BYU | CIVIL & ENVIRONMENTAL ENGINEERING

IRA A. FULTON COLLEGE

Report Date: 11/12/2018

CARSTONE

Project Status Report: CEEn-2018CPST-0DR-004

Team Members: Jared Lillywhite, Wade Roberts, Seth Barrus, Dan Costa

Project Title: Flood Mapping

1) Summary of technical/non-technical challenges encountered

- Technical Challenges
 - O How do we develop a flood-impact curve?
 - O What data do we need from ESRI/INDRHI?
 - How can we use satellite imagery to validate the flood extent mapping?
- Non-Technical Challenges
 - Team members have conflicting schedules and limited time to dedicate.

2) Team approaches & resolutions to overcome challenges

- We will reach out to Water Resources professors to see if anyone has expertise in developing flood impact curves.
- We will begin researching flood-impact curve generation methods independently.
- We will search the Dartmouth Flood Observatory archives and collect satellite data for future validation efforts.

3) Status of challenge resolutions & potential project impact

- Seth has emailed Dr. Nelson to see if he or other professors have experience or knowledge about generating flood-impact curves.
- Wade will browse the Dartmouth Flood Observatory website this week and will begin downloading data for the Dominican Republic.
- Jared has found one journal article about flood-impact curves. Jared,
 Seth and Dan will read the article this week and find more information through other sources.
- Jared will reach out to Fidel to learn more about previous flood-damage curve generation efforts in South America.

4) Project status & summary

- Fidel visited us in Provo last week, which gave us direction for the next steps of our project.
- We have received some population and boundary data and have some resources to obtain more.
- Our two main tasks of emphasis are:
 - Researching Depth-Damage Curve generation.
 - Collecting data from the Dartmouth Flood Observatory

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