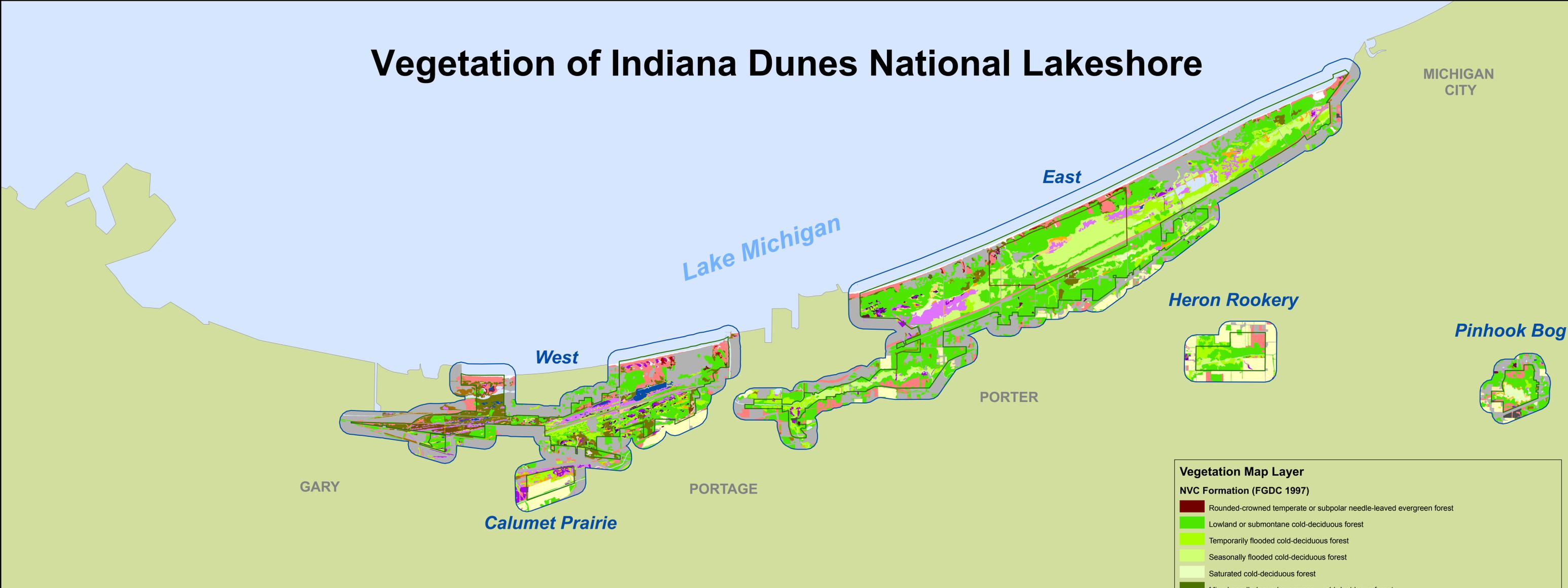




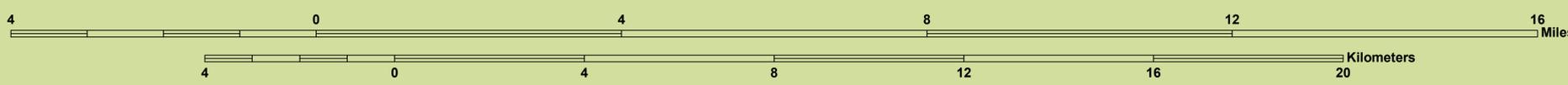
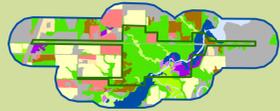
Vegetation of Indiana Dunes National Lakeshore



Hoosier Prairie



Hobart Prairie Grove



This map illustrates vegetation and land cover features of Indiana Dunes National Lakeshore (INDU) and immediate surroundings. The spatial database layer used to compose this map was produced for the National Park Service (NPS) Vegetation Inventory Program (VIP) by the U.S. Geological Survey (USGS) Upper Midwest Environmental Sciences Center (UMESC). The vegetation classification represented in this map layer was derived by NatureServe through vegetation data analyses and is based on the National Vegetation Classification (NVC) Standard (Federal Geographic Data Committee; FGDC 1997).

The vegetation classification was developed from 190 vegetation plots and 469 accuracy assessment sites. These data sets led to the identification of 38 NVC plant communities at INDU plus several more NVC alliance and formation types that could not be described at the association level.

The spatial database layer was derived from the stereo interpretation of October 2004 color infrared aerial photographs (1:12,000-scale). Prior to mapping, photointerpreters and ecologists performed fieldwork to learn photographic appearances of vegetation types and to link map classes to NVC vegetation types. The interpreted data were orthorectified with OrthoMapper Photogrammetric software,

and subsequently digitized into a spatial database layer. The standard minimum mapping unit applied was 0.5 ha, although 0.1 ha was applied to the West unit for select wet shrubland and wet herbaceous types. The spatial database layer is projected in Universal Transverse Mercator, Zone 16, using the North American Datum of 1983.

This map layout shows aggregates of 67 map classes into NVC Formation level types (FGDC 1997) and modified USGS land cover and land use units (Anderson 1976). The spatial database offers finer details than shown on this map layout (e.g., individual map classes, relationship to various levels in the NVC including alliance and association types, physiognomic features of vegetation).

The spatial database reflects conditions at the time of aerial photography. A margin of error is inherent with interpreting aerial photographs. Based on results of a thematic accuracy assessment, the estimated overall accuracy for map classes representing NVC vegetation types is 78.2% (kappa index of 76.9%). Those using the database should determine for themselves the fitness of the data prior to use.

This spatial database layer resides in a geodatabase and is available, along with other project data, at <http://biology.usgs.gov/npsveg>.

Vegetation Map Layer	
NVC Formation (FGDC 1997)	
	Rounded-crowned temperate or subpolar needle-leaved evergreen forest
	Lowland or submontane cold-deciduous forest
	Temporarily flooded cold-deciduous forest
	Seasonally flooded cold-deciduous forest
	Saturated cold-deciduous forest
	Mixed needle-leaved evergreen - cold-deciduous forest
	Planted/cultivated temperate or subpolar needle-leaved evergreen forest
	Planted/cultivated cold-deciduous forest
	Cold-deciduous woodland
	Temperate cold-deciduous shrubland
	Seasonally flooded cold-deciduous shrubland
	Sempermanently flooded cold-deciduous shrubland
	Tall sod temperate grassland
	Medium-tall sod temperate or subpolar grassland
	Temporarily flooded temperate or subpolar grassland
	Seasonally flooded temperate or subpolar grassland
	Sempermanently flooded temperate or subpolar grassland
	Tall temperate grassland with a sparse cold-deciduous tree layer
	Medium-tall temperate or subpolar grassland with a sparse needle-leaved evergreen or mixed tree layer
	Permanently flooded temperate or subpolar hydromorphic-rooted vegetation
	Perennial grass crops (hayland, pastureland)
	Annual close-grown forbs and grasses and/or Annual row-crop forbs and grasses
	Dunes with sparse herbaceous vegetation
	Barren beach (non-NVC)
	Open water-body (non-NVC)
	Developed area (non-NVC)
	Indiana Dunes State Park
	Park Boundary
	Project Boundary