Stormwater and Climate Change: Understanding our Challenges

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Overview

- Stormwater systems generally
- How climate change impacts our stormwater system
- Community impacts
- What can we do about it?
Stormwater Systems

- Stormwater systems may be simple, a drainage ditch that discharges to a stream.
- Stormwater systems may be a complex series of inlets, pipes, ponds, pumping systems, and outfalls.
- The purpose of a stormwater system is to convey water away from developed areas.
- After 1985, water quality treatment was also required.
- Public stormwater systems are regulated under the Clean Water Act’s National Pollutant Discharge Elimination System program.
Stormwater and Sea Level Rise

<table>
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<tr>
<th>YEAR</th>
<th>NOAA LOW (FT)</th>
<th>NOAA INT LOW (FT)</th>
<th>NOAA INT HIGH (FT)</th>
<th>NOAA HIGH (FT)</th>
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Stormwater and Rainfall Patterns
Community Impacts

- Infrastructure
- Access to homes, schools, employment centers
- Economic
- Social
- Environmental

- Public Health
  - Ades aegypti, “the yellow fever mosquito.”
  - Can spread dengue fever, chikungunya, Zika, Mayaro and yellow fever viruses, and other disease agents.
  - Thrives in urban areas.
  - Container breeder, depends on standing water for breeding.
  - Bacteria and viruses
What Can We Do?

- Become informed, listen, and share your story, encourage others to share theirs.
- Be responsive not reactive.
- Fund and implement effective asset management programs especially maintenance.
- Responsible regulations.
- Plan for and design resilient communities and public infrastructure.
Questions

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https://www.facebook.com/PinellasEnviroNews