

PROJECT OVERVIEW REPORT

1. UTC Identifying Number
69A3551847102
2. Center Identifying Number
CAIT-UTC-REG71
3. Project Title
Bio-mediated Method for Improving the Erosion Resistance of Coastal Embankment
4. Principal Investigator & Contact Information
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7. Project Description
The primary goal of this proposal is to develop a bio-mediated technique that would enable enzyme induced calcite precipitation (EICP) under varying temperatures to improve the physical properties of soil embankment and mitigate coastal erosion in the State of New Jersey.
8. Implementation of Research Outcomes (or why not implemented)
The intended outcome of the project is a final report to be distributed to a broad range of agencies across the region as well as a technical synthesis report that will include a set of concise but comprehensive recommendations for successfully implementing the developed technique with the existing NJ coastal soils. The developed bio-mediated soil reinforcing technique will be readily available to be deployed on the selected embankment sites of interest along NJ coastal roadways.
9. Impacts/Benefits of Implementation (actual, not anticipated)
To Be Determined

10. Dates and Budget

Start date: 7/1/2022

End date: 12/31/2023

UTC (CAIT) Dollars: \$75,000

Cost Sharing: \$75,360

Total Dollars: \$150,360

11. Keywords

embankment stability, bio-mediated technology, ground improvement, climate impact, coastal erosion

12. Web Links (Reports and Project Website)

<https://cait.rutgers.edu/research/bio-mediated-method-for-improving-the-erosion-resistance-of-coastal-embankment/>