

Planning for Coastal Change in Levy County

Project Update and Next Steps

Presentation to the Cedar Key City Council
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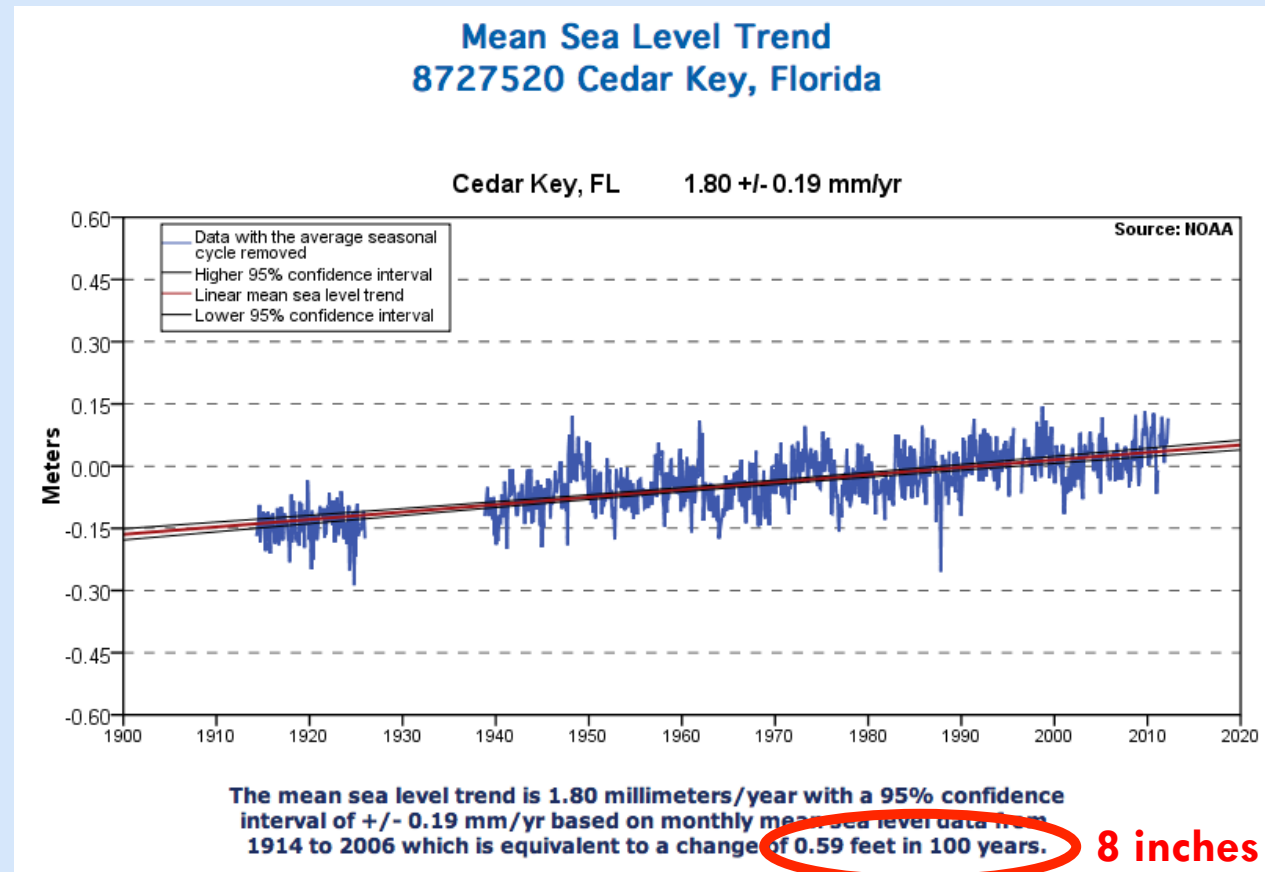
Purpose of the Presentation

- Project review
 - Vulnerability
 - Community input
 - Recommendations
- Review feedback received from County Commission
- Next steps
 - Findings report
 - New project
 - Other activities

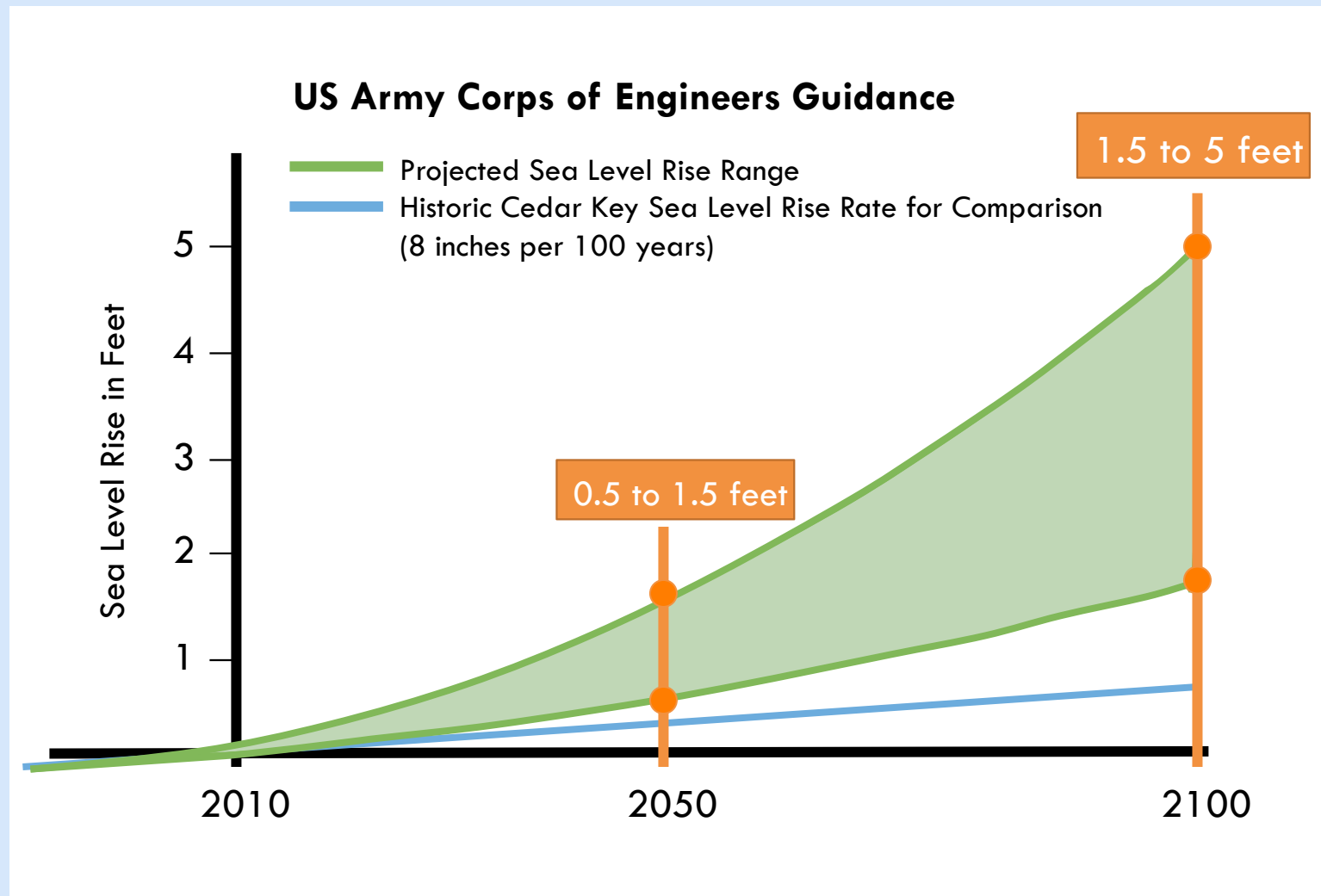
Historic Sea Level Rise



Cedar Key tide gage



Sea Level Rise Projections for Levy County



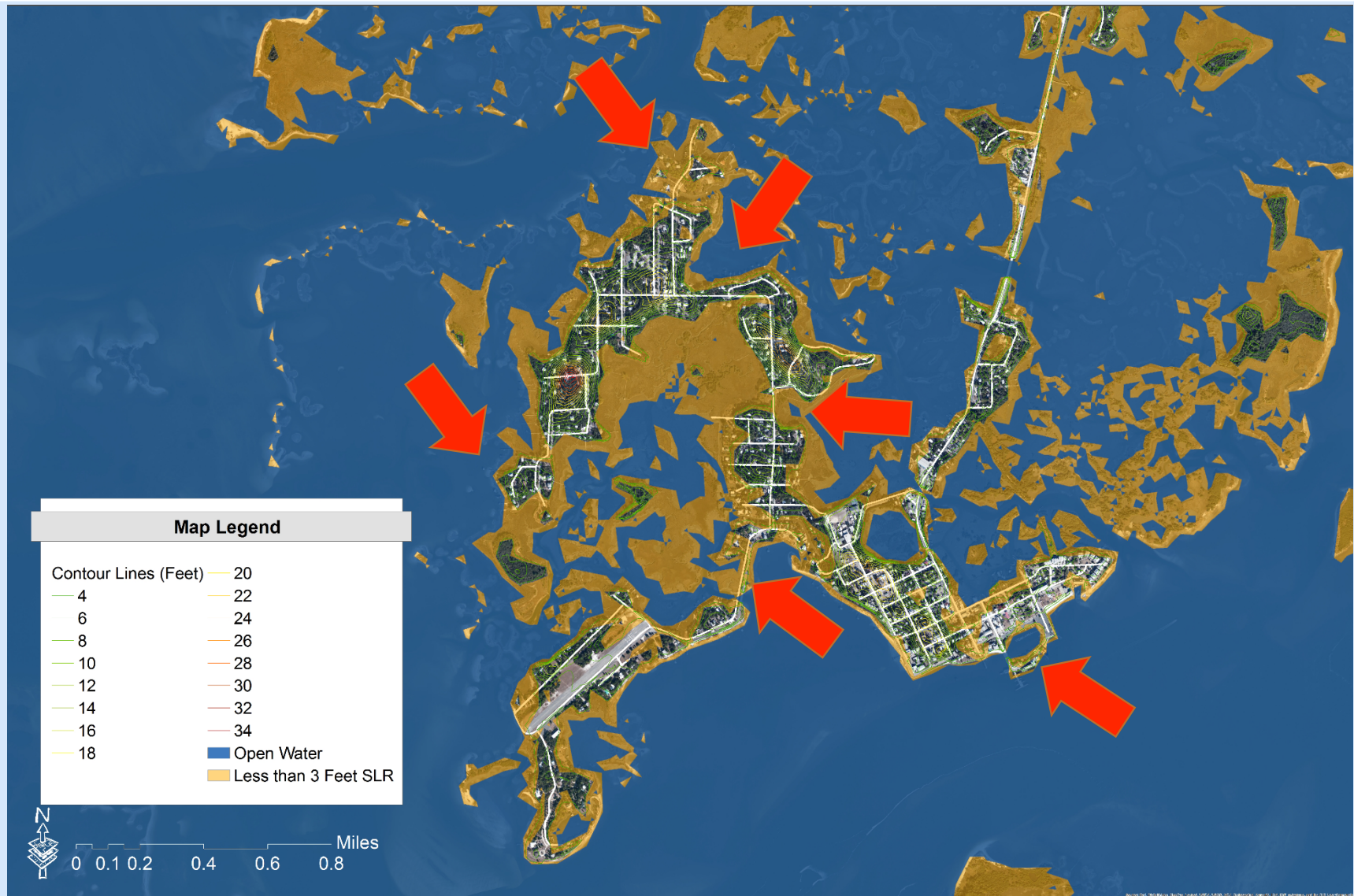
Impacts of Sea Level Rise:

Shifting Conditions, New Incompatibility

- **Habitat** and species changes
- More frequent **flooding** at high tide
- **Storm surges** farther inland
- Saltwater intrusion into **aquifers**
- **Erosion** and **corrosion** of infrastructure
- Release of **pollutants**



Cedar Key Low Lying Areas Map



Impacts of Sea Level Rise on Cedar Key

Cedar Key Low Lying Areas	Acres (from parcel data)	Additional Acres	Percentage of Impacted Land
Less than 1.5 feet	134	134	26%
Less than 3 feet	320	186	36%
Less than 4 feet	377	57	11%
Less than 5 feet	449	72	14%
Less than 6 feet	513	64	13%

Impacts of Sea Level Rise on Cedar Key

Cedar Key Low Lying Areas	# of Structures	Additional Structures	Percentage of Impacted Structures
Less than 1.5 feet	51	51	9%
Less than 3 feet	103	52	10%
Less than 4 feet	235	132	26%
Less than 5 feet	397	162	32%
Less than 6 feet	513	116	23%

Cedar Key: Key Observations

- Elevation
 - Varies
 - Impacts will accelerate
- Development
 - Low lying
 - Higher points
 - In-fill and redevelopment
- Social, cultural, and economic aspects
- Creative opportunities and resources



Ways to Address Changing Compatibilities

- Research
 - Land use-water connection
 - More detailed analysis for project planning
 - Monitoring of large scale trends
- Land use and infrastructure planning
 - Discourage new coastal development in low-lying areas and carefully plan for future upland development
 - Maintain habitat migration corridors
 - Plan for infrastructure and facilities adaptation
 - Post-disaster redevelopment planning
- Economic development
- Intergovernmental coordination
 - Water
 - County and municipalities



Design and Planning Recommendations

- Direct new growth to higher elevations
- Restore damaged protective ecosystems
- Prioritize infrastructure investments
- Harden critical facilities
- Elevate structures



Design and Planning Recommendations

- Integrated planning
 - Sea level rise is one of many considerations and changes
- Planning opportunities
 - Comprehensive plan evaluation and appraisal (EAR) report
- No regrets policies
 - Reduce current vulnerabilities



Design and Planning Recommendations

- Low hanging fruit
- Multi-purpose
- Consider planning for 4' elevation threshold
- Stakeholder input



County Feedback

- Concerned with whether sea level rise is actually happening
 - Wanted more modeling or information to make decisions
- Uncertain of the role they will play
 - Accepted that local communities on the coast are looking at the issue
 - Opportunity to incorporate information into County Comprehensive Plan update

Next Steps

- Findings report
 - May 2014
- New project
 - May 2014-September 2015
 - Detailed adaptation strategies
 - Social
 - Environmental
 - Hazards
 - Community design
- Other activities

Thank You!

ChangingLevyCoast.org