

Project Overview

The Colwood Waterfront Improvement Plan (WIP) is intended to provide the Colwood community with a public realm master plan for its waterfront and guide decision-making by Council and staff for 10+ years.

The final WIP will be informed by existing policies as well as public and stakeholder input. It will provide a high-level programmatic plan for the entire Colwood waterfront and public space concept designs for the study area (Fort Rodd Hill to Royal Beach) to enhance the character and recreational value of the waterfront while protecting the highly sensitive wildlife habitat and archeological resources.

The plan will, in turn, inform future detailed design and construction of new waterfront amenities, features, landscaping, and other improvements.



The WIP is informed by the OCP, the Strategic Plan, the Parks & Recreation Master Plan (including waterfront-specific engagement), Transportation Master Plan, and WCPC Reference Documents (many).



PROCESS

PHASE 1: CONTEXT & SITE ANALYSES

FEBRUARY - MARCH, 2021

The Project Team conducted analyses and developed a Needs Assessment Report and a Multidisciplinary Shoreline Assessment Report, both of which will inform the work of Phases 2-4.

PHASE 2: CONSULTATION & PRELIMINARY DESIGN

MARCH - MAY, 2021

Two rounds of community/stakeholder consultation will be undertaken: Round 1 will introduce the project and solicit initial feedback to inform preliminary design ideas. Round 2 will harvest feedback on preliminary design options developed after Round 1.

PHASE 3: PLAN DEVELOPMENT & REFINEMENT

MAY - JULY, 2021

Design concepts will be iteratively developed, tested, and refined by the Project Team based on community, stakeholder, staff, and Council feedback. Eventually, the draft WIP will be ready for Round 3 of consultation.

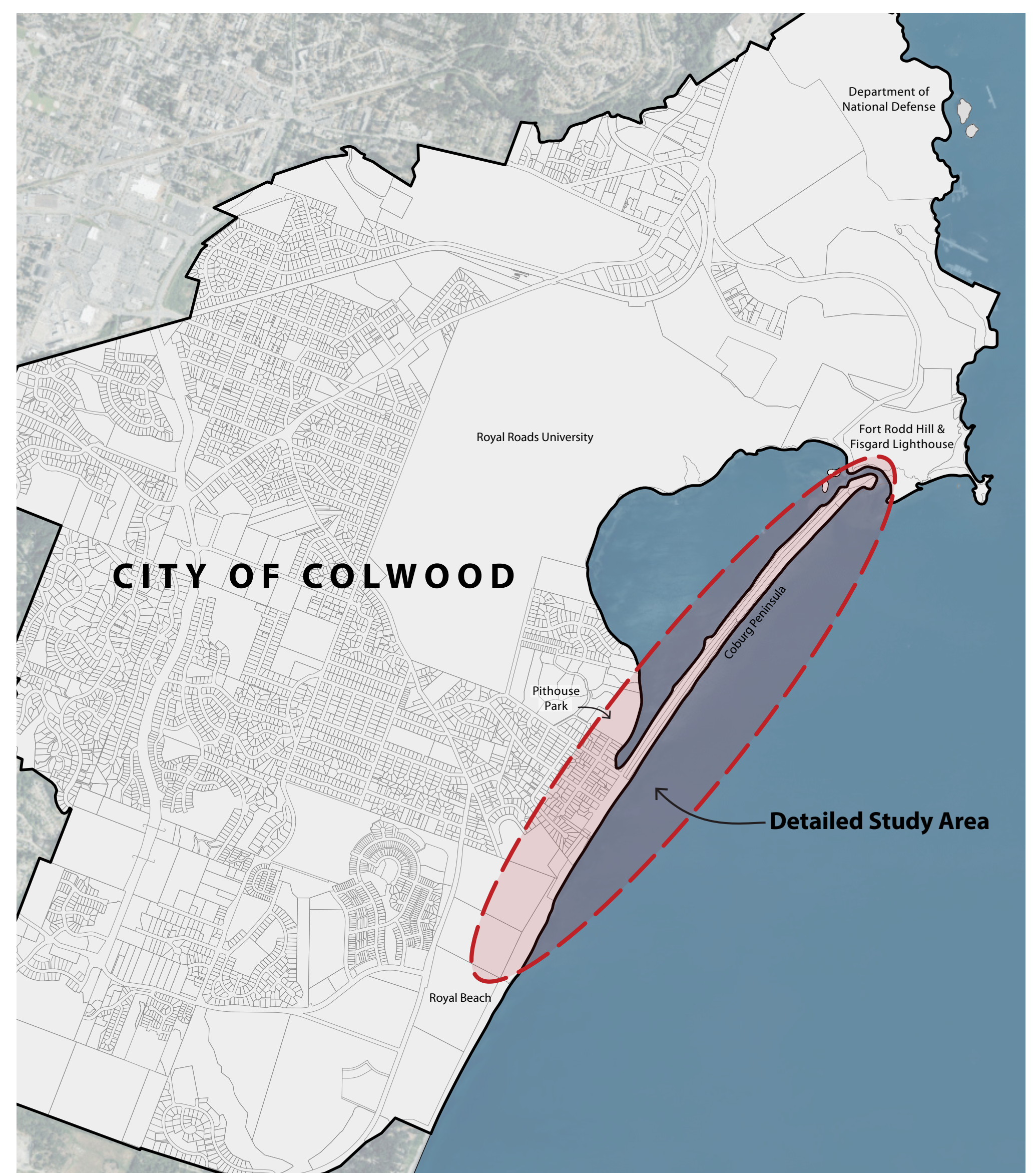
PHASE 4: FINAL PLAN

AUGUST - SEPTEMBER, 2021

The final WIP report will be refined back on community and staff feedback – and then presented to City Council at a public meeting.

STUDY AREA MAP

The Waterfront Improvement Plan will provide a high-level plan for the entire Colwood shoreline as well as specific public realm improvements along the 4 km long shoreline from Fort Rodd Hill to Royal Beach.

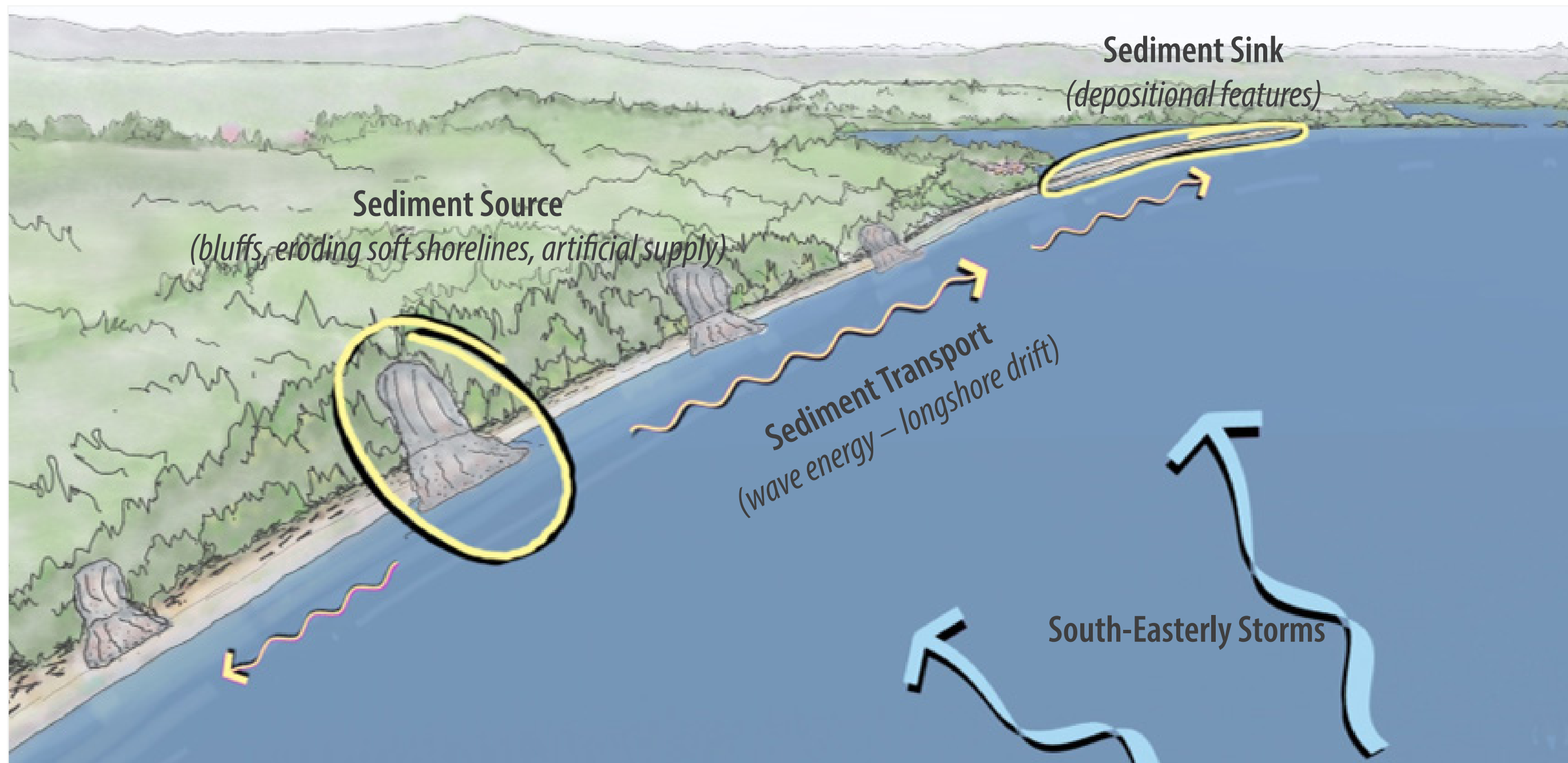


Shoreline System

OVERVIEW

Pre-Disturbance Shoreline (Pre-1890's):

Prior to European settlement and the start of gravel pit operations at Producer's Pit, the sediment system was fed by active bluffs south of the lagoon. Waves from south-easterly storms pushed sediment predominantly northward (see diagram below).



Pre-disturbance, the spit represented the key depositional feature in the system.

- The Spit was much coarser – pebble and cobble sediment.
- The Spit was washed over during storm events.
- There was little vegetation (some gumweed is visible)

Post-Disturbance Shoreline (Pre-1890-1950):

During gravel pit operations, the sediment system was artificially nourished by an over-abundance of sediment 'leaking' from Producer's Pit. Vegetation stabilized bluffs either side of the pit during this time. The Spit remained the primary depositional feature, with excess sediment continuing northward past Fort Rodd Hill.



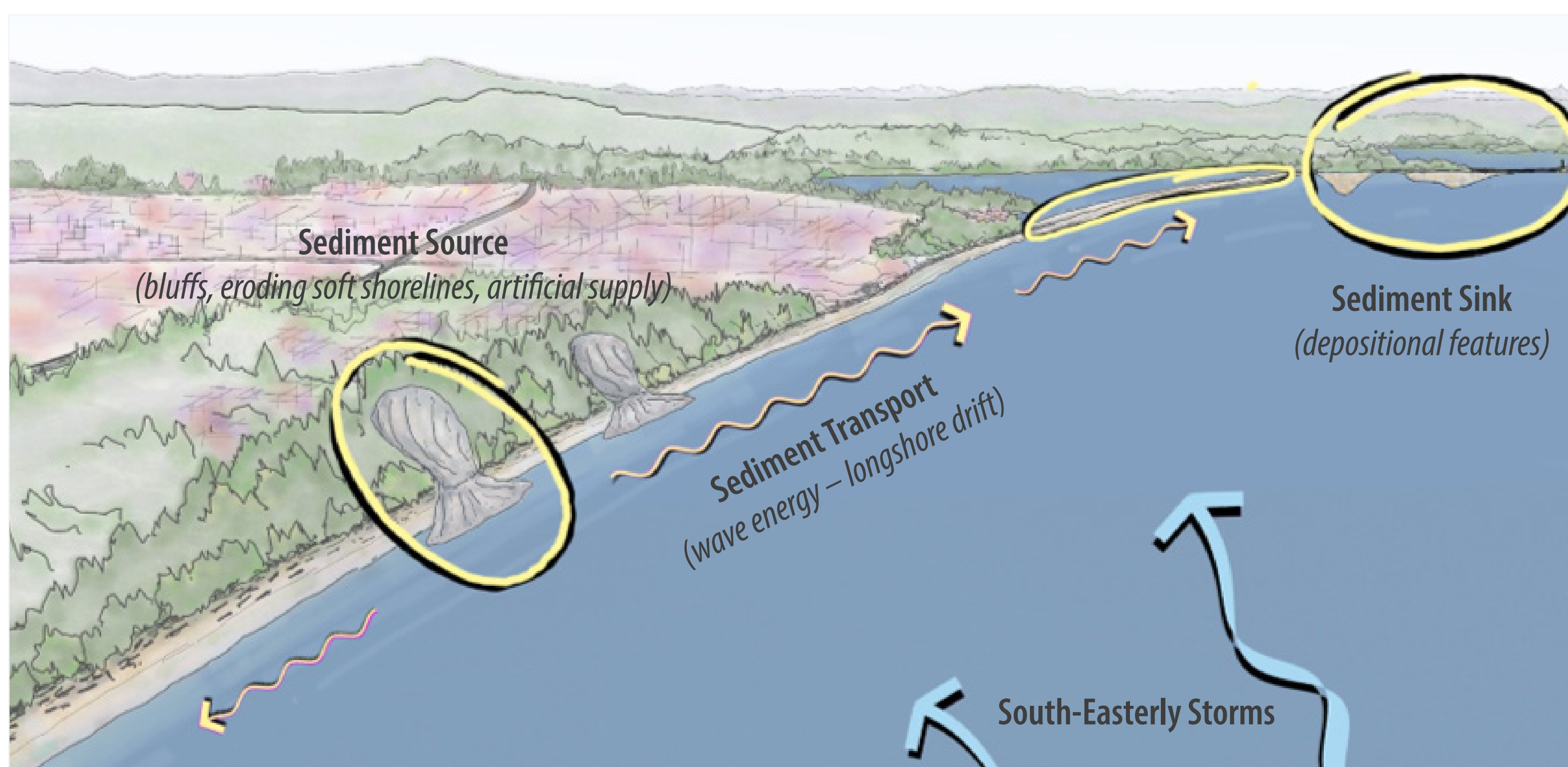
Historical image of the spit, pre-disturbance

Expected Future Shoreline:

Starting around 1950, the Causeway to Fisgard Lighthouse began trapping sediment at the north end of the Lagoon. In 2007, Producer's Pit ceased operation. Since then, waves continue to move sediment predominantly northward. Sediment supply to the system is likely to come from beach over-steepening and subsequent re-activation of bluffs.



Comparison of 1942 (blue) and 2019 (red) high water marks



Sediment Movement is Inevitable:

Whether a shoreline is hardened or is nourished with sediment, wave energy will continue to move sediment along the shoreline. If a sediment shoreline is hardened with seawalls (ie: to protect property values), waves will continue to move beach materials, eventually depleting the beach.

Managing The Shoreline

OVERVIEW

Green Shores was developed as a tool to support the sustainable development of shorelines and is a key direction of the Parks & Recreation Master Plan. Green Shores uses a third-party verification approach with a series of prerequisites and credits to evaluate and promote softer shoreline designs. Green Shores is based on four guiding principles:

- Preserve the integrity of connectivity of shoreline processes
- Maintain or enhance habitat diversity and function
- Minimize or reduce pollutants to the environment
- Reduce cumulative impacts of shoreline development



Trail integrated with green shores approach in North Vancouver



Waypoint Beach before green shores improvements



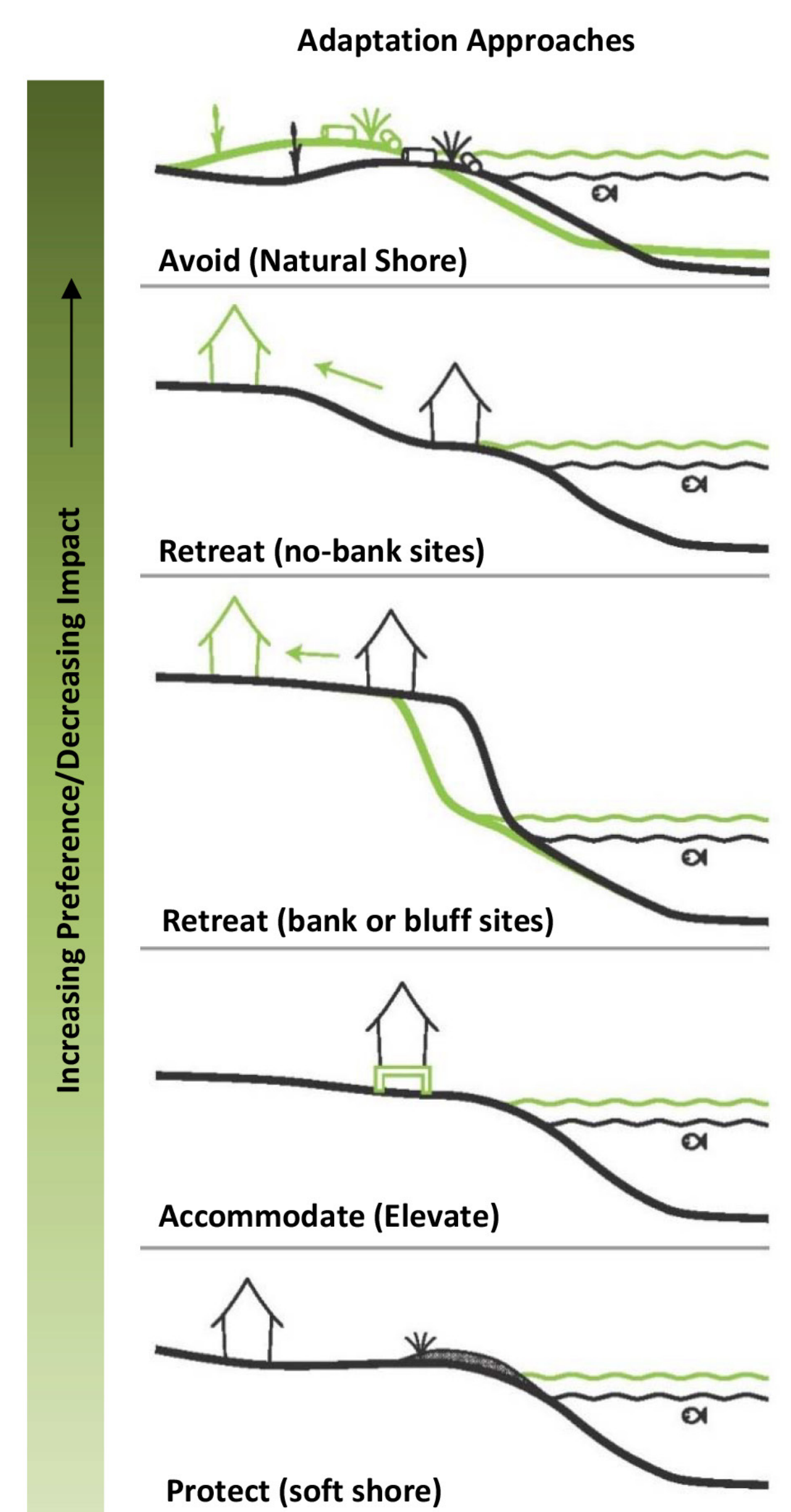
Waypoint Beach park with green shores approach



Qualicum residence before green shores approach



Qualicum residence with green shores beach frontage



Adaptation approaches at barrier beaches (from Stewardship Centre for BC)

SHORELINE MANAGEMENT SWOT

COLWOOD SHORELINE S.W.O.T. ANALYSIS

STRENGTHS:

1. Sandy beaches are rare in B.C.
2. High aesthetic and recreational values
3. Good public access and accessibility
4. Few property owners involved
5. Very little existing hard infrastructure

WEAKNESSES:

1. Challenging design problem to provide pedestrian link below bluffs
2. Current lack of system-wide sediment management strategy for shoreline

OPPORTUNITIES:

1. Building "change" into the design (adaptive design strategies)
2. Soft approaches to sediment management

THREATS:

1. Future sediment source is uncertain
2. Shoreline Hardening by private property owners could affect whole system

Key Considerations

The Colwood WIP will seek to balance recreational, cultural, and environmental interests in the area. There are numerous key considerations – such as significant Indigenous and archaeological values, ecological sensitivity of the lagoon and foreshore environments, and recreational needs and growth.



ENVIRONMENTAL

- A federally protected migratory bird sanctuary.
- Climate change and sea level rise considerations, especially for the low-lying peninsula with limited land area.
- The areas of old growth forest around the Esquimalt Lagoon provide a critical connection between the terrestrial and aquatic realms of the lagoon.
- Sediment shorelines are critical in supporting forage fish habitat (Surf Smelt and Sand Lance).
- Maintaining or enhancing riparian vegetation supports ecological values on the shoreline.

INFRASTRUCTURE

- Due to future sea level rise and climate change, any new infrastructure will require adaptive design.
- The pump station is vulnerable to flooding due to storm waves, which will become more severe in the future.
- The bridge is in adequate condition but has limited capacity and is more exposed to wave energy due to changes to sediment distribution at the tail end of the spit
- Storm waves, when combined with high tide and storm surge, can cause overtopping of Ocean Blvd, carrying sand, driftwood, and debris onto and across the road. This is expected to become more frequent and severe over time.

ARCHAEOLOGY

- For thousands of years, this shoreline is known to have been a gathering place for fishing, trading, feasting and celebration for the Xwsepsum, Lekwungen, and Sc'ianew people whose ancestors first lived here.
- The City works closely with the Archaeology Branch to preserve connections to the activities that have taken place here and the rich cultural history it offers the community.
- Opportunities to strengthen partnerships and education such as the Songhees Nation's marine tourism venture.

OTHER

- High demand for access to the area, predominantly by personal vehicles, in conjunction with the limited land area
- Requires multi-jurisdictional coordination between local First Nations, the City of Colwood, the Federal Government of Canada, and Royal Roads University, among others
- Recent trial closures of Ocean Boulevard to vehicle traffic as part of municipal response to COVID-19 to allow greater access for pedestrians and cyclists.
- Transportation Master Plan - Development of a multi-use trail along Ocean Boulevard from Belmont to Lagoon identified as an active transportation priority.

Community Context

COMMUNITY PROFILE

Colwood's 2016 population was 16,850 and a 2018 study indicates growth of up to 22,742 by 2028 and 26,484 by 2038.

Much like the region as a whole, Colwood has an aging population. Over the past 20 years:

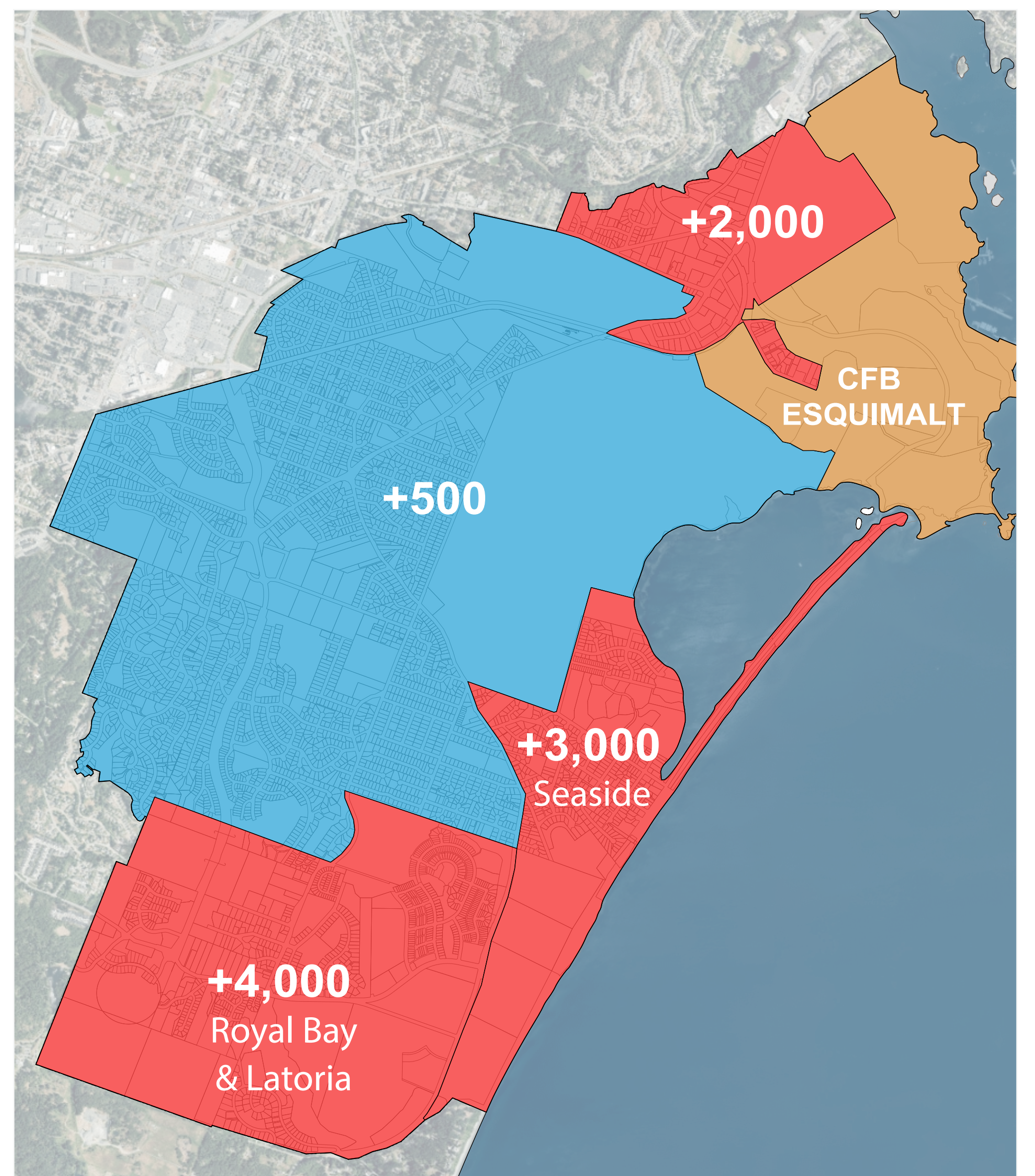
- the 45-64 age range grew by 12.7%;
- the 65+ age range grew by 9.5%; and
- the proportion of the population in other age categories decreased.

The bulk of growth within Colwood will be within the Colwood Corners area (town centre) and the Royal Bay/Latoria and Seaside neighbourhoods.

- The Royal Bay Area Plan includes the provision of 5,400 new housing units, including 2,850 predominantly multi-family and attached dwelling units in the Royal Beach Sub Area Plan.
- Royal Beach is also the site of a potential passenger ferry terminal and waterfront commercial area that would link the Westshore to downtown Victoria.

City of Colwood Age Breakdown (1986 - 2016)

| Year | 0 - 14 Years | 15 - 24 Years | 25 - 44 Years | 45 - 64 Years | 65+ Years |
|------|---------------|---------------|---------------|---------------|---------------|
| 1986 | 2,960 (25.6%) | 1,800 (15.6%) | 4,080 (35.3%) | 1,940 (16.8%) | 765 (6.6%) |
| 1991 | 3,385 (25.1%) | 1,780 (13.2%) | 4,790 (35.6%) | 2,480 (18.4%) | 1,035 (7.7%) |
| 1996 | 3,385 (25.1%) | 1,625 (11.7%) | 4,765 (34.3%) | 2,790 (20.1%) | 1,220 (8.8%) |
| 2001 | 3,240 (23.6%) | 1,615 (11.8%) | 4,295 (31.3%) | 3,250 (23.7%) | 1,320 (9.6%) |
| 2006 | 2,950 (20.1%) | 1,850 (12.6%) | 4,220 (28.7%) | 4,075 (27.7%) | 1,595 (10.9%) |
| 2011 | 2,875 (17.9%) | 1,925 (12.0%) | 4,440 (27.6%) | 4,765 (29.6%) | 2,080 (12.9%) |
| 2016 | 2,885 (17.1%) | 1,835 (10.8%) | 4,435 (26.3%) | 4,975 (29.5%) | 2,720 (16.1%) |



2038 Estimated population projections (from: Demographic and Land Yield Analysis)



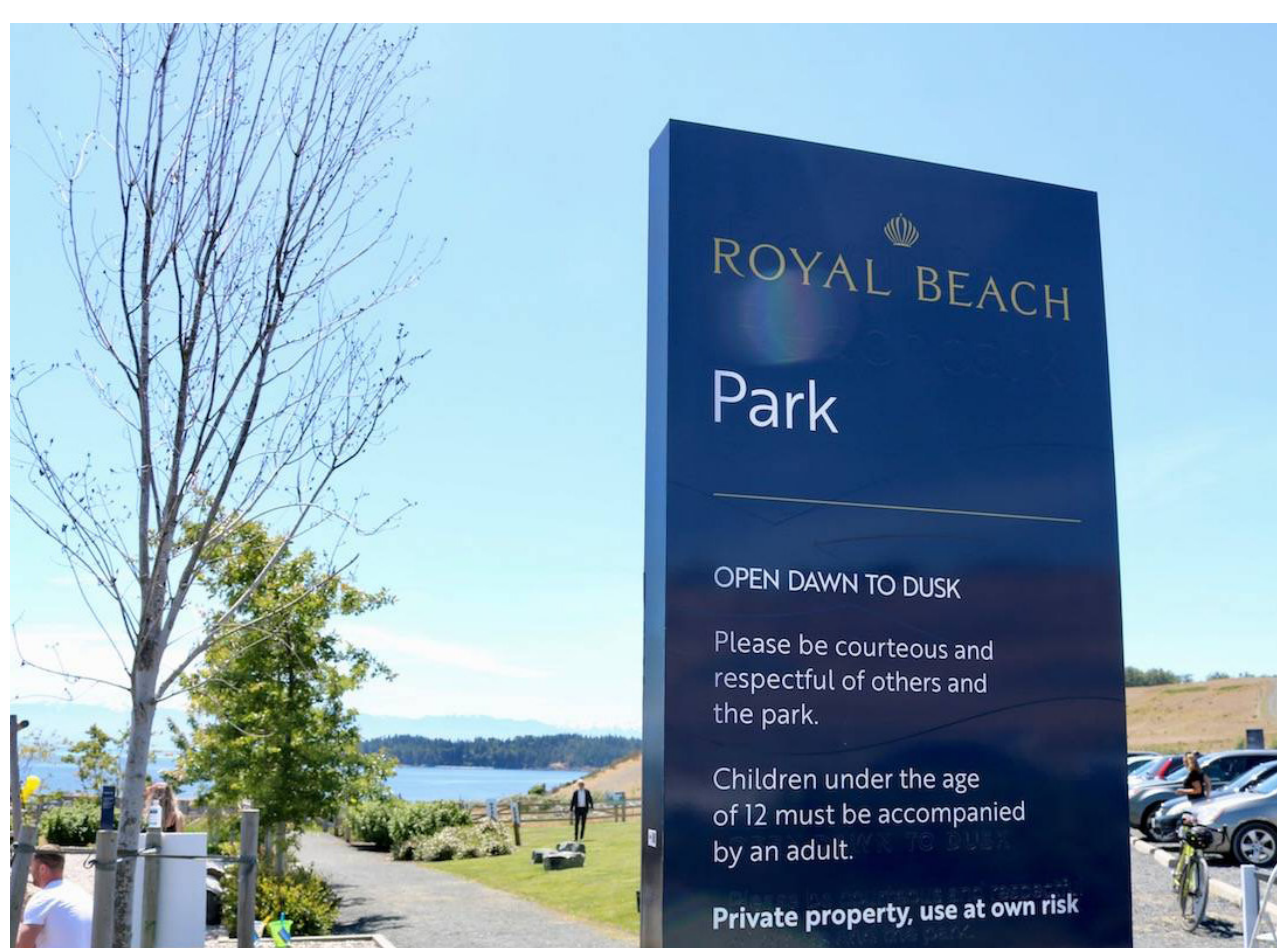
Royal Bay schematic plan (now outdated – for illustrative purposes only)

WIP IMPLICATIONS

1. While there may be some variation in growth estimates within the 2016 Census, the 2018 Demographics & Land Yield Analysis and recently approved/proposed Colwood unit counts, it is important to note is that the population and land use close to the waterfront is anticipated to grow and change dramatically.
2. The growing population of Colwood's waterfront neighbourhoods, Colwood proper, the West Shore, and the region will intensify pressure on the waterfront as a local recreational amenity and destination. New developments, including the Royal Beach commercial centre, will be a regional attraction.
3. As Colwood builds a 'World-Class' waterfront, visitors from outside of the region will add a visit to the Colwood waterfront to a typical 'bucket list' of places to visit in the Capital Region. This will further increase demand on the waterfront.

Key Directions

The WIP builds on a strong foundation of City policy, parks planning, and community consultation and input about the waterfront and the public realm. In particular, the Official Community Plan (OCP) and Parks and Recreation Master Plan (Draft) provide key directions to inform the development of the WIP.



OCP Directions

- Build understanding and seek partnerships with First Nations.
- The waterfront is a stewarded, world-class destination for residents and visitors alike.
- People and nature are exceptionally well connected.
- Colwood is prepared to adapt to a changing world.
- Maintain and regenerate the ecological functions of Colwood's diverse shoreline.

PRMP (Draft) Waterfront Vision

- The treasured public waterfront is iconic and balances resilience to climate change and sea-level rise, respect for the environment, and a vibrant destination for activity and cultural events in the region.

PRMP (Draft) Directions

- Continuous multi-use pathway from Lagoon Beach to Royal Beach.
- Soft-shore (Green Shores) restoration
- Tree planting, ecosystem, and riparian enhancement
- Design adaptation for sea level rise (SLR)
- Celebration of Indigenous and cultural heritage
- Consideration for high demand for private vehicle access
- Improved parking, including EV charging, bike parking, and E-bike charging
- Washroom improvements and consideration of additional washroom location at the bridge end of the peninsula
- Accessible beach access points such as seasonal mat installation for wheel access
- Amenity improvements such as public art, seating areas, picnic areas, viewpoints, potable water access, outdoor performance space, seasonal concession/ food vending opportunities

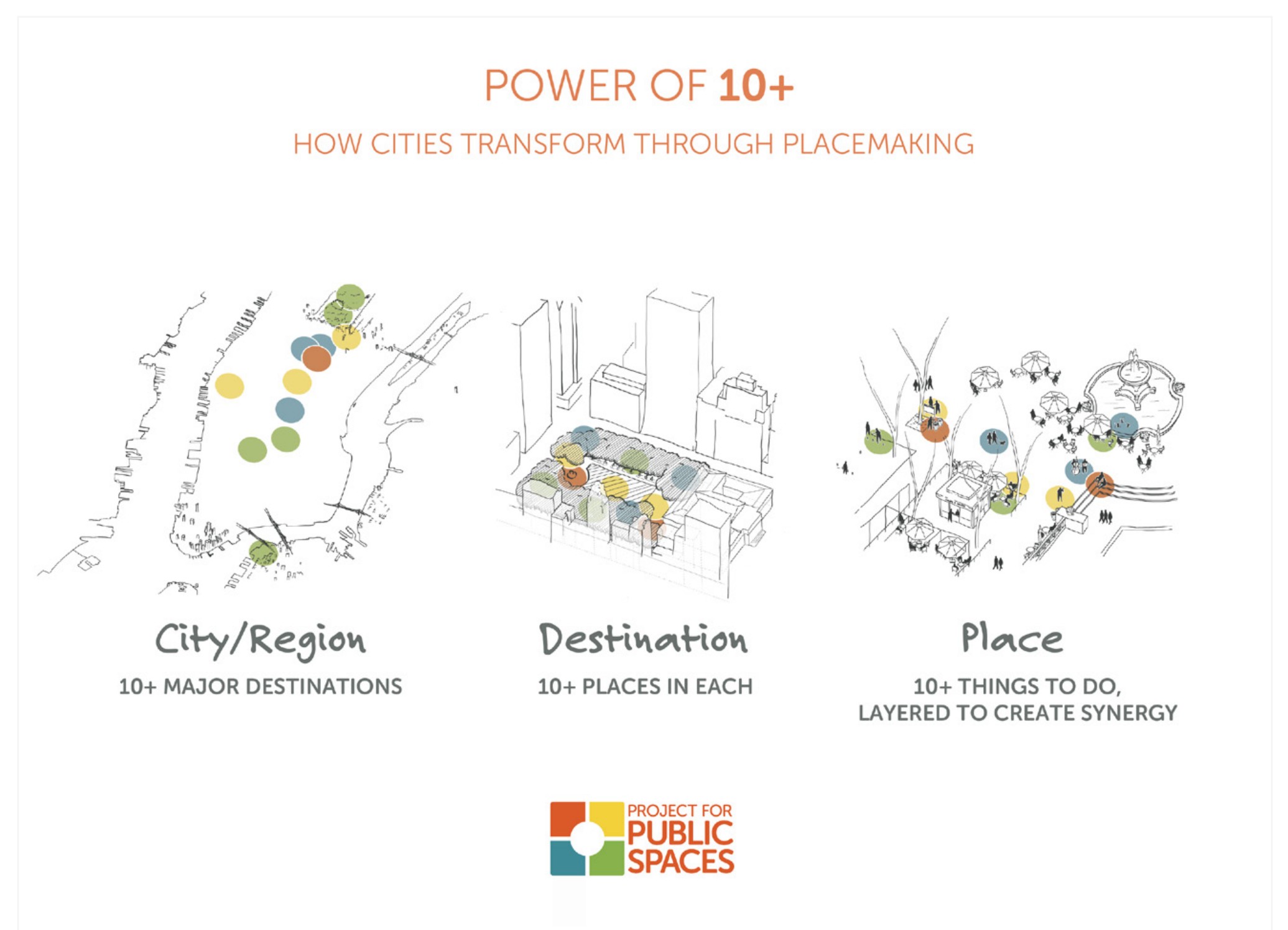
A World Class Waterfront (1 of 2)

The WIP aspires to create a world class waterfront for the City. Boards 7-8 outline some key best practices and guiding principles that have helped shape a variety of successful and world class waterfronts.

CREATE MULTIPLE DESTINATIONS (THE POWER OF 10)

The 'Power of 10+' is a concept developed by Project for Public Spaces (PPS) based on the idea that the most successful and vibrant public spaces "thrive when users have a range of reasons (10+) to be there".

Lively public spaces offer a variety of experiences within a destination and ideally reflect the culture or history of the community or destination. A specific number of attractions should not be the focus, rather setting the goal to strive towards creating rich, diverse, and memorable features within the project. The separation between 'good' and 'great' public space is in both the variety in quality spaces and linkages between those spaces.



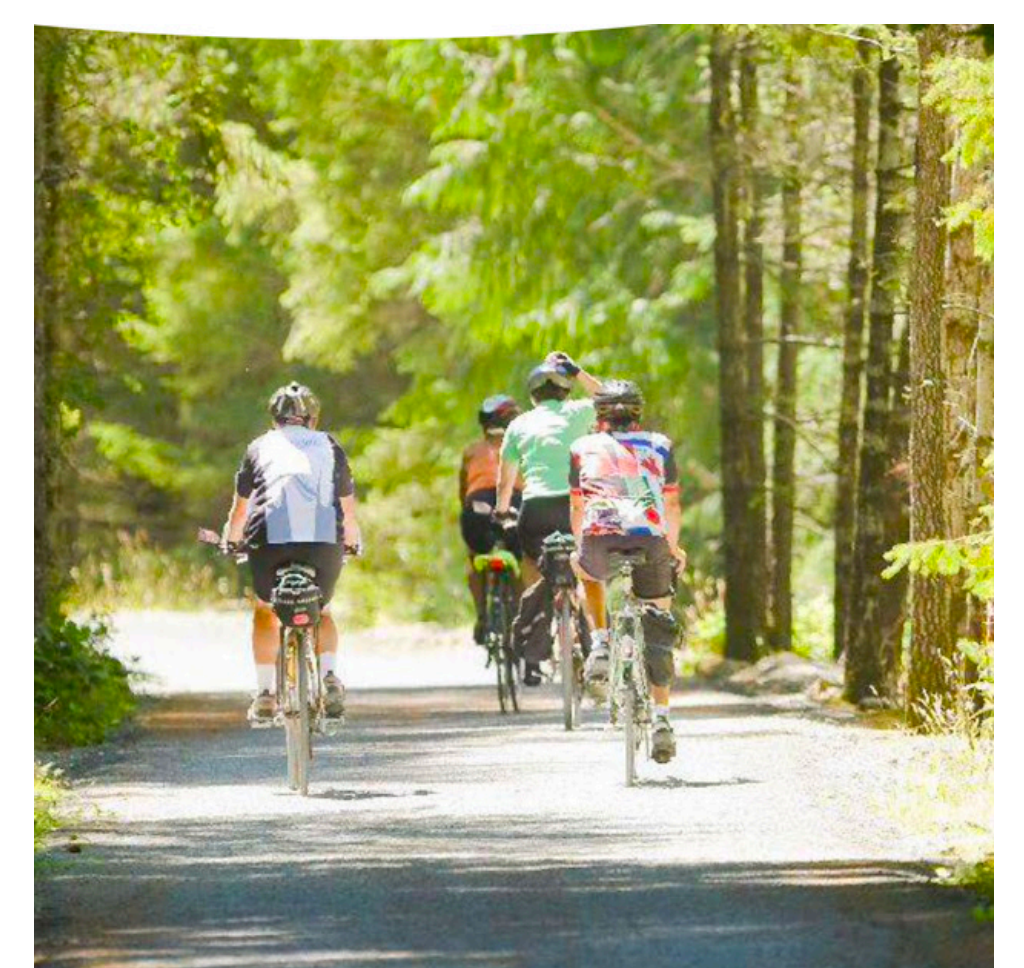
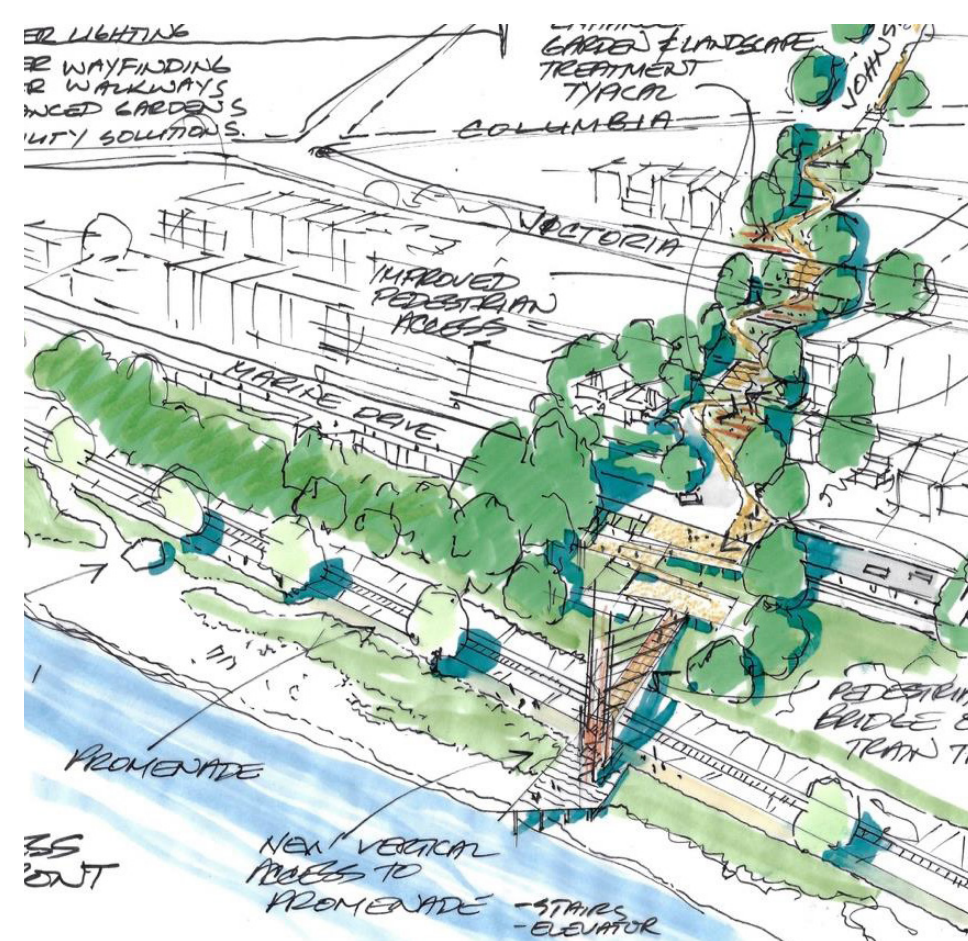
In addition to a waterfront trail, what other key attractions would you like to see?

CONNECTING DESTINATIONS

Create opportunities to link destinations that offer a variety of uses and partners. Consider destination linkages both along the waterfront and to/from the neighbouring areas. The experience of the linkages between destinations is just as important as the destinations themselves. Consider how people arrive and travel to and through destinations including vehicles, pedestrians, and cyclists.



Which linkages could be enhanced or created to strengthen the experience of Colwood's waterfront?



A World Class Waterfront (2 OF 2)

The following sections outline some key best practices and guiding principles that have helped shape a variety of successful and world class waterfronts.

MAXIMIZE OPPORTUNITIES FOR PUBLIC ACCESS

A successful waterfront is as physically and psychologically accessible as possible for all users. Important considerations include mobility, visual connections, lighting, daytime vs nighttime activities, the needs of different demographics and other design elements that make the waterfront feel welcoming, safe and secure for young and old alike.



In what ways can we maximize accessibility to Colwood waterfront areas?



BALANCE ENVIRONMENTAL BENEFITS WITH HUMAN NEEDS

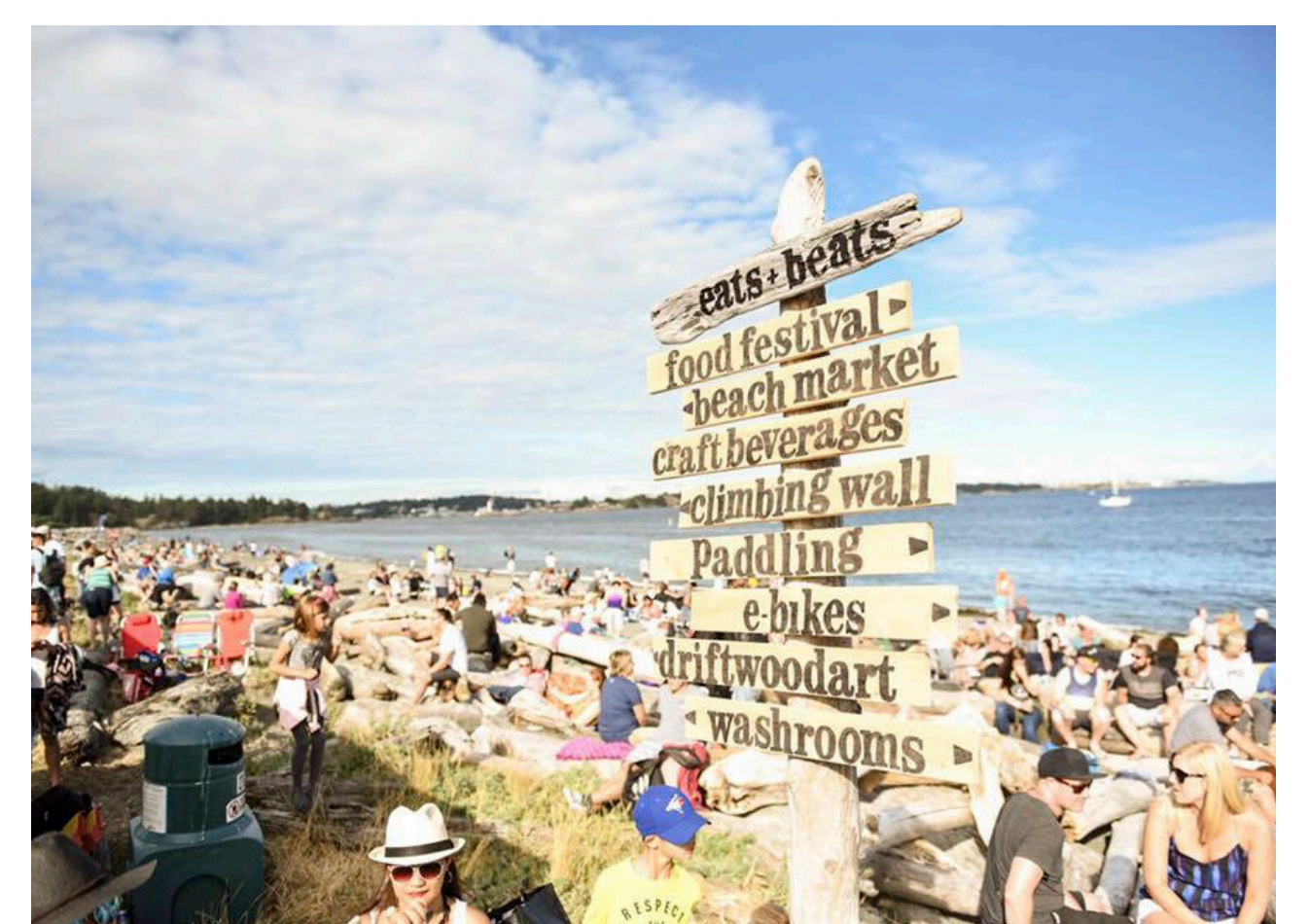
Maintaining and enhancing the shoreline sediment transport system and existing ecological considerations is critical but should not preclude the development of amenities to enhance the human experience of the waterfront. Boardwalks, interpretive signs, play amenities and so forth can be incorporated into the design in ways that minimize disturbance or create opportunities for enhancement.



In what key ways can we balance ecological health and community use of the waterfront?



What is the biggest challenge to achieving this balance?



START SMALL TO MAKE BIG CHANGES

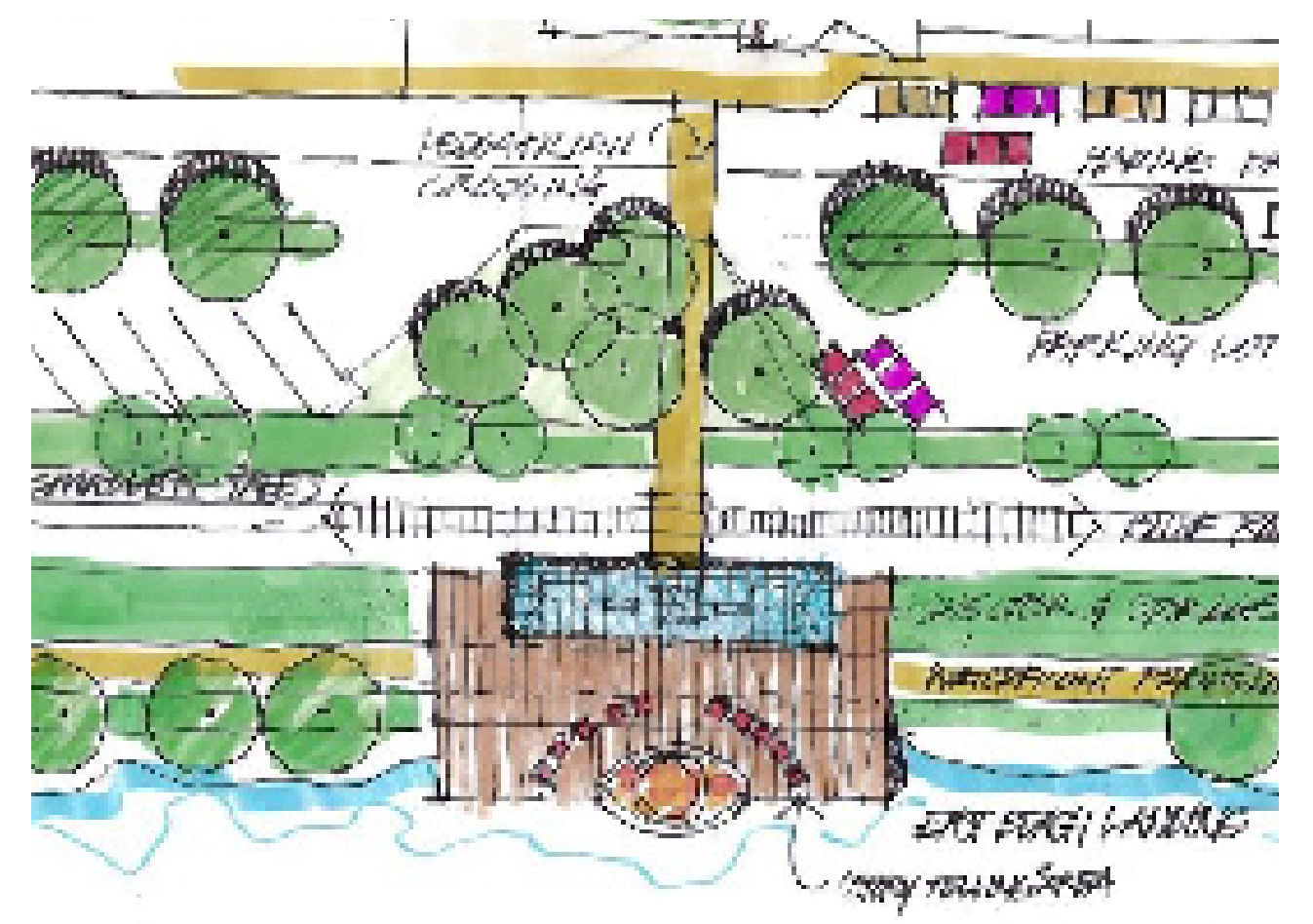
Depending on a variety of factors, such as budgets, adjacent development rates and so forth, the holistic implementation of waterfront plans can take many years to come to their full fruition. Including inexpensive short-term actions within the long-range plan can help the community to feel like progress is being made.



What small improvement or change would you like to see in the short-term?



What big idea would you like to see realized in the future?



Have Your Say!

Due to COVID-19, we are asking the public to provide their feedback digitally.

Please, visit the project page: www.LetsTalkColwood.ca

[More information](#) | [Complete the WIP Visioning Survey](#) | [Register to stay up to date](#)



We will be back in late Spring 2021 with preliminary design options based on the public input.

We Want To Hear From You!