QUARTERLY PROGRESS REPORT

October 1, 2016 to December 31, 2016

PROJECT TITLE: Florida Solid Waste Management: State of the State

PRINCIPAL INVESTIGATOR(S): Timothy G. Townsend

AFFILIATION: Professor, University of Florida
Department of Environmental Engineering Sciences

COMPLETION DATE: September 30, 2017 **PHONE NUMBER: 352-392-0846**

PROJECT WEB SITE: http://pages.ees.ufl.edu/townsend/research/hc16/

Work accomplished during this reporting period:

Florida Solid Waste Management Data Collection and Analysis

The project team met with the Florida Department of Environmental Protection (FDEP) to gain access to the statewide solid waste online reporting system, Re-TRAC. RE-TRAC is an online reporting tool that each county solid waste director or recycling coordinator uses to input their county's solid waste management data. Our goal is to use the current 2015 FDEP Re-TRAC data as a basis for a model of Florida's statewide solid waste management practices and costs. We will then use that model to explore alternative solid waste management practices and costs.

We are currently refining the data by further subdividing recycling quantities into residential and commercial categories. This requires assumptions regarding the sources of yard trash (residential vs commercial) so that it can be extracted from the final quantities.

Industry Working Group Meeting

The project team held a meeting on February 10, 2017 with xx solid waste industry representatives to present the data that we have collected so far, explain our proposed project approach, and to receive their input. The meeting was very productive; meeting notes are attached to this report.

Preliminary Evaluation of Alternative Solid Waste Management Scenarios

We performed a preliminary evaluation of alternative solid waste management scenarios that have the potential to achieve Florida's 75% recycling goal. We presented these scenarios to the working group and will expand and refine this analysis once the model described above is complete.

Evaluation of Alternative Solid Waste Management Goals

The team has been exploring ideas for re-stating Florida's 75% goal in a way that will allow the FDEP and Florida communities to achieve the goal using Life-Cycle Analysis (LCA). We believe this approach is needed to achieve the environmental benefits intended by the 75% recycling goal legislation in a more cost-effective and sustainable manner.

Work planned for the next reporting period:

Economic Data Collection

The project team will contact Florida counties and municipalities to obtain their solid waste collection, processing, recycling, and disposal cost information. This information will be input into the model described above.

Solid Waste Management Scenarios

We will begin detailed modeling of four alternative solid waste management scenarios once the model described above is complete. The approaches will be evaluated by their effectiveness in achieving th 75% recycling goal, economic cost, and environmental impact.

Evaluation of Alternative Solid Waste Management Goals

The team will also expand on the work started in the previous period to identify alternative approaches to realizing the intended benefits of the 75% recycling goal using LCA.

Preparation for first Stakeholder Working Group Meeting

The project team will collectively continue to analyze Florida's solid waste management by utilizing the model created for the State's data and the four categories of interest. The team will also gain an understanding of Florida's historic solid waste management data. Furthermore, other research on sustainable materials management will be assessed and its applicability in use towards achieving Florida's 75% recycling goal by 2020.

Metrics:

Name	Rank	Department	Professor	Institution
Malak Anshassi	Undergraduate Student	Environmental Engineering	Townsend	University of Florida

Stakeholder Working Group Meeting: The research team began preparation for the first stakeholder working group meeting which is currently being scheduled in February 2017.