WHAT WE CAN DO

- Restore complete systems, including processes
- Restore soon, in areas marshes are likely to persist
- Plan for the Baylands to migrate
SEDIMENT IS A precious resource
THE FUTURE OF MARSHES DEPENDS ON sediment supply

HIGH sea level rise scenario with HIGH

SEDIMENT SUPPLY

KEY

Additional Marsh
Marsh
Upland / no data
Mudflat / Subtidal

Henry Stralberg et al. 2011

Hectares

25000

0

2010
2110
Build up of sediment and vegetation takes time

Higher starting elevation means marshes survive sea-level rise for longer
Measures to increase vertical accretion

- Mudflat and marsh recharge increase local sediment supply
- Increasing channel density also increases sedimentation
Restore Watershed-Estuary Connections that nourish the baylands
Restore Watershed-Estuary Connections that nourish the baylands.
Restore Watershed-Estuary Connections that nourish the baylands
Measures to decrease marsh edge erosion

> Coarse beaches buffer wave erosion and preserve wide marsh

Photographs courtesy of Peter Baye
MIGRATION SPACE strategies

- Acquire and conserve
- Construct (horizontal levee)
- Planned retreat
PLAN FOR THE BAYLANDS TO migrate
PLAN FOR THE BAYLANDS TO migrate
Increase the level of coordination among bayland stakeholders

Restoration “Community”
Increase the level of coordination among bayland stakeholders

- Regulators
- Business
- Civic Institutions
- Infrastructure Agencies
- Restoration “Community”
Increase the level of coordination among bayland stakeholders

- Regulators
- Civic Institutions
- Business
- Infrastructure Agencies
- Restoration “Community”
Create plans that factor in ecological outcomes after extreme events and other disasters.
Thank You

Matt Gerhart
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Regional Recommendations

<table>
<thead>
<tr>
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<th>Recommendation</th>
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<tbody>
<tr>
<td>1</td>
<td>Restore estuary-watershed connections.</td>
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<td>2</td>
<td>Design complexity and connectivity into the Baylands landscape.</td>
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<td>3</td>
<td>Restore and conserve complete tidal wetlands systems.</td>
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<td>4</td>
<td>Restore Baylands to full tidal action prior to 2030.</td>
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<td>5</td>
<td>Plan for the Baylands to migrate.</td>
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<td>6</td>
<td>Actively recover, conserve, and monitor wildlife populations.</td>
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<td>7</td>
<td>Develop and implement a comprehensive regional sediment management plan.</td>
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<td>8</td>
<td>Invest in planning, policy, research and monitoring.</td>
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<td>9</td>
<td>Develop a regional transition zone assessment program.</td>
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<td>10</td>
<td>Improve carbon management.</td>
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