

Evaluating the limitations of the EPA's Gas Model (LandGEM) and developing an alternative method for landfill emissions estimation



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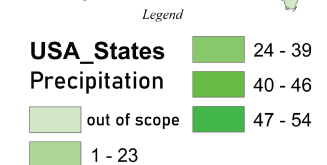
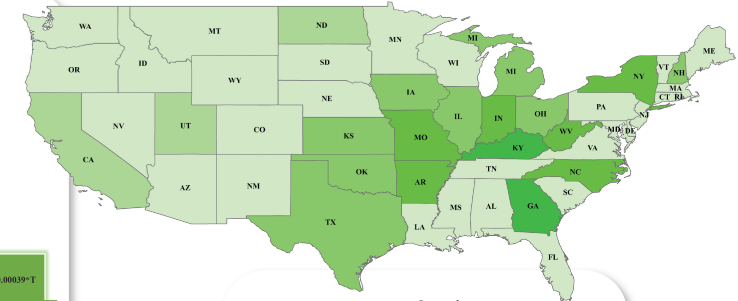
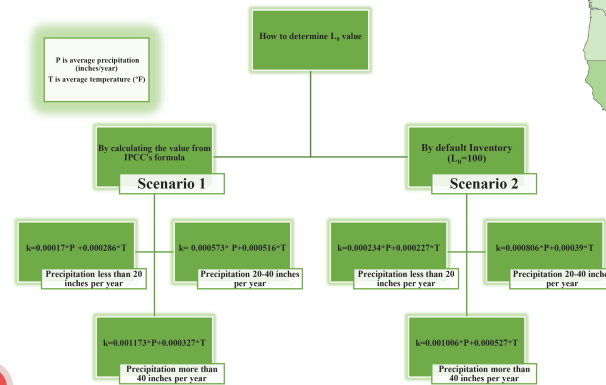
Introduction

This research was done by the IUST student team to assess the limitations of the EPA's Gas Model (LandGEM) and develop an alternative method for landfill emissions estimation

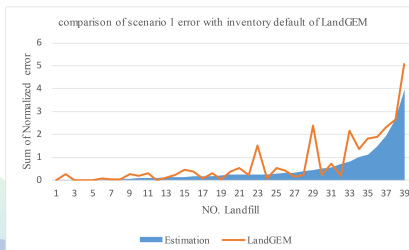
- 39 landfills with collection systems and no leachate circulation all over the U.S. were selected

Objectives

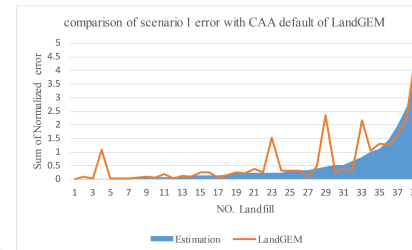
- To meet LANDGEMs limitations, software was run by different default of K and L0 and then compared with observed methane generation
- Alternative K and L0 were assessed to find values that produce a better prediction of methane generation



29.91% reduction in error



20.76% reduction in error



34.31% reduction in error

