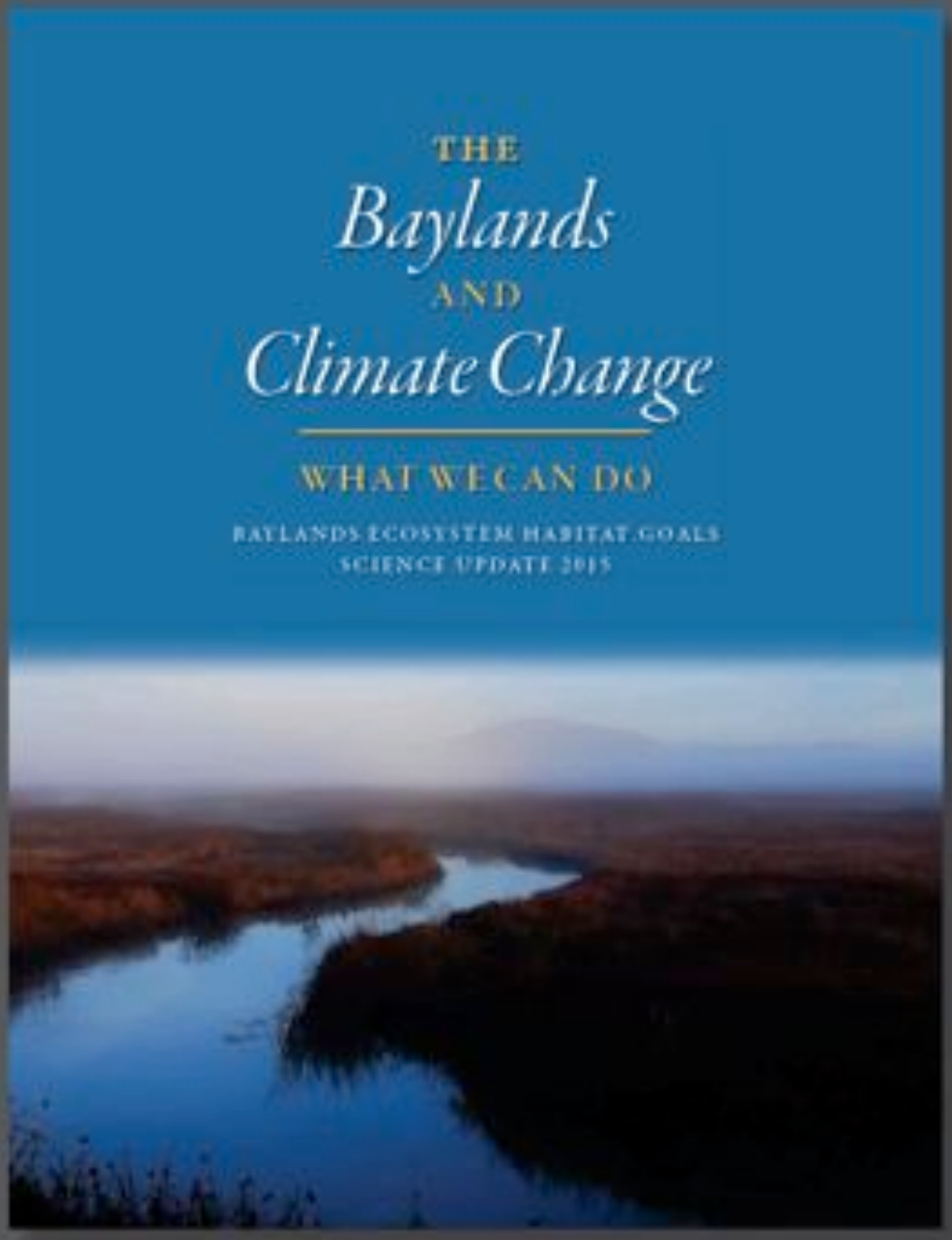

State of California
Coastal Conservancy

Recommendations

1. **Faster Restoration**
2. **More Sediment**
3. **Long Term Sediment Supply**

why do we care about

TIDAL MARSHES?

clean water

flood control

food web and wildlife

recreation and scenery

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Baylands Goals Science Update OCT. 2015

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Nate Kauffman

Baylands Goals Science Update OCT. 2015

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1800

Tidal Marsh

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1998

Tidal Marsh

Restored Tidal Marsh

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FUTURE

Tidal Marsh

Restored Tidal Marsh

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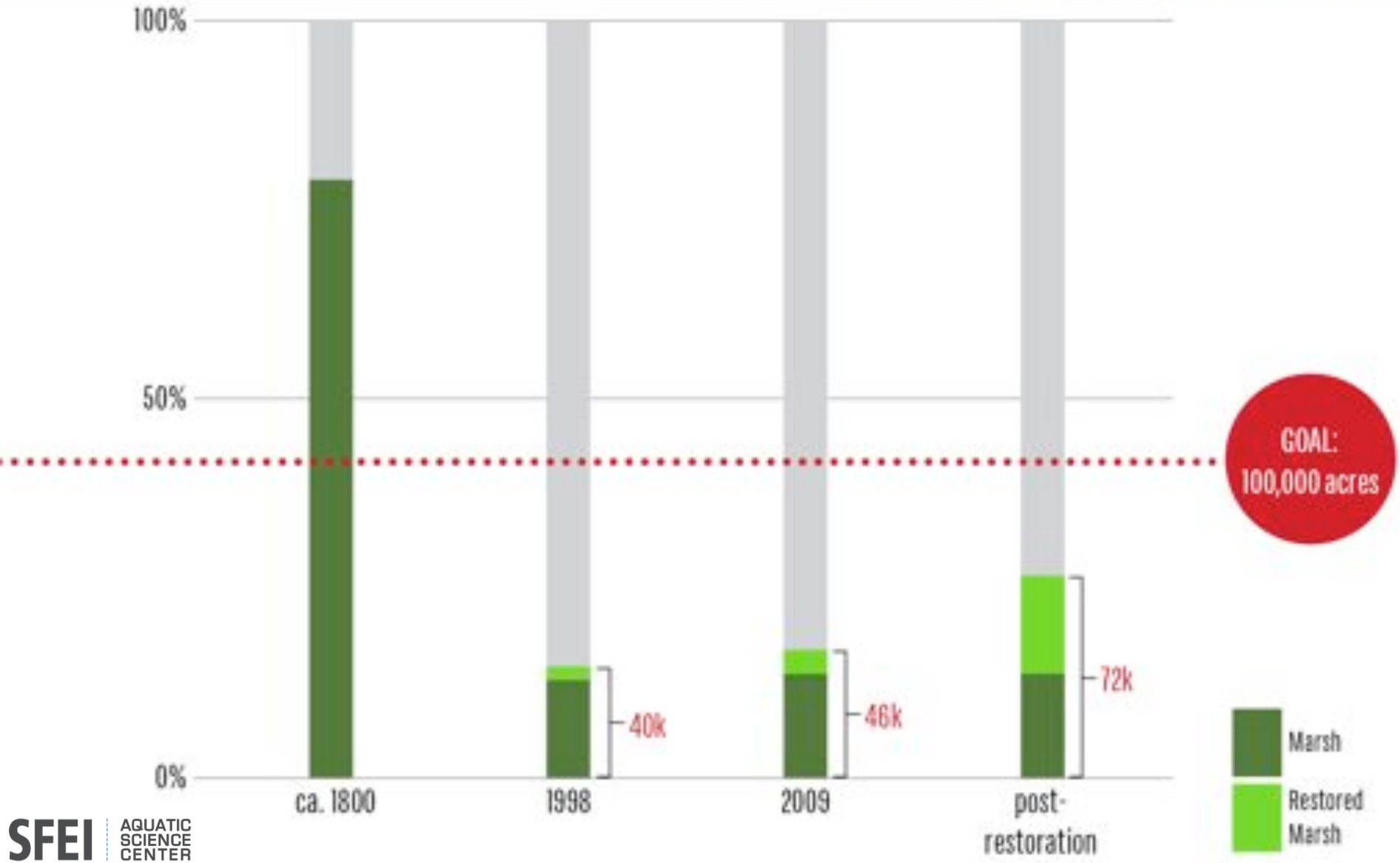
TIDAL MARSH *restoration*



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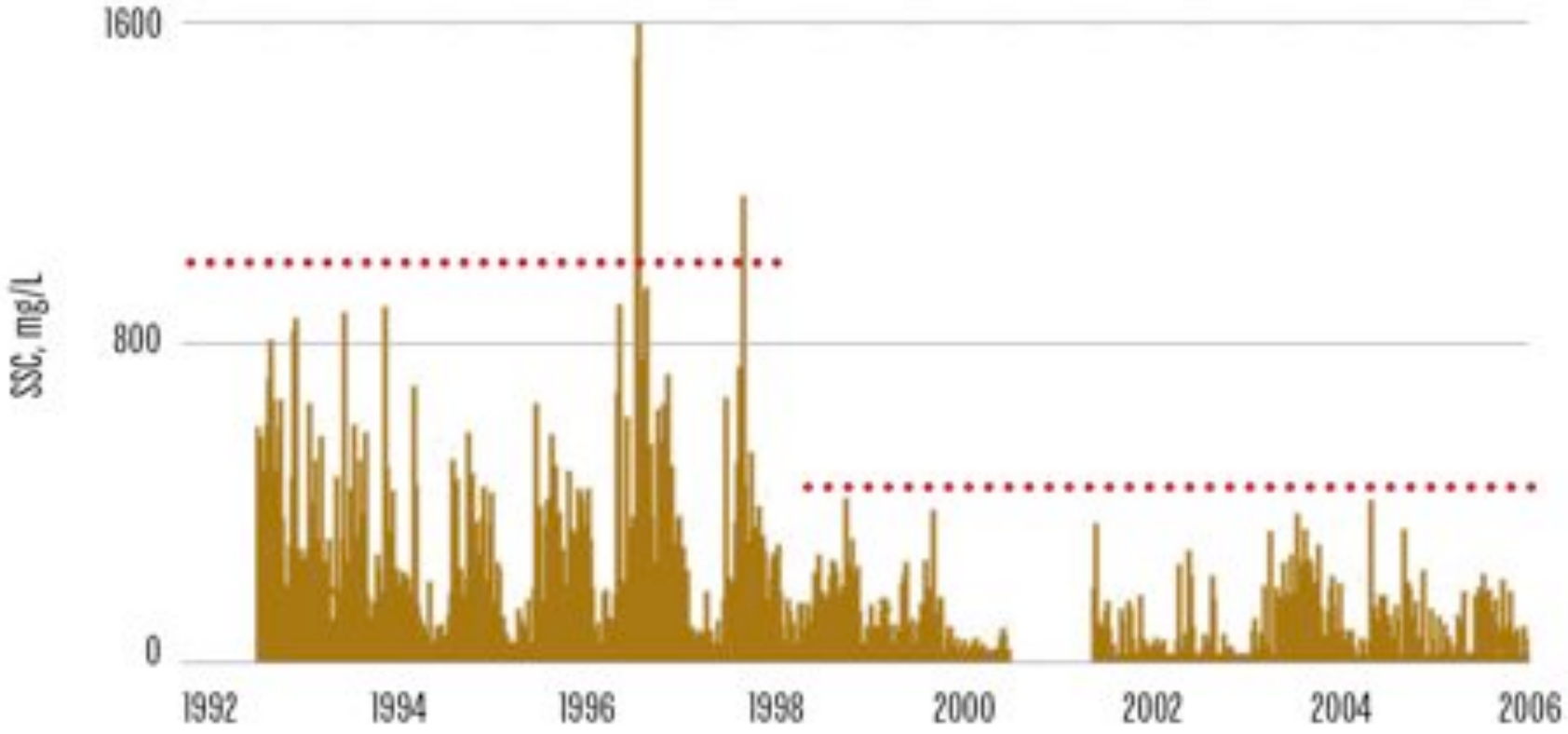
GLOBAL SEA LEVEL *change* SINCE 1800

Courtesy 3rd National Climate Assessment, 2014

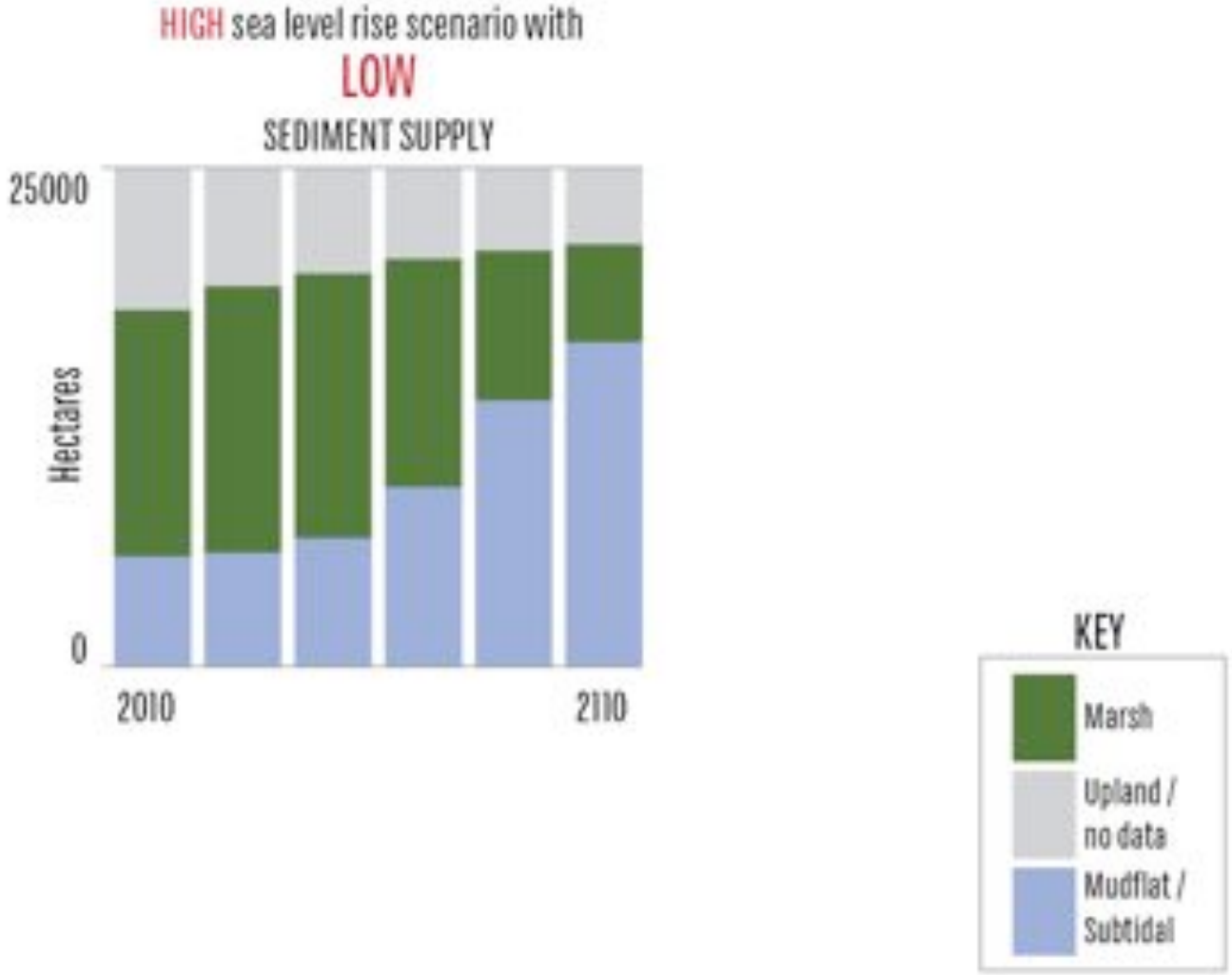
SEDIMENT SUPPLY *reduction*

Courtesy
Dave Schoellhamer
2011



THE FUTURE OF MARSHES DEPENDS ON *sediment supply*

Courtesy Stralberg et al. 2011



THE FUTURE OF MARSHES DEPENDS ON *sediment supply*

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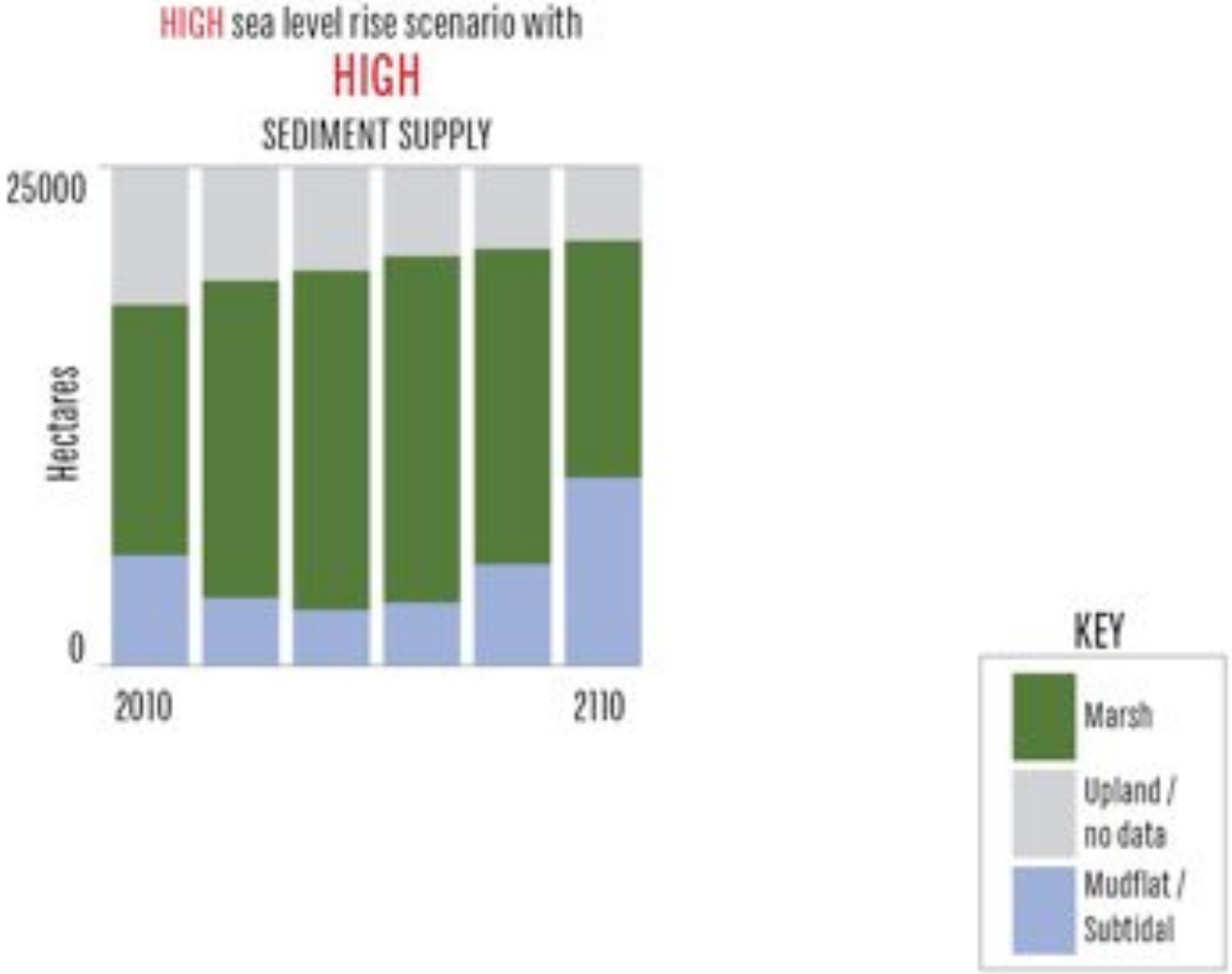

WHAT WE CAN DO

- *Restore complete systems, including processes*

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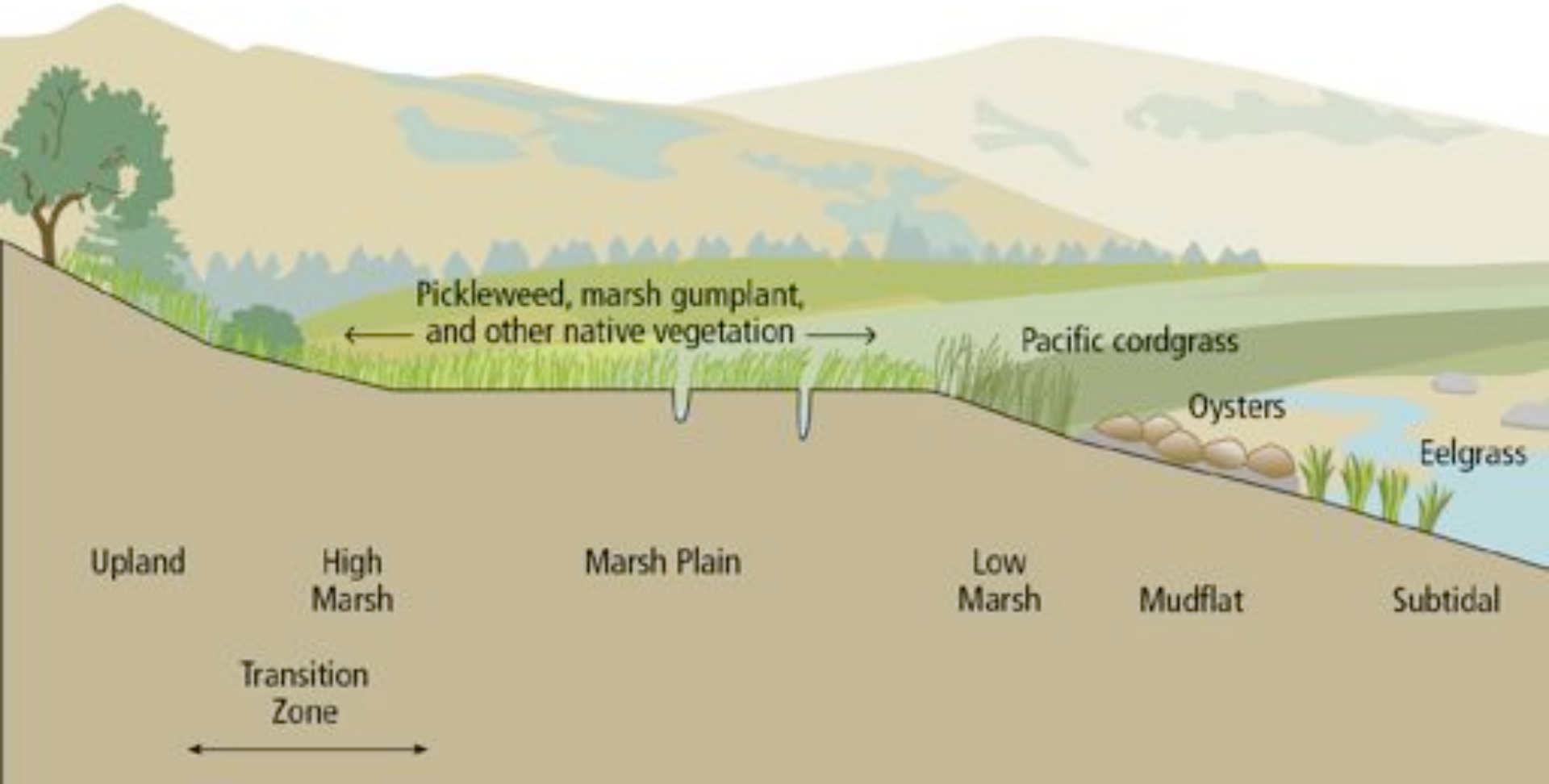
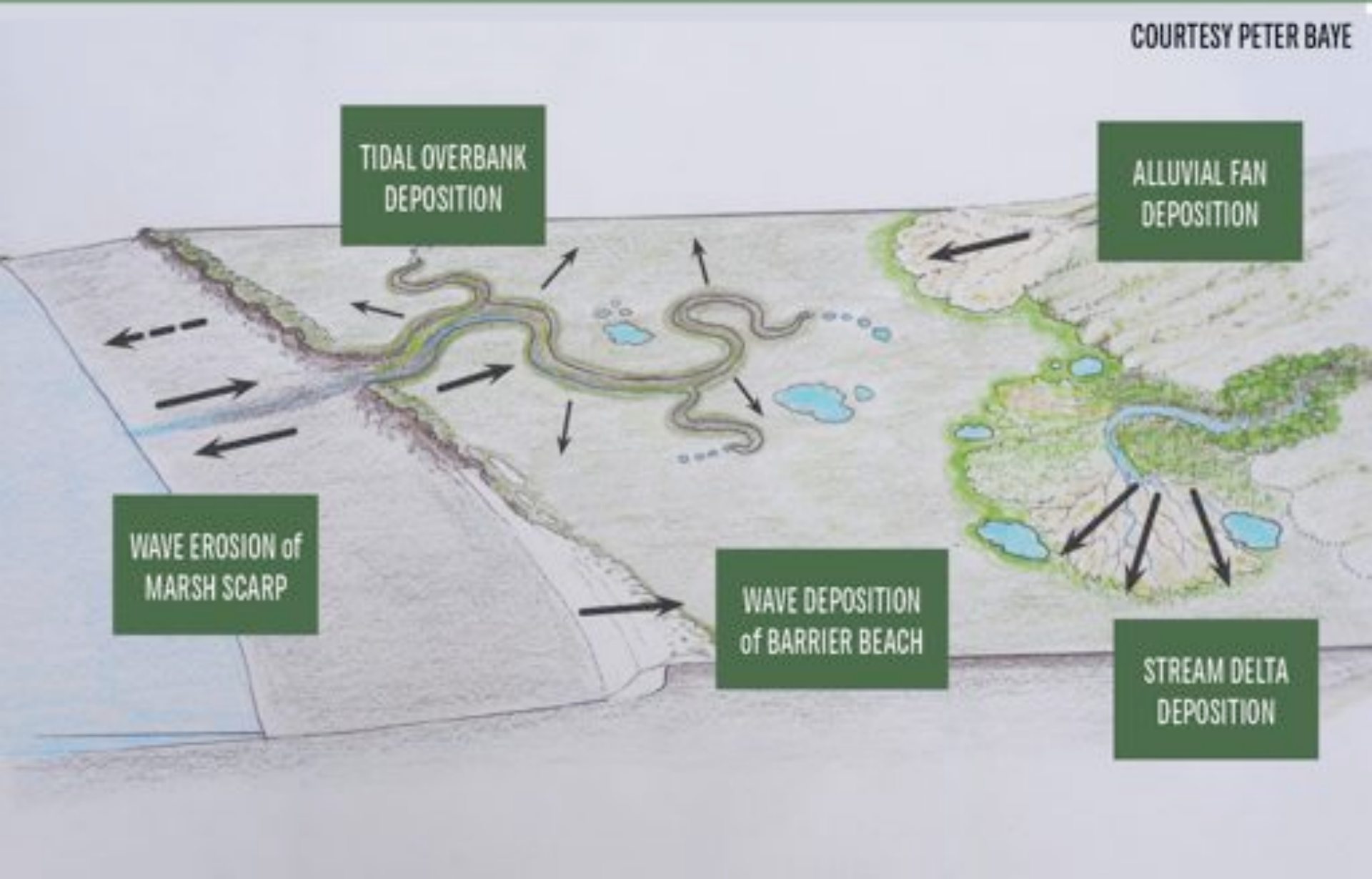
Restore COMPLETE SYSTEMS



MEANS RESTORING PROCESSES NOT JUST PLACES



SEDIMENT IS A *precious resource*

WHAT WE CAN DO

- *Restore complete systems, including processes*

- *Restore soon, in areas marshes are likely to persist*

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restore MARSHES BY 2030 IN AREAS WHERE THEY'RE LIKELY TO persist

Build up of sediment and vegetation takes time

Higher starting elevation means marshes survive sea-level rise for longer

Collaborative local

VISIONS & PLANNING

- *Define practical, science-based shoreline units*
- *Pair with appropriate adaptation strategies*
- *Convene stakeholders to create long-term vision for resilience*

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Resilient Shorelines

- Areas Vulnerable to Coastal Flooding
- Natural Shoreline Flood Control Options
- Constraints for Future Alignments

FUNDERS

- *State Coastal Conservancy*
- *Gordon and Betty Moore Foundation*
- *Goals Update Steering Committee*