

#### Understanding the Implications of Expanding Coastal Tourism



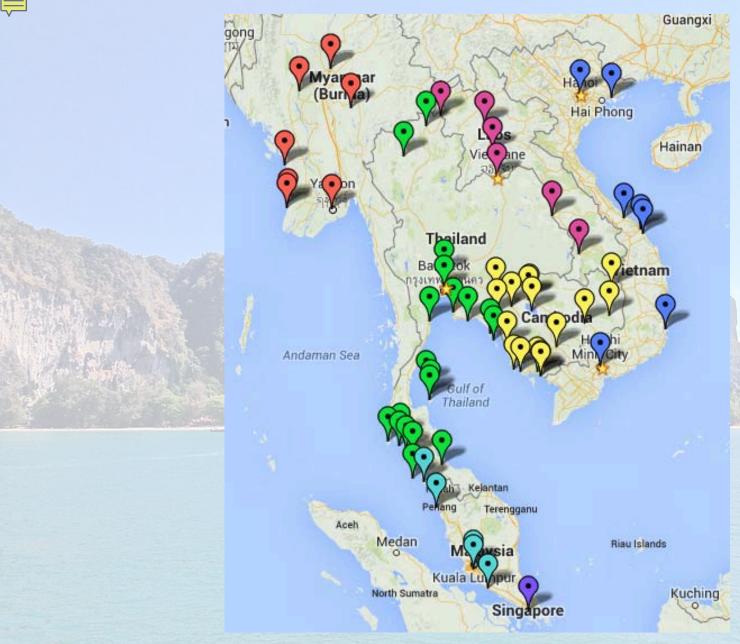
Justin Wallence Institute for Social and Environment Asian Cities (M-BRACE)

Asia-Pacific Climate Change Adaptation Forum | 2 October 2014





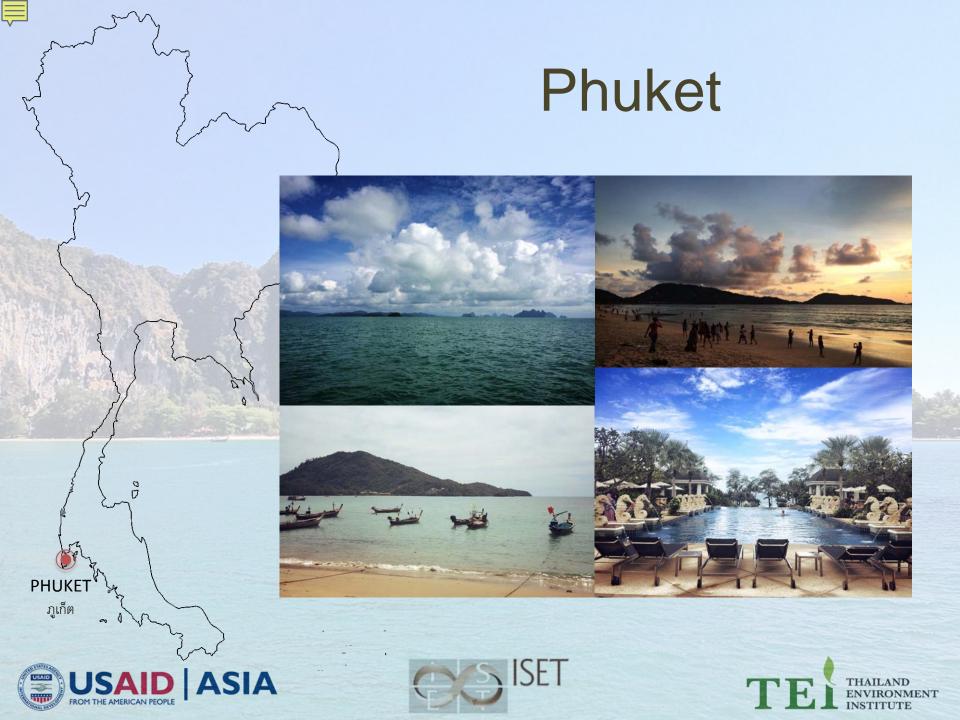














#### Tourism Growth in Phuket

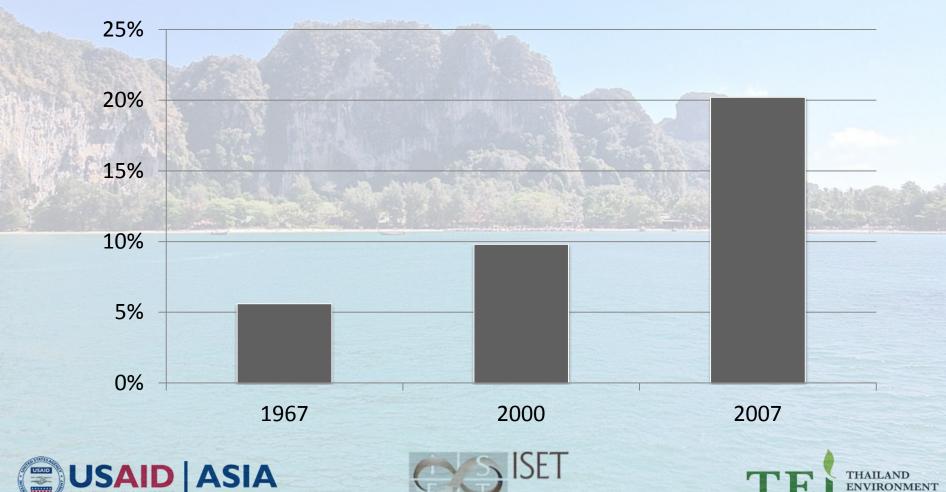


## Increase in Number of Hotel Rooms



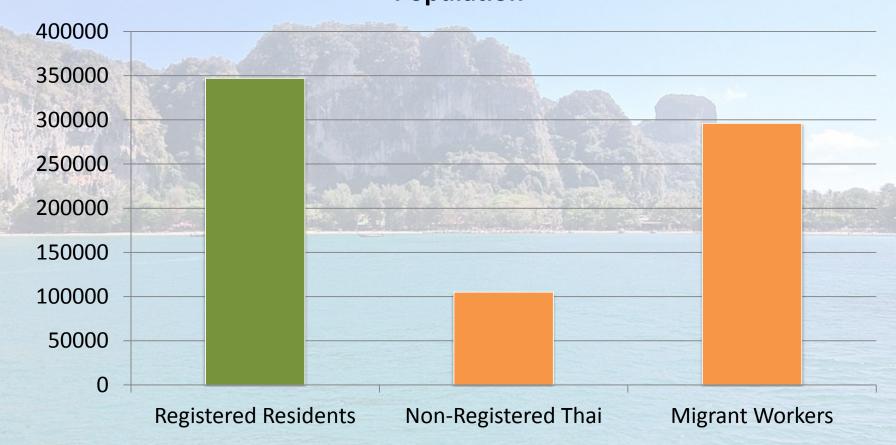
# Growth of the Built Land (or Urban Area)

**Urbanized Area** 



#### Population Growth

#### **Population**

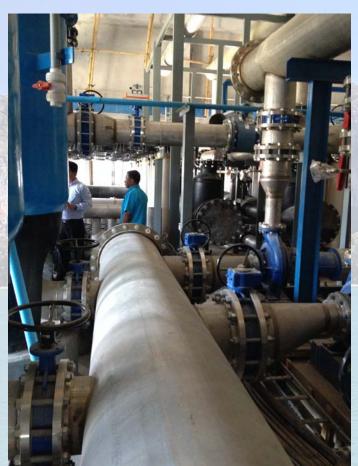


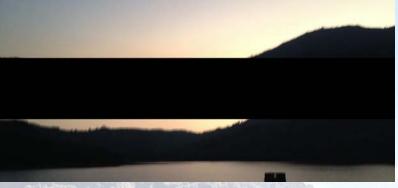






# New Infrastructure and New Demands on Existing Infrastructure















# The development associated with growing tourism in Phuket has led to increased URBANIZATION







Population Growth











Population Growth

Growth of Urban Area











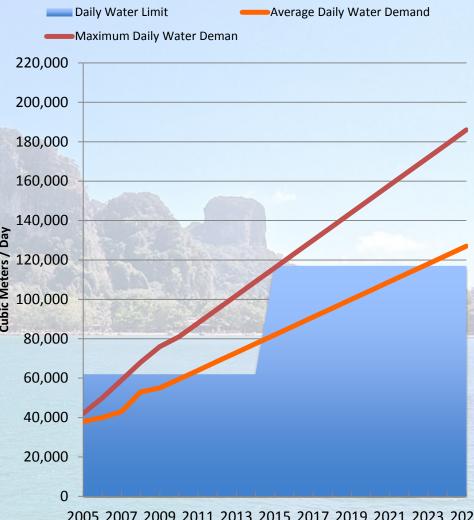


#### Water Use on Phuket Island

Population Growth

Growth of Urban Area

Reliance on Systems



2005 2007 2009 2011 2013 2015 2017 2019 2021 2023 2025

Year







#### Urbanization and Climate Change

- Population Growth
- More People at Risk
- Growth of Urban Area
- More Flooding, More homes, buildings, etc. at risk
- Reliance on Systems
- More challenges for managing key systems







### Approach to Understanding Vulnerability in Coastal Tourist Areas

Development for tourism (or urbanization) is creating new risks and vulnerabilities

Climate change will exacerbate those risks and vulnerabilities







## Approach to Understanding Vulnerability in Coastal Tourist Areas

Development for tourism (or urbanization) is creating new risks and vulnerabilities

Climate change will exacerbate those risks and vulnerabilities







 Ensuring that all stakeholders have a role in shaping development visions





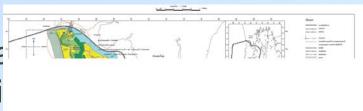


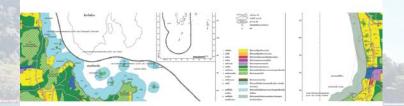




Ensuring that all stakeholders have role in shaping development visi

 Supporting and strengthening planning processes



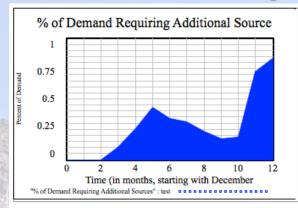


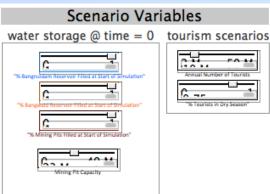


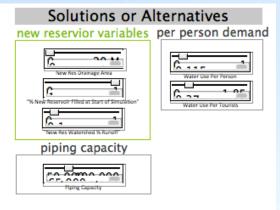


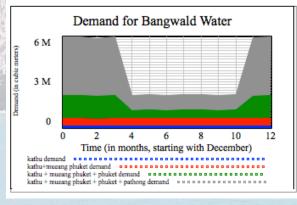


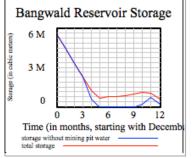


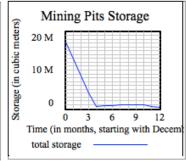


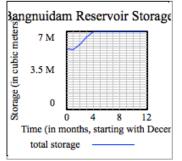












 Coordinating and integrating management of key urban systems







- Ensuring that all stakeholders have role in shaping development visions
- Supporting and strengthening planning processes
- Coordinating and integrating management of key urban systems
- Promoting data collection, better access to data, and its use









## Approach to Understanding Vulnerability in Coastal Tourist Areas

ΙF

Development for tourism (or urbanization) is creating new risks and vulnerabilities

AND

Climate change will exacerbate those risks and vulnerabilities

#### THEN

Efforts to guide, manage, and control development processes can address the risks arising from development (urbanization) and climate change













