

Appendix B Coastal Management Program Boundaries

Overview (See Chapter 3 of Program Document for more detail)

The coastal zone boundary for the Illinois Coastal Management Program (ICMP) defines the land and water areas that are within the limits of this program. A lakeward coastal zone boundary for Illinois is the Illinois state line in Lake Michigan. This state line borders the open-water areas of Wisconsin on the north, Michigan on the east, and Indiana on the south. Approximately 1500 square miles of lake and lake bottom are included within this area. The neighboring Lake Michigan states similarly include all of the lake and lake bottom within their defined coastal zone boundaries.

In defining the landward limit for a coastal zone boundary, the neighboring states of Wisconsin and Indiana have both used political boundaries. In Wisconsin, county lines were used such that the entire land area of counties bordering the state's Lake Michigan shore is within the coastal zone. In Indiana, township lines were used such that the entire land area of townships are included that contain any land that is within the state's Lake Michigan watershed.

The approach taken for Illinois has been to define the coastal zone boundary with a focus strictly on the landscape. Specifically, the boundary is primarily based on the Lake Michigan watershed within Illinois. There is no provision made for political boundaries. However, because of the high degree of altered drainage, river engineering and urban development, some flexibility was required in using the watershed approach.

Because of the degree of urbanization across the entire Illinois coastal area, the demarcation of the coastal zone boundary is along the center line of selected streets, roads and highways that approximate the watershed limits. In a few locations, it was necessary to use railroad right-of-ways. The use of the road and railroad infrastructure to define the coastal zone boundaries provides the advantage of defining a line that is easily identified on the ground.

A Two-Tiered Coastal Zone Boundary

The geologic and engineering history of the Illinois coast gives this coastal setting some physical attributes which are distinct to the Great Lakes Region. The coastal zone boundary for Illinois has taken into account these physical attributes and results in a two-tiered designation. The primary or "lakeshore" coastal zone boundary defines the land area within the present-day Lake Michigan watershed. This "present-day watershed" area is roughly 85 square miles. A secondary or "inland waterway" coastal zone boundary defines corridors along select segment of rivers that historically flowed to Lake Michigan but were engineered in the early 1900s to flow away from the lake. These inland waterways have a navigable link to Lake Michigan and are a critical interface between Lake Michigan and the regional river system. The inland waterways included in the coastal zone boundary add roughly another 25 square miles to the inland portion of our coastal zone.

Lakeshore Coastal Zone Boundary

Green Bay Road plays a major role in defining the coastal zone boundary through Lake County and into northern Cook County. This arterial generally follows the crest of a glacial moraine (the Highland Park Moraine) that is the high ground forming the boundary of the Lake Michigan watershed. In northern

Lake County, Green Bay Road is as much as four miles inland from the Lake Michigan shoreline, and thus northern Lake County has a broad area within the coastal zone. This extent includes all of the watersheds of streams that drain this area and discharge to Lake Michigan such as Kellogg Creek near Winthrop Harbor, Bull Creek in Zion and Beach Park, Waukegan River in Waukegan, and Pettibone Creek in North Chicago.

The coastal zone boundary along Green Bay Road assures that all of the ravines of the North Shore municipalities are within the designated coastal zone. These ravines include intermittent streams that discharge stormwater and surface drainage to Lake Michigan. The ravines also have a variety of slope stability and erosion issues that are critical coastal management concerns.

The coastal zone boundary along Green Bay Road (with a few road name changes in Lake Forest, Highwood, and Glencoe) extends as far south as Tower Road in Winnetka. At Tower Road, the boundary shifts about one half mile eastward to Sheridan Road. This boundary shift occurs for two reasons. First, Tower Road approximates the southern limit of the North Shore ravines. Second, and more importantly, this shift is consistent with how the lake watershed is defined through the municipalities to the south. Surface drainage is directed to combined sewers and there is no storm-water discharge to Lake Michigan. In the municipalities of Glencoe, Winnetka, Kenilworth, Wilmette, Evanston and all but far southern Chicago, the Lake Michigan watershed boundary is essentially along the upper limits of the beaches or along the shore-protection structures along the shoreline. This narrow band of Lake Michigan watershed is a result of the river and drainage engineering of this urbanized shore.

The watershed basis for defining the Illinois coastal zone boundary would dictate that much of the lakeshore from Glencoe southward would have little or no coastal zone land. However, a boundary has been defined to assure inclusion of all parkland that borders or is in proximity to the lakeshore. Sheridan Road provides an arterial and common boundary from Winnetka southward to Chicago's far north lakeshore. Streets that border the western (landward) side of Chicago's lakeshore park system are used to define the boundary. Through the Chicago Loop, Michigan Avenue provides a boundary to include all of Grant Park as well as parkland north of the Chicago River in the Streeterville neighborhood. On Chicago's near south lakeshore, the Metra right-of-way provides a boundary to include the full extent of Burnham Park to either side of Lake Shore Drive. On Chicago's far south lakeshore, the boundary along South Shore Drive and connecting arterials provides for inclusion of all lakeshore parks and follows the designated route of the Lake Michigan Circle Tour.

In southeastern Chicago, the lakeshore coastal zone boundary extends inland to encompass a broad area of lakes, streams and wetlands that have a hydrologic connection to Lake Michigan and are part of the Lake Michigan watershed. Lake Calumet and the Calumet River are key features, as well as Wolf Lake, Indian Creek, and Hegewisch Marsh. The lakeshore coastal zone boundary through the Calumet area has generally been defined along the first through street landward from the water or wetland areas. The boundary crosses the Calumet River at the Thomas J. O'Brien Lock and Dam. This facility separates water of the Lake Michigan watershed from water diverted away from Lake Michigan in the Illinois Waterway system.

Inland Waterway Coastal Zone Boundary

The second-tier boundary for the Illinois coastal zone consists of land corridors along the two river systems in the Chicago area that historically flowed to Lake Michigan but now have their flow diverted away from the lake. The Chicago River was diverted in 1900 with completion of the Chicago Sanitary and

Ship Canal. The Little and Grand Calumet River flowed to Lake Michigan until 1922 with completion of the Calumet-Sag Channel.

Dams and bulkheads form a water barrier between these river systems and Lake Michigan. However, locks provide navigation access between the rivers and lake. These locks also provide a means to open river flow into Lake Michigan during heavy precipitation storm events, when it is necessary to manage a surplus of combined-sewer flow into the river system. The segments of these river systems in proximity to the Lake Michigan watershed provide a front line for managing water quality, invasive species, and recreational and commercial boating between the rivers and lake.

A corridor along these inland waterways is defined to include land that borders these waterways and to include existing parkland and public space along the water edge. The primary basis used in defining these corridors was to use the first through street landward from the waterway. In some cases, this boundary division was straight forward, such as along a major part of the North Shore Channel where McCormick Boulevard is parallel to the west side of the channel and corresponds to the border of existing channel-side parkland. Where it was possible to define a boundary along arterials that parallel the waterway, these arterials were used rather than secondary streets closer to the waterways. Examples of such selected arterials are Elston and Clybourn Avenues along the North Branch Chicago River, and Archer and Canalport Avenues along the South Branch Chicago River.

The downstream limits of the inland waterways were determined by the bridge crossing closest to the where these rivers transition into the engineered channels that provide for their westward diversions. The downstream limit of the corridor along the South Branch Chicago River occurs at the Damen Avenue Bridge. The downstream limit of the corridor along the Little Calumet River occurs at the Ashland Avenue Bridge.

An upstream limit for the corridor along the North Branch Chicago River is defined as the dam and weir located on the North Branch at West River Park near Foster Avenue. This structure corresponds to the upstream navigable limit of the North Branch.

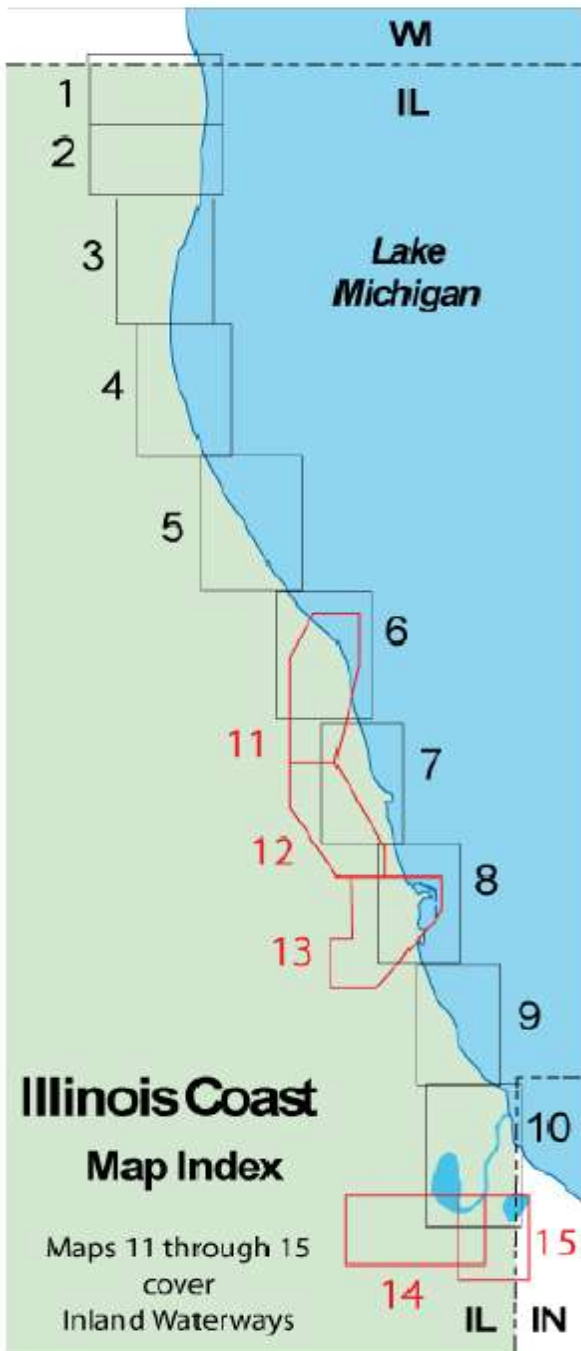
Summary

The Illinois Coastal Zone Boundary focuses strictly on the landscape, and only to the extent necessary to control shorelands, those which could have a direct and significant impact on the coastal waters. The total landward zone is estimated at 110 square miles, which is one of the smallest inland boundaries in the country.

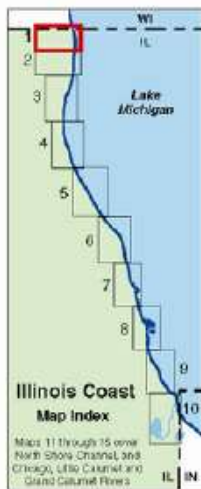
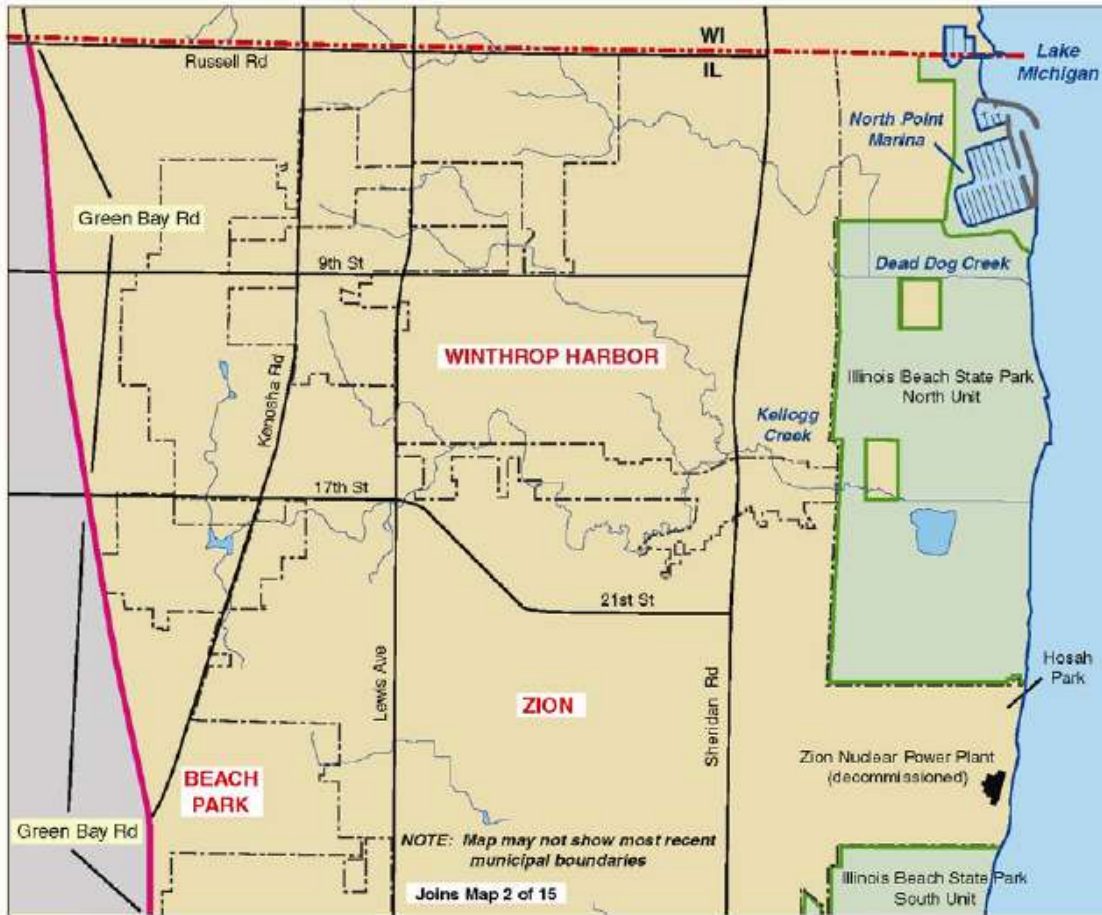
The boundary is delineated in a manner which is clear and exact enough to easily permit determination of whether property or an activity is located within the Illinois CMP. By using roads and railroads to define the boundary, which the public can readily recognize, the CMP coordination and review processes will be facilitated for all parties involved.

The boundary is foresighted, in that it includes those areas which could reasonably be expected necessary in order to address the issues identified as meriting special attention through the Illinois CMP. It includes navigable segments of the immediate inland waterways, which will enable addressing critical Lake Michigan issues, such as invasive species, combined-sewer overflow, recreational boating, tourism, and water quality. It also assures that all existing public parks along these waterways are included. These

areas are appropriate for inclusion, based on the dependency of these corridors on water access and their visual relationships in such a highly urbanized area.



1. IBSP North
2. IBSP South
3. Waukegan
4. Lake Forest
5. Glencoe
6. Evanston
7. Montrose
8. Chicago Loop
9. Jackson Park
10. Calumet
11. N Shore Chicago
12. North Branch
13. Main S Branch
14. Calumet Park
15. Grand Calumet

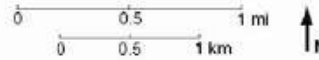


Illinois Coastal Management Program
Coastal Zone Boundary
MAP 1 of 15

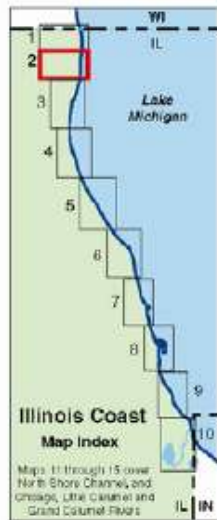
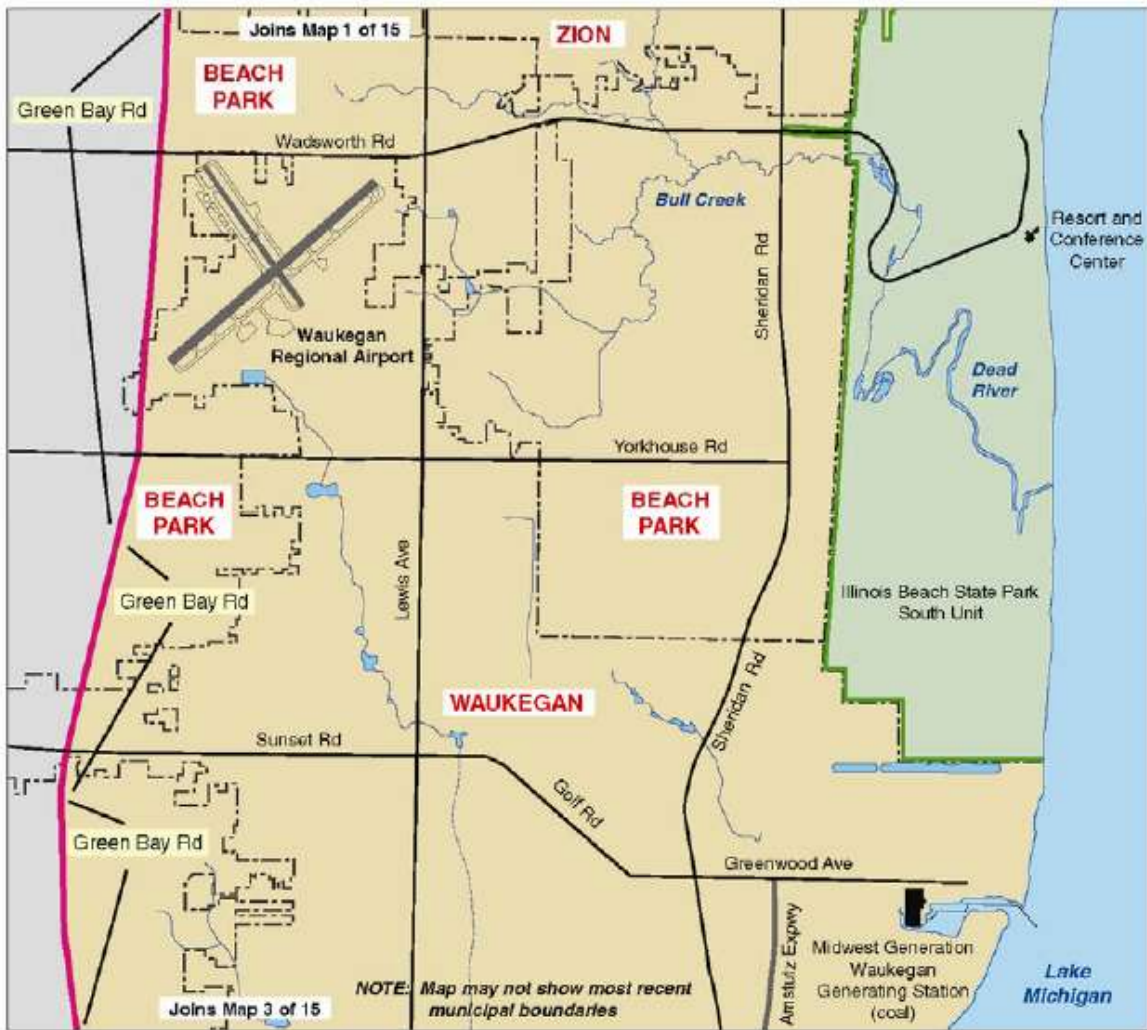
Coastal Zone Boundary
 Street names indicated
 - Boundary is steel center line

Municipal boundaries
 Municipal names in red

Land area within coastal zone
 (state park land indicated by green)

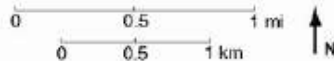
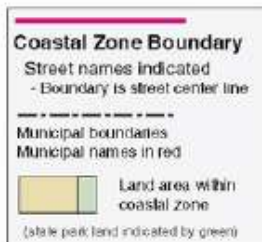


Base Map USGS 7.5-Minute Quadrangles
Wadsworth (1998), Zion (1993)



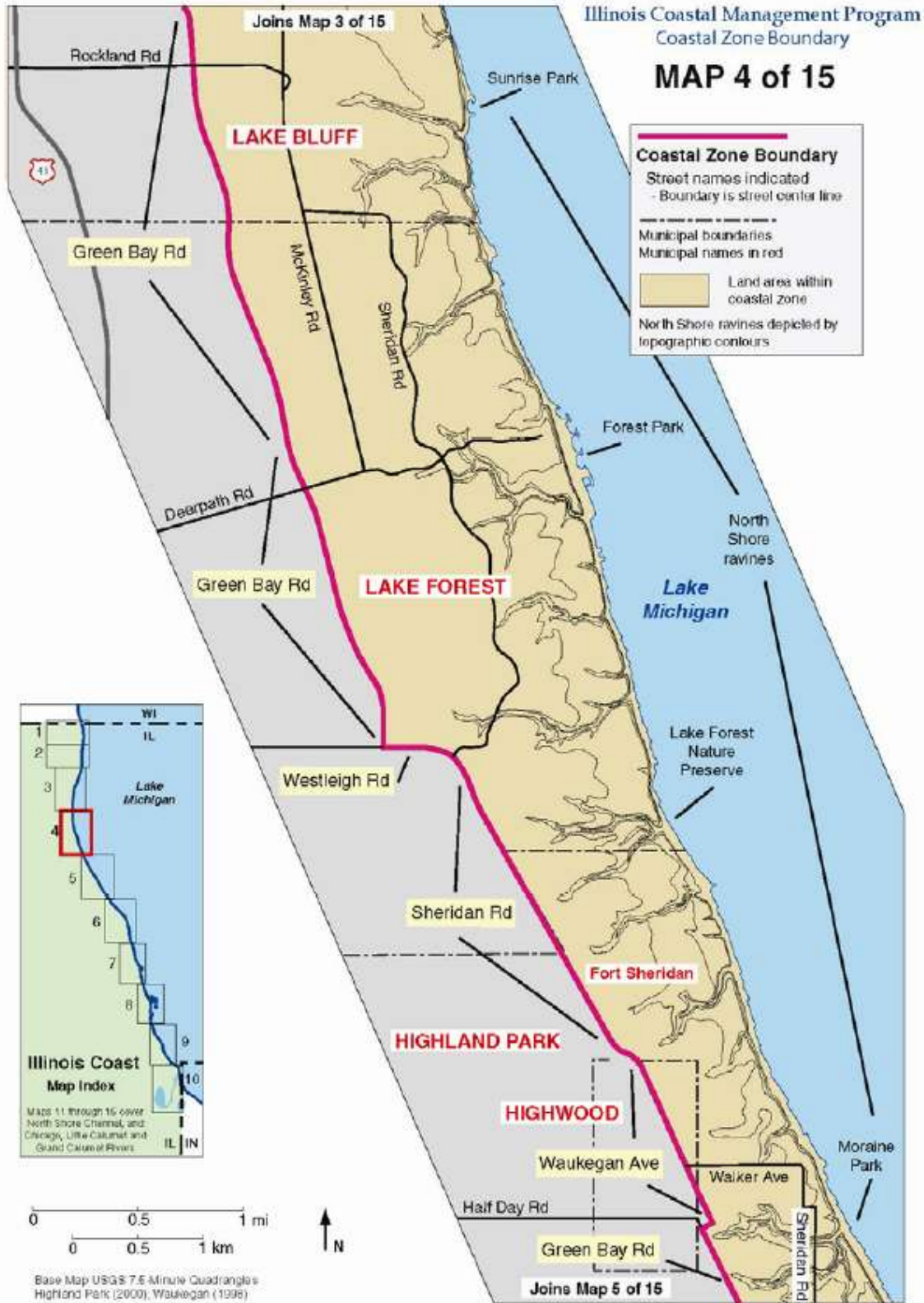
Illinois Coastal Management Program
Coastal Zone Boundary

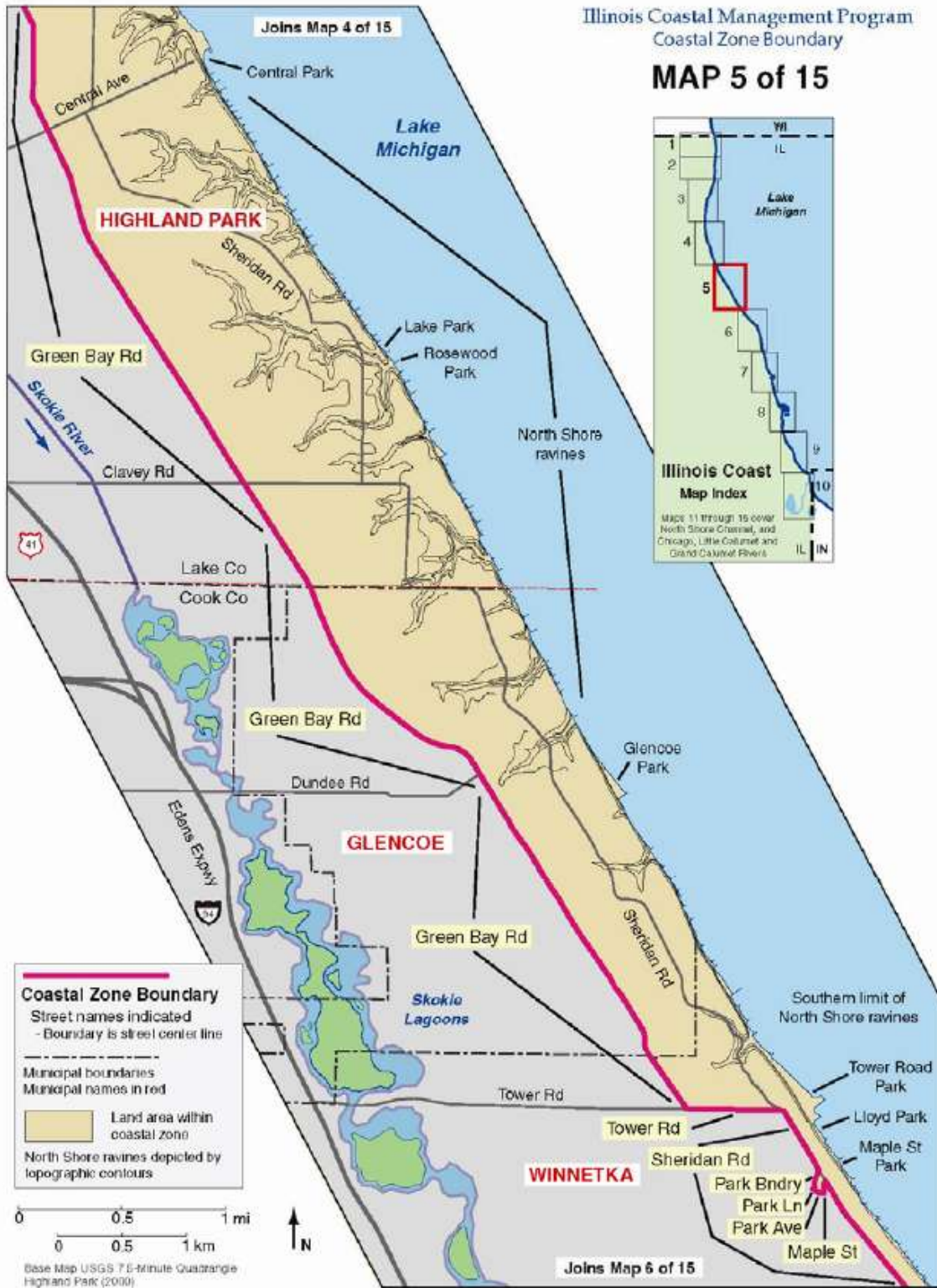
MAP 2 of 15

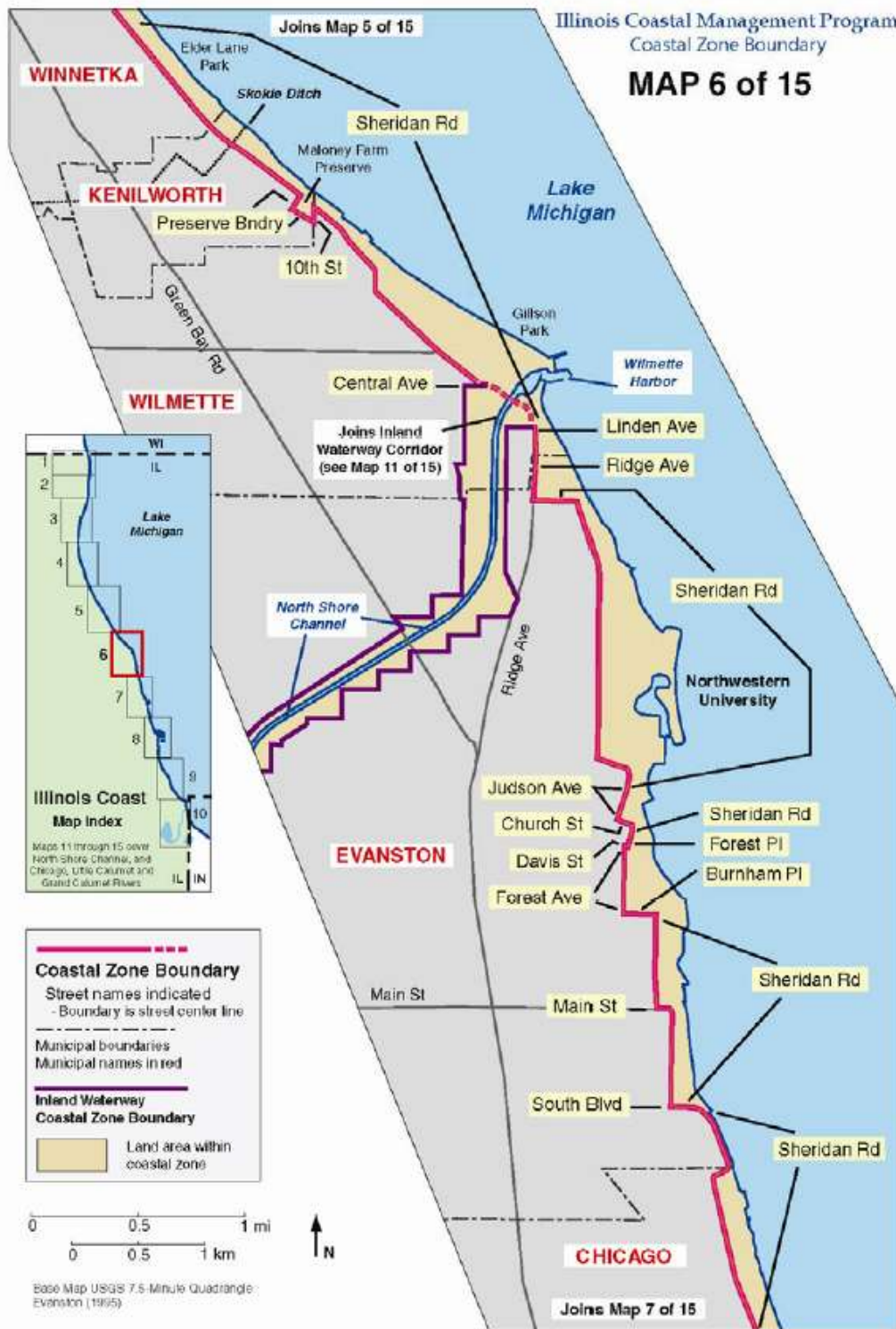


Base Map USGS 7.5-Minute Quadrangles
Wadsworth (1998), Zion (1998)

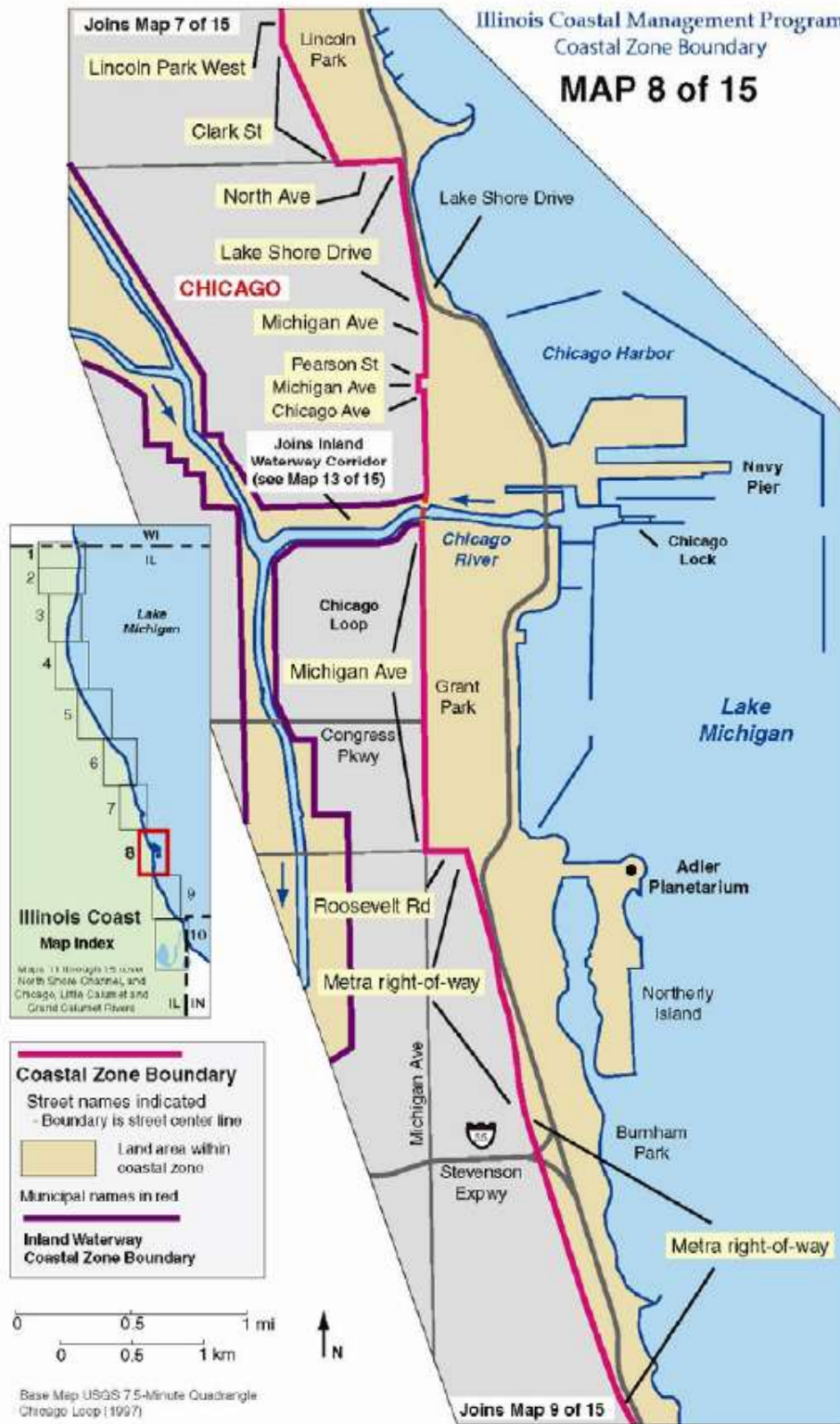


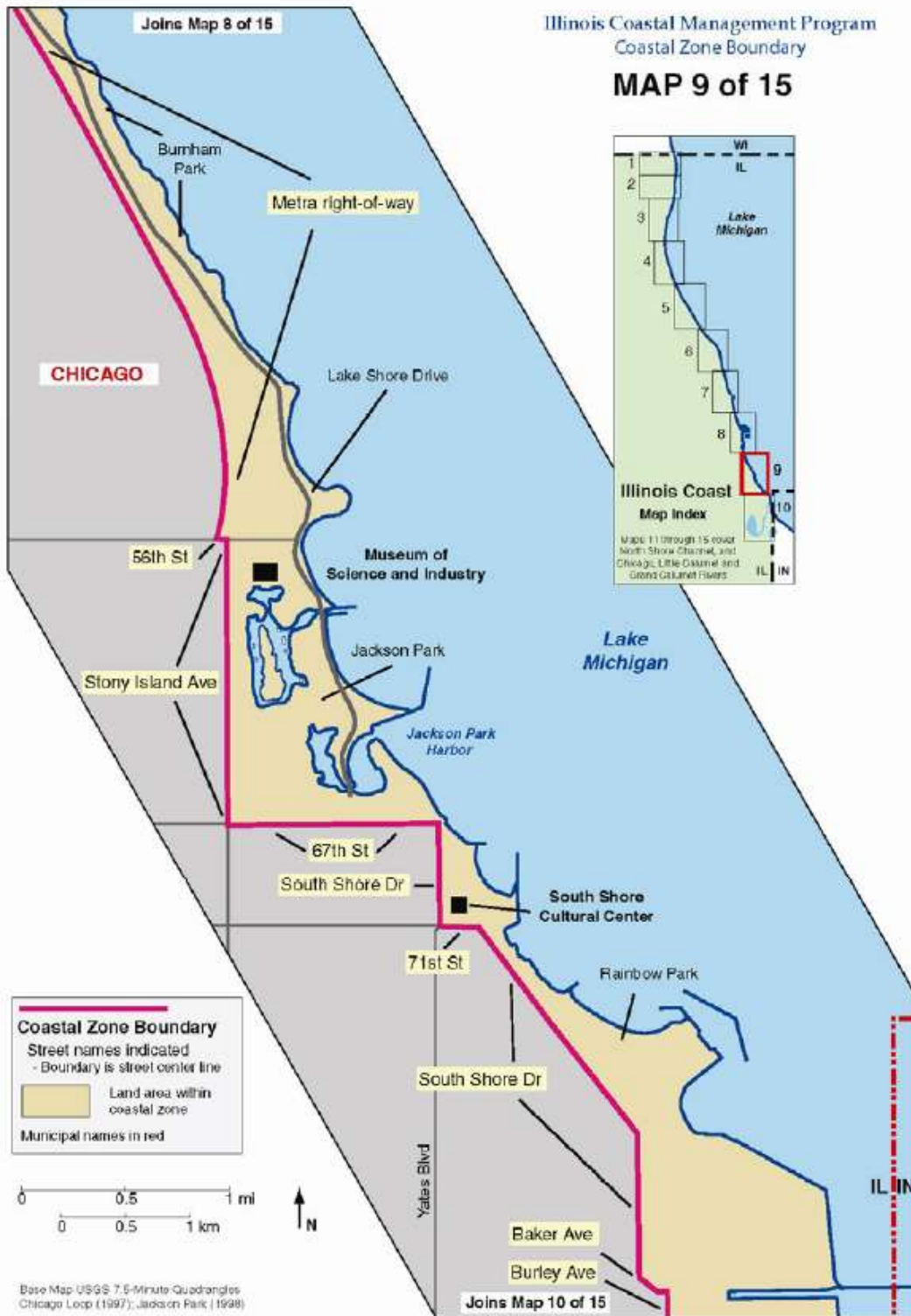


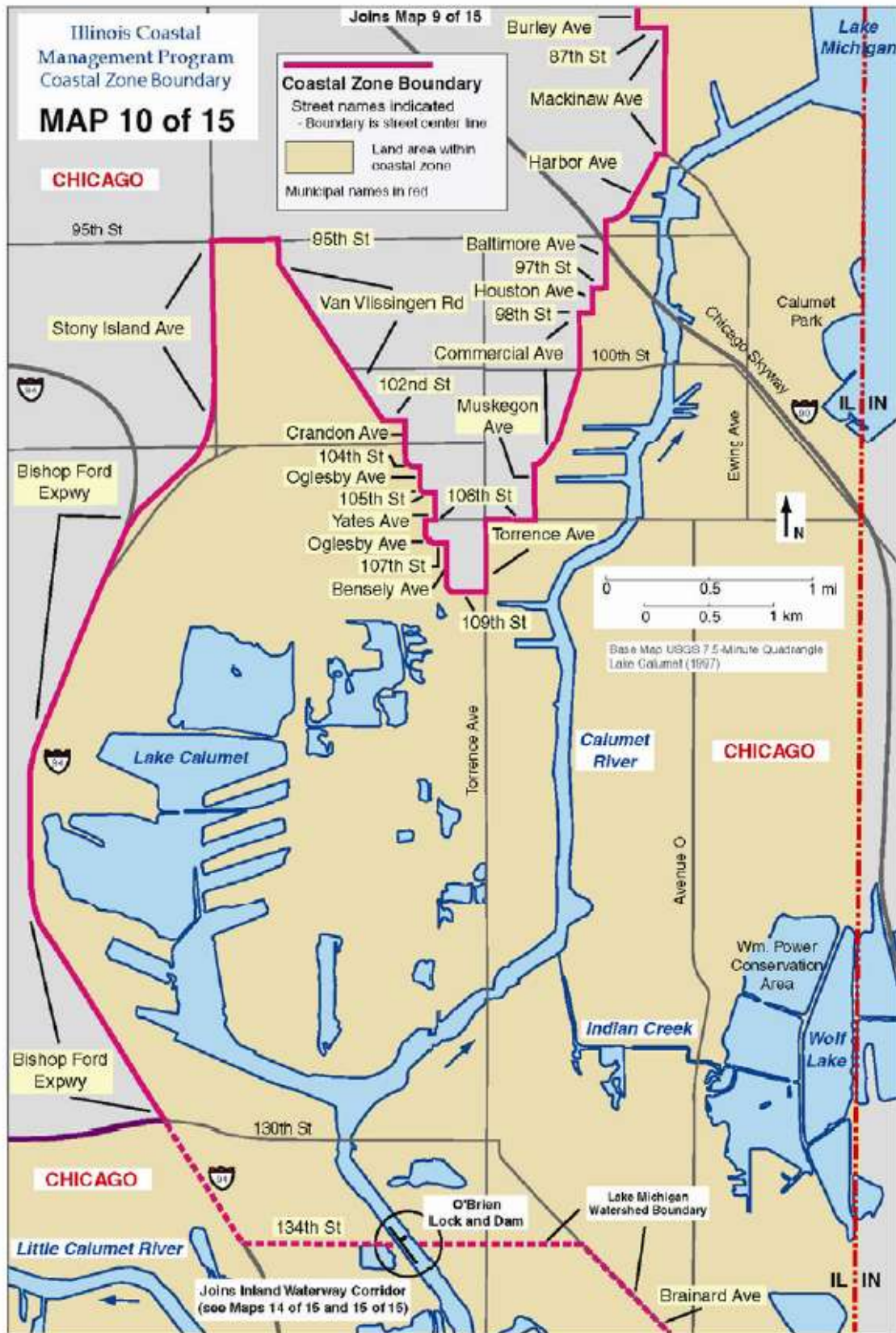












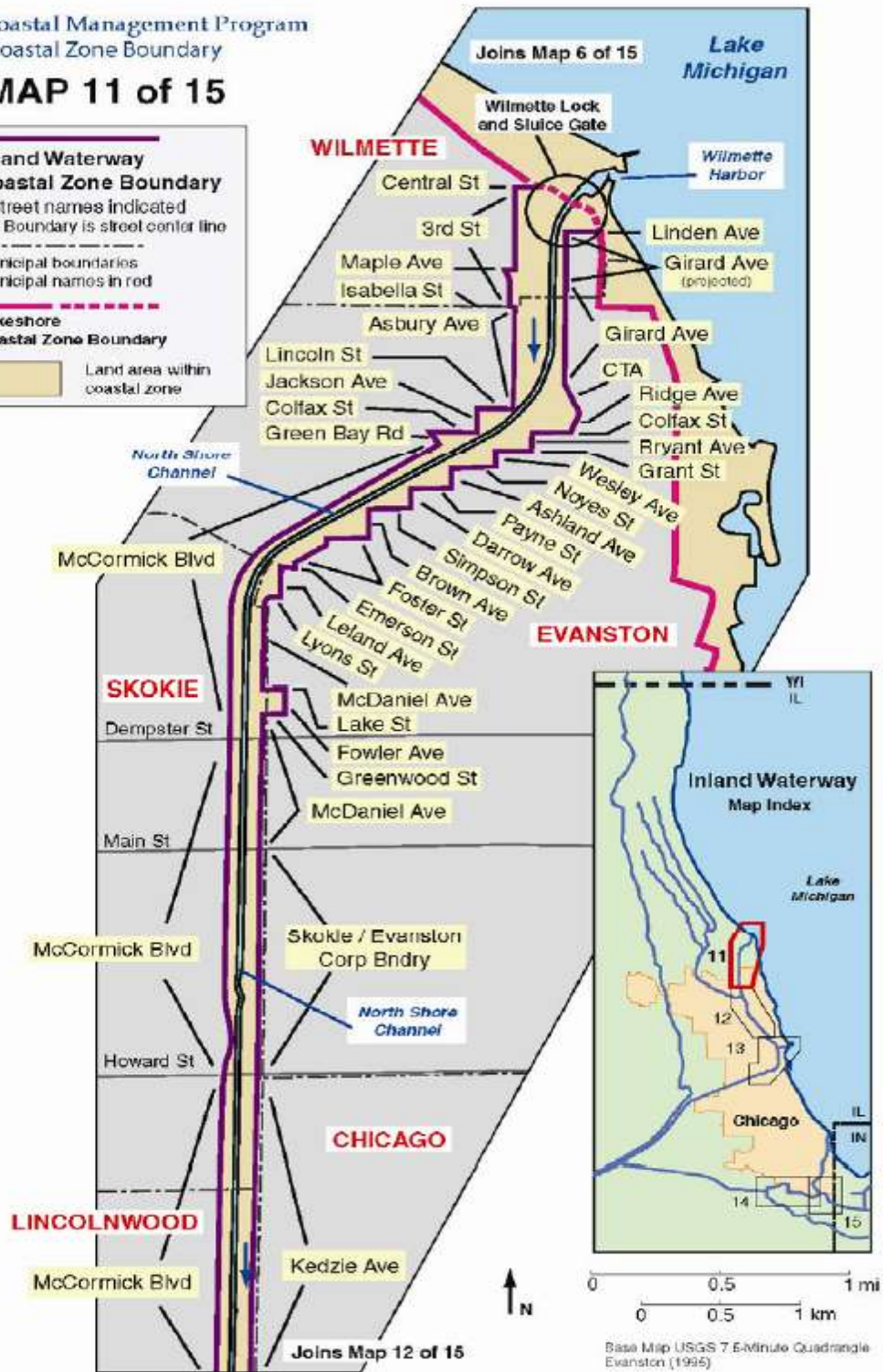
Illinois Coastal Management Program
Coastal Zone Boundary
MAP 11 of 15

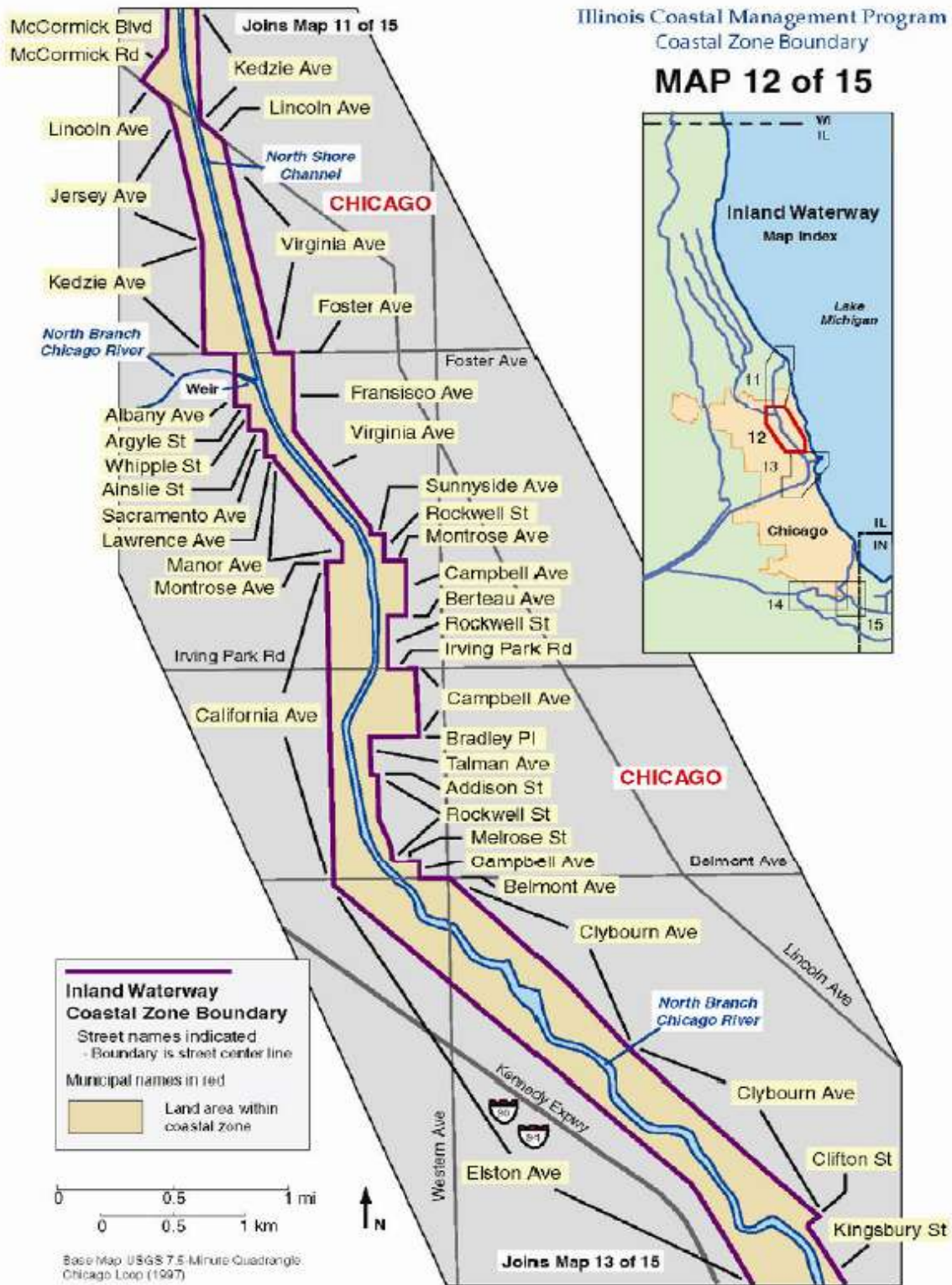
Inland Waterway
Coastal Zone Boundary
Street names indicated
Boundary is street center line

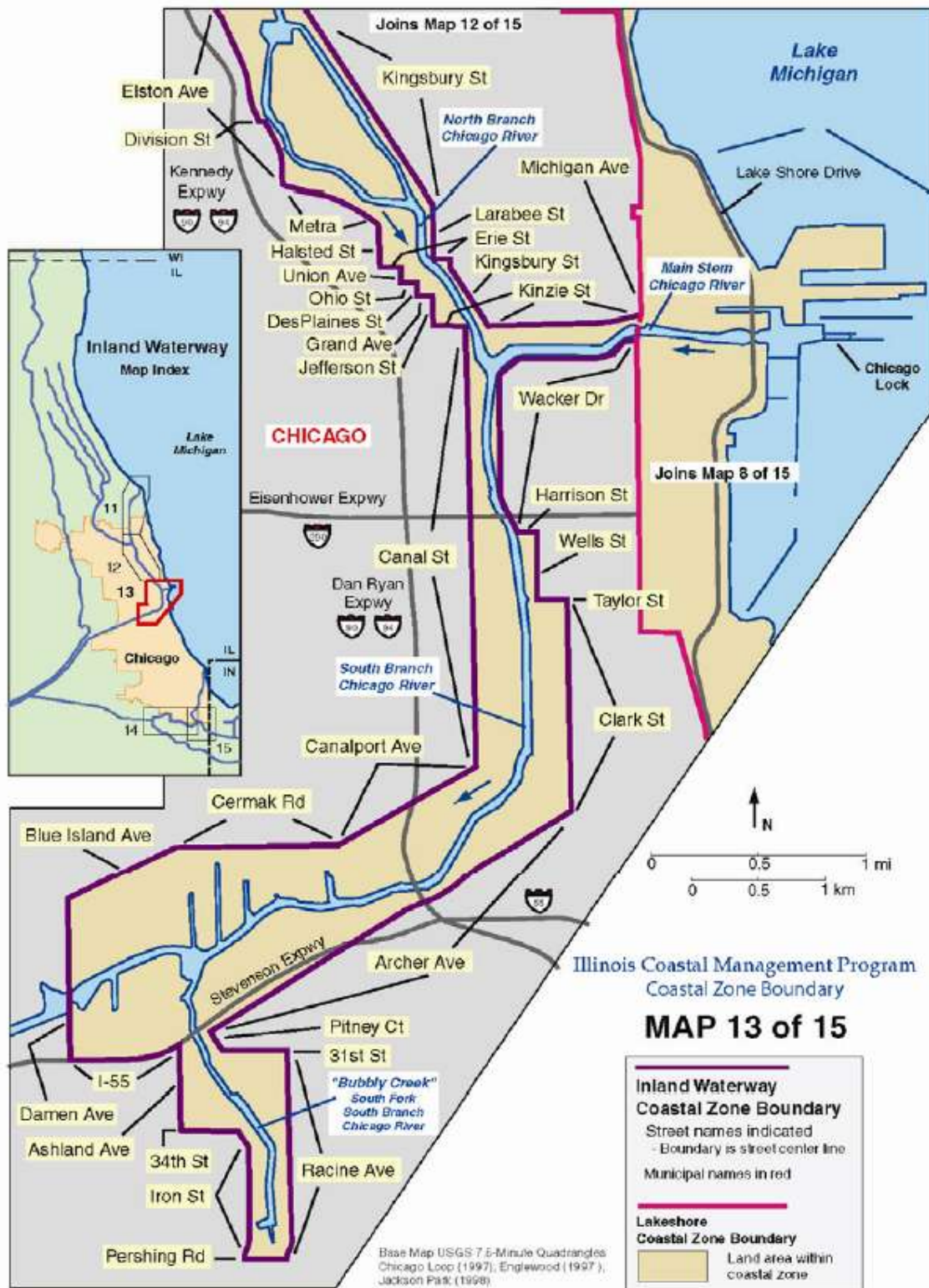
Municipal boundaries
Municipal names in red

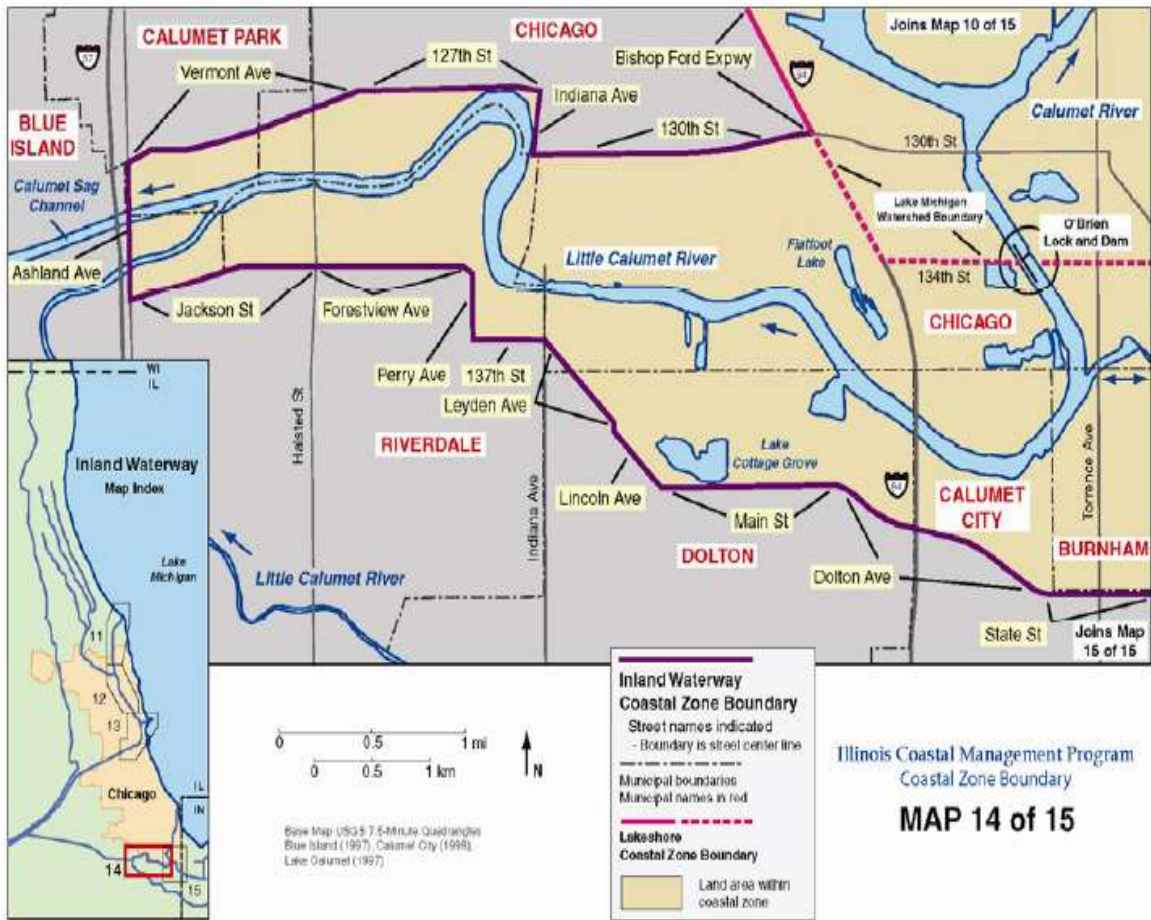
Lakeshore
Coastal Zone Boundary

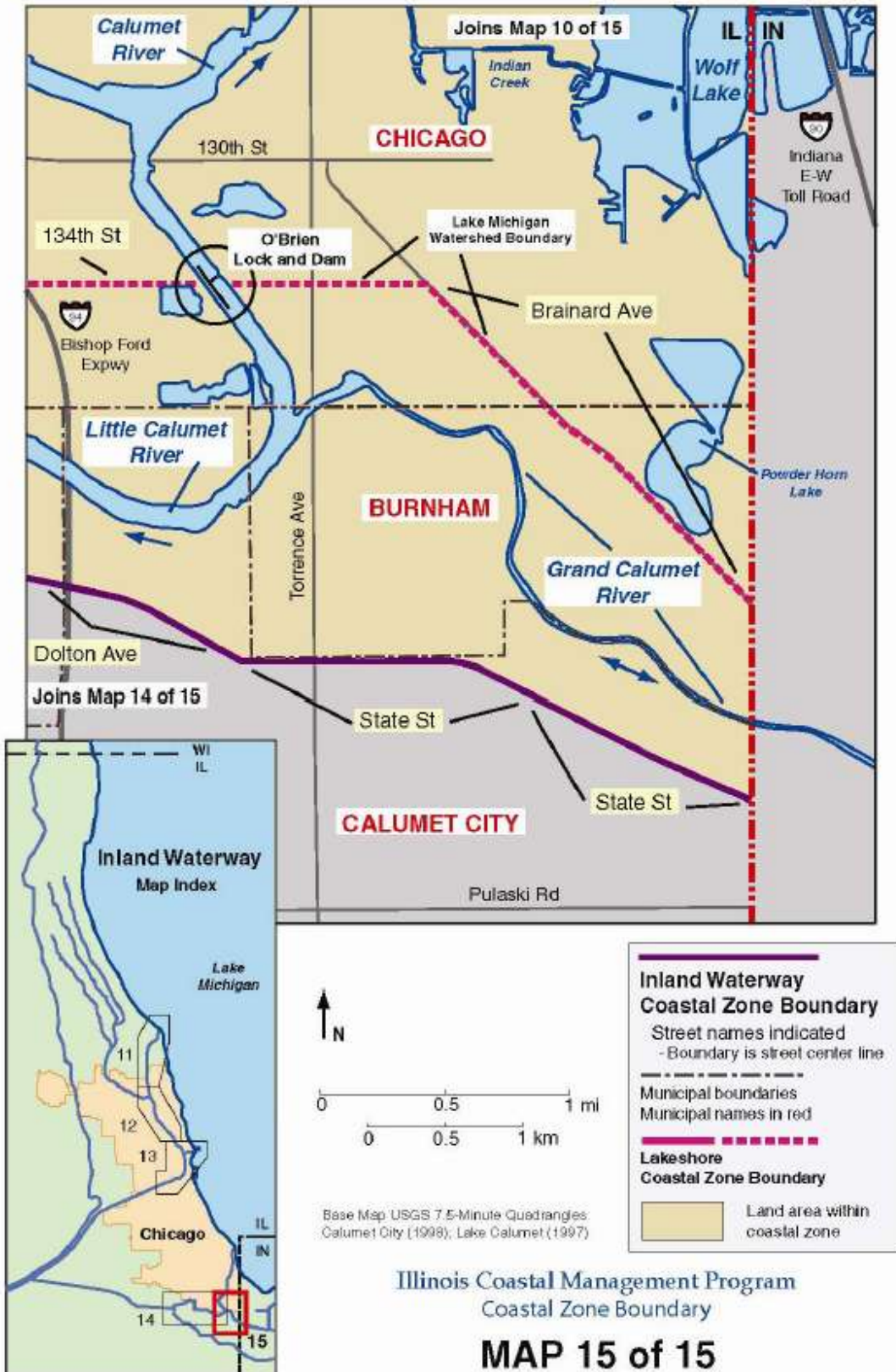
Land area within coastal zone











Illinois Coastal Management Program
 Coastal Zone Boundary

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