



# LIVING SHORELINES

*a regulatory perspective*



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# R E S I L I E N C E



*The capacity of a system to experience perturbations and yet persist.*



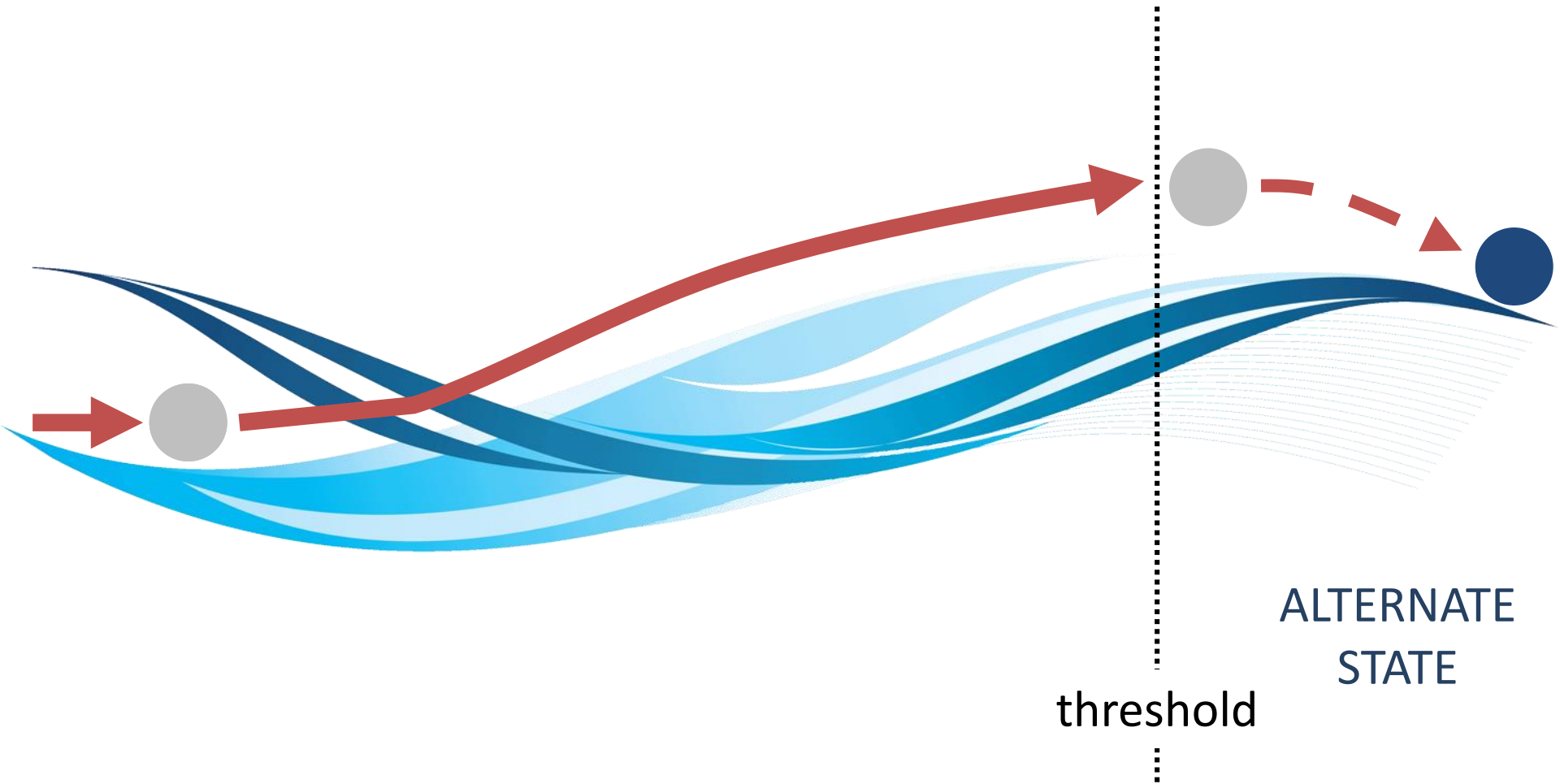
# R E S I L I E N C E



EXISTING  
STATE

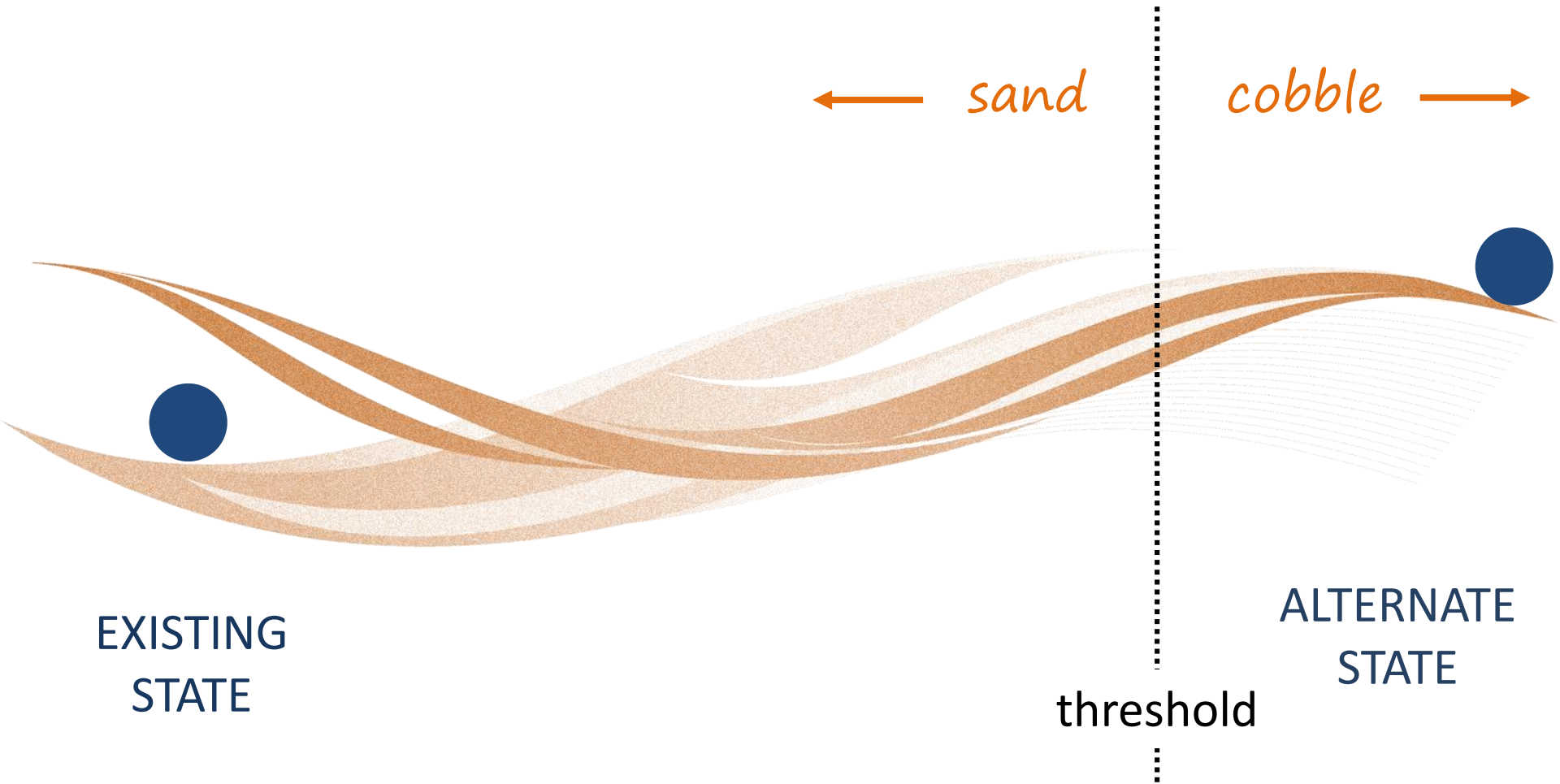


# R E S I L I E N C E



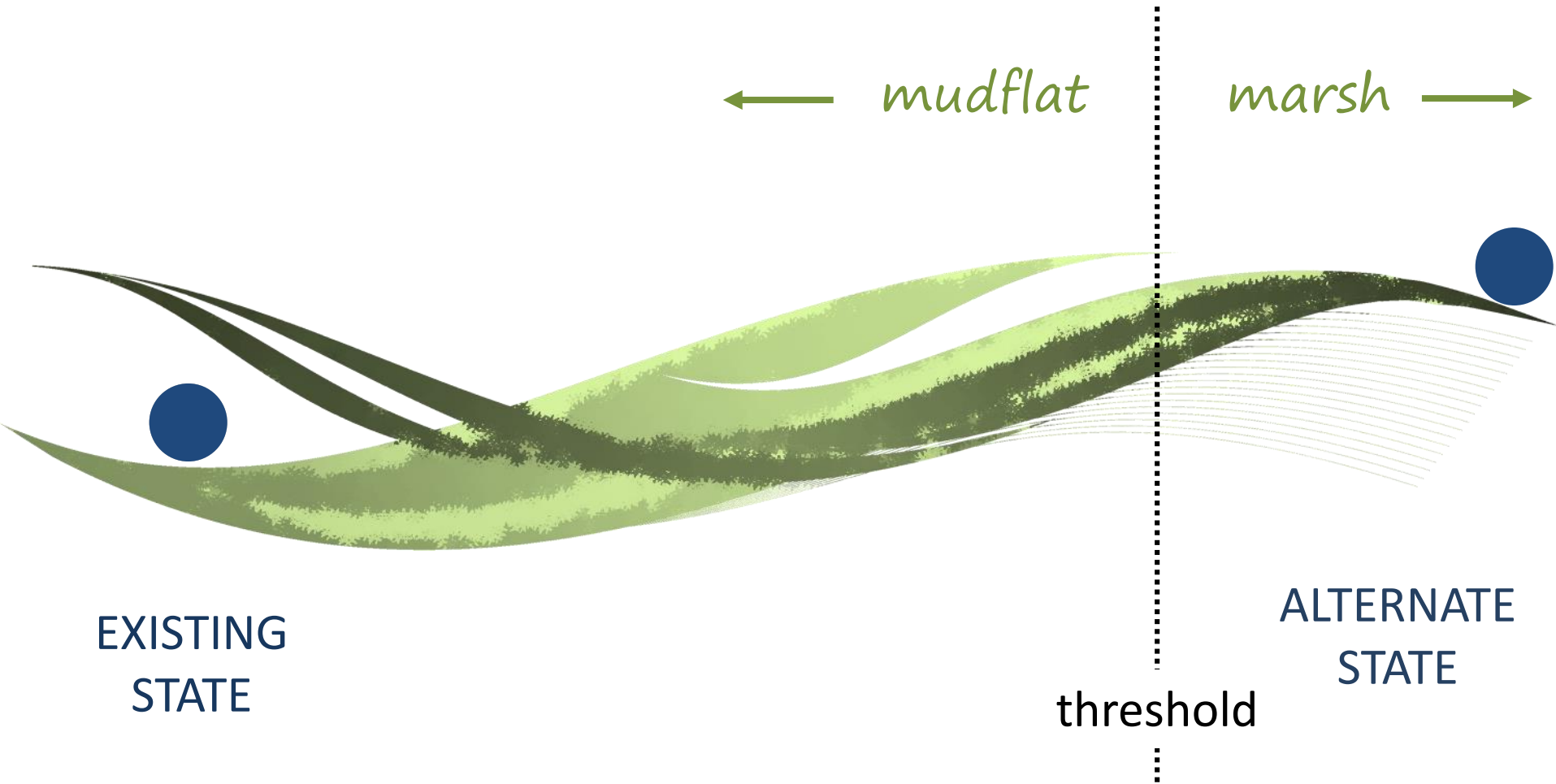


# R E S I L I E N C E





# R E S I L I E N C E





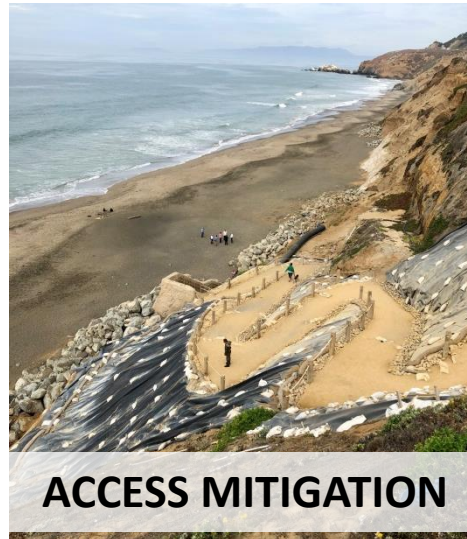


# COASTAL ACT





# *progress under the* **COASTAL ACT**



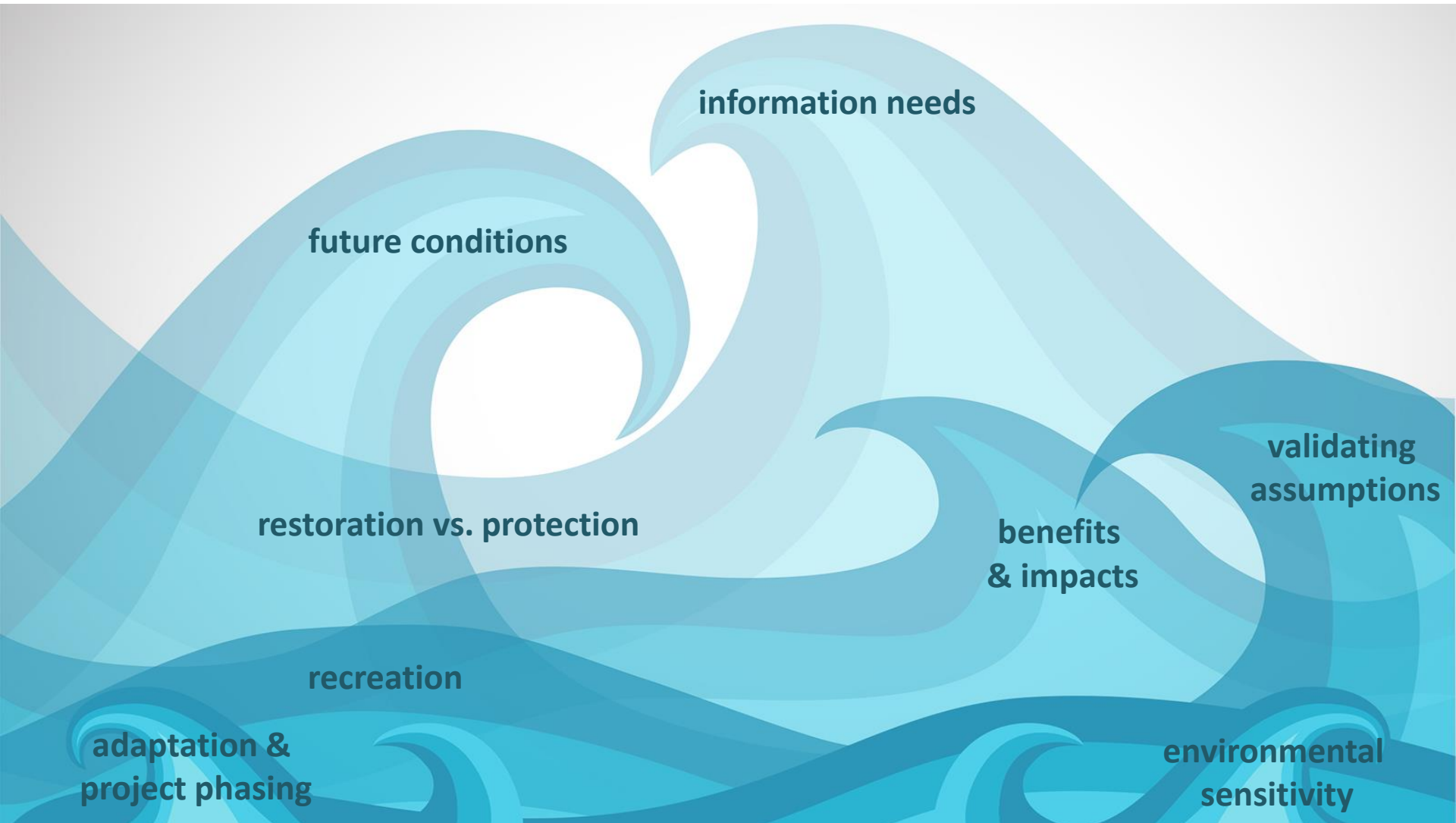
## **CALIFORNIA COASTAL COMMISSION SEA LEVEL RISE POLICY GUIDANCE**

*Interpretive Guidelines for Addressing  
Sea Level Rise in Local Coastal Programs  
and Coastal Development Permits*





# ANALYTICAL CHALLENGES





# INTELLIGENT MONITORING

## Baselines

- Pre-construction state
- Capture potential change
- Selected reference areas

## Indicators

- Relevance
- Practicality
- Static and/or process-based
- Physical and biological

## Evaluation methods

- Fixed and/or relative criteria
- Comparisons (time, space, design type, geography)
- Trends, patterns

## Confidence

- Sampling power
- Ground-truthing

## Schedules

- Frequency
- Duration
- Seasonality

## Opportunities

- Episodic events
- Tiered approaches

## Correction mechanisms

- Potential adaptive management
- Remedial actions



# *...moving* F O R W A R D

- **Partnerships:** agencies, communities, practitioners, technical
- **Planning:** local coastal plans, general plans
- **Pilot studies:** innovate, learn, experiment
- **Monitoring:** process-based methods, indicators
- **Knowledge-sharing:** best practices, adaptive management
- **Funding:** existing & new, include monitoring

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