UVic Sustainability Scholars Program

Benchmarking Shoreline Resilience: A Cross-Municipal Review of Shoreline Protection Policies in the Capital Region

Prepared by:

Mehdi Hosseini Dehaghani, UVic Sustainability Scholar, 2026

Prepared for:

Kyle Armstrong, Peninsula Streams Society

Date: Aug 16, 2026

Disclaimer

This report is a product of the UVic Sustainability Scholars Program, a partnership between UVic and various on- and off-campus organizations offering internship opportunities to graduate students working on sustainability-focused research projects that advance sustainability in the region. This project was conducted under the mentorship of the Peninsula Streams Society staff.

Territorial acknowledgement

We acknowledge and respect that this project takes place on Coast and Straits Salish territory, the territories of the Lekwungen peoples, known today as Songhees and Esquimalt Nations, and the W̱SÁNEĆ peoples, known today as W̱JOŁEŁP (Tsartlip), BOḴEĆEN (Pauquachin), S̱TÁUTW̱ (Tsawout), W̱SIḴEM (Tseycum) and MÁLEXEŁ (Malahat) Nations, whose historical relationships with the land continue to this day.

Table of Contents

Executive Summary 1
Purpose 1
Stages of Research 1
Case Studies 1
Interview Findings 2
Benchmarking Results 3
Conclusion 4
Priority Directions 5
Limitations 5
1. Introduction 6
1.1. Purpose 7
1.2. Background 7
1.3. Objectives 8
1.4. Scope 8
1.5. Methodology 9
1.5.1. Interviews and Interviewees 10
1.5.2. Municipalities and Their Policies 10
1.5.3. Limitations 11
2. Interview Findings 12
2.1. Integrated Thematic Analysis 13
2.1.1. Private Property and Short-Term Pressures 13
2.1.2. Fragmented Authority 14
2.1.3. Municipal Policy Tools 16
2.1.4. Implementation Capacity and Process 18
2.1.5. Cumulative Ecological Effects 19
2.1.6. Nature-Based Resilience 20
2.1.7. Knowledge, Relationships, and Governance 22
2.2. Synthesis: From Interview Findings to the Benchmarking Framework 23
3. Benchmarking Findings 26
3.1. Framework Overview 27
3.1.1. Jurisdictional Context 27

3.1.2. Benchmarking Foundation: Green Bylaws Toolkit 28
3.1.3. Purpose and Design 29
3.1.4. Unit of Analysis 29
3.1.5. Benchmarking Framework 29
3.1.6. Scoring 33
3.2. Comparative Assessment 33
3.3. Case Summaries 39
3.3.1. District of North Saanich 40
3.3.2. Town of Sidney 41
3.3.3. District of Central Saanich: Adopted Marine Shoreline DPA (2025) 41
3.3.4. District of Central Saanich: Proposed Marine Upland and Seaward DPA (2026) 41
3.3.5. District of Saanich 42
3.3.6. District of Oak Bay 42
3.4. Category-Level Assessment Across the Region 43
3.4.1. Policy Foundation and Legal Architecture 43
3.4.2. Ecological Protection Standards 44
3.4.3. Coastal Hazard and Climate Adaptation 45
3.4.4. Water Quality and Land–Water Linkage 47
3.4.5. First Nations, Cultural Heritage and Public Access 48
3.4.6. Implementation and Accountability 49
4. Conclusion and Recommendations 51
4.1. Key Challenges and Opportunities 52
4.1.1. Key Challenges 52
4.1.2. Key Opportunities 53
4.2. Municipality-Level Summary 54
4.3. Conclusion 54
4.4. Recommendations 55
Appendices 58
Appendix A: Framework with Details 59
Appendix B: Case Assessments 64
District of North Saanich 64
Town of Sidney 67
District of Central Saanich: Adopted Marine Shoreline DPA (OCP 2025) 70

District of Central Saanich: Proposed Marine Upland and Seaward DPA (2026) 73
District of Saanich 75
District of Oak Bay 78
References 81

List of Figures and Tables

Table 1. Municipalities and Shoreline Policy Instruments Assessed 1
Figure 1. Benchmarking Results By Municipality 3
Figure 2. Case Study Municipalities in the Capital Region 10
Table 2. Municipalities and Policy Instruments Included in the Assessment 11
Figure 3. Integrated Narrative of Shoreline Protection Policies in the CRD Based on Interview Findings 24
Table 3. Municipal Shoreline Policy Benchmarking Framework 30
Table 4. Benchmarking Scoring Scale 33
Table 5. Element-Level Comparative Scores Across Case Studies 35
Table 6. Case Study Scores Summary 39
Figure 4. Comparative Benchmarking Profiles by Case Study 40
Figure 5. Policy Foundation and Legal Architecture Scores by Case Study 43
Figure 6. Ecological Protection Standards Scores by Case Study 44
Figure 7. Coastal Hazard and Climate Adaptation Scores by Case Study 46
Figure 8. Water Quality and Land-Water Linkage Scores by Case Study 47
Figure 9. First Nations, Cultural Heritage and Public Access Scores by Case Study 48
Figure 10. Implementation and Accountability Scores by Case Study 50
Figure 11. Overall Benchmarking Scores by Case Study 54

Executive Summary

Purpose

This project evaluates how municipalities in the Capital Regional District use official community plans, development permit areas, zoning provisions, professional-report requirements, and related policy tools to protect shoreline ecological functions, manage coastal hazards, and support nature-based adaptation. It combines qualitative interviews, a standardized municipal benchmarking framework, and documentary case assessments.

Stages of Research

1. Interviews. The evidence base includes 16 interviews: 10 municipal interviews and 6 interviews with non-municipal subject matter experts.

2. Framework development. The Green Bylaws Toolkit and Green Shores performance principles were adapted into a structured assessment instrument. Successive drafts were consolidated to a final framework of 15 elements in 6 categories, each with a definition, screening-level legal authority, and a described ideal condition.

3. Policy assessment. The framework was applied to 6 shoreline policy instruments across 5 municipalities. Every element was scored 0 to 3 against the defined ideal, supported by a quoted provision and a written rationale.

4. Synthesis. Element-level and category-level results were compared across instruments, then combined with the interview findings to generate recommendations.

Case Studies

Table 1. Municipalities and Shoreline Policy Instruments Assessed

Municipality	Instrument
District of North Saanich	OCP Bylaw 1587 (2025), s. 5.9 and s. 5.10.2
Town of Sidney	OCP Bylaw 2240, s. 22 and s. 12
District of Saanich	OCP (2024) ss. 6.0, 6.3, 11.3; Zoning Bylaw 8200 ss. 5.16, 5.19
District of Central Saanich	Marine Shoreline DPA, adopted (OCP 2025)
District of Central Saanich	Marine Upland and Seaward DPA, proposed (2026)
District of Oak Bay	OCP Chapter 8, Shorelines and Watercourses DPAs

Central Saanich appears twice because both an adopted instrument and a proposed replacement were available; comparing them isolates the direction of policy change within one municipality.

Interview Findings

The interviews show that shoreline protection challenges are best understood as parts of a connected governance and decision-making system, rather than as separate policy problems. A central tension is that shoreline development and protection decisions are generally made parcel by parcel, while erosion, sediment movement, habitat connectivity, water quality, and sea-level-rise impacts operate across properties and municipal boundaries. Individual decisions that may appear reasonable at the site level can therefore contribute to cumulative effects at the shoreline-reach or regional scale.

Participants consistently identified fragmented authority as an important context for these decisions. Municipal, provincial, federal, and Indigenous responsibilities intersect at the shoreline, while institutional interfaces, approval sequences, and responsibilities are not always clear to property owners or practitioners. This fragmentation does not itself cause shoreline alteration, but it affects when a proposal is reviewed, by whom, and against which standards.

Three factors were particularly important in shaping how shoreline decisions translate into outcomes. First, policy design determines when ecological and climate considerations enter the development process and whether requirements are mandatory or advisory. Second, implementation capacity and process (including staffing, technical expertise, coordination, monitoring, and enforcement) determine whether adopted policies operate effectively in practice. Third, cost, knowledge, and relationships influence what property owners understand, can afford, and are realistically able to implement.

These conditions can contribute to a cumulative cycle of shoreline hardening, habitat loss, sediment disruption, coastal squeeze, and effects extending beyond the individual property. Because individual approvals are not always tracked or assessed cumulatively, these incremental changes can remain difficult to see until their combined effects become significant.

Participants generally supported nature-based and lower-impact shoreline approaches, but identified an important delivery gap between policy preference and practical implementation. Clearer permitting pathways, professional guidance, technical and financial support, demonstration projects, and earlier planning for future hazards were identified as ways to make these approaches more feasible. The interviews also emphasized the importance of regional coordination, nonprofit and stewardship partnerships, public understanding, and distinct engagement with First Nations as part of effective shoreline governance.

These findings informed the benchmarking framework and help explain the policy patterns identified in the municipal assessment: the effectiveness of shoreline policy depends not only on what objectives are stated, but on when they enter a decision, how clearly they are translated into requirements, and whether the institutional capacity exists to implement them.

Benchmarking Results

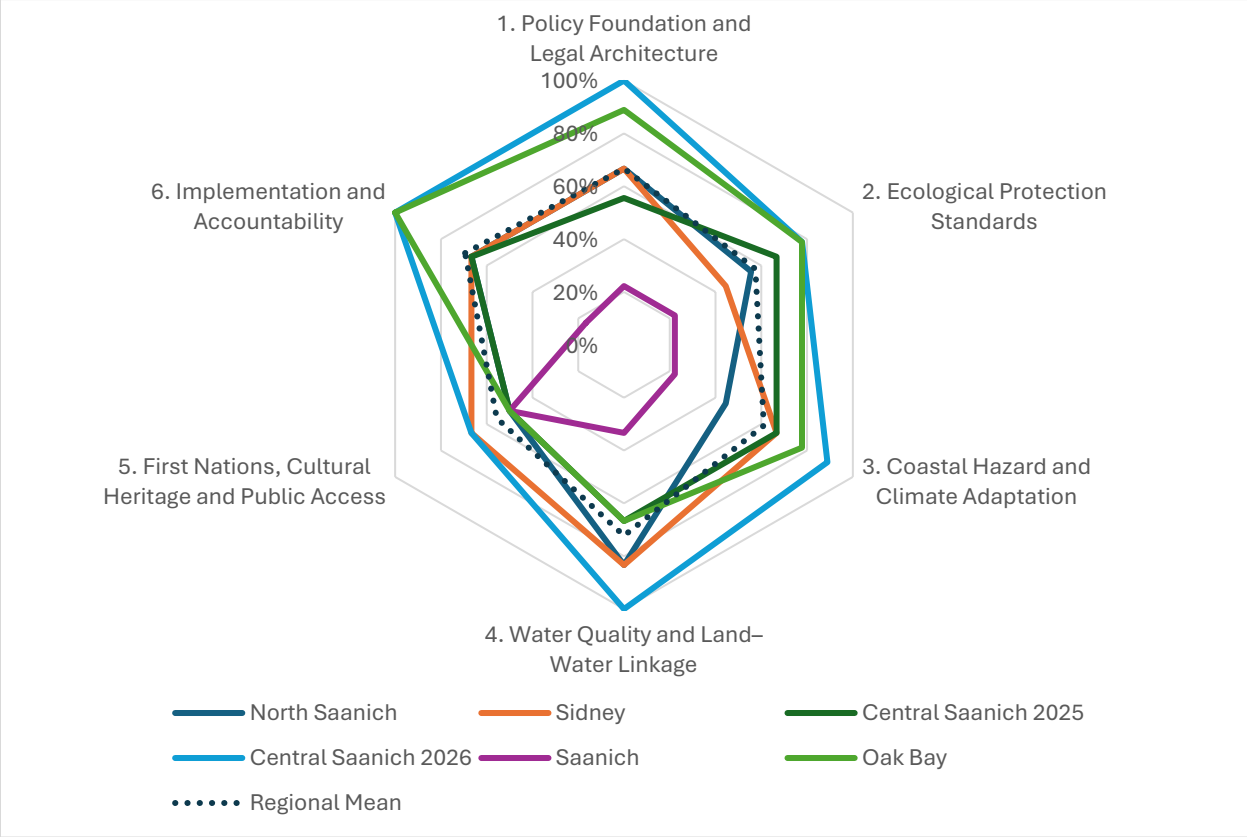


Figure 1. Benchmarking Results By Municipality

The benchmarking results show substantial variation in the completeness of municipal shoreline policy frameworks. Central Saanich's proposed 2026 DPA is the strongest overall model, averaging 89% across the six categories, followed by Oak Bay at 78% and Sidney at 64%. Central Saanich's adopted 2025 DPA and North Saanich form a middle group at 62% and 60%, while Saanich's policies provide the least developed shoreline-specific framework, averaging 27%. These results assess policy design in the reviewed documents, not actual implementation or on-the-ground outcomes.

The strongest policy systems combine mapped development permit areas, clear shoreline objectives, ecological protection standards, future-oriented hazard planning, water-quality controls, qualified-professional review, and implementation mechanisms. Central Saanich's proposed DPA performs especially well in climate adaptation, water quality, and accountability. Oak

Bay has the strongest adopted legal and ecological framework, including detailed limits on hard armouring. Sidney performs strongly in climate adaptation, water quality, and collaborative policy, while North Saanich's principal strength is its treatment of stormwater, pollution, marina impacts, and land–water connections. Central Saanich's adopted DPA is comparatively balanced but less comprehensive than the proposed replacement.

Saanich is the only municipality among the case studies without a current shoreline EDPA. Its former EDPA bylaw was officially rescinded in 2018 (District of Saanich, n.d.), after community objections to how it was being administered and to its relative inflexibility, and Council agreed with the community to remove it. Therefore, the main operative shoreline-specific regulatory provision identified in this assessment is the Zoning Bylaw's 7.5 m shoreline setback. This is the smallest setback among the reviewed cases, but also the only one without a reduction pathway.

Across all cases, water quality and land–water linkage is the strongest category, while First Nations, cultural heritage, and public access is the weakest. Common gaps include inconsistent enforceability of ecological standards, limited attention to cumulative shoreline effects, uneven integration of future sea-level rise and flood risk, incomplete incorporation of First Nations rights and cultural considerations, and limited policy-level monitoring and accountability. Overall, the comparison indicates that effective shoreline policy depends less on adopting isolated objectives or setbacks and more on integrating ecological, climate, cultural, procedural, and implementation requirements into one coherent municipal decision-making system.

Moreover, municipal policy protects development from the shoreline more forcefully than it protects the shoreline from development. Provisions governing flood elevation, setback, and shore protection works are more often mandatory with measurable thresholds. Provisions governing vegetation retention, impervious coverage, restoration, and public access are more often advisory. Indigenous and cultural heritage content is also increasing but has not reached the permit process. No referral, notification, engagement step, or archaeological screening requirement appears in any operative shoreline provision assessed.

Conclusion

Taken together, the interviews and benchmarking point to one central conclusion: the main challenge for shoreline resilience in the Capital Region is not the absence of policy tools, but the incomplete integration of those tools into a coherent governance and implementation system. Municipalities already use many important mechanisms, but their coverage, enforceability, climate orientation, cumulative-effects consideration, and implementation requirements vary considerably.

The findings therefore support a more integrated and layered approach that connects ecological protection, climate adaptation, professional evidence, implementation capacity, regional

coordination, First Nations governance, and practical pathways for nature-based approaches. The goal is to ensure that individual shoreline decisions remain responsive to site conditions while also accounting for their cumulative effects on the broader shoreline system.

Priority Directions

The findings support several priority directions for municipal and regional shoreline policy:

- Strengthen the legal and policy foundation by integrating ecological and hazardous-condition purposes where appropriate and aligning shoreline-related municipal instruments.
- Make ecological requirements operational by converting measurable standards into enforceable provisions, bounding discretionary exceptions, and basing exemptions on ecological effects.
- Address cumulative and future impacts through shoreline-reach assessment, better tracking of approvals and armouring, and explicit consideration of sea-level rise and long-term coastal hazards.
- Make nature-based approaches practical to deliver through clear approval pathways, professional guidance, technical assistance, procedural incentives, demonstration projects, and financial support where available.
- Strengthen implementation and governance through post-permit verification, adequate municipal capacity, monitoring and adaptive review, clearer intergovernmental coordination, and distinct early processes for First Nations and archaeological considerations.

Limitations

The benchmarking assesses policy design rather than implementation performance or ecological outcomes. A high score indicates that the reviewed documents contain relatively strong provisions; it does not demonstrate that those provisions are consistently implemented or that shoreline conditions are improving. Conversely, a lower score does not mean that municipal staff or other organizations are not undertaking relevant activities outside the reviewed policy instruments.

The interviews provide contextual and explanatory evidence from municipal practitioners and non-municipal experts, but they should not be interpreted as statistically representative of all shoreline actors in the Capital Region. The findings are intended to identify recurring governance and implementation patterns and to complement, rather than replace, the documentary assessment.

1. INTRODUCTION

Key Takeaways

This report examines how municipal policy can better protect shoreline ecological functions while addressing coastal hazards and supporting nature-based adaptation. It combines 16 semi-structured qualitative interviews with a standardized 15-element benchmarking framework applied to shoreline policy instruments across selected Capital Region municipalities. The assessment focuses on the strength and completeness of policy design, rather than measuring implementation performance or ecological outcomes.

1.1. Purpose

This project, *Benchmarking Shoreline Resilience: A Cross-Municipal Review of Shoreline Protection Policies in the Capital Region*, aims to evaluate how municipalities in the Capital Regional District (CRD) address shoreline management, habitat protection, and climate resilience. The project responds to growing pressures on shorelines from urban development, sea-level rise, erosion, storm surge, habitat degradation, and the continued use of hard shoreline infrastructure such as seawalls and riprap. The main purpose is to develop a practical and standardized policy assessment framework that can be used to compare municipal approaches and identify opportunities for stronger nature-based shoreline governance.

The project is grounded in the Green Shores and Green Bylaws approaches, which emphasize protecting shoreline processes, maintaining habitat diversity, reducing pollutants, and reversing cumulative impacts to shoreline systems (Stewardship Centre for BC, 2023; Stewardship Centre for BC, 2025). These principles are especially relevant for the CRD, where municipal shoreline policies vary and where local governments are increasingly expected to integrate ecological protection with climate adaptation.

1.2. Background

Coastal shorelines are among the most ecologically and socially significant landscapes in the Capital Regional District (CRD). They provide critical rearing habitat for juvenile Pacific salmon, support high levels of biodiversity, anchor Indigenous cultural practices, and offer recreational and aesthetic value to millions of residents. However, conventional shoreline protection has often relied on hard infrastructure, including seawalls, bulkheads, riprap, and revetments. These structures can disrupt natural shoreline processes, diminish biodiversity, and interrupt sediment movement (Brutas & Sheehan, 2025).

In contrast, Nature-based Solutions (NbS), such as restoring wetlands, protecting riparian vegetation, using permeable materials, and supporting natural sediment processes, work with natural coastal dynamics to increase adaptive capacity while protecting ecological function.

This project develops a more focused municipal benchmarking framework for shoreline protection policies. The Green Bylaws Toolkit recommends that local governments use shoreline or marine Environmental Development Permit Areas (EDPAs/DPAs) to manage marine ecosystems, reduce shoreline hardening, protect natural vegetation, preserve sediment processes, regulate stormwater drainage, and support public access. However, the extent to which CRD municipalities have adopted and structured such tools varies.

1.3. Objectives

The project aims to evaluate and compare municipal shoreline protection policies in the Capital Regional District to identify gaps, strengths, and opportunities for nature-based, climate-resilient management.

Key objectives:

- Develop a standardized assessment framework using tools such as the Green Bylaws Toolkit to rate municipal policies on shoreline protection, habitat conservation, and climate adaptation.
- Conduct a cross-municipal comparison to benchmark policy design, completeness, and consistency across the region.
- Identify actionable recommendations for improving municipal policies and integrating sustainable, nature-based approaches.

1.4. Scope

Within Scope:

- Literature and Policy Review: Gather and review municipal bylaws, policies, and planning documents related to shoreline protection across the Capital Regional District.
- Framework Development: Adapt existing resources, such as the Green Bylaws Toolkit, to create a standardized evaluation tool for comparing municipal policies.
- Data Collection: Conduct interviews or targeted consultations with municipal staff, PSS staff, and relevant subject matter experts
- Policy Assessment: Apply the framework to rate and benchmark each municipality's approach to shoreline management, habitat protection, and climate resilience.
- Data Analysis and Synthesis: Identify trends, gaps, and best practices across municipalities.
- Reporting and Recommendations: Prepare a final report summarizing findings and actionable policy recommendations.

Out of Scope and Limitations:

- Selective Municipal Scope: The assessment covers five CRD municipalities selected within the project timeframe and focus area; it is not a complete assessment of all CRD municipalities.

- Municipal Policy Focus: The project primarily assesses municipal shoreline policies and does not comprehensively assess broader provincial, federal, regional, or Indigenous governance systems
- Limited Stakeholder Engagement: The interviews provide contextual depth and support framework refinement, but they are not intended to represent all shoreline actors in the region.
- Document Availability: The policy assessment depends on the documents identified and available for review; relevant instruments or implementation practices may exist outside the assessed material.
- Non-Systematic Literature Review: The project does not constitute a systematic literature review, and relevant literature or guidance may not have been captured.

1.5. Methodology

The report integrates four stages developed during the project:

- Stage one: initial framework development. The Green Bylaws Toolkit and Green Shores performance principles were adapted into a structured assessment instrument. Several successive drafts were prepared and progressively consolidated; the initial framework informed the interview questions.
- Stage two: interviews. 16 semi-structured interviews were conducted: 10 with municipal participants and 6 with non-municipal subject matter experts. Interviews were coded and analysed thematically, producing 577 unique coded quotations across 962 quote–code assignments and 196 harmonised codes. The initial coding structure was then consolidated into the integrated thematic narrative reported in Section 2.
- Stage three: policy assessment. Informed by the interview findings, the assessment framework was refined to 15 elements in 6 categories and applied to six shoreline policy instruments across five municipalities. Each element was scored from 0 to 3 against a defined ideal condition, with every score supported by a quoted provision and written rationale. The comparative findings are reported in Section 3, and the detailed case assessments are provided in Appendix B.
- Stage four: synthesis. Element-level and category-level results were compared across municipalities to identify regional patterns, and combined with the interview findings to generate the recommendations.

1.5.1. Interviews and Interviewees

Participants are identified only through anonymized IDs. Municipal participants are M01–M10 and non-municipal experts are N01–N06. Direct quotations include only anonymized interview and quote IDs. High-risk quotations were retained in the internal evidence workbook but excluded from the public narrative.

1.5.2. Municipalities and Their Policies

The assessment report includes Saanich, Oak Bay, Central Saanich (adopted 2025), Central Saanich (proposed 2026), North Saanich, and Sidney. Central Saanich is presented twice: once for its adopted 2025 Marine Shoreline DPA and once for the proposed 2026 Marine Upland and Seaward DPA.

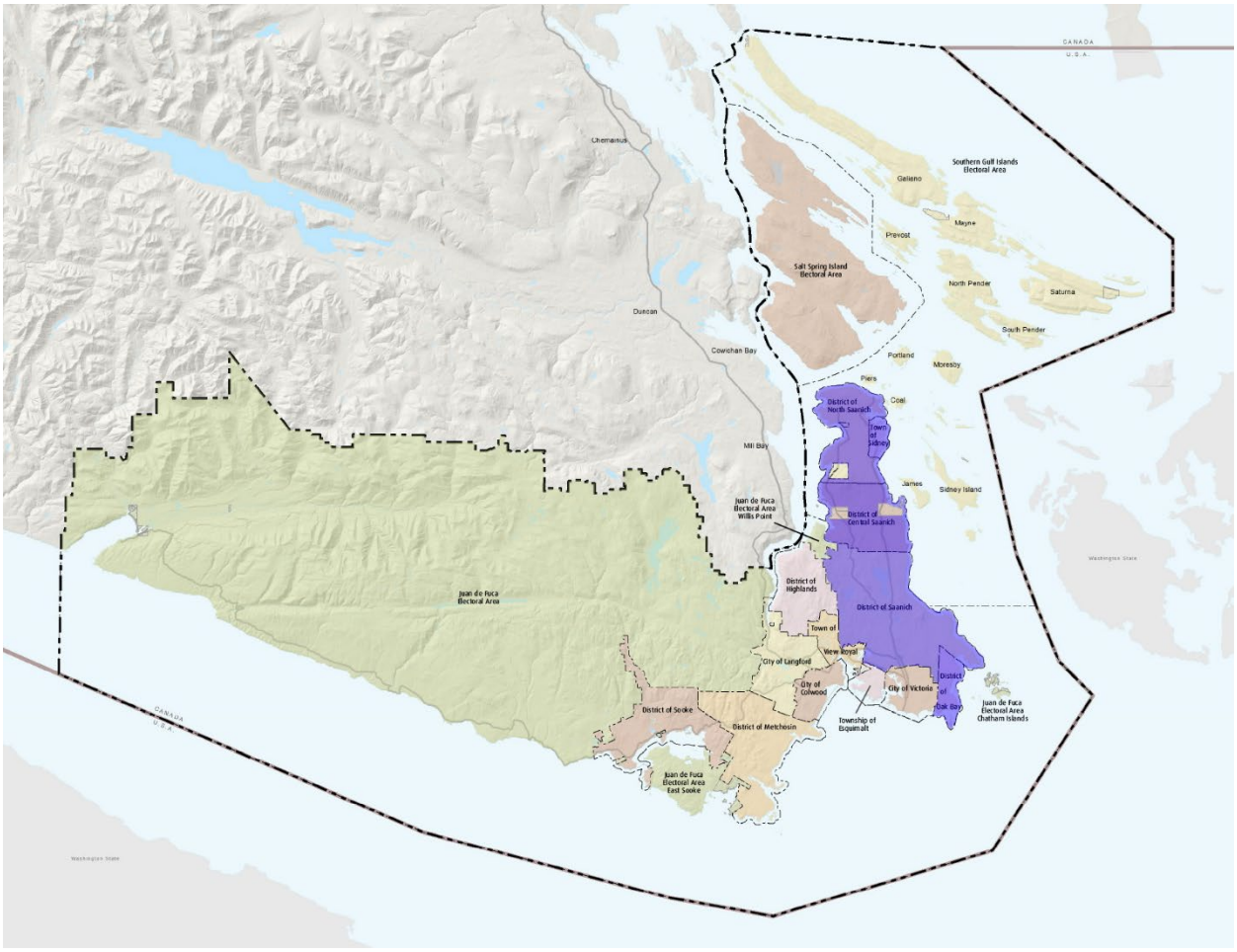


Figure 2. Case Study Municipalities in the Capital Region

Table 2. Municipalities and Policy Instruments Included in the Assessment

Municipality	Instrument
District of North Saanich	OCP Bylaw 1587 (2025), s. 5.9 and s. 5.10.2
Town of Sidney	OCP Bylaw 2240, s. 22 and s. 12
District of Saanich	OCP (2024) ss. 6.0, 6.3, 11.3; Zoning Bylaw 8200 ss. 5.16, 5.19
District of Central Saanich	Marine Shoreline DPA, adopted (OCP 2025)
District of Central Saanich	Marine Upland and Seaward DPA, proposed (2026)
District of Oak Bay	OCP Chapter 8, Shorelines and Watercourses DPAs

1.5.3. Limitations

These limitations should be read alongside every result in this report.

- The assessment covers policy text, not outcomes or practice. A municipality that scores poorly on monitoring may in fact inspect diligently; the finding is that its policy does not require it. Conversely a high score does not demonstrate that the shoreline is well protected.
- Coverage is partial. Five municipalities is not the CRD. Municipalities not assessed may hold provisions that would change the regional findings.
- Scoring involves judgment. The rubric constrains that judgment and every score is accompanied by quoted evidence and a written rationale, so a reader can disagree with any individual score on the evidence presented.
- The interviews are perspectives, not measurements. 16 interviews across a region of this size give depth, not representativeness.

2. INTERVIEW FINDINGS

Key Takeaways

- Almost every shoreline change originates in a private landowner's decision about a single parcel: the central phenomenon the whole system organizes around.
- Authority over the shoreline is fragmented across municipal, provincial, federal, and Indigenous jurisdictions, and the interfaces between them are unclear even to municipal staff.
- Policy tool design, implementation capacity, and cost/knowledge barriers determine whether stated objectives actually shape what gets built.
- Individually reasonable decisions accumulate into shoreline-scale ecological loss that feeds back into the conditions causing it.
- Participants broadly supported nature-based and softer shoreline approaches; the obstacle is delivery (cost, permitting friction, unfamiliarity), not preference.

2.1. Integrated Thematic Analysis

The interview analysis explains how shoreline policy operates after formal objectives have been adopted. Municipal plans and bylaws show what a local government says it will do. Interviews reveal the conditions that determine whether those commitments shape real decisions: who is responsible, when ecological review is triggered, whether staff and applicants can navigate the process, how property and development pressures affect choices, and whether lower-impact alternatives are practical.

As described in methodology, the interviews included 10 municipal participants and 6 non-municipal subject matter experts with regional, technical, stewardship, and comparative perspectives. Confidentiality also remains central. Participants are identified only by anonymized IDs: M01-M10 for municipal participants and N01-N06 for non-municipal experts. Direct quotations are cited by interview and quote ID. Quotations marked as high confidentiality risk in the evidence workbook are not used publicly. Municipality-specific details are generalized where necessary to avoid linking a statement to an identifiable participant.

The analysis produced a large coded evidence base organized initially into themes and associated subthemes. Rather than presenting those themes as separate findings, this section integrates them into a single narrative. Reading them as one connected account clarifies how individually reasonable decisions can combine to produce cumulative regional effects

2.1.1. Private Property and Short-Term Pressures

The shoreline of the Capital Region is, in most places, privately owned to the natural boundary and publicly owned below it. Almost every physical change to it therefore originates in a decision made by an individual owner about an individual parcel: whether to clear vegetation for a view, install stairs or a dock for access, extend usable ground toward the water, or build a structure to hold the shore in place. The private shoreline parcel is therefore a central organizing feature of the interview narrative.

Decisions about a parcel therefore reflect objectives that can be entirely reasonable from the perspective of an individual owner but substantially different from the objectives of shoreline management at the scale of a beach, bay, municipality, or region.

Every other theme in this report either explains why those decisions take the form they do, shapes how they are made, or describes what happens once enough of them accumulate. Land ownership is what makes the shoreline a collection of parcels rather than a system, and it is the reason a shoreline that functions as a connected reach is governed one lot at a time.

From this perspective, some pressures were particularly important. Physical risk is likely the most immediate. Erosion, flooding, storm events, and sea-level rise can threaten land and structures, and an owner facing an apparently urgent problem is unlikely to experience it primarily as an ecological or regional-planning question. Under those conditions, a seawall or other hard structure is familiar, visible, and appears to provide a direct response. As one municipal participant explained:

> *"If someone's house is falling into the water and you basically just say, 'Well, no, you can't build a new seawall,' how does that work? Now you're into discussions around property rights, who owns what, and what values predominate." (M03, Q014)*

Therefore, the benefit of protecting a property is immediate and concentrated on the owner. Potential ecological costs (such as interruption of sediment transport, habitat loss, transferred wave energy, or effects on neighbouring properties) may emerge gradually and be distributed along a much larger section of shoreline.

Waterfront ownership also carries expectations that extend beyond protection from hazards. Participants discussed expectations of maintaining views, direct water access, usable yards, docks, stairs, and other amenities. These expectations can result in smaller but frequent modifications that may receive less regulatory attention than seawalls even though they also alter shoreline habitat. One participant described the connection directly:

> *"So the development pressure there comes from the homeowners who want to have a view. They may remove trees to maintain that view. They want to have access to the ocean. They may remove habitats to put stairs in, to put docks in, and all of that." (M01, Q023)*

Development and housing pressures add a further dimension. New or intensified development can place additional buildings and infrastructure on shoreline parcels at the same time that climate change is increasing future exposure. Participants raised a difficult long-term question: whether development should be approved today where the resulting structures are likely to require shoreline protection during their expected life.

2.1.2. Fragmented Authority

Parcel-level decisions take place within a governance system that is itself divided. Municipal authority is strongest on the upland side of the natural boundary; provincial responsibilities generally apply to Crown foreshore and seabed; federal mandates include matters such as fisheries and navigation; and Indigenous rights and title run through all of it. No single institution identified in the interviews has comprehensive authority over the shoreline as a whole. One participant summarized the resulting institutional landscape:

> *"You have these overlapping jurisdictions. You've got First Nations interests and former village sites along shorelines, with intense archaeological resources concentrated on shorelines. You've got federal fisheries interests. You've got Transport Canada Navigable Waters interests. You have the provincial Water Sustainability Act overlapping on portions of the shoreline. And then, with respect to municipalities, for everything that's kind of land-based above the natural boundary, you have all kinds of bylaws and municipal regulations that apply to how land is used." (M03, Q001)*

Two features of this context matter most. First, the interfaces between authorities are unclear to the people navigating them, including municipal staff, so an applicant or staff member may have difficulty determining what is required or in what order. Second, participants described the absence of a common provincial minimum standard specifically for marine shoreline protection, contributing to variation in how municipalities assemble local policy frameworks within broader legal requirements. As one non-municipal participant put it:

> *"And there are a lot of unknowns, because a lot of the time, even within departments, they don't talk to each other. They're not clear on who is managing what, or they think that it lands with one ministry, but it lands with another." (N01, Q014)*

This ambiguity has practical consequences. Projects may be delayed as applicants move among authorities; gaps may emerge where responsibility is assumed to lie elsewhere; and a difficult or unclear approval process can create an incentive to undertake work outside the formal system. The interviews therefore distinguish fragmented jurisdiction, which is largely structural, from unclear institutional interfaces, which can be improved through better coordination and clearer processes.

Regional variation adds another layer. Participants generally supported greater consistency, but this did not translate into support for one standardized engineering solution. The more consistent position across the interviews was that regional consistency should apply to outcomes and minimum expectations rather than to site design. Municipalities can share ecological objectives, basic safeguards, evidence requirements, terminology, and accountability expectations while retaining flexibility in how those expectations are met on a particular site.

> *"I would love to see CRD advocate for stringent, consistent marine development permit areas amongst member municipalities. CRD by itself may not be able to do this, but they are in a position to advocate for minimum standards, such as requiring greater developments setbacks from the natural boundary / high water mark [...] and putting the onus on development applicants to prove why hardening is "needed" if they are proposing this approach for shoreline protection." (N06)*

However, not all participants shared this view of a stronger regional role. A municipal planner cautioned against regional standardization, noting that regional districts in British Columbia are collaborative service bodies rather than a governance tier with authority over member municipalities, and that a common regional bylaw would be neither helpful nor acceptable given how much local nuance shoreline conditions require. This participant located the appropriate role for higher levels of government at the provincial level instead, describing the existing provincial Streamside Protection Regulation as a reasonable common baseline that leaves individual municipalities free to adopt stronger tools, such as development permit areas, where locally appropriate.

> *"[The CRD] is not a hierarchical organization above local governments. No regional districts are. Regional districts in BC are intended as a collaboration between the member municipalities." [M10]*

This distinction is important for the role of the CRD and the Province. Regional coordination can reduce duplicated work by supporting common information, technical guidance, definitions, indicators, and opportunities for intermunicipal learning. Provincial direction can establish a more consistent floor where local authority or voluntary coordination is insufficient.

At the same time, participants emphasized that higher-level coordination does not remove the role of municipalities. Municipalities already possess important tools affecting development on shoreline parcels. The issue is how completely, consistently, and effectively those tools are used.

2.1.3. Municipal Policy Tools

Municipalities currently use combinations of Official Community Plans, Development Permit Areas (DPAs), zoning setbacks, professional-report requirements, drainage and stormwater provisions, tree and vegetation regulations, subdivision requirements, and other tools. The larger issue is how those tools connect ecological objectives to individual decisions.

A critical distinction is between keeping development away from a hazard and protecting the ecological functions of the shoreline. A setback can reduce exposure of a building to erosion or flooding without necessarily protecting vegetation, sediment movement, habitat, water quality, or the capacity of coastal ecosystems to move landward as sea level rises. Similarly, broad environmental objectives in an OCP may express an important commitment but have limited effect if they are not connected to a permit trigger or enforceable requirement.

> *"Well, in the void of policy, people will probably try to harden their shores, and it will fail. So it's inevitable." (M08, Q024)*

Among policy tools, the Development Permit Area (DPA) is the primary municipal instrument for shoreline protection, and its usefulness depends on three design choices: what area it covers, what activities trigger it, and how early in a project it applies.

Participants identified the timing question as decisive. Where a permit is triggered only by construction or subdivision, ecological review begins after the building envelope, access, and grading have been settled. At that stage the available responses are mitigation and compensation. Where triggers extend to vegetation removal, soil disturbance, drainage works, and shoreline protection works, review begins while avoidance is still possible.

Participants also identified a tension between clear standards and professional judgment. Shoreline conditions vary too much for one fixed design to work everywhere. Qualified professionals can assess geomorphology, erosion, wave exposure, habitat, site constraints, and future hazards in ways that generalized municipal regulations cannot. A municipal participant explained:

> *"But even here, like I said, there is variety in the shoreline. So, for us to have a strict bylaw to say 'you must do this,' that may not be the best thing in terms of the geomorphology of that part of the beach. We don't know what's the right thing. So that's why we require our engineer's report." (M06, Q013)*

However, reliance on applicant-funded professional assessment also creates challenges. Technical studies can be costly, the quality and scope of reports can vary, and professional judgment cannot substitute for a clear public-policy objective. If every important ecological expectation is left to case-by-case judgment, similar sites may receive substantially different treatment.

The interviews therefore point toward a layered approach: clear minimum safeguards and outcomes establish the floor; policy defines when review is required; and qualified professionals determine how site-specific conditions should be addressed above that floor. In this model, professional judgment provides flexibility without making the underlying ecological objective optional.

The wording of policy matters for the same reason. Participants distinguished requirements from encouragements. Guidelines framed through terms such as "consider," "encourage," or "should," particularly when accompanied by broad exceptions, may carry less weight during development review than their placement in an environmentally ambitious plan might suggest.

This does not imply that discretion should be eliminated. Some flexibility is necessary because shoreline conditions vary. The important distinction is between bounded and unbounded discretion. An exception linked to defined criteria, professional evidence, and recorded reasons can accommodate genuine site differences. A broad exception without those conditions can allow an objective to disappear during implementation without an explicit decision that the objective should not apply.

Finally, participants described shoreline policy as a portfolio rather than a single instrument. A strong DPA can be weakened if zoning, tree protection, drainage regulations, exemptions, or other bylaws operate according to different definitions or permit activities that undermine the shoreline objective. Conversely, several comparatively ordinary municipal tools can provide substantial protection when they work together. This is why the assessment in the next section evaluates the overall policy architecture rather than simply asking whether a municipality has adopted a shoreline DPA.

2.1.4. Implementation Capacity and Process

The key here is that the effectiveness of shoreline policy cannot be inferred from the quality of its written objectives. Between an adopted requirement and an ecological outcome are staff capacity, technical expertise, permit procedures, inspection, monitoring, enforcement, funding, and sustained institutional attention. In this sense, implementation is not a final administrative step. It is part of policy design. One municipal participant illustrated how uncertainty in the process can directly affect shoreline outcomes:

> *"You have a homeowner who has a failing seawall and approaches the municipality for a permit. The person they call in engineering, or maybe they call parks, doesn't actually know where to direct that person. They might just say, 'Well, there are no permits that apply, so just go ahead and do what you want to do.' In which case, the homeowner—next thing you know, there are excavators parked on the beach working away with very little environmental protection in place." (M03, Q003)*

The example illustrates why process design has environmental consequences. A confusing process does not necessarily prevent shoreline alteration. Instead, it can shift alteration outside the permit system, where ecological review and mitigation are even less likely to occur.

Capacity creates a related problem. Requirements for professional reports are useful only if the municipality can evaluate what has been submitted. Requiring a coastal assessment without having sufficient internal expertise to question its assumptions or conclusions may turn professional review into a procedural formality rather than substantive scrutiny.

Participants also emphasized that stronger environmental requirements have resource implications. More detailed review may require additional staff time; monitoring and inspection require ongoing capacity; technical assistance for homeowners requires expertise; and effective enforcement requires both institutional commitment and resources.

As one municipal participant observed:

> *"You need to be very upfront with Council when these policies go forward that if they want that idealistic outcome, the price to pay is public money. You're going to need to compensate owners, or you're going to need to hire staff who can provide the expertise to owners to help them through the process. There's going to be some price to pay on the municipality's behalf to achieve that extra level toward the idealistic outcome." (M02, Q036)*

The same concern applies after approval. Participants emphasized inspection, verification of completed works, monitoring of restoration, and consequences for non-compliance. A requirement that is never checked may function little differently from an advisory guideline. This is particularly important where permits depend on professional designs or restoration commitments: approval of the proposal does not establish that the approved work was built as designed or that required ecological functions were successfully restored.

There is also a temporal dimension. Shoreline change occurs over decades, whereas elected councils, staff assignments, project funding, and grant programs operate on shorter cycles. One participant captured this mismatch:

> *"They're hard to find, and to get them over a long period of time, because these are all elected officials, right? It is hard to get them over a long period of time to commit to something like shoreline protection being a priority. And the ocean doesn't have the same timeframes, right? It doesn't have a four-year elected term." (M01, Q045)*

The implication across these findings is that durable policy depends on institutional mechanisms that survive individual projects and political cycles: clear responsibilities, stable staff capacity, recorded approvals, monitoring requirements, and periodic review based on implementation experience.

2.1.5. Cumulative Ecological Effects

The central ecological problem identified through the interviews is the mismatch between the unit of regulation and the unit of ecological function. Shoreline permits are generally associated with individual parcels or projects, while beaches, sediment systems, habitat, wave energy, drainage, and water quality operate across property and jurisdictional boundaries.

A seawall may therefore appear reasonable when assessed only in relation to the property it is intended to protect. At a larger scale, however, participants described hard structures as capable of transferring wave energy, increasing scour, interrupting sediment supply, and affecting neighbouring or downdrift shorelines. Similar cumulative effects arise from vegetation loss, fill, access structures, runoff, and repeated small modifications. As one participant summarized:

> *"The cumulative impacts of the development on the shoreline remove very precious shoreline habitat, which exists in very small quantities." (M01, Q024)*

Climate change adds coastal squeeze to this cumulative process. As sea level rises, beaches and coastal habitats may need to migrate landward. Fixed structures can prevent that movement, gradually trapping habitat between rising water and a hardened shoreline. One non-municipal participant explained:

> *"These structures actually cause shoreline damage upstream and downstream of them and have the potential for what's called coastal squeeze. Coastal squeeze is when you have sea level rise coming in and, instead of the land being able to migrate further back to provide space for natural shoreline processes to occur, which includes natural little bits of erosion to create those beaches, what ends up happening is they get squeezed out for space." (N02, Q003)*

The interviews therefore suggest a need to see individual applications in their shoreline context: neighbouring structures, sediment pathways, existing habitat, previous approvals, future sea-level conditions, and cumulative modification of the shoreline reach. This finding becomes particularly important in the next section, where cumulative effects and monitoring are treated as characteristics of a more complete municipal policy framework.

2.1.6. Nature-Based Resilience

Nature-based and soft-shore approaches were among the clearest areas of convergence in the interviews. Participants discussed vegetation, living shorelines, eelgrass, constructed dunes, accommodation, relocation, retreat, hybrid designs, and Green Shores as possible alternatives to conventional hard protection.

The interviews therefore move beyond the question of whether nature-based approaches are desirable. The more significant question is whether the governance and delivery system makes them realistically available when a property owner needs to act.

One municipal participant described the broader range of possible responses:

> *"That's where Green Shores fits in beautifully. You can have conversations about retreating, avoiding the shoreline altogether, or accommodating through different design approaches to anticipate sea-level rise, for example—moving facilities back or protecting them with constructed dunes or different strategies for shoreline enhancement." (M03, Q010)*

Importantly, support for nature-based approaches did not mean support for a uniform soft-shore prescription. Participants repeatedly emphasized differences in geomorphology, exposure, lot configuration, existing shoreline modification, and risk. On some sites, avoidance or retreat may be feasible; on others, living shoreline techniques may be appropriate; already constrained or heavily modified sites may require hybrid approaches.

The common principle is therefore better described as seeking the softest effective approach rather than requiring one particular design.

Future climate conditions also matter. A shoreline treatment that responds only to current erosion or flood conditions may not remain effective through the life of a building or infrastructure asset. Participants connected nature-based resilience with forward-looking hazard assessment and with keeping multiple adaptation strategies available: avoidance, accommodation, protection, and retreat.

The principal barriers to adoption were practical. Nature-based approaches may be less familiar to homeowners, contractors, professionals, and staff. Performance may be perceived as uncertain. Technical expertise may be difficult to obtain. Residential projects may receive little financial support. Most importantly, participants described situations in which the environmentally preferred approach was not the easiest approach to permit. A non-municipal participant described the financial barrier:

> *"Even though nature-based solutions are using natural kinds of materials, it still costs a fair amount of money, and there's not a lot of financial incentive currently to do a nature-based solution restoration on a residential property. There's not a lot of funding or bursaries for that homeowner to do it." (N03, Q031)*

Another emphasized process:

> *"So you need the government to help support that implementation piece of policies by having a better, more streamlined process that allows for those nature-based solutions to occur without impacting the environment." (N02, Q033)*

The interviews therefore suggest that successful nature-based policy depends on aligning regulation, process, expertise, evidence, and incentives. A preferred option that remains harder to understand, finance, design, or permit is unlikely to become the default in practice.

2.1.7. Knowledge, Relationships, and Governance

Participants consistently described public understanding, technical support, trust, nonprofit partnerships, intergovernmental relationships, and Indigenous governance as factors affecting whether policy is understood, accepted, challenged, or implemented.

Property owners generally cannot be expected to possess specialist knowledge of sediment transport, coastal geomorphology, habitat function, or nature-based shoreline engineering. Where the rationale for a requirement is poorly understood, an ecological safeguard may be experienced primarily as an arbitrary restriction on private property. Where a nature-based approach is unfamiliar, owners may reasonably perceive a conventional wall as the safer option.

Education is therefore not separate from implementation. Technical assistance, understandable guidance, and visible examples can reduce uncertainty and improve the legitimacy of regulatory requirements. However, the interviews also suggest that education alone is insufficient where the underlying barrier is cost, process complexity, or physical risk. Information works best when combined with a feasible pathway for action.

Nonprofit and stewardship organizations were described as particularly valuable in this space because they can work across institutional boundaries, provide continuity, support restoration and monitoring, communicate with communities, and connect actors whose formal jurisdictions are more constrained.

As one participant explained:

> *"I think the role of nonprofits like ourselves can really bridge a gap because our scope is less limited than that of a municipality and a regional district. They have very strict jurisdictional boundaries and very strict scope that they can function within, and so I think, really, nonprofits like ourselves can act to bridge the gaps between those." (N04, Q042)*

Participants were also clear about the limit of this role. Partnerships can complement public capacity but should not become substitutes for responsibilities requiring statutory authority, stable funding, or long-term institutional accountability.

Moreover, First Nations governance requires separate treatment. The interviews did not frame First Nations simply as another stakeholder group. Participants discussed rights, title, laws, cultural and archaeological sites, harvesting, knowledge, authority, and capacity. These considerations place the relationship on a different footing from general public engagement or nonprofit partnership.

The timing of engagement was again critical. Cultural and archaeological concerns cannot meaningfully shape a decision if they enter only after the basic project has been designed.

One participant emphasized this point in relation to climate impacts on cultural sites:

> *"I have talked to a lot of Nations who have concerns over losing important cultural sites to erosion and sea level rise. So it's really important. It's more than just losing recreational space. For a lot of communities, it's about losing their ancestors to the sea and really important cultural remains. So it can be a heavy conversation, but it's so, so important that the local governments are working with Nations from the get-go." (N03, Q015)*

This finding connects directly with the broader interview narrative. Just as ecological review is more effective before project design is fixed, relationships with First Nations must enter early enough to influence the decision rather than simply receive notice of it.

The interviews therefore distinguish three related but different forms of capacity: public understanding and homeowner support; nonprofit and stewardship partnerships; and relationships with First Nations. All contribute to shoreline resilience, but they perform different functions and should not be collapsed into a generic category of stakeholder engagement.

2.2. Synthesis: From Interview Findings to the Benchmarking Framework

Taken together, the interviews describe a connected governance problem rather than a collection of independent weaknesses. Reading them as a single account clarifies how individually reasonable decisions can produce cumulative regional effects. The diagram below synthesizes the relationships identified across the thematic analysis:

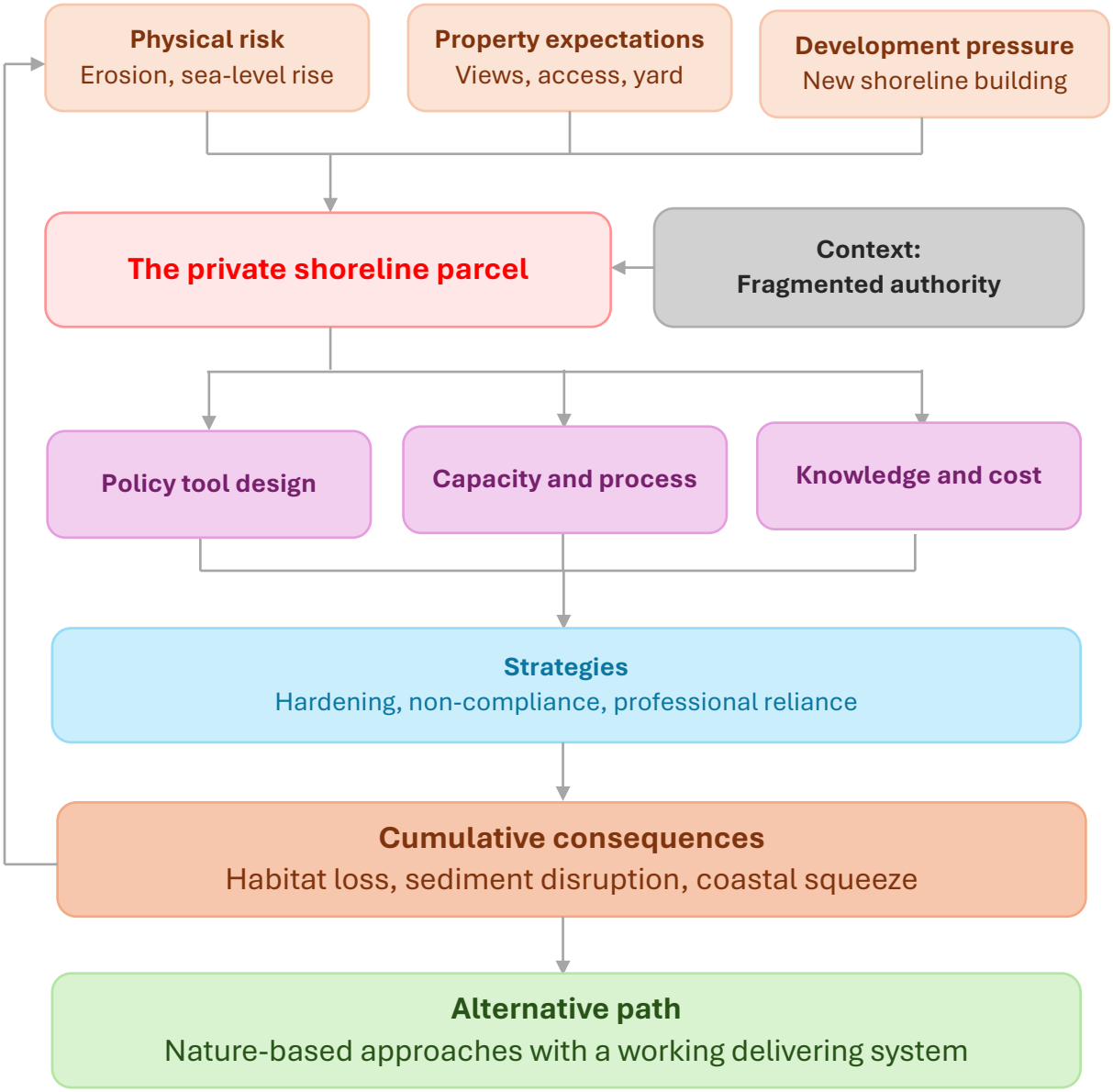


Figure 3. Integrated Narrative of Shoreline Protection Policies in the CRD Based on Interview Findings

The process begins with a shoreline parcel subject to physical risk, development pressure, and owner expectations. Decisions about that parcel occur within fragmented institutional authority. Municipal policy determines whether ecological and climate considerations enter early enough to influence the decision and whether clear minimum safeguards exist. Professional expertise allows those safeguards to be adapted to site conditions. Municipal capacity and process determine whether the requirements can actually be administered, understood, monitored, and enforced. Cost, knowledge, and familiarity influence the options that a property owner finds realistic.

The consequences then extend beyond the parcel. Hardening, vegetation removal, fill, runoff, and other modifications can accumulate across a shoreline reach, affecting habitat, sediment movement, water quality, neighbouring properties, cultural values, and the capacity of shoreline ecosystems to respond to sea-level rise. Those cumulative effects can in turn increase physical risk and pressure for further protection, reinforcing the original pattern.

The alternative pathway identified through the interviews is not simply the adoption of a new shoreline bylaw. It is a system in which ecological and hazard considerations enter early; minimum outcomes are clear; site-specific professional judgment operates within those minimums; implementation is adequately resourced; cumulative effects are visible; jurisdictional interfaces are understandable; First Nations governance is incorporated distinctly and early; and nature-based approaches are practical enough to compete with conventional hard protection.

These findings directly informed the benchmarking framework in the next section. The framework therefore examines more than the presence or absence of shoreline policy. It considers whether municipal policy establishes a coherent legal and policy foundation; protects ecological functions and shoreline processes; addresses coastal hazards and future climate conditions; connects upland development to water quality and the marine environment; recognizes First Nations, cultural heritage, and public values; and provides the implementation and accountability mechanisms necessary to translate policy into practice.

The interview findings also clarify how the scores in the next section should be interpreted. A strong policy framework does not guarantee a strong ecological outcome, because staffing, professional practice, enforcement, owner behaviour, intergovernmental coordination, and other implementation conditions remain important. Conversely, municipalities may achieve positive outcomes through practices that are not fully expressed in the policy documents assessed. The benchmarking exercise therefore evaluates the strength and completeness of the policy architecture, while the interviews explain the wider conditions through which that architecture operates.

The central message from the interviews is: shoreline resilience depends less on any single rule than on whether the different parts of the governance system work together at the scale at which the shoreline itself functions. The strongest opportunity is to shift from isolated parcel-level responses toward a system in which individual decisions remain site-specific but are made within shared ecological objectives, clear institutional responsibilities, workable implementation processes, and a cumulative understanding of the shoreline.

3. BENCHMARKING FINDINGS

Key Takeaways

- Shoreline policy strength varies enormously across the region, from 27% (District of Saanich) to 89% (Central Saanich's proposed 2026 DPA) of the framework's ideal.
- First Nations, Cultural Heritage and Public Access is the weakest category regionally, and cumulative/off-site effects are the weakest element within Ecological Protection Standards in nearly every case.
- Central Saanich's proposed 2026 DPA is the strongest policy model assessed, while Oak Bay has the strongest adopted framework.
- A broader pattern is that policies generally protect development from shoreline hazards more strongly than they protect the shoreline from development: hazard and structural provisions are mandatory more often than not, while ecological provisions are advisory more often than not.

3.1. Framework Overview

3.1.1. Jurisdictional Context

Under British Columbia's current legislative framework, municipalities have meaningful but bounded authority to protect shorelines through land-use planning and development regulation. Principal municipal tools include Official Community Plans (OCPs), zoning bylaws, and environmental development permit areas (EDPAs/DPAs).

Section 488 of the Local Government Act allows an OCP to designate areas for protection of the natural environment, ecosystems and biodiversity, and for protection of development from hazardous conditions. The OCP must explain the conditions or objectives justifying the designation and establish guidelines for addressing them. Within a designated area, subdivision, construction, structural alteration and, where the designation concerns environmental protection or hazards, land alteration cannot proceed without a development permit unless a defined exemption applies.

These provisions give municipalities considerable potential to connect shoreline objectives to individual development decisions. A natural-environment permit may require areas to remain free from development; protect, restore or enhance natural features; require environmental protection works; and retain or plant vegetation for habitat, drainage, erosion control and bank protection. A hazardous-condition permit may restrict development in areas exposed to flooding, erosion, landslip or tsunami and may be informed by an applicant-funded report from a professional engineer with relevant experience. Municipalities can also designate development approval information areas and require applicant-funded information about anticipated effects on the natural environment. Zoning, setbacks, runoff controls, floodplain requirements and related bylaws can supplement the EDPA. Together, these tools can support avoidance of sensitive areas, climate-ready siting, protection of vegetation and sediment processes, alternatives analysis, restoration, construction sequencing and monitoring, provided that the requirements are clearly connected to the statutory purposes and adopted guidelines.

Municipal authority nevertheless has important limits. It is delegated by provincial legislation and must be exercised within the purposes, procedures and specific powers established by that legislation. Development permits cannot generally change the permitted use or density of land, and their conditions must follow the adopted DPA guidelines; hazard-related variations are limited to health, safety or protection of property. Municipal policies are also most direct in relation to land use within municipal boundaries. The Land Act defines the natural boundary by reference to the visible high-water mark and indicates that unfilled land below that boundary is generally Crown land.

Consequently, municipal shoreline policies cannot by themselves determine ownership, authorize occupation of provincial foreshore or seabed, or replace required provincial and federal approvals.

The Riparian Areas Protection Act and Regulation provide a comparatively detailed model involving mapped assessment areas, qualified environmental professionals, prescribed reports, avoidance measures, construction monitoring, education and compliance. However, their 30-metre assessment area applies to regulated streams and fish-riparian habitat, not automatically to marine shorelines; it should therefore inform procedural design rather than be treated as the legal source of a universal marine setback.

Municipal effectiveness is further limited by fragmented jurisdiction, incomplete ecological information, exemptions, professional-report quality, staffing, inspection and enforcement capacity. The strongest municipal policy is therefore not one that claims comprehensive control of the coast, but one that uses municipal powers fully and precisely, establishes clear referral interfaces with other authorities, and provides the resources needed to implement and monitor its requirements.

3.1.2. Benchmarking Foundation: Green Bylaws Toolkit

The Green Bylaws Toolkit describes what marine development permit areas typically contain, and that description serves as an external check on the framework that follows. Marine DPAs are frequently designated along a strip running 15 to 30 metres on either side of the shoreline, and their guidelines commonly address:

- restrictions on new development, with requirements that development minimise impacts to marine ecology and address flooding, erosion and slope stability risks through siting, supported by reports from qualified environmental professionals with expertise in coastal processes and safe-siting assessments that factor in rising sea levels;
- restrictions on shoreline protection measures, expressly on account of the cumulative impacts of multiple works, with soft measures encouraged over hard, and some marine DPAs prohibiting new protection except to protect previously existing structures and then only where a qualified professional has concluded the structure is at risk from natural shoreline processes;
- restrictions on the use of fill upland of the shoreline;
- stormwater and drainage requirements preventing drainage to the foreshore or over bluffs and shore banks;
- requirements to preserve natural beach transport processes such as erosion and accretion in their natural state;

- siting and design requirements for marinas, float homes and boat shelters;
- requirements to retain natural vegetation in the marine riparian area, including woody debris;
- and requirements to protect waterfront views and public access (Stewardship Centre for BC, 2021).

3.1.3. Purpose and Design

The framework provides a standardised way to compare how municipalities in the Capital Regional District use their land use and development powers to protect shoreline ecological function, manage coastal hazard, and support nature-based adaptation.

It contains 15 elements in 6 categories. Each element sets out a definition, the enabling legal provision at a screening level, and a description of the ideal condition: the state that would earn the highest score. The assessor compares the municipality's policy text against the ideal description and assigns a score, producing both an element-level diagnosis and a category profile.

3.1.4. Unit of Analysis

The unit of analysis is the municipal shoreline protection policy system: the OCP, the shoreline or marine development permit area, zoning and setback provisions, development approval information requirements, permit procedures, and the related drainage, vegetation, and soil bylaws that bear on shoreline decisions.

An element is scored only where it has a direct and observable bearing on municipal shoreline decisions. General environmental, climate, or biodiversity commitments are not scored unless they connect explicitly to shoreline policy or to the permit system.

3.1.5. Benchmarking Framework

The benchmarking framework provides a standardized way to compare how municipal shoreline policy addresses ecological protection, coastal hazards, climate adaptation, land–water relationships, cultural and public values, and implementation.

The framework contains 15 elements organized into six categories. Together, the categories examine whether shoreline objectives are established in policy, translated into ecological and climate-related requirements, connected to broader land–water processes and cultural considerations, and supported by mechanisms for implementation and accountability.

Detailed definitions, legal foundations, ideal conditions, and the complete scoring rubric are provided in Appendix A.

Table 3. Municipal Shoreline Policy Benchmarking Framework

Category	Definition	Element	Legal Support	Definition
1. Policy Foundation and Legal Architecture	Whether the municipality has a legally anchored shoreline mandate	**1.1 Shoreline objectives in the OCP**	LGA s. 474(1)(d); s. 488(2).	States why shoreline regulation exists and what ecological, hazard, and adaptation outcomes it targets.
		1.2 Dedicated shoreline or marine DPA	LGA s. 488(1)(a) and (b); s. 488(2); s. 489.	A development permit area designated specifically for the shoreline, or a clearly identifiable shoreline component within a broader environmental DPA.
		1.3 Integration across municipal instruments	LGA ss. 479, 488–491; Community Charter ss. 8(3), 9.	Consistency between the OCP, DPA guidelines, zoning/setbacks, and related drainage, tree, and soil bylaws.
2. Ecological Protection Standards	Whether policy protects shoreline function, not just building position	**2.1 Shoreline setback or buffer**	LGA ss. 479, 488–491.	A minimum development-free separation from the shoreline, and the basis on which it can be varied.
		2.2 Vegetation and natural beach features	LGA s. 491(1); Community Charter s. 8(3)(c).	Requirements to retain or restore native shoreline vegetation and leave natural beach materials in place.
		2.3 Cumulative and off-site effects	LGA ss. 484–487, 491(1).	Whether review considers effects beyond the applicant's own parcel,

				on neighbours, the shoreline reach, and past approvals combined.
3. Coastal Hazard and Climate Adaptation	Whether policy plans for future conditions and steers away from hard armouring	**3.1 Coastal hazard and sea-level-rise assessment**	LGA ss. 488(1)(b), 484–487.	Whether a hazard assessment is required before shoreline development or protection works are approved.
		3.2 Shoreline protection hierarchy	LGA ss. 488(1)(a)–(b), 490, 491(1).	Whether policy requires avoidance, then accommodation, then soft/nature-based, then hard armouring only as a last resort.
		3.3 Standards for hard protection and legacy structures	LGA ss. 490, 491(1).	Design and ecological requirements where hardening is genuinely necessary, and treatment of existing structures on repair/replacement.
4. Water Quality and Land-Water Linkage	Whether policy connects upland activity to shoreline outcomes	**4.1 Stormwater and drainage control**	LGA s. 491(1); Community Charter ss. 8(3), 9.	Controls on runoff volume, rate, and discharge point from shoreline parcels.
		4.2 Pollution and sediment source control	LGA s. 491(1); Community Charter ss. 8(3), 9.	Requirements addressing pollutants and sediment entering the shoreline environment, including during construction.
5. First Nations, Cultural Heritage and Public Access	Whether policy addresses rights, heritage, and public values	**5.1 First Nations engagement and archaeological protection**	Heritage Conservation Act ss. 12–13; LGA s. 475(2); Declaration on the	How the municipality screens for archaeological/cultural sensitivity and engages affected First Nations.

			Rights of Indigenous Peoples Act.	
		5.2 Public foreshore access and access design	LGA ss. 479, 490, 491(1).	Protection of continuous public access, and design requirements for private access structures (docks, stairs).
6. Implementation and Accountability	Whether policy requirements support consistent administration and evidence-based decisions	**6.1 Clarity and enforceability of language**	LGA ss. 488(2), 490, 491(1).	Whether requirements use mandatory, testable language tied to a specific decision point.
		6.2 Professional evidence requirements	LGA ss. 484–487; Riparian Areas Protection Regulation.	When a qualified professional report is required, from which discipline, and what it must contain.

3.1.6. Scoring

Each element is scored from 0 to 3. Category percentages are calculated as the points earned divided by the maximum available points in that category, and the overall normalized score is the total points earned divided by the 45-point maximum across 15 elements. If an element is marked N/A because the relevant instrument was unavailable, it is excluded from the applicable denominator.

The scoring is intended to assess policy design, not implementation outcomes. A high score means that the reviewed policy documents contain relatively strong mechanisms for addressing an element; it does not demonstrate that those mechanisms are consistently implemented or that ecological outcomes are positive. Conversely, a lower score does not mean that municipal staff are not undertaking relevant work outside the reviewed policy documents.

Table 4. Benchmarking Scoring Scale

Score	Meaning
0 = Absent	No policy language addresses this element, or the language contradicts it.
1 = Aspirational	The element appears as an objective, encouragement, or guideline with no trigger tied to a permit decision.
2 = Present but limited	The element is enforceable but coverage is partial, thresholds are vague, discretion dominates, or it is weakened by exemptions or late triggering.
3 = Enforceable and integrated	Mandatory language, measurable or mapped where relevant, tied to a required permit decision, and consistent with related municipal documents.
N/A	The relevant instrument was not available. No inference is drawn about whether the provision exists.

3.2. Comparative Assessment

The framework was applied to each of the six shoreline policy instruments identified in Section 1.5.2. For every element, the relevant municipal policy provisions were reviewed against the scoring criteria and assigned a score from 0 to 3. Each score is supported by a quoted policy provision and a written assessment explaining how the evidence relates to the benchmark.

To keep the main report focused on the comparative findings, the detailed element-by-element assessments for individual cases are provided in Appendix B. This appendix provides the complete

evidence base for the scores and allows readers to review or question individual assessments without interrupting the regional comparison presented here.

The analysis first presents the overall score pattern and concise case summaries, then compares performance across the six framework categories to identify regional strengths, weaknesses, and variation. It concludes by drawing together the principal comparative findings.

The scores should be interpreted as measures of the strength and completeness of the reviewed policy framework, not as measures of implementation or ecological outcomes. A high score indicates that the reviewed policy documents contain relatively strong and integrated provisions; it does not establish that those provisions are consistently implemented in practice.

Table 5. Element-Level Comparative Scores Across Case Studies

Element	North Saanich	Sidney	Central Saanich 2025	Central Saanich 2026	Saanich	Oak Bay
1. Policy Foundation and Legal Architecture						
1.1 Shoreline objectives	**2** – traceable, but no SLR/cumulative link	**2** – broad rationale, no unifying statement	**2** – ecological and erosion objectives; some processes omitted	**3** – comprehensive ecological, hazard, and climate objectives	**1** – stated as OCP policy only, not permit-linked	**3** – comprehensive objectives operationalized through EDPA
1.2 Dedicated DPA	**2** – designated DPA, but natural-environment purpose only	**2** – designated DPA, but doesn't cover whole town	**2** – shoreline-specific DPA; natural-environment purpose only	**3** – dedicated DPA using multiple statutory purposes	**0** – no DPA; EDPA rescinded 2018	**3** – dedicated shoreline DPA using environmental and hazard purposes
1.3 Integration	**2** – connects DPA to approvals, not full bylaw alignment	**2** – bylaw alignment framed as future action	**1** – only a generic cross-reference to other approvals	**3** – strong integration across DPAs, standards, and authorities	**1** – setbacks stand alone, no cross-bylaw procedure	**2** – variance mechanism exists but discretionary
2. Ecological Protection Standards						
2.1 Setback	**2** – 15 m baseline; limited future-risk	**1** – 15m buffer covers only 50% of shoreline	**2** – flat 15m baseline; rigorous joint-professional	**3** – DPA area + septic/bluff	**1** – absolute 7.5m; no scaling or reduction path	**3** – 15 m setback with professional

Element	North Saanich	Sidney	Central Saanich 2025	Central Saanich 2026	Saanich	Oak Bay
	and reduction criteria		reduction test; not risk-scaled	setbacks + 2100 flood level		evidence for reductions
2.2 Vegetation and beach features	**2** – mandatory retention; no survival/monitoring standard	**2** – retention only "where possible," covers half shoreline	**2** – detailed 2-yr monitoring; much language is "should"	**2** – mandatory retention; limited restoration and monitoring provisions	**1** – encouragement only, no mandatory trigger	**3** – strong protection of vegetation and shoreline processes
2.3 Cumulative effects	**1** – addressed only for hard revetment design	**1** – addressed only for hard structures, no assessment	**2** – mandatory no-harm rule across hard structures	**2** – mandatory but no formal cumulative assessment	**0** – no cumulative/off-site provision at all	**1** – mandatory avoidance of sensitive features only
3. Coastal Hazard and Climate Adaptation						
3.1 Hazard and sea-level rise	**1** – SLR named as objective only; no permit-stage assessment	**1** – "must consider" SLR, no report/FCL required	**1** – life-of-structure geotech standard, no SLR horizon	**3** – mandatory 2100 flood-level safe-siting standard	**1** – "consider" SLR only, no trigger	**2** – mandatory QCP flood level, no numeric horizon
3.2 Protection hierarchy	**2** – soft-first encouraged, not mandatory sequence	**2** – mandatory certification, but no avoid-first step	**3** – mandatory avoid>soft>hard sequence with evidentiary test	**3** – avoid-first with binding no-net-loss rule	**1** – no hierarchy or alternatives test at all	**3** – mandatory softest-first with required QCP justification
3.3 Hard protection standards	**1** – legacy structures rebuildable as-is,	**3** – detailed design standard;	**2** – no-net-loss required; some	**2** – registered engineer + two-	**0** – no hard-protection design standard at all	**2** – comprehensive but mostly

Element	North Saanich	Sidney	Central Saanich 2025	Central Saanich 2026	Saanich	Oak Bay
	no ecological trigger	no legacy-structure clause	wording still "should"	professional replacement		"should"; no upgrade trigger
4. Water Quality and Land–Water Linkage						
4.1 Stormwater	**3** – covers development + construction; missing inspection detail	**3** – numerically precise cap, written as "should"	**2** – mandatory, tied to District plan; no impervious cap	**3** – mandatory, tied to District's latest standards	**1** – discretionary language, no permit trigger	**2** – mandatory features; imperviousness only "should"
4.2 Pollution and sediment	**2** – mandatory ESC plan; no construction inspection	**2** – mandatory duty; ESC plan only discretionary	**2** – discretionary "should"/"may" throughout	**3** – two-stage mandatory QEP-prepared ESC plans	**1** – framed as collaboration, not a permit requirement	**2** – mandatory duty; management plan discretionary
5. First Nations, Cultural Heritage and Public Access						
5.1 First Nations and archaeology	**1** – collaboration recognized; no permit referral or archaeology process	**2** – strong collaboration commitments; not tied to permits	**0** – no archaeology/First Nations reference	**1** – limited archaeological protection; no First Nations pathway	**1** – framed as ongoing collaboration, not a process	**1** – archaeology mentioned but creates no operative obligation
5.2 Public access	**2** – measurable private-access design; public	**2** – mostly discretionary; no defined exception criteria	**3** – non-extinguishment rule + multi-user dock preference	**3** – mandatory prohibition + measurable design standards	**2** – framed as exploratory priority, no design standard	**2** – non-extinguishment addressed, but

Element	North Saanich	Sidney	Central Saanich 2025	Central Saanich 2026	Saanich	Oak Bay
	access unprotected					exceptions undefined
6. Implementation and Accountability						
6.1 Enforceability	**2** – mixed mandatory/discretionary; vague variance standard	**2** – some measurable thresholds; "should" still common	**2** – key clauses mandatory; general guidelines mostly discretionary	**3** – strong mandatory language for environment/hazard provisions	**1** – zoning mandatory; OCP language almost all non-binding	**3** – mandatory language across outcome-determining guidelines
6.2 Professional evidence	**2** – generic QEP; no coastal-specific discipline	**2** – clear trigger; discipline referenced only generically	**2** – two professionals jointly required; no checklist/peer review	**3** – tiered explicitly by discipline and risk	**0** – no professional-report requirement at all	**3** – distinct QEP vs QCP roles, several required conclusions
Score:	**27 / 45**	**29 / 45**	**28 / 45**	**40 / 45**	**12 / 45**	**35 / 45**
Normalised Score:	**60%**	**64%**	**62%**	**89%**	**27%**	**78%**

3.3. Case Summaries

The comparative scores reveal different approaches to shoreline protection across the six policy instruments. The summaries below highlight the principal strengths and limitations of each policy system. Detailed element-by-element evidence, quoted policy provisions, and scoring rationales are provided in Appendix B

Table 6. Case Study Scores Summary

Case Studies	Score	Normalised Score	Strongest category	Weakest category
District of North Saanich	27 / 45	**60%**	Water quality	Coastal hazard
Town of Sidney	29 / 45	**64%**	Water quality	Ecological standards
Central Saanich (adopted 2025)	28 / 45	**62%**	Ecological standards	Policy foundation
Central Saanich (proposed 2026)	40 / 45	**89%**	Policy foundation, Implementation, Water quality	First Nations, heritage & access
District of Saanich	12 / 45	**27%**	-	Policy foundation, Ecological standards, Coastal Hazard
District of Oak Bay	35 / 45	**78%**	Implementation	First Nations, heritage & access

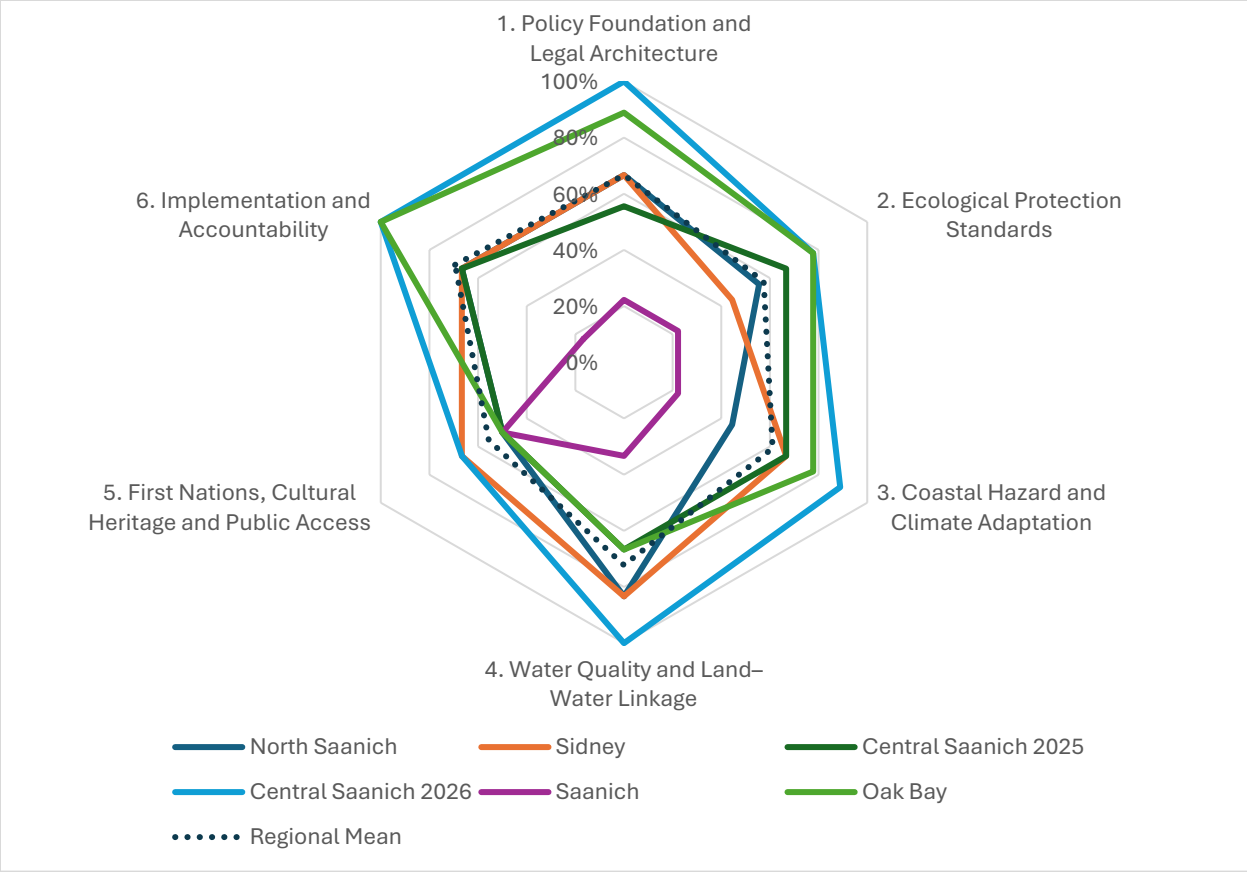


Figure 4. Comparative Benchmarking Profiles by Case Study

Overall, three broad patterns emerge. First, Central Saanich's proposed 2026 DPA represents the most comprehensive policy model. Second, Oak Bay and Sidney have relatively strong adopted policy systems, but their strengths are concentrated in different components. Third, Saanich's policies provide substantially less shoreline-specific policy direction than the other cases, particularly in relation to ecological standards, climate adaptation, and implementation.

3.3.1. District of North Saanich

North Saanich has a relatively comprehensive shoreline policy package built around a mapped 15 m landward-and-seaward DPA, detailed professional-report requirements, habitat and vegetation protection, and strong stormwater and pollution controls. The policy also recognizes sediment processes, adjacent-property erosion, marine habitat, access, and nature-based approaches. Its main weakness is future-oriented coastal hazard planning: sea-level rise is recognized as an objective, but the DPA does not establish a future flood level or climate-planning horizon. Nature-based approaches are preferred, but the requirements for demonstrating alternatives before hard armouring are comparatively limited.

3.3.2. Town of Sidney

Sidney's Marine Coastal DPA combines shoreline-specific ecological and hazard objectives with measurable provisions for setbacks, vegetation, stormwater, pollution control, and public access. It also contains a relatively strong professional test requiring an applicant to demonstrate that soft-shore approaches are not viable before hard shoreline protection is used. However, several ecological provisions remain advisory or apply only to portions of the shoreline, and cumulative effects are not systematically assessed. Overall, Sidney provides a broad policy foundation but is less consistent in translating ecological objectives into comprehensive and enforceable standards.

3.3.3. District of Central Saanich: Adopted Marine Shoreline DPA (2025)

Central Saanich's adopted Marine Shoreline DPA provides a relatively balanced framework, including measurable shoreline setbacks, vegetation and restoration provisions, professional assessment, consideration of adjacent and down-current effects, and a clear preference for avoiding or minimizing hard shoreline protection. Its strongest feature is the explicit progression from avoidance toward softer approaches before hard protection is considered. However, much of the DPA relies on advisory language such as "should," limiting the enforceability of otherwise strong ecological objectives. Future sea-level-rise planning and integrated First Nations and archaeological processes are also comparatively limited.

3.3.4. District of Central Saanich: Proposed Marine Upland and Seaward DPA (2026)

Central Saanich's proposed 2026 DPA represents the most comprehensive policy model assessed in this study. It substantially expands the adopted framework by integrating natural-environment and hazardous-condition purposes, extending coverage 15 m upland and 300 m seaward, and explicitly addressing future sea-level rise, coastal flooding, storm surge, marine infrastructure, and shoreline processes. New subdivided lots must provide safe building sites above a year-2100 flood construction level, while shoreline protection follows an avoid-first and nature-based hierarchy. The proposal also strengthens stormwater, erosion and sediment controls, public-access requirements, professional-report standards, monitoring, and completion requirements.

The proposal nevertheless retains some gaps. Cumulative and off-site effects are recognized but are not supported by a formal cumulative-effects assessment or shoreline-wide tracking mechanism. Archaeological protection applies in limited circumstances, and no clear First Nations engagement or referral pathway is established.

3.3.5. District of Saanich

Saanich is the only municipality among the case studies without a current shoreline EDPA. Its former EDPA bylaw was officially rescinded in 2018 (District of Saanich, n.d.), and the main operative shoreline-specific regulatory provision identified in this assessment is the Zoning Bylaw's 7.5 m shoreline setback. This is the smallest setback among the reviewed cases, but also the only one without a reduction pathway.

At the OCP level, Saanich recognizes shoreline habitat, integrated watershed planning, sea-level rise, public access, and cultural significance. However, these objectives are generally advisory and are not connected to a dedicated shoreline development-permit process, professional-review requirements, cumulative-effects assessment, or detailed implementation mechanisms. The assessment therefore identifies a substantial gap between broad environmental objectives and operative shoreline-specific regulation. Given the extent of Saanich's shoreline, the implications of the District's 2018 rescission of its former EDPA warrant further examination.

According to reports, the former EDPA was rescinded following community objections to how it was being administered[1] and to its relative inflexibility, and Council agreed with the community to remove it; there is reportedly no current effort to reinstate a comparable instrument, as the issue remains politically sensitive.

In the interim, shoreline-adjacent protection is provided indirectly through zoning setbacks, streamside development-permit requirements informed by the provincial Riparian Areas Regulation, and floodplain construction standards, although these tools are not shoreline-specific and are applied with greater emphasis on freshwater than oceanfront shorelines.

3.3.6. District of Oak Bay

Oak Bay has one of the strongest adopted shoreline policy frameworks in the comparison. Its principal strengths are its dedicated shoreline DPA, 15 m setback, qualified-professional requirements, future-oriented flood and sea-level-rise provisions, and a strong shoreline-protection hierarchy. In particular, hard protection requires professional evidence that softer alternatives are not viable, providing one of the clearest alternatives-analysis requirements among the reviewed instruments.

The framework is less consistent in its ecological and accountability provisions. Hazard and structural requirements are generally mandatory and measurable, while vegetation retention, restoration, impervious-surface reduction, and public access rely more heavily on advisory

[1] It also reflects the Mermaid Creek Salt Marsh Restoration Project which was regrettably cancelled due to complications surrounding riparian property rights infringement (PSS, n.d.)

language. The policy also provides limited mechanisms for cumulative-effects tracking, First Nations and archaeological processes, post-construction verification, and longer-term policy-performance monitoring. Oak Bay therefore illustrates an important regional pattern: strong controls on where and how development responds to shoreline hazards, but less complete mechanisms for verifying ecological outcomes over time.

3.4. Category-Level Assessment Across the Region

3.4.1. Policy Foundation and Legal Architecture

Leaders	Central Saanich 2026 100%, Oak Bay 89%
Middle	North Saanich 67%, Sidney 67%
Weakest	Central Saanich 2025 56%, Saanich 22%
Regional Mean	67%

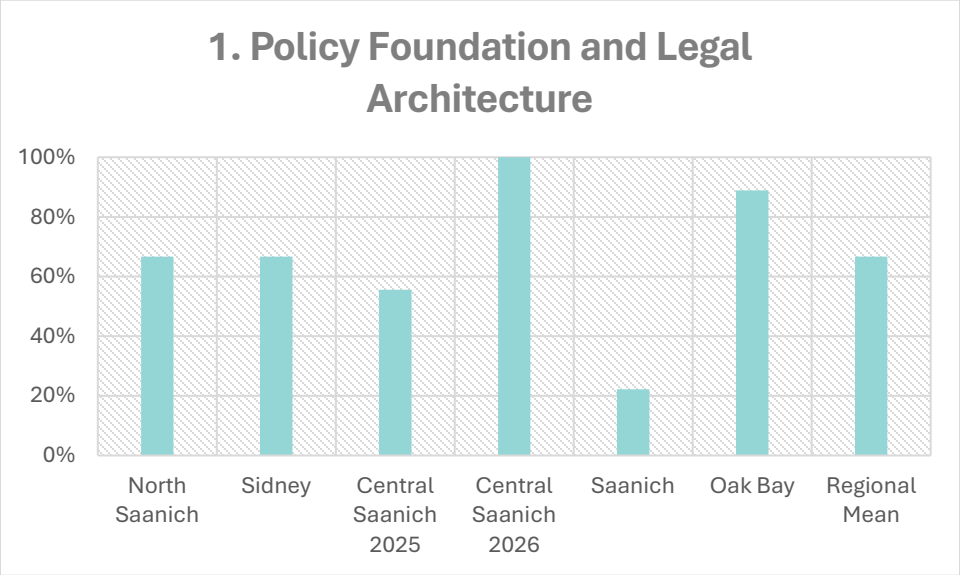


Figure 5. Policy Foundation and Legal Architecture Scores by Case Study

The strongest policy foundation is found in Central Saanich's proposed 2026 DPA at 100%, followed by Oak Bay at 89%. Both establish shoreline-specific objectives, mapped development permit areas, regulatory triggers, and relationships among ecological protection, hazard management, and implementation tools.

North Saanich and Sidney, both at 67%, also establish recognizable shoreline policy systems, but they are less fully integrated. Their OCP policies and development permit provisions provide a

meaningful legal foundation, although some objectives, standards, or relationships among policy instruments remain incomplete or discretionary.

The difference between the two Central Saanich versions demonstrates how policy renewal can strengthen jurisdictional clarity, spatial coverage, climate objectives, professional-review requirements, and connections among overlapping DPAs.

Saanich scores 22% because current policies contain general shoreline, habitat, and environmental objectives and limited zoning setbacks, but do not establish a comparably detailed shoreline EDPA or integrated shoreline-development review system.

3.4.2. Ecological Protection Standards

Leaders	Central Saanich 2026 78%, Oak Bay 78%
Middle	Central Saanich 2025 67%, North Saanich 56%
Weakest	Sidney 44%, Saanich 22%
Regional Mean	57%

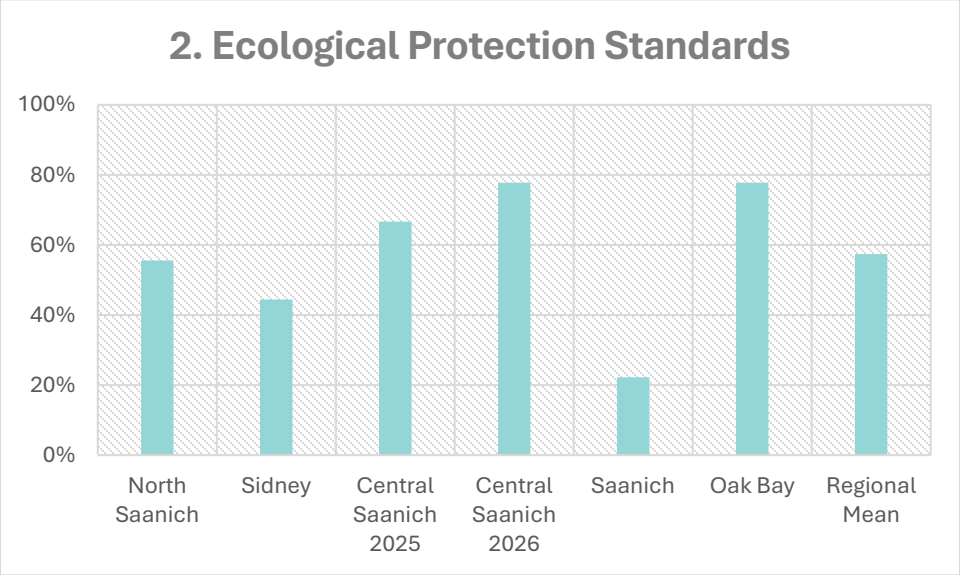


Figure 6. Ecological Protection Standards Scores by Case Study

Ecological protection is strongest in Central Saanich's proposed 2026 DPA and Oak Bay, both at 78%. These policies address several connected ecological functions, including vegetation and habitat protection, natural shoreline processes, sediment movement, sensitive ecosystems, and limits on shoreline armouring.

North Saanich scores 56%. It has notable strengths, but its overall score is moderated by uneven ecological specificity and by the extent to which professional judgment and discretionary language determine the final outcome.

Sidney scores 44%, despite having important provisions for shoreline vegetation, sediment processes, natural-state retention, and soft-shore approaches. Its lower score reflects the limited completeness and enforceability of ecological standards across the full framework rather than an absence of ecological objectives.

Saanich again scores 22%. Its OCP recognizes marine shoreline habitat, native vegetation, biodiversity, and ecosystem health, but the provisions generally remain broad policy directions rather than measurable shoreline-development standards.

Across the region, ecological protection is one of the weaker categories, averaging approximately 57%. Most municipalities recognize shoreline ecological values, but fewer translate those values into comprehensive, measurable, and consistently enforceable requirements. In particular, cumulative effects, shoreline-reach processes, habitat performance standards, and long-term restoration outcomes remain unevenly addressed.

3.4.3. Coastal Hazard and Climate Adaptation

Leader	Central Saanich 2026 89%
Strong	Oak Bay 78%
Middle	Sidney 67%, Central Saanich 2025 67%
Weakest	North Saanich 44%, Saanich 22%
Regional Mean	61%

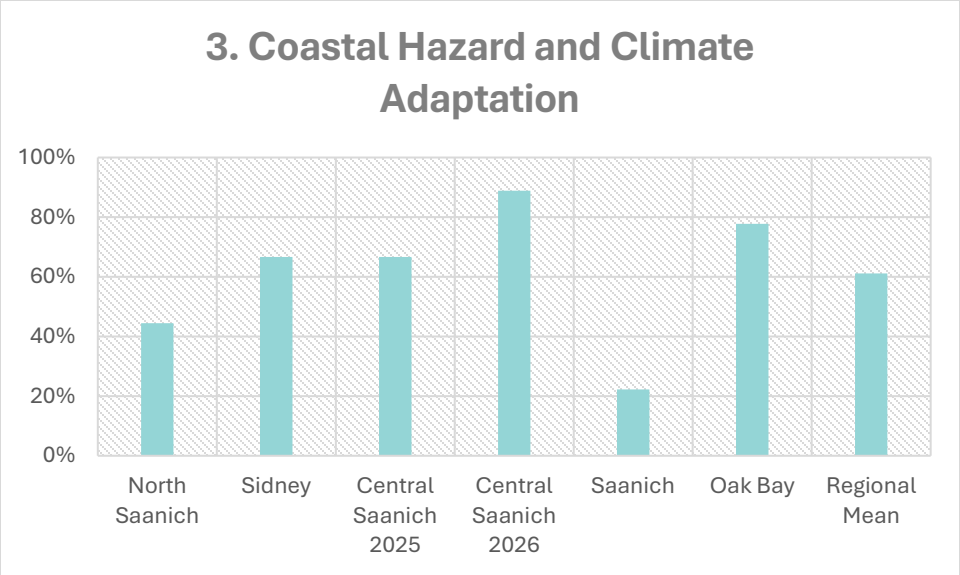


Figure 7. Coastal Hazard and Climate Adaptation Scores by Case Study

Central Saanich's proposed 2026 DPA leads this category at 89%. It explicitly addresses current and future sea-level rise, coastal flooding, storm surges, the year-2100 flood construction level, shoreline erosion, and the need to avoid creating lots that will depend on future shoreline protection.

Oak Bay scores 78%, while Sidney and Central Saanich's adopted 2025 DPA each score 67%. Oak Bay combines setbacks, flood construction levels, qualified coastal-professional review, sea-level-rise considerations, and strong limits on shore protection. Sidney explicitly connects its Marine Coastal DPA to sea-level rise, storm surge, flooding, erosion, and professional review, but lacks a defined future planning horizon. Central Saanich's adopted DPA provides a strong avoid-first hierarchy and professional life-of-structure siting, but does not explicitly establish a sea-level-rise planning horizon.

North Saanich scores 44%. Its policies contain setbacks, erosion controls, shoreline-type provisions, nature-based solutions, and qualified-professional review, but climate adaptation is not as fully integrated with future sea-level rise, flood construction levels, storm surge, and long-term siting decisions.

Saanich scores 22% because the OCP recognizes sea-level rise, erosion, flooding, and climate impacts, but these concerns are not translated into detailed shoreline hazard-assessment or development-control provisions.

The results show that climate adaptation is relatively advanced in several municipalities but remains inconsistent across the region. The strongest policies treat future hazard avoidance as a land-use issue: they direct development away from vulnerable areas, establish setbacks and flood elevations, and seek to prevent the creation of lots or buildings that will later require armouring. Weaker policies

recognize climate hazards but provide limited direction on how those hazards must change development decisions.

3.4.4. Water Quality and Land–Water Linkage

Leader	Central Saanich 2026 100%
Strong	North Saanich 83%, Sidney 83%
Middle	Central Saanich 2025 67%, Oak Bay 67%
Weakest	Saanich 33%
Regional Mean	72%

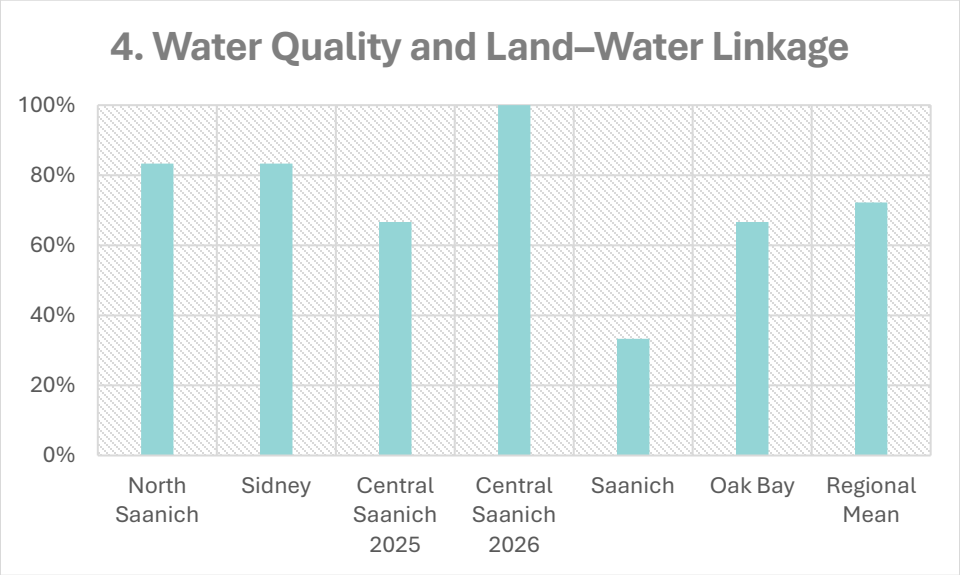


Figure 8. Water Quality and Land-Water Linkage Scores by Case Study

Water quality and land–water linkage are the strongest regional component, averaging approximately 72%.

Central Saanich's proposed 2026 DPA achieves 100%, reflecting its detailed controls for stormwater, wastewater, septic systems, erosion and sediment management, construction impacts, drainage, marine contaminants, marina waste, and professional preparation and monitoring of environmental-control plans.

North Saanich and Sidney both score 83%. North Saanich provides strong controls for runoff quantity and quality, drainage, pollution, marina waste, erosion, and sediment management. Sidney similarly addresses stormwater outflows, pollution prevention, construction sediment, watershed processes, water-quality monitoring, and nature-based rainwater management.

The adopted Central Saanich DPA and Oak Bay each score 67%. Both contain substantial stormwater, sediment, pollution, clean-fill, and construction-management provisions, but their systems are less comprehensive than the proposed Central Saanich framework.

Saanich scores 33%. Its OCP promotes integrated watershed planning, source control, low-impact development, shoreline habitat protection, and cooperation on water-quality monitoring. However, it contains few binding shoreline-specific requirements connecting these objectives to development approvals.

The comparatively high scores in this category indicate that municipalities generally understand that shoreline health is affected by upland drainage, stormwater, sediment, septic systems, and pollutants. The remaining weakness is not recognition of the land–water relationship, but inconsistent translation of that relationship into mandatory site-design, construction, monitoring, and maintenance requirements.

3.4.5. First Nations, Cultural Heritage and Public Access

Best available	Sidney 67%, Central Saanich 2026 67%
All others	North Saanich 50%, Central Saanich 2025 50%, Oak Bay 50%, Saanich 50%
Regional Mean	56%

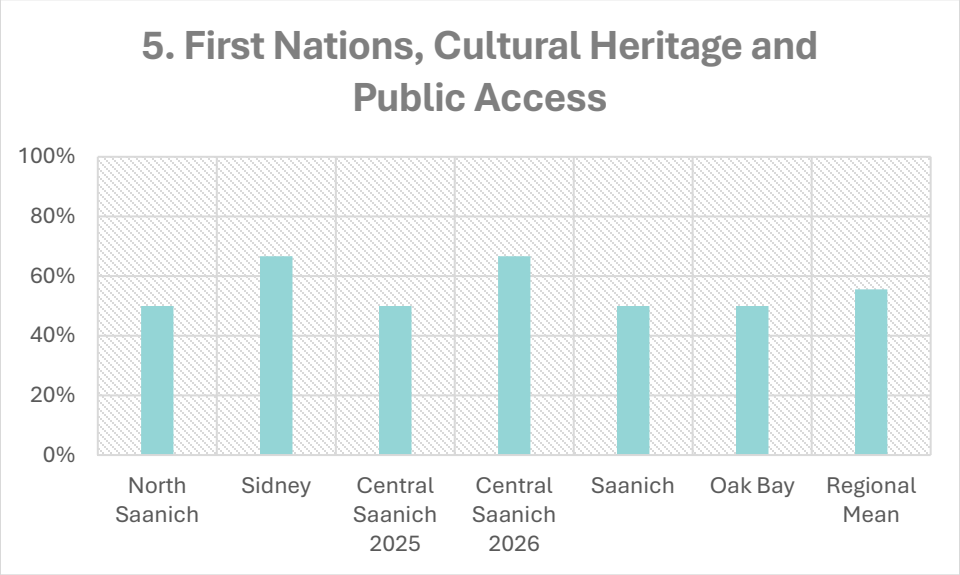


Figure 9. First Nations, Cultural Heritage and Public Access Scores by Case Study

This category has the lowest regional average, approximately 56%, and the narrowest range of scores. No case exceeds 67%.

Sidney and Central Saanich's proposed 2026 DPA score 67%. Sidney provides the strongest broad policy recognition of collaboration with W̱SÁNEĆ Nations, traditional ecological knowledge, regional environmental stewardship, and culturally informed restoration. Central Saanich's proposal addresses archaeological areas and provides relatively detailed public-access provisions, particularly for foreshore access and marine infrastructure.

North Saanich, Central Saanich 2025, Saanich, and Oak Bay each score 50%. These policies generally address public shoreline or beach access and the need to avoid ecological harm. Some also recognize cultural or archaeological values. However, the reviewed provisions do not consistently establish clear processes for First Nations engagement, Indigenous governance, cultural-site protection, harvesting interests, or the use and protection of Indigenous knowledge.

This category combines three related but distinct subjects. A municipality may have relatively strong public-access provisions but limited First Nations or cultural-heritage provisions, or vice versa. The similar scores should therefore not be interpreted as evidence that all three subjects receive equal treatment.

The comparative result identifies a common regional policy gap. Public access is often considered in shoreline design, but First Nations rights, governance relationships, cultural landscapes, archaeological resources, and Indigenous knowledge are less consistently integrated into shoreline-development policy and review procedures.

3.4.6. Implementation and Accountability

Leader	Central Saanich 2026 100%, Oak Bay 100%
All others	North Saanich 67%, Sidney 67%, Central Saanich 2025 67%,
Weakest	Saanich 17%
Regional Mean	69%

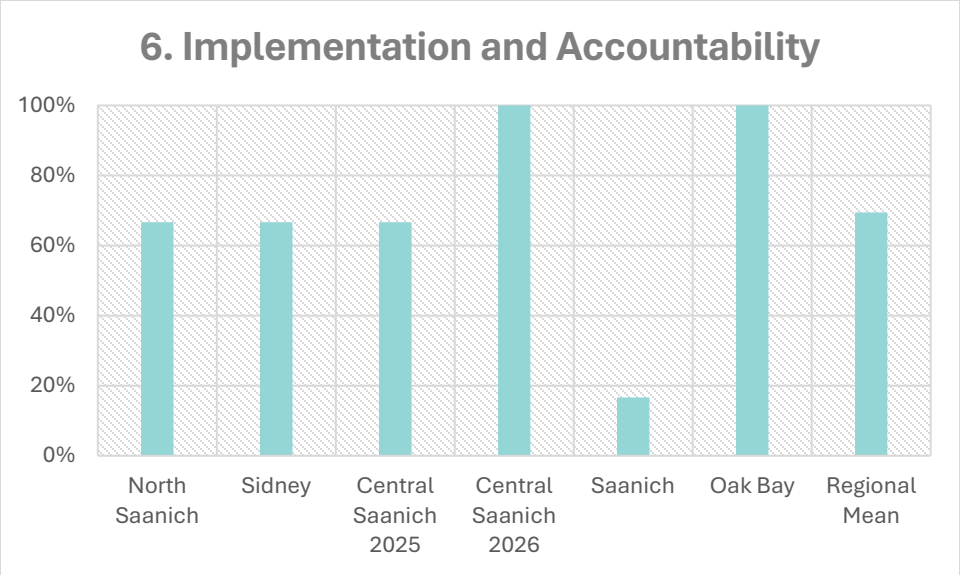


Figure 10. Implementation and Accountability Scores by Case Study

Central Saanich's proposed 2026 DPA and Oak Bay each score 100% on the two elements assessed in this category: clarity and enforceability of language, and professional evidence requirements. Both use comparatively clear mandatory language for key decisions and specify professional review requirements.

North Saanich, Sidney, and Central Saanich 2025 each score 67%. Their policies contain meaningful professional-report requirements and enforceable provisions, but use more mixed or discretionary language and/or less specific professional triggers.

Saanich scores 17%. Its policies provide few shoreline-specific administrative or accountability mechanisms beyond general policies and zoning requirements.

The 83-point difference between the highest and lowest scores makes this the most uneven category. This category should be read narrowly. It measures two policy-design features that support administration: clarity and enforceability, and professional evidence requirements. It does not measure staffing, inspection practice, enforcement performance, post-construction verification, long-term monitoring, or ecological outcomes. Those broader implementation conditions are addressed through the interviews and the report's conclusions.

4. CONCLUSION AND RECOMMENDATIONS

Key Takeaways

- Taken together, the interviews and benchmarking show that the main challenge is not the absence of shoreline policy tools, but their incomplete integration into a coherent governance and implementation system.
- Fragmented authority, the mandatory/advisory split, weak cumulative-effects review, and limited integration of First Nations engagement emerged across both evidence streams.
- The region's difficulty with nature-based shorelines is not that policy fails to ask for them. In fact, policy text often states a soft-first preference. However, policy doesn't yet make them the easier or most-supported choice.

4.1. Key Challenges and Opportunities

4.1.1. Key Challenges

1. Fragmented and uneven shoreline governance.

Authority is divided among municipal, provincial, federal, regional, and Indigenous governments, while roles and approval sequences are not always clear to applicants or staff. Municipal policies also vary substantially across the region, creating different levels of protection for parts of the same connected shoreline system.

2. Parcel-level decisions do not adequately capture cumulative effects.

Most shoreline decisions are made property by property, while erosion, sediment movement, habitat, water quality, and climate impacts operate across larger shoreline reaches. The policy review similarly found limited mechanisms for recording and assessing cumulative change over time.

3. Ecological objectives are not always translated into early and enforceable requirements.

The benchmarking found stronger mandatory provisions for protecting development from hazards than for protecting ecological functions from development. The interviews help explain the significance of this difference: when ecological review occurs late, or requirements remain advisory or highly discretionary, opportunities for avoidance may already have been lost.

4. Implementation and accountability remain critical weaknesses.

Policy effectiveness in practice depends on staff capacity, technical expertise, permit coordination, inspection, enforcement, monitoring, and sustained institutional attention. The benchmarking found substantial variation in policy-level mechanisms that support implementation, while the interviews showed that even well-designed requirements may have limited effect if municipalities cannot consistently administer or verify them.

5. Preferred approaches are not always the easiest approaches to deliver.

Participants broadly supported nature-based and softer shoreline approaches, but cost, unfamiliarity, technical requirements, and permitting difficulty can continue to favour hard protection. More broadly, First Nations governance, cultural and archaeological considerations, public understanding, and long-term partnerships are not yet consistently integrated into shoreline-development processes.

4.1.2. Key Opportunities

1. Establish common outcomes while preserving site-specific flexibility.

Regional consistency does not require identical shoreline designs. Shared ecological objectives, minimum safeguards, evidence requirements, definitions, and accountability expectations could provide a common floor while allowing qualified professionals to respond to differences in shoreline type, exposure, geomorphology, and existing development.

2. Bring ecological and climate considerations into decisions earlier.

Mapped permit areas, clear activity triggers, defensible exemptions, future-oriented hazard assessment, and better integration among OCP, zoning, DPA, drainage, and development-information tools can ensure that ecological and climate considerations enter before siting and design decisions become difficult to change.

3. Connect parcel-level approvals to the larger shoreline system.

Assessment of shoreline works can incorporate neighbouring and down-current effects, sediment pathways, existing armouring, coastal squeeze, cumulative exemptions, and previous approvals. Consistent recording and monitoring of shoreline change would provide the information needed to identify cumulative effects that individual applications cannot reveal.

4. Make nature-based approaches practical and competitive.

Clear approval pathways, alternatives analysis, qualified-professional guidance, demonstration projects, technical assistance, financial incentives where available, and faster processing for qualifying lower-impact designs can help translate broad policy support for nature-based approaches into actual uptake.

5. Strengthen the governance and implementation network around municipal policy.

Municipal staffing and expertise, regional technical coordination, clearer intergovernmental referral pathways, long-term nonprofit and stewardship partnerships, public education, and distinct early processes with First Nations can strengthen implementation without requiring one institution to assume responsibility for the entire shoreline system.

4.2. Municipality-Level Summary

The municipality-level results reinforce the comparative findings in Section 3. Central Saanich's proposed 2026 DPA receives the highest overall score (89%), while Oak Bay has the strongest adopted framework (78%). Sidney (64%), Central Saanich's adopted 2025 DPA (62%), and North Saanich (60%) form a middle group with different strengths and gaps. Saanich scores lowest (27%), reflecting the limited shoreline-specific policies. As emphasized throughout the report, these scores assess policy design rather than implementation performance or ecological outcomes.

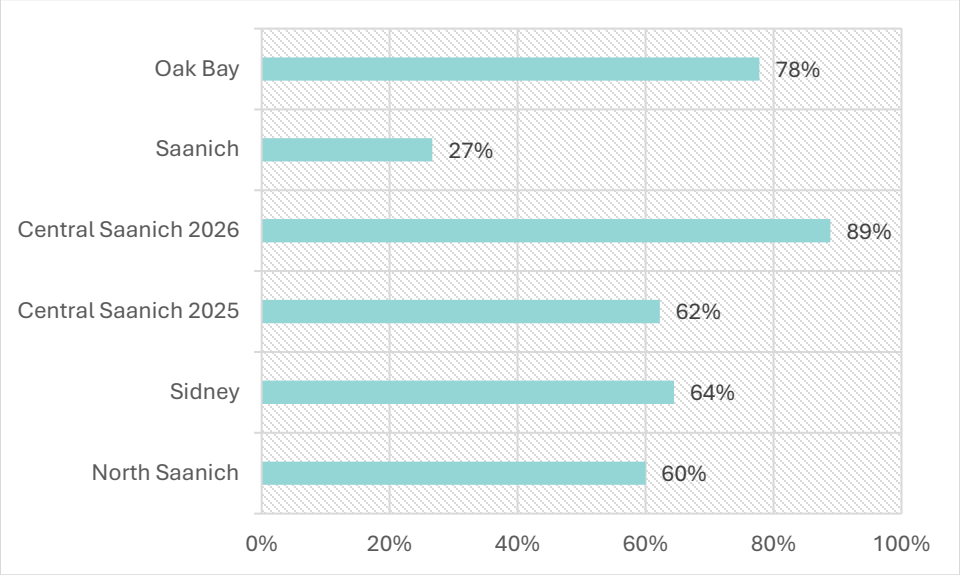


Figure 11. Overall Benchmarking Scores by Case Study

4.3. Conclusion

Taken together, the interviews and municipal benchmarking point to one central conclusion: the main challenge for shoreline resilience in the Capital Region is not the absence of policy tools, but the incomplete integration of those tools into a coherent governance and implementation system. The benchmarking shows that municipalities already use many of the necessary components, including Official Community Plan objectives, development permit areas, setbacks, professional assessments, ecological guidelines, stormwater controls, hazard provisions, and preferences for softer shoreline protection. However, these components vary substantially in coverage, enforceability, climate orientation, cumulative-effects consideration, and implementation requirements. The strongest policy frameworks are therefore not those containing one particular

tool, but those that connect ecological protection, hazard planning, land–water relationships, professional evidence, and accountability throughout the development process.

The interviews explain why this integration matters in practice. Shoreline change generally occurs through individual decisions about individual parcels, while ecological processes such as sediment movement, erosion, habitat connectivity, water quality, and sea-level-rise adaptation operate across properties and municipal boundaries. Those decisions also occur within fragmented institutional authority and are shaped by immediate property risk, development expectations, cost, technical knowledge, permit complexity, municipal capacity, and the availability of practical alternatives. The benchmarking reflects many of these pressures in policy form. In particular, municipal policies generally protect development from shoreline hazards more strongly than they protect the shoreline from development: setbacks, flood elevations, and protection works are more often governed through measurable requirements, while vegetation retention, restoration, cumulative effects, and some other ecological objectives are more frequently expressed through discretionary or advisory provisions.

The two evidence streams also suggest that stronger shoreline resilience cannot be achieved through municipal regulation alone. Municipalities can make fuller and more consistent use of the powers available to them, but regional ecological processes cross municipal boundaries, provincial and federal responsibilities intersect with local decisions, and First Nations rights, governance, knowledge, and cultural interests require distinct and early consideration. At the same time, broad support for nature-based approaches will have limited effect if those approaches remain more difficult, costly, unfamiliar, or time-consuming to implement than conventional hard protection. The overall direction emerging from the research is therefore a layered governance approach: clearer minimum safeguards and institutional interfaces, site-specific professional assessment, adequate implementation capacity, cumulative monitoring, regional coordination, distinct First Nations pathways, and a delivery system that makes lower-impact shoreline approaches practical.

4.4. Recommendations

The following recommendations translate the combined interview and benchmarking findings into specific actions. They focus primarily on changes that can strengthen municipal shoreline policy and implementation, while recognizing areas where regional or provincial action is also needed.

Add the hazardous-conditions purpose to shoreline DPAs where appropriate

Where a shoreline development permit area is currently designated under the natural-environment purpose alone, add the hazardous-conditions purpose so ecological protection and long-term coastal risk can be considered together.

Require post-permit verification

Require confirmation that shoreline works were constructed in accordance with approved plans, professional recommendations, restoration requirements, and permit conditions.

Convert measurable ecological standards into enforceable requirements

Where policies already identify measurable thresholds for setbacks, vegetation, restoration, impervious surfaces, or other ecological conditions, use mandatory rather than advisory language where legally appropriate.

Bound discretionary exceptions

Require exceptions to established shoreline standards to be supported by stated criteria, appropriate evidence, and recorded reasons rather than leaving broad discretion without an evidentiary threshold.

Base exemptions on ecological effect rather than project value

Activities with potentially significant shoreline effects should not avoid ecological review simply because their construction cost is low.

Extend existing strong provisions consistently across the municipal policy framework

Where a municipality already uses effective requirements in one shoreline area, DPA, or related bylaw, review whether those provisions should apply more consistently to other comparable shoreline areas and activities.

Integrate archaeological screening and First Nations pathways into shoreline review

Develop early referral, notification, or other agreed procedures addressing archaeological potential, cultural sites, harvesting interests, knowledge, and First Nations governance rather than treating these matters solely through general public consultation.

Create a procedural advantage for qualifying nature-based shoreline approaches

Establish a clear and differentiated approval pathway for lower-impact or nature-based designs, including staff-delegated approval or shorter processing times where appropriate. The preferred environmental option should not be more difficult to obtain than conventional hard protection.

Support residential nature-based shoreline projects with incentives, technical assistance, and education

Financial incentives or cost-sharing, where available, should be combined with practical guidance, demonstration projects, and outreach so property owners can understand and implement lower-impact alternatives.

Establish a minimum policy standard for marine shorelines at the provincial level

A provincial framework could establish a common floor for ecological objectives, evidence, assessment, and accountability while retaining municipal authority to adopt stronger standards and allowing site-specific professional design. Procedurally, the Riparian Areas Protection Regulation provides a useful model for how minimum requirements, professional assessment, monitoring, and local implementation can be connected.

APPENDICES

Appendix A: Framework with Details

Policy Foundation and Legal Architecture

Element	Definition	Legal support	Ideal situation (Score 3)
1.1 Shoreline objectives in the OCP	The OCP states why shoreline regulation exists and which ecological, hazard, and adaptation outcomes it is meant to achieve.	LGA s. 474(1)(d); s. 488(2).	Objectives name shoreline processes, habitat, sediment supply, erosion, flooding, and sea-level rise. Each objective can be traced to an operative permit guideline rather than sitting only in a vision statement.
1.2 Dedicated shoreline or marine DPA	A DPA designated for the shoreline, or a clearly identifiable shoreline component within a broader environmental DPA.	LGA s. 488(1)(a) and (b); s. 488(2); s. 489.	All shoreline land within municipal jurisdiction is designated. Both the natural environment and hazardous conditions purposes are used where relevant. Guidelines are specific to shoreline conditions rather than generic environmental language.
1.3 Integration across municipal instruments	Consistency between the OCP, DPA guidelines, zoning and setback provisions, and related drainage, tree, soil, and procedures bylaws.	LGA ss. 479, 488–491; *Community Charter* ss. 8(3), 9.	Definitions, shoreline reference points, mapped boundaries, and exemptions match across instruments. Where DPAs overlap, they apply cumulatively. No related bylaw permits the work the shoreline policy is intended to control.

Ecological Protection Standards

Element	Definition	Legal support	Ideal situation (Score 3)
2.1 Shoreline setback or buffer	A minimum development-free separation measured	LGA ss. 479, 488–491.	A numeric baseline setback applies and increases with erosion rate, bank height, habitat value,

	from the shoreline reference point, and the basis on which it may be varied.		and sea-level-rise exposure. Reductions require professional evidence rather than a preferred building footprint, and are recorded with reasons.
2.2 Vegetation and natural beach features	Requirements to retain, restore, or replant native riparian and shoreline vegetation, and to leave natural beach materials in place.	LGA s. 491(1); *Community Charter* s. 8(3)(c).	Retention is mandatory within the buffer, with restoration required where vegetation has already been removed. Removal of natural beach material and beach grooming are addressed explicitly. Replanting specifies native species with a survival standard and monitoring period.
2.3 Cumulative and off-site effects	Whether review considers effects beyond the applicant's parcel, on adjacent properties, along the shoreline reach, and in combination with past approvals.	LGA ss. 484–487, 491(1).	Applications for shoreline works must assess reflected wave energy, sediment interruption, end-scour on neighbouring lots, and the reach-scale context including existing armouring. The municipality keeps a record of shoreline approvals so cumulative change is visible over time.

Coastal Hazard and Climate Adaptation

Element	Definition	Legal support	Ideal situation (Score 3)
3.1 Coastal hazard and sea-level-rise assessment	Whether a hazard assessment addressing erosion, flooding, wave exposure, slope stability, and sea-level rise is required before shoreline development or protection works are approved.	LGA ss. 488(1)(b), 484–487; provincial Flood Hazard Area Land Use Management Guidelines.	Assessment is required early, before design is fixed. A stated forward-dated planning horizon is used rather than present-day conditions. New lots and buildings must achieve a safe building site without relying on shore protection works.

3.2 Shoreline protection hierarchy	Whether policy establishes an order of preference (avoid, then relocate or accommodate, then soft or nature-based, then hybrid, then hard armouring) and requires alternatives to be tested before hardening is approved.	LGA ss. 488(1)(a)–(b), 490, 491(1).	The hierarchy is stated as a mandatory sequence, not an encouragement. An applicant proposing hard armouring must demonstrate in writing why each less-impactful option was rejected, supported by professional assessment. Nature-based options have a defined and workable approval pathway.
3.3 Standards for hard protection and legacy structures	Design and ecological requirements where hard protection is genuinely necessary, and the treatment of existing structures at repair or replacement.	LGA ss. 490, 491(1).	Where hardening is permitted, requirements address toe placement, slope, surface roughness, habitat features, minimal footprint, and continuity of public access. Repair or replacement of a legacy structure triggers a requirement to improve ecological performance or set the structure back, rather than a grandfathered right to rebuild as-is.

Water Quality and Land–Water Linkage

Element	Definition	Legal support	Ideal situation (Score 3)
4.1 Stormwater and drainage control	Controls on runoff volume, rate, and discharge point from shoreline parcels, including impervious surface limits and infiltration or treatment requirements.	LGA s. 491(1); *Community Charter* ss. 8(3), 9.	Direct discharge to the foreshore is restricted. Impervious coverage is capped and on-site retention, infiltration, or treatment is required. Requirements connect explicitly to the municipality's stormwater or integrated watershed plan.
4.2 Pollution and sediment	Requirements addressing pollutants and sediment	LGA s. 491(1); *Community*	Erosion and sediment control plans are required for shoreline

source control	entering the shoreline environment, including construction-phase erosion and sediment control.	*Charter* ss. 8(3), 9.	works, with inspection during construction. Materials and treatments used in or near the intertidal zone are restricted. Onsite wastewater constraints in shoreline areas are addressed where applicable.

First Nations, Cultural Heritage and Public Access

Element	Definition	Legal support	Ideal situation (Score 3)
5.1 First Nations engagement and archaeological protection	How the municipality identifies shoreline applications with archaeological or cultural sensitivity, and how it engages affected First Nations.	*Heritage Conservation Act* ss. 12–13; LGA s. 475(2); *Declaration on the Rights of Indigenous Peoples Act* (policy context).	Shoreline applications are screened against archaeological potential and applicants are informed of provincial permit obligations. Engagement occurs early and in a form agreed with the Nations concerned, rather than as a late referral. Note: the *Heritage Conservation Act* protects recorded and unrecorded sites independently of municipal policy.
5.2 Public foreshore access and access design	Protection of continuous public access along the foreshore, and design requirements for private access structures.	LGA ss. 479, 490, 491(1).	Shoreline works must not extinguish existing public access. Private access is consolidated and designed to minimise vegetation loss and beach disturbance. Note: authority to secure new public access is limited and generally arises through subdivision, dedication, or negotiated agreement rather than the DPA itself.

Implementation and Accountability

Element	Definition	Legal support	Ideal situation (Score 3)
6.1 Clarity and enforceability of language	Whether requirements are written in mandatory, testable terms and tied to a decision point.	LGA ss. 488(2), 490, 491(1).	Guidelines use “must” with measurable thresholds wherever measurement is possible. Discretion is bounded by stated criteria. An assessor can tell from the text alone what would cause an application to be refused or conditioned.
6.2 Professional evidence requirements	When a qualified professional report is required, from which discipline, and what the report must contain.	LGA ss. 484–487; Riparian Areas Protection Regulation as a model for report content, noting it applies to streams rather than marine shoreline.	Triggers for professional review are stated and tiered to risk and scale. The required discipline is specified — coastal geomorphology or coastal engineering for hazard and protection works, not a general environmental report. Minimum report content is listed so submissions are comparable.

Appendix B: Case Assessments

This appendix provides the complete element-level evidence underlying the comparative assessment. Each municipal policy instrument is assessed against the 15 elements of the benchmarking framework. For each element, the appendix reports the assigned score, the relevant policy evidence, and the assessment rationale.

The purpose of these detailed assessments is to provide transparency and traceability for the comparative results presented in the main report. Readers can therefore review how individual scores were derived while the main body remains focused on cross-municipal patterns, strengths, gaps, and policy implications.

District of North Saanich

Element	Score	Evidence	Assessment
1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	2	"Manage risk from hazards including sea level rise and tsunamis" (5.9e); tied to the DPA via 5.10.2.2(c), which requires consistency with §5.9 policies	Objectives name hazard, erosion, and habitat outcomes and are traceable to an operative permit guideline, not left in a standalone vision statement. But do not expressly address coastal squeeze, cumulative effects, flood construction levels, or measurable outcomes.
1.2 Dedicated DPA	2	Designated "pursuant to Section 488(1)(a) of the Local Government Act"	Only the natural environment purpose is used, leaving other objectives with no statutory foundation.
1.3 Integration	2	"Any development or site alteration must be consistent with the Marine Areas policies established in Section 5.9"	It expressly connects the DPA to the Marine Areas policies, zoning controls, external approvals, overlapping jurisdictions, treaty-related access, and co-management. But it does not explain typical permit sequencing, or demonstrate aligned definitions and

			procedures across all related bylaws.
2. Ecological Protection Standards			
2.1 Setback	2	"Provide a minimum 15 metre setback from the natural boundary" (5.10.2.2a)	It establish a measurable 15 m setback, extend restrictions to soil removal and fill, differentiate shoreline types, use QEP-defined boundaries, and support clustered subdivisions. But it does not expressly incorporate projected sea-level rise, future flood levels, landward migration space, a design horizon, or a defined minimum floor and objective decision test for every setback reduction.
2.2 Vegetation and beach features	2	"Retention of existing trees and vegetation must be prioritized to preserve the existing habitat and to mitigate erosion" (5.10.2.2d)	Mandatory retention language is present, but no survival standard or monitoring period is specified.
2.3 Cumulative effects	1	Hard revetment must "Mimic the natural shoreline function and avoid redirecting erosion forces to adjacent properties" (5.10.2.2i)	Off-site effects are addressed only for hard revetment design; no reach-scale assessment or cumulative-approvals record is required
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	1	"To manage risk from hazards including sea level rise and tsunamis" (Objective 5.9e)	Sea level rise appears only as a general OCP objective, with no assessment report or permit-stage trigger
3.2 Protection hierarchy	2	"Support nature-based solutions first" (5.9.9); hard revetment "discouraged except in cases where a professional has recommended this treatment"	An ordered preference exists, but the language is encouragement-based rather than a stated mandatory sequence with a written-justification requirement.

3.3 Hard protection standards	1	Repair/reconstruction of an existing dock/float/gangway is exempt from permitting "provided that there is no increase in the dock/float/gangway area and no land alteration" (5.10.2.1g)	Legacy structures may be rebuilt as-is with no trigger requiring ecological improvement
4. Water Quality and Land–Water Linkage			
4.1 Stormwater	3	"Development must be designed to maintain the quality of any storm water flowing toward or into the ocean" (5.10.2.2k)	These provisions cover both development and construction phases and closely match the benchmark, although wastewater-system inspection and spill-response details are not supplied.
4.2 Pollution and sediment	2	QEP report must address "Erosion and sediment control plan to address any areas subject to destabilization" (5.10.2.2w(vii))	Mandatory as a submission component. No construction-phase inspection; no materials restrictions of any kind; no onsite wastewater provision.
5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	1	"Collaborate and support marine restoration projects with indigenous communities" (5.9.7)	Operates on District initiatives, not on applications: no referral, notification, or engagement step. Archaeology absent.
5.2 Public access	2	Private access pathway "must be designed to be no wider than 1.5-metres" (5.10.2.2g)	A specific, measurable design standard exists for private. Nothing protects existing public access from obstruction by shoreline works
6. Implementation and Accountability			
6.1 Enforceability	2	Mandatory: "shall be placed" (5.9.16); discretionary: "should incorporate" (5.10.2.2e); recurring "demonstrated to the District's satisfaction"	A mix of mandatory and discretionary language, with a recurring variance standard that lacks stated criteria

6.2 Professional evidence	2	The guidelines "must be addressed by a Qualified Environmental Professional… through the submission of a letter or detailed environmental report, depending on the scale and scope of development" (5.10.2.2(w)), with seven specified site plan contents and named provincial datasets.	Detailed and comparable report content, but the discipline specified is a generic "QEP" with no defined risk tiers. No coastal geomorphology or engineering requirement.

Town of Sidney

Element	Score	Evidence	Assessment
1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	2	"To maintain and restore shorelines, creeks, and streams… and ensure the protection of coastline, beaches, and riparian areas" (12.2.4); operationalized through the Marine Coastal guidelines at §22.3.	The OCP and DPA provide a shoreline-specific ecological and hazard rationale and connect it to restoration, foreshore development, erosion, sea-level rise, storm surge, fish habitat, public access, and operative DPA guidelines. But they do not expressly establish shoreline outcomes, or a single comprehensive shoreline policy statement connecting every objective to permit standards.
1.2 Dedicated DPA	2	"Designated as Development Permit Areas pursuant to Section 488(1)(a) and (b)"	Coverage needs to be extended the whole City.
1.3 Integration	2	"Review and update the Town's Seawall Policy, Zoning Bylaw, and other relevant regulations to facilitate the restoration of the shoreline" (12.3.31)	Frames Zoning Bylaw alignment as an ongoing action item rather than confirmed present-day consistency
2. Ecological Protection Standards			

2.1 Setback	1	"Retain or restore… an average 15 metre (with a 5 metre minimum) wide shoreline zone… over a minimum 50% of shoreline length" (22.5.6)	The buffer requirement applies to only half of shoreline length by design, leaving a substantial portion without a guaranteed setback.
2.2 Vegetation and beach features	2	"Landscaping for new development should retain natural vegetation where possible" (22.5.22)	Retention is only conditional ("where possible"), and the vegetation zone itself covers just 50% of shoreline length.
2.3 Cumulative effects	1	Hard structures "must not be located where geo-hydraulic processes are critical to shoreline conservation" (22.5.12b)	Addressed only in the context of hard shore protection. Do not require a cumulative-effects assessment for individual shoreline applications.
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	1	"Sea level rise and storm surges associated with climate change must also be considered when planning new development" (§22.2)	Uses mandatory language ("must") but does not establish a specific assessment report requirement: no flood construction level, no horizon, no requirement to establish exposure.
3.2 Protection hierarchy	2	"Harder shoreline protection measures… should only be constructed if no other alternative exists" (22.5.11); owner "must provide a report… certifying that… 'soft-shores' approaches are not viable" (22.5.12a)	Mandatory certification of two distinct facts, tied to a standing municipal instrument. No avoid-first step and no causation test.
3.3 Hard protection standards	3	New hard structures "must not be located where geo-hydraulic processes are critical to shoreline conservation" (22.5.12b)	Detailed design standards apply to new works, but no legacy-structure provision was supplied
4. Water Quality and Land–Water Linkage			

4.1 Stormwater	3	Hard surfacing within 10 m of the natural boundary “should not affect more than 10% of the property area” (22.5.20)	Numerically precise but written as “should”.
4.2 Pollution and sediment	2	“All development must be undertaken and completed… to prevent the release of sediments or pollutants” (22.5.9)	A mandatory prevention duty exists, but the construction management plan addressing specifics “may be required” only discretionarily; no ESC plan requirement for Marine Coastal; no materials restrictions; no marine infrastructure provisions at all.
5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	2	“Establish a centralized database and support a coordinated approach to the collection and use of environmental data, including information from W̱SÁNEĆ traditional knowledge” (12.3.18c)	Substantive collaboration commitments exist, but remain general rather than an operative process tied to a permit decision.
5.2 Public access	2	“The construction of public road or pathways should not result in a net loss of shoreline ecological functions” (22.5.15)	Much of the language is discretionary. Access-restriction exceptions are not accompanied by defined criteria.
6. Implementation and Accountability			
6.1 Enforceability	2	Mandatory thresholds present (10% hard-surfacing cap, 15/5 m vegetation zone, 20 m road setback) alongside frequent “should” language	Measurable thresholds exist for several provisions, but discretionary qualifiers remain common throughout
6.2 Professional evidence	2	“The owner must provide a report prepared by a qualified professional as required by the Town’s Seawall Policy” (22.5.12a)	Clear triggers exist, but the professional discipline is referenced generically rather than specified as coastal-specific.

District of Central Saanich: Adopted Marine Shoreline DPA (OCP 2025)

Element	Score	Evidence	Assessment
1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	2	"To plan and regulate new development in a manner that preserves and protects the long-term physical integrity and ecological values…" (§2.3)	Objectives name ecological integrity, erosion, and access. Sediment reasoning exists in the guidelines but is not reflected upward.
1.2 Dedicated DPA	2	Designated "pursuant to Section 919.1(1)(a)"; justification separately discusses "(b)… hazardous conditions" but (b) is not cited in the formal designation (§2.1–2.2)	Only the natural-environment purpose. Shoreline-specific and well differentiated by shore type. Absence of flood provisions.
1.3 Integration	1	"Owners must meet any other applicable local, provincial or federal requirements" (§2.5); road/septic siting supervised "to the satisfaction of the District and Vancouver Island Health Authority" (§2.7)	The integrated-policy and referral-pathway ideal is only minimally demonstrated.
2. Ecological Protection Standards			
2.1 Setback	2	15 m inland and seaward baseline (§2.4); reduction requires reports from both a QCP and a QEP (§2.8)	Rigorous joint-professional reduction standard, but the baseline itself is flat, not risk-scaled.
2.2 Vegetation and beach features	2	Replanting "maintained by the property owner for a minimum of 2 years… dying or dead stock should be replaced at the owner's expense" (§2.10f)	Well-detailed monitoring/replacement standard. However, much of the operative language uses 'should' rather than mandatory terms.
2.3 Cumulative effects	2	"Shore protection measures that will cause erosion or other physical damage to adjacent or down-current properties shall	Mandatory prohibition applied consistently across hard structures. But it does not require cumulative-effects assessment.

		not be supported" (§2.7); same concern applied to bulkheads and docks (§2.11.4a, §2.14.2)	
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	1	Bluff-top development "shall be set back sufficiently… to ensure that shore protection measures will not be necessary during the life of the structure, as demonstrated by a geotechnical analysis" (§2.7)	A mandatory, professionally demonstrated life-of-structure standard exists, but no explicit sea-level-rise reference or forward-dated horizon is present.
3.2 Protection hierarchy	3	"Only if all options to locate and design without the need for shore protection measures are exhausted should such works be considered" (§2.6.3); hard measures require conclusive evidence on four specific points (§2.7)	Stated avoid > soft > hard sequence reinforced by a detailed conjunctive evidentiary test before hardening is permitted
3.3 Hard protection standards	2	New works require evidence of "no net loss of shoreline ecological functions" (§2.7); replacement of existing works must "assure no net loss of ecological functions," and works may be removed "where impacts to critical marine habitats would occur" (§2.7)	Although some wording remains 'should', the approval test is detailed, integrated, and closely aligned with the ideal benchmark.
4. Water Quality and Land–Water Linkage			
4.1 Stormwater	2	"Stormwater outflows shall have water quality and water quantity/erosion control features installed… to comply with stormwater management guidelines and policies of the District" (§2.7)	Mandatory and tied to the District's own stormwater plan. But no impervious-coverage cap is specified.

4.2 Pollution and sediment	2	Development "should be undertaken… to prevent the release of sediment"; erosion/sediment control plan "may be required" (§2.9)	Discretionary language throughout ("should," "may"). No construction-phase inspection.
5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	0	No reference to archaeology, First Nations, heritage, or the *Heritage Conservation Act* anywhere in the document.	
5.2 Public access	3	Shore protection measures must not "restrict appropriate public access… except where… infeasible" (§2.13.1); docks "should serve multiple users rather than one dock per property" (§2.14.1)	Access addressed for both protection works and docks, including a multi-user dock preference, but exception criteria remain.
6. Implementation and Accountability			
6.1 Enforceability	2	Mandatory: "shall not be supported" (§2.7); "shall have… features installed" (§2.7). Discretionary: nearly all of §2.6 General Guidelines use "should"	Several consequential provisions are mandatory, but the overarching General Guidelines section is almost entirely discretionary
6.2 Professional evidence	2	QCP required for setback reduction, existing-structure replacement necessity, and road/septic supervision; QEP required for sensitive-habitat disturbance and completion monitoring; both required jointly for Rocky Shores setback reduction (§§2.5, 2.7, 2.8, 2.9)	Two professionals for one decision removes the commonest weakness in professional-reliance regimes. However, it does not provide a comprehensive checklist or independent peer-review mechanism.

District of Central Saanich: Proposed Marine Upland and Seaward DPA (2026)

Element	Score	Evidence	Assessment
1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	3	Nine numbered objectives, e.g. "To guide shoreline development away from areas vulnerable to current and future impacts of sea level rise, coastal flooding, and storm surges"	The proposed DPA contains a shoreline-specific justification covering ecological and physical integrity, hazardous conditions, marine infrastructure, public access, sea-level rise, coastal flooding, storm surge, and erosion and accretion.
1.2 Dedicated DPA	3	Designated under "488.1(a)... 488.1(b)... and 488.1(f) establishment of objectives for the form and character of buildings and structures along the shoreline"	Three statutory purposes are invoked
1.3 Integration	3	"Where this development permit area overlaps with other development permit areas, all relevant guidelines from all development permit areas apply"	The proposal expressly makes overlapping DPAs cumulative, links the shoreline DPA to the Sensitive Terrestrial Ecosystem DPA, names major external authorities, requires outside approvals, refers to provincial flood and moorage standards, and anticipates a coordinated mooring program.
2. Ecological Protection Standards			
2.1 Setback	3	"This Development Permit Area applies to areas and parcels located 15 m upland and areas extending 300 m seaward"	The draft combines a measurable DPA area, a 30 m septic setback, landward structural siting, bluff setbacks, avoidance of future shore protection, and a year 2100 flood construction level

2.2 Vegetation and beach features	2	“Existing trees and vegetation on the upland area and adjacent to the foreshore must be retained”	Unconditionally mandatory, but no restoration-where-removed clause or monitoring period is stated for this DPA specifically
2.3 Cumulative effects	2	Marine infrastructure “shall… not impact coastal processes including but are not limited to the tidal actions, currents and littoral drift”	Mandatory language applies more broadly (not just to hard protection), but it does not require a formal cumulative-effects assessment.
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	3	New subdivided lots must achieve “useable, safe building sites… above the year 2100 flood construction level when considering sea level rise” (General Guideline 4)	A stated forward-dated horizon (year 2100) combined with a mandatory safe-siting outcome closely matches the ideal condition.
3.2 Protection hierarchy	3	Replacement works must “Be designed, located, sized, and constructed to ensure no net loss of ecological functions” (Hazardous Conditions Guideline 4)	A stated avoid-first sequence reinforced by a binding prohibition on using hardening opportunistically replacement is conditioned on demonstrable ecological performance, not a grandfathered right to rebuild as-is
3.3 Hard protection standards	2	Replacement works must “Be designed, located, sized, and constructed to ensure no net loss of ecological functions” (Hazardous Conditions Guideline 4)	Registered engineer requirement and two-professional replacement.
4. Water Quality and Land–Water Linkage			
4.1 Stormwater	3	Stormwater outflows “must include water-quality and erosion-control features that meet the District’s latest standards”	Mandatory and tied to an existing municipal standard.

4.2 Pollution and sediment	3	"Applicants must provide erosion and sediment control plans prepared by a QEP. Most projects need two plans: one for temporary controls… and another for permanent measures"	Two-stage mandatory plans plus QEP monitoring through completion
5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	1	"Do not locate the dock over an Area of Special Interest (i.e. known archaeological sites…)"	Operative archaeological protection. Applies to docks only, to "known" sites only, with "Area of Special Interest" undefined. No First Nations engagement pathway.
5.2 Public access	3	"Marine infrastructure must not obstruct public access… a minimum width of 2m" envisioned for continuous access; piers "must be constructed at least 2m above the present natural boundary"	Combines a mandatory prohibition with specific, measurable design standards
6. Implementation and Accountability			
6.1 Enforceability	3	Core provisions use "must"/"shall" with real prohibitions. Form and Character guidelines lean on "should"/"encouraged"	Strong mandatory language for environmental-protection and hazard provisions.
6.2 Professional evidence	3	QEP for general assessments; "shall be designed by a Qualified Professional Engineer" for shore protection works; joint QEP/Geotechnical Engineer report for legacy replacement	Explicitly tiered by discipline and risk

District of Saanich

Element	Score	Evidence	Assessment

1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	1	"Improve the health of watersheds and freshwater/marine shoreline habitat" (Objective B); "Consider future sea level rise and climate change…" (11.3.5)	Objectives are stated at the OCP level. The wording remains at policy and is not linked to operative shoreline permit standards.
1.2 Dedicated DPA	0	No DPA designation	The District of Saanich officially rescinded its controversial Environmental Development Permit Area (EDPA) bylaw on April 23, 2018.
1.3 Integration	1	Zoning Bylaw §5.19 and §5.16 setbacks each begin "Notwithstanding any other provisions in this bylaw"	The OCP supports integrated watershed planning, intergovernmental collaboration, and a cross-reference to stormwater management. But it does not provide further procedures across the OCP.
2. Ecological Protection Standards			
2.1 Setback	1	"No building or structure shall be constructed or located on a lot within 7.5 m… of the natural boundary of any watercourse" (§5.19)	Mandatory and absolute, but half the typical baseline elsewhere and with no scaling or reduction mechanism
2.2 Vegetation and beach features	1	"Encourage the retention or planting of native vegetation in the coastal riparian zone" (6.3.3)	Framed only as an encouragement with no mandatory language or permit trigger
2.3 Cumulative effects	0	No provision addressing off-site or cumulative shoreline effects	
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	1	"Consider future sea level rise and climate change to minimize associated impacts" (11.3.5)	Discretionary verb with no assessment report or permit-stage trigger specified

3.2 Protection hierarchy	1	“No building or structure shall be constructed or located upon or over the land lying below the natural boundary of the ocean” (5.16(a))	No hierarchy and no alternatives test. No pathway for soft works either.
3.3 Hard protection standards	0	No provision addressing hard-protection design standards or legacy structures	
4. Water Quality and Land–Water Linkage			
4.1 Stormwater	1	“Support an integrated watershed planning approach that promotes low impact development” (6.3.1)	Discretionary language with no permit-stage trigger
4.2 Pollution and sediment	1	“Work with… business and stakeholders, as appropriate, to improve source control and reduce contamination” (6.3.6)	Framed as inter-governmental collaboration rather than a permit-triggered requirement
5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	1	“Beach areas are also often areas of archaeological and cultural significance to the First Nations requiring sensitivity and respect.” (11.3)	Framed as ongoing collaboration rather than an operative permit-stage process
5.2 Public access	2	“Explore opportunities to create additional beach access points” (11.3.6); “seek opportunities where appropriate” (11.3.3)	Access is framed as an exploratory community priority, with no non-extinguishment rule or design standard for private access structures
6. Implementation and Accountability			
6.1 Enforceability	1	Zoning Bylaw setbacks are mandatory, but nearly all OCP shoreline policy language uses “support,” “encourage,” or “consider”	OCP-level shoreline language is almost entirely non-binding

6.2 Professional evidence	0	No professional-report or QEP requirement	

District of Oak Bay

Element	Score	Evidence	Assessment
1. Policy Foundation and Legal Architecture			
1.1 Shoreline objectives	3	"To protect development from erosion and flooding associated with sea level rise and storm surges" (Objective 4, §8.2.2.3)	Four objectives name habitat, foreshore integrity, and hazard outcomes and are operationalized by the guidelines in the EDPA
1.2 Dedicated DPA	3	Designated under "Section 488 (1) (a)… and Section 488 (1) (b)"	Both statutory purposes are used, and guidelines are shoreline-specific throughout rather than generic
1.3 Integration	2	"Zoning variances and relaxations to other bylaw requirements… may be considered in order to facilitate the siting of development outside of the Shorelines DPA"	A reconciliation mechanism exists but is discretionary
2. Ecological Protection Standards			
2.1 Setback	3	"Provide a minimum 15 metre setback… except where a Qualified Environmental Professional… demonstrates a lesser setback is appropriate. Such assessments shall include recommendations for protection and restoration…"	Mandatory QEP demonstration with required findings, but the baseline itself remains flat rather than risk-scaled
2.2 Vegetation and beach features	3	"Preserve the foreshore ecosystem and ecological processes… including existing vegetation… except in accordance with the conditions of an approved Development Permit" (Guideline 1)	Strong on sediment processes. Retention and restoration are discretionary; no survival standard.

2.3 Cumulative effects	1	“Construction in areas on or near feeder bluffs, eelgrass beds, spits or hooks must be avoided” (Guideline 15)	Mandatory avoidance of sensitive reach-scale features, but no cumulative-tracking requirement is specified
3. Coastal Hazard and Climate Adaptation			
3.1 Hazard and sea-level rise	2	Buildings “shall be constructed at an elevation at or greater than an appropriate flood construction level established by a Qualified Coastal Professional and that takes into consideration the expected effects of sea level rise” (Guideline 6)	Mandatory, coastal specialist, forward-looking. No planning horizon, no numeric allowance.
3.2 Protection hierarchy	3	“Apply only the ‘softest’ possible shore protection measure… unless no alternative shore protection design is possible” (Guideline 14); QCP report required certifying softshores “not viable” (Guideline 15)	Mandatory sequence with required written professional justification
3.3 Hard protection standards	2	Replacement measures must be “of the same size and footprint as the existing works” and generally “shall not encroach seaward” (Guideline 16)	Comprehensive content, but written almost entirely as “should”. Does not require ecological-performance improvement upon replacement.
4. Water Quality and Land–Water Linkage			
4.1 Stormwater	2	“Storm water outflows shall have water quality and water quantity / erosion control features installed” (Guideline 22)	Mandatory feature installation, but impervious-surface minimization is only “should,” with no numeric cap
4.2 Pollution and sediment	2	“Development must be undertaken and completed… to prevent the release of sediments or pollutants onto the marine foreshore” (Guideline 7)	Mandatory prevention duty, but the construction management plan is triggered only discretionarily

5. First Nations, Cultural Heritage and Public Access			
5.1 First Nations and archaeology	1	Sole reference is exemption 11, listing “archaeological resources” among things emergency works may protect.	The single mention creates no obligation.
5.2 Public access	2	Structures “should not obstruct public access to and along the foreshore, except where such access is determined to be infeasible” (Guideline 19)	Directly addresses non-extinguishment of access, but the language is qualified and exception criteria are undefined
6. Implementation and Accountability			
6.1 Enforceability	3	Mandatory: guidelines 4, 6, 12, 13, 15, 17, 22. Discretionary: guidelines 3, 8, 10, 11, 19.	Consistent mandatory language among the five for the provisions that actually determine permit outcomes
6.2 Professional evidence	3	Distinguishes a “Qualified Environmental Professional” for habitat/landscaping matters from a “Qualified Coastal Professional” for flood construction levels and shore protection certification	Requires shoreline or coastal professionals for flood levels, construction planning, subdivision, setback exceptions, and hard-protection necessity, and it specifies several required conclusions.

References

British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development. (2019). *Riparian Areas Protection Regulation technical assessment manual* (Version 1.1).

Brutas, J., & Sheehan, K. (2025). *Climate change adaptation and nature-based solutions in the Capital Regional District* [Resilient Coasts for Salmon report]. Pacific Salmon Foundation. Prepared for Environment and Climate Change Canada.

Bullock, L. (2021). *Reforming Kitimat's local laws during an industrial boom: Law reform recommendations to support a Green Bylaws approach in the District of Kitimat*. Environmental Law Centre, University of Victoria.

Chochla, A., DesBrisay, A., Curran, D., & James, M. (2024). *Green Bylaws for the Sunshine Coast: Bylaw and regulatory opportunities for the Sunshine Coast Regional District to strengthen its sensitive ecosystem protections*. Environmental Law Centre, University of Victoria.

Community Charter, SBC 2003.

District of Central Saanich. (2025). *Official Community Plan*. Available at https://www.centralsaanich.ca/OCP

District of Central Saanich. (2026). *Appendix B – DRAFT Development Permit Areas Design Guidelines* in *Introduction to Draft Official Community Plan Development Permit Areas Design Guidelines*. Available at https://pub-centralsaanich.escribemeetings.com/Meeting.aspx?Id=0c830fa7-4056-4b53-add3-b66802c6578f&Agenda=Agenda&lang=English&Item=16&Tab=attachments

District of North Saanich. (2025). *Official Community Plan (Bylaw No. 1587*). Available at https://northsaanich.ca/your-community/official-community-plan/

District of Oak Bay. (December 2025). *Official Community Plan*. Available at https://www.oakbay.ca/building-infrastructure/planning/official-community-plan/

District of Saanich. (May 2024). *Official Community Plan*. Available at https://www.saanich.ca/EN/main/community/community-planning/official-community-plan-ocp.html

District of Saanich. (n.d.). *The Environmental Development Permit Area (EDPA) was rescinded on April 23, 2018*. Available at https://www.saanich.ca/EN/main/community/natural-environment/environmental-planning/environmental-development-permit-area.html

District of Saanich. (September 2003). *Zoning Bylaw 8200*. Available at https://www.saanich.ca/EN/main/local-government/zoning/zoning-bylaw-8200.html

Land Title Act, RSBC 1996.

Local Government Act, RSBC 2015.

Pacific Salmon Foundation. (2022). *Impacts of climate change on shorelines, people, and salmon: Nature-based approaches for ecosystem health*.

Peninsula Streams Society (n.d.). Mermaid Creek Salt Marsh. Available at https://peninsulastreams.ca/our-work/restoration-projects/mermaid-creek-salt-marsh-restoration/

Riparian Areas Protection Regulation, BC Reg 178/2019.

Sheehan, K., Catanzaro, M., Christiansen, N., & Pearsall, I. (2026). *Shoreline modification & climate change on Lekwungen Territory: Oak Bay, British Columbia: Implications for communities, natural systems and salmon*. Pacific Salmon Foundation.

SNC-Lavalin (2014). *Greening shorelines to enhance resilience: An evaluation of approaches for adaptation to sea level rise*.

Stewardship Centre for BC (2020). *Partial review of British Columbia shoreline policies and opportunities for Green Shores*.

Stewardship Centre for BC. (2020). *Green Shores 2020: Impact, value and lessons learned: Final project report*. ESSA Technologies Ltd.

Stewardship Centre for BC. (2021). *Green bylaws toolkit* (3rd ed.).

Stewardship Centre for BC. (2023). *Green Shores for Homes: Credits and ratings guide*.

Stewardship Centre for BC. (2023). *Green Shores for shoreline development: Credits and ratings guide*.

Stewardship Centre for BC. (n.d.). *Climate change impacts: Risks to the shoreline*.

Stewardship Centre for BC. (n.d.). *Green Shores® program and shoreline performance principles*.

The Environmental Law Centre Society. (2023). *Cleaning up Coles Bay and the BC Coast: The urgent need for federal action to address Indigenous shellfish issues*. Environmental Law Centre, University of Victoria.

Town of Qualicum Beach. (2016). *Waterfront Master Plan*. Available at https://qualicumbeach.com/project/waterfront-master-plan/

Town of Sidney. (June 2022). *Official Community Plan (Bylaw 2240). Available at https://www.sidney.ca/planning-building/community-planning/official-community-plan/*