



**Port of Olympia**

*Serving All of Thurston County*

# Preparing for Sea Level Rise at the Port of Olympia

Alex Smith

Director of Environmental Programs

January 22, 2015

# The Concern

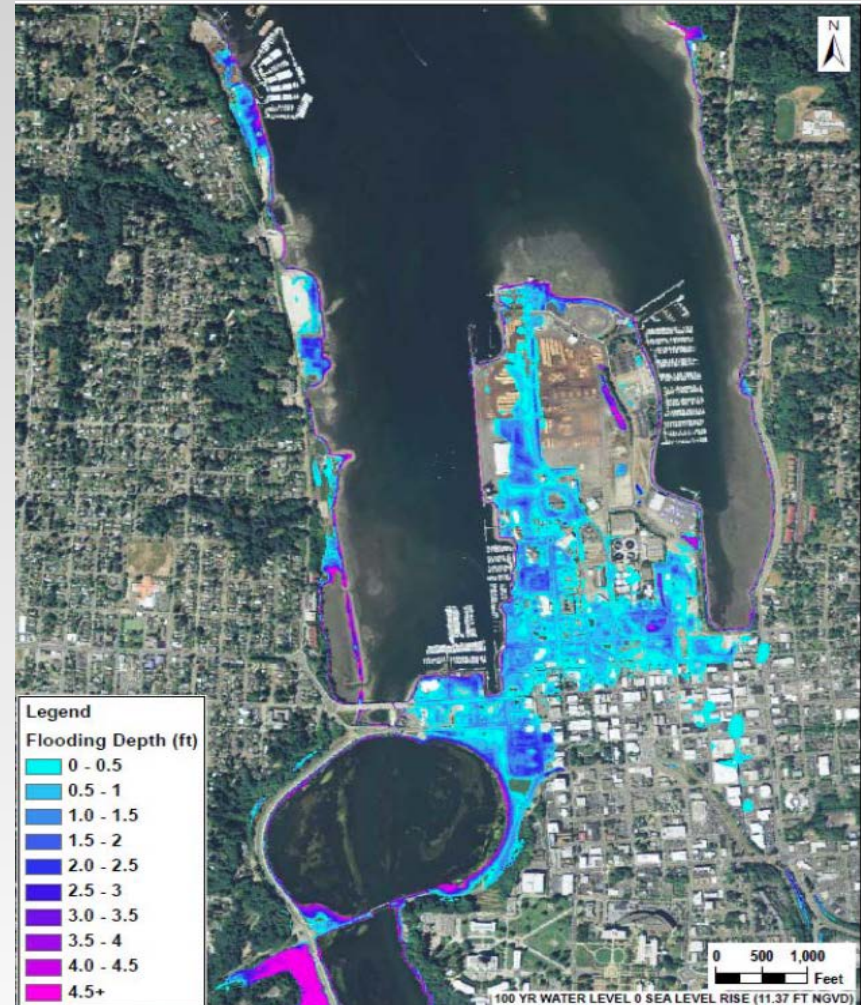


# The Concern



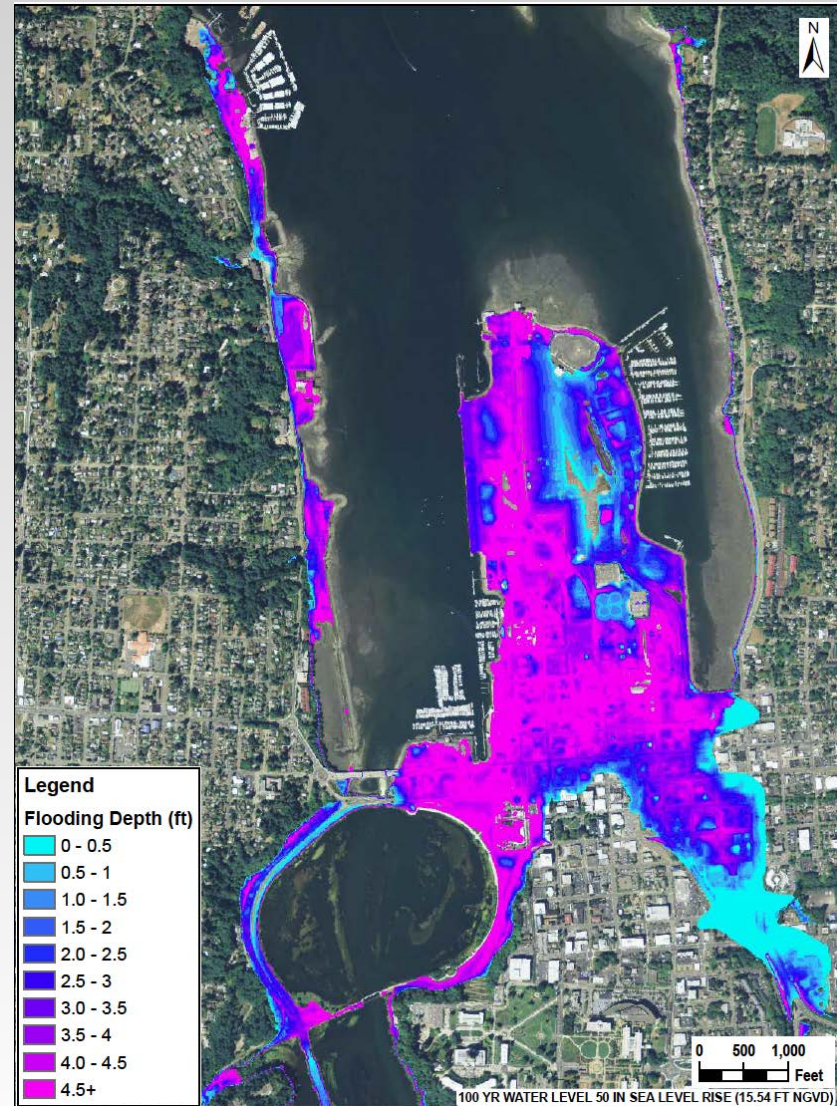
# The Concern

- This is the inundation of downtown Olympia with no increase in sea level in a 100 year storm
- Between 6" to 3' of inundation



# The Concern

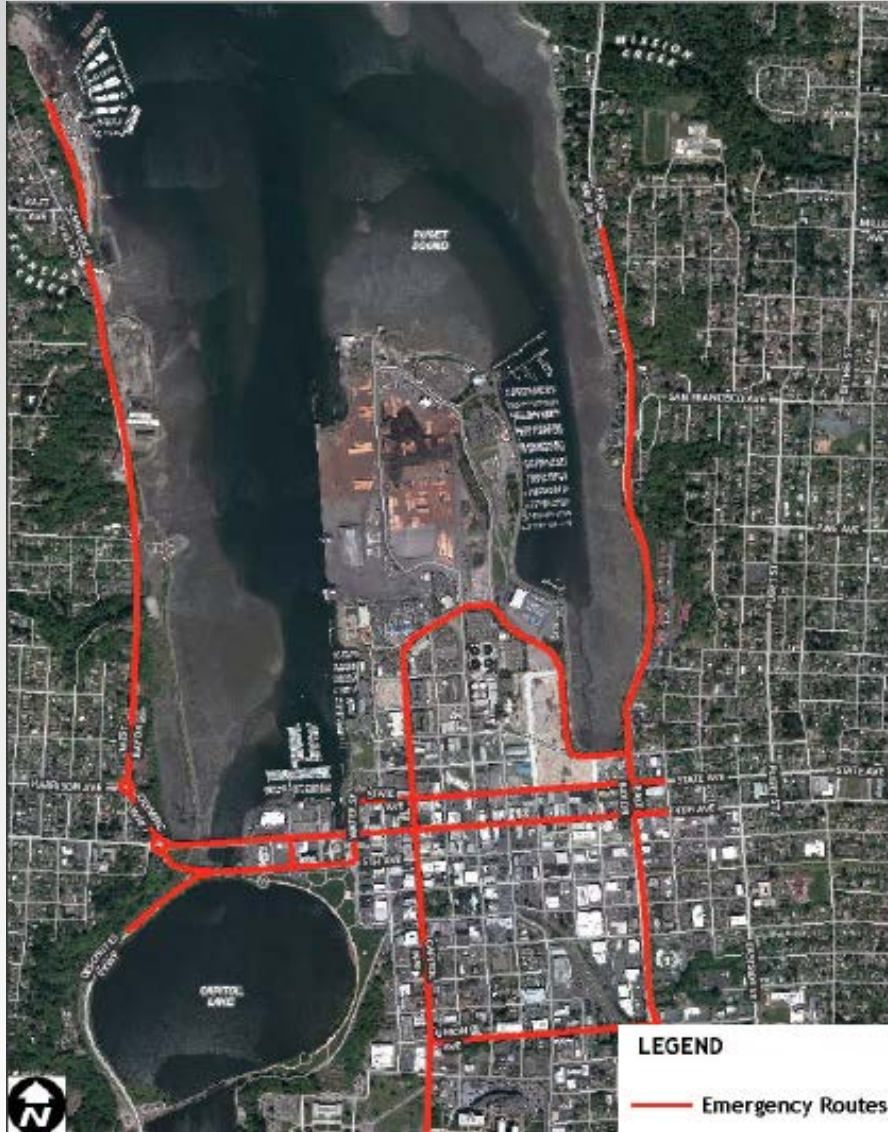
- Sea Level rise expected to be up to 50" by 2100
- At 50" of sea level rise – the 100 year flood event inundates downtown with 4.5' of water



# Climate Change Influence

- **2013 IPCC Report:**
  - Sea Level Rise Directly Related to Greenhouse Gas Emissions
    - If GHG curbed, sea level rise will be less than 3' by 2300
    - If GHG not curbed, sea level rise will be more than 6' by 2300

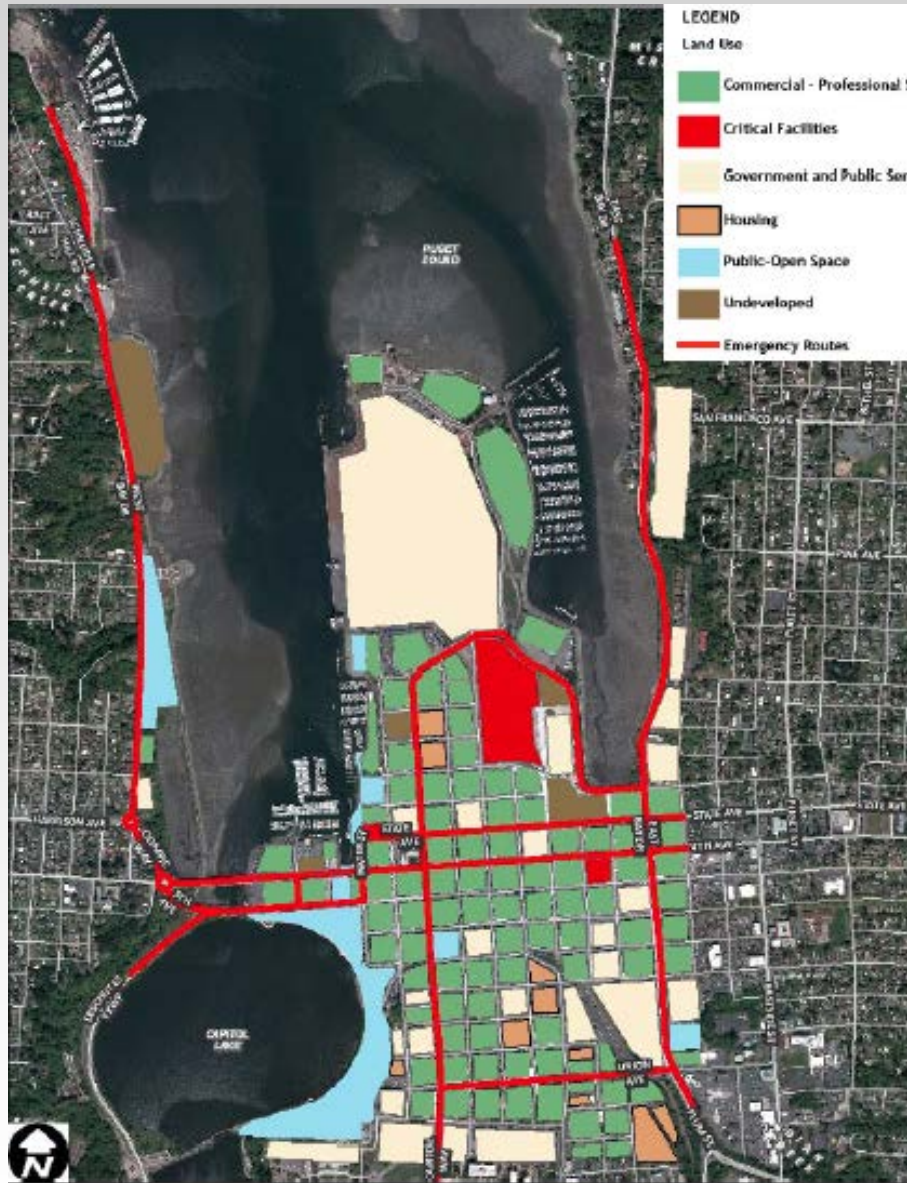
# Areas to Protect



Emergency  
Transportation  
Corridors



# Areas to Protect



Essential Public  
Facilities

# What is the Port of Olympia Doing?

- We are also planning – are coordinating with City as we do
- Are now adding sea level rise protections as we undertake projects on our downtown properties
- We are looking at ways to curb GHG emissions from Port properties and projects
- Ultimately, City building codes apply to projects on Port properties – will comply with measures the City adopts to protect downtown

# What Are Other Ports Doing?

- **Port of Gulfport** – raising elevation of Port by 4.5 meters (post Katrina)
- **Port of San Diego** – extensive planning
  - Risk matrix developed to help determine response action priorities
  - Coordinated SLR efforts into Master Plan
  - Developed Framework for Collaboration and Coordination with Other City & Regional Agencies
  - Developed cost-benefit analysis to analyze cost of investments vs. environmental risk

# What Are Other Ports Doing?

- **Port of Baltimore** –
- Drainage is the issue –
- Assessing whether to manage through re-grading the site and adding a pump system
- **AAPA** – has subcommittee developing manual and recommendations

Openings

## Our Path Forward and Perspectives

- Mix of hard/soft measures
- December 2013: first draft
- Encourage planning
- Assist seaports stakeholder
- Coordinated study efforts

27 | 11/12/2013  
AAPA FACILITIES ENGINEERING SEMINAR



COWI

 **Port of Olympia**  
Serving All of Thurston County



**Port of Olympia**

*Serving All of Thurston County*