

An aerial photograph of Philadelphia, Pennsylvania, showing the Delaware River, the city skyline, and the Ben Franklin Bridge. The text "Windmill Keys Development" is overlaid in large blue letters.

Windmill Keys Development

**Delaware River between the Walt Whitman
and the Ben Franklin Bridges**

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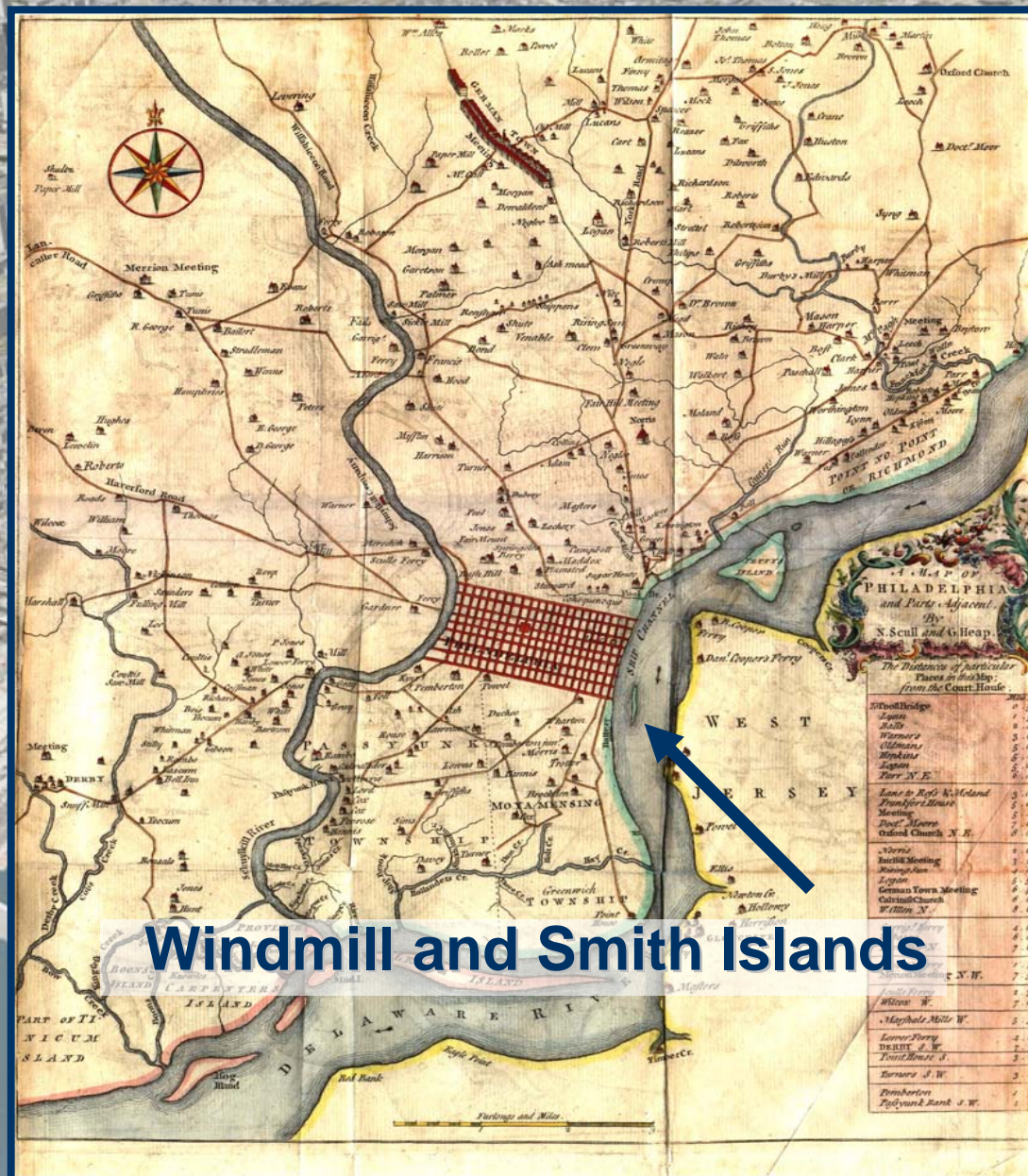
February, 2008

An aerial photograph of a city waterfront. On the left, a dense urban area with numerous skyscrapers and buildings is visible. A wide river or harbor flows from the top right towards the bottom left. In the foreground, a large ship is docked at a pier on the right side. The water is dark blue, and the sky is a pale blue. The text 'Concept:' is overlaid in the center of the image.

Concept:

**Beneficial reuse of dredge spoils create
economic development
Investment: \$1 billion**

Historic Scull & Heap Map of Philadelphia - 1752



Windmill and Smith Islands

PHILADELPHIA.



Diagram Showing Proposed Extension of Port Warden's Line.

[The dotted shore lines shown illustrate the present Port Warden's line and; hatched shorelines show the proposed extension. The dark part of Petty's Island indicates the portion that it is proposed to cut away].

Circa 1830



WINDMILL AND SMITH'S ISLANDS, TO BE REMOVED TO OPEN CHANNEL IN DELAWARE RIVER.

Smith Island

Windmill Island



Circa 1880

F. Gutekunst, Photo.

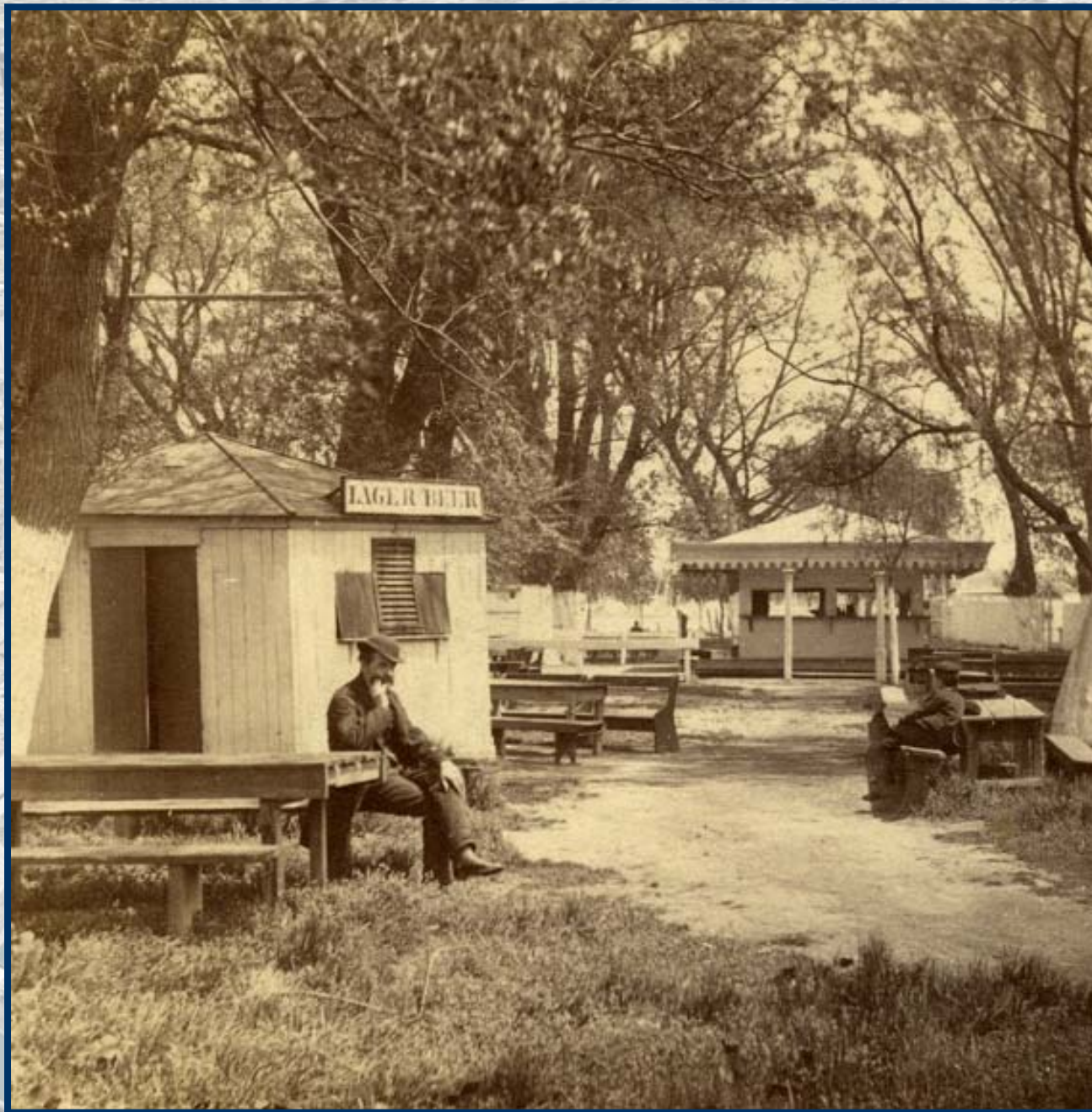
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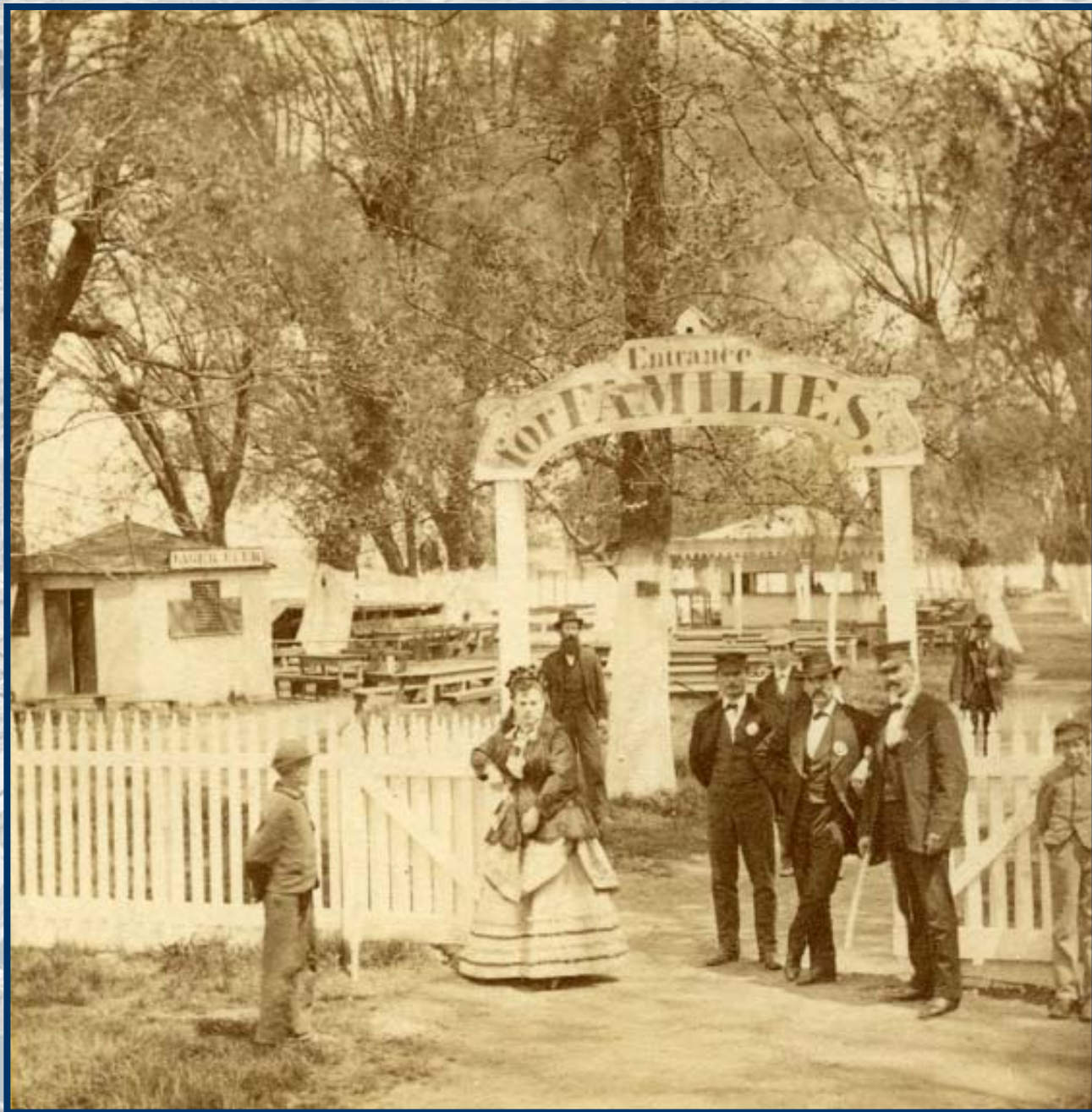


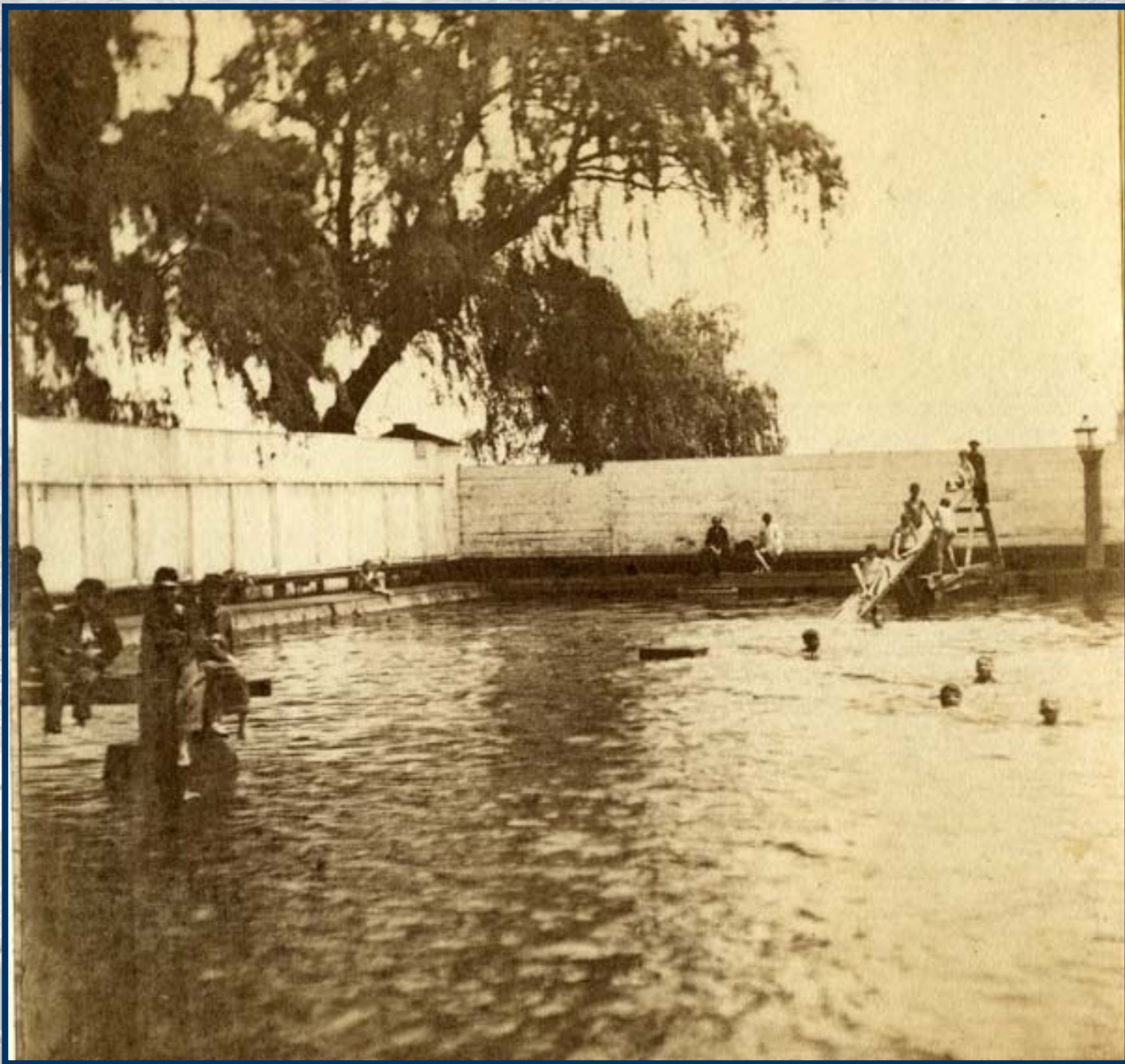


Smith's Island.









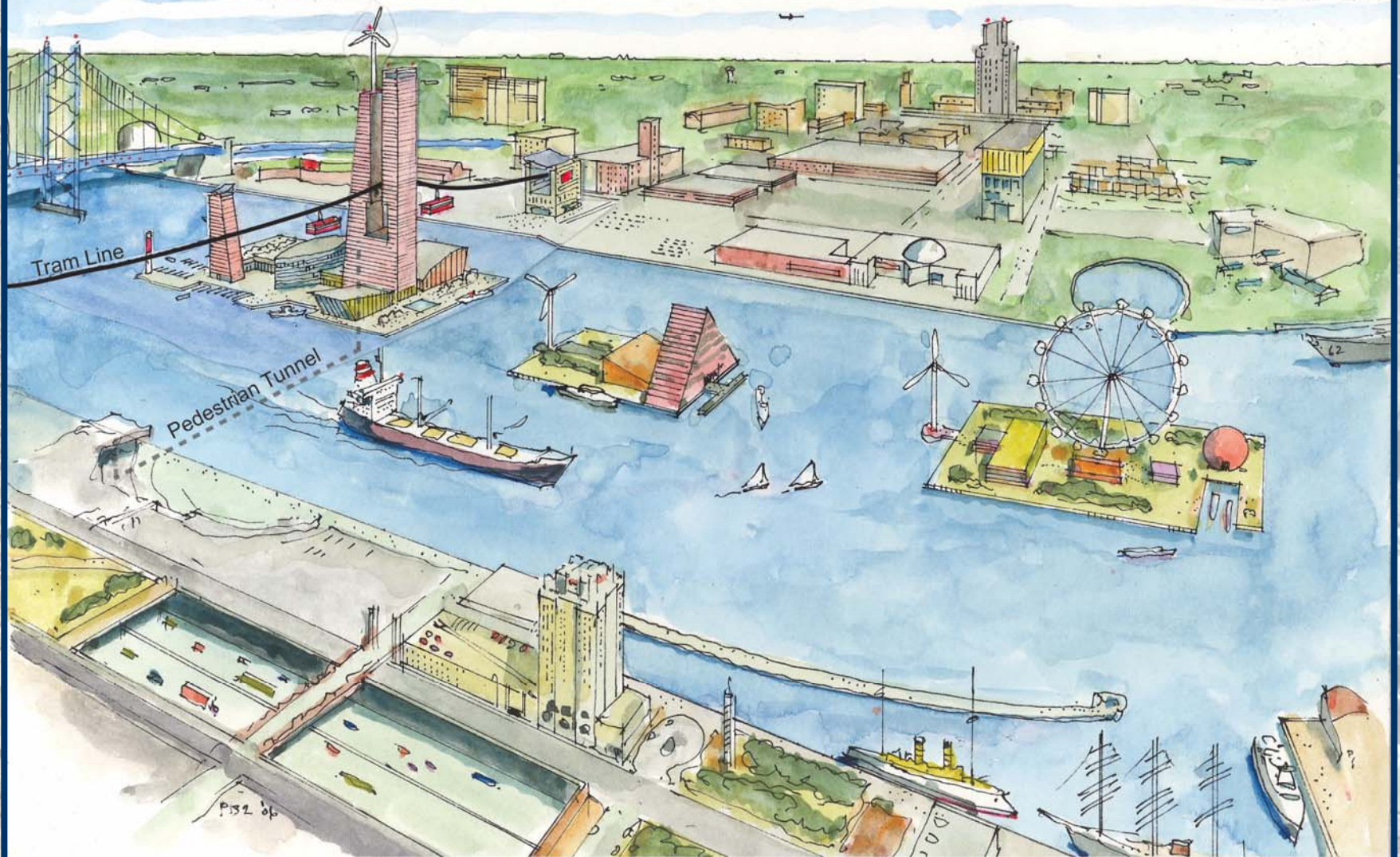
Island Development

Creation of series of 13 islands for a variety of economic development uses:

- **Commercial**
- **Residential**
- **Recreational**
- **Nature Preserve – Zoo**
- **Golf Course**

Wetlands
Fairmount Park Island
Marina
Gaming Industry

Island Development





Windmill Keys

Windmill Keys Development, LLC

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Circa 1880

Economic Impacts

Construction:

- Capital: \$1.8 Billion
- State Tax: \$97 Million
- City Tax: \$74 Million
- Jobs: 19,000

Annual Operations:

- Capital: \$347 Million
- State Tax: \$95 Million
- City Tax: \$42 Million
- Jobs: 4,500

Reduced Carbon Footprint

Substantial decrease in energy expenditure by depositing dredge materials close to channel site

Versus

- Energy cost of trucking dredge materials 100 miles up-state

Who else has built islands?

Miami, Florida
Star and Fisher Islands



Chesapeake Bay
Poplar Island

QuickTime™ and a
decompressor
are needed to see this picture.



Dubai
Palm and World Islands

Access to Islands

- Trams from Philadelphia to Islands and on to Camden
- Water taxi services and ferry services
- Pedestrian tunnels
- Floating or elevated bridges

Big Ships in Narrow Channels



Summary

- PA-NJ economic benefits from dredge spoils
- Solution to environmental, cost and environmental problems for spoils
- Reinforces current economic development initiatives for both PA-NJ on the Camden and Philadelphian waterfronts
- As Will Rogers said: *“Invest in real estate because they don’t make it anymore.”*

400 foot
channel