



Black River Watershed Management Plan



*Final Report Part II:
Appendices
May 2010*



This watershed management plan was prepared for the New York State Department of State Division of Coastal Resources with funds provided under Title 11 of the Environmental Protection Fund, Local Waterfront Revitalization Program.

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8 Appendices

8.1 Watershed Glossary of Terms

Anaerobic – Occurring without oxygen, especially of an environment or organism.

Anoxic Sediments – Sediments in areas of fresh water that are depleted of dissolved oxygen.

Anthropogenic – Processes or materials that are derived from human activities, as opposed to those occurring in natural environments without human influence.

Biodiversity – Simply defined as the variety of life and all processes that keep life functioning. At the watershed level, biodiversity is the variation of life forms within a given ecosystem and is often used as a measure of the health of biological systems.

Built Environment – The man-made surroundings that provide the setting for human activity, ranging from the large-scale developments and transportation infrastructure to smaller residential areas. This term is often used in contrast to the “natural environment”.

Contiguous – Areas that are in physical contact with one another. As it relates to flora and fauna, contiguous areas are those areas with similar ecological traits that are in physical contact with one another.

Ecozone – Individual geographic regions defined according to the geology, topography, climate, soils, vegetation, and land use of a given area.

Erosion – The removal of sediment, soil, rock and other particles in the natural environment by wind, water, or ice. Gravity and living organisms may also cause erosion.

Evapotranspiration – Describes the amount of water lost from a watershed through evaporation and transpiration. Evaporation is the movement of water to the air from surface water, soil, and canopy interception. Transpiration is the movement of water to the air from within plants.

Extirpation – The extinction of a species from a given study area, although that species still exists elsewhere (i.e., local extinction).

Groundwater – Water located beneath the ground surface in soil pore spaces and in the fractures of rock formations. Groundwater is naturally replenished by surface water from precipitation, streams, and rivers when this recharge reaches the water table.

Hydrology – The study of the movement, distribution, and quality of water in a given area.

Infiltration – Process by which water on the ground surface enters the soil. The infiltration rate is a measure of the rate at which soil is able to absorb rainfall or irrigation.

Macroinvertebrate – An invertebrate that is large enough to be seen without the use of a microscope. An invertebrate is an animal without a vertebral column and includes species such as worms, snails, and insects.

Moraines – Any glacially formed accumulation of unconsolidated glacial debris (soil and rock) which can occur in currently glaciated and formerly glaciated regions. Ground moraines are till covered areas with irregular topography and no ridges, often forming gently rolling hills or plains.

Nonpoint Source Pollution (NPS) – Water pollution affecting a water body from diffuse sources, such as polluted runoff from agricultural areas draining into a river or wind-borne debris blowing out to sea. NPS is derived from many different sources with no specific solution to rectify the problem, making it difficult to regulate. NPS is the leading cause of water pollution in the United States today.

Nutrient Load(ing) – The mass of nutrients carried by water into surrounding waterways over a period of time. Nutrients may enter the water from runoff, groundwater, or the air (in the form of wet deposition such as rain or snow as well as dry deposition).

Peak Flow – The largest discharge found in a stream channel in response to a particular rainfall or snowmelt event. The timing of peak flow after a given event is dependent on the imperviousness of the watershed, with peak flows occurring sooner in more heavily developed watersheds.

Permeability – The ability of water to move through soil. A soil's permeability is determined by its composition, with soils made up of larger particles (e.g., sand) being more permeable than those composed on smaller particles (e.g., clay).

Phytoplankton – Phytoplankton are microscopic plant-like organisms that live in water. These organisms are the foundation of the marine food chain.

Point Source Pollution – A single identifiable localized source of air, water, thermal, noise or light pollution. Point-source pollution generally comes from wastewater discharged from the pipes of industrial facilities and municipal sewage treatment plants into rivers, streams, lakes, and the ocean.

Potable Water – Water that is fit for consumption by humans and other animals (i.e., drinking water).

Sedimentation – Sedimentation is the deposition of eroded materials (i.e., soil) in a given waterbody. Deposits of sediments in ditches, streams, and rivers reduce their capacity to store water resulting in more frequent and severe flooding and increased property damage. Accumulations of sediment may result in severe damage to storm drain systems.

Siltation – see *Sedimentation*.

Stochastic Event – An event involving chance or probability.

Surface Water – Water collecting on the ground or in a stream, river, lake, wetland, or ocean. Surface water is naturally replenished by precipitation and naturally lost through discharge to evaporation and sub-surface seepage into the groundwater.

Taxon – A group of one or more organisms that have common characteristics (e.g., geographic population, genus, family, order) that differentiate the group from other such groups.

Topography – The surface shape and features of a given land area.

Turbidity – The cloudiness or haziness of water caused by individual particles (i.e., suspended solids). While heavier materials settle rapidly to the bottom, very small particles will settle only very slowly or not at all – these unsettled particles cause the water to appear turbid. Turbidity can be caused naturally by phytoplankton and natural sedimentation, as well as through human land disturbance activities, such as construction, that also lead to increased sedimentation.

Water Budget – A water budget is an assessment of all the inputs and outputs to a hydrologic system, including rainfall, evaporation, runoff, and seepage.

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8.2 Watershed Maps

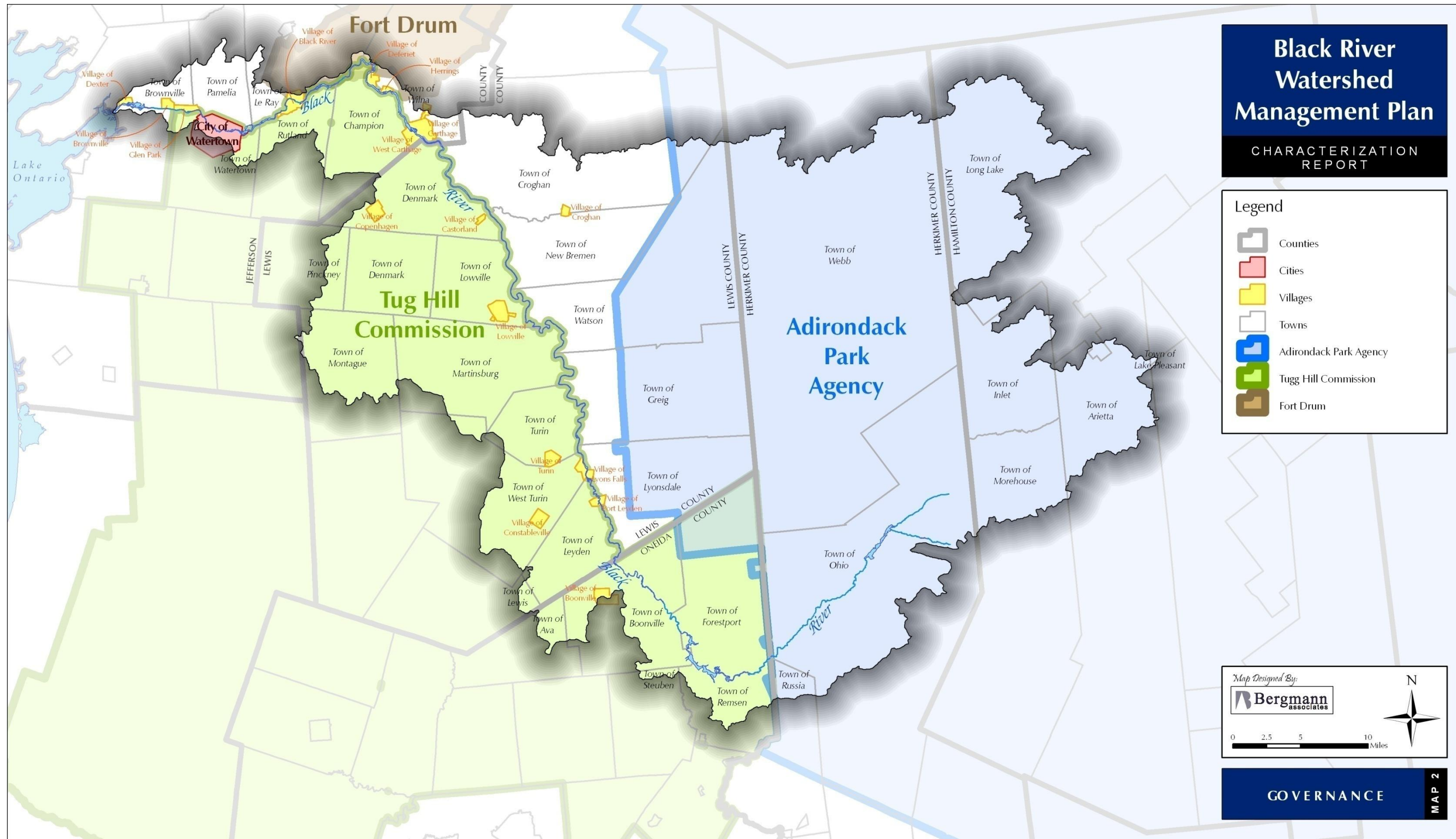
MAP KEY

- Map 1 – Project Location
- Map 2 – Governance
- Map 3 – Subwatersheds
- Map 4 – Land Use
- Map 5 – NYSDEC Lands
- Map 6 – Land Cover
- Map 7 – Population Density Year 1990
- Map 8 – Population Density Year 2000
- Map 9 – Topography
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- Map 19 – Aquifers
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- Map 21 – Water Quality Results
- Map 22 – Land Cover Results
- Map 23 – Land Use & Ownership Results
- Map 24 – Natural Resources Results

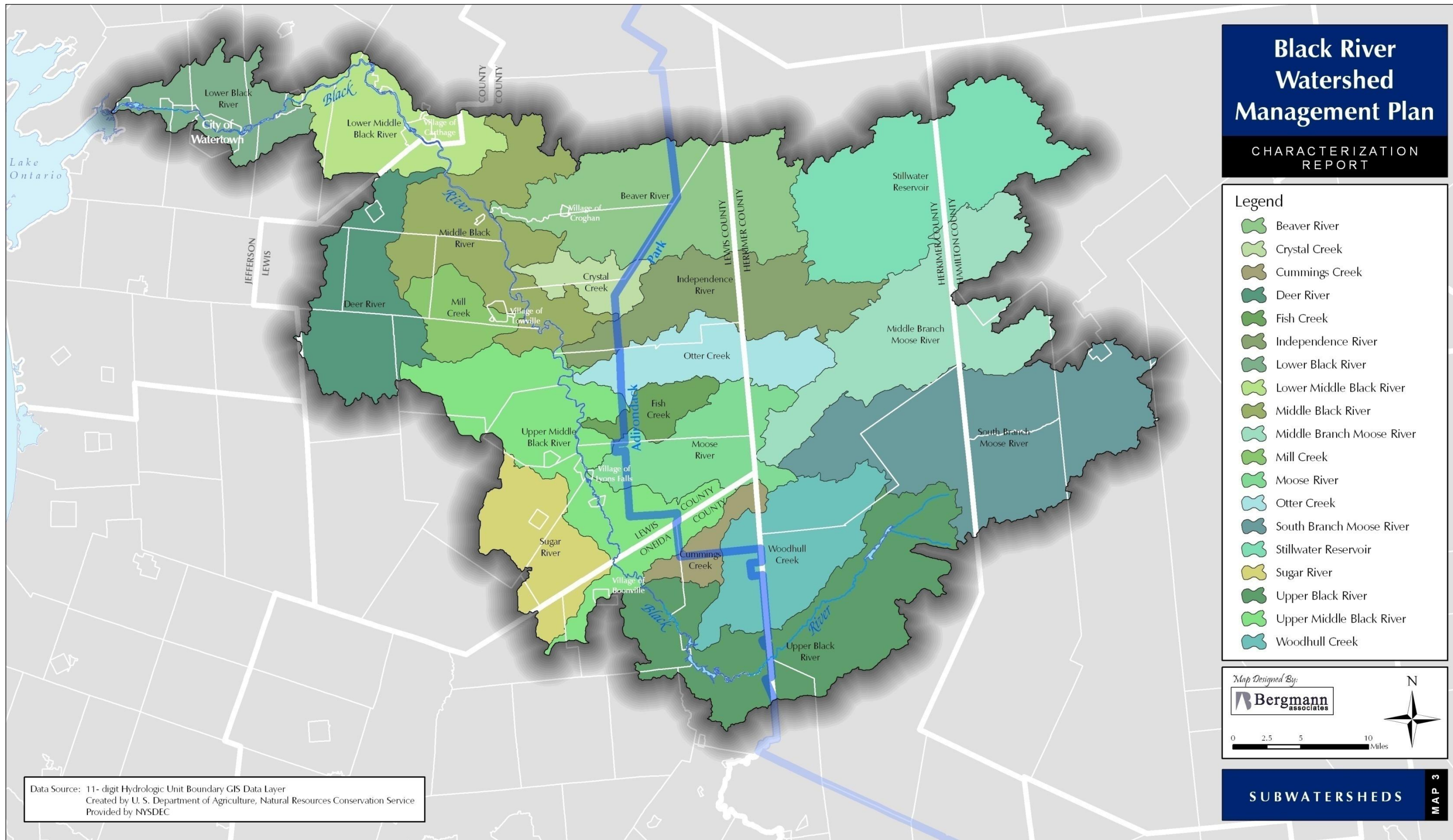
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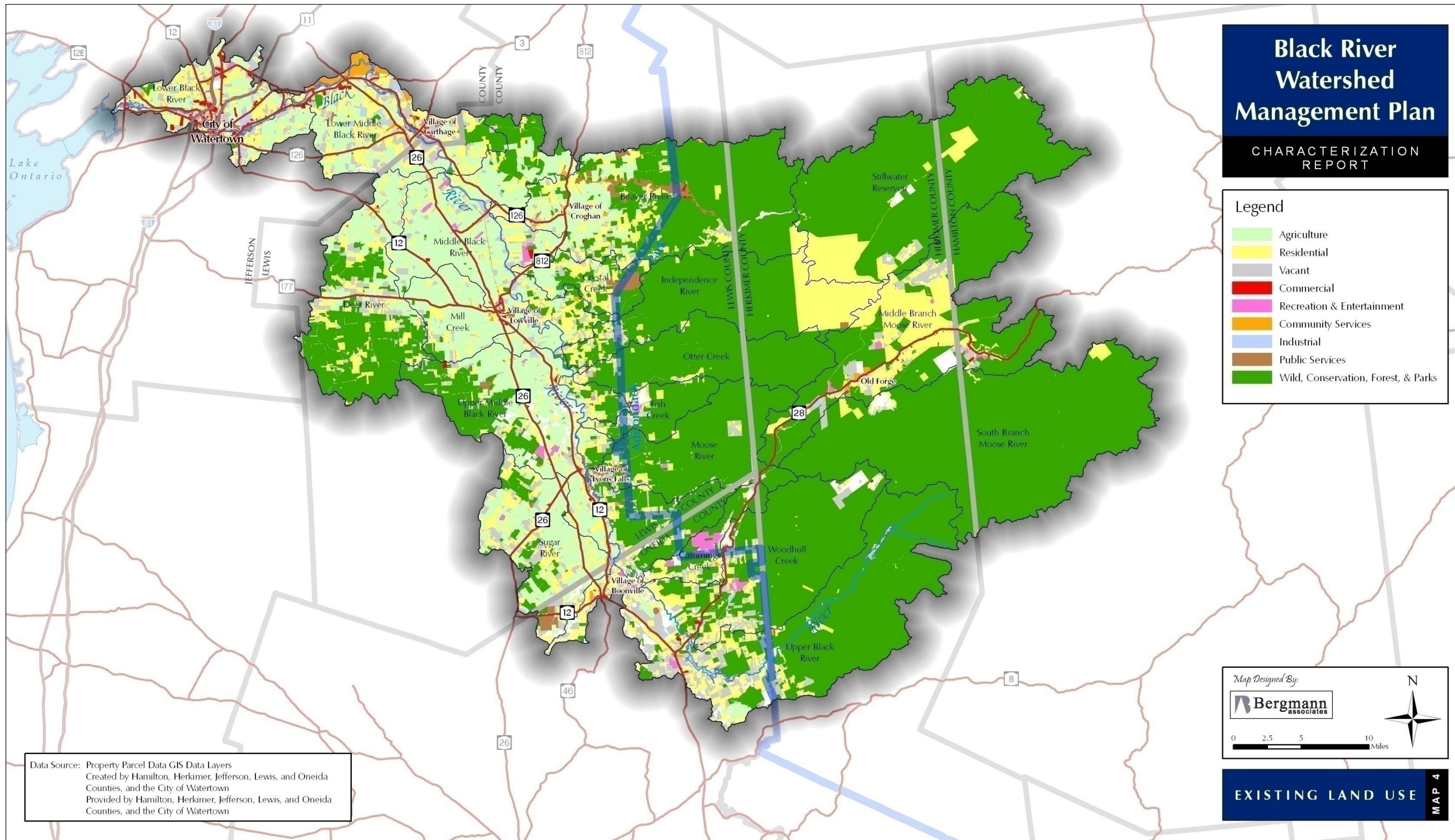
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Data Source: Property Parcel Data GIS Data Layers
Created by Hamilton, Herkimer, Jefferson, Lewis, and Oneida
Counties, and the City of Watertown
Provided by Hamilton, Herkimer, Jefferson, Lewis, and Oneida
Counties, and the City of Watertown

**Black River
Watershed
Management Plan**
CHARACTERIZATION
REPORT

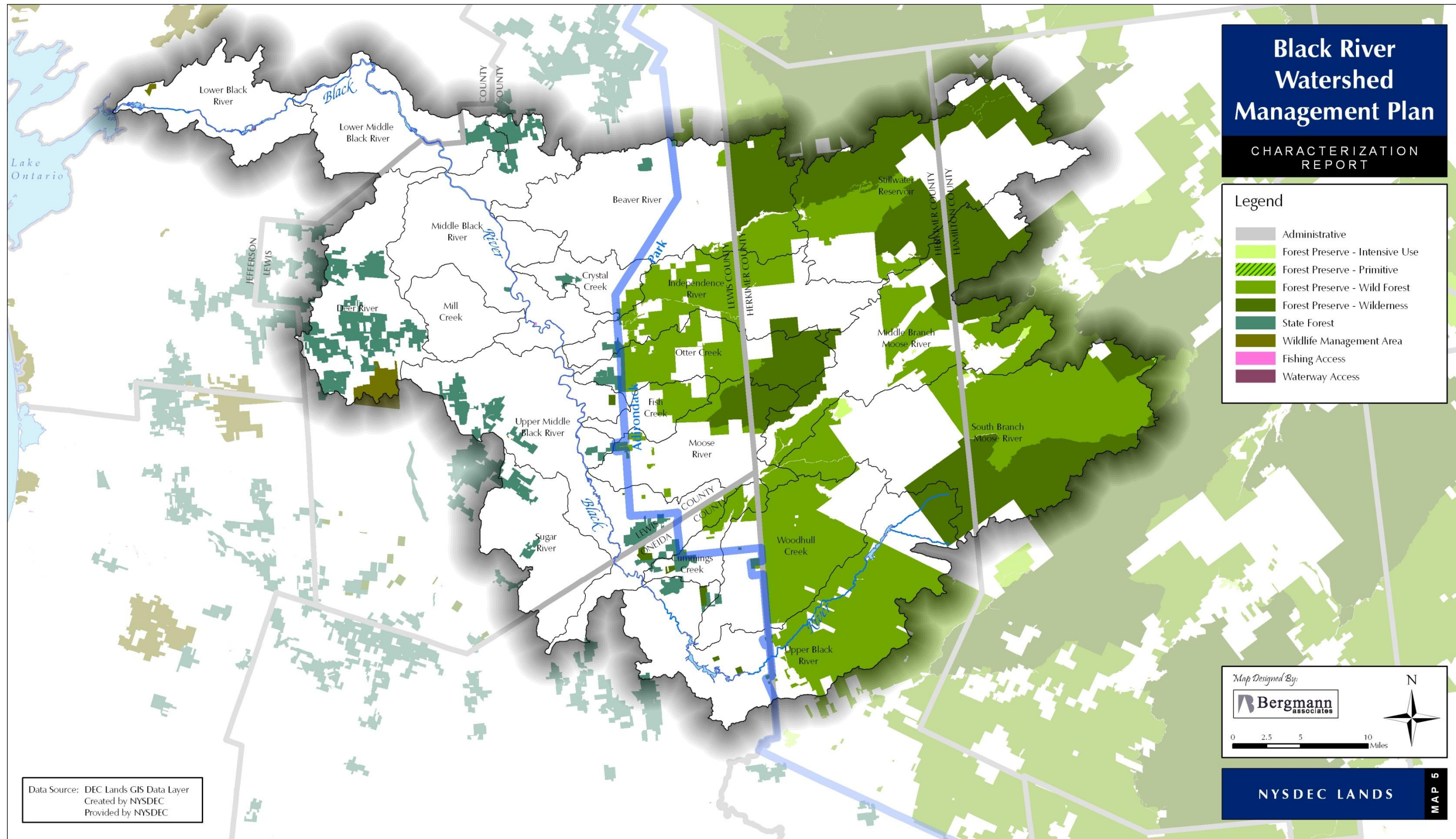
- Legend
- Agriculture
 - Residential
 - Vacant
 - Commercial
 - Recreation & Entertainment
 - Community Services
 - Industrial
 - Public Services
 - Wild, Conservation, Forest, & Parks

Map Designed By:
**Bergmann
associates**

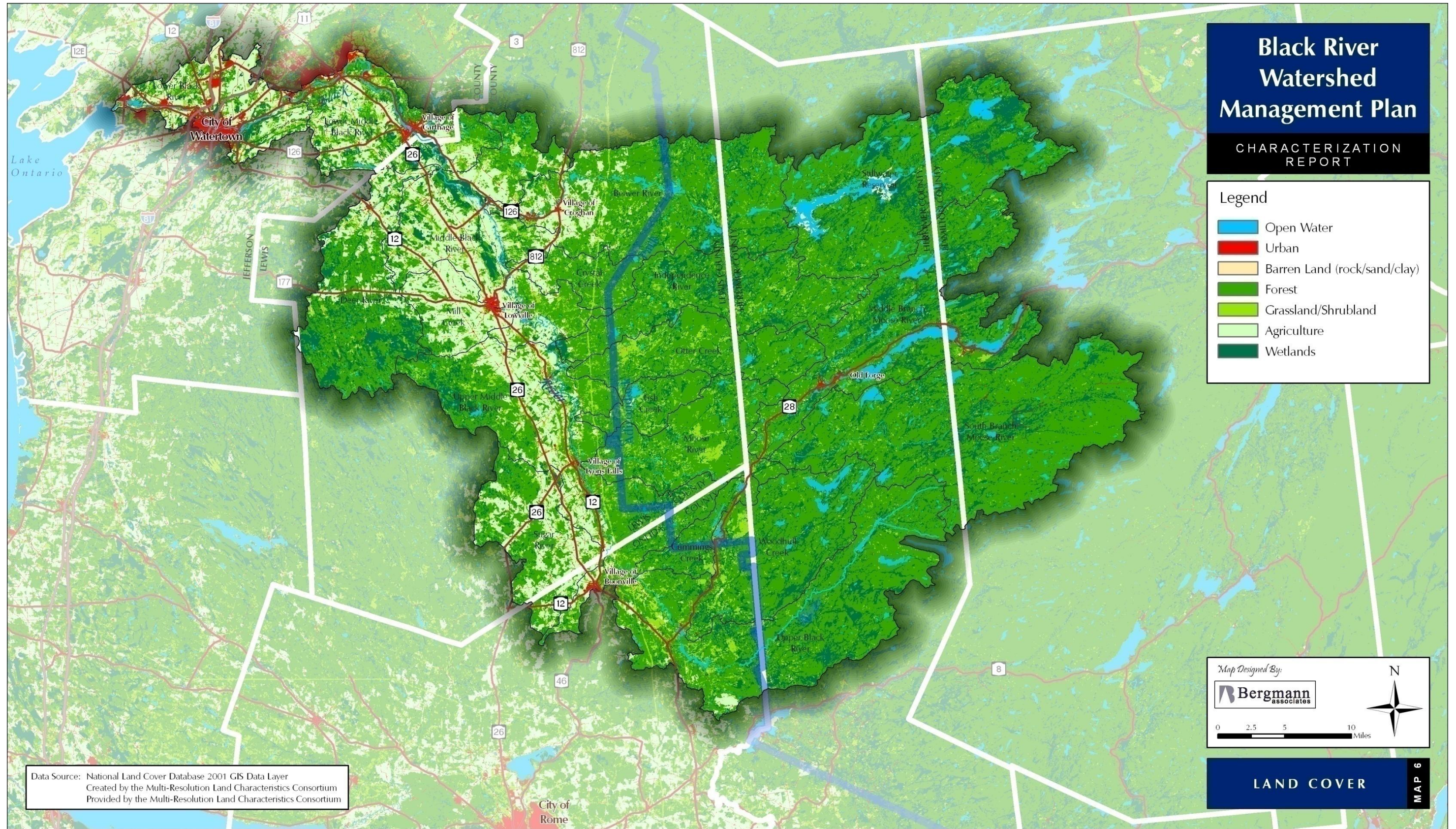
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EXISTING LAND USE MAP 4

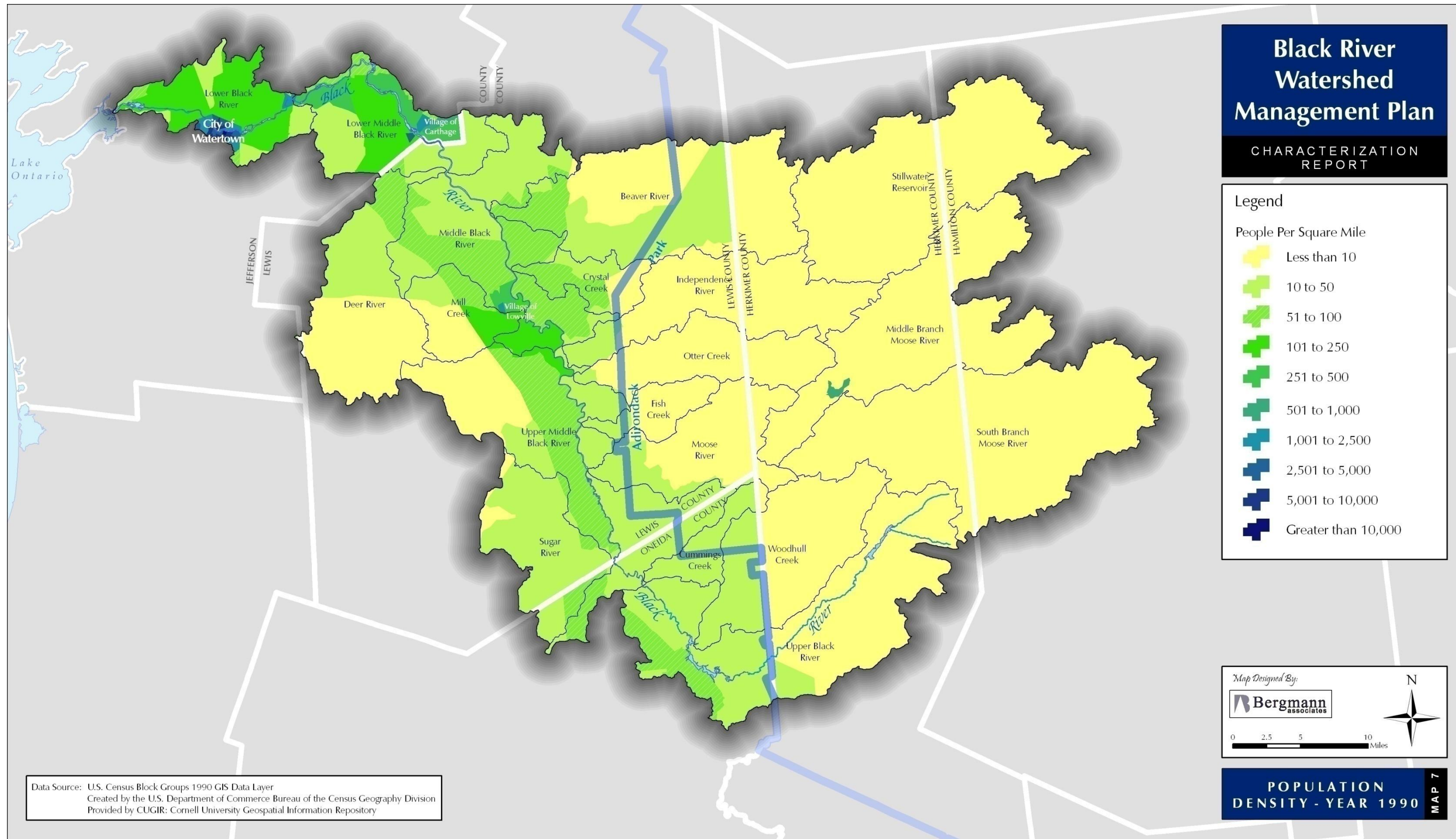
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