above noted and discussed leads to the conclusion that, upon the facts stated in your communication, the title to the submerged lands here in question is in the State of Ohio in trust for the use and benefit of the public.

Although there is nothing in your communication to suggest a discussion of legal rules and principles other than those applying in case of the erosion of lands, it may be pertinent to note that, if any of the lands here in question were submerged by a temporary or periodical elevation of the level of the lake, the title of the owner of the upland would not necessarily be lost to such littoral owner; and in such case he might reclaim his lands upon the recession or reliction of the waters from such lands. *Baumhart vs. McClure*, 21 O. App. 491.

Likewise, if any of this land was submerged not by the slow process of erosion but suddenly and perceptibly by such violent action of the waters of the lake as to amount to an avulsion of such lands, the title of the littoral owner in such lands would not be lost; but in such case he could recover such lands on the reliction of the waters therefrom. Many years ago this principle of the common law of England was stated in Hargraves' Law Tracts de Jure Maris 36, 37, as follows:

"If a subject hath land adjoining the sea, and the violence of the sea swallow it up, but so that yet there be reasonable marks to continue the notice of it, or though the marks be defaced, yet, if by situation and extent of quantity, and bounding upon the firm land, the same can be known, though the sea leave this land again, or it be by art or industry regained, the subject does not lose his property; and accordingly it was held by Cooke and Foster (7 Jac. C. B.), though the inundation continue forty years. * * * But, if it be freely left again by the reflux and recess of the sea, the owner may have his land as before, if he can make it out where and what it was; for he cannot lose his propriety of the soil, though it be for a time become part of the sea, and within the admiral jurisdiction while it so continues."

See also *Mulry vs. Norton*, 100 N. Y. 424.

However, as above noted, there is nothing in your communication or in any other information which has come to me to indicate that the lands here in question were submerged otherwise than by the erosion of the upland by action of the waters of the lake and, upon the considerations above noted applicable to the facts stated in your communication, I am of the opinion that the title to these lands is in the state in trust for the benefit of the public.

Respectfully,

GILBERT BETTMAN,
Attorney General.