

Adaptation Case Studies

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Adaptation

Even with climate mitigation actions our community will need to prepare for the likely impacts to:

- Stormwater, Septic & Sewer Systems
- Roads
- Structures
- Groundwater Aquifers
- Coastal Habitats
- Historic Structures



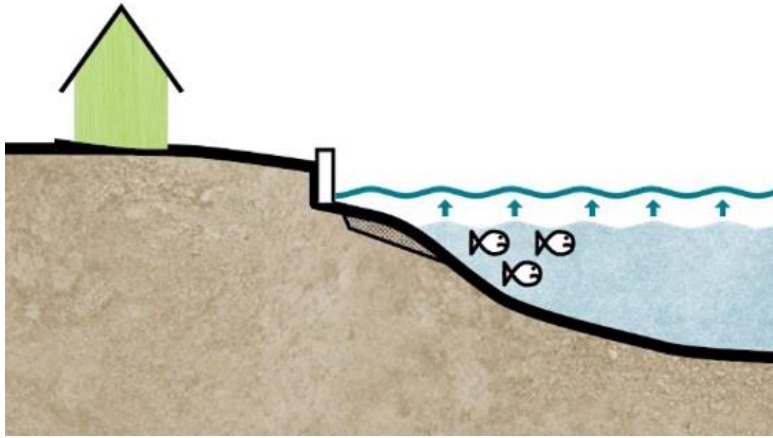
Challenges and opportunities

Planning for change is not just about avoiding or reducing impacts.

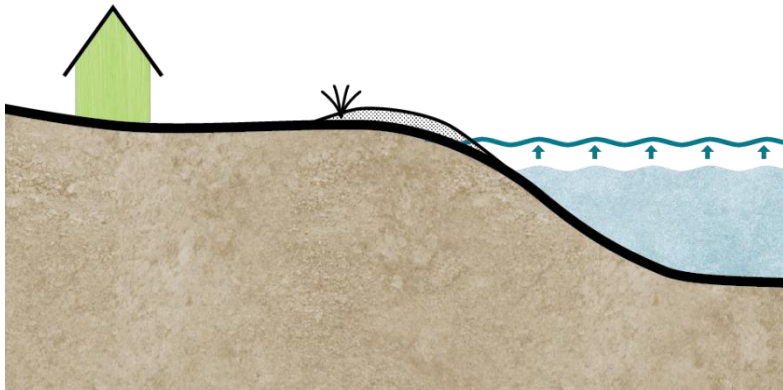
It also provides an opportunity to increase resilience, maximize public benefits and reshape our community.



'Coastal Squeeze' leads to smaller beaches



Hard armoring prevents the beach from naturally adjusting landward in response to rising seas, causing the beach to be underwater even at lower tides.



In some cases, gravel and vegetation storm berms can provide the same services, without impacting beach area for people and nature.

Campground relocation Shaw County Park

Planned relocation protects campers, saves money over the long term and ensures that the bluff can continue to provide sand to down drift recreational users and private homeowners.



Storm berm Orcas island

After 25 years, residents are still enjoying reduced erosion rates, much improved beach access and intact habitat.



BEFORE



AFTER

Road Relocations

Increase public safety

Reduce maintenance costs

Protect beaches for people,
shellfish, fish & wildlife

Improve public access

Ensure coastal processes
for long-term resilience



Montgomery Lane, Ship Bay bluffs Orcas

Road Relocations

Increase public safety

Reduce maintenance costs

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Deer Harbor Road Orcas

Road Relocations

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Cattle Point Road Relocation San Juan

Road Relocations

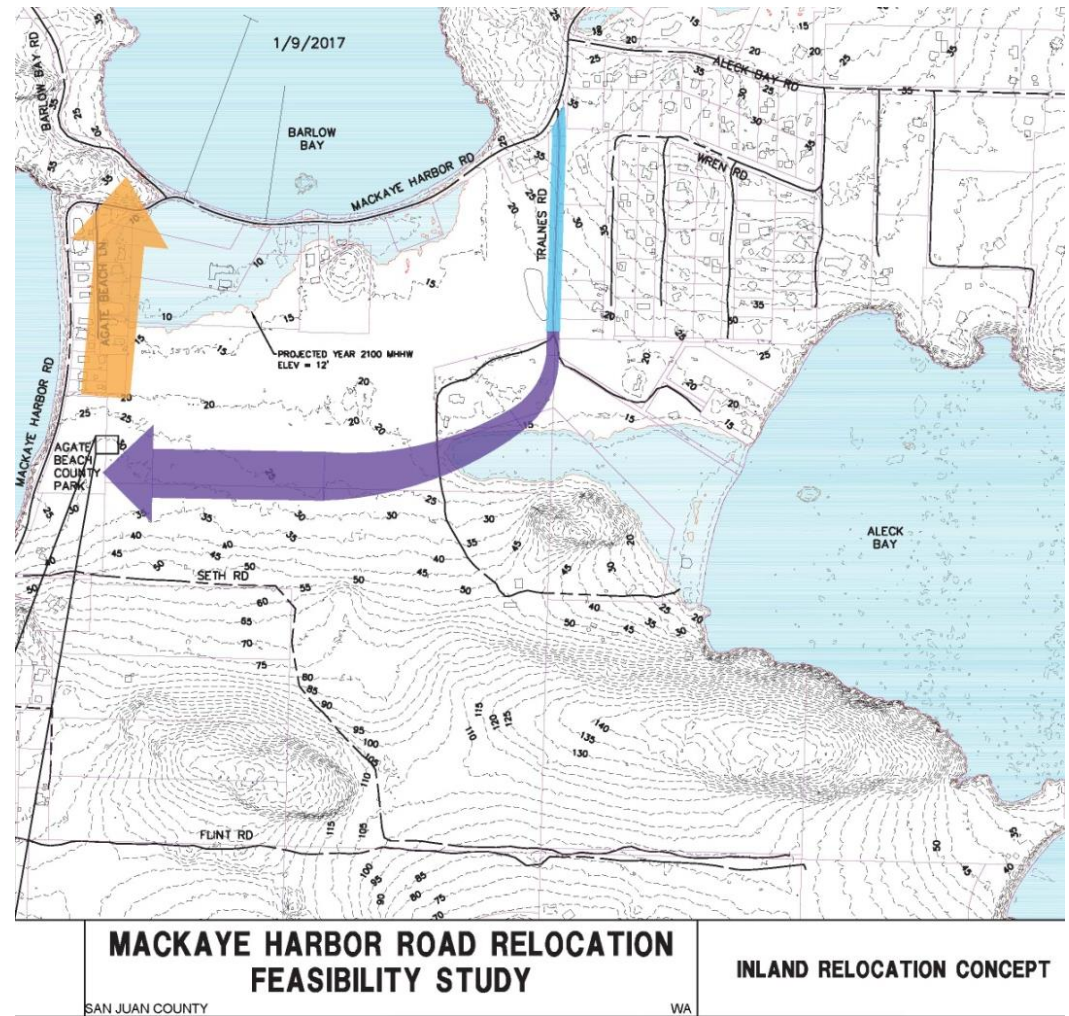
Increase public safety

Reduce maintenance costs

Protect beaches for people, shellfish, fish & wildlife

Improve trails

Ensure coastal processes for long-term resilience



SJC S. Lopez Rd. Re-alignment Study Area- CONCEPT

Road Relocations

Increase public safety

Reduce maintenance costs

Protect beaches for people, shellfish, fish & wildlife

Improve trails

Ensure coastal processes for long-term resilience



Agate Beach Road and County Park Lopez

Road Relocations

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shellfish, fish & wildlife

Improve public access

Ensure coastal processes
for long-term resilience



Crescent Beach Road Orcas

Wetland mitigation Odlin County Park

Freshwater wetland plant species used in the wetland mitigation site are being replaced with salt-tolerant, estuarine species in response to changing conditions.



Home relocation Orcas island

In 2015, landowners located their new home 160 feet landward of the original footprint to:

- Allow removal of a large bulkhead/seawall,
- Unbury the beach for people and nature, and
- Protect their investment into the future.

Video at: www.sanjuans.org



Advancing Adaptation

Encourage your local, state and federal representatives to take real action on climate mitigation and adaptation planning:

- Local comprehensive plan update is underway now!
- Follow energy efficiency bills in Olympia and provide comments.



Advancing Adaptation

Get involved in local climate action & resiliency planning:

- *Islands Climate Resilience* San Juan
- *Transition Lopez* Island
- *Thrive Orcas* Island
- Friends of the San Juans
- OPALCO
- Conservation District



Advancing Adaptation

Contact Friends about site
specific maps or a site visit

For reports, maps and workshop
presentations:

www.sanjuans.org/sealevelrise

THANK YOU!

