**Mellon Initiative in Urban Landscape Studies**

Dumbarton Oaks Research Library and Collection

Mellon Fellows – Final Reports

Fall 2015

**Christina Milos, "Anticipatory Urbanization Strategies for In-Situ Oil Sands Extraction in Nigeria"**

Nigeria's future will be shaped, in part, by the twin forces of urbanization and resource development. A key emerging resource expected to accelerate urbanization in southern Nigeria is the 140-kilometer oil sands belt that stretches across Edo, Ondo, Ogun, and Lagos states. Estimated by Nigeria's Ministry of Mines and Steel Development to contain 32-47 billion barrels of oil, Nigeria's reserves of oil sands are the largest in all of Africa, and sixth largest in the world. Anticipating how resource development might spur urbanization and restructure landscapes in developing countries such as Nigeria poses a critical global challenge. Seeking to improve policy and planning mechanisms to respond to this challenge, the present research project asks two key questions: How might Nigeria's future oil sands industry transform regional urban landscapes? What are potential transformative actions and decision points that may structure this future landscape? The project examines two historical cases: (1) Canadian oil sands development and urban impacts; and (2) Nigeria's oil industry development and urban impacts in

the Niger Delta. These cases are used as precedents to anticipate potential scenarios for future oil sands development.

With the support of the Mellon Fellowship Supplemental Travel Grant, I traveled to Canada to document the spatial impacts of oil sands in Alberta. During my stay at Dumbarton Oaks, with the support of Harvard's extensive library collections, I intensively investigated the territorial, environmental, urban, and social impacts of Nigeria's oil industry. This work is part of my doctoral research at Hannover University in Germany and a larger research initiative established in partnership with Nigerian stakeholders. The research conducted at Dumbarton Oaks will play a critical role in shaping knowledge products intended to raise awareness among Nigerian policy makers regarding the critical challenges oil sands extraction poses to Nigeria's urban landscapes.

**David Wooden, "Washington's Sewer History: Ideological, Technical and Environmental Evolution"**

This project researched the origins of the District of Columbia's sewer system. Most modern cities share some common histories in regard to their development of sewer management techniques. However, the District's recent founding as a city by the District of Columbia Organic act of 1801, its location on a tidal river, and its governmental structure as the United States capital lacking self-government for most of its existence makes it unique.

The site of the District is directly related to its proximity to planned water infrastructure. Prior to becoming president, George Washington believed a navigable Potomac River providing a connection to

the emerging country's frontier resources via the Ohio River was a national imperative. He made personal investments in a commercial enterprise, the Potowmac Company, to realize his vision. When Congress gave him the mission to select a site for the nation's capital, he appointed a commission comprised of fellow investors. The commission selected a site at a portage along the Potomac River where a world capital emerged from tidal mud flats.

The planned canal system was intended to extend into the city transporting goods and resources vital to the growth of an ambitiously planned metropolis. The canal to the Ohio River became the Chesapeake and Ohio (C&O) Canal. But it never reached its intended destination to the west. The canal's arm into the city became the Washington City Canal and the capital's original and accidental sewer.

Construction of the canal started soon after the city's founding along the courses of two existing streams: Tiber Creek and James Creek. Woefully underfunded and poorly constructed the canal was mostly un-navigable and became the terminus for the city's surface runoff and raw sewage. Known for its "accumulation of stagnant sewerage and filth" and as "a disgusting spectacle – a disgrace to the city and the nation," the canal was entombed underground by the late-nineteenth century and largely lost from memory. As it was transformed from open sewer to subterranean tunnel, the canal became the origin from which today's sewer gradually expanded as the city grew to Pierre L'Enfant's planned extents and beyond.