SURREY COASTAL FLOOD ADAPTATION STRATEGY (CFAS)

"The complexity and cost of coastal flood protection issues are significant. By getting ahead of the issue, and setting a direction now for where we want to be in 100 years, we are positioning Surrey to make smarter investments in the protection of residential neighbourhoods, businesses, significant habitat areas and provincially critical infrastructure."

- Mayor Linda Hepner

CFAS | CITY OF SURREY

Climate change is driving some big changes on Surrey's coastline. Our changing climate means that the historic controls that have been put in place to limit flood damages will be ineffective in limiting future flood damage as sea levels continue to rise. In the short-term, we can expect more nuisance flooding and more frequent and severe flooding from storm surges, while over the longer-term we can expect even greater challenges.

THE CFAS PROJECT

To help prepare Surrey for a changing climate and help make our coastal communities more resilient, we are developing a Coastal Flood Adaptation Strategy (CFAS).To be completed in late 2018, the final strategy will outline the potential future impacts of climate change on Surrey's coastline and the best adaptation options available to address them over the short-, medium, and longer-terms.

Launched in 2016, the project is taking a community-based, participatory approach and engaging residents, stakeholders, and other partners in the project, including First Nations, community and environmental organizations, business associations and groups, senior governments, farmers and the agricultural community, and neighbouring jurisdictions.

The CFAS project is broken into five phases. We are currently at the end of Phase 3 and heading into the final two phases.

PHASE 1: Summer 2016-Spring 2017

WHAT MATTERS MOST AND WHO IS AFFECTED?
Education, awareness building, and community values

PHASE 2: Summer 2017-Fall 2017

WHAT CAN WE DO?
Exploring adaptation options

PHASE 3: Fall 2017-Spring 2018

WHAT IS ACCEPTABLE?
Developing adaptation strategies

PHASE 4: Spring 2018-Summer 2018

HOW WILL WE DO IT?
Detailing preferred strategies

PHASE 5: Summer 2018-Fall 2018

REPORTING BACK
Final reporting

SURREY'S COASTAL FLOODPLAIN

www.surrey.ca/coastal
#SurreyCoastal

Surrey's coastal floodplain makes up about 20% of Surrey's entire land area. It is a large low-lying area that stretches from Boundary Bay and Mud Bay along the Nicomekl and Serpentine Rivers towards Cloverdale and Newton. The area also includes the Campbell River/Semiahmoo Bay area near White Rock and Semiahmoo First Nation.

As a natural floodplain, the area has regularly experienced some coastal flooding over the years from high tides and storm surges, and river floods which are typically caused by rain storms and rapid snow melt. River flooding can also be influenced by high tides and storm surges.

COMMUNITIES AND PEOPLE

- Many residential areas and neighbourhoods, including Crescent Beach, Panorama/Gray Creek, Cloverdale, Inter-River Area, Colebrook, Mud Bay, Nico-Wynd/Crescent Road
- Semiahmoo First Nation
- 2,500+ residents
- Approximately 20% of Surrey's land area

LOCAL AND REGIONAL ECONOMY

- Over 60 sq. km of Agriculture Land
- 3,500+ direct employment
- Over $100 million in annual farm gate revenue
- Over $1.5 billion in assessed property value
- Almost $25 billion annual truck and rail freight traffic
- About 10% of the Agricultural Land Reserve in Metro Vancouver

PARKS AND ENVIRONMENT

- Regional and City parks, beaches and recreation areas, including Surrey's only public ocean beach
- Significant natural areas with very high biodiversity values, including foreshore, riparian and coastal areas
- Internationally important migratory bird habitat

INFRASTRUCTURE

- 13km of Provincial Highways
- Over 200,000 vehicle trips a day
- 31km of railway (freight and passenger)
- Regional sewer and water lines
- Major power transmission lines
- Natural gas pipelines

www.surrey.ca/coastal
#SurreyCoastal

SURREY'S COASTAL FLOODPLAIN

What's keeping us dry today?

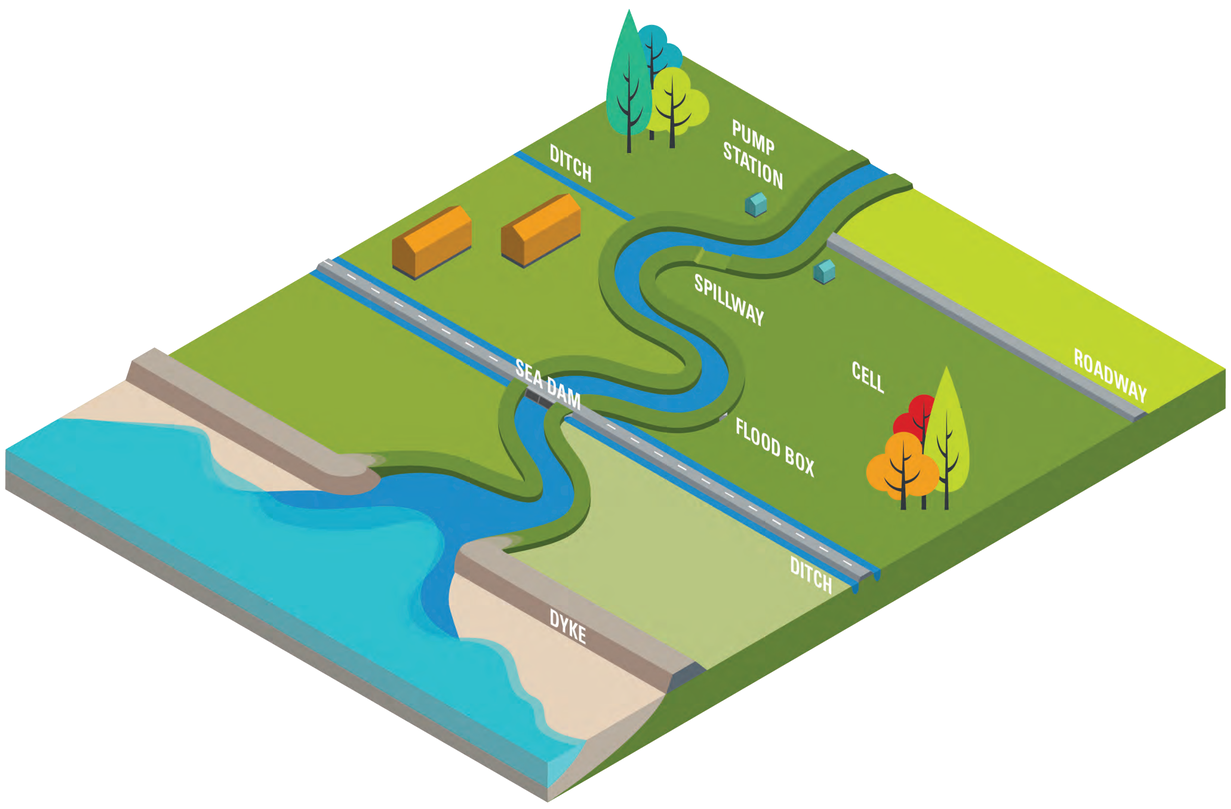
European settlement in the 1890's saw the first dykes and drainage ditches being created to reclaim land for farming. Since then, Surrey has developed a complex network of river and sea dykes along the coast and along the Serpentine and Nicomekl Rivers. Working with the dykes are a system of drainage ditches, spillways and pumps that help move water from behind dykes.

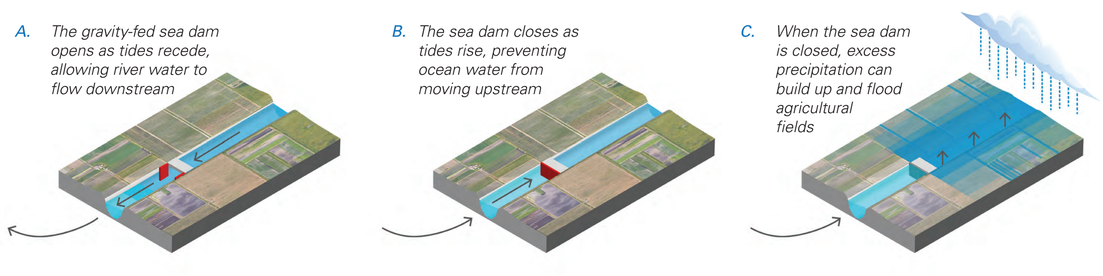
DYKES

A sea dyke is a long wall or embankment built to prevent flooding from the sea. A river dyke is an embankment built to prevent river flooding along the Nicomekl and Serpentine Rivers. Most of Surrey's floodplain, both coastal and inland sections, are protected by dykes. Many dykes in Surrey are also popular walking trails and bicycle routes.

SEA DAMS

Sea dams are constructed along tidal rivers, like the Nicomekl and Serpentine Rivers, to keep salty ocean water from moving upstream where it could have detrimental effects on agricultural irrigation. Sea dams are tidally influenced and gravity-fed, with the incoming tide pushing their gates closed and the river pushing them open once the tide moves out. The Nicomekl and Serpentine sea dams were first built in 1912 and 1913.





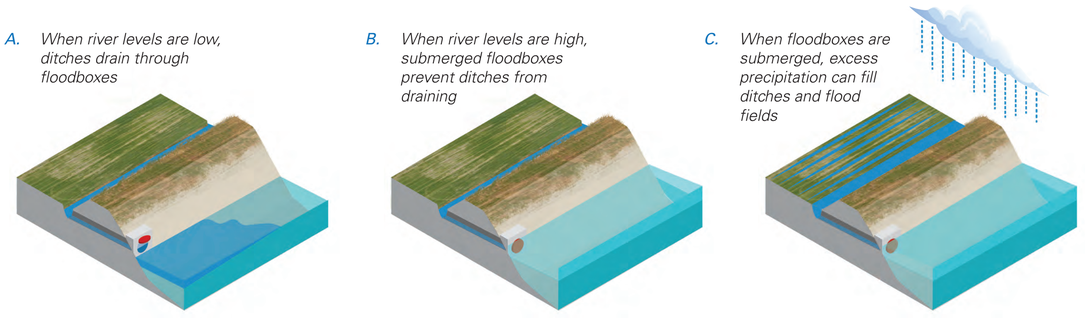
A. The gravity-fed sea dam opens as tides recede, allowing river water to flow downstream

B. The sea dam closes as tides rise, preventing ocean water from moving upstream

C. When the sea dam is closed, excess precipitation can build up and flood agricultural fields

DITCHES, FLOODBOXES AND PUMPS

Surface water flows into drainage ditches which then direct water through floodboxes located along the river. During low tides and when the river water is low enough, the water drains into the river by gravity-fed flap gates (A). When river levels are higher the flood boxes are submerged and their gates are closed (B). During high tides or when sea dams are closed, electrically powered pumps, like the Maple Pump Station in Crescent Beach, are used to help push the water into the rivers.



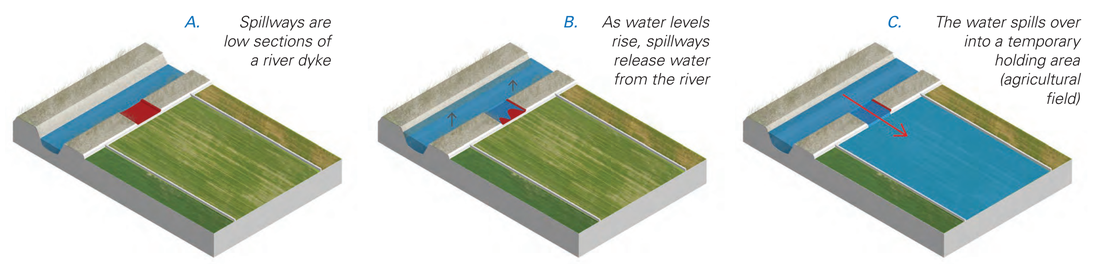
A. When river levels are low, ditches drain through floodboxes

B. When river levels are high, submerged floodboxes prevent ditches from draining

C. When floodboxes are submerged, excess precipitation can fill ditches and flood fields

SPILLWAYS

A spillway is a low section of a river dike (A) where, during floods, water can spill over into a holding area called a cell (B,). These cells are located on agricultural fields and typically only used in winter months when the fields are fallow (C). Once the flood event has ended and river level returns to normal, water stored in the cells will drain back into the river through floodboxes or with the assistance of pumps.



A. Spillways are low sections of a river dyke

B. As water levels rise, spillways release water from the river

C. The water spills over into a temporary holding area (agricultural field)

The changing climate means that the historic controls that have been put in place will not perform in the future with rising sea levels, more frequent storm surges, and increased precipitation. With sea level rise, the duration that rivers can freely drain will be shorter.

Visit surrey.ca/coastal to see a video on Surrey's current coastal flood management system.

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CLIMATE CHANGE & COASTAL FLOODING

As with many coastal floodplains around the world, the two principal causes of increased flooding in Surrey's coastal floodplain are sea level rise and increased magnitude and intensity of rain. The effects of sea level rise are greater than those of rainfall in Surrey's coastal floodplain.

SEA LEVEL RISE

Global sea level is rising. This is a result of increasing temperatures throughout the world that are melting glaciers and polar ice caps, and that are also increasing the average temperature of ocean waters causing them to expand. The Province of British Columbia advises municipalities to plan for 1 metre of sea level rise over the next 80 years, and 2 metres by 2200.

INCREASED RAINFALL

With the changing climate, we can expect more extreme weather conditions. For example, in Surrey, winters are expected to have fewer wet days, but on the wet days the rainfall amounts will be much greater than in the past. This will result in increased flooding, as more runoff flows into the Nicomekl, Serpentine and Campbell Rivers during these storm events. The frequency and intensity of storm events with heavy precipitation are also expected to increase.

Projected impacts for Surrey's coastal area include higher sea levels, increased frequency and intensity of storms and storm surges (when water is pushed ashore by wind and waves), more erosion of the coastline, impacts on infrastructure, loss of beaches and coastal ecosystems, soil salinization, and groundwater pooling.

COASTAL AND RIVER FLOODING

1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100 2100

Major Coastal and River Flood Events

1 Metre
100 cm
80 cm
60 cm
40 cm
20 cm
0 cm

Sea Level Rise

TODAY

A Changing Shoreline

In 1890, dyking of Mud Bay begins. Shortly afterwards, dyking and damming of the Serpentine and Nicomekl Rivers begins.
By 1953, a timber sea wall at Crescent Beach is constructed.

Since then, residents of Surrey's Coastal Floodplain have relied on a system of dykes and sea dams to protect themselves from ocean and river flooding.

An Evolving Future

As our climate continues to change and sea levels continue to rise over the coming years, it is anticipated that the frequency and intensity of major coastal and river floods will also increase.

The Province has directed municipalities to plan for at least 1m sea level rise by 2100. In Surrey, and elsewhere in the Lower Mainland, most drainage systems are not designed for projected changes.

FLOODING HAZARDS

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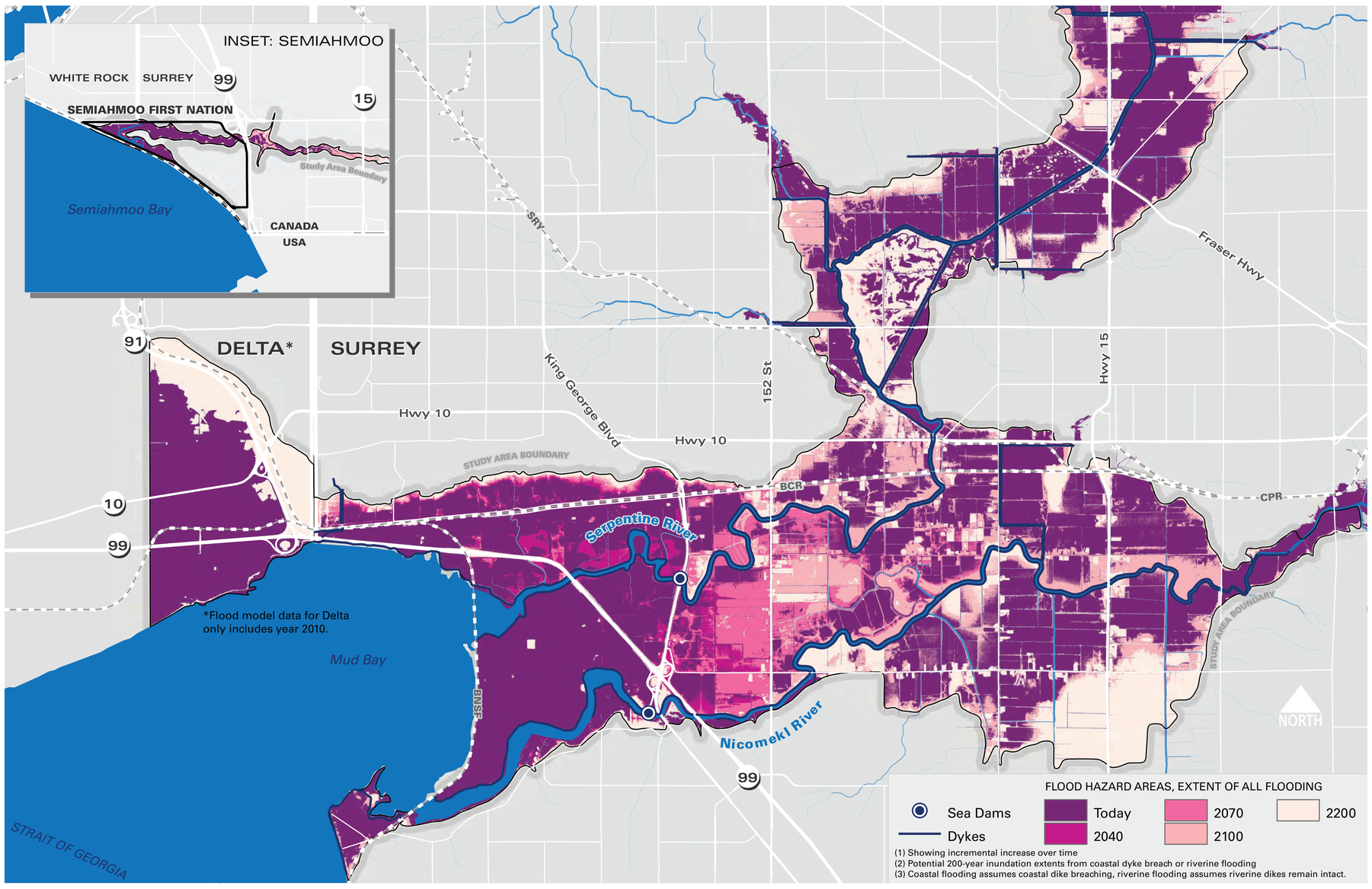
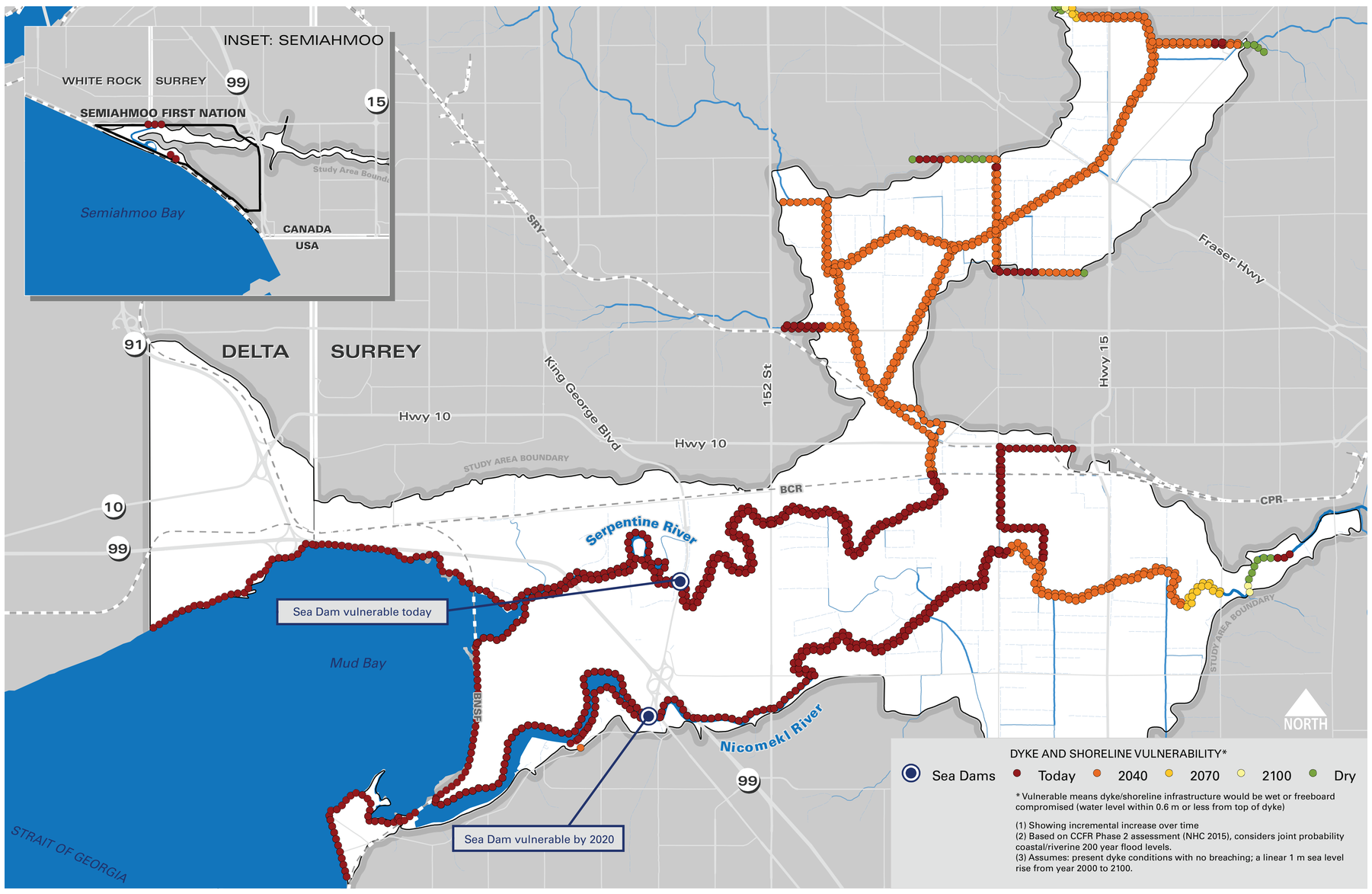
OUR NEED TO PREPARE

Our changing climate means that the historic controls that have been put in place to limit flood damages will not work in future as sea levels rise. The map illustrates the extent of flooding that could be expected today and in the future if no improvements are made to the existing system.



OUR VULNERABLE DYKES AND SHORELINE

Surrey maintains the largest dyking network in BC. Sea level rise is forecast to significantly increase dyke vulnerability and expose low-lying infrastructure along the shoreline to flooding. This map shows that the impacts of sea level rise are greatest closet to the ocean. By 2040, dyke infrastructure nearly 10km inland is expected to become vulnerable.



FLOOD ADAPTATION OPTIONS

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A number of flood adaptation options for the three CFAS study areas—Mud Bay, Crescent Beach, Semiahmoo Bay—were developed and shortlisted through extensive community consultation, technical analysis from project engineers and City of Surrey staff, and with input through a partnership with UBC and Dutch landscape architects and engineers. Two rounds of assessment and engagement took place using the following assessment approaches.

VALUES ASSESSMENT

The participatory values assessment analyzed how each option performed against seven "values criteria." Developed through the project's extensive engagement process, the values criteria capture what people and partners in the study area care about most. The seven values criteria were:

- ***Residents:*** Number of people permanently displaced by the option and anticipated health and safety impacts
- ***Agriculture:*** Amount of agricultural land permanently lost due to the option
- ***Environment:*** Anticipated impact (positive and negative) to wetland habitats, freshwater fish habitat and riparian areas that could be expected from the option
- ***Infrastructure:*** Transportation and utilities service disruptions that could be expected from the option
- ***Economy:*** Permanent loss of businesses that could be expected from the option
- ***Recreation:*** The diversity of recreation opportunities (positive and negative) that could be expected from the option
- ***Culture:*** Semiahmoo First Nation cultural impacts that could be expected from the option

COST ASSESSMENT

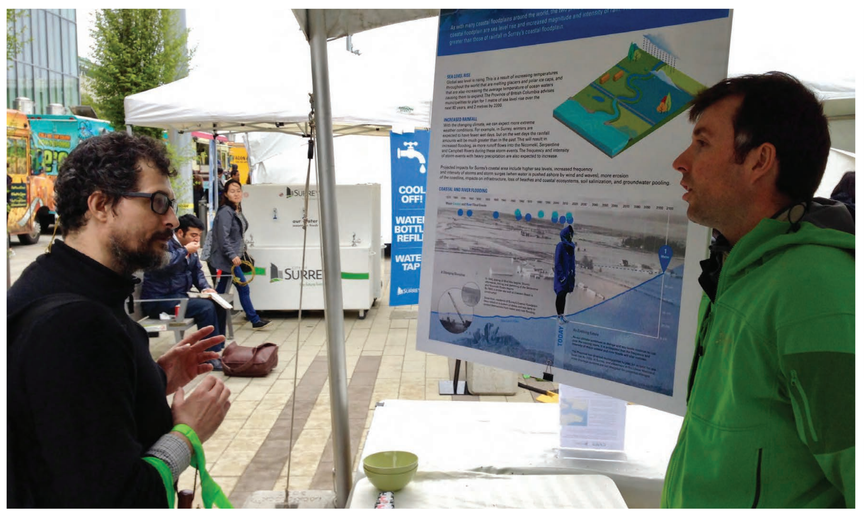
This assessment included an overview of the cost of implementing the option. Cost criteria included:

- ***Capital Cost:*** Capital infrastructure cost, estimated land purchasing costs, decommissioning existing infrastructure and land remediation costs
- ***Operation & Maintenance Cost:*** The yearly operations and maintenance costs
- ***Other Infrastructure Cost:*** The additional cost of adapting non-flood related infrastructure (e.g., roads & highways, hydro lines, water & sewage mains, etc.)
- ***Future Adaptation Cost:*** Estimated costs of continued adaptation requirements from both upgrading flood protection infrastructure beyond 1 metre of sea level rise and future replacement costs of aging flood protection infrastructure

RISK ASSESSMENT

Recognizing that all flood protection infrastructure carries some risk of failure, assessment also included a risk assessment. To quantify this risk, the likelihood of a failure of an option to provide flood protection was assessed with the consequence that failure would have on identified community values. For each option, a detailed description of the anticipated impacts to community values is provided using a scale from Very Low to Very High.

- ***Impact of a Failure:*** A description of the consequences to a given value from a catastrophic flooding event due to the failure of the option to provide protection
- ***Likelihood of Failure of Option:*** Provides a summary evaluation of how likely the option is to fail in the future
- ***Risk:*** The combination of the likelihood that an option will fail with the impact its failure would have on the value
- ***Overall Risk:*** The overall risk across all identified community values



COMMUNITY, STAKEHOLDER & PARTNER ENGAGEMENT

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Developing a direction for coastal adaptation with the community

4

MEETINGS AND SITE VISITS
with Semiahmoo First Nation

3

FOCUS GROUPS
(Agriculture & Farming, Community & Residential, Environment & Recreation)

60+ participants

7

TECHNICAL WORKSHOPS
2 Greenshores™ Shoreline Design workshops, 2 PIEVC™ infrastructure operators workshops, 2 Design workshops with Dutch engineering design experts and UBC researchers, Coastal regulators, Coastal stewards

3

CFAS ADVISORY GROUP WORKSHOPS
With project stakeholders and partners, including local governments, infrastructure operators, provincial agencies, organizations, residents and farmers

5

CRESCENT BEACH COMMUNITY WORKSHOPS
140+ attendees

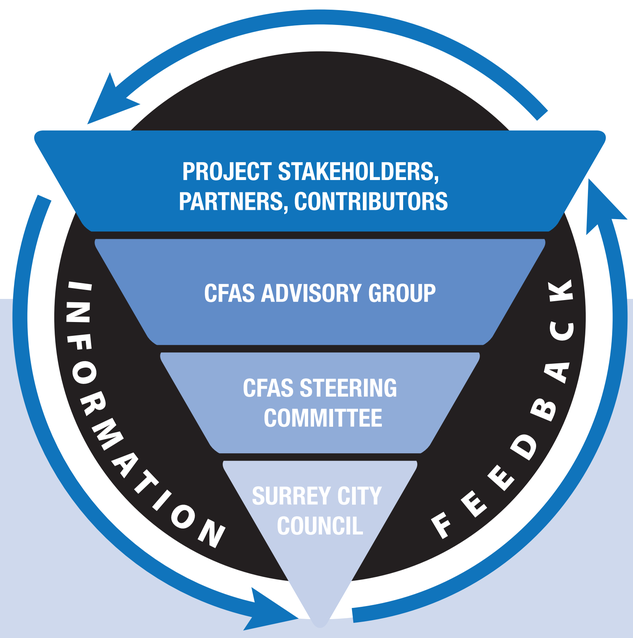
2

BUS TOURS
Site tour and "walk-shops" around the CFAS study area

70+ participants

200+

SURREY YOUTH ENGAGED
5 sessions with high school students, 2 youth events at City Hall, and 80 CFAS postcards completed by elementary school students



200+

COMMUNITY CONVERSATIONS
at Crescent Beach pop-up event hosted with 40+ University of the Fraser Valley Geography and Environment students

8

POP-UP PROJECT OUTREACH STATIONS
Crescent Beach, Blackie Spit, SFU Surrey, Surrey Centre/Ocean Park/ Semiahmoo Public Libraries, Surrey City Hall, Alexandra House (Crescent Beach)

500+

WORKSHEETS COMPLETED
At various engagement events and workshops

100,000+

SOCIAL MEDIAL IMPRESSIONS
Instagram & Twitter (200+ #SurreyCoastal mentions), Facebook (100+ CFAS comments), LinkedIn, YouTube (1,000+ hours of CFAS video views), CFAS website and StoryMaps (10,000+ views)

1,000+

COMMUNITY MEMBERS
directly involved to date

1

#SURREYCOASTAL PHOTO CONTEST
200+ submissions on Facebook, Twitter, and Instagram with winners in three categories

1,000+

SURVEYS
Completed online, at CFAS workshops, at community events, and by CitySpeaks Members

600+

CFAS DOOR HANGERS
Hung on Crescent Beach doors

30+

ORGANIZATIONS, AGENCIES, LOCAL GOVERNMENT PARTNERS, CITY OF SURREY COMMITTEES, AND COMMUNITY GROUPS INVOLVED
Keeping partners and stakeholders engaged

10,000

COMMUNITY MAILERS
Sent to Surrey residents in the CFAS study area and beyond

3

PROJECT VIDEOS
Available on-line and shown at community events

6

BIG MEDIA HITS
CBC Early Edition and The Current (national), articles in the Vancouver Sun, The Province, and 24 Hours newspaper reaching over 100,000+ Metro Vancouver residents

THANK YOU EVERYONE FOR YOUR TIME AND THOUGHTFULNESS IN CONTRIBUTING TO THE CFAS PROJECT

MAKING CHOICES – SHORTLISTED OPTIONS

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Through the CFAS engagement process we heard from many residents, farmers and stakeholders. Their feedback helped develop the criteria with which options were short-listed and evaluated. Community and stakeholder input also raised important, and often difficult, questions for the project team to consider and include in the overall options development and assessment.

From this feedback and additional technical analysis, fairly clear directions began to emerge around the short-listed adaptation options Surrey could pursue. Furthermore, underlying these directions, a few critical and shared understandings emerged:

- ***Climate change and sea level rise demands a dramatic change in approach to coastal flood management over the medium-term and long-term.***

- ***No adaptation is not an option over the medium- and long-terms.***

- ***All adaptation options involve serious and difficult trade-offs; there are no "silver bullets."***

Another equally important understanding that emerged is that all of the short-listed options would be phased in over time based on observed sea level rise. While there is no avoiding a 1 metre increase in sea levels in the future, today, the rate and pace of sea level is still uncertain. Recognizing this, over the coming years or decades, current conventions (i.e., maintaining existing dykes) will be appropriate. However the flood risk will increase over time and investment and land use decisions will increasingly need to align with the longer-term approach and option selected.

The City of Surrey recognizes that the short-listed options presented in the next posters are far from easy – they are all very difficult, complex, costly options where some stakeholders are clearly more impacted than others. With few precedents to look to, we also know that Surrey is amongst the first to ask these hard questions, and the City is committed to continuing to work with those impacted as the CFAS project goes forward into the next phases with the final preferred options and beyond.

The direction of CFAS will have a big impact on today's youth over the course of their lifetime. 31 per cent of Surrey's population is under the age of 25.

SHORTLISTED OPTIONS – MUD BAY

The summary table compares the short-listed options for the Mud Bay study area. The overview includes a “Baseline” or “No Adaptation” option for reference. Full descriptions of the short-listed options are available in the Primer (Primer Part II: Options) and at the video station.

CURRENT CONVENTIONS
Building up existing dykes

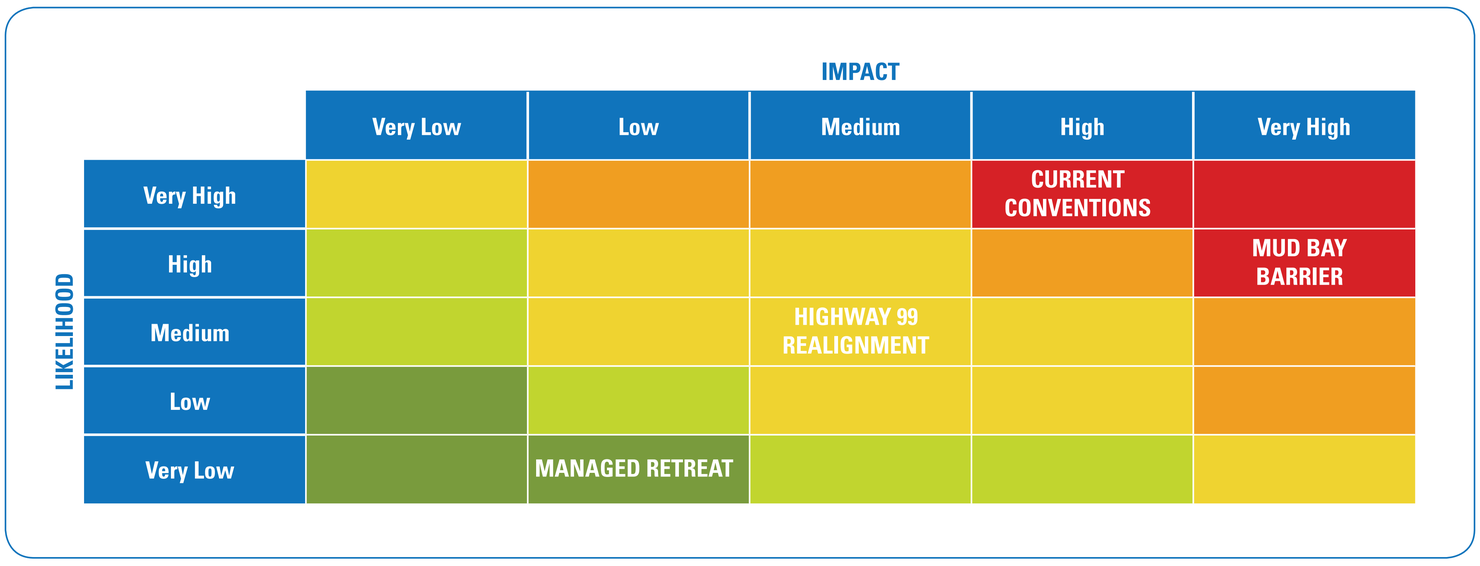
MUD BAY BARRIER
Building a super dyke offshore

HIGHWAY 99 REALIGNMENT
Building a super dyke inland

MANAGED RETREAT
Removing dykes over time

	BASELINE - NO ADAPTATION	CURRENT CONVENTIONS	MUD BAY BARRIER	HIGHWAY 99 REALIGNMENT	MANAGED RETREAT
VALUES CRITERIA					
RESIDENTS *People permanently displaced*	FAR WORSE	SLIGHTLY WORSE	NO CHANGE	SLIGHTLY WORSE	FAR WORSE
AGRICULTURE *Permanent loss of agriculture land*	FAR WORSE	SLIGHTLY WORSE	NO CHANGE	SLIGHTLY WORSE	FAR WORSE
ENVIRONMENT *Impacts to wetland habitats, freshwater fish habitat & riparian areas*	MODERATELY WORSE	FAR WORSE	FAR WORSE	SLIGHTLY BETTER	FAR BETTER
INFRASTRUCTURE *Percent of service/transportation infrastructure made vulnerable*	FAR WORSE	NO CHANGE	NO CHANGE	NO CHANGE	SLIGHTLY WORSE
ECONOMY *Revenue*	FAR WORSE	SLIGHTLY WORSE	NO CHANGE	SLIGHTLY WORSE	MODERATELY WORSE
RECREATION *Diversity of recreational opportunities*	FAR WORSE	NO CHANGE	SLIGHTLY WORSE	SLIGHTLY BETTER	MODERATELY BETTER
CULTURE *Opportunities for traditional practices*	SLIGHTLY WORSE	NO CHANGE	MODERATELY WORSE	NO CHANGE	NO CHANGE
IMPACT & RISK OF FAILURE					
OVERALL RISK	VERY HIGH	VERY HIGH	VERY HIGH	MEDIUM	VERY LOW
COST CRITERIA					
CAPITAL COST	—	$100M - $1B	MORE THAN $4B	$1B - $4B	$1B - $4B
OPERATION & MAINTENANCE COST	MORE THAN $10M	MORE THAN $10M	$1M - $10M	$1M - $10M	LESS THAN $1M
OTHER INFRASTRUCTURE COST	MORE THAN $100M	$10M - $100M	LESS THAN $10M	$10M - $100M	MORE THAN $100M
FUTURE ADAPTATION COST	$1B - $4B	$1B - $4B	$1B - $4B	$1B - $4B	LESS THAN $100M

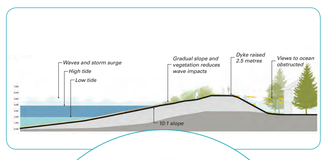
RISK ASSESSMENT HEAT MAP



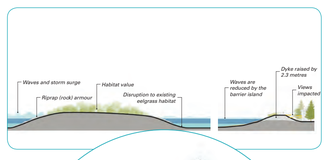
SHORTLISTED OPTIONS – CRESCENT BEACH

The summary table compares the short-listed options for the Crescent Beach study area. The overview includes a “Baseline” or “No Adaptation” option for reference. Full descriptions of the short-listed options are available in the Primer (Primer Part II: Options) and at the video station.

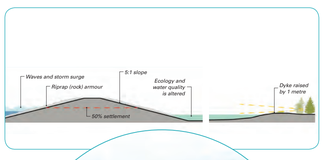
EXPANDED EDGE
Building up large dyke on shoreline

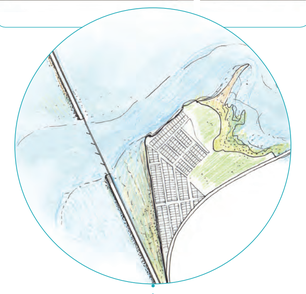


BARRIER ISLAND/SPIT
Building protective island offshore

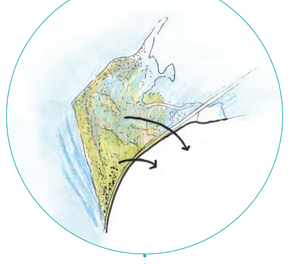


MUD BAY BARRIER
Building a super dyke offshore



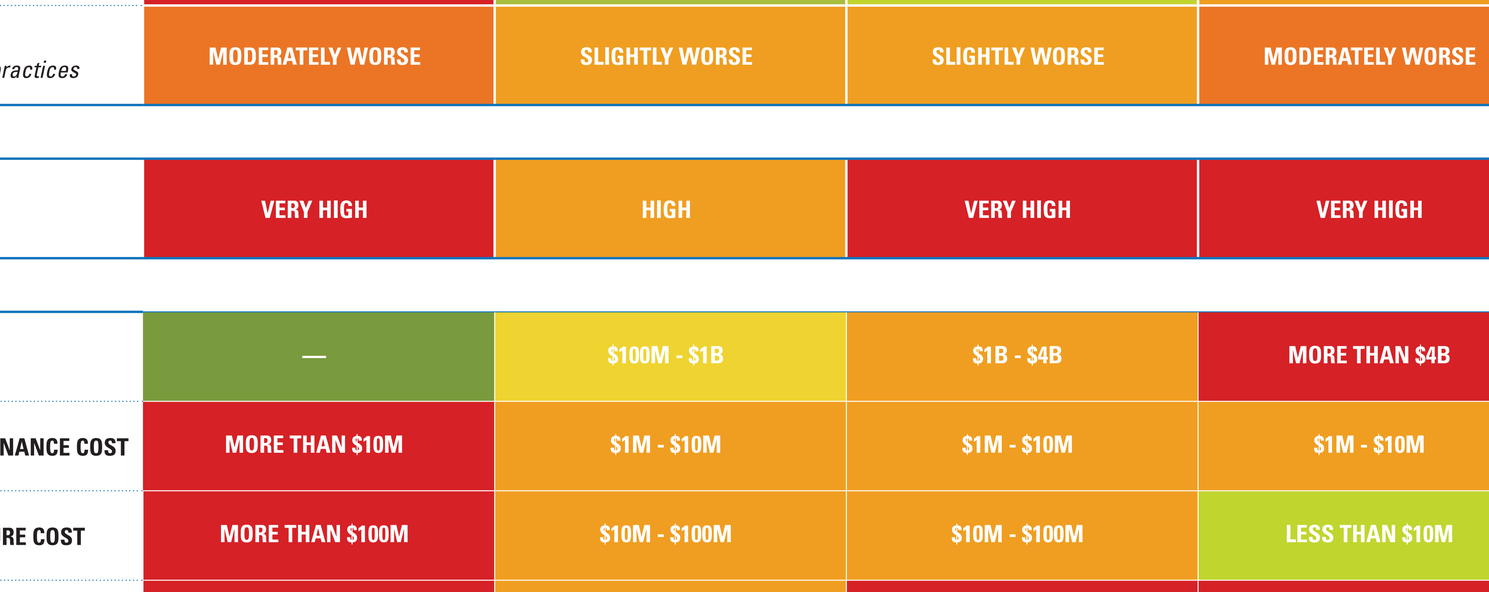


MANAGED RETREAT
Removing dykes over time



	BASELINE - NO ADAPTATION	EXPANDED EDGE	BARRIER ISLAND/SPIT	MUD BAY BARRIER	MANAGED RETREAT
VALUES CRITERIA					
RESIDENTS *People permanently displaced*	FAR WORSE	SLIGHTLY WORSE	MODERATELY WORSE	MODERATELY WORSE	FAR WORSE
ENVIRONMENT *Impacts to wetland habitats, freshwater fish habitat & riparian areas*	FAR WORSE	SLIGHTLY WORSE	MODERATELY WORSE	FAR WORSE	FAR BETTER
INFRASTRUCTURE *Percent of service/transportation infrastructure made vulnerable*	FAR WORSE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE
ECONOMY *Revenue*	FAR WORSE	SLIGHTLY BETTER	NO CHANGE	SLIGHTLY WORSE	MODERATELY WORSE
RECREATION *Diversity of recreational opportunities*	FAR WORSE	MODERATELY BETTER	SLIGHTLY BETTER	SLIGHTLY WORSE	FAR BETTER
CULTURE *Opportunities for traditional practices*	MODERATELY WORSE	SLIGHTLY WORSE	SLIGHTLY WORSE	MODERATELY WORSE	MODERATELY WORSE
IMPACT & RISK OF FAILURE					
OVERALL RISK	VERY HIGH	HIGH	VERY HIGH	VERY HIGH	VERY LOW
COST CRITERIA					
CAPITAL COST	—	$100M - $1B	$1B - $4B	MORE THAN $4B	$1B - $4B
OPERATION & MAINTENANCE COST	MORE THAN $10M	$1M - $10M	$1M - $10M	$1M - $10M	—
OTHER INFRASTRUCTURE COST	MORE THAN $100M	$10M - $100M	$10M - $100M	LESS THAN $10M	LESS THAN $10M
FUTURE ADAPTATION COST	$1B - $4B	$100M - $1B	$1B - $4B	$1B - $4B	—

RISK ASSESSMENT HEAT MAP



SHORTLISTED OPTIONS – SEMIAHMOO BAY

The summary table compares the short-listed options for the Semiahmoo Bay study area. The overview includes a “Baseline” or “No Adaptation” option for reference. Full descriptions of the short-listed options are available in the Primer (Primer Part II: Options) and at the video station.

NO ADAPTATION

ROAD & LAND RAISING
Raising lands and roads above flood levels

EXPANDED EDGE
Building up the shoreline

	NO ADAPTATION	ROAD & LAND RAISING	EXPANDED EDGE
VALUES CRITERIA			
RESIDENTS *People permanently displaced*	SLIGHTLY WORSE	NO CHANGE	NO CHANGE
ENVIRONMENT *Impacts to wetland habitats, freshwater fish habitat & riparian areas*	SLIGHTLY WORSE	NO CHANGE	MODERATELY BETTER
INFRASTRUCTURE *Percent of service/transportation infrastructure made vulnerable*	MODERATELY WORSE	NO CHANGE	FAR BETTER
ECONOMY *Revenue*	MODERATELY WORSE	SLIGHTLY BETTER	FAR BETTER
RECREATION *Diversity of recreational opportunities*	SLIGHTLY WORSE	NO CHANGE	FAR BETTER
CULTURE *Opportunities for traditional practices*	NO CHANGE	NO CHANGE	NO CHANGE
IMPACT & RISK OF FAILURE			
OVERALL RISK	MEDIUM	VERY LOW	VERY LOW
COST CRITERIA			
CAPITAL COST	—	LESS THAN $10M	LESS THAN $10M
OPERATION & MAINTENANCE COST	$100K - $1M	LESS THAN $100K	LESS THAN $100K
OTHER INFRASTRUCTURE COST	LESS THAN $1M	$1M - $10M	$1M - $10M
FUTURE ADAPTATION COST	$10M - $100M	LESS THAN $10M	LESS THAN $10M

RISK ASSESSMENT HEAT MAP

LIKELIHOOD \ IMPACT	Very Low	Low	Medium	High	Very High
Very High					
High					
Medium					
Low			NO ADAPTATION		
Very Low		LAND & ROAD RAISING and EXPANDED EDGE			

NEXT STEPS

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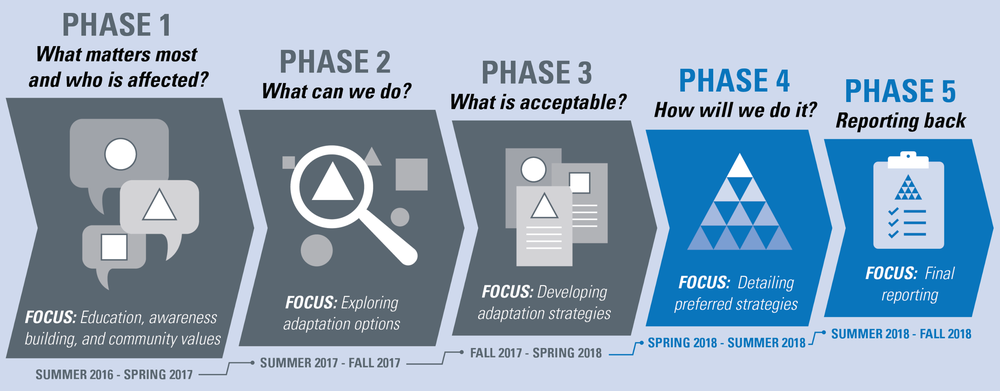
CFAS will move into *Phase 4: How will we do it?* to detail the preferred strategy. This will include option fine-tuning and additional strategy design details with key project partners. Final CFAS reporting to Council is expected to occur this fall/winter.

The focus on this next phase of work is to:

- ✓ Complete further technical work including economic and engineering analysis
- ✓ Identifying implementation and decision points moving forwards
- ✓ Consult with potential partners for implementation

An Open House to present the results of Phase 4 is planned for November, 2018.



MORE INFORMATION?

If you or your organization are interested in learning more about the project, are interested in presentation, let us know (see contact information). All project information, including dates for upcoming presentations and events, and all CFAS project materials (videos, information materials, reports) will be posted on the project website: ***www.surrey.ca/coastal***

Sign up for the CFAS e-news to stay informed as new materials become available.

CONTACT US

For more information, please contact Matt Osler, Project Engineer, City of Surrey, coastal@surrey.ca