



Coastal Hazards Analysis & Management Program (CHAMP)

*A 2007-2009 NOAA Coastal
Management Fellowship*

Joel Johnson

CT Department of Environmental Protection
Office of Long Island Sound Programs (OLISP)

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STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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2007-2009 NOAA Coastal Management
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Coastal Hazards in Connecticut: Tropical Cyclones/Hurricanes

Forecasters expect that at least one major (Category 3 or 4) hurricane will likely strike Connecticut before 2040.*



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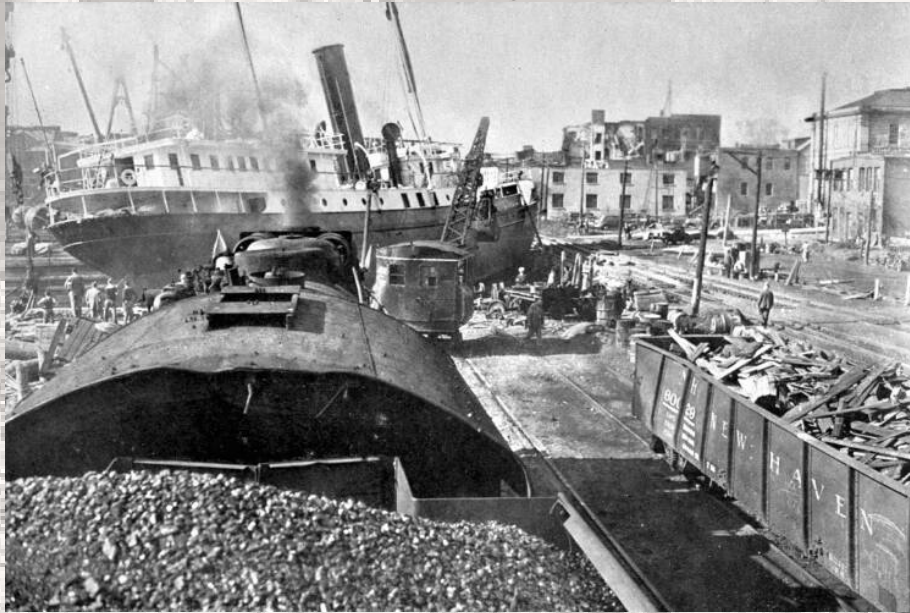


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Coastal Hazards in Connecticut: Tropical Cyclones/Hurricanes

Forecasters expect at least one major (Category 3 or 4) hurricane to strike Connecticut by 2040.*



** 2004 Department of Environmental Protection Statewide Natural Hazard Mitigation Plan*



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Coastal Hazards in Connecticut: Flooding/Winter Storms



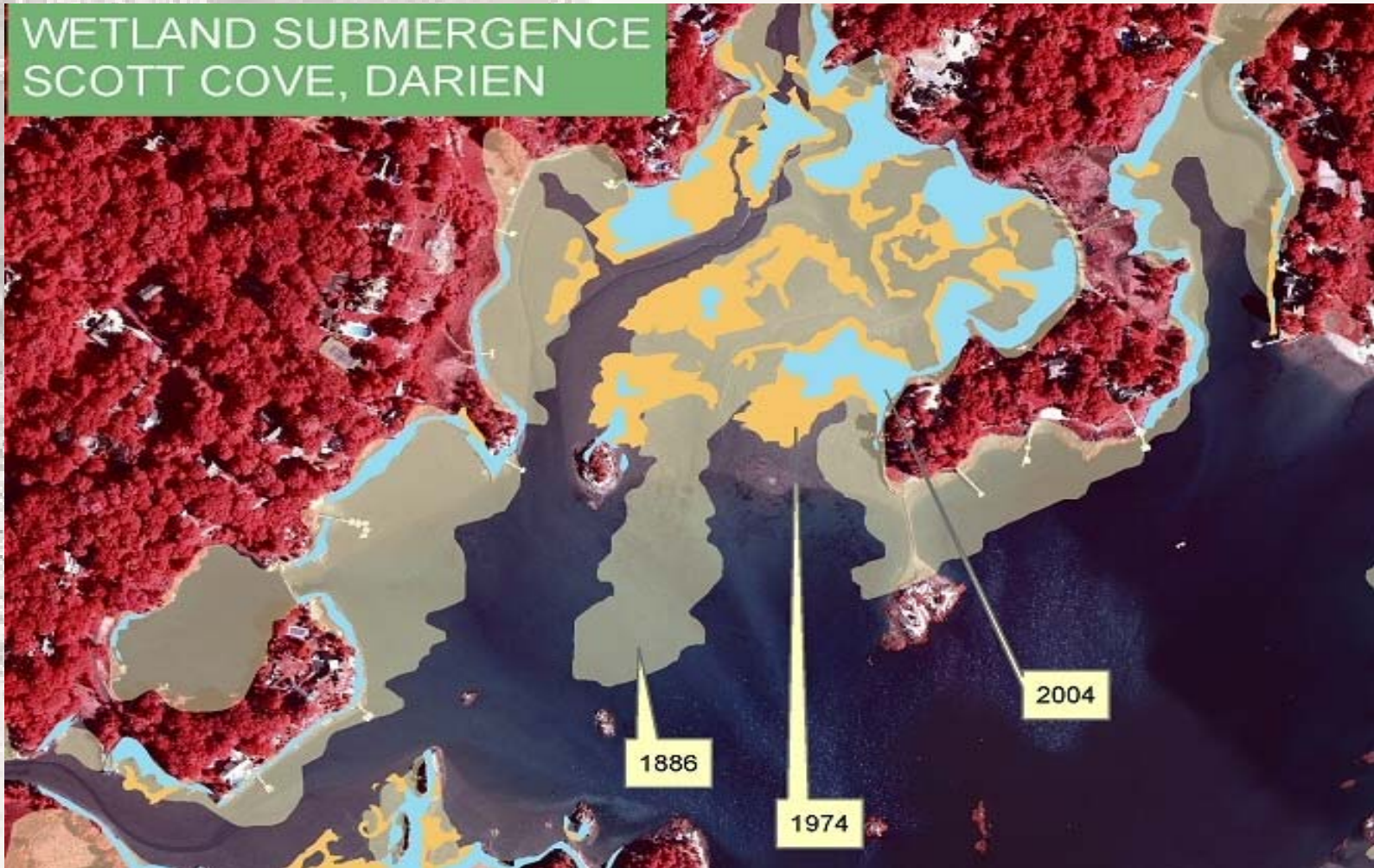
April 2007 "Nawtheastah"



Atlantic Road, Crescent Beach,
East Lyme



Coastal Hazards in Connecticut: Inundation



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Coastal Hazards in Connecticut: Erosion



Bluff Point, Groton, CT.
Barrier beach landward migration:
one full beach width in 120 years



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Coastal Hazards in Connecticut: Erosion



Dune destruction by Hurricane Gloria (1985)



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Coastal Hazards in Connecticut: Heavy Precipitation /Undersized Culverts



Old Lyme, CT



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CHAMP Rationale

State/Municipal officials, coastal property owners and the general public would benefit from a single, comprehensive, updatable source of hazards information for the coast.



CHAMP Project Deliverables

1. Coastal Hazards Research & Assessment:

- Consolidate and analyze existing coastal hazards information for CT

2. Coastal Hazards Web Site & Visualization Tool:

<http://depweb.dms.uconn.edu>

- Website to deliver hazards related information and data
- Website features an interactive inundation visualization tool

3. Outreach to Coastal Communities:

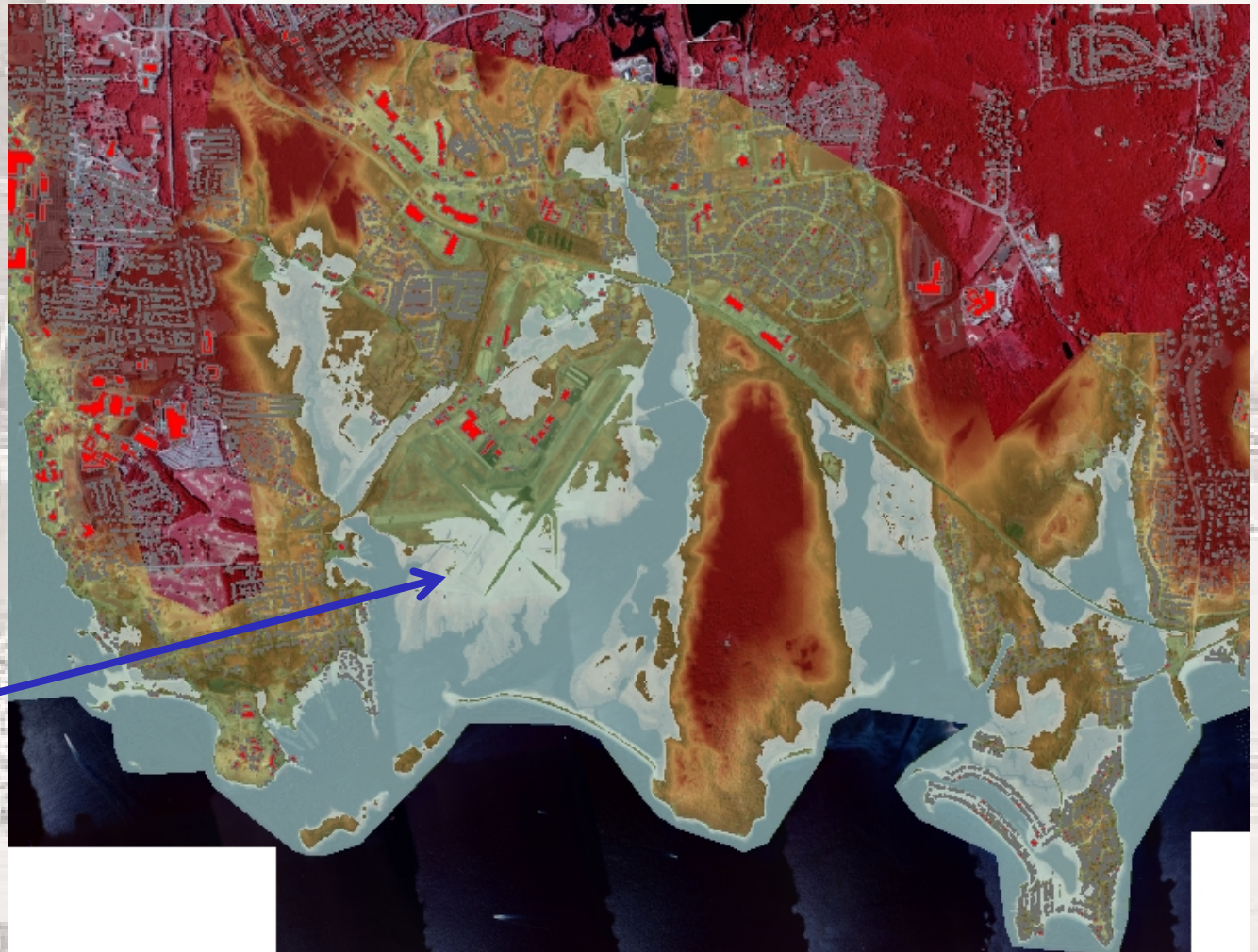
- Let them know data and tools exist to help plan/prepare/recover from coastal hazards



SLR Scenario Example

Groton, CT:

Mean High Water
plus 1.5 Meters
--Rahmstorf
(2007)



Groton/New London
Regional Airport



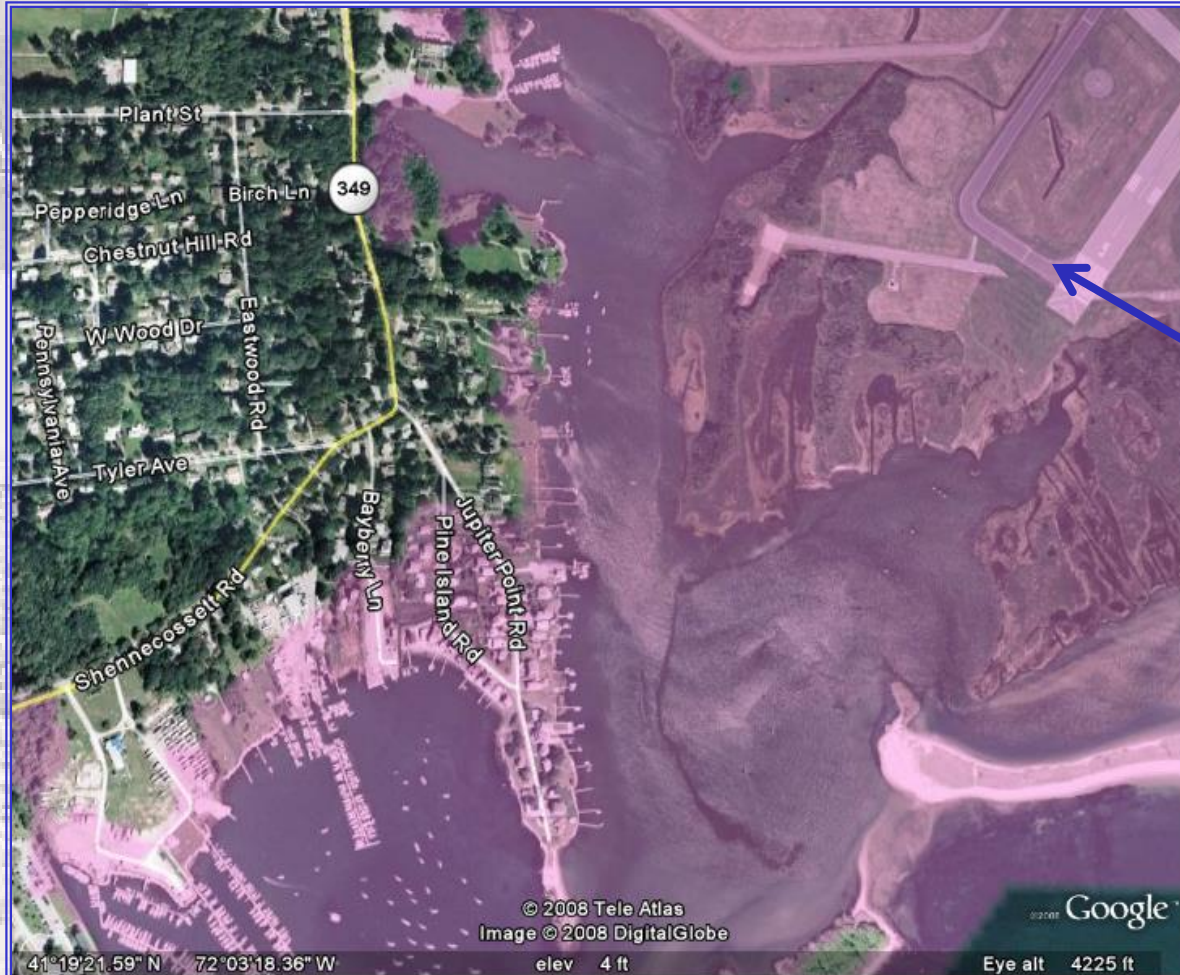
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SLR Scenario Example

Groton, CT:
Mean High Water
plus 1.5 Meters
--Rahmstorf
(2007)



Groton/New
London
Regional
Airport

Viewed in Google

Earth



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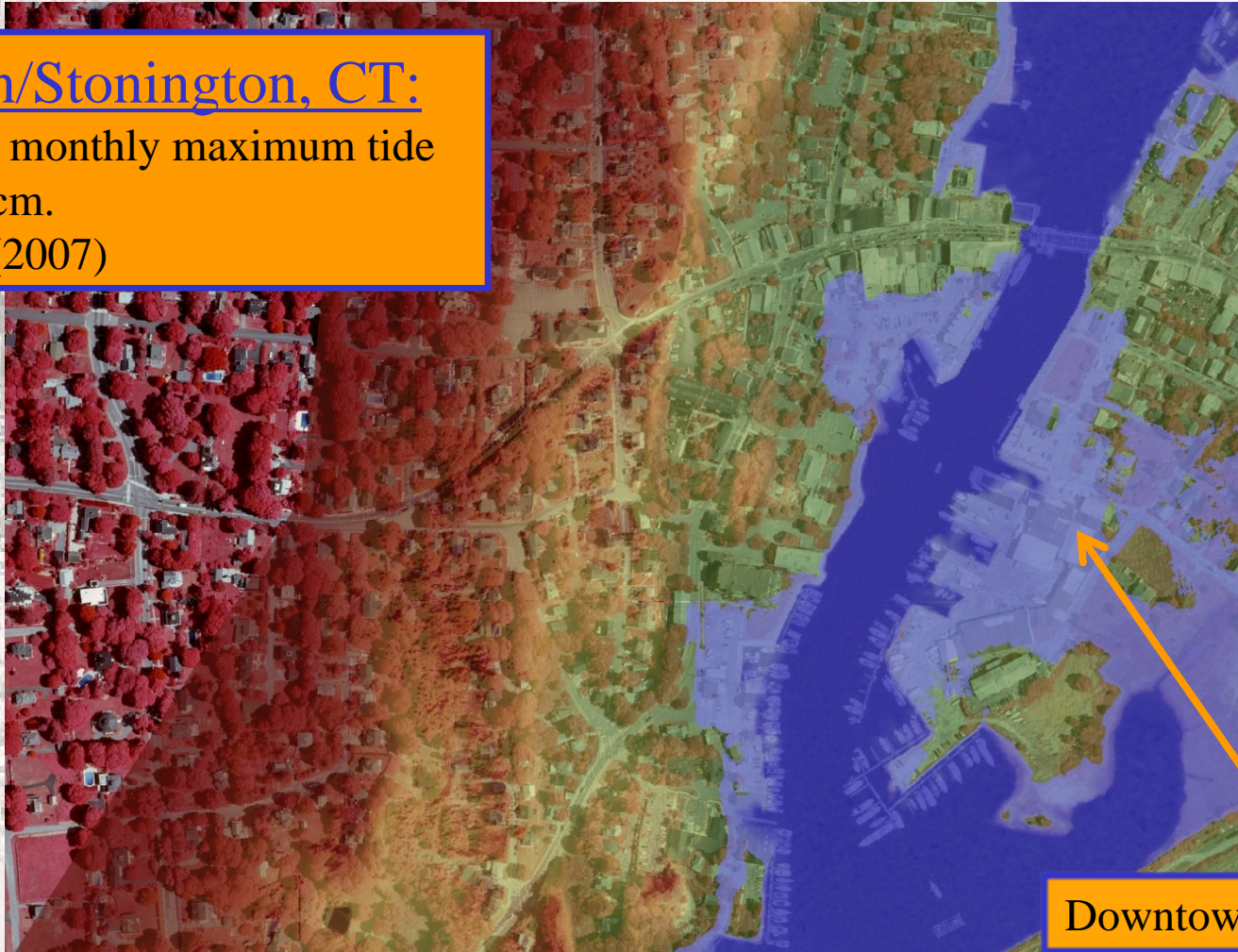
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SLR Scenario Example

Groton/Stonington, CT:

Average monthly maximum tide
plus 59 cm.

--IPCC (2007)



Downtown Mystic, CT



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Next Steps:

1. Improve website
2. Serve sea level rise inundation maps on website
3. Begin work on storm surge scenarios
4. Advertise. Get the word out.



Help CHAMP. Be a critic.

Joel Johnson

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Connecticut Coastal Hazards Portal and Visualization Tool
A Public Resource



<http://depweb.dms.uconn.edu>



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