Master of Science in Engineering

Oluwatimilehin Shodimu

Tuesday, October 27, 2015 @ 3:30 pm

Head Hall – Room E-11

Board of Examiners:	**Co-Supervisors:**	Dr. Yun Zhang, Geodesy & Geomatics Eng.
		Dr. Raid Al-Tahir, Geodesy & Geomatics Eng.
	Examining Board:	Dr. Emmanuel Stefanakis, Geodesy & Geomatics Eng.
		Dr. John Kershaw, Forestry & Environmental Mgmt.
		Dr. Fan-Rui Meng, Forestry & Environmental Mgmt.
	Chair:	TBA

SPATIAL ANALYSIS OF LAND COVER CHANGES IN THE GRAND LAKE MEADOWS, NEW BRUNSWICK

ABSTRACT

The ever growing human activities and economic development will eventually change the relationships between human and the environment. A matter of grave concern is the unsustainable patterns of land use that are considered a major cause for the deterioration of the environment. The Grand Lake Meadows is an important part of the Saint John River wetlands that form the largest freshwater wetland habitat in the Maritimes (east Canada).

In this paper, remotely sensed images were used for mapping the use of land use and cover in the Grand Lake Meadow over a period of 20 years. The goal was to undertake a detailed spatially explicit inventory of local trends in land use and land cover changes through classifying the historical images. Other available data like the road network to mention a few were combined with this information to create a database that was used to investigate consequences of land use/cover change.

The results demonstrates the flexibility effectiveness of this technology in establishing the necessary baseline and support information for sustaining eco-services of a wetland thereby depicting the rate of change undergone in the GLM area over time. The study identified a 15% decrease in the wetland from the 1990 to 2001, while there was 66% change in the wetland area since then. The result will help the managers to comprehend the dynamics of the changes, prompting a better management and implementation of LULC administration in the GLM area.

Faculty Members and Graduate Students are invited to attend this presentation.