

#### Western Washington University Western CEDAR

Salish Sea Ecosystem Conference

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### Using a design charrette and state of the art coastal modeling to support local government adaptation to sea level rise

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Macilroy, Carol; Doyle, John; Grossman, Eric; and Mauger, Guillaume, "Using a design charrette and state of the art coastal modeling to support local government adaptation to sea level rise" (2018). Salish Sea Ecosystem Conference. 567.

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# LA CONNER DESIGN CHARRETTE

Using an Architect's Project Tool to Guide Public Policy on Adapting to Sea Level Rise

John Doyle









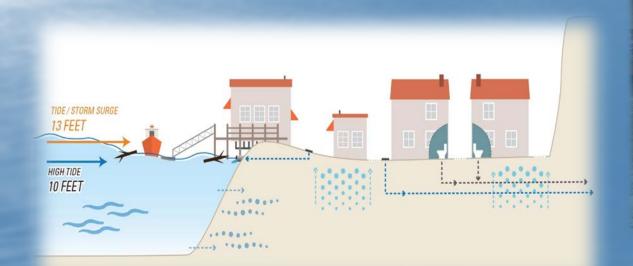




#### WHY LA CONNER?

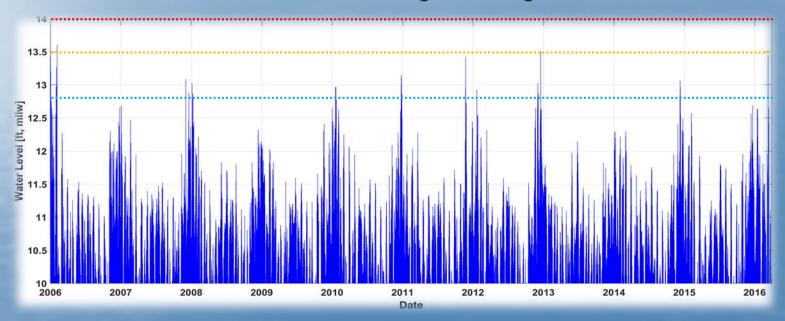
- An early DOE Climate Change Report identifies Skagit River Delta and Willapa Bay in southwest Washington likely to be first impacted by sea level rise
- 2006 Event started evaluation and risk assessment with Town and Swinomish Planning Office

Events that happened in the Town 1-2 times every 4-5 years began happening 4-5 times a year.



#### **EVENT FREQUENCY**

- The Blue dotted lines: Town experiences minor flooding
- > The Yellow dotted: Significant flooding
- The Red dotted lines: Devastating flooding



[Note: 1 foot of SLR will likely result in an annual "red line" flood event and 2 feet of SLR will result in multiple "red line" flood events annually. SLR projections for 2050-2100 is between .5 and 6 feet.]

#### WHY DESIGN CHARRETTE?

- Small Jurisdiction with limited resources
- Complex technical issues
- Controversial topic
- > Unknown solutions

### CHARRETTE PROVIDES STRUCTURAL GUIDANCE

- Ground Rules for Public Officials in workshop
- Common technical understanding of problem
- Looking for achievable objectives
- Need to sort complex details into manageable divisions
- Identify next steps

### THE LA CONNER CHARRETTE EXPERIENCE

- ❖ Participants Target of no more than 30
  - Scientists and Technical Staff
  - Councilmembers
  - Planning Commissioners
  - Waterfront Business Owners
  - > Town Citizens

#### CHARRETTE EXPERIENCE

Town staff, Skagit Climate Science Consortium and Steve Moddemeyer met for more than a year to understand Town needs, develop science, and craft design charrette



## PARTICIPANTS TOURED TOWN FACILITIES



[Note: Councilmembers and Commissioners had not previously toured Town facilities together.]



## SCIENTISTS & TECHNICAL EXPERTS PROVIDE CURRENT DATA



#### THE CHARRETTE STEPS

- > Lessons learned in other parts of the world
- How do we recognize success?
- Idea generation based
- Refinement and sorting of ideas
- Deliberation on idea by groups







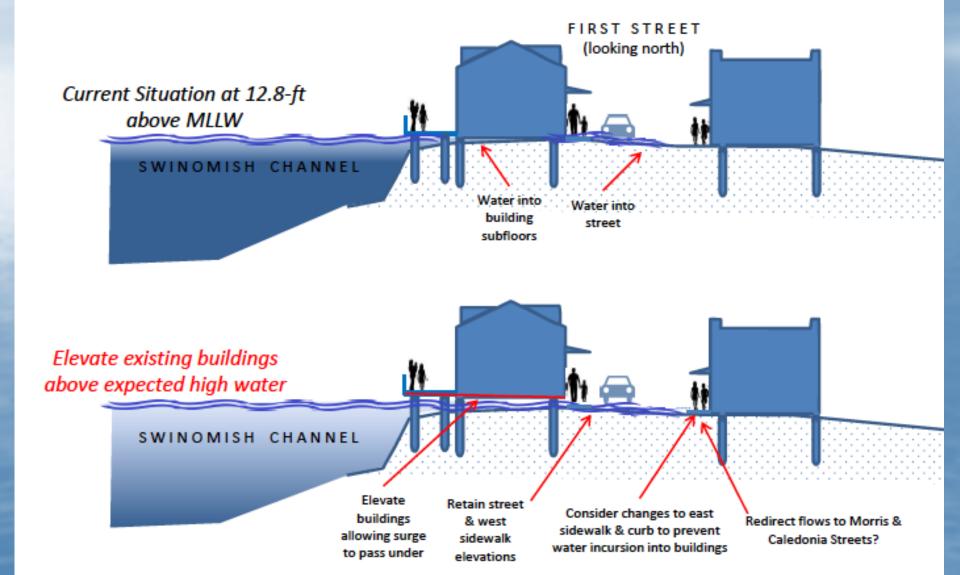
# PRESENTATION OF DELIBERATIONS



#### **CHARRETTE RESULTS**

- Update Planning Documents with relation to Climate Change
  - Comprehensive Goals and Objectives added
  - Capital Facilities Plan
  - Stormwater Management Plan
- Creative ideas for more resilient infrastructures
- Installation of a tide gage
- Improved local decision-maker understanding of locally specific climate risk
- Local needs and knowledge provided to USGS as they continue their coastal modeling work in Puget Sound

### Creative Ideas Table Three: Raise buildings along First & Morris



### THANKS TO ALL THOSE WHO PARTICIPATED:

- Special thanks to Carol McIlroy of the Skagit Climate Science Consortium for coordinating the planning of the event
- Steve Moddemeyer of Collins Woerman for his inspired use of the Charrette Process
- Eric Grossman from the USGS
- Guillaume Mauger of the UW Climate Impacts Group
- Ed Knight, Planning Director for the Swinomish Indian Tribal Community
- La Conner Planning Commission members; Carol Hedlin, Marna Hannaman, Bruce Bradburn and Linda Talman
- ➤ La Conner Councilmembers; Marylee Chamberlain and John Leaver
- Western Washington University
- John Doyle, Town of La Conner for his leadership and vision (Carol snuck this one in!)