



Caddboro Bay

LOCAL AREA PLAN

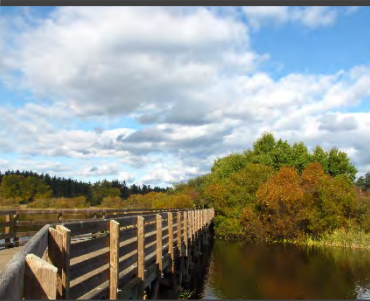
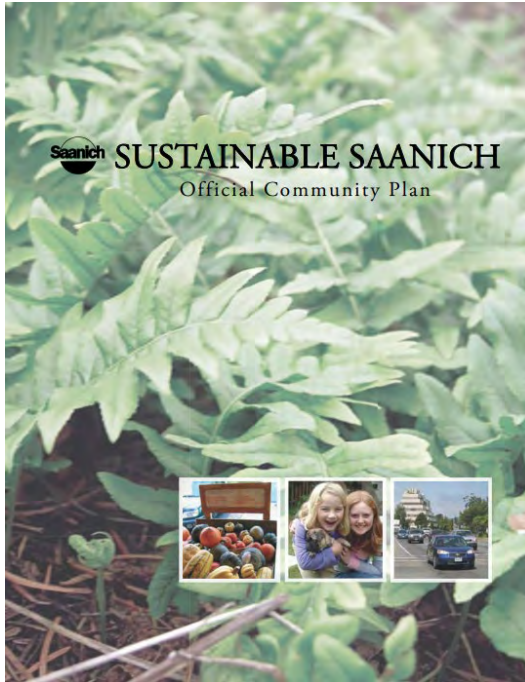


Natural Areas & Community Amenities Workshop
January 26, 2019

Our Ecosystems in a Changing Climate



SUSTAINABILITY IN SAANICH





100%
Renewable
&
Resilient
Saanich
saanich.ca/climateplan

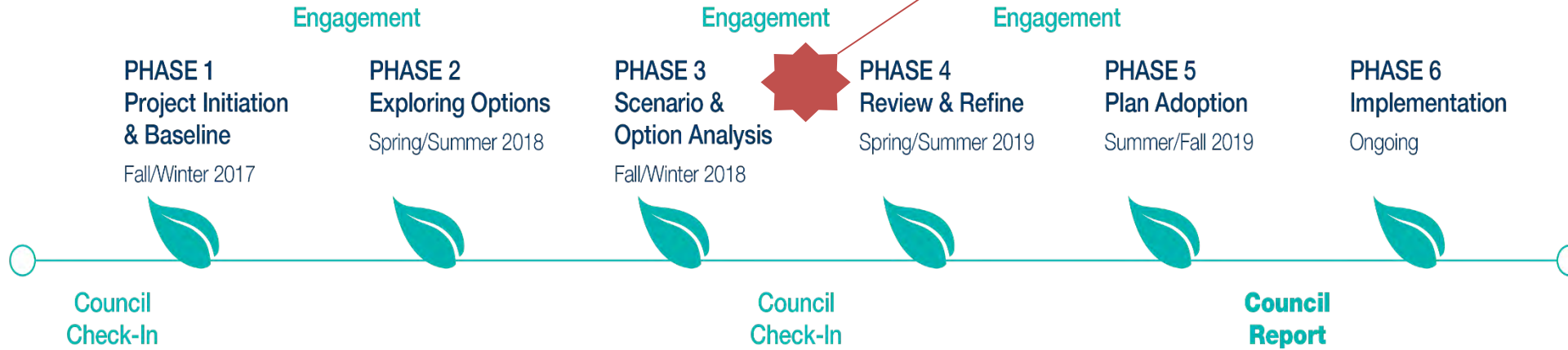
UPDATED CLIMATE PLAN

- Become a 100% Renewable Energy Community by 2050
- Reduce our GHG emissions by 80% from 2007 Levels by 2050
- Prepare for a Changing Climate

Integrates Mitigation (reducing GHG emissions) and Adaptation (preparing for impacts)

PLANNING HIGHLIGHTS

We are here



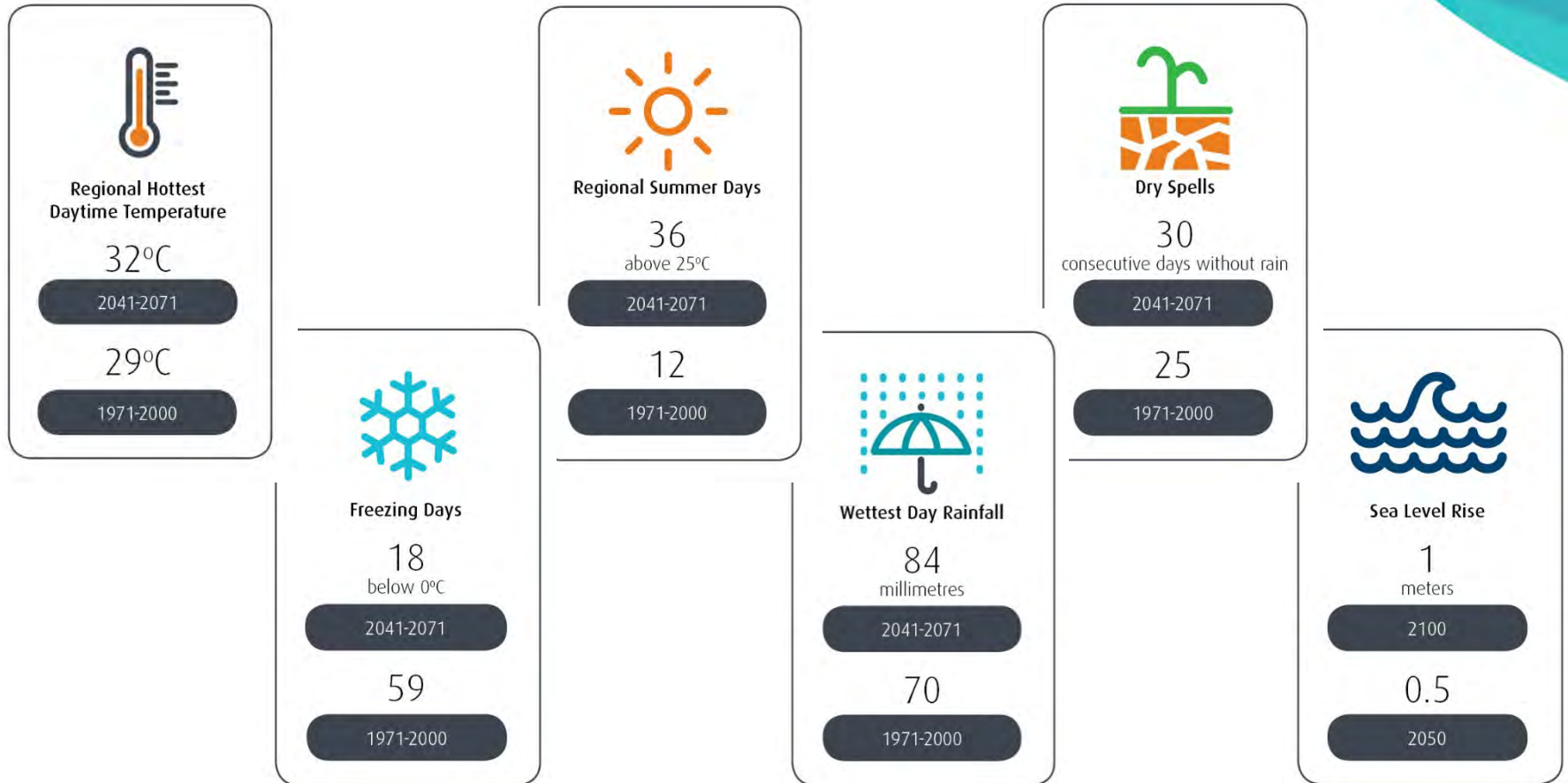
ACTION AREAS:

1. Transportation
2. Buildings
3. Consumption & Waste
4. Food & Agriculture
5. Climate Adaptation
6. Leading By Example

Public Adaptation Priorities:

- Protect/enhance natural assets
- Adapt buildings and infrastructure
- Support farmers and food security
- Improve water use
- Emergency response

LOCAL CLIMATE CHANGE PROJECTIONS



Source: Climate Projections for the Capital Region (2017, CRD)

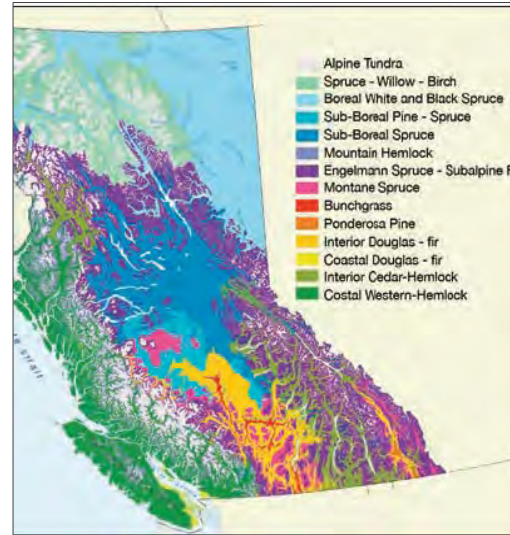
HOW ARE ECOSYSTEMS AFFECTED?



Changes in timing of lifecycle events



Direct Climate Stressors



Range Shifts



Invasive Species



Food Web Disruptions



Pathogens and Disease



Coastal Squeeze

Image: OceanWatch

SUPPORTING ECOSYSTEM RESILIENCE

- Preserve a diverse representation of ecosystem types
- Ensure sufficient space within ecological hubs for species to thrive
- Create corridors that facilitate the movement of species as they adapt
- Actively manage invasive species
- Enhance habitat values on both public and private lands
- *Assisted migration?* Consider seed sources (new provenances) for native species, or new species on the edge of their Southern range?

THE FLIP SIDE: ECOSYSTEM SERVICES



Storm-water management – storage



Mental health and wellbeing



Urban cooling and air quality



Carbon



Water quality



Storm-water management – flood reduction

Photo by Bob
Bridgeman



Coastal protection

Thank you!

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Saanich Parks





Saanich Parks Quick Facts

- 171 parks (825 ha)
- 1035 km of boulevards
- 100 km of trails
- 62 sportsfields
- 35 tennis/pickleball courts
- 21 sport courts
- 56 playgrounds
- 1 water park
- 1 skate park
- 21 public washrooms
- 37 beach accesses
- 735 horticultural displays
- Over 100 bridges and stairs
- Over 500 pieces of furniture



Cadboro Bay

- 12 parks totaling over 29 ha
- 5.24 km of trails
- 16 beach accesses
- 2 playgrounds
- 1 baseball field
- 1 soccer field
- 1 sport court (half basketball, half hockey)
- 1 boat launch
- 2 tennis courts



Urban Forest Strategy



Goal

To protect and enhance the Urban Forest.

Vision

“The urban forest in Saanich is a highly valued asset comprised of a rich and diverse forest that is widely recognized and appreciated for the contribution that it makes to our community and to our sustainable environment.”

Tree Protection Bylaw

Regulates cutting, removing or damaging of trees and sets requirements for replacing Protected trees.

Amendments to the bylaw in 2014 offer greater protection to private trees.

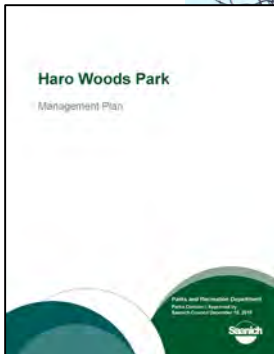
Pulling Together Volunteer Program

Parks offers a great program to be part of:



Recent Park Projects

- Cadboro Gyro Park Upgrades – playground 2014, parking lot 2015, event access 2018
- Haro Woods Management Plan – Council approval 2018



Upcoming Park Projects

- Cadboro Gyro Park tennis court replacement
- Phyllis Park trail improvements
- Haro Wood plan implementation – trail improvements, interpretive, wayfinding and regulatory signage, and Finnerty Creek restoration

Natural Environment in Cadboro Bay

Did you know...



Did you know these natural
history facts about the
Cadboro Bay Local Area?





It contains the majority of Hobbs Creek Watershed plus Sheep Cove Creek, Haro Creek, Finnerty Creek, Guinevere Creek, and unnamed coastal drainages.



The Mystic Pond Great Blue Heron colony is one of the most successful on Vancouver Island.





The entire Ten Mile Point is documented as historical Garry Oak and Associated Ecosystems. (In red is what remains today)



Mystic Vale contains the only known old growth forest in the area and is home to more than 75 native plant species.



Canada's first Pacific migratory bird sanctuary stretches all along the coastline from the Portage Inlet to 10 Mile Point?



There are 9 significant trees in the local area, such as this native Big Leaf Maple.



The beaches are known forage fish habitat.

Natural Shoreline Natural Treasures

Sand and Gravel Beaches

Sand and gravel beaches are vital to life in the ocean. When you walk on a sandy beach, many small creatures are beneath your feet. These small animals are food for larger fish, birds, and marine mammals. This marine food web reaches far out to sea. From sand grains to salmon, insects to orcas, it is all connected.

You can help keep the web of life intact by leaving no trace.

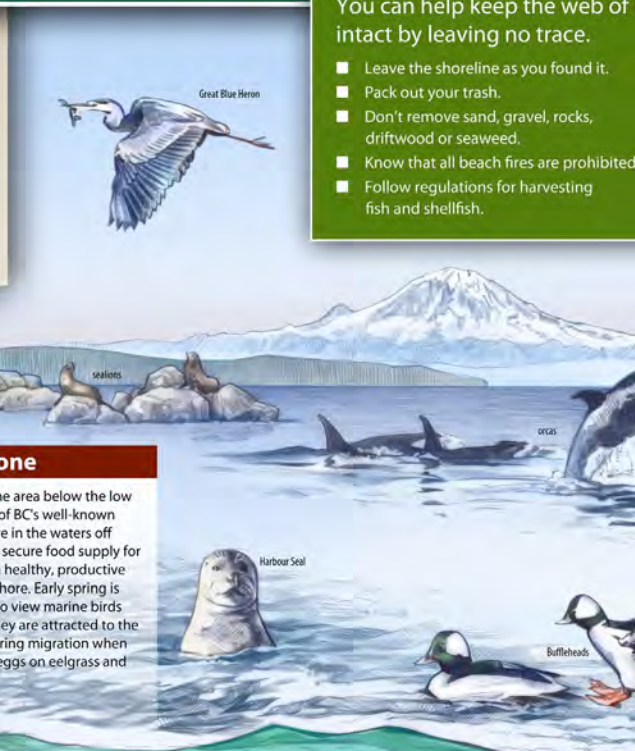
- Leave the shoreline as you found it.
- Pack out your trash.
- Don't remove sand, gravel, rocks, driftwood or seaweed.
- Know that all beach fires are prohibited.
- Follow regulations for harvesting fish and shellfish.



Belted Kingfisher

Double-Crested Cormorant

Song Sparrow



Great Blue Heron

sealions

orcas

Harbour Seal

ducks

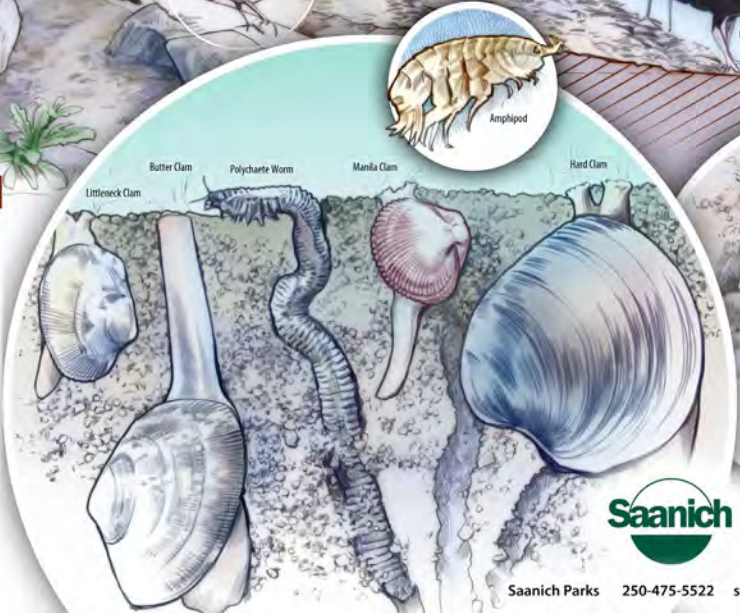
Subtidal Zone

Subtidal refers to the area below the low tide line, and some of BC's well-known marine life lives here in the waters off Saanich beaches. A secure food supply for them depends on a healthy, productive ecosystem on the shore. Early spring is often a good time to view marine birds and mammals as they are attracted to the area during the herring migration when these fish lay their eggs on eelgrass and algae near shore.

Shore

Where the land and sea meet is the marine shoreline. This area or backshore. Trees and shrubs in this area are a crucial part of the coastal ecosystem. They provide shade and insects falling from the trees provide food for tiny organisms called plankton and young fish. Enhancing vegetation creates shade for birds in the beach zone, especially the nesting sites of birds such as sand lance and eelgrass. Shoreline vegetation also filters water and stabilizes the banks. Once dead, trees provide places for perching, nesting or feeding, such as Bald Eagles or cormorants.

Beach grasses growing close together knit the beach together and provide shelter and habitat for small animals and birds. The logs and grasses protect the beach from storms and wave erosion.



Amphipod

Little Neck Clam

Butter Clam

Polychaete Worm

Manila Clam

Hard Clam



Pacific Sand Lance

Pacific Herring

Intertidal Zone - Foreshore

The intertidal zone on a sandy beach is constantly changing and full of life. Animals such as amphipods, polychaete worms, clams and many other invertebrates are found in this zone, living just below the surface. Small fish such as Surf Smelt and Pacific Sand Lance spawn on pebbles and sand high in the intertidal zone, just below the driftwood line.

These fish, along with Pacific Herring, are called forage fish because they form a large portion of the diet of salmon (especially Chinook Salmon), marine mammals, and many birds. Activities such as sand and gravel removal reduce the habitat for these small organisms, which in turn affects animals higher up the food chain.





The area is also known for Bald Eagle nests however there has been a recent decline in the known nests in Cadboro Bay.



Phyllis Park serves as a corridor for wildlife, connecting the forests of the Queenswood, Konukson Park and Bedford Road Park with the ocean.



Rare and endangered plants found here include: Bearded-owl clover, Macoun's meadow-foam, Twisted Oak Moss, Yellow Sand-verbena, Slimleaf Onion, and Winged Water-starwort.



Many invasive plants occur here such as English Ivy, Daphne/Spurge Laurel, English Holly, Scotch Broom, Lesser Celandine, and Himalayan Blackberry



Ten Mile Ecological Reserve is a protected area with high marine productivity.

Before and after....

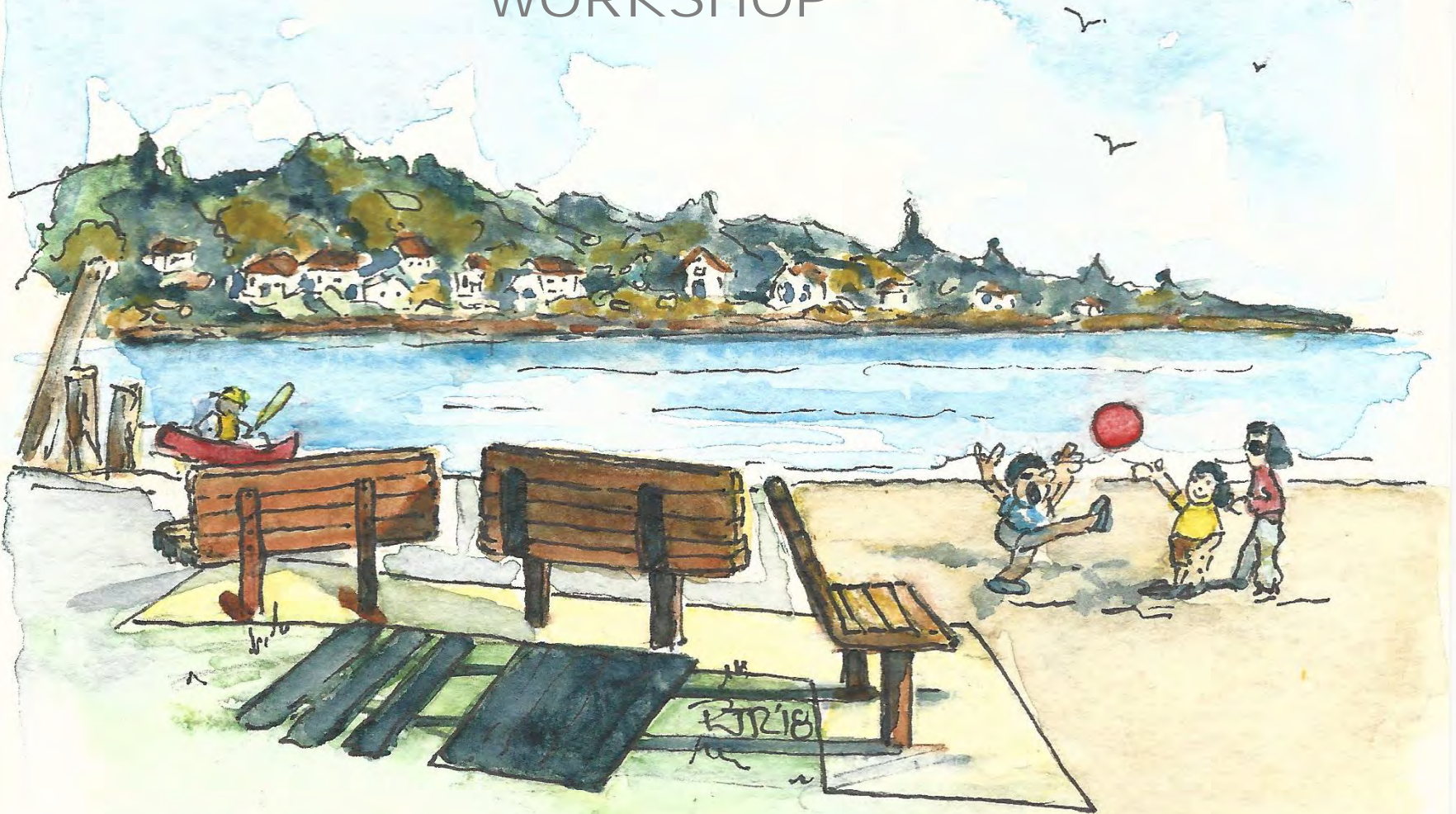


Considerable volunteer resources have been at work at Haro Woods, Goward House, and Knoksun Park.



What else do *you* know about the natural history of Cadboro Bay that is special?

Natural Areas & Community Amenities WORKSHOP



Artwork use kindly donated by Paul Redchurch, Goward House Volunteer Artist