of the Brooklyn Bridge to Battery Park nonnavigable waters of the United States.

The Office of Lower Manhattan Development, a part of the Office of the Mayor of New York City, is working on a project for the development of the waterfront of the Hudson and East Rivers within these areas. An initial phase of the work on the Battery Park city project extending from Chambers Street to the Battery is being undertaken jointly by the city of New York and the State of New York. A memorandum of understanding between the city and State provides for the creation by the State of a nonprofit corporation which will lease the area from the city and will undertake to obtain financing and to develop the area without cost to the city. The area will be developed as a balanced community containing residential, commercial and civic facilities. There is nothing in the agreement to indicate waterfront development for shipping, marinas, et cetera, although such features are not excluded.

The purpose of the proposed legislation is to enable the participants in the development to show clear title to areas proposed to be filled so that financing may be obtained. Under the navigation servitude of the United States, fill placed in navigable waters is subject to Federal use without compensation to its owner. While the possibility of such use is remote where substantial development has occurred, still title and mortgage insurance firms are very reluctant to insure clear title to or accept as security such filled lands unless the navigation servitude is made inapplicable. The proposed legislation is intended to accomplish

this.

The existing project for the improvement of the Hudson River which was adopted by Congress between 1913 and 1937 provides in part for a channel 40 feet deep for the full width of the river from deep water in Upper Bay, New York Harbor, to the north line of West 59th Street, Manhattan, and for a channel 2,000 feet wide and 45 feet deep from Upper Bay to West 40th Street and thence 48 feet deep to West 59th

Street.

In the section of the Hudson River between the Battery and Canal Street there were formerly 27 piers in use for foreign and domestic shipping including railroad lightering service between New Jersey and New York. At the present time there are only two piers in use in foreign service, six have been demolished and the remaining are either vacant or used for nonwater-oriented storage. In the section of the East River between the Battery and the Brooklyn Bridge there were formerly 15 piers in use for foreign and coastwise shipping and the Fulton Fish Market. At the present time, there are only two piers in use in foreign service. The remaining piers are either vacant or have been demolished. If the lower Manhattan project is consummated, the remaining piers will have to be demolished.

Mr. Chairman, there are a number of questions which should be resolved concerning the possible effects of the filling on navigation

and the regimen of the waterway.

These questions involve the effect of the land fill on current velocities and flow patterns in the river as well as in any slips for pleasure craft or commercial ships which may be proposed and its effect on the shoaling of the channel and vessel berths.